Languages Acquisition in a Foreign Language Environment: Some Effects and Non-Effects of L2 Input and Output on Learners’ Linguistic Progress

Thesis submitted in candidacy for the degree of Doctorate Es-sciences in applied linguistics

Candidate: NASSER GARDAOUI

Supervisor: Prof F. BOUHADIDA   Co-Supervisor: Prof M.F. NARCY-COMBES

BOARD OF EXAMINERS:

Chairwoman: Prof Z. MOSTEFA SBA            Mohamed Ben Ahmed University, Oran II
Supervisor: Prof F. BOUHADIBA             Mohamed Ben Ahmed University, Oran II
Co-Supervisor: Prof M.F. NARCY-COMBES       Nantes University, Nantes
Member: Dr. L. MOULFI                    Mohamed Ben Ahmed University, Oran II
Member: Dr. B. ABDELHAY                 Ibn Badis University, Mostaganem
Member: Dr. H. AMEZIANE                  Mouloud Mammeri University, Tizi Ouzou
Member: Dr. B.A. NEDDAR                 Ibn Badis University, Mostaganem

2015
DEDICATION

I dedicate this thesis to:

The memory of my mother and father, may Allah bless them.

My family and the many friends, who have been so supportive and encouraged the fulfilment of this work.
ACKNOWLEDGEMENTS

Many people have made important contributions to this doctoral research study. I would like to begin by thanking Professor F. BOUHADIBA my supervisor, for persevering with me throughout the time it took me to complete this research. Equally important, his enthusiasm for the study kept me going when the data seemed overwhelming and when other responsibilities slowed progress. I am deeply grateful for his help.

I would like to express my extreme and hearty gratitude to Professor M.F. NARCY-COMBES my co-supervisor, for her distinguished humane qualities, for her precious guidance, for her perfect sense of understanding, for her willingness and principles, for her encouragement, support and patience.

I am also grateful to the librarians at the university of Nantes, who are very service-minded and have helped me access books and articles that otherwise would have been difficult for me to obtain.

I am also most grateful to the students who participated in this project and the administration and colleagues at my workplace, Mostaganem university. Without their cooperation, it would have been impossible to complete this project.

I would also like to thank all the members of the Board of Examiners who have kindly accepted to examine the present thesis.
ABSTRACT

In this classroom-based research work, the effects of input- and output-based practice on L2 learning were investigated. The research questions were:

1) Research question: Does providing opportunities for output in addition to input of the target structures aid learning of tense/grammatical aspect more than output-free input-based instruction only?

2) How does learner’s own written output enable them to recognize gaps in their L2 linguistic knowledge and performance?

3) When learners reprocess their performance what mental processes result that impact L2 learning?

The answers to the research questions for the current study were sought through a twofold research design. Two empirical studies - a quasi-experimental study and an exploratory study - were carried out in order to examine both learning outcome and learning process. In the quasi-experimental study the effects output-free input-based instruction (Input Only) and Input Plus Output L2 instruction on the learning of a linguistic feature (which were several morphosyntactic structures) known to be problematic to Algerian EFL learners were investigated. The treatment conditions were implemented with thirty-eight adult EFL learners in two intact classes at the university level. The two groups were randomly assigned to one input-only group (n = 19), and one input-plus-output group (n = 19). The input-only group received an explicit presentation of the rules followed by output-free input-based instruction. The input-plus-output group received the same treatment followed by output-based instruction. A pre-test/treatment/post-test design, comprehension and production tasks as both the pre- and post-tests were used in this quasi-experimental study.

The last two research questions, which were adapted from Swain and Lapkin’s (1995) study, aimed to explore whether EFL students become aware of gaps in their linguistic knowledge as they produce their L2, and if so, what thought processes they engage in an attempt to solve their problems. To this end, thirty-three students engaged in writing tasks comprising three stages: (a) to write a picture description, (b) compare their own use of grammatical structures in their own written output to the use of linguistic forms as used in a text written by a native speaker, and (c) to rewrite the original description. The participants
were asked to verbalize their language problems by taking notes on whatever they noticed (i) while they were writing the initial picture description, and (ii) while they were comparing their output to native speaker input that was provided as feedback.

Results of data analysis of the two studies revealed the following research findings:

Although the absolute predominance of any of the approaches was not statistically established in the course of experimentation—that is, the instructional effect did not amount to statistically significant learning gains, the study indicated that the input-plus-output had a practically (although not statistically) significant effect on gains in grammatical accuracy in the use of the target form. Despite the relative complexity of the structures and the brevity of instruction, the participants managed to attain better control of linguistic forms, as evidenced by the descriptive results (pretest-post test gains), particularly with respect to the production of the targeted form (Research question 1).

Overall, the results of the study findings emerged from the data obtained in a three-stage L2 written output task have shown that:

(i) The struggles experienced by the students in their attempt to describe the picture promoted their awareness of gaps in their linguistic knowledge as they produced their L2 at the composing stage and drew their attention to relevant language forms when they were exposed to the model text at the comparison stage (research question 2).

(ii) When L2 learners encountered problems in producing the target language they noticed gaps in their L2 knowledge and engaged in thought processes using the tools at their disposal, namely themselves i.e. their internalised knowledge. Subsequent input exposure to input helped learners notice the gap between their output and the modelled target language input (Research question 3).

(iii) This awareness of language gap had an impact on their language learning as revealed in their effort of applying their learning from the model texts in subsequent revisions of their narrative paragraphs (Research question 3).

Pooled together, these findings indicate that output is not only a critical part of L2 learning but also serves important functions in the complex process of language learning and teaching; functions that contribute to learners’ acquisition of the L2.
LIST OF ABBREVIATIONS

CIH: Comprehensible Input Hypothesis
CLT: Communicative Language Teaching
COH: Comprehensible Output Hypothesis
CI: Comprehensible Input
CO: Comprehensible Output
EFL: English as a Foreign Language
ELT: English Language Teaching
ESL: English as a Second Language
FFI: Form-Focused Instruction
FonF: Focus on Form
FonFs: Focus on formS
IH: Interaction Hypothesis
IP: Input Processing
IL: Interlanguage
L1: English as a First Language
L2: English as a Foreign or Second language
MFI: Meaning-Focused Instruction
NH: Noticing Hypothesis
PI: Processing Instruction
SLA: Second Language Acquisition
TI: Traditional Instruction
TL: Target Language
**LIST OF TABLES**

Table 01: Effects of Output on L2 development 18
Table 02: L2 implicit and explicit knowledge Criterion 28
Table 03: Language learning theories reviewed 55
Table 04: A comparison of Traditional (TI) and Input Processing Instruction (IPI) 71
Table 05: Lines of Research on Output 86
Table 06: Topics, and grammatical focus of input material used in the study 126
Table 07: Time allotted for each stage of the lesson during for the input group 128
Table 08: Time allotted for each stage of the lesson for the output group 130
Table 09: Grammatical focus of pushed output tasks for the output group 146
Table 10: Descriptive Statistics for pretest reception assessment tasks 146
Table 11: Analysis of Variance for Listening Comprehension tests 147
Table 12: Analysis of Variance for Grammaticality Judgement tests 147
Table 13: Descriptive Statistics for pretest production assessment tasks 148
Table 14: Analysis of Variance for written gap fill production tests 148
Table 15: Analysis of Variance for written gap fill production tests 149
Table 16: Descriptive statistics for the pretest and posttest on reception data 150
Table 17: Analysis of Variance for Grammaticality Judgement tests 150
Table 19: Descriptive statistics for the pretest and posttest on production data 151
Table 20: Analysis of Variance for written gap fill production tests 153
Table 21: Analysis of Variance for picture description tests 156
Table 22: Language Problems Recognized in the Written Output Task comparison task 163
Table 23: Summary of Findings 177
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Output and Second Language Learning (from Swain and Lapkin 1995)</td>
<td>17</td>
</tr>
<tr>
<td>02</td>
<td>The input–interaction-output (IIO) model of L2 learning</td>
<td>25</td>
</tr>
<tr>
<td>03</td>
<td>Three Sets of Processes Involved in SLA and Use</td>
<td>34</td>
</tr>
<tr>
<td>04</td>
<td>Influences upon noticing</td>
<td>43</td>
</tr>
<tr>
<td>05</td>
<td>Language teaching options</td>
<td>45</td>
</tr>
<tr>
<td>06</td>
<td>Input- and production-based instruction</td>
<td>54</td>
</tr>
<tr>
<td>07</td>
<td>The research design</td>
<td>132</td>
</tr>
<tr>
<td>08</td>
<td>Performance on receptive pretest and posttest</td>
<td>152</td>
</tr>
<tr>
<td>09</td>
<td>Performance on productive pretest and posttest</td>
<td>154</td>
</tr>
<tr>
<td>10</td>
<td>Performance on productive pretest and posttest</td>
<td>156</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS
Acknowledgement.................................................................................................................. III
Abstract ................................................................................................................................ IV
List of Abreviations ................................................................................................................. VI
List of Tables .......................................................................................................................... VII
List of Figures ........................................................................................................................ VIII
Table of Contents .................................................................................................................... IX

CHAPTER ONE
INTRODUCTION
1.1 Background ................................................................................................................ 1
1.2 The Current Study ...................................................................................................... 3
1.2.1 Statement of the Problem ..................................................................................... 4
1.2.2 Purpose of the Study .............................................................................................. 8
1.2.3 Theoretical underpinning of the study ................................................................... 9
1.2.4 Significance of the Study ..................................................................................... 11
1.2.5 Hypotheses and Research Questions ................................................................... 12
1.3 Structure of the Thesis ................................................................................................ 13

CHAPTER TWO
COGNITIVE PROCESSES OF SLA
2.1 Introduction ................................................................................................................. 14
2.2 Cognitive Views of L2 Learning ................................................................................. 14
2.2.1 Swain’s Output Hypothesis .................................................................................. 15
2.2.2 Gass’s psycholinguistic model of L2 learning ....................................................... 25
2.2.3 Skill-Learning Theory .......................................................................................... 26
2.2.4 Van Patten’s Input Processing (IP) Model ............................................................... 33
2.3 Cognitive notions ......................................................................................................... 39
2.3.1 Attention, Awareness and the Noticing Hypothesis (NH) ....................................... 39
2.3.2 The Cognitive Focus on Form (FonF) Approach .................................................... 45
2.3.2.1 Focus on form
2.3.2.2 Focus on FormS

IX

CHAPTER THREE
### INPUT-AND OUTPUT-BASED APPROACHES

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>53</td>
</tr>
<tr>
<td>3.2</td>
<td>Input- and Output-Based Approaches</td>
<td>54</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Input-based approaches</td>
<td>54</td>
</tr>
<tr>
<td>3.2.1.1</td>
<td>Early Input-Based Approaches</td>
<td>55</td>
</tr>
<tr>
<td>3.2.1.1.1</td>
<td>Comprehensible Input</td>
<td>57</td>
</tr>
<tr>
<td>3.2.1.1</td>
<td>Early Input-Based Approaches</td>
<td>56</td>
</tr>
<tr>
<td>3.2.1.1.1</td>
<td>Comprehensible Input</td>
<td>57</td>
</tr>
<tr>
<td>3.2.1.2</td>
<td>Input and the Interactionist Approach</td>
<td>62</td>
</tr>
<tr>
<td>3.2.1.2</td>
<td>Contemporary Input-based Approaches</td>
<td>66</td>
</tr>
<tr>
<td>3.2.1.2.1</td>
<td>Input Enhancement</td>
<td>66</td>
</tr>
<tr>
<td>3.2.1.2.2</td>
<td>Processing Instruction (PI)</td>
<td>69</td>
</tr>
<tr>
<td>3.2.1.2.3</td>
<td>Criticism about Input Processing Instruction (IPI)</td>
<td>73</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Output-Based Approaches</td>
<td>75</td>
</tr>
<tr>
<td>3.2.2.1</td>
<td>Output Practice in Conventional L2 Methodology</td>
<td>76</td>
</tr>
<tr>
<td>3.2.2.1.1</td>
<td>Recent Views on Output Practice</td>
<td>78</td>
</tr>
<tr>
<td>3.2.2.1.1</td>
<td>Output as an Attention-Drawing Device</td>
<td>81</td>
</tr>
<tr>
<td>3.2.2.1.2</td>
<td>Effects of Output on Attention to Input</td>
<td>83</td>
</tr>
<tr>
<td>3.3</td>
<td>Research on the Effects of Input and Output</td>
<td>85</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Output vs Input Studies</td>
<td>86</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Interaction Research into the Role of Language Production</td>
<td>91</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Research within the Framework of the Output Hypothesis</td>
<td>101</td>
</tr>
<tr>
<td>3.3.3.1</td>
<td>Swain and Colleagues</td>
<td>102</td>
</tr>
<tr>
<td>3.3.3.2</td>
<td>Izumi and Associates</td>
<td>107</td>
</tr>
<tr>
<td>3.3</td>
<td>Chapter Summary</td>
<td>110</td>
</tr>
</tbody>
</table>

### CHAPTER FOUR

### RESEARCH DESIGN AND METHODOLOGY

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Introduction</td>
<td>113</td>
</tr>
<tr>
<td>4.2</td>
<td>STUDY 1: Quasi experimental design</td>
<td>114</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Research design</td>
<td>116</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Subjects</td>
<td>117</td>
</tr>
<tr>
<td>4.2.3</td>
<td>Targeted linguistic structures</td>
<td>120</td>
</tr>
<tr>
<td>4.2.3.1</td>
<td>The Concepts of Tense and Aspect</td>
<td>120</td>
</tr>
<tr>
<td>4.2.3.2</td>
<td>The pedagogy of the English Tense and Aspect System</td>
<td>123</td>
</tr>
<tr>
<td>4.2.4</td>
<td>Instructional Treatments</td>
<td>125</td>
</tr>
<tr>
<td>4.2.4.1</td>
<td>Input-Based Instructional Material</td>
<td>125</td>
</tr>
<tr>
<td>4.2.4.2</td>
<td>Output-Based Instructional Material</td>
<td>128</td>
</tr>
<tr>
<td>4.2.5</td>
<td>Testing instruments and scoring procedures</td>
<td>131</td>
</tr>
<tr>
<td>4.2.5.1</td>
<td>Listening Comprehension Test</td>
<td>132</td>
</tr>
<tr>
<td>4.2.5.2</td>
<td>Written Gap-Fill Production</td>
<td>133</td>
</tr>
<tr>
<td>4.2.5.3</td>
<td>Grammaticality Judgement test</td>
<td>134</td>
</tr>
<tr>
<td>4.2.5.4</td>
<td>Picture Description Task</td>
<td>134</td>
</tr>
</tbody>
</table>
CHAPTER FIVE

ANALYSIS AND RESULTS

5.1 Introduction

5.2 Analyzing Data of Participants in Study I

5.2.1 Comparison of Baseline Performances in the Pretests

5.2.2 Comparison of Students’ Mean Performance

5.3 Analyzing Data of Participants in Study II

5.3.1 Introduction

5.3.2 Learner Noticing in the Composing and Comparison Stages

5.3.3 Processes Employed in Focusing on Language Problems

5.3.4 Summary of the Results from study II

CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1 Introduction

6.2 Discussion of the findings from study I

6.3 Discussion of the findings from study II

6.4 Implications of research findings

6.5 Limitations

6.6 Directions and Suggestions for Future Research

6.7 Conclusion

REFERENCES

APPENDICES

Appendix A: Explicit rule instruction

Appendix B: Example of Treatment Activities: Input-based activities

Appendix C: Example of Treatment Activities: Output-based activities

Appendix D: Testing instruments

Appendix E: The picture prompt

Appendix F: Model passage

Appendix G: Statistical Tables

Appendix H: Learners’ linguistic concerns during the initial written production task

Appendix I: Noticing during the comparison stage
1.1 Background

Approaches to L2 instruction that emphasize experiencing language as a medium of communication focusing on meaning over the practice and manipulation of grammatical forms (e.g. immersion and other communicatively-oriented classrooms) have been widely popular since the early 1990s. They have won support from many teachers and learners as well as many researchers in Second Language Acquisition (SLA). In these ‘grammar free communicative natural, or immersion L2 and foreign language programmes’ (N.Ellis, 2007:20), there is a clearly defined outcome other than the use of language. In other words, the language serves as the means for achieving the outcome, not as an end in its own right (R.Ellis, 2009).

It is this approach to teaching or experiential L2 learning approaches growing out of communicative language teaching (CLT) such as thematically-oriented, project-geared approaches (New Prospects, 2007), which informed the new curriculum framework and program development of English Language teaching (ELT) carried out in the late 1990’s and the beginning of the twenty-first century by the Ministry of Education in Algeria. According to the English syllabus (Ministry of Education, 2005), the stated goals seek to create a real-life communication in the classroom in an attempt to develop language fluency, not just accuracy. The language teaching content of each level of instruction is designed to allow students to engage in using the target language (TL) to convey messages in tasks requiring information-exchange, problem-solving or opinion sharing to achieve specific goals. The main purpose of classroom work is to process messages for meaning practice, to get learners internalise the linguistic elements more naturally (New Prospects, 2007). There is ‘no grammar syllabus’, and what is generally offered is little more than a brief list of suggestions regarding the selection and presentation of new language. Language educators thought that the ability to accurately use the L2 would eventually develop on its own.

However, it has also been acknowledged, as evident in the findings from classroom-based research on communicative classroom contexts (Swain, 1995), that limiting L2 learners to L2 instruction in which language is employed to complete meaningful tasks
cannot guarantee high levels of grammatical competence. Data from these studies showed that these learners have ‘significant shortcomings in the accuracy of their language.’ (N. Ellis, 2007:20). This is true even after learners have had years of meaningful, comprehensible input and many opportunities for interaction. For example, extensive research on learning outcomes in L2 French immersion programs by Swain and her colleagues showed that, despite substantial long-term exposure to meaningful input, the learners did not achieve accuracy in certain grammatical forms. (Swain, 1995; Swain and Lapkin, 1995). This research suggested that some type of focus on grammatical forms was necessary if learners were to develop high levels of accuracy in the target language (TL). In the same context, Robinson and Ellis (2008:493) point out that research into the effects of L2 instruction revealed that input-driven learning as in non-interventionist programmes of instruction, while leading to ‘considerable levels of success in receptive L2 activities (listening and reading), led to a limited “(non-natural) acquisitional endstate” especially in terms of learners L2 production abilities’. In addition, researchers, such as Skehan (1998), claim that language use in itself does not lead to the development of an underlying language system since processing for meaning detracts from attention to language form. In an extensive meta-analysis, Norris and Ortega (2000) summarised findings from experimental and quasi-experimental investigations into the effectiveness of L2 instruction published between 1980 and 1998. They found that focused L2 instruction, in comparison with simple exposure or meaning-driven communication, makes a significant difference to language learning outcomes in that learners exposed to form-focused instruction (FFI) significantly outperformed those who were not. In addition to perspectives from language acquisition theory, there are also pedagogic reasons in favour of L2 FFI in the language syllabus. Ellis (1999) argues that process-oriented syllabuses such as task-based or thematically-based syllabuses do not ensure systematic coverage of the grammar of the L2 that is being taught. Only a structural syllabus guarantees that all the main aspects of the grammar are taught. In recent years, the suggestion that some kind of form-focused activity needs to be incorporated into the L2 classroom has gained importance in the field of SLA (Doughty and Williams, 1998; Ellis, 2006). As will be discussed in the literature review, two proposals have been made in the research literature to overcome the shortcomings of focusing solely on comprehension and excessive focus on meaning and communication.
One is to encourage learners to notice L2 forms in the input (chapter three); the other is to provide learners with opportunities for output (chapter three). The focus of more recent studies, namely those conducted in the late 1990s and in the first years of the new millennium, has largely been influenced by important developments in SLA theory such as the Noticing Hypothesis (Schmidt 1990, 2001); Input Processing Theory (VanPatten 1996, 2004), skill-building perspectives (DeKeyser 1998, 2007), negative feedback (e.g. White 1991), the revised version of the Interaction Hypothesis (Long 1996), and the Output Hypothesis (Swain, 1995, 2005). Among the more commonly addressed questions in the L2 type-of-instruction research literature are (Norris and Ortega, 2001:158-9):

i) Do some kinds of formal instruction work better than others? (Ellis 1999, 2008),

ii) In what ways can TL input (positive evidence) be enhanced to promote noticing and learning?

iii) Is acquisition promoted more effectively when learners process the input in psycholinguistically relevant ways than when they experience traditional grammar explanation and practice? (e.g. VanPatten 1996, 2004)

iv) Is comprehension practice as effective as production practice for learning L2 structures? (e.g. DeKeyser, 1997, 2007)

Research in FFI has been motivated in part by a desire to improve pedagogy. Of particular importance is the need to tease apart the specific contributions that different types of form-focused instruction may make on learning problematic L2 forms, but it has also served as one of the major ways of testing theoretically-based hypotheses (Ellis, 2009). One way of achieving a clearer understanding of how FFI contributes to acquisition might be to examine in detail studies that have investigated the effect of specific instructional options. The present study contributes specifically to the existing research literature that investigates the effects of specific instructional approaches on developing L2 competence by examining two particular form-focused options.

1.2 Current Study

The present study assesses the role of output in the acquisition of L2 morphosyntax by comparing output-free input-based instruction to instruction where input and output
are combined. From the teacher’s point of view, the key question is this: to what extent should instruction be directed at developing form-meaning associations through comprehension practice only as opposed to providing opportunities for learners to practice in production tasks? A second aim has been to explore the cognitive learning processes underlying L2 production as related to composing and subsequent processing of input. Swain’s Output Hypothesis (2005) was used as a theoretical framework to investigate these two issues.

The statement of the Problem, the purpose of the study, as well as the significance, the theoretical underpinning of the study and the research questions and hypotheses are delineated in this section.

1.2.1 Statement of the Problem

Research has demonstrated the need for formal instruction for L2 learners to attain high levels of accuracy which is not only the case in content-based L2 classrooms but also in any L2 educational setting which strives to provide its learners with a chance to become proficient language users. In addition to FFI, many researchers also suggest that language production (output) is an essential requirement (Fotos and Hinkel, 2007; Skehan, 1998; Swain, 2005). In her Output Hypothesis, Swain (1995, 2000, 2005) observes that that language comprehension and production have different cognitive requirements. Whereas successful comprehension is possible without a full linguistic analysis of the input, L2 production (both speaking and writing), requires learners to move from the ‘semantic, open-ended strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate production (2000: 99)’. In other words, learners have to experience syntactic processing and focus on language forms in order to achieve the communicative aim appropriately. Among various means or approaches of getting learners to focus on form, the role of L2 output has received comparatively less attention from researchers. Previous L2 acquisition research has built an argument for L2 learning as a natural outcome after receptive acquisition (Krashen, 1985; VanPatten, 2004). SLA research has mainly focused on the importance of relevant input in promoting L2 learners’ linguistic knowledge, rather than on the importance of output. This emphasis has its origins in Krashen’s (1981, 1985) input hypothesis; the hypothesis that holds that language acquisition is driven in a receptive modality and
depends entirely on comprehensible input (Skehan, 1998). According to Gass and Selinker (2008) output has traditionally been viewed not as a way of creating L2 knowledge, but a way of practicing already-existing L2 knowledge. In other words, L2 methodology and research considered output as a means for L2 learners to practice what has been learned previously.

With the proposal of Swain’s Output Hypothesis (1985, 1995, 2000, 2005), output has been viewed as part of the learning process itself and not merely as an end product of learning. As a matter of fact, language output has been attended to both theoretically and pedagogically in the last 20 years or so. Theoretically, the importance of output for language learning has been emphasized since the postulation of the comprehensible output hypothesis (COH) (Swain, 1995, 2005). Pedagogically, language production is common in L2 teaching and learning due to the spread of process-oriented syllabuses (e.g. communicative language teaching (CLT), task-based teaching and learning (TBTL); competency-based approaches (CBA). However, how to attain language acquisition through L2 production, especially through written language output, has not been researched adequately. Specifically, few research studies have examined how output could affect L2 learning, and even fewer if different modes of production (i.e. oral output and written output) and different theoretical perspectives (i.e. the cognitive perspective and the sociocultural perspective) are considered.

In teaching English as a foreign language in Algeria, to improve learners’ output ability (i.e. speaking and writing in English) is an important aspect. However, output practice has not been given sufficient weight in relation to input practice. If comprehensible output does provide opportunities for learners to develop accuracy in their language production, then its role is significant, especially for mastering certain grammatical aspects of the TL, an area that experience shows Algerian EFL students are lacking. Even if process-based instruction has been taken as one important approach in classroom teaching -of which meaning-based interaction in L2 is central to the learning experiences- first year students enrolled in the English department demonstrate low levels of linguistic accuracy in speaking and writing, despite gaining in communicative fluency. The type of L2 instruction they have experienced has been meaning-oriented rather than form-oriented. EFL instruction in the middle and secondary education is basically thematically-oriented and project-geared (New Prospects, 2007). These students are able
to understand much of what they hear and read, and to communicate their ideas fairly well in English. However, they are not able to produce the TL accurately as they have problems with morphology and syntax. From our own classroom teaching experience, we have observed that first year students enrolled in the English department, like other students at other levels, have gaps in their knowledge in the use of certain L2 linguistic features such as the use of English tenses and grammatical aspect. Many learners fail to learn the intricacies of the English tense system and show a limited use of tense and aspect forms, even of basic verb morphology. This linguistic feature is relatively complex and places heavy cognitive demands on the students. Moumene (2010) has commented that tenses seem to be a problematic linguistic feature for Algerian students who show limited use of the various tense forms and uses for expressing their ideas (p.76). This interferes with the accuracy of students’ L2 output, especially in the written form. At the same time, it constitutes a major pedagogical preoccupation facing teachers in the Algerian EFL context, a situation that entails the need for a heavy focus on this linguistic area in the university grammar teaching/learning programs. It should be noted, however, that the acquisition of tense and grammatical aspect, like other L2 morphosyntactic structures, is influenced by a variety of learner-internal and learner-external factors. Cowan (2008), among other researchers, argued that tense and aspect is one of the most problematic area of English grammar for EFL students and summarised three factors that converge to explain the problematic nature of tense and aspect: i) The influence of the lexical aspect of verbs, ii) The influence of the student’s L1, and iii) The type of instruction that learner’s receive from teachers and materials (p.389). Similarly, Salaberry and Shirai (2000:14) pointed out, that acquisition of tense and aspect is influenced by a variety of learner-internal and learner-external factors including i) universal (and possibly innate) predisposition by learners to mark some salient grammaticizable notions, ii) L1 influence, iii) individual learner characteristics, iv) input /interaction, and v) instructional variables. It is beyond the scope of this study to solve controversial issues concerning the acquisition of temporal expression in L2 learning. In this study, we attempted to situate the concerns of L2 learning of morphosyntactic structures in a pedagogical context. Although this study is both theoretically and pedagogically driven, the focus is on the role of instructional intervention on the development of a learner’s system of tense-aspect. Very often the decision as to how to teach grammatical forms in
the L2 classroom will be influenced far more by pedagogical factors (e.g. learner motivation or time limitations) than by those based on SLA theoretical models (Ur, 2009). Thus, the focus will be on the role of L2 classroom instruction on the development of a learner’s system of tense-aspect.

Having established two reasons for form-focused instruction in the L2 classroom, one relating in particular to the Algerian context, and the other from the SLA perspective (Ellis, 1999), it would seem to relevant to determine whether some types of FFI are more effective than others. Ellis (2008) argues that studies comparing approaches to grammar teaching are still few and far between and the heated debate on what exactly implicit and explicit teaching involve does not help solve the problem. More classroom-based research is needed to find new approaches to teaching problematic features of English in order to optimally achieve the ways to deal with ELT in Algeria.

After reading the published literature in the field, we believe that in addition to exposure to enhanced TL input, learners need opportunities to be ‘pushed’ to produce linguistically accurate output in the classroom. Current perspectives on SLA have stressed the importance of the L2 production in the language learning process. As the learners’ need for attention and awareness to L2 form in input has become central to understanding and explaining L2 learning processes, output-oriented researchers have begun to look for ways in which the learner’s production of output might play a role in this process. They have also suggested that in order to ensure effective second language learning through instruction that draws attention to form but is not isolated from communication, we must carefully explore the roles not just of input, but also that of output.

A good example of research that has investigated this can be found in studies that have sought to demonstrate that awareness of form generated by output tasks that, engage learners in real syntactic processing (e.g. Swain and Lapkin, 1995). Addressing the shortfalls in the teaching of L2 written output, Fotos and Hinkel (2007:135) observe that L2 learners instructed only through input-based approaches seldom achieve target levels of accuracy. They noted that the majority of researchers on L2 writing pedagogy ‘now postulate that without both FFI and intensive and extensive output learners are unable to develop the range of advanced grammar features required to generate formal written prose’ (p.134). In general, FFI is designed to promote noticing of target forms. Also,
output-oriented instruction that is form-focused is supported on the ground of a number of functions for output particularly the noticing function of output. Swain (2005) and others have continued to offer evidence that L2 production allows learners to achieve a level of linguistic awareness and development that they appear to be unable to attain without sufficient opportunities for output. Studies conducted in the field of output (chapter three) have stressed its importance in second language learning, claiming that L2 learning takes place when learners attempt to produce their developing L2 knowledge. Output, thus, would seem to have a potentially significant role in the development of the development of complex morphosyntactic abilities (Swain 1995:128). As the literature review in the ensuing chapters reveals, there are many issues to be investigated in terms of how beneficial it is to engage in L2 production. Comparative research on the effects of input-based instruction in conjunction with and without output-based instruction has been quite limited and differential effects of both instruction methods need further investigation. It needs also to be remembered that most of the well-known existing research concerns learning a second, not a foreign language, as is the case with English in Algeria, thus giving rise to queries concerning the applicability and generalizability of the research findings to the Algerian setting. Furthermore, research on the output hypothesis was originally based on young ESL learners (students in L2 French immersion classes).

This reinforces the need for specifying the nature of form-focused instructional treatments that may facilitate classroom L2 learning. In particular, the need is to tease apart the specific contributions that different types of FFI may make on learning specific linguistic features in specific classroom situations. It is possible that form-focused output instruction will prove more effective with young adult EFL students. Verifying the effectiveness of diverse instructional options with the specificity of our educational context seems necessary so as not to put forward pedagogic recommendations that would be incompatible with the requirements and characteristics of the Algerian context.

1.2.2 Purpose of the Study

This dissertation aimed to contribute to current understanding of the role of language L2 production by extending theoretical and empirical work on the relationship between input and output within the framework of the output hypothesis. Methodologically, both
learning outcome and learning process are examined in order to demonstrate the impact of output on language learning. While the main research project focused on learning outcomes, the aim of the second research project has been to explore the cognitive learning processes underlying L2 production (chapter four). The purpose of this study is thus:

i) to examine the effects (and non-effects) of output-free input-based instruction (input-only) and input plus output L2 instruction on Algerian EFL learners’ grammar performance.

ii) to develop a framework which would illustrate how to use input-based and output-based instructional techniques in grammar instruction with regard to learners’ receptive and productive knowledge of the target structure.

iii) to explore the nature the processes of output modification that learners engage in during their L2 production attempt.

1.2.4 Theoretical underpinning of the study

Although the output hypothesis was postulated from the cognitive perspective, Swain (2000, 2005) has extended it to the sociocultural paradigm of language learning. Thus, the role of output in SLA has been widened beyond learner-internal (cognitive) factors to include investigation of the impact of social and learning context. Swain (2000, 2005) has argued for an alternative collaborative, sociocultural perspective for viewing and examining L2 learning. According to a collaborative, sociocultural perspective, within the framework of Swain’s approach, collaboration is the primary basis for language learning. One reason for the importance of output in SLA is that language production, especially that in the form of collaborative dialogue, can induce form-focused negotiation of meaning (Long, 1996) or metalinguistic talk (Swain, 2000). In their work, Swain and her colleagues (chapter three) recommend the incorporation of more opportunities for students to produce extended output especially collaborative written output within a communicative context.

In the area of SLA, there has been some debate amongst researchers: those who believe cognitive aspects are primary, usually with quantitative and experimental methods, and those who focus on social and contextual aspects, often with qualitative and ethnographic methods (Larsen-Freeman, 2007). Firth and Wagner (1997) called for a
reconceptualisation of SLA research, which heavily focused on cognitive aspects compared to social and contextual aspects of language learning, by taking more account of the contextual and interactional perspectives of language use. Firth and Wagner (1997) suggest that the social and contextual approaches have been insufficiently influential on L2 learning research with researchers favouring the cognitive over the social variables. The linguists who support the cognitivist perspective, where acquisition is considered as an individual phenomenon, argue that socially situated studies treat target language use (not acquisition) by the learners and do not suggest how their perspective should be combined with the acquisition of the language (Kasper, 1997; Long, 1997; Poulisse, 1997). Poulisse (1997:214) argued that in relation to SLA, the primary consideration should be given to the psycholinguistics approach followed by the sociolinguistic approach. The basic processes of learning need first to be described, and then describe the ‘contextual factors that may influence these processes.’ Skehan (1998), on the other hand, argued that the cognitive and social perspectives have not been in balance with researchers favouring the sociolinguistic dimensions over the psycholinguistic ones.

Gass (2003:227) wrote a paper on L2 research in which she made the following remark:

It may be the case that some parts of language are constructed socially, but that does not necessarily mean that we cannot investigate language as an abstract entity that resides in the individual (2003:227).

In the same vein, Ellis (2003) and Swain (2005) contended that the two perspectives are complementary in explaining language development. In the field of SLA, most researchers usually follow either the sociocultural paradigm or cognitive perspective. For example, most of the empirical studies (e.g. Swain and Lapkin, 1998) that focus on the impact of output on L2 grammar acquisition have been carried out within the sociocultural paradigm, while studies focusing on the effectiveness of output for L2 vocabulary acquisition (e.g. Ellis and He, 1999) have mainly been performed from the cognitive perspective.

Although we recognize the importance of L2 learning accounts which provide more of a role for the social context, the present research work is embedded in a cognitive perspective. From a cognitive viewpoint of L2 learning, concepts such as input, output,
and noticing form the rationale of the study. The important theoretical propositions about these concepts are the comprehensible input hypothesis (Krashen, 1985), the input processing model (VanPatten, 1996, 2002, 2004), the interaction hypothesis (Long, 1996), the comprehensible output hypothesis (Swain, 1995, 2005), and the noticing hypothesis (Schmidt, 1990, 2001).

1.2.3 Significance of the Study

The present study addresses a practical and theoretical need evident in the existing L2 SLA literature for research that continues to place the focus of developing L2 output-oriented research on the actual process of acquisition. This area of second language learning has been relatively underexplored in L2 research and pedagogy (Swain, 2000). Specifically, the current study claims that the comparative effectiveness of two instructional form-focused options, namely, output-free input-based instruction and a combination of input and output-based practice is an area of great research value for the following reasons: (1) theoretically, L2 output-oriented research informs the issues such as how to integrate FFI instruction into L2 learning programmes, the proposed role of output (in addition to input) in L2 instruction and the understanding of the issue of output in terms of its noticing effect i.e. mental processes that learners engage when modifying and reprocessing their L2 production. (2) pedagogically, research findings in this area may (a) provide EFL teachers with useful insights that are relevant to their own teaching situations. In settings in which purely communicative methodology is dominant (as in most Algerian EFL teaching contexts) teachers may be provided with an understanding of the need for incorporating form-focused instruction that is not only input-oriented but also output-focused. Similarly, in educational settings where the instructional format has a traditional structural focus (as in some other Algerian EFL teaching contexts), teachers may understand the need for providing a communicative context in which to embed focused instruction and (b) fill in a research gap concerning the effectiveness of input-based instruction and output practice on EFL learners’ grammar performance since (to the author’s knowledge) no study has been undertaken in an Algerian EFL context on the relative effects of the two instructional interventions under investigation. Thus, the findings of this study may help EFL educators and teachers
to make informed decisions in selecting input-based and output-based instructional techniques that can enhance EFL learners’ acquisition of problematic grammatical forms.

Perhaps more importantly, the findings of this study will further our understanding of how language is learned in the L2 classroom, how a learner can learn to use the TL with a greater degree of grammatical accuracy, how educators and language teachers must perceive learner output.

1.2.5 Hypotheses and Research Questions

In light of the theoretical focus of the present study, the following research questions were addressed within the framework of the Output Hypothesis: One major question and two related questions.

Research question 1: Does providing opportunities for written output in addition to input of the target structures aids learning of tense/grammatical aspect more than input-based instruction only?

This study investigated three hypotheses: Hypotheses 1 and 2 were formulated based on the assumption that L2 learners’ acquisition of target structures would be greater when any kind of FFI is given. Hypothesis 3 was formulated based on the assumption that learners’ acquisition of target structures would be greater if output instruction is included than when only input-based instruction operates.

Hypothesis 1: Competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structures would increase as measured by differences on the posttest scores. Therefore, positive results are expected.

Hypothesis 2: Competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structure that include an output component would increase as measured by differences on the posttest scores. Therefore, positive results are expected.

Hypothesis 3: Competence in the production and comprehension of tense and grammatical aspect among learners who receive input plus output L2 instruction of the target grammatical structures will be more significant as measured by differences on the posttest scores compared to those who receive input-only instruction.

The other two secondary research questions were:
Research question 2: How does learner’s own written output enable them to recognize gaps in their L2 grammatical knowledge and performance?

Research question 3: When learners reprocess their performance what mental processes result in that impact L2 learning?

These questions followed those investigated by noticing research within within the output hypothesis (chapter three); in particular research by Swain and colleagues (Qi and Lapkin 2001, Swain and Lapkin, 1995, 2001), Hanaoka’s study (2007) and Adams (2003). The research questions were examined through an introspective exploratory study where learners were asked to report what they had ‘thought’ during output and input processing.

1.3 Structure of the Thesis

Chapter 1 has described the theoretical basis for the central assertion of the present study that instruction, particularly output-focused instruction, may be effective in developing morphosyntactic accuracy of the L2. Some initial evidence in the literature has been offered in support of the claim as well. The remaining chapters of the thesis are organized in the following way: The background literature was reviewed in two phases. In Chapter 2 a series of SLA models are presented. These clarify how language data are received processed and turned into some type of L2 knowledge which is for the basis of output. The other areas of focus in the second chapter include some cognitive processes crucial in determining the input to output progression and L2 learning. The perspective taken is that of a cognitive form-focused perspective. In the second phase, chapter 3 further discusses the input and output orientations to L2 learning. Emphasis is put on the role of output. Chapter 4 focuses on the research design by delineating the specific research questions and the data collection methods used for the two studies. Chapter 5 reports the research findings in response to research questions 1 and 2 and 3. Chapter 6 concludes the thesis with a summary of the research findings, an account of the implications of the study for EFL teaching and learning, and a brief discussion of the limitations of the study.
CHAPTER TWO

COGNITIVE PROCESSES IN SLA

2.1 Introduction

This chapter discusses both the theoretical claims of the role of output and input in SLA. First, a number of models are discussed in terms of their respective theoretical claims regarding the role of output. The remaining discussion complements the first discussion by focusing on research about the role of some ‘microcognitive’ processes in assisting learners to notice L2 input and apply it to their learning.

2.2 Cognitive models of L2 learning

As previously mentioned (chapter one), the perspective adopted in this study is to consider the learning of a foreign language, particularly L2 grammar, from a cognitive perspective. Cognitive approaches are not seen as competitive to, but as complementary with, linguistic approaches to SLA (McLaughlin 1990). When L2 learning research is carried out within a cognitive perspective, the L2 is viewed as a skill, and its acquisition as a linguistic system is assumed to be built up gradually through processes of attention, conscious awareness and practice (Pica, 2005). For cognitive approaches, SLA is essentially the mental process of acquiring systems of knowledge (morphosyntactic, phonological, lexical), which make up the TL. This is specifically what this chapter is about: the presentation of cognitive models which explain how learners are able to extract linguistic information from target language input, convert it into some form grammatical representation in the mind (intake), store it in long-term memory and retrieve it as output. Influential L2 learning theorists and applied linguists who have used the cognitive label in promoting L2 learning theories and models are: Swain’s Output Hypothesis (Swain s (1995, 2005; Swain and Lapkin ,1995) Gass’s (Gass1997, Gass and Selinker, 2008) psycholinguistic model of L2 acquisition; Skill-Learning Theory (Anderson,1983, 1995; Anderson et al, 2004; Dekeyser, 2007; Johnson, 2001; McLaughlin (1990) and VanPatten’s (1996, 2004 ) Input Processing (IP) Model. The sequence used for their description is in terms of their respective theoretical claims regarding output in SLA, starting with those that assign a greater role to L2 production.
2.2.1 Swain’s Output Hypothesis

Over two decades, views about the role of output in (SLA) have shifted from considering it as a result of “acquired competence” (Krashen, 1987:16) to “part of the process of learning” (Swain, 2005: 471). Swain’s (Swain,1995, 2005; Swain and Lapkin,1995) Comprehensible Output Hypothesis (COH) challenges the standard view in L2 learning/teaching that the ability to produce second language (i.e. L2 output) derives from competence which only comes from comprehensible input (e.g. Krashen, 1985). Swain has argued that ‘comprehensible input’ is necessary but not sufficient in promoting L2 accuracy and that opportunities to produce output in the L2 are as important to linguistic development as opportunities to comprehend input. As articulated by Swain (2005), ‘the act of producing language (speaking or writing) constitutes, under certain circumstances, part of the process of second language learning’ (p. 471). According to Swain, to develop full competence in their L2, learners must be provided with opportunities to produce ‘comprehensible output’ where they are stretched’ in their language production: in speaking or writing, learners can stretch their interlanguage(IL) to meet communicative goals (Swain, 2000:98). ‘Stretching’ the L2 is achieved as learners are pushed ‘to process language more deeply-with more mental effort-than does input’ ( 2000:99). Being ‘pushed’ in output is similar to the notion of i+1 comprehensible of input (Swain 2005). Swain contends that when learners are required to produce output, they may be forced to move from semantic processing to syntactic processing:

Output may stimulate learners to move from the semantic, open-ended strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate production (Swain, 2000:99).

The empirical evidence for Swain’s claim comes from a number of studies on L2 French immersion classes where despite years of exposure to sufficiently rich comprehensible input, in communicative classrooms(input-rich classes) learners achieved a level of discourse and sociolinguistic competence, which do not rely heavily on grammar.They evidenced less knowledge and control of complex grammar, less precision in their overall use of vocabulary and morphosyntax, and lower accuracy in pronunciation. Swain found that these students were conveying intended meanings successfully but were not cognitively challenged to further develop their language and
being required to analyze the L2 grammar. Swain and Lapkin (1995) in particular argue that when learners produce the TL, external or internal feedback leads them to notice a gap in their existing IL knowledge. The noticing pushes them to consciously reprocess their utterances to produce modified output. Swain and Lapkin state:

In producing the L2, a learner will on occasion become aware of (i.e. notice) a linguistic problem (brought to his/her attention either by external feedback (e.g. clarification requests) or internal feedback. Noticing a problem ‘pushes’ the learner to modify his/her output. In doing so, the learner may sometimes be forced into a more syntactic processing mode than might occur in comprehension. Thus, output may set ‘noticing’ in train, triggering mental processes that lead to modified output (pp.372-373).

Swain and Lapkin (1995) further explain that in producing the L2, learners will sometimes become aware of a linguistic problem that is brought to their attention either by an external or internal feedback. This awareness pushes the learner to modify his output towards greater comprehensibility. In the process of modifying their output, L2 learners ‘engage in grammatical analysis which, though not essential to comprehension, is essential to accurate production’ (p.384). That is giving some attention to the form of their linguistic output, promotes more grammatical analysis of the L2 than meaning-driven processing alone. It moved them from ‘semantic to grammatical processing’ (pp.386-388). It is this syntactic processing that is believed to be an important element in the underlying SLA mechanism.

This view was advocated by many other researchers who seem to agree that comprehending input is insufficient for acquisition since it is clear that, during language comprehension, grammatical decoding may be bypassed and learners may circumvent syntactic analysis, relying more on contextual cues to decode messages (Skehan, 1998). Skehan noted that the nature of the input comprehension process suggests that input cannot guarantee the occurrence of language learning in that comprehension resources and strategies can prevent learners from doing deep processing and focusing on language forms. According to Skehan, ‘the comprehension process can be partly detached from the underlying syntactic system and from production’ (Skehan, 1998:15). Skehan explained how learners may well understand the meaning of an utterance without reliance on its morphology or syntax but that when they wish to convey meaning, they must be able to manipulate and structure their IL production. In the same vein, Gass and Selinker (2008)
have argued that comprehension and production have different psycholinguistic requirements; whereas successful comprehension is possible without a full linguistic analysis of the input, correct production requires learners to pay attention to the grammaticality of their messages. According to Gass and Selinker, semantic processing (which is achieved during comprehension) is not as useful for intake as the analysis made at the level of syntax which is achieved during production. It follows from this that comprehension-based approaches are unable to direct learners’ attention to form since these approaches are dominated by the need to extract meaning (Skehan1998). Swain and Lapkin proposed the following model (Figure1) that represents an illustration of second language learning from an output perspective.

Figure 1: Output and second language learning (based on Swain and Lapkin,1995)

Swain and Lapkin’s model of output and L2 learning depicts a process concerned with cognitive processes. The learning process is one-way, shown by the arrows pointing from left to right. It begins with ‘the need to communicate’ and ends with the goal of producing output 2 which is modified and more accurate. The elements include learners who receive feedback and produce output, and their cognitive (mental) processes. The cognitive processes occur between output 1 and output 2. They involve the learners engaging in ‘noticing’, using either ‘internal’ or ‘external’ feedback, analysing gaps in their L2 system through ‘simple inspection’ or ‘complex thinking’, producing output 2 when a solution is found or analysing input when no solution is found before producing output 2. Throughout the process, what the learners produce (output 1) and reproduce (output 2) as a result of feedback or analysis are implicated in L2 learning. In Swain’s
and Lapkin’s words ‘what goes on between the first output and the second… is part of the process of second language learning’ (p. 386).

Furthermore, Swain attributes considerable importance to corrective feedback, Output and feedback are interrelated constructs that allow learners to selectively attend to useful information in the input and to modify their ill-formed utterances, which are considered important processes in second language learning. The role of output may thus be seen as facilitating the process of input becoming intake.

Since the Output Hypothesis was first proposed, Swain (1985, 1995, 1998) has refined her hypothesis proposed some functions (table 1) to explain why the act of producing output in the L2 might lead to learner’s language development:
(a) the hypothesis testing function, and (b) the metalinguistic (reflective) function. (c) the noticing/triggering.

Table 1: Effects of Output on L2 development

<table>
<thead>
<tr>
<th>Output functions</th>
<th>Proposed Effects on learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis formulation/testing (e.g., Pica, 1988; Pica et al., 1989; Nobuyoshi and Ellis, 1993; Ellis and He, 1999)</td>
<td>-Learners formulate, modify their output (hypotheses) in response to input or feedback</td>
</tr>
<tr>
<td>-Reflective or metalinguistic function (e.g., Kowal and Swain, 1994; Swain, 1995, 1998; Swain and Lapkin, 2001)</td>
<td>-Learners use the L2 to reflect on the forms he demonstrating an awareness of the output they are producing</td>
</tr>
<tr>
<td>-Noticing triggering /function (e.g., Swain and Lapkin, 1995; Izumi, 2000; Izumi and Bigelow, 2000, 2001; Izumi et al., 1999)</td>
<td>-Learner’s recognition of their linguistic gaps forces them to seek input or search their own. Developing L2 system for the needed L2.</td>
</tr>
<tr>
<td>-Fluency /Automaticity function (e.g., Bygate, 2001; Debot, 1996; DeKeyser, 1997)</td>
<td>-Output practice leads to automatization of L2 forms which will progressively require less attention</td>
</tr>
</tbody>
</table>

Functions (a) and (c) involve processes equivalent to those proposed in the reformulated interaction hypothesis (IH) (chapter 3). Function b) focuses on an explicit rather than
implicit facet of language learning and stresses the role of the learner as an active agent in the learning process.

These three functions of output relate to L2 accuracy. Swain states, however, that output does affect L2 fluency but did not emphasize this function because she holds that this function of output is natural and self-obvious. Most language learning researchers agree that output is necessary to increase fluency, that is, learners must practise producing second language utterances if they are to learn to use their IL system confidently and routinely. However, the output hypothesis advanced by Swain (1985, 1995) makes a number of claims which go beyond this fluency function of output, and which have to do with the development of the interlanguage system, and not only increased efficiency in using it. These four functions will be addressed in more detail in the next subsections.

2.2.1.1 A Hypothesis Formulation and Testing Function

The fact that the learner devises a rule to account for some grammatical properties of the TL is well established from L2 research. The learner consciously or subconsciously builds ‘a hypothetical grammar’ (Gass and Selinker, 2008). The first function that language production may play in language processing is hypothesis testing: learners acquire L2 knowledge by first forming hypotheses about target structures, and then testing them out based on the resulting feedback from their output. Swain (1995) argues that L2 learners’ oral and written production errors reveal their hypotheses about how the L2 works. As learners use the language, both individually (e.g. a class presentation) and in interaction with others, they test their own hypotheses against their receptive knowledge. To test a hypothesis, the learner needs to use the L2 in some productive way. That is they have to say or write something in the TL. In other words, they can test whether they are understood and whether their IL is linguistically well-formed. Based on the assumption that output itself is the hypothesis, Swain (1995) states that ‘output represents the learner’s best guess as to how something should be said or written’ (p.132).

In addition to the argument of learner output (spoken or written) reflecting hypotheses held by the learner about how the L2 works, it is through language production that learners are able to get feedback (either implicit or explicit) about whether these hypotheses are correct. By receiving feedback from their interlocutors, learners engage in
negotiation of meaning, and their production is pushed to produce more accurate and precise L2 structures:

…producing output is one way of testing a hypothesis about comprehensibility or linguistic well-formedness. A considerable body of research and theorizing over the last two decades has suggested that output, particularly erroneous output, can often be an indication that a learner has formulated a hypothesis about how the language works, and is testing it output…Sometimes this output invokes feedback which can lead learners to ‘modify’ or ‘reprocess’ their output (1995:126).

According to Swain 2005 ‘important in this argument is the assumption that the processes in which learners engage to modify their output in response to feedback are part of the second language learning process (p 476)’. The hypothesis testing role of output has been explored by researchers who have shown that learners modify their output and test their hypotheses about the TL during interaction with other speakers, in response to such conversational moves as clarification requests or confirmation checks (chapter three). For example, Pica’s (1994) research has shown the hypothesis testing function to be important because during language production learners are able to form and test their hypotheses about the comprehensibility and linguistic accuracy of their utterances in response to feedback obtained from their interlocutors.

2.2.1.2 Reflective or Metalinguistic Function

A second function of output that Swain suggests is the metalinguistic or reflective function. This refers to the fact that when learners try to solve linguistic problems in their output they are, very often, consciously involved in reflecting on the nature of their TL use. Output has a metalinguistic function whereby learners’reflection on their language used helps them to internalise L2 linguistic knowledge. Using language to reflect on the language produced either by the self or by others is helpful to ‘control and internalize linguistic knowledge’ (Swain, 1995:126). In Swain’s view, encouraging students to use meta talk when faced with a linguistic problem serves the function of ‘deepening the students awareness of forms and rules and the relationship of the forms and rules to the meaning they are trying to express ’(1998:69). In order to achieve talk about language
(meta talk) and hence greater focus on grammar, Swain (2000) suggests tasks that involve language production outcomes. In their work, Swain and her colleagues, Swain and Lapkin (1995) and Swain (1998) highlight the importance of metalinguistic episodes in dialogues that allow students to think about the language through discussion of rules, language forms, and form-function relationships. Swain and Lapkin (1995) label instances of such meta talk as language-related episodes (LREs). In recent work, Swain (2000: 102) advocates activities which promote a different kind of ‘negotiation’ in which students engage in knowledge building dialogue not because they have misunderstood each other but because ‘they have identified a linguistic problem and sought solutions’. Swain and Lapkin (2001) have developed various classroom activities in which (pairs of) students have to work together to solve ‘form-based’ linguistic problems in the L2 through reflection on them, or through metalinguistic talk.

2.2.1.3 The Noticing/Triggering Function

A third function has been identified as the ‘noticing/triggering’ function of output. This function is indirectly related to input. Swain (1995,2005) suggests that, through output activities output activities such as speaking and writing, L2 learners become aware that they cannot say what they want to say in the TL. In other words, learners sometimes come to the realization that they don’t know how to produce certain linguistic forms. Swain has hypothesized that, under certain circumstances, output promotes noticing. Swain, (1995:129) wrote: ‘in producing the target language (TL), learners may encounter a linguistic problem leading them to notice what they do not know, or know only partially’. In other words, learners sometimes come to the realization that they don’t know how to produce certain linguistic forms. This recognition of linguistic needs can be internal, so that it is the student himself or herself that notices the gap, or external, that is, detected by the interlocutor or teacher. Noticing linguistic problems may have two subsequent consequences: If input is not immediately available, learners may engage in thought processes by which they revise their knowledge to either ‘consolidate it or to generate new L2 knowledge’. Secondly, if input is immediately available, this recognition of problems prompt the learners to attend to the relevant information in the input, in order to solve their problem and fill their gap. This process is thought to trigger learners’ L2 development. In the same vein, Narcy-Combes (2005:48, translation by the
author) noted that the development of IL toward the target norm is triggered by the learner’s understanding and becoming aware of the gap between one’s IL and the L2 input data. Swain (2000;1998:66) pointed out that noticing takes place on several levels such as: (a) noticing a form in the input, (b) noticing one’s deficiencies (or holes) in the L2, and (c) noticing the gap i.e. ‘language learners’ awareness of a mismatch between the input and their current interlanguage’ (Truscott, 1998:104). Noticing as described above (type b) is intended by Swain to mean learner’s recognition that they do not know how to communicate precisely, either by speaking or writing, the meaning of what they want to say. That is, they can notice that they are unable to produce the meaning they want to express in the TL. This noticing of L2 deficiencies or ‘holes’ (Doughty and Williams, 1998) in the L2 linguistic system may lead to another type of noticing i.e. noticing the gap between learner’s L2 or IL and the TL as proposed by Schmidt’s Noticing Hypothesis (see below). (type c). Swain claims that one the major functions of production in the L2 is to facilitate this type of noticing. Closely associated with the concept of noticing is the concept of cognitive comparison. Doughty (2001) argues that in order to compare what is known against what is unknown (i.e. for learning to take place) there must exist enough available memory resources which are coordinated between working and long-term memory. Feedback provided during interaction may help learners notice the gap between IL and the TL. The last type of noticing (type a) is when, while listening to or reading L2 material, the learner simply attends to the formal aspects of the TL in the input. Ellis, (2008) uses the term ‘noticing’ in this sense, i.e. learners have to notice a linguistic feature in the input for it to be acquired. It should be pointed out, however, that the issue of ‘noticing’ was originally limited to the interaction of attention with input as a way to incorporate new features into the L2 linguistic system (see the Schmidt’s Noticing Hypothesis in the section below). The issue of the interaction of attention with output had been neglected until Swain’s output hypothesis (1998). One important aspect of noticing research has concerned the role of L2 production (output) in promoting noticing. The present study focuses on output because it is considered to promote different types of noticing, particularly noticing in the sense intended by Swain above i.e. types (b) and (c) when L2 learners encounter problems -notice gaps- with the means to communicate their message (i.e. with their developing grammatical system) and engage in thought processes to fill those gaps. One of the two research projects
presented in this thesis (chapter four) examined whether output production would make learners notice the gap between what they know and what they want to produce, and whether it would prompt them to seek out subsequent input with more focused attention and lead to the noticing and learning of a specific L2 form (chapter four).

2.2.1.4 A Fluency/Automaticity Function

Apart from the above three functions, output also has the fluency function. That is, output provides opportunities for developing automaticity in language use. In order to be able to rapidly access already-existing L2 knowledge for fluent productive use, learners need to practice their knowledge in meaningful contexts. This naturally needs output because output can help learners to achieve greater fluency by increasing control over the forms that they have already partially acquired. Swain (1995, 2005) suggested that ‘one function of producing the target language in the sense of ’practicing’, is that it enhances fluency’ (1995:126). Although this function is ‘self-obvious and non-controversial’ (Swain:126), De Bot (1996) views the fluency function as the most likely way in which output aids acquisition. He points out that production helps learners to increase automaticity of processing, and as a result, enables them to devote more attentional resources to the higher-level processes involved in message generation.

The fluency function of output has been empirically corroborated (Bygate, 2001; DeKeyser, 1997). Perhaps worth mentioning here is another influential view that complements the Output Hypothesis, particularly with respect to the importance placed on production for L2 learning, is the position held by Skehan (1998). Skehan proposes a dual-mode processing which includes both exemplar-based and rule-based learning, to explain learner development in an L2 and connects these two systems via production. Skehan reviews evidence that in L1 learning children go from a process of lexicalization to syntacticalization of language before re-lexicalizing language again. According to him, this process of lexicalization and syntacticalization of language will not happen in L2 unless contrived by production, which forces the L2 learner to analyze language at a syntactic level. As pointed out above, Skehan (1998:14) claims that, during language comprehension, syntactic analysis can be circumvented since learners can be helped by contextual cues to comprehend messages whereas this is not possible during language
production. According to him, L2 learning happens when items from the rule-based system (the system responsible for analyzing language) are transferred to the memory-based system (the system responsible for synthesizing language). When L2 learners produce output and the main goal is fluency (e.g. speaking), they will draw more on the memory-based system whose products are faster than the products of the rule-based system. On the other hand, when the aim is to produce complex or accurate language, learners will draw more on the rule-based system which uses controlled processes (and attention) for its execution (Skehan, 1998:88-92). Thus, in Skehan’s view language production is essential to force the learner to process linguistic data at a syntactic level, forcing the learner to move from one system (memory-based) to the other (rule-based) and vice-versa. Extending Swain’s Output Hypothesis, Skehan(1998) identified six roles for output, some of these roles overlap with those advanced by Swain. These are: 1) generating better input, 2) forcing syntactic processing, 3) testing hypotheses, 4) developing automaticity, 5) developing discourse skills, and 6) developing a personal voice.

The three functions in Skehan’s framework: 1) testing hypothesis about the structures and meanings of L2 and receiving feedback for the verification of these hypotheses; 2) forcing a shift from meaning-based processing of the second language to a more syntactic mode, and 3) developing fluency and automaticity in interlanguage production can be seen as central roles for output. Skehan argues that a theoretical case can be made for the importance of language production on the basis of these roles. Skehan suggests other two roles for language production. The first is that production provides the learners with opportunities to develop discourse skills in the sense that only when taking part in extended discourse (as opposed to sentence-based grammar) can learners extend their capacities. In addition to this, there is the role of developing one’s own voice within the speech community. As Skehan put it, a learner who does not engage in expressing individual meanings is ‘unlikey to be able to develop a personal manner of speaking’ (p.18). In this way output has an important role to play. Ellis (2003:111), reviewing Skehan (1998) adds one other contribution of output in L2 learning: it provides the learner with ‘auto-input’ (i.e. learners can attend to the ‘input’ provided by their own productions) (in the literature auto-input, has also been referred to virtual input or back door learning).
If L2 output pushes learners to further internalize the input (for example, by noticing or hypothesis testing), as Swain argues, then what processes might play a role in the operation of those functions? Such questions are discussed in a number of psycholinguistic models, such as, Gass’s Psycholinguistic Model (Gass and Selinker, 2008), skill learning model (DeKeyser, 2007; Anderson’s 1983, 1995; Johnson, 2001) and VanPatten Input Processing (IP) Model (1996, 2004) A description of these models in relation to L2 output is discussed in the following sections.

2.2.1 Gass’s Psycholinguistic Model of L2 Acquisition

Gass’s (Gass1997, Gass and Selinker, 2008) model combines the sequence input-interaction-output with findings from cognitive approaches to learning and perspectives from Universal Grammar Hypothesis (UG). It distinguishes five stages which are needed to convert input into intake: 1) apperceived input 2) comprehended input 3) intake 4) integration 5) output. A graphic representation of the model is presented in figure 2.

![Input-Interaction-Output (IIO) Model of L2 Learning](image)

**Figure 2:** The Input-Interaction-Output (IIO) Model of L2 Learning (Adapted from Gass (1997), Gass and Selinker (2008))

The first major stage in acquisition is, of necessity, language data or apperceived input. Apperception is defined as ‘an internal cognitive act identifying a linguistic form as being related to some prior knowledge’ (2008:482). Frequency in the input, prior knowledge and experience help learners to notice forms as apperceived input. These features determine why some input is apperceived and why some is not. The comprehended stage goes a step further beyond noticing; it starts input analysis. Gass points out that in her model comprehension occurs at two distinct levels. At a superficial level, there is comprehension at the level of meaning. At a deeper level, ‘a more analytic understanding takes place with learners performing a mini-linguistic analysis’ (484). Prior knowledge and universal grammar (UG) are factors which determine what is comprehended. At the
next stage, the comprehended input is incorporated into the learner’s grammar to become intake. Intake is the process through which linguistic material is assimilated (Gass, 1997). It leads to grammar formation. Assimilation of intake, as Gass points out, is not automatic even if input has been apperceived and comprehended. Aspects of knowledge of L1, L2, quality of analysis and language universals determine what comprehended input is important for intake. Several psycholinguistic processes occur at the level of intake. These include hypothesis testing, hypothesis formation, hypothesis modification, hypothesis rejection or confirmation. The integration stage consists of the development and storage of changes that occurred in the learner’s grammar. According to Gass, hypothesis rejection or confirmation during the intake phase results in integration. Input that is not understood, analysed or processed is not integrated and may be placed in storage for later use. Especially important for the purpose of our study is the final stage is of output. Gass, like Swain (1995, 2005), assigns a causal role to output by pointing out that ‘output has generally been seen not as a way of creating knowledge but as a way of practising already-existing knowledge (1997:139). Gass’s model shows how the output component feeds into the development of the other components. Output provides the learner with opportunities to test hypothesis, getting feedback which feeds back into the intake component (the arrow from output to intake) and pushes the learner to engage in language analysis that goes beyond semantics analysis to the level of syntax. This links learner production with the comprehended component (the arrow from output to comprehended input) and develops automaticity of learners’ language production (1997).

2.2.3 Skill-Learning Theory

Skill-Learning Theory equates language learning with the learning of any other complex skill (cognitive or physical skills), and holds that it is an intentional process which requires attention and effort, and initially involves the development of declarative knowledge (i.e. knowledge that). Since this type of knowledge is factual, slow, and its application places heavy demands on a learner’s channel capacity, fluent and efficient performance is only possible when it is converted, by dint of practice, into procedural, (i.e. knowledge how) knowledge (DeKeyser, 2007; Dörnyei, 2009). This phenomenon may be accounted for by ‘a set of basic principles typical of the processes of learning’ (DeKeyser 2007: 97). Thus, it is assumed that the move from declarative to procedural
knowledge involves three stages. Following Anderson’s (1983, 1995) Adaptive Control of Thought (ACT) and Anderson’s et al. (2004) Adaptive Control of Thought-Rational theory (ACT-R), Dörnyei (2009:153-155) describes the process of skill building as comprising the cognitive or declarative stage in which learners consciously acquire new information through verbal instruction analysis, the associative or procedural stage in which learners apply what they know, and the autonomous or automatic stage in which learners are able to use being able to use the L2, receptively and/or productively fast, unconsciously and without effort or attention.

Declarative knowledge is a rough equivalent of what has been referred to above as explicit knowledge and procedural knowledge is often taken as a synonym for implicit knowledge (Dörnyei, 2009). Within the SLA literature, they are generally considered to refer to the same mental phenomenon (Ellis, 2008). Explicit knowledge has been characterised as ‘conscious, declarative’ available to the learner as a conscious representation through controlled processing in planned language use (Ellis 2008:418). In contrast, implicit knowledge is characterised as knowledge about language that does not involve awareness of that knowledge; it is ‘intuitive, procedural’ available for the learner in fluent, unplanned language use. The learner calls on both explicit and implicit knowledge in communication while the ultimate aim of teaching and learning an L2 remains the development of an implicit linguistic competence sometimes called the ‘true competence’. However, the possibilities raised by implicit learning, such as in first language acquisition are dismissed by some others. The Critical Period Hypothesis (CPH) seeks to limit the incidental acquisition of language to the childhood years due to reduced or eliminated access to the Language Acquisition Device (LAD) in the adult’s brain. It has been suggested that adult L2 learning is fundamentally different from L1 acquisition in its processes and in the level of competence attained and that it is strongly influenced by the learners’ L1 (Bley-Vroman, 1989; Schachter; 1988, reported in Gass and Selinker, 2008). Within a cognitive perspective on language learning, Dekeyser (1998, 2007) argues that older learners use a different cognitive system because the decline or attenuation of implicit cognitive mechanisms forces the late L2 learners to rely on explicit learning. In a similar vein, Gaonach (2005, translation by the author), in a discussion of the long-standing debate on the relative advantages of starting L2 learning earlier in the primary education, contended that differences between L2 and L1 learning...
strategies indicate that acquisition mechanisms that enable L1 acquisition are not available to late L2 learners resulting in differences in the acquisition process. According to Gaonach, late L2 learners ‘reconstruct an L2 in a way that is fundamentally different from children learning their L1’ (p.69, ‘translation by the author’). He, therefore, supports the views that argue for a subconscious acquisition mechanism available for early child learners only.

Ellis (2004, 2008:418) has distinguished and characterised the constructs of implicit and explicit knowledge as shown in table 2.

**Table 2: L2 Implicit and Explicit knowledge Criterion (based on Ellis 2008:418)**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Implicit knowledge</th>
<th>Explicit knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of awareness</td>
<td>Intuitive</td>
<td>Conscious use of rules</td>
</tr>
<tr>
<td>Type of knowledge</td>
<td>procedural</td>
<td>declarative</td>
</tr>
<tr>
<td>Systematicity</td>
<td>Knowledge is systematic</td>
<td>Knowledge is anomalous and inconsistent</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Knowledge is accessible by means of automatic processing.</td>
<td>Knowledge is accessible by means of controlled processing.</td>
</tr>
<tr>
<td>Use of L2 knowledge</td>
<td>When performing fluently</td>
<td>When learner experiences planning a difficulty</td>
</tr>
<tr>
<td>Self report</td>
<td>non verbalizable</td>
<td>verbalizable</td>
</tr>
<tr>
<td>Learnability</td>
<td>Learnable only within the ‘critical period’</td>
<td>Learnable at any age</td>
</tr>
</tbody>
</table>

In the left-hand column, he puts forward criteria which distinguish implicit and explicit knowledge. Next, Ellis suggests what elements a task would need in order to measure either implicit or explicit knowledge. For example, for ‘degree of awareness’, a task measuring implicit knowledge would require learners to respond by ‘feel’ (intuitively), while a task measuring explicit knowledge would need to encourage learners to consciously draw on their knowledge of L2 rules.

In terms of the acquisition of linguistic skills, the skill-learning theory assumes that explicit (i.e. declarative) knowledge is in some way a prerequisite for the development of implicit (i.e. procedural) knowledge. L2 learners thus have to begin with explicit
declarative knowledge about language elements; what Johnson (2001) calls the ‘learning pathway’ (in contrast to the ‘acquisition pathway’). Dekeyser (2007) referred to Anderson’s model to explain that practice in an L2 has the same effect as it does in other cognitive skills. He suggests that classroom instruction should facilitate the transition from declarative to procedural knowledge. When such procedural knowledge is practiced over a long period of time automatization is likely to occur. Automatization ‘refers to the whole process of knowledge change from initial presentation of the rule in declarative format to the final stage of fully spontaneous, effortless, fast, and errorless use of that rule, often without being aware of it anymore’ (DeKeyser, 2007:3). By automatizing speech, learners will not need to pay so much attention to how they are communicating a message (i.e. formulation) and will, therefore, be able to concentrate on what is being communicated (i.e. conceptualization). Skehan (1998:8) suggests, however, that this may apply more to some areas of language than to others (e.g. more to morphology and less to word order). Skehan (1998:88-92), as summarised in section 2.2.1.4 above, proposes dual-mode processing which includes both exemplar-based and rule-based learning to explain to explain L2 learning. Skehan’s view is that when L2 learners produce output and the main goal is fluency (e.g. speaking), they will draw more on the memory-based system whose products are faster than the products of the rule-based system. According to Ellis (2008:432), Skehan’s position echoes instance-based theories of fluency which claim that ‘fluent speech is based on the retrieval of ready-made exemplars that require minimal processing capacity’ rather than on a computation of rules. Similarly, Logan’s (1988, cited in Dörnyei, 2009:157) ‘instance theory’ explains the development ofautomaticity not as a change from one type of knowledge to another but by suggesting that each encounter with a stimulus is stored separately. When enough encounters with certain stimuli have been stored, access to them becomes direct. The more encounters occur, the more information is stored about the stimulus and the faster retrieval of that information becomes. Automaticity in this view is, thus, not based on the computation of ‘initial algorithms’ but on retrieval of ‘one of the stored instances’ or ready-made exemplars’; it is a transition from algorithm-based performance to a memory function’. If rule-based and item-based structures coexist in the language system but involve different processing mechanisms, then it follows that different types of instructional
intervention will have variable effects on changes in rule-based and item-based representations.

Anderson’s approach is in many respects similar to McLaughlin’s. First, McLaughlin’s (McLaughlin 1990) distinction between controlled and automatic processes and Anderson’s distinction between declarative and procedural knowledge both account for the progression from a more cognitively demanding to a more autonomous stage of learning. That is, controlled knowledge becomes automatic and routinized through enough practice and repetitions. Thus, according to McLaughlin’s model, practice makes perfect (McLaughlin, 1990:115). As McLaughlin claims, increased practice provides an opportunity for learners to internalize and restructure their internal representations to match the target language.

In this framework, production practice is the most important variable for acquisition. It is the means through which a skill is built and information is stored in long-term memory (DeKeyser, 2007). Differences exist, however, regarding the nature of the practice that is required to effect the transformation from explicit to implicit knowledge; in particular, researchers disagree on whether this practice can be mechanical or needs to be communicative in nature (Dörnyei, 2009). In traditional methodology, practice has a clear purpose. Practice helps to make perfect by helping the learner to gain control over new knowledge to the point where it can be used automatically and correctly in normal communication (see chapter three, section 3.2.2). This claim is closely associated with the precepts of behaviourist learning theory. Providing that the stimulus is carefully identified with a particular response and care is taken to ensure that the learner produces correct responses. In SLA research, output practice has been seen as a way to promote the building of language as a skill through practice i.e. as a means to facilitate automatization of language use. One function of output in Swain’s Output Hypothesis described above is the development of fluency and automaticity of processing. McLaughlin (as cited in Gass and Selinker, 2008) claims that automaticity involves ‘a learned process that has been built up through the consistent mapping of the same input to the same pattern of activation over many trials’ (p. 134). Gass (1997), Gass and Selinker 2008, Gass (1997) has applied this to output and argued that the consistent and successful mapping (which is practice) of grammar to output leads to automatic processing. De Bot, (1996) taking the information processing approach as the starting point, related the different functions of
output to Anderson’s ACT model and Levelt’s (1989, 1992, 1993) speech production model. Drawing on Anderson’s ACT model and Levelt’s (1989, 1992, 1993) speech production model, he payed particular attention to the role of output in processing particular L2 linguistic knowledge and proposed that output plays a direct role in the process of turning declarative knowledge into procedural knowledge: ‘the effect of output must be in the transition of declarative to procedural knowledge’ (p.549). Furthermore, De Bot (1996) argues, language learners are likely to benefit more from being pushed to retrieve TL forms, ‘make the right connection on one’s own’ than from merely hearing the correct grammatical structures in the input because the retrieval and subsequent production stimulate the development of connections in memory (p. 549). Some researchers in SLA, however, have argued that practicing a particular form or pattern does not mean that it has been permanently established. For example, Lightbown (1990) pointed out that the equation ‘practice makes perfect’ cannot fully account for L2 acquisition. L2 learners appear to forget forms and structures which they had extensively practiced and which they had previously seemed to master. Evidence for that claim can be found in the fact that L2 learners seem to go through a period of restructuring (McLaughlin, 1990) in which performance is worse before it improves again when new forms are taught. Once the restructuring phase is over, performance improves again, mirroring a U-shaped line. This so-called ‘U-shaped behavior’ phenomenon has been often reported in L2 learners. One example of U-shaped behavior comes from the development of English irregular past forms, such as ‘came’ which is later replaced by rule-governed, but deviant past form, ‘comed’(Ellis, 2008:982). These deviant forms are then replaced by the irregular forms that appeared in the initial stages as learners’ knowledge of past forms developed.

In line with other researchers who acknowledge the limitations of cognitive theories to explain L2 development (for example, McLaughlin, 1987; VanPatten, 1996; DeKeyser, 2007), Murano (2007:65) also suggests that skill building theories are limited when the skill at hand is L2 learning, since some linguistic rules may not be acquired following the transition path from declarative to procedural knowledge. Murano explains that the possible positive effects of practice on the acquisition of some grammatical forms depend on the linguistic features of those particular forms (Murano, 2007:65). From another perspective, Ellis (2008) contends (Ellis claims a weak interface position, section 2.3.1
below) that learners can and do acquire certain linguistic feature without explicit attention to them. Ellis, like Krashen (1985), believes that many aspects of L2 learning are governed by linguistic rather than cognitive aspects which means that ‘it is difficult to accept that the acquisition of all L2 features begins with declarative knowledge’ (2008:480). Ellis concludes that neuroscientific research does not provide conclusive answers to show ‘whether or not there is an interface between the two types of knowledge and ‘what the nature of the interface is’ (Ellis, 2008:755). Although recent neuroscientific research ‘has not confirmed the declarative to procedural shift suggested by skill acquisition theories’ (Dörnyei, 2009:160), some attempts have been made by some researchers who attempted to apply skill acquisition theory to language teaching.

Two important applications of skill learning theory to language pedagogy, have mainly been explored by Johnson (1996) and DeKeyser (1998, 2001). Johnson (1996 cited in Johnson 2001:108-110) argued that learners need to practice specific forms under ‘real operating conditions’ (i.e. in actual communication) to achieve full automatization of linguistic knowledge. One of the key concepts considered here is proceduralization, referred to as DECPRO, and PRODEC, or declarativization. The first one corresponds to the three stages of development from declarative to automatized knowledge outlined above. The second concept in the proposal by Johnson explains how implicit knowledge can be acquired thanks to the exposure to the target feature and how implicit knowledge contributes to the development of explicit representation. In practice, PRODEC encourages language awareness activities in order to create conditions for conscious analysis of the language, and DECPRO proposes planning activities for students in a way that they can pay less attention to forms than they actually need, for example by setting time limits or task cognitive complexity. This last strategy which involves the ‘direct proceduralisation of knowledge’ is ‘what many learners do when they learn an FL in the country where it is spoken’ (Johnson 2001:110).

Another pedagogical proposal has been formulated by DeKeyser (1998, 2001, 2007). According to DeKeyser, second language fluency, which he calls automatic procedural skill, can be achieved thanks to engagement in the practice of this language in the course of communicative tasks with the relevant declarative knowledge available in the working memory. He believes that the availability of declarative knowledge while doing tasks that entail communicating real meaning is an essential condition for skill acquisition. He
questions the utility of mechanical drills, first of all because they may be completed without the use of declarative knowledge. In his opinion, mechanical drills are useless because they do not make the learner engage in what is the essence of language processing i.e. establishing form-meaning connections (2007:11). So both Johnson’s and DeKeyser’s views accord that practice may only facilitate acquisition (proceduralising knowledge of L2 structures) if it is communicative, i.e. meaning-focused in nature. Since the distinction between input practice and output practice formed the foundation of the experimental research that was carried out in this dissertation, we shall try to indicate, in chapter 3, the roles and the importance of practice by discussing two approaches-input-based approaches and output-based approaches-which both assign crucial roles to the concept of practice but do so in fundamentally different ways. Consequently, SLA is said to be only input-dependent, according to some input-based approaches. On the other hand, output-based approaches (like skill acquisition theory) embrace both input (practice) and output (practice) as essential components in SLA.

2.2.4. Van Patten Input Processing (IP) Model

VanPatten (1996, 2004) developed a psycholinguistic model as part of a cognitive theory of second language learning that addresses the incorporation of grammatical knowledge of the learners’ developing system. The input processing (IP) model focuses on the need to understand learners’ psycholinguistic processing strategies. In particular, this model seeks to explain how learners’ processing strategies may hinder the development of their IL system, particularly with linguistic data that have certain features-for example, those that lack communicative value. According to the IP model, processing strategies may mislead learners in the comprehension of input, which results in the development of impoverished intake and eventually a faulty internal language system. Assuming a limited capacity for attention (i.e. that learners cannot attend to different stimuli in the input), and drawing on the work of other language researchers (e.g. Tomlin and Villa 1994) VanPatten identifies ‘detection’ as the key attentional process noting that detecting one bit of information can interfere with the detection of others by consuming available resources in working memory. This model assumes that-all things being equal-form and meaning compete for attentional resources, with meaning more likely to win out particularly at early stages of acquisition. VanPatten’s model views
as essential to L2 development the focus of learner’s attention on the initial stage of the process of acquisition in the course of which learners derive intake form input and use it to create a linguistic system (VanPatten 1996, 2004). As can be seen in Figure 2, IP attempts to explain what processes are responsible for deriving intake, parsing sentences during online comprehension, connecting grammatical structures with their meaning, and interpreting the noun-verb relations in a sentence. The limited attentional resources humans are equipped with a filter of the information that reaches the brain and, consequently, not all language are exposed to gets incorporated into the developing system.

![Diagram of SLA and use processes](image)

**Figure 3:** three sets of processes involved in SLA and use (adapted from VanPatten, 1996:154)

The part of input that gets processed is intake i.e. the portion of input available for incorporation into the IL or the developing system, as ‘the data that can be accommodated by the developing system’(1996:56). This is equivalent to the conceptualisation of intake in Gass’s model above (that is input or language data attended to and noticed but not yet integrated into the learner’s grammatical system).

The first process (I) indicated in the diagram consists in the conversion of input into intake and is called input processing. The key issue for Van Paten is how learners allocate attention during online processing to detect stimuli in the input. Taking as a point of departure the claim that language acquisition involves making form-meaning connections, VanPatten makes four assumptions about input processing concerning the mechanisms responsible for processing linguistic data in the input which operate when learners are engaged in comprehension (2004:7):
(1) learners’ prime focus is on the extraction of meaning from the input (e.g. Krashen 1982);

(2) learners must notice things in the input for acquisition to happen (Schmidt 1990);

(3) noticing is constrained by working memory limitations regarding the amount of information to be processed during real-time computation (Just and Carpenter 1992);

(4) learners may rely on certain universals of input processing but may also use their L1 input processor.

The subsequent process (II) results in the partial or complete incorporation or accommodation of the newly registered information into the developing system. This may bring about some kind of restructuring of the system. Accommodation is described by VanPatten (2004) as ‘either the partial penciling in or complete incorporation of a surface feature (form-meaning connection) of language into the developing system’ (p. 33) and restructuring as ‘what may happen to the developing system after a form has been accommodated (p. 33). Whereas accommodation involves quantitative changes to the developing system or linguistic behaviour, restructuring involves qualitative changes to the developing system of linguistic behaviour (VanPatten, 2004).

In the final stage (III), learners access and extract grammatical knowledge in their developing system through language production (output). Only one of those processes assumes the focal position in the model developed by VanPatten, namely input processing. It is perceived solely as the initial phase of acquisition in the course of which important data are fed into the internal mechanisms for organization and storage. VanPatten and Cadierno (1993) claim that instead of trying to change how learners produce language output, instruction should focus on altering how learners process input. This is more likely to have an impact on the developing language system, given that language acquisition is a sequential process that moves from left to right. According to VanPatten, traditional language instruction has been aimed at the last of these processes, that is, teachers have combined some sort of explicit grammar instruction with activities that concentrate on providing learners with opportunities to produce the target structure. Input processing and skill acquisition theory (described above), share some cognitive
features (e.g. importance of practice, provision of explicit L2 declarative knowledge before attempting to continue with proceduralization). However, the two models disagree with each other on the issue of skill specificity. Whereas input processing does not advocate skill specificity, skill acquisition theory claims that transfer from input-practice does not exist, and that comprehension and production skills should be practised separately.

VanPatten (2004) also disagrees with the claims of the skill-learning theory that acquisition proceeds from proceduralisation and next automatization of declarative knowledge owing to its repeated appearance in the output. VanPatten distinguishes between skill development and the creation of an implicit system. Skills such as accessing forms and phrases, arranging them to make sentences need to be practiced but, as he claims, ‘practicing forms and structures in the output does not result in acquisition’ (2004: 27). He stresses that output is actually the result of acquisition that consists in the development of access and production mechanisms. As described above, Swain’s Output Hypothesis asserts that output ‘pushes’ learners from the semantic processing during comprehension to the syntactic processing indispensable for encoding meaning. VanPatten (2004) takes Swain’s (1995, 2005) proposal of output triggering the syntactic processing of language to mean that output plays a facilitative role in acquisition and that making output pushes learners to be better processors of input. Moreover, VanPatten (2004: 13) perceives another role of output in language learning: confronting one’s own output within other’s input facilitates noticing which assists making form-meaning connections needed for intake (see discussion in chapter 3, section 3.2.2.3). He maintains, however, that decontextualized output practice such as mechanical pattern practice plays a limited role in L2 acquisition.

Taking into account the assumptions formulated above and the findings of research on how the incoming data are processed, VanPatten has proposed a set of principles accounting for language learners’ input processing. They have been subject to constant amendments and improvements and some subprinciples have been added to explain the detailed processes happening during input processing. The following set of principles is based on the version proposed by VanPatten in 2004 (7-18):

P1. The Primacy of Meaning Principle. Learners process input for meaning before they process it for form.
P 1a. The Primacy of Content Words. Learners process content words in the input before anything else.

P 1b. The Lexical Preference Principle. Learners will tend to rely on lexical items as opposed to grammatical form to get meaning when both encode the same semantic information.

P 1c. The Preference of Non-Redundancy Principle. Learners are more likely to process non-redundant meaningful grammatical form before they process redundant meaningful forms.

P 2. The First Noun Principle. Learners tend to process the first noun or pronoun they encounter in a sentence as the subject/agent.

P 2a. The Lexical Semantics Principle. Learners may rely on lexical semantics, where possible, instead of word order to interpret sentences.

P 2b. The Event Probabilities Principle. Learners may rely on event probabilities, where possible, instead of word order to interpret sentences.

P 2c. The Contextual Constraint Principle. Learners may rely less on the First Noun Principle if preceding context constraints the possible interpretation of a clause or sentence.

In terms of applications to L2 pedagogy, IP provides a theoretical basis for what VanPatten calls Processing Instruction (PI). As conceived by VanPatten (1996), the goal of PI is to alter the processing strategies that learners take to the task of comprehension and to encourage them ‘to make better form-meaning connections than they would if left to their own devices’; ‘to create grammatically richer intake’ (1996:60). This is done by giving learners the opportunity to process grammatical forms in the input and make form-meaning connection. Thus, IP being input-oriented, will provide learners with opportunities to engage with input receptively through listening and speaking. Ellis (2006:98) contends that this version of input-based ‘psycholinguistic options’ in L2 research and learning is ‘directed at helping learners to overcome the default processing strategies that are a feature of interlanguages (e.g. assuming that the first noun in a sentence is always the agent), (PI is described later in chapter 3 section 3).
Some scholars have challenged the theoretical model of PI (DeKeyser, Salaberry, Robinson, and Harrington, 2002); they critically examined the theoretical grounds in VanPatten’s model of input processing and argued that there are problems in the conceptualization of attention and input processing. According to them, a single limited attentional capacity model as proposed in VanPatten’s model does not specify how and why attention is constrained in capacity and leaves unexplained how exactly processing operates on language. DeKeyser et al. also argued that ‘the status of IP as a psycholinguistically testable construct is questionable’ (p.6) mainly because of the difficulty of assessing how learners process input with a meaning-driven parsing mechanism and because this meaning-driven parsing mechanism, although possible, contradicts current sentence-processing approaches and neglects the importance of structural language information.

We need to sum up the discussion about these four models. This summary will highlight the fact that it is difficult to have a model which gives a satisfactory account of the L2 learning processes namely the input-intake-internalisation-output progression. Each of the models described puts stress on one aspect somewhat at the expense of other aspects. However, there is one common consensus among the above-described models: the fundamental source of linguistic data for acquisition is the input learners receive. Another consensus is that learners need to perceive, notice and attend to linguistic feature in the input for learning to occur. Beyond the general consensus, the views diverge on a number of points: 1) the relative weight of processes and subprocesses that work at every stage of the learning process, 2) the degree to which language structures are learnt, and 3) the issue of concern for this study: how learners come to produce output? Gass’s model explains acquisition of L2 linguistic knowledge by focusing on input processing as a central stage in the conversion of input to intake. Input processing is key to the development of an implicit linguistic system in the mind of learners. Similar to Gass’s model, Van Patten emphasises the primacy of deriving meaning from input before acquisition. Van Patten explicitly affirms the centrality of input rather than output. Gass, however, acknowledges the importance of output as a stage of the acquisition process. This links Gass’s model to the skill learning theory (Anderson’s model of L2 learning). Both assign a role to language production (output) as means to automatise already taught language structures. The models also differ on other details. What we can
take from them is the following definition of the process of L2 acquisition. From the perspective of this study, developing L2 learners’ linguistic competence through language production (output) constitutes an essential part of learning. This process takes place at various levels moving from input to intake to internalisation and finally to output. Input becomes intake i.e. part of the learner’s short-term memory through the process of noticing - ‘apperception’ in Gass’s model described above- linguistic features in the input and comparing the target language structures with their own L2 production. Intake needs to be integrated into the learner’s long-term memory and forms the basis for language production (output). Output processes work as a device to (1) proceduralise the internalised linguistic features in order to enable learners access them easily (Anderson’s model), (2) trigger changes in the learners’ developing system particularly through the process of noticing (Swain 1995).

FFI is one way of enabling learners notice and attend to linguistic features. We explain the notions of attention, noticing and focus on form in the following sections.

2.2 Cognitive notions

Some researchers and language teaching methodologists have pointed to the natural human ability to learn first languages effortlessly as evidence that attention with awareness is not required. But adult learners of a second language often seem unable to reproduce this type of learning, and these difficulties are most overt in the learning of L2 grammar. The assumption adopted by many researchers (Corder 1967, Dulay and Burt1973; Felix 198; Krashen 1985) that primary naturalistic input is all that learners’ internal mechanisms need for acquisition to take place, has been minimised, reinterpreted or re-examined. The concepts of attention and noticing have been proposed to understand, and to possibly explain why it is that L2 learning understood basically as an implicit process is not sufficient.

2.2.1 Attention, Awareness, and the Noticing Hypothesis (NH)

Since the mid-1990s, the constructs of attention and noticing have been the primary focus in SLA research. Many researchers argued that subliminal learning, that is learning implicitly without awareness and simply from exposure to TL input is not sufficient and that some degree of conscious awareness is needed for the restructuring i.e. changing of
the learner’s mental representation of the language to take place. In that respect, Sharwood Smith (1994) argues that it is interesting to learn a language in an intuitive manner without external manipulation. However, this may take a very long time to accomplish and may not happen no matter how long the period of exposure is. Therefore, he suggests that teachers provide ‘short-cuts’ to their students to help raise their consciousness by deliberately drawing their attention specifically to the formal properties of the TL. According to Narcy-Combes (2005), recent research has taken an interest in how learners vary when it comes to learning a language. Among working memory, motivation, aptitude, learning strategies and other factors, specifically ‘attention’ has enjoyed recent focus. Narcy-Combes explains that, in general, learners have a limited attention span and that based on these limitations, and other factors, not all input is actually attended to and gets processed. He reinforces this idea that attention plays a significant role as a tool for determining if linguistic structures are noticed or not by the learner (pp.47-48, translation by the author). The NH proposed by Schmidt (1990, 1992, 1995, 2001) attempted to explain this fundamental issue that applied linguistics have been grappling with i.e the question why only a selected portion of the input becomes intake in the learning process. Schmidt formulated the hypothesis in which he identified ‘noticing’ as a key attentional process. In fact, Schmidt argued that attention is an essential notion to understand practically every aspect of L2 acquisition and stated that ‘SLA is largely driven by what learners pay attention to and notice in target language input and what they understand the significance of noticed input to be’ (Schmidt, 2001:3-4). The basic claim is that learning an L2 entails attended learning; ‘people learn about the things they attend to and do not learn much about the things they do not attend to’ (p. 30). According to Schmidt, attention and awareness are closely linked - what we are aware of is what we attend to, so if attention is required for learning then perhaps awareness is as well. However, Schmidt maintained that noticing involves a very low level of awareness (e.g. simply being aware of linguistic forms in the input) directing attention only to the ‘elements of the surface structure of utterances in the input, instances of language, rather than any abstract rules or principles of which such instances may be exemplars’ (Schmidt, 2001:5). Schmidt proposes that, in addition to noticing, that is, awareness at the level of noticing, there is another higher level of awareness, which he refers to as awareness at the level of understanding. This level of awareness is characterized by
learners’ ability to analyze and understand the underlying rules of linguistic forms. It is awareness at the level of noticing that Schmidt claims is crucial for language learning, whereas awareness at the level of understanding is facilitative but not necessary for SLA. According to Skehan (1998:48) ‘Schmidt is claiming, in contrast to Krashen (1985), that a degree of awareness is important before material can be incorporated into a developing interlanguage system’. In this context, it is important to mention that the debate on the potential interface between implicit and explicit knowledge (see section 2.2.3) centers on the extent to which awareness is necessary for L2 development. Most researchers have viewed SLA as an implicit experience that entails the development of implicit knowledge (Pica, 2005). However, there is no consensus on how this is achieved; nor is there a consensus on the role played by explicit knowledge. The nativist perspectives’ (e.g. Krashen’s Monitor Theory, 1981,1985) position is that acquisition has nothing whatsoever to do with explicit knowledge; it is an altogether implicit activity. Cognitive accounts of L2 acquisition, however, are much more mixed. Traditionally, the relationship between the two types of learning/knowledge has been discussed in terms of the interface between them, as shown in three distinct cognitive perspectives (Ellis, 2008). According to the noninterface position, learning under explicit conditions that is, with awareness, cannot convert into acquisition. In other words explicit grammatical knowledge (Krashen, 1982) or learned linguistic knowledge (Shwartz 1993) involves different acquisitional mechanisms which are stored in different parts of the brain and are accessed for performance by different processes, either automatic or controlled (Hulstijn, 2002). In contrast, the strong interface position (DeKeyser 1998, 2007) claims that not only can explicit knowledge be derived from implicit knowledge but also that explicit knowledge can be converted into implicit knowledge through practice. This position has been particularly promoted by skill learning theory (see section 2.2.3). In a weaker form of the noninterface position, that includes the concepts of attention and noticing, the possibility of explicit knowledge becoming implicit is recognized. However, it is believed that L2 knowledge can be built up through both explicit instruction and other interventions that enable learners to notice crucial relationships of L2 form and meaning that are difficult, if not impossible, for them to learn without such intervention. This is a view held by those who carry out research strictly within the cognitive perspective, but also among researchers associated with strategies of consciousness-raising (Sharwood...
Smith 1993). As pointed out by Skehan (1998:64), many of the scholars who hold the weak interface position share the premise that the aim of L2 teaching and learning should be to have learners work through consciousness-raising tasks i.e. ‘tasks which draw attention to a particular form but give no explicit information’. The weak interface position has been put forward by R. Ellis (1990). He, too, argues that implicit and explicit knowledge are two separately coexisting knowledge systems. Ellis’s theory tries to allow for findings that suggest that -for some L2 rules- formal instruction is effective only if properly timed: these rules seem to be developmentally constrained. Another important feature of Ellis’s theory is that knowledge does not necessarily start out as being explicit; ‘More often than not L2 knowledge begins as implicit knowledge’ (p.115). For Ellis, acquisition is not so much driven by learners’ needs to understand messages, as Krashen supposes. Rather, Ellis argues that language learners pay attention to features of the input and compare them to their own output; mechanisms referred to by Ellis as noticing and comparing (p.119).

This view also is also held by researchers associated a perspective that has come to be known as Focus on Form, which will be dealt with in the following section of this chapter. As Doughty (2000:225-227) explains, the importance of ‘selective attention’ and ‘cognitive comparison’ may lie in the fact that, in contrast to automatic and inaccessible macro processes of language learning as ‘internalisation of input’, ‘mapping’, ‘analysis’ and ‘restructuring, they represent shorter-term moment-to-moment micro-processes which may be open to immediate influence, and, as such, susceptible to FFI.

The position that we have adopted in this dissertation accords more closely with the second and third of these positions. Although we do not deny the view that L2 learning is largely an implicit process, we view explicit L2 learning and explicit L2 knowledge as essential, at least with regard to syntax, and side with researchers who argue for a role involving aspects such as both explicit instruction and other interventions that enable learners to notice crucial relationships of L2 form and meaning. A basic assumption guiding our research question is that L2 learning is a conscious process (Schmidt, 1990). In agreement with Schmidt (1990), Robinson (1995) and Swain (1995), among many others, a related assumption is that focusing on meaning alone when processing input cannot lead to complete L2 competence if not combined with awareness of form.
By discussing the issue of awareness, we imply that grammar instruction has a role perhaps a key role in the L2 classroom. This does not entail exclusively teaching discrete decontextualised grammar items for their own sake with some overt grammar explanations. The stipulation that learned knowledge can never become acquired knowledge means that the role of noticing (which includes awareness) is reduced in the L2 classroom, where teachers and learners would be expected to rely solely on incidental L2 learning and exposure to comprehensible input to develop language competence (Doughty and Williams, 1998).

Schmidt’s NH has attracted the support of some scholars. In Gass’s model described above, noticing is considered as the first stage in language development. Only the input that is ‘apperceived or ‘noticed’ becomes available for further processing. Skehan (1998) provides a visual schematization of Schmidt’s hypotheses (figure 4) concerning noticing and incorporates them into a model of language processing with some factors influencing noticing such as input frequency/salience and language instruction. He describes noticing as having a mediating role between input and memory systems. As Skehan’s diagram illustrates, TL forms that are noticed become available for further processing in working memory and are then stored in long-term memory.

![Input -frequency - salience](#) → ![Noticing](#) → ![Working memory](#) → ![Output](#)

![Input -frequency - salience](#) → ![Noticing](#) → ![Working memory](#) → ![Output](#)

\[\text{Input} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Input -frequency} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Input - salience} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{Output} \]

\[\text{Instruction} \quad \text{Working memory} \quad \text{O
features or parts of the TL in the input, which will in turn determine which part of the input can become intake subsequently. In a sense, learning is still input-driven (since the input is not being transformed) but in this way, instruction can allow the learner to choose what to prioritize in the input.

While Schmidt’s NH has attracted the support of some scholars, other researchers (e.g. Tomlin and Villa, 1994, Truscott, 1998) have questioned the idea that awareness is necessary for acquisition. Tomlin and Villa (1994 cited in Ellis 2008:437-8) posit a somewhat different approach to attention and claim that there are three interrelated processes of attention: alertness, orientation, and detection. Of these three processes, alertness and orientation require conscious awareness and the only process that does not require conscious awareness is detection. According to this view, the process of detection is crucial for learning. That is not to say that alertness and orientation do not have an important role, in fact, their role is to help increase the chance of detection, and in turn facilitate learning. Truscott (1998) criticizes the concept of noticing used in SLA research by stating that ‘the foundations of the hypothesis in cognitive psychology are weak’ and that ‘the hypothesis is not based on any rational theory of language’ (p.104). Truscott also points out that there are conceptual problems with the NH that make interpreting it and also testing it difficult. Truscott (1998) further claims that this hypothesis is ‘too vague to be of much value’ (p. 116).

Notwithstanding many criticisms, it is clear that in SLA, some kind of attention to formal features in the input is necessary for acquisition to occur. Therefore, although a few controversies remain, in the current study, attention to or noticing of relevant aspects of L2 is assumed an important process for learners’ learning of the targeted grammatical feature. Such consideration is indeed at the core of influential pedagogic proposals known as focus on form (Doughty, 2001; Doughty and Williams, 1998; Long and Robinson,1998) and consciousness-raising or input enhancement (Sharwood Smith, 1993) discussed in section 2.3 and section 3.2.1 respectively.

However, it needs to be pointed out that the theoretical tenets of the NH were originally limited to the interaction of attention with input as a way to incorporate new features into the L2 linguistic system. Assigning a role for noticing in input has been largely accepted. As Narcy-Combes (2005) explains, it is widely recognized that noticing is essential for language acquisition. In addition to input, it is also accepted that interaction plays a
crucial role in the process of learning a second language (p.1, translation by the author). The issue of the interaction of attention with output; how noticing interacts with output in L2 acquisition has hardly been mentioned in the literature. Among various means or approaches of getting learners to focus on form, the role of L2 output has received comparatively less attention from researchers. With the proposal of the Output Hypothesis (Swain, 1995, 2000, 2005), output production has been viewed not merely as an end product of learning, but as a stronger trigger of attention to form than input comprehension. As discussed above, this proposal has been made from several directions. One of them revealed noticing as one of the main reasons why producing output mediates L2 development; the argument which corresponds to Schmidt’s NH (see section 2.2.1). In fact, the value of the NH lies in that it offers justification for different variants of form focused instruction.

Taking the central role of attention in learning as a starting point of investigation, recent SLA research has begun to explore whether and how the learners’ attentional processes may be influenced for the sake of their greater IL development (Doughty and Williams, 1998). This research is reviewed later in chapter three of this dissertation. In the following section, we shall focus on how prominent teaching methodologies consider the role of attention and noticing in the classroom.

2.3 The Cognitive Focus on Form (FonF) Approach

The cognitive focus on form (FonF) approach has its basis in SLA models which treat L2 input as an important factor affecting learning processes. This approach draws on research by the Interaction and Output Hypothesis which aimed at discovering factors conducive to L2 learning. Doughty (2001: 206)) explains that progress in SLA is thought often to depend crucially upon cognitive processes such as paying attention to features of target input, noticing interlocutor reactions to (IL) output, and making insightful comparisons involving differences between input and output utterance details. In particular this approach points out the need to incorporate instructional techniques for learners to attend to form during a communicative activity, as they may help learners briefly draw their attention to form, meaning and use during one cognitive event (Doughty 2001: 211). At the outset, it should be stressed that the FonF approach has been discussed within the broad category of the so-called form-focused instruction (FFI)(also
known as focus on form instruction) which is used to characterize a wider range of instructional approaches.

The concepts of FonF and FFI are rather vague and have been interpreted in somewhat different ways. It is important to clarify the terminology used by different researchers to refer to instruction that deliberately focuses on the formal properties of language with the aim of facilitating the development of the L2. The first distinction with regard to the type of instruction can be made between FFI and meaning-focused instruction (MFI). FFI has been distinguished from MFI which focuses exclusively on meaning exchange (meaningful input) during classroom instruction and no overt reference is made to rules and language forms. Spada (1997) defined FFI as ‘any pedagogical effort which is used to draw the learners’ attention to language form either implicitly or explicitly’ (p. 73). Ellis (2001:1-2) wrote about FFI and defined it as ‘any planned or incidental activity that is intended to induce language learners to pay attention to linguistic form’. Depending on the instructional approach, attention may be directed to specific linguistic properties or not at all. In language teaching, these types of instruction have been referred to respectively as synthetic and analytic language teaching strategies (Wilkins, 1976).

Michael Long and Peter Robinson (1998) divide SLA into two notions: focus on forms and focus on meaning based on whether each of them focuses mainly on form or meaning. Focus on form is in between focus on forms and focus on meaning; Long and Robinson provide a diagram which shows the related teaching methods and syllabus type of focus on forms, focus on meaning, and focus on form respectively (Figure 5). In synthetic language strategies, it is the teacher’s role to analyse the TL for the learner. The classroom focus is on the teaching of language forms as separate and discrete. Methods and language teaching approaches associated with the synthetic strategy include the Grammar Translation method (GT), the Audiolingual approach, Grammatical and Notional approaches and some other methodologies (Silent Way and Total Physical Response-TPR). In contrast to the synthetic strategy, the analytic strategy, focuses on communicative practice. Learners experience language a means of communication rather through the study of a grammatical content (e.g. Natural Approach, Immersion and Procedural syllabus). A less radical ‘analytic’ line, while placing a high premium on putting the L2 to communicative use, recognises the value of attention to language form
(task-based language teaching (TBLT), Content-based language teaching (CBLT) and Process syllabus, option 3).

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic</td>
<td>Analytic</td>
<td>Analytic</td>
</tr>
<tr>
<td>Focus on forms</td>
<td>Focus on meaning</td>
<td>Focus on meaning</td>
</tr>
</tbody>
</table>

Natural Approach | TBLT | GT, ALM |
Immersion | Content-Based Instruction | Silent Way, TPR |
Procedural Syllabus | Process syllabus | Structural/ N-F |
Etc. | Etc. | Syllabuses etc. |

**Figure 5:** Language teaching options (Based on Long and Robinson, 1998)

As mentioned in the introductory chapter to this thesis, the interest in FFI was raised in 1990s as a result of research findings that suggested that MFI does not help developing high levels of TL accuracy; that successful mastery of the TL needs to be supported with focus on the formal aspects of the TL (Nassaji and Fotos, 2007; Swain, 1995). Throughout the previous sections, we dealt with the concepts of input, output, attention, awareness and noticing. These constructs offer an explanation of why meaning-focused language teaching (in contrast to form-focused language teaching) is not sufficient to develop full competence in the TL. From an output-based perspective, it has been argued that FFI does not suffice in acquiring language forms; learners can interpret the meaning without the use of syntax (Skehan, 1998; Swain, 1995). In contrast when producing output (spoken or written) one is more likely to attend to the form of the language. That is one is forced to move from ‘semantic processing’ that characterises comprehension to the ‘complete grammatical processing required for accurate production (Swain1995:128). Form focused output was to overcome some of the shortcomings of excessive focus on meaning and input-oriented instruction. It is now widely accepted among SLA researchers that FFI may have a beneficial effect on learners’ interlanguage (Doughty and Williams, 1998). Within the category of FFI, two main types have been largely discussed in recent years, namely Focus on Form (FonF), and Focus on FormS (FonFs). These two types of FFI are described and discussed below.
2.3.1 Focus on Form (FonF)

Focus on form (FonF) refers to drawing learners’ attention to language forms during MFI or communication. The following are commonly accepted definitions:

Focus on form often consists of an occasional shift of attention to linguistic code features -by the teacher and/or one or more students- triggered by perceived problems with comprehension or production (Long and Robinson, 1998: 23).

Focus on form overtly draws students’ attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on mean and communication (Long, 1991: 45-46).

This conceptualisation of paying or ‘shift of” attention to the form in the context of a meaningful communicative activity (i.e. what Long and Robinson (1998) and Long (1991) meant by FonF) has been termed as reactive FonF by Doughty and Williams (1998). These authors claim that adopting a reactive stance may be difficult for a practical implementation, since teachers have to be always ready to notice an error and consequently intervene with an appropriate FonF technique. In contrast, they mention that FonF can also adopt a proactive stance where the teacher chooses in advance which form he/she is going to structure in the context of a meaningful communicative activity. A different division of FonF was also elaborated on by Ellis (2008) who made a distinction between incidental (reactive) and planned (proactive) FonF. When the teacher adopts a proactive (planned) FonF approach, specific, previously prepared, instructional techniques will be employed (e.g. input enhancement) in order to make learners focus on a given form. In the case of a spontaneous, reactive focus on form, the teacher’s decision to address a particular structure always results from the students’ problems while performing a task or an activity.

Apart from planning, another feature which may determine the classification of FonF techniques is obtrusiveness. The least obtrusive FonF methods attempt to enhance detection (without awareness), while other, more obtrusive techniques focus on promoting noticing (which includes awareness) (Doughty and Williams 1998). Doughty (2001: 227) presents three criteria which must be met if a pedagogical intervention is to be considered unobtrusive: i) the primary focus is on meaning; ii) the FonF targets arise incidentally, and iii) learner attention is drawn to forms briefly. Norris and Ortega
(2000: 438) define ‘focus on form’ as that which meets the following criteria: (a) designing tasks to promote learner engagement with meaning prior to form; (b) seeking to attain and document task essentialness or naturalness of the L2 forms; (c) seeking to ensure that instruction was unobtrusive; (d) documenting learner mental processes (‘noticing’).

Throughout the 1990s and the beginning of the 21st century research has expanded FonF definitions. The concept includes now both preplanned and reactive approaches to grammar instruction and is generally understood as any activity that draws the learners’ attention to form within a meaningful context (Dougthy, 2001). The theoretical underpinnings for implementing focus on form in L2 learning have been revised by Ellis (2008: 827-828) as follows:

- learners need the opportunity to engage in meaningful language exchanges in order to be able to use the new forms spontaneously;
- full acquisition of the new language forms is possible only when the form is attended to while using the language in a meaning-focused task (see also Long 1991);
- taking into account learners’ limitations to process L2 data and attend to content and form in the input (VanPatten 1990), it is believed that learners concentrate on the meaning first during the performance of a communicative activity;
- therefore, there is a need to incorporate instructional techniques for learners to attend to form during a communicative activity, as they may help learners briefly draw their attention to form, meaning and use during one cognitive event (Doughty 2001).

In addition, Ellis (2008:879) points out that a focus on form might involve one or all of these options:

1) input-based instruction where input is manipulated in a way that causes attention to forms to take place incidentally;
2) implicit instruction (i.e. absence of rule explanation or instruction to attend to form;
3) output-based instruction which enables learners to create texts; and
4) implicit corrective feedback, (e.g.by means of recasts or requests for clarification).
These options carry the characteristics of implicit FFI in that 1) they does not direct but only attracts learners’attention to target forms while they are engaged in meaning-based activities; 2)they are unobtrusive- minimally interrupts communication, 3) they present target forms in context, 4) they make no use of meta-linguistic terminology, and 5) they encourage free production of target forms.

In order to be able to draw conclusions about the effectiveness of either approach, we need to investigate the other option which is Focus on FormS. This is done in the subsequent section.

2.3.2 Focus on FormS (FonFs)

Focus on FormS ‘refers to instruction that seeks to isolate linguistic forms in order to teach them one at a time’ (Ellis 2008:878) within the context of a planned approach to form-focused instruction. Thus, the TL is acquired through decontextualised explanations of the language point to be taught and series of controlled exercises that enable learners to practice the rules they have been presented (Edge and Carton 2009). This option is related to what Wilkins (1976) and Long and Robinson (1998) termed the synthetic syllabus in which the language is divided into separate parts and consequently taught in different steps. In this sense, it includes the skills-learning approach (advocated mainly by DeKeyser, 1998, 2007) which is based on the assumption that classroom L2 learning derives from general cognitive processes, and thus entails the learning of a skill(see section 2.2.3). The most common and typical focus on forms lesson follows the presentation-practice-production (PPP) procedure (Edge and Carton 2009:18; Ur, 2009). The classroom procedures which come from this approach include, for example, explicit provision of grammar rules (including explanation in the L1, pointing out differences between the L1 and the L2; and then a number of text manipulation (2nd stage) and text-creation (3rd stage) activities follow. In parallel with the ‘focus on form’ options, four main options are distinguished in the focus on forms approach (Ellis 2008:870-871):

- input-based instruction where input is manipulated in a way that directs learners’attention to the target form;
- explicit instruction involving consciousness-raising or/and meta-linguistic explanation;
-output-based instruction which enables learners to manipulate and create texts; and
-explicit corrective feedback, e.g. by means of meta-linguistic descriptions.

These options are characteristics of explicit FFI discussed by Ellis (2008:879); that is they(1) direct attention to target forms;(2) are planned; (3) and obtrusive; (4) present target forms in isolation; (5) involve the use of meta-language; and (6) include controlled practice of forms.

The difference between these two approaches, therefore, would appear reasonably clear-cut. Unfortunately, however, the use of the two terms in the literature is not always consistent. Some researchers (e.g. DeKeyser 1998; Lightbown 1998, 2000) use ‘focus on form’ to refer to any approach which includes grammar instruction, thus including both ‘focus on form’ and ‘focus on forms’. In a review of focus on form and form focused instruction, Dörnyei (2009:274) pointed out that instead of distinguishing the two terms, ‘it might be more useful to refer to two aspects of the same approach with focus on form being used to talk about both the theoretical principles and psycholinguistic underpinnings of the approach, and FFI when discussing the pedagogical applications of these’. The concepts have, thus, been interpreted in different ways and to decide whether ‘focus on form’ or ‘focus on forms’ is more effective, one needs some firm evidence coming from research.

The present study was carried out in the context of the debate as to how to most effectively implement FFI in the second language classroom. At the heart of the debate is the question whether learners may need to have their attention drawn explicitly to some linguistic features. A corollary to this question is to what extent should instruction be directed at developing form-meaning associations through comprehension practice (input) only as opposed to providing opportunities for learners to practice in production tasks(output). The pedagogical intervention employed in the first research project (chapter four) does not meet the requirements of focus on form decribed in the earlier section. It is thus, if we follow both Long’s criteria (see above), and criteria (a) and (c) of Norris and Ortega themselves, clearly an exponent of a ‘focus on formS’. That is L2 grammar is treated as entailing discrete forms which it teaches initially by means of explicit instruction in separate lessons, with an emphasis on form (and is, thus, in the terms of Doughty (2001) obtrusive before proceeding to comprehension and/or
production exercises enabling students to recognize form-meaning relationships. Thus, this study will primarily consider instructional approaches that relate to a planned approach to FFI, that is, approaches relating more to ‘focus-on-forms’. For the purposes of this study we will adopt the definitions of FFI as used Ellis (2001), and Spada (1997) above. The model provided by Ellis (2001) conceptualized FFI as ‘any planned or incidental instructional activity that is intended to induce language learners to pay attention to linguistic form’ (pp.1-2). Similar to Spada, Ellis included both planned and incidental interventions, which is also consistent with an expanded definition of focus on form. However, Ellis’s definition incorporates form-oriented interventions that do not occur in the context of meaning or communication. In other words, Ellis included instructional activities that are associated with traditional grammar teaching following a synthetic syllabus.
CHAPTER THREE

INPUT- AND OUTPUT-BASED APPROACHES

3.1 Introduction

Different theoretical orientations were identified concerning the necessity, sufficiency or facilitative role of input, output, and negotiated interaction. In our discussion, we shall refer to these two theoretical perspectives as the input and the output orientations. The third orientation i.e negotiated interaction accounts for L2 learning both through input and output. After laying the theoretical background, a review of empirical studies investigating the effects of three linguistic environments related to the hypotheses above – input, interaction, and output – on L2 learning will be presented.

3.2 Input- and Output-Based Approaches

In many occasions throughout chapter 1 and 2, we have seen that some theorists and methodologists see L2 learning arising from exposure to input rather than from language practice (output). Claims about the value of each of these factors and variables have led to different perspectives towards the way L2 learning is fostered. Research on classroom instruction and particularly the competing theories of SLA do not always agree on what fosters learning. For example input-based approaches say that output plays no role in learning whereas output-oriented approaches say that output is crucial to developing accuracy and IL. According to Ellis (1997) language instruction can at least be viewed from two perspectives (figure 6): some researchers and language teaching methodologists have taken an input-based approach to classroom instruction which aims at providing learners with language input in the form of listening and reading tasks. Others take an output-based approach that provides learners with opportunities to engage with the L2 productively i.e. through speaking and writing.

How should teachers react to these claims? Should we choose one position and ignore the other?

This study will focus on the two components, input, and output in comparing input-based instructional techniques with output-based instructional techniques.
The specific focus of the study will be how these instructional techniques affect the acquisition of L2 structures. Therefore, the theoretical background to the present research project includes the input hypothesis (IH) (Krashen, 1982, 1985) and the comprehensible output hypothesis (COH), (Swain, 1995, 2005), the Input Processing (IP) model (VanPatten, 1996, 2004), and the interaction hypothesis (IH) (Long, 1996) (table 3).

The input-based theories—the input, the interaction hypotheses, and the Input processing (IP) model - are presented first and are followed by the output hypothesis.

### 3.2.1 Input-based approaches

Input-based instruction, the focus in the treatment used in this study, involves an attempt to intervene directly in the process of L2 learning by manipulating the input to which learners are exposed (Ellis 1999). There are various approaches to L2 instruction that prioritize input, many of them proposing innovative ways of manipulating the input in order to maximize learning outcomes. Thus, it is possible to distinguish between early and contemporary input-based approaches to L2 instruction. In the first, L2 instruction is unfocused in the sense that it is geared to providing roughly tuned comprehensible input

Table 3: Language learning theories reviewed
<table>
<thead>
<tr>
<th>Language learning theories/models</th>
<th>Roles for input</th>
<th>Roles for output</th>
<th>Empirical evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensible input hypothesis (CIH)</td>
<td>Comprehensible input is sufficient for SLA</td>
<td>Output is a result not a cause of SLA</td>
<td>No empirical evidence</td>
</tr>
<tr>
<td>Input Processing (IP) model</td>
<td>Input is fundamental for SLA</td>
<td>Output merely facilitates access to an already developed L2 system</td>
<td>Processing instruction is superior to traditional output-based instruction</td>
</tr>
<tr>
<td>Interaction hypothesis (IH)</td>
<td>Input is necessary for SLA; negotiation provides comprehensible input</td>
<td>Negotiation provides modified output, facilitating SLA</td>
<td>Mixed findings on how interaction affects comprehension and acquisition; negotiated interaction provides input, feedback, and output</td>
</tr>
<tr>
<td>Comprehensible output hypothesis (COH)</td>
<td>Input is necessary but insufficient for SLA</td>
<td>Output plays important roles in SLA: noticing, hypothesis-testing, metalinguistic/syntactic processing</td>
<td>Mixed findings on how output affects L2 from a cognitive perspective; positive results about learning effect within sociocultural paradigm</td>
</tr>
</tbody>
</table>

through written and spoken texts, as recommended by Krashen (1981). In other words, this instructional approach caters to incidental acquisition or what was described in chapter two as a ‘focus on form’ approach. According to Ellis (2006:85) such view is based on ‘the conviction that learners (including classroom learners) would automatically proceed along their built-in syllabus as long as they had access to comprehensible input and were sufficiently motivated (2006:85)’. In the second, in what has become known as ‘processing instruction’ (PI) (VanPatten 1996), learners are expected to pay conscious attention to specially designed input in order to learn a specific target structure. Another type known as ‘Input Enhancement’ (Sharwood, 1993) provides learners with input that has been flooded with exemplars of the target structure in the context of meaning-focused activities. Although these approaches make use of different pedagogical techniques they are all based on a common assumption-namely, that experience in L2 reception (listening to L2 speech and reading L2 texts) lays the foundation for L2 learning, including L2 production. What they also have in common is that they do not require learners to produce the target structure.
3.2.1.1 Early Input-Based Approaches

In the 1960s and 1970s, input-based approaches were promoted by Asher (1969) and Winitz and Reeds (1973). Asher (1977), quoted in Richards and Rodgers (1986) recommended the delay of practice (speaking) in foreign language teaching until the teacher is convinced that the language forms which are being taught are fully comprehended. According to Richards and Rodgers (p.87) this emphasis on comprehension skills is known as the ‘Comprehension approach’. This methodological approach assigns a central role to comprehension in L2 learning and puts an emphasis on meaning rather than form. The premise of the ‘Comprehension approach’ is that L2 acquisition is very similar, if not identical, to L1 acquisition. Thus, the classroom should be a space where language development can proceed ‘naturally’ via acquisition activities that do not force learners to speak (produce output) before they are ready. It is important to mention that comprehension or input-based instruction positions itself in opposition to the traditional approach to the teaching of L2. It has, particularly, been advanced as an alternative to the production practice traditionally utilised in L2 instruction which claims that in L2 learning we first learn rules or items consciously and then gradually automatize them through practice’ (Ellis1994:280). The evidence for this alternative hypothesis is strong. It has been shown that comprehensible-input-based methods are very successful when compared to practice (output)-based teaching methods. As noted by Larsen-Freeman and Long (1991:141) method comparison studies show superiority of input-based methods (e.g.Total Physical Response (TPR), the Natural Approach) over production-oriented methods (e.g. Audiolingual or audiovisual methods, Silent way, Community Language Learning (CLL) which ‘insist on early production’ and usually after ‘minimal exposure’. However, the success of these input-based instructional methods, commonly referred to as comprehension-based approaches, was done in the context of global comparative method studies. In our discussion, we will focus more on recent research on input-based instructional techniques.

3.2.1.1.1 Comprehensible Input (CI)

In the early 1980s, the case for input was made by Krashen (1981, 1982,1985, 1998)) as part of his Monitor Model, a theory whose central tenet was the Comprehensible Input Hypothesis(CIH), (later known as the Comprehension
Hypothesis), which assigns a crucial role to comprehension. In short, the input hypothesis identifies ‘comprehensible input’ as the only causative variable in SLA claiming that language can be acquired only by understanding content, that is, by receiving ‘comprehensible input’. Krashen defines comprehensible input as that bit of language beyond the learners current level of grammatical knowledge. The learner’s current level of L2 knowledge is defined as i and the next level as i+1; ‘we move from our current level, to i+1 the next level along the natural order by understanding input containing i+1’ (1985:2). Krashen (1982, 1983) makes the following claims:

1) Learners progress along a natural order by understanding input that contains structure a little bit beyond their current level of competence.

2) Although comprehensible input is necessary for acquisition to take place, it is not sufficient because learners also need to be disposed affectively to receive the input that they comprehend.

3) Input becomes comprehensible as a result of simplification and with the help of contextual and extralinguistic clues.

4) Speaking is the result of acquisition, not its cause. If the learner receives a sufficient amount of comprehensible input, speech will develop on its own. Learners’ production does not contribute directly to acquisition.

5) If input is understood and there is enough of it, the necessary grammar is provided automatically.

Krashen (1982) lists the following sources of evidence in support of his hypothesis:

1) Caretaker speech - People responsible for looking after children tend to talk ‘simpler’ in order to be understood. This speech is not strictly graded but ‘roughly tuned’ to the child’s level.

2) Simple codes - By this he refers to teacher and foreigner talk where utterances are modified in order to help comprehension.

3) The silent period - Often children acquire the TL, go through a period of not talking.
4) The limited contribution of L1 - Learners may ‘outperform’ their competence by using an L1 rule before learning the appropriate L2 rule. However, the L1 rule and the L2 rule may differ resulting in error. This situation can only be resolved by further acquisition.

5) Method comparison research - He suggests methods emphasising input have been more successful (1982) and also stresses the success of immersion and sheltered language teaching (1985).

Over the years, many premises that underlie this hypothesis, which include the claim that understanding messages is not only necessary but sufficient for learning an L2, have been challenged. While it is generally acknowledged in L2 learning and teaching research that comprehensible input is necessary for L2 knowledge to continue toward target-language norms (Larsen Freeman and Long, 1991); it is also acknowledged that the definition of CI is imprecise, and efforts to operationalize it have been problematic (Gass and Selinker, 2008). First, The term CI suggests the provision of TL data for learners through listening and reading texts; it does not involve learner in active engagement in the sense of having to engage in the L2 learning process through speaking and writing. As Brown put it, it ‘paints a picture of learners at the mercy of input that others offer’ (2000:280).

Returning to the discussion of Gass and Selinker’s model (2008) reviewed in chapter 2, five stages were identified. A main suggestion made in this model was that for input to become intake, three conditions must be met: 1) features in the input must be noticed; 2) input must be comprehended by the learner, 3) intake must be integrated into the learner’s implicit knowledge system. The interesting stages from the perspective of the present discussion are the first stage which involves ‘apperceive’ or ‘notice’ some feature in the TL input and the next stage where the feature which has been noticed is comprehended at some level. The prerequisite for learning is still seen as comprehensible input but attention is drawn to the conditions that make input available for processing. Gass and Selinker distinguish comprehensible input from comprehended input. The former implies that the person providing input controls the comprehensibility, whereas the latter is ‘learner-controlled’; the focus is on the learner and the extent to which the learner is doing the ‘work’ to understand (2008:484). According to Gass and Selinker, comprehension of the input refers to a continuum of possibilities that range from
understanding the general message to performing a mini-structural analysis. When the comprehended item has been ‘assimilated’, it is considered to have become intake. Gass and Selinker suggest that the factors that influence what gets noticed are: frequency in the input (either very frequent or very infrequent), affective variables such as motivation, attitudes, prior knowledge (of the L1, other languages, of the world), and selective attention. They propose that explicit grammatical teaching can influence acquisition at the apperception phase. In other words, learners can make use of such knowledge in order to ‘selectively attend’ to the linguistic feature in the input. This view which considers explicit L2 knowledge to have an effect on the process of the acquisition of structures through meaningful input (i.e. the apperceived input stage) is different and somewhat in contrast to Krashen’s ‘no-interface’ position (section 2.3.1). Other criticism is mainly centered on the fact that Krashen’s supports a Chomskyan (nativist) view and places excessive emphasis on the role CI-positive evidence- in language development without recognizing the role of the factors such as language output and negative evidence (i.e. corrective feedback). For example, White (1987 cited in Sharwood, 1994) criticises the input hypothesis and points out the importance of feedback, particularly as a source of negative evidence to indicate the inadequacy of learners’ interlanguage system i.e. to indicate that a form in the input is not correct. Sharwood Smith suggests that positive evidence alone is insufficient in L2 learning. He writes that ‘the input itself provides no clear evidence of how the grammar should be changed’ (p.106). Learners need more than just comprehensible input to allow them to recognize their inadequate rule system, they also need incomprehensible input. Most significant to the concern of this study is the argument for the role of comprehensible output (CO) (statement 4 above). According to Krashen (1985, p. 2) ‘Speaking is a result of acquisition and not its cause. Speech cannot be taught directly but ‘emerges’ on its own as a result of building competence via comprehensible input’. In other words, the CIH asserts that as long as students receive adequate comprehensible input, their language production ability can be fostered automatically. In chapter two, we reviewed Swain’s (and Swain and Lapkin’s, 1995) account of L2 learning. As evident in their argument, the possibility of change in learners’ L2 developing system comes from attempts by the learner to process output, to produce comprehensible output ( further discussion of the role of output in L2 learning will follow later in this chapter).
By calling into question the importance of L2 production (speaking), Krashen’s theory downplayed the role of conversation. Some researchers argue that it is doubtful whether mere exposure to input, even if it is comprehensible, actually promotes language development, and that conversation in itself is productive because it reflects the effort on the part of the learner to comprehend input. Input studies have taken Krashen’s claims as the fundamental basis against which to examine how input can be made comprehensible to the learner and more precisely, how learners can be guaranteed that comprehensible input is actually contributing to L2 development. There has been agreement among researchers that L2 input has to be modified in order to make it both and available and accessible to the learner. What has been the source of disagreement is the kind of input modifications and adjustments that should be made. Ellis (2001) identified four domains in instructional methods that researchers sought to determine in order to meet what kind of input works as the greatest facilitator of L2 comprehension and L2 development.

(i) Comprehension: while comprehension (comprehensible input) is important for completing language tasks successfully, it does not guarantee learning of targeted forms.

(ii) Simplified input: making the meaning of L2 input accessible to the learner (e.g. through simplification or elaboration) affects comprehension and learning.

(iii) Interactionally modified input: Giving students the opportunity to signal non-understanding of input is effective both for comprehension and acquisition.

(iv) Modified output: Allowing learners the opportunity to clarify their own output has a qualitative effect on the interaction that facilitates both comprehension and L2 learning.

Studies on input modification concentrate on describing simplification or modifications (oral or written) that different speakers (e.g. mother, father, native speaker, teacher) make when addressing an ‘acquirer’ or an L2 learner. Long (1980, cited in Ellis 1999) refers to input modifications as the grammatical or ungrammatical changes made in the formal properties of utterances addressed to learners. The assumption is that such
modifications aid comprehension. Of the different interaction patterns mentioned, we shall be focusing on pre-modifications made in oral and written classroom input. Pre-modified input occurs in teacher-learner interactions and TL samples. The input-oriented language resulting from such interactions is known as foreigner talk or teacher talk respectively. The modifications in teachers’ speech can lead to a special type of discourse which has been referred to as ‘teacher talk’.

Another claim for the role of premodified input comes from research on classroom materials where simplification is used as a means of providing access to the meaning of written linguistic input. It is argued that ‘authentic input’ (i.e. input that naturally occurs outside of pedagogic settings) that would be of pedagogical utility to the learner is problematic for the same reason that it is useful. It contains language structures that the learner does not comprehend. As a consequence, the learner needs help with the input in order to comprehend it both semantically and syntactically. This help can consist of changes to reading and listening texts through features such as simplification, elaboration, (or marginal glosses with translation) (Larsen-Freeman and Long1991). Simplification consists of modifications of texts that change syntax and vocabulary of the text to make listening and reading material accessible for the learner. Elaboration helps learners gain access to the text by adding grammatical structures such as phrases, clauses rather than removing the language forms in the input. It ‘often involves lengthening sentences in an attempt to make the meaning clear’ (Ellis 1994:256). The assumption is that modification of the linguistic input enhances comprehension and, therefore, has the potential of affecting L2 learning.

Although modified input (whether simplified or elaborated) might be highly effective in facilitating comprehension (Chaudron, 1988), Long (1996), it was Long (1983,1996) who made an important distinction between modified input and modified interaction arguing that learners cannot just be passive recipients of i+1 if they wish to acquire a new language. He put forward the argument that input is most beneficial when it is part of two-way communication and not when the learner is simply exposed to TL input. Unlike the premodified condition in which input had less complexity, the interactional input is modified through opportunities to interact and negotiate.

3.2.1.1.2 Input and the Interactionist Approach
Those working from an interactionist perspective proposed views that consider both the individual and the environment as important components of L2. They focus on the role the linguistic environment in interaction with the learner’s innate capacities. Language learning in determining is the outcome both of input factors and of learners’ innate mechanisms (Gass 1997). Within this approach, language is not viewed as a separate faculty or organ as the innatists claim. Understanding a language is the result of a continuing interaction between the learner and his linguistic environment. According to Ellis (1985) L2 is learning is seen as the product of the interaction between external input and external factors.

The interactionist view sees language development as the result of both input factors and innate mechanisms. Language acquisition derives from the collaborative efforts of the learner and his interlocutors and involves a dynamic interplay between external and internal factors (p.129).

The interactionist approach has paid particular attention to the nature of the interactionist approach has paid particular attention to the nature of conversational exchanges and linguistic modifications L2 learners typically engage in (Gass, 1997). Their focus is on the ways in which learners engage themselves in negotiating for meaning i.e. try to understand and to make themselves understood by conversational partners. Interactionists maintain that positive evidence is important but not sufficient for acquisition; they contend that negative evidence - or what is not possible in a language - which is available to learners through the interactive feedback that is offered as interlocutors negotiate for meaning when attempting to resolve communication breakdowns - has an important role to play. The modifications and negotiation of meaning that take place in interaction facilitate L2 learning because they contribute to the accessibility of input for mental processing. Narcy-Combes (2005:58, translation by the author) mentions one factor influencing the acquisition process, within French studies on interaction, called ‘séquences potentiellement acquisitionnelles’ (SPA). This concept refers to the fact that inside interaction (or some sequences of interaction) the ‘more competent interlocutor’ or the native speaker (NS) signals to the learner a ‘gap’ in his L2 linguistic knowledge and overtly draws his attention to linguistic elements as they arise incidentally in a natural flow of conversation, where the focus is on meaning or
communication. At this critical juncture, communication can either break down, or through negotiated interaction, the interlocutors can work through the communication breakdown until the new L2 form has been modified to the point where it is entirely understood. The interaction hypothesis (IH) - an extension of Krashen’s IH - proposed by Long and investigated by other researchers (e.g. Pica 1994, Ellis, 1999; Gass, 1997; Larsen-Freeman and Long, 1991) revealed that it was the learners’ interaction with learners that mattered as much as the input directed to them (Pica, 2005:273). The early version of the IH (Long, 1985) postulated an indirect causal relationship between interaction and acquisition by claiming that negotiation of meaning can generate more profitable comprehensible input and hence lead to language acquisition. This first formulation of the IH was based on the following three claims: (1) Interactional modification makes input comprehensible, (2) Comprehensible input promotes acquisition and (3) Interactional modification promotes acquisition.

While Long, like Krashen, emphasizes the importance of comprehensible input, he places more importance on the interactional aspect of two-way communication, as well as the adjustments that have to be made as a result of negotiation of meaning.

The revised version of the IH was proposed by Long in 1996 and offered the following advancements: Firstly, it seeks to account for the role of interactionally modified input in L2 by specifying the learner internal mechanisms that are involved. Secondly, CI is one of the several processes required for acquisition to occur. Thirdly, the additional processes of attention (the learner’s focused consideration on the input received) and noticing (the learner’s conscious capacity to perceive differences between their own output and the input received) are introduced as key factors.

In Long’s view, the strength of negotiated interaction lay in the way it linked the various processes involved:

It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner’s developing L2 processing capacity, and that these resources are brought together most usefully, although not exclusively, during negotiation for meaning. Negative feedback obtained during negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language.
specific syntax, and essential for learning certain specifiable L1-L2 forms (Long, 1996:414)

...negotiation for meaning and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways (Long, 1996:151-52).

Long’s statements emphasize that interaction is a connection between ‘input’ and ‘learner internal capacities’. It explicitly mentions the concepts of ‘negative feedback’ and ‘selective attention’ to be important to L2 learning. Ellis (1999) refers to the IH as the conversational exchanges that arise when interlocutors seek to prevent a communicative breakdown or to remedy communication problems. He believes that L2 learning is fostered when the input to which learners are exposed is made comprehensible through the interactional modifications that arise when learners perceive or experience difficulties in message comprehension. Ellis (2001:71) pointed out that whereas in the early version of the IH, in which only comprehended input is important for L2 acquisition, ‘the latter version also recognises that interaction can contribute to language acquisition by providing negative feedback, and opportunities for learners to modify their output’ (p. 71). Therefore, according to the updated IH, negotiation of meaning could assist language learning because it provides learners with comprehensible input, feedback, and modified output. Negotiation of meaning is the central concept for both the early and the updated version of the IH. SLA research on negotiated interaction supported the argument that when interaction is modified conditions for language development are enhanced considerably (Pica 1994, 2005).

Swain’s Output Hypothesis, discussed in chapter two, also shares with Long’s (1996) IH its emphasis on meaning negotiation, though unlike Long’s emphasis on selective attention and negative evidence, Swain (2005) believes it is the process of producing the TL that enhances language learning (see also discussion below).

In the Deep-end approach (as opposed to the shallow-end) or strong version (Howart 1984) of CLT interaction between the teacher and learners or between learners is considered an important condition by which the L2 is learnt. It is argued that by
providing large amounts of input and engaging learners in life-like interaction the grammatical system will be acquired implicitly. Thus, the best way to approach learning an L2 was to provide the learners with large amounts of input and opportunities for interaction and meaningful communication. More generally, instructional options which rely on interaction-based theories have been criticised for emphasising meaning over form. We have seen in chapter two, section 2.32, increasing concerns with CLT approaches to promote accuracy has promoted interest form focused approaches. As proposed in this study, form focused output was to overcome some of the shortcomings of relying solely on comprehension and excessive focus on meaning and communication (see section on output-based approaches below). From an SLA perspective, other researches also questioned the benefits of interaction in the development of L2 learning. Skehan (1998:203) pointed out that ‘it is one thing for successful negotiation to take place, but quite another for this to have beneficial consequences for IL development’ (Ellis, 2001). has also suggested that limited support is provided for the claim that interaction directly contributes to learning. He considered it difficult to find a direct relationship between comprehension of L2 input and the internalization of L2 forms. Quoting Sharwood Smith (1986) he argues (p.55) that input can be processed in two different ways: exclusively for comprehension, or for comprehension and acquisition. Interaction will only lead to acquisition if input functions as ‘intake’ for both comprehension and learning and not simply for top-down processing i.e. to infer meaning. In other words, only when learners become aware of gaps between their developing L2 grammar and the target language and when they consciously attend to linguistic items in the input does L2 learning take place. Input has to be assimilated into intake for L2 learning to occur. Recently, other proposals have been made in the research literature to overcome some of the shortcomings of earlier input-based methods that rely solely on input comprehension.

3.2.1.2 Contemporary Input-based Approaches

The early comprehension-based methods inspired by Krashen’s IH (e.g. Natural Approach) intentionally limited L2 instruction to implicit exposure only, that is, no attempt is made to manipulate the input to focus on particular grammatical structures. Contemporary input-based methods gradually shifted to more focused techniques that
manipulate the input to make a particular feature of the L2 grammar more salient and thus more likely to be noticed by the learner. This strand of research on types of formal exposure (e.g. input enhancement, input flooding, and implicit vs explicit learning conditions) fits under the broad category of FonF which has already been described in chapter two. Currently, FonF refers to any technique that draws the learners’ attention to form in the classroom within meaning-based approaches, and may be either preplanned or reactive. Alternatively, these input-based techniques can also be classified as Input Enhancement (Sharwood Smith, 1993), a term used to refer to deliberate attempts to make the input more salient for learners. The term FonF is similar to IE in that both techniques refer to external efforts to draw the learners’ attention to form. However, while focus-on-form techniques dictate that the technique should occur in the context of communicative events, IE does not. Among the samples that Sharwood Smith (1994) offered as input enhancement techniques are input flood, typographically enhanced input, and rule explanation. Another input-based option for targeting problematic grammatical forms is Processing Instruction and Structured Input (SI). The following sections outline each one of these treatment types and also includes a brief description of the results of some of the relevant research in this area (a complete review of some of these studies is found in Chapter 4).

3.2.1.2.1 Input Enhancement (IE)

One line of research linked to types of formal exposure that has been pursued recently is the investigation of the theoretical premise that input can be enhanced or manipulated (consisting both of CI and attention to L2 forms) or made more apparent as a means to draw the learners’ attention to form contained in the input. Various pedagogical techniques have been devised to help learners pay attention to grammatical form while also providing them with the input they need for successful language learning, including consciousness-raising or input enhancement (Sharwood Smith 1994). For Sharwood Smith 1994, L2 certain grammatical features in the input to which the learners are exposed are inherently non-salient, and hence their presence often escapes the learners’ attention. Sharwood Smith proposed a continuum of consciousness-raising techniques, ranging from the extremely overt metalinguistic explanations found in traditional grammar instruction, to highlighting relevant aspects
of the input without any overt explanation ‘(1994:178). According to Sharwood-Smith (1994:178) ‘the most obvious way of to affect subconscious processes beneficially is by making relevant evidence in the input salient’. The ‘frequency’ and the ‘perceptual saliency’ of L2 forms affect to a large extent learners ability to notice (Narcy-Combes, 2005, translation by the author). Enhancing input is one way in which L2 forms are made more salient and likely to be noticed by a learner. It is expected the greater saliency a particular linguistic feature has in the L2 input to which the learner is exposed, the greater the chances are for it to be selected by the L2 learner (Skehan, 1998). Saliency, simply put, is to make learners notice what stands out in the input. Input enhancement was a term designed to replace the term ‘grammatical consciousness-raising’ (CR). ‘Consciousness-raising’ or what Sharwood Smith also termed ‘input salience enhancement’ (p.179) consists of focusing of learner’s attention on the formal properties of the language in order to accelerate the acquisition processs. While CR describes what happens in the mind of the learner, the term input enhancement, coined by Sharwood-Smith ‘emphasizes the work that is carried out on the linguistic material. It highlights ways in which input is made salient to learners’ (Gass and Selinker 2008: 387-388). In input enhancement, students are not required to produce the structures right away and are not required to produce them correctly from the start. As Sharwood-Smith noted, the aim is to ‘heighten metalinguistic awareness of relevant input without appealing to systematised metalinguistic knowledge’ (1994:179). Sharwood Smith (1993, cited in Vanpatten, 1996: 84) proposes two types of input enhancement: positive and negative input enhancement. Positive input enhancement highlights the salience of correct forms in the input. An example of this would be visual input enhancement of a reading text. Negative input enhancement would highlight forms that are not correct (e.g. pointing out errors).

As a kind of focus on form instruction, textual enhancement, also known as visual enhancement, begins with a meaningful context (written input). The input could appear in the form of an article, a letter, a story or anything else that is written and meaning-bearing. The target item in this input is then enhanced by visually altering its appearance in the text by using typographical cues such as bolding, italics, underlining, capitalizing or bigger fonts to draw the reader’s attention to particular information in a text. One of the advantages of textual enhancement is that it directs the learners’ attention to form while also encouraging them to process meaning-bearing input. Another advantage is that
textual enhancement can be easily integrated into different types of instruction regardless of the teaching approach adopted.

Falling within the parameters of input enhancement is enriched input (also referred to as input flooding). Input flood can make use of both aural and written input. During an input flood task, learners are held responsible for the meaning of the text and not asked any questions dealing specifically with the target forms embedded (flooded) in the text. Therefore, because the target forms occur frequently in the input, it is hypothesized that L2 learners will attend to them in some way. Gass (1997) states that ‘something that is very frequent in the input is likely to be noticed’ (p. 17). Therefore, because the target forms occur frequently in the input (the input is flooded with exemplars), it is hypothesized that L2 learners will attend to them in some way. Narcy-Combes (2005:48, translation by the author) suggests that learners need to pay proper attention to L2 elements of the target language and look out for ‘exemplars’ of the target features; that unattended (incidental) learning is limited compared to attended (intentional) learning. According to Narcy-Combes, the rationale for the use of such techniques as enhanced input and enriched input (flooding) is that they are likely to encourage intentional learning.

Studies that have investigated the effects of Textual Enhancement (Shook, 1994; Alanen, 1995; Doughty, 1995; Jourdenais, Ota, Stauffer, Boyson, and Doughty, 1995; Robinson, 1997; White, 1998; Williams, 1999; Izumi, 2002) and Input flood (Trahey and White, 1993; Spada and Lightbown, 1999; Williams and Evans, 1998) on SLA have produced mixed results. As summarised by Simard (2001, translation by the author), some of these studies (Jourdenais et al., 1995; Leeman et al., 1995; Shook, 1994) yielded positive findings and found evidence for the claim that learners are more prone to notice and produce those features that have been made more salient in the target input. In other words, typographical enhancement of selected input features positively affects L2 learning, since they integrate attention to form with attention to meaning. Some reported partial effects (Alanen, 1995); or no effect for textual enhancement (Leow, 1997, 2001; Overstreet, 1998, Wong 2000). Studies (Doughty, 1991; Izumi, 2002; Robinson, 1997; White, 1998) which have investigated the variables and linguistic forms in L2 English produced mixed results. One study by Izumi (2002) investigated the potentially positive effects of output and input enhancement on the acquisition of English relative clauses by
L2 learners of English within the framework of the output hypothesis (Swain 1995, 2005). This study is described later in section 3.3.3.2. R. Ellis (1999) identified three main goals of such studies: (a) to investigate whether the forms targeted are noticed by learners (Jourdenais, Ota, Stauffer, Boyson, and Doughty, 1995), (b) to investigate whether enhanced input promotes acquisition (e.g., Trahey and White, 1993), and (c) to compare the effects of enhanced input with some other instructional option (e.g., White, 1998). In all of these studies, learners were exposed to large amounts of input that they process for comprehension. Although the findings are somewhat mixed, Ellis concluded that these studies show that enhanced input can promote noticing of specific forms, can lead to acquisition, and, in some cases, works as effectively as (or more effectively than) other instructional techniques that involve more traditional, explicit instruction.

3.2.1.2.2 Processing Instruction (PI)

As the name indicates, PI is a type of instruction. It is a type of FFI informed by VanPatten’s work on learners’ input processing strategies (Morgan-Short and Bowden, 2006) that seeks to manipulate the way in which learners process input, thus leading to better intake. Unlike other input-based techniques (e.g., input flood, textual enhancement), PI is much more explicit; learners are told what to notice and how to process it. VanPatten (1996, 2004) has argued that PI, which helps learners process information via comprehension practice, might be more effective than traditional instruction (TI) which requires learners to produce language too prematurely. The PI approach maintains that L2 learning occurs through a series of processes. As elaborated by Van Patten (1996, 2004), PI consists of:

1) explicit grammatical explanation of the relationship between a given form and the meaning it can convey;

2) information about processing strategies showing learners how natural processing strategies may not work to their benefit; and

3) Input-based materials, ‘structured input activities’, in which learners are given the opportunity in the input in a controlled situation so that better form-meaning connections might happen compared with might happen in less controlled situations. (1996: 60).
Structured input (SI) activities, include:

(a) Referential SI, or input that ‘requires the learner to pay attention to form to get meaning and have a right or wrong answer’ (Van Patten, 2004: 43).

(b) Affective SI, or input ‘require the learner to express an opinion, belief or some affective response as they are engaged in processing information about the real world’ (p.43). These activities unlike type (a), do not have right or wrong answers.

In PI, activities are structured so that learners can make changes in their developing system via focus on input and only afterward should instructional material provide opportunities for learners to develop their productive abilities. In this way, PI falls largely within input-based instructional techniques, reception-based theories and communicative methodologies to grammar instruction, which require learners to engage with the target language via comprehension practice rather than through attempts at producing the language. Despite the fact that PI is an input-based approach which does not provide any opportunity for output practice, Van Patten (1996) claimed that PI has consistently promoted improvement in production comparable to that achieved by output-based instruction. Van Patten and his colleagues have carried out numerous investigations to examine the effectiveness of processing instruction in relation to a more traditional language teaching, which emphasizes production of the L2. The key issue investigated was whether acquisition is promoted more effectively when learners process the input in psycholinguistically relevant ways than when they experience traditional grammar explanation and practice? (e.g. Van Patten and Cadierno, 1993a, 1993b). In these studies, processing instruction has often resulted in improved learner performance in both comprehension and production (e.g. Van Patten, 2004). Van Patten writes: In a series of studies, ‘we have demonstrated, the relative superior effects of PI to more traditional instruction…’. We find that participants who undergo processing instruction in which they never produce a structure ‘do not only perform better on particular kinds of interpretation tasks’, but also ‘they can access their newly created knowledge for production on a variety of tests’ (p.279).
VanPatten (2004) argued in favour of ‘an interventionist’ approach to L2 instruction (VanPatten’s IP model, section 1.6.) but not in favour of output-based traditional instruction (TI) to which processing instruction (PI) has often been compared.

TI is the term used to refer to the instructional treatments that are contrasted with and input processing instruction (IPI). TI, which was chosen as a basis for comparison, was, and probably still is, the most pervasive pedagogical tool in the L2 classroom and characterizes the most typical way of manipulating input, i.e. through providing learners with metalinguistic information and rules (Morgan-Short and Bowden, 2006). The main difference between output-based instruction, which is referred to as traditional instruction (TI) and the processing instruction approach is that PI attempts to change the strategies and mechanisms used by language learners when processing L2 input, whereas TI involves explanation and output practice of a grammatical point and focuses on the manipulation of learner output to affect change in the developing system. Other differences between traditional instruction (TI), and input processing instruction (IPI) are summarised in Table 4.

Table 4: A comparison of Traditional (TI) and Input Processing Instruction (IPI) (Based on Morgan-Short and Bowden, 2006)

<table>
<thead>
<tr>
<th>Traditional instruction</th>
<th>Processing Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Paradigmatic</td>
<td>-Information is presented non-paradigmatically.</td>
</tr>
<tr>
<td>-TI involves output practice</td>
<td>-Input-focused activities (reading or listening)</td>
</tr>
<tr>
<td>-Some focus on meaning</td>
<td>-Meaning always in focus</td>
</tr>
<tr>
<td>-No Processing strategy Information.</td>
<td>-Processing strategy information</td>
</tr>
</tbody>
</table>

Although PI has not been shown to be superior to other types of instruction (notably traditional instruction (TI)) in all cases (VanPatten, 2004). What appears to be the key factor in its success are the type of comprehension-based grammar activities called ‘structured input activities’. Structured input tasks (also called grammar interpretation
activities, Ellis, 1997, 2001, 2008), is another explicit form of input-based instruction that organizes the input to meet a particular goal. Students work at activities that are designed to encourage them to pay attention to form and to process input for meaning. Ellis (2001) defines structured input instruction as fitting within the focus-on-forms (see discussion of FonFS, chapter two) category because it aims to focus student attention on form and because attention is repeatedly drawn to a preselected linguistic feature. According to Ellis (2008), structured input is achieved by means of what he calls ‘interpretation tasks’. An interpretation activity consists of an input stimulus to which learners must make some kind of response. The stimulus can take the form of spoken or written input. The response can take various forms (e.g. indicate true-false, check a box, select the correct picture, draw a diagram, perform an action) but in each case the response will be either completely ‘nonverbal or minimally verbal’ (2008:875). Erlam (2003: 561) characterises structured input instruction as follows:

- It involves a primary focus on form.

- Students are required to work with language input that focuses their attention on a particular target structure.

- Students are given listening or reading tasks that require them to pay attention to the form and process its meaning.

- Students are not at any stage engaged in activities requiring them to produce this structure.

Students do not engage in activities that require them to produce the target structure in either written or spoken form. Unlike input processing instruction, the activities that students work at do not aim to direct them away from an unhelpful processing strategy. Van Patten uses the term structured-input activities to refer to the input-based activities that he gives to his students in his processing-instruction treatments. This led to the misunderstanding that structured-input activities are synonymous with input-processing instruction (Erlam, 2003). Unlike input processing instruction, the activities that students work at in structured input instruction ‘do not make any mention of altering an unhelpful, natural-processing strategy’ (p.560). Ellis (2008:875) pointed out that
‘input processing instruction makes use of structured input but it cannot be equated with it’. Structured input activities, in VanPatten’s approach, are informed by the strategies that learners use to process input. The goal, in VanPatten’s framework, is not just to get learners to notice the target forms, but also to alter any incorrect strategies they may be using, to process input so that they can make form-meaning connections correctly and more efficiently. They are, as VanPatten defines them, ‘a type of grammar instruction whose purpose is to affect the ways in which learners attend to input data. It is input-based rather that output based’ (VanPatten 1996:2). According to VanPatten (1996:63) the term ‘structured’ is used to ‘refer to the fact that the input has been manipulated in particular ways’. The activities are structured in that in order to complete the tasks successfully, the learners must match the meaning of the target structure to its form, (e.g. a sentence or a set of pictures and are asked to match them with one of two proposed interpretations). The rationale behind structured input activities, says VanPatten, ‘is the push to get learners to make form meaning-mappings in order to create grammatically richer intake’ (p.55). In this study, structured input activities are used in the sense intended by Erlam (2003) and Ellis (2005, 2008) above.

In short, what can be understood from Van Patten’s framework is that in L2 learning situations where input is not enough, PI represents the best kind of classroom intervention to help learners focus on problematic L2 forms. Within the last few years, Input Processing Instruction (IPI) has received considerable attention. A sizable amount of research has been carried out to determine the extent to which PI is superior to other types of instruction, notably traditional instruction (TI). This research is examined in the following section.

3.2.1.2.3 Criticism about Input Processing Instruction (IPI)

Some scholars have challenged both the findings and the theoretical model of PI. DeKeyser (1997, 2001) and Dekeyser et al, (2002) called into question any basis for assuming the superiority of this input-based method of instruction over one that engages students in output activities. These researchers remain skeptical about the claim that PI, as suggested by research findings, may be effective in improving both the interpretation and production of certain target forms, especially when learners practice only comprehension strategies, not production skills, during treatment. They suggested that both input and output develop corresponding comprehension and production skills. The
researchers found that the relative effectiveness of the two types of instruction depends upon on the type of structure. Input processing works well for teaching things such as verb endings but complex structures are more effectively taught with output practice. They concluded that ‘comprehension and production skills in an L2 are to some extent learned separately (p.105). In other words, input processing is more effective for promoting comprehension skills, whereas production-based instruction is more effective for promoting production skills. Similarly, DeKeyser et al. (2002) in their critique of research on PI, which suggest that interpretation practice (comprehension ) shows the same effect in production test as production practice, point out that recent studies on processing have reported that both processing and output-based instruction (which is more meaning-based) have equal beneficial effects on the acquisition of semantically complex target forms. According to DeKeyser et al., whether output-based instruction has positive effects equal to those of IP seems to depend on the operationalisation of the treatments, on the complexity of the target structure and on the delay between practice and testing. One criticism from DeKeyser et all, questions the cognitive underpinnings of PI. They claim that VanPatten’s input processing model is based on an outdated model of ‘attention’ and processing and questioned whether there is any psycholinguistic basis for the theoretical tenets of input processing instruction. They caution that it would be premature to draw conclusions about what type of processing students need to engage in to acquire various language structures. Without casting doubt on the value of PI, Toth (2006: 324-325), argued that the question that arises is ‘whether output requirements during meaningful interaction come at a cost for acquisition acquisition-still putting the ‘cart before the horse,’ as in TI- or whether they play a facilitative role independent of the one played by input processing’. If this is the case, then a treatment involving input and output in meaningful interaction might provide benefits to learners’ linguistic knowledge that go beyond those of PI alone.

This has led a number of researchers to compare PI or PI-like input-only groups to output practice groups (e.g. Allen, 2000; Bowden and Morgan 2006;Collentine, 1998; DeKeyser and Sokalski, 1996; Erlam, 2003; Salaberry, 1997) with resulting positive gains for output practice on L2 development, especially when it is utilized in conjunction with the appropriate input. Findings from these studies are presented in subsequent sections.
As mentioned above, the framework of instructional options proposed in this thesis includes a distinction between input-based vs. output-based instructional orientations. In light of the previous discussion on the role of input and focus of the present study on developing L2 learning through language production, the question emerges as to whether output plays a similar role in learners’ acquisition of L2 competence.

3.2.2 Output-Based Approaches

In chapter two, the overall process of L2 acquisition was illustrated. The language performed by the learner was described as output. While, it was postulated, that exposure to input was sufficient for language learning, not all models regarded output as playing an important role in the acquisition process. Theoretically, the major approaches to L2 learning, ranging from the skill building theory (Ellis 1994; Dekeyser 2007) to the updated the input-interaction framework (Long, 1996; Pica, 1994, 2005), all recognize the need for language production though they attach different importance to its role in L2 learning. There are conflicting views regarding the primacy of input or output for L2 acquisition. The debate over the role of output revolves around whether it plays a primary or secondary role. In contrast to input-oriented approaches to L2 acquisition, an output-centered approach to teaching emphasizes the importance of building into instruction opportunities for L2 production. One form of output-based instruction is the one practiced in traditional ELT methodology in which target structures were practiced devoid of any communicative context through different types of mechanical drills. Output-based options may also serve as an opportunity for output-based tasks, which, according to some researchers (e.g. Gass and Selinker, 2008; Swain 1995, 1998, 2005; Skehan, 1998) push the learners to use their full grammatical resources and allow learners to become aware of gaps in their current state of interlanguage development. The current meaning of output practice is that it not the means by which learners practice their language for fluency, but it is also believed to play an important role in the process of SLA, as learners need to employ their cognitive resources to produce language (Izumi, 2002). Both traditional and recent perspectives on L2 output practice are discussed below.

3.2.2.1 Output Practice in Conventional L2 Methodology
Pedagogically, L2 production has always been an important feature of L2 classroom instruction. Many L2 teachers upgrade the importance of classroom activities that push students to produce the L2 either in speaking or writing. As noted by some scholars, the view that L2 production is an important part of learning constitutes a central part of ‘traditional’ foreign language teaching methodology (DeKeyser, Sokalski 2001:83). In traditional methodology, practice has a clear purpose. Practice helps to make perfect by helping the learner to gain control over new knowledge. This claim is closely associated with the precepts of skill learning theory— as outlined in chapter two. Based on our experience, we believe that participation in classroom activities that lead to output practice (speaking or writing) is important for developing learners’ abilities to communicate in the target language. As a component of L2 instruction, output practice encompasses different kinds of language-related performance, but some general design choices are considered basic. Most methodologists distinguish two general stages in the teaching of linguistic knowledge: presentation and practice (Edge and Garton, 2009:123-130). The purpose of the presentation stage is to introduce a grammatical feature (deductively or inductively) to help the learner acquire new linguistic knowledge. During the production stage, learners are required to engage in extensive production of utterances containing the new structure. These stages correspond to the PPP model; (Byrne, 1976; Harmer, 2001; Ur, 2009). A common distinction found in most training manuals is that between controlled and free practice. Controlled practice takes the form of various oral and written transformation and substitution drills which require the mechanical production of specific linguistic forms. Free practice involves engaging in simulated communication which has been set up to provide opportunities for the use of those forms that have been presented and practised in a controlled manner. In free practice the learner is concerned with meaning rather than with form. In between the two poles are other kinds of practice (e.g. guided and meaningful or contextualised practice). Ellis (1997:90) refers to these two types of practice as ‘text-manipulation’ and ‘text-creation’ activities. ‘Text-manipulation’ supply learners with the sentences to produce and ask them to operate on them in some limited way-fill in a blank, make a choice from items supplied, substitute another item, transform them into some other pattern, and so on. ‘Text-creation activities require learners to produce their own sentences containing the target structure.’ Some proponents of a communicate methodology are more radical, advocating
a re-ordering of the customary three steps of the teaching process, so that instruction starts with communicative use (e.g. Brumfit, 1980). Even here, however, a place is still provided for the controlled practice of those features of which the learner displays a lack in mastery.

Thus, there is a received tradition about the role of practice which assigns it a prominent place in L2 classroom learning. However, the agreement is not unanimous. There are a number ELT methods which reject any role whatsoever for traditional practice-oriented instruction. In the comprehension-based approaches discussed throughout section 3.2.1, (the Natural approach based on Krashen’s (1985, 1998) CIH and VanPatten’s IP Model), all that is required for L2 development is input. Input is solely responsible for the development of L2 whereas output helps in the learner’s ability to access the L2 system already developed by the intake of CI. VanPatten criticized the form of output-based instruction practiced in traditional classrooms in which target structures were practiced devoid of any communicative context through different types of mechanical drills. VanPatten did not agree with the claim that ‘using a form in one’s output is a direct path to acquisition’ (2004: 27) and suggested instead, on the basis of current evidence, that acquisition does not appear to be dependent on output.

Output practice is a form of classroom interaction and, as such, is a varied phenomenon subject to a host of social and personal factors. As suggested by Dekeyser (2007: 12) ‘the need for and usefulness of different kind of practice varies considerably on the institutional context and the characteristics of the individual learners’. Van Lier (1996) distinguishes ‘practice’ from ‘mal practice’ suggesting that guidance for classroom practice should be based on local judgments. Muranoi (2007) investigates how output based practice, which she defined as ‘any activity designed to provide L2 learners with opportunities to produce output’ (p. 52) influences the development of productive skills L2 learners need for communication. She points out that output practice is viewed by L2 practitioners as essential; nonetheless, there is an ongoing debate to whether this intuitive view is confirmed by empirical research. Muranoi reviews studies on the role of output practice in: text reconstruction, essay writing, output-oriented interaction, and communication tasks. A summary of the findings and methodological limitations of the studies are provided. Muranoi concluded by suggesting that ‘we should be careful not to assume that output practice can be useful for any learner with any linguistic form under
any condition’; the researcher noted that the possible positive effects of practice on the acquisition of some grammatical forms depend on ‘various factors including learners’ psycholinguistic readiness and linguistic features of the target form’ (pp. 59-60).

It should be clear from the discussion above that both input-based practice and output-based types of language practice are equally important in language learning. Input-based practice develops learners’ underlying linguistic system while output-based practice enables learners to develop a skilfull use of the language. In this study, the term output practice is used to refer to any activity designed to provide L2 learners with opportunities to produce output. The term practice, therefore, is used in a wider meaning than that used in the traditional Presentation-Practice-Production sequence (PPP), in which practice refers to a mechanical drill-like activity such as repetition and manipulation. In line with recent development the construct of ‘output’ has been proposed as a possible contributing factor to L2 learning. Several researchers drew attention to the value of the L2 learner’s production in the second language acquisition process allocating more positive and causal role to output in developing L2 system.

3.2.2.1 Recent Views on Output Practice

According to Gass and Selinker (2008) the standard and traditional viewpoint on output is that it is not a way of creating L2 knowledge, but a way of practicing already-existing L2 knowledge. In other words, output has traditionally been viewed as the means for L2 learners to practice what has previously been learned. Most language learning researchers agree that output practice is necessary to increase fluency, that is, learners must practise producing second language utterances if they are to learn to use their interlanguage confidently and routinely. However, we have seen in chapter two, section 2. that some theoretical accounts of L2 learning advanced by some researchers make a number of claims which go beyond this ‘practice’ function of output, and which have to do with the development of the IL system, and not only increased efficiency in using it. These researchers do not deny the essential role of input in L2 acquisition; they do, however, reject the view that input alone is sufficient for the development of the learner’s linguistic system. For example, in Gass and Selinker’s (2008) model (see chapter one), the learner went from noticing a form in the input, to analyzing that form, and then to integrating it into the developing grammar. The result is a second language
acquisition model in which output becomes an integral part of the process, rather than solely a product of acquisition. Similarly, the updated interaction hypothesis (section 3.2.1), while still focusing on input processes, has emphasized the role of interactional modifications on the learner’s output. From an input interactionist perspective, Pica (1994, 2005) asserted that the production of CO is essential to the process of language acquisition. She argued that engaging learners in interaction and pushing them to produce output is another effective way to promote L2 learning. The sequence of output, feedback, and reprocessed or modified output plays an important role in ‘pushing’ learners beyond their current performance level. Pica, Kang and Sauro (2006:308) contend that ‘meaningful input and communicative experiences need to be accompanied by opportunities for learners to produce and modify their output if they are to become more syntactically accurate’. According to Swain (2005) ‘important in this argument is the assumption that the processes in which learners engage to modify their output in response to feedback are part of the second language learning process (p.476). In Skehan’s (1998) account of SLA (section 2.2.1), language production plays a key role in language learning. According to Skehan, the nature of the input comprehension process suggests that input cannot guarantee the occurrence of language learning in that comprehension resources and strategies can prevent learners from doing deep processing and focusing on language forms. In Skehan’s words, ‘the comprehension process can be partly detached from the underlying syntactic system and from production’ (Skehan, 1998:15). Skehan explained how learners may well understand the meaning of an utterance without reliance on its morphology or syntax, that is grammatical decoding may be bypassed and learners rely more on contextual cues to decode messages; the same cannot be said for production which requires grammatical encoding. Thus, in Skehan’s view language production is essential to force the learner to process linguistic data at a syntactic level, forcing the learner to move from one system (memory-based) to the other (rule-based) and vice-versa. Overall, the current view of learner output is then that output a means by which to practice one’s language for greater fluency, but also that it plays a potentially important role in L2 learning. A strong claim for this idea of ‘output as a process’ came from Merril Swain (1995, 2000, 2005) who in response to Krashen’s input hypothesis (1985), suggested that in addition to being the end result of the language
learning process, output can actually have an important role in promoting language development; Its main tenet is that the activity of producing the target language (speaking or writing) is, under some (yet-to-be-specified) circumstances, part of the process of second language learning (Swain 2005). It is important to recognize that the Output Hypothesis (OH) in no way negates the importance of input or input comprehension. The intention is to complement and reinforce, rather than replace, input-based approaches to language acquisition so that learners will go beyond what is minimally required for overall comprehension of a message. The importance of output in learning is that it is a means for learners’ active deployment of their cognitive resources. That is, output presents learners with unique opportunities to process language more deeply in ways that may not be necessary for comprehension (Izumi 2000). These observations have led other L2 learning researchers to suggest important roles for L2 production in language instruction as well. The contributions that output can make are summarized below:

- Language production (output) serves to generate better input through the feedback elicited by learners’ efforts at production.

- Output obliges learners to pay attention to grammar.

- Output allows learners to test hypotheses about the TL grammar.

- Output helps to automatize existing knowledge.

- Output provides opportunities for learners to develop discourse skills, for example, by producing long turns in conversation.

- Output helps learners develop a personal voice by steering conversation to topics to which they are interested in contributing.

- Output provides the learner with auto-input—that is, learners can attend to the input provided by their own language production.

(Based on Swain, 1995, 2005; Skehan, 1998; and Ellis, 2003)

One fundamental question is then how to maximize the effects of output instruction in increasing learners’ proficiency.
The present study, in part, touched upon the issues formulated above, especially with regard to the importance of output task types as an important trigger that directs learners’ attention to the linguistic items. Previous studies addressing these issues have concentrated on the relative effects of linguistic input and/or output on learning a particular linguistic feature (e.g. Eralm, 2003; Toth, 2006). The theoretical assumption underlying this question focuses directly on ways to draw learners’ attention to target linguistic features more effectively. Another issue concerns the cognitive learning processes underlying learners’ L2 production attempt and subsequent input processing. These issues are discussed in the two sections below.

3.2.2.2. Output as an attention-drawing device

We have seen in section 2.3.1 that SLA research has emphasized the beneficial effects of attention and awareness on L2 learning. Schmidt (1990, 2001) proposed the noticing hypothesis (NH), in which he emphasized the significance of focal attention and awareness and excluded learning without awareness. Researchers have proposed several pedagogical approaches which encompass from the most explicit method of instructing grammatical rules to the most implicit method of just exposing learners to the input in which a specific grammatical form is enhanced. The question of how output enables L2 learners to acquire the TL more effectively than input or other conditions does might be answered with the concepts called attention, awareness and noticing. From an output-based perspective, it has been argued that meaning-focused instruction does not suffice in acquiring language forms. The rational underlying the effectiveness output is that L2 production induces high cognitive involvement and is more effective that simple exposure to TL (Izumi 2000). To quote Swain again, while producing the L2 one is forced to move from ‘semantic processing’ that characterises comprehension to the ‘complete grammatical processing required for accurate production (Swain 1995:128). De Bot (1996) explains that if this attention to the form of output leads learners to attend to language forms the output may have a bona fide role in SLA. However, among various means or approaches of getting learners to pay attention to L2 forms, the role of output has received comparatively less attention from researchers. To the researcher’s knowledge, only a few studies have investigated the claims for a role of output in attention to L2 form (Izumi and Bigelow, 2000; Izumi et al., 1999). Therefore, more
research needs to be done to investigate what the suitable means of getting learners to focus on form are. Hence, in the current study, attention to or noticing (awareness at the level of noticing and understanding) of relevant aspects of L2 through learners’ production attempt, is assumed an important process for learners’ learning of the targeted grammatical feature.

Pedagogically, the output-input issue (the question of how output enables L2 learners to acquire the TL more effectively than input or other conditions) can be tackled in relation to the following teaching strategies which, although by no means exhaustive, use learner output in coordination with TL input:

1) simultaneous attention to input and output,

2) attention to input prior to output, and

3) attention to output prior to input.

(Basturkmen (2006); Thornbury, 1997)

These claims are based on which of these conditions researchers believe that learners focus more on target features. Regarding the first order, it is generally agreed that learners fail to give simultaneous attention to input and output. One proposed explanation is that learners’ mental capacity is a limited-capacity attentional processing system, only allowing a certain amount of information to be attended to at one time (Doughty and Williams, 1998). Advocates for an input-first presentation (i.e. Doughty and Varela, 1998), argue that input supplies an external inducement to notice the gap between the IL and the TL. That is, when the learners are provided linguistic information from external sources, learners are enabled to make cognitive comparisons between their IL system and the TL. Thus, L2 learners are engaged in explicit cognitive activity in which noticing the gap occurs.

On the other hand, advocates for an output-first presentation (Dekeyser, 1997; Izumi and Bigelow, 2000) argue that this sequence is more advantageous to create an environment promoting a greater degree of focused attention, given that L2 learners notice gaps in their IL knowledge when they attempt to produce the TL, and such gaps bring expectations affecting allocation of selective attention. Thus, under this claim,
output is an effective device for drawing attention to target features since it provides a strong motive for L2 learners to solve their linguistic problems. Basturkmen (2006), following Stern (1992), distinguished between two teaching macro strategies that he referred to as input-based strategies and output-based strategies. Input-based strategies were defined as strategies in which ‘learning occurs primarily through exposure to language input in the form of written or spoken texts’ (p. 134). Here, it is important note that the emphasis on input-only practice leading to gains in language production has given rise to a number of empirical studies on the comparability of Processing Instruction (PI) and traditional output-based instruction. These studies supported the claim that learners who received instruction which excludes any kind of output practice performed as well on comprehension and even production tasks as those who had an output-based instruction (see the discussion in 3.2.1.2.2). Output-based instruction, the other strategy, was described either as ‘predominantly output’ or output-to-input strategies (in contrast to input-output). The first is based on ‘the premise that using the language (producing output) is sufficient for learning’. It is based on the belief that learning occurs through output prompting learners to stretch their current IL to reach their linguistic ceilings. This last option was adopted in the second research project (outlined in chapter four) which investigated whether the awareness of problems L2 written output can prompt the learner to seek out subsequent input with more focused attention. This issue is discussed in the ensuing section.

3.2.2.3 Effects of Output on Attention to Input

In addition to output being an attention-directing option for language teachers, it was important to ask not only whether output-based activities indeed alter learners’ subsequent input processing, and if it promotes the acquisition of target forms. It has been suggested that language production may have a role to play by orienting the learner’s attention to language forms in the input (Ellis 1997). For example, when learners produce output and encounter difficulties in expressing message meaning, the awareness of those shortcomings can direct learner’s attention to the form of their L2 output and as a result pushing learners to attend more carefully to the input in search for the needed language forms which then may be used in subsequent output. According to Ellis (1997) output is a result (rather a cause) of acquisition and is thought to be beneficial to L2 learning only
when learners treat it as auto-input (also referred to as virtual input or back door learning). Gass (1997), Gass and Selinker (2008) explain that output processing serves as a priming device in which learners are prompted to process relevant information during subsequent input processing. Subsequent input processing may also serve as a reinforcing device in which learners can confirm or disconfirm information about lexical and grammatical problems encountered during output processing. The role of output here is proposed to facilitate the process of noticing the relevant features in the input. Whereas attention in output arises internally through production processes, in that learners themselves decide what they find problematic in their L2 production attempt; input functions as an external attention-drawing technique. In other words attention to L2 forms is induced by external means (Izumi 2000).

L2 production attempt (e.g. Writing) is often employed in L2 teaching, the purpose of which is for learners to produce better compositions so that their writing skills can be enhanced. Research and theory on EFL teaching and learning indicate that writing can be viewed in two ways—either as a skill to be taught, learned, and assessed (the learning-to-write dimension) or as a means and basis for learning (writing-to-learn line of research dimension). A number of studies addressing the language learning potential role of written output have also examined learners ongoing thinking episodes or decision-making while producing their L2, finding salient L2-related internal processes or composing behaviors among second-language learners (e.g. Adams, 2003; Cumming, 1989, 1990; Izumi and Bigelow, 2000; Izumi, Bigelow, Fujiwara and Fearnlow, 1999; Qi and Lapkin, 2001; Swain and Lapkin, 1995; Tocalli-Beller and Swain, 2005). Furthermore research in SLA emphasizes the need to help L2 learners notice their own L2 use (in comparison to the use of the TL). One of the central issues in the FonF approach (section 2.3.2.1) is ‘how to lead the learner’s attention to a linguistic mismatch between IL (interlanguage) and TL (target language)’ (1998: 238). Specific tasks have been identified in the SLA literature that demonstrate the gains that learners make when they locate a mismatch between their IL and the TL, most notably when engaged in tasks that involve the written modality (Qi and Lapkin, 2001). The second research project in this dissertation (to be described later in chapter four) is framed in the writing-to-learn line of research dimension where practice in writing can be seen as one form of output practice.
that (in conjunction with feedback as input) as a means for language learning that is thought to stimulate learners’ noticing of L2 forms.

3.3 Research on the Effects of Input and Output

In the first part of this chapter (section 3.2.1.2) we distinguished between two broad types of input-based approaches to L2 teaching. In the first, ‘enriched input’ provides learners with input that has been flooded with exemplars of the target structure in the context of meaning-focused activities. In other words, this instructional approach caters to incidental acquisition and what Long (1991) has referred to as ‘focus on form’ (chapter two). Another input-based instructional technique, namely VanPatten’s (1996, 2004) processing instruction (PI) posits that it affects the acquisition of target forms by actively engaging learners in processing structured input. In this way, learners are pushed to alter their existing processing strategies by changing the ways they attend to input data that result in better intake. This kind of approach invites learners to engage in intentional learning and caters to a ‘focus on forms’ approach. What these two approaches have in common, however, is that they do not require learners to produce the target structure.

Although the research findings related to effect input enhancing methods are somewhat mixed, they show that enriched input can promote noticing of specific forms, and improve accuracy in the use of problematic grammatical structures, and, in some cases, works as effectively as (or more effectively than) other instructional techniques that involve more traditional, explicit instruction. The input-processing studies examined in section 3.3 involved experimental comparisons of processing instruction and traditional output-based instruction. These studies provided evidence that learners who received instruction which excludes any kind of traditional grammar explanation and output practice performed as well on comprehension and even production tasks as those who had output-based instruction. In other words, L2 development both in comprehension and production results from comprehension practice alone. More specifically, there are studies which suggest that the role of output is secondary to the role of input and output merely facilitates access to an already developed L2 system (e.g. Benati, 2001; VanPatten and Cadierno, 1993; VanPatten and Wong, 2004). Thus, it has not been within the scope of the research in processing instruction to clarify what roles L2 production might have in
L2 learning. The arguments for the importance of output practice in L2 learning have been supported by other strands of research on the role of output.

Thus, this section examines how this strand of research has viewed and examined output in L2 learning. Grounded in either the cognitive (or the sociocultural perspective), the output-oriented researchers have focused on different issues. In this study, studies on output are represented by input vs output studies, negotiated interaction studies (output and negotiation), and studies based on the comprehensible output hypothesis (including the sociocultural studies) (table 5). The researchers in input vs output studies involved

Table 5: Lines of Research on Output

<table>
<thead>
<tr>
<th>Line of Research</th>
<th>Relevant Research Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output vs input studies</td>
<td>(Allen, 2000; Collentine, 1998; Dekeyser and 2001; DeKeyser and Sokalski1996; Erlam, 2003; Nagata, 1998; Salaberry1997; Morgan-Short and Bowden, 2006)</td>
</tr>
<tr>
<td>Interaction research into the role of language production in L2 development</td>
<td>(Ellis and He, 1999; Nobuyoshi and Ellis, 1993; Pica et al., 1989; Shehadeh, 1991; Shehadeh, 2001)</td>
</tr>
<tr>
<td>Research within the framework of the Output Hypothesis (OH)</td>
<td>(Izumi, 2002; Izumi and Bigelow, 2000; Izumi et al., 1999; Izumi and Izumi, 2004; Swain and Lapkin’s, 1995; Lapkin, Swain and Smith, 2002; Swain and Lapkin, 1998, 2001)</td>
</tr>
</tbody>
</table>

comparing instruction that enhances input with instruction that focuses on production (output). The interaction research into the role of language production in L2 development has focused primarily on modified output, specifically the role of negotiated interaction in providing opportunities for interlanguage modification and CO. Research based on the OH has investigated how learners, their mental processes and output inter-relate. The researchers in both the input-interactionist and output vs input perspectives have enhanced our understanding of how the relationship between language production

86
and L2 learning has been viewed and examined. Nevertheless, as mentioned in the introductory chapter, the present study remains framed within Swain’s (1995, 2005) Output Hypothesis framework.

3.3.1 Output vs Input Studies

It has not been within the scope of the research on processing instruction (section 3.2.1.2.2) to clarify what roles L2 production (output) might have in L2 learning. A line of research deserving important notice with regard to the role of input processing in L2 learning is the area concerning the effect output practice compared to that of receptive practice. As noted above, the arguments for the importance of output practice in L2 learning have been supported by other studies, all of which involve comparing instruction that enhances structured input instruction (sometimes under the PI framework) with instruction that focuses on production. They specifically focused on the exploration of any differential effects of input-based as compared to output-based instructional conditions. Accordingly, much of this research has made attempts to methodologically isolate the variable of output (Morgan-Short and Bowden, 2006). These studies were not included in the strand of research on processing instruction (PI) because they are substantially different from PI research in that they have not methodologically followed the design of VanPatten and colleagues’ studies. Instead, they may be considered more general output vs input studies interested particularly in understanding how input and output affect learners’ comprehension and production of L2 target forms (Morgan-Short and Bowde, 2006).

In one study, responding to VanPatten and Cardierno’s (1993) argument, DeKeyser and Sokalski, 1996 selected object pronouns and the conditional tense in Spanish as the target items. The two experimental groups both received EI as well as practice exercises that progressed from mechanical to meaningful and communicative, except that the practice set for one group was input-based in nature, whereas that for the other group was primarily output-based. Both groups were provided with EI and compared to a control group. Results concerning object clitic pronouns showed that input-based activities were correlated with better performance on the comprehension task only; the output-based group did better on the production task. For the conditional, the output-based group obtained better scores in both comprehension and production. This prompted DeKeyser
and Sokalski to conclude that PI is not superior to TI and that PI could not bring about transfer of task skills from interpretation to production even within the paradigm of one particular feature.

Dekeyser and Solasky (2001) investigated the role of comprehension and production practice of 82 first-year Spanish students in a traditional context. Students were divided into a control group, an input group, and an output group for practicing material in different ways. The findings basically reflect the predictions of skill acquisition theory (chapter two); input practice is better for comprehension skills, and output practice for is better for production skills. They also found that the relative effectiveness of the two types of instruction depends upon the type of structure. Input processing works well for teaching things such as verb endings but complex structures are more effectively taught with output practice. Similar results were also obtained by Salaberry (1997) and Collentine (1998).

Salaberry (1997) replicated VanPatten and Cadierno’s (1993) study, again targeting the form of Spanish object pronouns. Both the input processing group and the output processing group were presented with sequenced activities moving from mechanical to communicative language. The only difference was that the latter group was required to produce the target form, while the former, other than receiving instruction that was input-based but not composed of SI, was not. When compared to the control group, no significant differences were found between the two treatment groups’ performances on the comprehension test, the discrete-item production test, and the free video narration test. Salaberry thus concluded that PI is not better than TI.

Collentine’s (1998) study compared PI to an output-oriented instruction for the Spanish subjunctive. The results revealed no significant differences between experimental groups on either comprehension or production tasks; both PI and output-processing (OP) groups improved after instruction on the uses of the Spanish subjunctive. Collentine’s finding of no differences between the instructional groups offers some evidence that PI is not necessarily superior to all output-based instruction.

Allen (2000) (cited in Morgan-Short and Bowden, 2006) investigated acquisition of French causatives and compared the effects of processing instruction and production-based instruction. She did not find an advantage for the processing instruction group.
compared with the production group, but both groups did improve compared with a control group. Another study investigating the relative effectiveness of structured-input instruction and output-based instruction on the acquisition of direct object pronouns in French was conducted by Erlam (2003). Erlam (2003) found that the output-based group outperformed the structured-input group on the listening comprehension test and the written production test (form placement). However, no significant differences were found between groups on a reading comprehension test, the written production test (form correctness), or on an oral production test. In Erlam’s words, structured-input and output-based instruction made ‘greater gains on tests of comprehension and production than those evidenced by the control group’ (p.576). However, when the relative effectiveness of these two types is concerned, the findings suggest that there is ‘no greater advantage for structured-input instruction over meaning-oriented, output-based instruction” (p. 579). Erlam concluded that research is needed ‘to ascertain whether giving students opportunities to produce language leads to greater gains in automaticity and the development of oral skills’ (p. 579).

Toth (2006) examined the role of input and output in the acquisition of L2 Spanish morphosyntax by comparing PI (as a form of input-based instruction) to communicative output instruction (COI). Statistically speaking, the results of Toth’s study showed that both PI and COI performed equally on a timed grammaticality judgement, but that the COI group outperformed the PI group in the guided written production test, though PI outperformed the control group in both tests. This study has ‘questioned an account of output’s role in L2 acquisition that is limited to accuracy and fluency in accessing the implicit system, as well as assertions that system development occurs only via input processing’ (2006:371).

Apart from the three studies discussed above, the effectiveness of output-based instruction was also explored in the study by Morgan-Short and Bowden (2006). As the researchers claim ‘it contributes to a growing body of literature that suggests that output-as well as input-can promote linguistic development and might constitute a direct path to acquisition’ (2006:55). The learners on the different measures, Morgan-Short and Bowden (2006: 59) offer a conclusion that ‘meaningful output-based instruction can, like processing instruction, lead to linguistic development, at least when practice is
meaningful and leads learners to make form-meaning’. These results suggest that not only input-based but also output-based instruction can lead to linguistic development.

Although the previous studies have contributed to our understanding of how input and output affect learners’ comprehension and production of L2 target forms and structures it remains unclear which of these two forms of practice is more effective. Some studies have shown that input-based instruction is more effective for target-structure acquisition than output-based instruction, and others have not. It is possible to classify these studies into three categories:

- Studies which indicate that input-based and output-based instructions are equally effective in promoting L2 knowledge (e.g. Erlam)

- Studies which provide evidence for the advantage of input-based over (in particular traditional) output-based instruction (e.g. Studies by and his colleagues VanPatten 1996, 2004 and his colleagues)

- Studies which suggest the superiority of output-based over input-based instruction (e.g. Allen, 2000; Toth, 2006; Morgan-Short and Bowden, 2006)

It must be remembered that these studies have employed various designs, investigated different output-based options and compared them with some specific input-based techniques. Therefore, it is difficult to draw definitive conclusions, because the treatments and assessment tasks are not equivalent across the studies (Morgan-Short and Bowden 2006). As commented on by Ellis (2006: 99), studies which compared the relative effectiveness of input-based and production-based instruction produced mixed results, ‘resulting in ongoing debate about the relative merits of these two options’. Ellis argued that both options are likely to result in input-processing and production. In an input-based approach, individual learners silently produce the L2 structure. Similarly, in a production-based approach, utterances produced by one student serve as input for another. According to Ellis ‘It is, therefore, not surprising that both options have been shown to result in acquisition’.

Although such efforts have implications for the present study, they have done little to make clear the possible contributions of output to learners’ developing L2 grammatical
system. Studies with greater implications for the exploration of output are explored in the following sections, but are shown to have many limitations as well. For the most part, the construct of output as a causative variable in developing L2 competence has gone unexplored in any meaningful way (Swain, 2000). It seems, therefore, that more research is needed to ascertain the effectiveness of the particular options.

3.3.2 Interaction Research into the Role of L2 Production

In section 3.2.1.1.2 on input and interaction, it was reported that interaction in general and meaning negotiation in particular which is elicited by interactional modifications foster input comprehensibility. What has been particularly suggested was that learners who have opportunities for interaction which lead them to signal their non-understanding of input learn better than learners who do not (Ellis, 2001). Other (output-oriented) researchers have looked at other ways in which negotiated or modified interaction can contribute to language learning. In addition to the provision of comprehensible input, producing modified output has been identified as an additional contribution of negotiated interaction to the learning process. Modified output, that is L2 learners’ reformulation of their own utterances either in response to feedback or without feedback, has been attracting researchers’ interest as an important component of learner interactions, and as a manifestation of interlanguage development and psycholinguistic processing. Swain’s OH, like the IH, also generated researchers’ interest in the role of modified output as a component of interaction. Researchers such as Pica have argued for the importance of negotiated interaction not just because it provides learners with an opportunity to receive input that they have made comprehensible through negotiation, but also because it provides them with an opportunity for the production of comprehensible output as well. Pica argued that modification of interaction may occur when L2 learners and their interlocutors have to work to achieve comprehensibility by ‘repeating a message verbatim, adjusting its syntax, changing its words, or modifying its form and meaning in a host of other ways’ (1994: 494). Pica (2005) maintained that the learner’s interaction with interlocutors is as important as the input they receive. We have already pointed out that by modified ‘pushed’ output researchers refer to a learning process whereby learners are given the opportunity both to produce and modify their sentences so as to make them more target-like. It can also be
described as a ‘speech or writing that makes demands on them (learners) for correct and appropriate use of the L2 ’ (Ellis1994:27). Modified output may ‘occur following feedback, or as a result of self-monitoring’(Ellis, 2008:971).Within the framework of the OH, Swain explained that:

Negotiation of meaning need to incorporate the notion of being pushed toward the delivery of a message that is not only conveyed but that is conveyed precisely, coherently and appropriately (Swain, 2005:472-473).

The importance placed on L2 learners production led to a number of studies which have studied the effects of negotiation on language learner’s output within the context of the IH. This research attempted to address a number of issues. One issue is whether and how negotiated interaction between interlocutors may provide learners with pushed output opportunities. Much of the research has been motivated by the claim that, although a great deal of L2 learning takes place through exposure to comprehensible input, producing target-like output may help learners notice gaps in their L2 knowledge. This happens through negative evidence (i.e. information about ungrammaticality), or explicit instruction, when learners are not able to discover through exposure alone how their interlanguage differs from the L2 .

Pica’s 1988) study was designed to find out whether and how speakers modify their output to make it more target like when their interlocutors signal their non-understanding that is as a result of meaning negotiation. Pica examined the interactions between a native speaker (Ns) and ten non-native speakers (NNSs) of English. She hypothesised that NNSs would modify their IL morphosyntax, phonology and lexicon using more target-like forms when asked by their interlocutor to provide clarifications or confirmations of their utterances. The results indicated that the NNSs did ‘modify their interlanguage to achieve output that was both more comprehensible and more target-like.’(p.58) when the speakers requested clarification or confirmation. However, Pica (p.64) noted that ‘such adjustments were relatively infrequent’ since the interlocutors themselves ‘Produced much of the modification for them’ when comprehension problems arose. This led her to suggest that though the study supports the claim that ‘learners can shape their interlanguage toward target norms when asked to make themselves
understood, the data were less conclusive, however with regard to other possible contributions of negotiated interaction to interlanguage production and development’ (p.68). The assumption is that this process of output modification contributes to L2 learning. As suggested by Pica and her colleagues learners in modifying their output ‘…test hypotheses about the second language, experiment with new structures and forms and expand and expoit their interlanguage in creative ways’ (1988:64).

Another follow up study by Pica et all (1989, cited in Ellis 1994; Shehadeh, 1999, 2001) showed that learners did modify their output by making it more grammatical in response to negotiated interaction involving clarification requests. That is modified output occurred most often when learners are requested to clarify their output rather than provided a model utterance for confirmation (confirmation checks, see section 3.4.3 for definitions). A clarification request as described earlier is a type of implicit feedback which indicates a request for clarification of utterances in terms of non-targetlike use (Ellis, 1994). Similarly this study investigated the effect of meaning negotiation on self correction by learners when ‘pushed’ to modify their output. Pica and her colleagues, after an analysis the language produced by learners, found that learners’ semantic and morphosyntactic modification of their L2 output was prevalent but was affected by the type of signal of comprehension difficulty that the interlocutor provided: requests for clarification led to more modifications of L2 output as opposed to confirmation requests and repetition. In terms of classroom practice, this suggests is that giving time for learners to reformulate and clarify their messages rather than simply modelling or repeating correct versions of their responses may better contribute to learners’ progress. In support for the need for learners to attempt producing the L2, Pica suggested that:

…learners must have opportunities to produce comprehensible output during interaction involving meaningful content. Such opportunities allow them to modify interlanguage toward greater clarity, to make hypotheses about the L2, and to try to map L2 form on L2 meaning (Pica, 1992:6).

In a similar vein, Pica et al. pointed out:
Although research has focussed mainly on the ways in which negotiation with the interlocutor helps the learner to understand unfamiliar input, we believe that it is through negotiation that learners gain opportunities to attempt production of L2 new words and grammatical structure as well (Pica et al. 1989:65).

Shehadeh further explored this issue by examining students’ ability to modify their output. He looked at output in non-native, non-native interaction and lent some support to the claim that interaction between learners working in pairs or small groups triggered greater opportunities for negotiation. Shehadeh (1991, reported in Shehadeh 1999a,b) investigated the ability of non native speakers (NNSs) to modify their output to make it more target like (phonologically, morphosyntactically and semantically) and the degree to which such learners attempts at modification were self-initiated or in response to signals of comprehension difficulty from their partners (other-initiated). More importantly he looked at opportunities which NNNs have to modify their output to make it more target like phonologically, morphosyntactically and semantically. The findings of the study showed that learners were able to adjust their interlanguage but also revealed that ‘self-initiated clarification attempts occurred in significantly greater proportions than other-initiated clarification requests’ (70 percent versus 30 percent respectively) and ‘instances of self-initiated comprehensible output occurred in significantly greater proportions than instances of other-initiated comprehensible output (70 percent versus 30 percent respectively’ (1999a:3). Shehadeh (1999b:36) suggests that from a pedagogical perspective this may ‘support the underlying assumption that the role of L2 learners’ production is not only to give feedback in order to generate more comprehensible input, but also to facilitate SLA by ‘offering NNSs opportunities to modify their IL utterances in the direction of comprehensible output’; that learner-based (rather than other- or teacher-based) initiations should be encouraged in classroom asks and activities. Shehadeh (2001) examined the role self- and other-initiations play in providing opportunities for modified output (MO). Thirty-five adults (4 male and 4 female native speakers NSs, 12 male and 15 female non-native speakers- NNSs-) ranging in age from 22 to 37 years participated in the study. The NNS participants represented 13 different L1 backgrounds. The NS participants were university teachers and postgraduate students.
experienced in talking to NNSs. Three communication tasks were developed for the purpose of the Study: a) a picture description task in which a NNS described a picture for a NS or a NNS to reproduce, b) an opinion exchange task in which the interactants (NS/NNS and NNS/NNS pairs) In the opinion exchange task, interactants were required to discuss their opinions on a short newspaper article, and c) a group decision-making task in which the NNSs created part of the constitution of a newly independent (invented) country. The first two tasks were performed in NS-NNS and NNS-NNS pairs and were audiotaped, and the third was completed in NNS groups and was audio- and videotaped. The results showed that both self- and other-initiations provided NNSs prompted modified output, a greater number of these were self-initiated. Modified output (MO) was defined as ‘the modifications non-native speakers (NNS) make to their output in order to make an initial utterance or part of an utterance more accurate or more comprehensible in response to: (a) other-initiation or (b) self-initiation’ (p.437) However, in four of the five interactional contexts examined in the study, significantly more instances of MO resulted from self-initiation than from other-initiation. This suggested that self-initiations play an important role in prompting MO and that learners need both time and opportunity to initiate and complete repair of their own messages. Shehadeh (2001) argues that the main conclusion to be drawn from these results is that if production of MO is integral to successful L2 learning self initiations as well as other-initiations matter. In addition, the researcher concluded that in terms of classroom interaction, this ‘implies that learners need both time and opportunity for self-initiated, self-completed repair of their messages (p.451).

The research areas discussed above have been conducted to examine whether learners modify their output in the interaction. It has shown that negotiated interaction particularly interactional moves such as clarification requests (compared to confirmation requests) foster modified output as L2 learners push their L2 abilities to their linguistic limits in trying to more precisely convey messages. However, this research usually did not go further once modified output was produced. They have only managed to demonstrate the type of output and their occurrences. They have yet to demonstrate how output impacts learning outcomes.

Another area of research has addressed the question of whether the target-like output that results from negotiated interaction are maintained in the learner’s IL. The focus of
the research is on the changes in learner developing linguistic system before and after the production of modified output. Nobuyoshi and Ellis (1993) explored this issue. This study studied the use of the past tense by a small group of learners and found that two out of the three learners in the experimental group were able to improve the accuracy (i.e. learning) of their use of the target forms as a result of being ‘pushed’ to modify their productions by means of requests for clarifications (rather than by being given explicit corrections) and maintained this improvement over time (one week later). The control group showed no gains in accuracy. Ellis and He (1999) also tested Krashen’s and Long’s input-based theories, as well as Swain’s output hypothesis. To this end, they investigated the effects of three linguistic conditions - premodified input, interactionally modified input, and pushed output - on the comprehension and acquisition of L2 vocabulary and found that the pushed output condition yielded better comprehension and acquisition results. They chose 50 students from six intermediate-level classes studying English at university level. The participants were randomly assigned to one of three groups: the premodified input group, the interactionally modified input group or the negotiated output group. The results of the study show that the negotiated output group outperformed the other two groups in comprehension. As far as the input groups are concerned, the differences in comprehension were not statistically significant. As regards subsequent word recognition, once again the negotiated output group obtained significantly higher recognition scores than the other two groups on the three posttests. The difference between the input groups was significant only on the second posttest, with the interactionally modified group faring better than the premodified input group. Finally, with regard to subsequent word production, the negotiated output group also performed significantly better than the other two groups on the two posttests that measured the oral production of the 10 furniture-related lexical items. Again, the difference between the input groups was not statistically significant.

study of the differential effects of premodified input, interactionally modified input, and modified output on the comprehension of directions in a listen-and-do task and the acquisition of new words embedded in the directions. The modified output group achieved higher comprehension and vocabulary acquisition scores than either of the input groups. There was no difference between the premodified and interactionally modified input groups.
Another aspect of interaction that has been demonstrated to foster modified learner’s production is corrective feedback. Lyster (1998), emphasizes that negotiated interaction is particularly important to learners because it allows for feedback, that encourages self-correction which then leads to more output rather than just simple comprehension. When L2 learners receive feedback on their attempts to communicate, learners may attempt to reformulate their initial utterances, making them more comprehensible. One way in which teachers may modify and manage interaction in their classroom is through their use of feedback. It has been argued that successful L2 learning not only requires opportunities for students to receive comprehensible input and produce comprehensible output but also for them to obtain ample feedback. Many researchers (Lyster, 1998a, 1998b; Lyster and Ranta, 1997; Panova and Lyster, 2002; Swain, 1995, 1998; Swain and Lapkin, 1995) have stated that interactional feedback is important for L2 learning. However, results of studies revealed that the extent to which, and the ways in which, learners interactionally modified their output during negotiated interaction were determined by the type of feedback they received. It has been suggested that the interactional feedback that encourages modification of learners’ output is more conducive to language learning than those which provide learners with linguistic models. Researchers found that when feedback enabled learners to engage in a cognitive comparison between their own erroneous utterance and the target grammatical structure, the students learned better than in learning situations in which they are simply provided with a series of model utterances of the new L2 structures. Lyster (1998) and Lyster and Ranta (1997) emphasize that negotiated interaction is particularly important to learners to modify their output because it allows for feedback, that encourages self-initiated modification involving accuracy and precision and not simply comprehensibility. Lyster and Ranta (1997) suggest that ‘producing comprehensible output entails the provision of useful and consistent feedback from teachers and peers’ (p.41). In line with Swain’s OH, Lyster and Ranta argued that learning not only requires opportunities for students to receive comprehensible input but also opportunities for them to obtain comprehensible output ‘involving, on the one hand, ample opportunities for student output and, on the other, the provision of useful and consistent feedback from teachers and peers ample feedback’ (1997:41). Lyster (1998) suggests that corrective feedback
involving the negotiation of form may help second language learners to modify their use of nontarget language forms. Furthermore, ‘corrective feedback that invites student-generated repair in the form of self- or peer-repair provides opportunities for learners to proceduralize target language knowledge’ (Lyster, 1998:53). According to Lyster, learners who receive limited opportunities to interact and obtain corrective feedback from their teachers or (more competent speakers) native English-speaking peers may be restricted in their acquisition of the L2. In the same context, Ellis (2006) considers: (a) whether the feedback is implicit or explicit and (b) whether the feedback is input or output based. As a response to learner error, implicit feedback is masked. Explicit feedback includes a number of forms, such as direct correction or metalinguistic explanation. Ellis (2006) cites evidence that ‘explicit feedback is more effective in both eliciting the learner’s immediate correct use of the structure and in eliciting subsequent correct use’ (p. 99). Ellis further explains that implicit feedback ‘is more compatible with the FonF approach’ and that ‘it ensures that learners are more likely to stay focused on meaning’ (p. 100). Considering whether the feedback is input- or output-based, Ellis notes that ‘Input-based feedback models the correct form for the learner (e.g. by means of a recast). Output-based feedback elicits production of the correct form from the learner (e.g., by means of a request for clarification)’ (p. 100). The problem remains: how, when and how often to apply the various kinds of feedback for optimal learning.

Pica’s descriptive studies (1988, 1989) cited above have shown that clarification requests (what Ellis refers to as Output-based feedback) are more likely to lead to learners reformulating their initial erroneous utterances, making them more comprehensible.

Lyster and Ranta (1997) conducted an observational study of interactional feedback and learner uptake from the perspective of an analytic teaching strategy (i.e. settings ranging from communicative and content-based immersion classrooms to form-oriented analytic classrooms) in four French classrooms. The overall aim of the study was to determine, ‘whether error treatment is indeed “negotiable” and, if so, to what extent such pedagogically motivated negotiation (i.e., of form) occurs in communicative classrooms’ and ‘what moves constitute such an exchange’ (1997:42). The database analyzed for this study consisted of 27 lessons totaling 18.3 hours of classroom interaction. In their study, six types of feedback techniques were first identified. Results include the distribution and frequency of the six different feedback types in addition to
the distribution of different types of learner response following each feedback type. The findings indicate that most of the time teachers tended to correct learners with a recast (i.e. repetitions of a learner’s incorrect utterance, but with changes made in order to make it correct) rather than through the negotiation of form. They found that recasts were the least likely to lead to uptake. Uptake is another important construct in interaction research similar to modified output (MO). It is defined by Lyster and Ranta as ‘a student’s utterance that immediately follows the teacher’s feedback and that constitutes a reaction in some way to the teacher’s intention to draw attention to some aspect of the student’s initial utterance’ (p. 49). A difference can be pointed out here between uptake and modified output. Uptake assumes the provision of feedback while modified output does not do. Some researchers (e.g. Swain 1995) consider the process of producing modified output identical regardless of the provision of feedback, and argue for the positive role of self-repair on L2 learning. As described above, Swain’s Output Hypothesis, proposes a facilitative role for output ‘even without implicit or explicit feedback provided from an interlocutor about the learner’s output” (Swain and Lapkin, 1995:373). Therefore, modified output in Swain’s framework, does not exclude learner’s output produced without interactional feedback from an external source. The four other types of feedback (elicitation, metalinguistic feedback, clarification request, and repetition) led to a greater number of student-generated repair moves. From a practical standpoint, these findings suggest the need for teachers to implement various types of feedback, particularly those that lead to student-generated repair, namely elicitation, metalinguistic clues, clarification requests, and repetition of error. These four types initiated what Lyster and Ranta characterize as negotiation of form (as opposed to negotiation of meaning) in that they engage learners more actively by helping them to draw on what they already know, rather than providing learners with correct linguistic models. Lyster (1998) was interested in determining the functional properties of recasts. In terms of their functional properties, Lyster (1998) described two types of recasts: interrogative and declarative. Interrogative recasts differ from declarative recasts in that the reformulation is delivered with rising intonation in the former, whereas no change in intonation occurs in the latter. Lyster found that 34% of the total of learners’ incorrect utterances was followed by recasts, and that 27% of learners’ correct utterances were followed by noncorrective repetition. While recasts and noncorrective repetition have
similar functions and distribution, recasts were much more successful at drawing student uptake (students responded after 31% of teachers’ recasts) than noncorrective repetition (students responded to 5% of teachers’ noncorrective repetitions). In light of the findings, Lyster (1998) argues that simple provision of the correct form may not always be the only - or indeed the most effective form of error correction since it bars the way to the learner testing alternative hypotheses. Making a learner try to discover the right form could often be more instructive to both learner and teacher. Lyster noted that ‘corrective feedback that invites student-generated repair in the form of self- or peer-repair provides opportunities for learners to proceduralize TL knowledge that has already been internalized in declarative form’ (p. 53).

Lyster’s claims for the potential effectiveness of pushing learners to produce the correct form and to get involved in some analysis of their errors is closely associated with assumption of the OH that pushed output can help learners to focus on form and the accuracy of the meanings they want to convey. Panova and Lyster (2002) have shown that interactional feedback results in modified output, the production of which has a direct impact on L2 learning. They present an observational study of patterns of error treatment in an adult ESL classroom. The study examines the range and types of feedback used by the teacher and their relationship to learner uptake and immediate repair of error. They applied Lyster and Ranta’s model (study described above) of corrective feedback types in a new context: low-proficiency, adult ESL learners. The results reveal a clear preference for implicit types of reformulative feedback, namely, recasts and translation, leaving little opportunity for other feedback types that encourage learner-generated repair. Consequently, rates of learner uptake and immediate repair of error are low in this classroom. These results are discussed in relation to the hypothesis that L2 learners may benefit more from retrieval and production processes than from only hearing L2 target forms in the input. The researchers noted that ‘corrective techniques that promote negotiation of form by allowing students the opportunity to self-correct or to correct their peers resulted in the highest rates of uptake’. In contrast, feedback types that provide learners with target forms-implicit, reformulative types of feedback such as recasts and translation, and explicit correction—‘tend not to push students to modify the nontarget output in their responses immediately following feedback’ (p.591).
Although the interactionist perspective allows for the role of modified output in language learning, the theory that gives the most emphasis to the role of output in SLA is the Comprehensible Output Hypothesis. Swain and Lapkin (1995) pointed out that whether modified output contributes to acquisition is still an assumption as ‘no one has yet shown directly that these modified, or reprocessed, responses are maintained in the learner’s interlanguage’ (p. 373). Research based on the Output Hypothesis is examined next.

### 3.3.3 Research within the framework of the Output Hypothesis (OH)

The studies described in this section, unlike input vs output studies seen above, investigate no contrast between two types of instruction, but the sole effect of output, in addition to input, on L2 learning. Representative of output-focused research in L2 learning is Swain and Lapkin’s (1995 and elsewhere) research on the output hypothesis. Working within the framework of the Output Hypothesis, Swain and her colleagues tried to provide empirical evidence of a strong role for Output in the acquisitional process. It has examined whether learner output promotes noticing and L2 learning and how learners, their mental processes and output inter-relate. Swain’s research has viewed the relationship between output and L2 learning from a cognitive perspective on language learning. This psycholinguistic perspective on language learning, taken in conjunction with more qualitative work (sociocultural approach) by Swain and colleagues (Swain and Lapkin, 1995, 1998, 2001, Lapkin, Swain and Smith, 2002) motivate the present research into the role of output. As pointed out in the introduction to this dissertation, in the area of L2 learning research, there has been some debate amongst researchers: those who believe cognitive aspects are primary, usually with quantitative and experimental methods, and those who focus on social and contextual aspects, often with qualitative and ethnographic methods (Dörnyei, 2007). Firth and Wagner (2003) called for a reconceptualisation of SLA research, which heavily focused on cognitive aspects compared to social and contextual aspects of language learning, by taking more account of the contextual and interactional perspectives of language use. The linguists who support cognitivist disciplines, where L2 learning is considered as an individual phenomenon, argue that studies based on the sociocultural perspective do not investigate learners’ language acquisition (Kasper, 2003; Long, 2003; Poulisse, 2003). Influenced
by Swain’s output hypothesis, other researchers (Izumi et al., 1999; Izumi and Bigelow, 2000; Izumi, 2002; Izumi Y. Izumi and Izumi, 2004) focusing on the cognitive context have investigated whether learner output assists L2 learning and why, whether output is better than input for, whether learner output promotes noticing and L2 learning. Evidence from these studies investigating the output hypothesis lends some support to the notion that output might have beneficial effects on L2 development in addition to-not in opposition to-the key role of input. Because work by Swain and colleagues and Izumi and associates on the function of output informs and constitutes the basis of this study, we discuss it here in some detail under separate sections.

3.3.3 1. Swain and colleagues

Swain and Lapkin presented the Output Hypothesis in a study in 1995. Swain and Lapkin examined the extent to which ‘learners would identify problems as a result of trying to produce the target language’ and ‘what they might report doing to overcome them.’ (p.376). In other words, whether output encourages learners to recognize problems in their IL and whether L2-related internal processes may be triggered as a consequence. In their study they were guided by the following basic questions: (a) Do learners notice their own gaps when producing L2? (b) If they are aware of the gaps, does this trigger cognitive processes that contribute to SLA? and (c) Do the learners engage in grammatical analysis of their output when trying to solve linguistic problems?

In order to address these questions, Swain and Lapkin carried out a writing task with the learners. They were asked to assume the role of journalists, and to write a short article (one to two paragraphs) on ecological problems. The researcher sat with the students and asked them to think aloud when their behavior suggested that there was a problem, (e.g. when there was a pause or correction of text) to see the impact of output upon the learners’ thought processes.

From the transcripts, the researcher identified and selected ‘language-related episodes’ and analyzed them in depth in order to find out what cognitive processes were generated by the output problems. ‘Language related episodes’ were defined as:

…any segment of the protocol in which a learner either spoke about a language problem he/she encountered while writing and solved it either correctly or incorrectly, or
simply solved it (again, either correctly or incorrectly) without having explicitly identified it as a problem (p. 37).

Swain and Lapkin (1995) did identify evidence of learners’ noticing their gaps. They found that each of the students noticed, and responded to language problems in their output. In addition, they showed that these L2 learners became aware of the gaps in their linguistic knowledge while producing the L2 and analyzed their knowledge of the L2 in order to solve their problems, applied various strategies to overcome the problems and engaged in particular thought processes. These thought processes which are assumed to facilitate L2 learning included: a) applying L1 meanings to L2 contexts b) extending L2 meanings to new L2 contexts, and c) hypothesis formulation and testing about language forms and functions (pp. 383-4). Swain and Lapkin found that there were ‘190 occasions in which students consciously recognized a linguistic problem as a result of producing, or trying to produce, the target language’ (p. 384). In each case the students forced themselves to modify their output toward greater message comprehensibility. Production of oral/written language required paying more attention to grammatical form. That is, communicative needs engendered by the tasks pushed students into thinking about the form of their linguistic output, to moving them from ‘semantic’ to ‘syntactic’ analysis of the TL. Swain and Lapkin (p. 384) wrote that ‘on each occasion, the students engaged in mental processing that may have generated linguistic knowledge that is new for the learner, or consolidated existing knowledge. In other words, it was argued that in the process of modifying their utterances in the direction of greater comprehensibility, L2 learners were engaged in some restructuring of the L2 system which affected their access to the knowledge base; that this restructuring process is part of the process of second language learning. The need to produce output, it was suggested, has either helped the learner realize the distinction between L2 forms (transitive and intransitive verbs) for the first time, or it has consolidated the learner’s knowledge of this distinction, in that it has been applied to additional forms. Output led to noticing the gap, additional syntactic processing, the creation of a more accurate output, and the development of the student’s interlanguage system in the process. The entire process can be considered as an example of L2 learning through ‘private speech-an internal dialogue’. In other words, all of these things took place, it was noted, without any external feedback from the teacher or the
researchers. According to Swain and Lapkin, this clearly suggests that output has the potential to influence the general L2 learning process. Swain and Lapkin concluded that while output is not the only source of L2 learning, producing output can promote learning through noticing. Their study, thus, lends support to the role of output in moving ‘learners from semantic to grammatical processing’ (pp. 387-8). Swain and Lapkin are continuing to explore the output hypothesis. The research described above has its theoretical basis in psychological and cognitive constructs of SLA that concentrate on the mental processes related to individual language development. In the same vein, research by Izumi and his associates (described below) concerning output and L2 acquisition have also been carried out from this perspective. In recent years, however, Swain and her colleagues have defined the role of linguistic production in sociocognitive terms focusing on the way learners’ language develops through the help they give and receive as they construct meaning. The scope of the Output Hypothesis (OH) has widened beyond learner-internal (cognitive) factors to include investigation of the impact of social and learning context, that tends to be the province of research with a sociocultural theoretical perspective. Swain (2005) takes the position that both the cognitive perspective and the sociocultural paradigm provide valuable insights about mind and memory. In their work, Swain and her colleagues recommend the incorporation of more opportunities for students to produce extended output especially collaborative written output within a communicative context. Output studies based on sociocultural theory, in contrast to the more quantitatively oriented studies based on a cognitive view of language learning have tended to use qualitative methodology and have been very sensitive to context. Relevant studies based on sociocultural theory are, therefore, included in this review. Nevertheless, the present study is embedded within the cognitive approach, since the purpose of the study is to examine the issue of how beneficial to linguistic knowledge building it is to engage in the production of L2. This issue was originally examined within a cognitive orientation. In recent years, Swain (2000, 2005) has argued for an alternative perspective for viewing and examining L2 learning within Vygotskian (1978, 1987) sociocultural theory. According to a Vygotskian perspective, within the framework of Swain’s approach, collaboration is the primary basis for language learning, and neither input nor output by themselves are adequate units of analysis. This approach extends how output has been viewed and examined; whereas as in the past, input and output were studied in

According to Swain, research has tended to view dialogue between learners as a rich source of comprehensible input, but there are now strong arguments to suggest that producing output itself is a key factor in acquisition (Swain, 2000). Swain advocates tasks which promote a different kind of ‘negotiation’ in which students engage in knowledge building dialogue not because they have misunderstood each other but because ‘they have identified a linguistic problem and sought solutions’ (p.102). A series of studies by Swain and Lapkin (Swain and Lapkin 1998, 2001, Lapkin, Swain and Smith, 2002) collaborative tasks with the goal of linguistic accuracy were designed to assist students to extend their language output. Swain (2000) suggests that collaborative tasks, which by their very nature are communicative and encourage output, are more likely to encourage noticing and hypothesis testing and the use of meta talk; that is, tasks that are communicatively oriented but where students talk about and reflect on their own language. Furthermore, Swain (p.102) notes that this type of collaborative dialogue becomes not only problem solving but also knowledge building. Thus, three functions of output underlie collaborative tasks: 1) noticing the L2 while attempting to produce it, 2) using output as a means of hypothesis formulating and testing, and 3) engaging in meta talk. Collaborative tasks such as dictogloss, jigsaw and reformulation were used in these studies to produce language related episodes. Research results indicate that collaborative tasks increased the amount of output, helped students to focus on language as they formulate and tested hypothesis and provided opportunities for output. This provides support for the theoretical position that dialogue can be both a means of communication and a cognitive tool (Swain, 2000). Swain and Lapkin (1998) investigated language-related episodes (LREs) and language acquisition within dyadic interaction between two teenage French students as they write a short narrative for evidence of language being used as a tool to help L2 learning. One of their goals was to see what linguistic changes occur when two learners engage in collaborative dialogue. Their hypothesis was that collaborative dialogue provides the context and conditions for L2 learning. Swain and Lapkin’s study set up an activity in which students in collaborated in dyads by
completing an information-gap jigsaw activity about a picture story, then writing up the story. The pair produced 23 LREs while working collaboratively on their jigsaw task. Results suggest that that LREs lead to acquisition of certain structures during these instances. They noted examples of lexis-based and form-based language-related episodes (LREs) as evidence of acquisition taking place. However, they note that they chose strong students, and that research is needed to evaluate the effectiveness of such an approach with lower proficiency students. The findings of Swain and Lapkin (1998: 321) provide some evidence of language use ‘as both an enactment of mental processes and as an occasion for L2 learning’. Swain, M., and Lapkin, S. (2001) compared students performance on an information gap tasks involving a picture story and a dictogloss task. In the picture story (a jigsaw task) the students worked in pairs to reconstruct a story based on a series of pictures. The dictogloss task required to first listen to a passage and take notes to reconstruct it. Swain and Lapkin anticipated that students doing the dictogloss tasks would focus more on form than the students doing the jigsaw task. As Swain and Lapkin found in their results ‘both tasks generated a similar and substantial proportion of form focused language-related episodes’ (p.111). There were no statistically significant differences in the frequency language-related episodes which were defined by Swain and Lapkin as negotiation of form activities any part of a dialogue where the students talk about the language they are producing, ‘question their language or other- or self- correct their language production’ (p.104). However, the range of language-related episodes produced by the learners completing the dictogloss task was notably smaller suggesting that ‘the use of the dictogloss task may focus student’s attention, thus constraining student’s output somewhat more than the jigsaw task which is more open ended linguistically’ (p.110). That is, while the jigsaw task led students to use a wide range of vocabulary and language-related episodes, the dictogloss task increased accuracy in the production of target structures and prompted students to notice and reproduce complex linguistic structures. Although taken from a different perspective, Swain and lapkin’s study has suggested the pedagogical usefulness of form-focused tasks which require learner’s to produce written output collaboratively. However, if this notion that learners can help each other notice L2 language features when they collaborate in solving linguistic tasks, the long-term effects of these negotiation of form activities on L2 learning has not yet been demonstrated. Lapkin,
Swain, and Smith (2002) examined collaborative dialogues between lower- and higher proficiency levels of L2 learners of French who worked together in pairs. The subjects first jointly wrote or reconstructed a story, and then noticed the differences between their story and a reformulation of it. They then talked about what they noticed during a stimulated recall session, after which they revised their story and finally took part in an interview. The first-draft story and the final revised story were considered as pre-test and posttest respectively. The authors specifically investigated the effect of collaboration on the acquisition of French pronominal verbs. The language-related episodes (LREs.) selected for close analysis, along with the post test data, provide evidence that in most cases, learners have progressed in their correct use of pronominal verbs. For the dictogloss task, the stronger pair produced 11 verbs compared to the 8 verbs produced by the weaker pair. The same trend occurred for the jigsaw task: 17 verbs for the stronger pair and 9 verbs for the weaker pair. However, the length and quality of the LREs differed among pairs. Overall, the stronger pair on the jigsaw task produced the most sets of LREs. Nonetheless, the authors noted that in looking at changes in LREs over the first three stages, learning was facilitated by the collaborative environment.

Swain and colleagues’ studies motivated further research into the role of output. An interpretation of this line of research—whether in cognitive or social—has been that although input is essential to L2 acquisition, output might also bring about mental processes that both directly and indirectly affect L2 learning. We turn our attention to the studies by Izumi and associates that have discussed the potential impact of L2 output on learning within the framework the Output Hypothesis from a cognitive perspective.

### 3.3.3.2 Izumi and Associates

The work of Schinichi Izumi and colleagues (Izumi et al. 1999; Izumi, 2000) tested the Output Hypothesis by examining the effects of output on noticing, and how it contributes to interlanguage development, and how it relates to input. Izumi et al. (1999) tested the Output Hypothesis by examining the effects of output on noticing and SLA. examined the effect of written output on the acquisition of the English past hypothetical conditional, group read a passage first and then reconstructed a short text, followed by a second chance to read the same text and to reconstruct again. In the Phase 2 treatment, learners in the experimental group first wrote an essay on a guided topic that prompted
the use of the target structure, followed by the reading of a model essay and a second opportunity to write an essay on the same topic. The comparison group read the same text and answered true-or-false comprehension questions. By using pre-tests and post-tests, the results revealed that, while the Phase 1 tasks did not lead the experimental group to improve on the first posttest, the Phase 2 tasks led to significant improvement of this group on the subsequent production test, a gain significantly larger than that of the comparison group. The results of this study failed to reveal the effects of output on noticing of linguistic form. The following study (Izumi and Bigelow, 2000), investigated the noticing function of output again, examining whether output promotes noticing and SLA. This study is a replication of Izumi et al. (1999). The only difference is that Izumi and Bigelow (2000) reversed the delivery order of the two phases of the treatment in Izumi et al. (1999) in order to examine the task-ordering effects and the replicability of the previous results. Izumi and Bigelow, compared an output group with a non-output group in terms of noticing and acquisition the English past hypothetical conditional. The researchers attempted to answer this question: Does noticing the linguistic problems promote the noticing of relevant forms in subsequent input and result in learning? They made two groups (an experimental group and a control group) and gave two types of writing tasks to both groups: text reconstruction tasks and guided essay-writing tasks. In the text reconstruction tasks, learners in the experimental group were required to read a short written passage that had been seeded with the target structures (the English past hypothetical conditional) and to underline the parts they felt were important for the subsequent reconstruction of the passage texts for the succeeding writing tasks; on the other hand, the control group read the same texts only for comprehension. In the guided essay-writing tasks, the experimental group performed writing tasks for given topics before the model input while the control group performed writing tasks for unrelated topics. Both groups wrote essays after the model input. The researchers examined the learners’ noticing while reading, the use of the target forms (the past hypothetical conditional) in their writing tasks, and the performance in the multiple-choice recognition tests and the picture-cued production tests. The data indicated that output alone could not necessarily be associated with noticing but that extended opportunities to receive relevant input along with opportunities to produce output were helpful in improving learners’ use of the target form, the past hypothetical conditional. As Izumi and Bigelow (2000) noted:
Output did not always succeed in drawing the learners’ attention to the target grammatical form. The analyses of the interview data and of the production data collected during the treatment suggest that this occurred because not all learners necessarily found their IL grammar to be problematic during production, which in turn affected their attention to the grammatical form when they were exposed to the input (p.271).

Although the results showed no unique effects of output, extended opportunities to produce output and receive relevant input were found to be crucial in improving learners’ use of the grammatical structure. They authors called for further research to ‘to examine the effects of noticing on other grammatical forms under varying conditions using various focusing devices, and ‘the conditions under which output, in combination with input, can most effectively promote SLA’ (p.272). Whitlow (2001) raises questions about theoretical and methodological issues in the research reported by Shinichi Izumi and Martha Bigelow. Whitlow asks, in particular, asks whether manipulated forms of input and output actually lead to grammatical learning or whether any such gains are due to long-term exposure to the target language (input driven learning). In line with Krashen’s and Schwartz’s (1993) arguments she argues that only positive linguistic data can activate innate language mechanisms. Izumi and Bigelow (2001) responded that this theoretical position is interesting theoretically but is yet without empirical substantiation and the theoretical claim Whitlow appears to rely on as fact is far from categorically accepted in the profession. Izumi (2002) improved on the methodology of the previous studies and investigated the effects of output and input enhancement (IE) on noticing and SLA by focusing on English relative clauses. The purpose of including input enhancement as a variable in this study was to investigate the relative efficacy of different focus on form techniques. Izumi’s (2002) central research question was whether output and (visual) input enhancement promote noticing and learning of an L2 grammatical form. In this study, 61 adult ESL learners were randomly divided into four treatment groups and one control group. Of the four treatment groups, one was exposed to regular un-enhanced input and was required to produce output; another received typographically enhanced input and was required to produce output; the third group received enhanced input without output; and the fourth group received un-enhanced input without output. The
control group participated only by taking the tests. A text reconstruction task similar to those used in previous studies was used. The results revealed a strong positive effect of output on L2 learning. The major findings of this study are the following: those engaged in output-input activities outperformed those exposed to the same input for the sole purpose of comprehension in learning gains, and those who received visual input enhancement failed to show measurable gains in learning, despite the positive impact of enhancement on the noticing of the target form items in the input. Learners exposed to the input enhancement noticed the target form, but they did not perform better than the other groups involved in the experiment. Input enhancement did not make a significant contribution to learning outcomes. Therefore, no support was found for the hypothesis that the effect of input enhancement is comparable to that of output. The above three studies all examined the effect of the reading / writing mode on L2 learning and obtained positive results generally. However, Izumi and Izumi (2004, cited in Gass and Selinker, 2008) investigated the impact of the aural / oral mode on the acquisition of relative clauses in English, and the results indicated that the output group failed to outperform the non-output groups.

3.3 Chapter Summary

In this chapter, we situated the current study in relevant theories of L2 learning and reviewed the research on three main components that have emerged from these theories: input, interaction, and output. We specifically addressed a number of issues which resolve themselves into the following question: what is the relative importance of TL production in L2 learning. From a pedagogical perspective, we have made connections between two classroom interventions claimed to facilitate L2 learning—input and output-based learning. That is the effectiveness of having students work with language input, as opposed to having them produce language output. For this purpose, the chapter was divided into two parts.

In the first part of sections 3.2.1, we described the theoretical framework for input and interaction research and discussed the findings of key input/interaction research studies that have investigated the claims of the IH (Krashen, 1982), the IH (Long, 1983). The theories discussed above, which attempt to explain the relationship between input and L2, all agree that linguistic input is essential for learning. We have seen that the notion that providing CI is the only necessary condition for language acquisition to take
place had a significant impact on the field of L2 learning and has been the topic of much debate. Most importantly, Krashen’s (1982) IH, has led researchers to question the standard assumption in L2 learning research that language acquisition is an implicit process that is only input-driven, as Krashen suggested. Theoretical and empirical arguments supported the view that input can be enhanced or manipulated so that learners become more aware of the L2 forms. A basic theoretical premise of this orientation is that attention to form is the necessary and sufficient condition for L2 learning. Different from the IH, the IH (Long, 1983, 1996) reasoned that learners comprehend and learn L2 input through verbal interaction. Our discussion of the theoretical work of Long following Krashen, led to a pedagogical issue concerning the role of interaction in L2 learning. Particularly it has influenced the development of classroom pedagogy which as noted by L2 researchers gave interaction an important role in the learning process - Input-interaction based teaching.

This first part was followed by the examination of a crucial concept to this study in sections 3.2 that is L2 output. In line with other developments in L2 learning research, we argued that although various kinds of input provide different ways of focusing on form, input alone is not sufficient, and its importance relative to other factors such as output practice is still not known. We suggested that in order to ensure effective L2 learning that draws attention to form, we must explore the roles not just of input, but also that of output. Specifically, we addressed the claim that engaging in L2 production potentially leads to linguistic development. A number of speculations about how production can contribute to learning were summarized. As we have seen one of the most important reasons for promoting output as a means to improve L2 learning is that when learners experience communication difficulties, they need to be pushed into making their output more precise and appropriate. This claim is supported by research from the latest interactionist theories. However, the strong argument for the importance of output in the development of L2 learning came from Swain in the form of the Output Hypothesis. This hypothesis was described at length along with some empirical studies. The studies reviewed in sections 3.3.2 and 3.3.3 have each served to clarify a part of the picture of how output impacts the acquisition of L2 competence. The contributions of the various studies, whether experimental or descriptive in design, are useful in the effort to understand developing output more fully. It must be noted however, that most studies
have investigated vocabulary and few others examined relatively simple grammatical rules. In order to ensure effective L2 learning through instruction we must carefully explore the roles of output (in addition to input) in acquiring various linguistic rules, especially complex syntactic rules (Muranoi 2007). At the same time the results from these studies point to the lack of overwhelming evidence supporting the claims put forth by Swain and her colleagues; the impact on other internal processes such as noticing (e.g. Izumi, 2000) hypothesis formulation, cognitive comparison, and syntactic processing has not been directly examined. Thus, it remains unclear, however, from these studies how output functions as facilitator of L2 learning. There is little, if any research that clearly shows that L2 learning is output dependent and even less has examined the effect of output on the acquisition of L2 morphosyntactic structures. The present research effort takes these points into account and aims to further our understanding of the input-output relationships. Specifically, building on earlier studies, the present study examines whether output and input, in isolation or in combination, promote noticing and learning of an L2 grammatical form. Previous research has informed the design of the current study in a number of ways. Chapter 4 outlines the methodology, and procedures of the study.
CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter outlines the methodology adopted in this study to investigate the roles of input and output in combination and alone as factors promoting learning of English in a foreign language context.

The answers to the research questions for the current study were sought through a two-fold research design. The first major research question posed in the main study concerned whether or not target language production of syntactic structures (English tense and grammatical aspect) facilitates learning of these structures. This research question was examined mainly through a quantitative quasi-experimental research design. The second phase of the research design, aimed to explore whether EFL students become aware of gaps in their linguistic knowledge as they produce their L2, and if so, what thought processes they engage in an attempt to solve their problems. Description of the two research designs is presented in sections 4.2 and 4.3, respectively, as well as information on the subjects, the target structures, the different experimental treatments used, the testing instruments and scoring procedures.

4.2. STUDY 1: Quasi-experimental design

4.2.1 Research design

A research design refers to the general plan of data collection or analysis in order to shed light on the problem under investigation (Seliger and Shohamy, 1989). The aim is to obtain data which will serve to answer the research questions. In second/foreign language research, two different types of approaches are commonly used for data collection: the quantitative and the qualitative approaches. The quantitative approach uses data collection procedures that ‘result primarily in numerical data, which is then analysed primarily by statistical methods’ (Dörnyei 2007:24). The main aim of this approach is to draw conclusions from an objective detached perspective. The researcher is not involved and the reality of the question under investigation can be described objectively. The qualitative approach is described as the method of analysis that provides open-ended,
non-numerical data does not make use of statistical procedures in the examination and interpretation of data (Dörnyei 2007).

As far as the present study is concerned, the author of this thesis believes that a quantitative (experimental) approach would serve better the objective of the present research. An experimental study is beneficial for studying the issue more reliably because it allows the researcher to state the research problem using very specific terms which in turn help to follow the set research aims. More importantly, a quantitative (experimental) approach helps to determine whether the predictive hypothesis underlying the present research holds true.

Experimental studies can be true experimental or quasi-experimental. The difference is that true experimental studies require random assignment of subjects to different groups, while quasi-experimental studies use subjects not randomly assigned since they naturally belong to one group or the other, for example, intact classes (Dörnyei 2007, Seliger and Shohamy, 1989). Quasi-experimental designs, as asserted by Seliger and Shohamy, do not disturb ongoing programmes and are less disruptive to participants’ normal teaching and learning since they are ‘constructed from situations which already exist in the real world’, they are ‘more representative of the conditions found in educational contexts’, and ‘are more likely to have external validity’ (Seliger and Shohamy, 1989:148-149).

Considering that we could easily and conveniently gain access to intact classes, the present study was quasi-experimental in character and was conducted by the participants’ regular teacher in the course of normally scheduled classes. The students remained in their original groups as allocated at the beginning of the academic year. Two groups of learners were allocated to one of the two treatment options: (1) an input-only group that received output-free input-based instruction and (2) an input-plus-output group that received input- and output-based instructional material designed by the researcher. The treatment in both experimental groups consisted of two weekly ninety-minute sessions over a period of 8 weeks. To determine the short-term effects of the two treatments, four types of assessment tasks were used: a listening comprehension (aural interpretation) test, a written production test, a grammaticality judgement test and a picture description task.
Based on the purpose of the study, the following research questions were addressed within the framework of the Output Hypothesis: One major question and two related questions.

The first research question concerned whether or not target language production of syntactic structures (English tense and grammatical aspect) facilitates learning of these structures.

**Research question:** Does providing opportunities for written output in addition to input of the target structures aids learning of tense/grammatical aspect more than input-based instruction only?

It was hypothesized that both types of instruction would have positive effects on learner performance, but that the input-plus-output learning condition would show an overall greater improvement in their use of the target structures than learners with input-based instruction only. This first question was examined mainly through a quasi-experimental research design. In order to answer the research question the following hypotheses were formulated in relation to the impact of written modified output.

**Hypothesis 1:** Competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structures would increase as measured by differences on the post-test scores. Therefore positive results are expected.

**Hypothesis 2:** Competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structure that include an output component would increase as measured by differences on the post-test scores. Therefore positive results are expected.

**Hypothesis 3:** Competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structure that include an output component would increase as measured by differences on the post-test scores compared to those who receive input-based instruction only.
4.2.2 Subjects
The present study was carried out in an EFL context at the university level. In this context, students have very few opportunities to use English outside the classroom; they have limited exposure to English culture, most often through TV or music. The teacher may be the only native speaker they have exposure to. Another important contextual parameter is that French, which is familiar to most students, is the dominant language after their L1, Arabic.

The participants in this study were all Algerian undergraduate students taking their first semester in BA course in English Studies. In this programme, the first two years (four semesters) are mainly devoted to teaching language skills (reading, writing, grammar, etc.). The teaching approach adopted by the department during the first four semesters places an emphasis on developing communicative skills in English although there is also a considerable amount of content teaching. The main focus of the remaining semesters is on teaching some academic linguistic, literature and civilisation courses. Admission into this course was based on the learners’ ability to meet any one of the following criteria: (1) a given score on the Baccalauréat examination and (2) a given score on the English language examination. These students received at least seven years of school instruction in English. English is taught as one of many school subjects during four years in the middle school and three years of secondary education school. Their level in English should correspond to their years of instruction and also to personal effort in their studies. In addition, the type of L2 instruction they have experienced has been meaning-oriented. EFL instruction in the middle and secondary education is basically competency-based, thematically-oriented and project-geared (New Prospects, 2007). Consequently, students receive minimal explicit instruction on language forms. This population of learners is also homogenous consisting principally of Algerian students with Arabic as L1, although eight participating students were African students with different L1 backgrounds and were also learning English as a foreign language. These students were not excluded from the study since their level of comprehension and production of English was similar to that of the Algerian students. Participants averaged about 19 years of age with some others
as old as 30. Concerning gender there were more females than males. Learners’ main contact with the language is limited to the EFL classroom.

Students attended one of two intact classes, all of which were selected to test the hypotheses. After the administration of the pretest, two classes were assigned to the treatment conditions (input-only and input plus output). Students had to be present at all treatment and testing sessions in order to be included in the study. A total of 38 students (those who had attended all treatment/testing sessions) were included in the final analyses of results.

4.2.3. Targeted Linguistic Structures

One important factor affecting the choice of linguistic forms for instruction is whether these forms are problematic for learners, that is whether or not learners have difficulties in producing them (for example, in writing or speaking). The target forms chosen for this study were tense and grammatical aspect. Tense and grammatical aspect were chosen as target features of the study for the following reasons:

a) The acquisition of tense and aspect figure among the central grammatical categories in L2 learning.

b) Tense and aspect occupy a prominent place in course books and pedagogical grammars used in the Algerian EFL context.

From our past English teaching experience, we have found that tense and aspect constitute a major source of errors for students at different stages in L2 learning. As noted in the introductory chapter, Algerian EFL learners show limited use of tense and aspect forms and fail to learn the intricacies of the English tense system (Moumene, 2010). This linguistic feature is relatively complex and places heavy cognitive demands on the students. Tens of if not hundreds of inappropriate uses of tense and grammatical aspect are somewhat familiar to teachers and even predictable. This interferes with the accuracy of students’ L2 production, especially in the written form. At the same time, it constitutes a major pedagogical preoccupation facing teachers in the Algerian EFL context.

In addition, recent L2 studies of the development of tense-aspect of English (and certain romance languages such as French, Spanish, Italian) reveal that the acquisition of tense and aspect morphology is problematic. It is, however, still unclear why L2 learners perceive these linguistic structures as problematic. Recent accounts of L2 tense-aspect
acquisition research proposed several factors as responsible for the difficulties in learning to use tense and aspect. Cowan (2008:379) summarised three factors that converge to explain the problematic nature of tense and aspect for EFL/ESL learners:

i) The influence of the lexical aspect of verbs

ii) The influence of the student’s L1

iii) The type of instruction that learner’s receive from teachers and materials and the frequency with which, within this instruction, certain types of verbs are associated with particular tense forms.

Cowan also identifies as a fourth factor ‘cognitive principles that constrain hypotheses that learners make about associating tense markers with certain activities and actions (p.389).

Similarly, Collins (1999:3) explained that a number of studies of both tutored and untutored learners have found that interlanguages at various stages of development may be characterised by inappropriate use and incomplete knowledge of the grammatical devices that exist in the L2 for situating events in time (tense) and expressing perspectives on how situations develop (aspect). The development of temporal-aspestual systems (tense and aspect) has been a prolific topic of research in the field of L2 acquisition. One major concern for researchers was to understand how learners come to know what morphological markers go with what verbs? In the 1970’s studies by Dulay and Burt 1973; Krashen 1977 (referred to as the morpheme studies) established a common acquisition order for a number of English morphemes such as nouns and verb inflections. With reference to verb inflections, Krashen’s (1977) ‘Natural Order’ postulated the acquisition of the ‘ing-morpheme’ as the first stage. Irregular past is acquired in the next stage; whereas regular past is acquired later in the order. In the 1980’s other approaches were taken to the L2 acquisition of L2 tense-aspect morphology. Bardovi-Harling (2000:10) points out that ‘two main strands of inquiry can be distinguished: the investigation of the expression of semantic concepts through various linguistic devices and the investigation of distribution of verbal morphology as an indicator of the underlying semantic system of interlanguage’. Most studies in L2
research concentrate on the relation between verb semantics and the development of tense aspect morphology. Some researchers have claimed that the developmental sequence of tense-aspect morphology in L1 and L2 acquisition follows a universal pattern and it is strongly influenced by the inherent semantic aspect of the verb to which the inflections are attached. This perspective has been referred to as the Aspect Hypothesis. In its current formulation, this hypothesis predicts that ‘patterns in the emergence and development of tense and grammatical aspect will reflect associations made by learners between the verb morphology of the target language and the inherent situational aspect of the verb or predicate (Collins 1999:7)’. According to Gass and Selinker (2008:207) this approach to tense-aspect acquisition is ‘semantic in nature and focuses on the influence of lexical aspect in the second language acquisition of tense-aspect morphology.’ The study of tense-aspect morphology has been the focus of many accounts of L2 language acquisition and the aspect hypothesis is only one way of looking at the acquisition of tense and aspect (Gass and Selinker 2008). Theoretical perspectives range from functional to typological-linguistic (Sallberry and Shirai, 2002). In summary, tense and aspect can be considered complex and is most likely to be conditioned by other factors. As Sallberry and Shirai (2000:14) pointed out, the aspect hypothesis is only one part of the total picture and that acquisition of tense and aspect is influenced by a variety of learner-internal and learner-external factors including:

1) universal (and possibly innate) predisposition by learners to mark some salient grammaticizable notions
2) L1 influence
3) individual learner characteristics
4) input/interaction
5) instructional variables

It is beyond the scope of this study to solve controversial issues concerning the acquisition of temporal expression in L2. In this study we attempt to situate the concerns

1 A review of the empirical studies the on the Aspect Hypothesis with untutored and tutored learners of various target languages is presented in Bardovi-Harlig (2000).
of L2 learning research in a pedagogical context. The study investigates the effects (and non-effects) of input and output on L2 learning by considering the acquisition of tense and aspect in an instructional setting. The focus is on the role of instructional intervention on the development of a learner’s system of tense-aspect. Thus, the reason for choosing English tense and aspect was both psycholinguistically and pedagogically motivated. However, we need first to review what is it that L2 learners are expected to acquire, what do we understand by the notions tense and aspect? Explaining these two concepts that may help us in understanding what the English tense and aspect are about.

4.2.3.1 The Concepts of Tense and Aspect

The grammatical expressions of time are tense and aspect. The two terms, in spite of the fact that they are basic notions have been variably conceptualised in linguistics and grammar. On a general linguistic level, one view characterises them in the following way: ‘Tense and aspect are semantic notions concerning temporality encoded implicitly and explicitly in the verb’ (Sallaberry and Shirai 2002:2). We define first what is understood by the notion of tense. Tense, as a grammatical category, is defined as the ‘grammaticalized expression of location in time’ (Comrie, 1985:9 cited in Collins 1999:7). It refers to the location of an event in time with respect to another reference time. There are two concepts on tense. They are (1) absolute tense and (2) relative tense. Absolute tense refers to a relationship between moment of speech (S) and moment of event (E) where -E before S- defines past, E simultaneous with S, indicates present, and -E after S- specifies future. In English absolute tenses are the simple present and simple past tenses which include the present moment as the center in their meaning. They consist of one word that is morphologically marked and relate either to past or present. Examples of relative tenses are the compound tenses composed of an auxiliary, which is morphologically marked to indicate time reference, and the participle of the main verb.

The second grammatical category expressing time in language is aspect. Many formulations can be found in the literature describing the subject of aspect, each emphasizing a different detail. Biber, Conrad and Leech (2002:455), for example
describe aspect as ‘a choice in the verb phrase that expresses time meanings related to whether an action is finished or still in progress.’ According to Cowan (2008:351) ‘aspect expresses how the speaker views the action of the verb’. Cowan distinguished between actions that are perfect in aspect and action that are imperfect in aspect. The first type of actions are bound and complete while the second type are seen as incomplete. Other distinctions include iterative, for actions seen as repeated and habitual for actions described as occurring regularly i.e. bound and complete; actions that are inceptive signalling the beginning of an action, inchoative (or ergative) signalling entrance into a state (Cowan 2008:251-289).

Briefly explained, aspect indicates not only when the event occurred, but also how the action developed over time; whether the action ended, came into being, or existed continuously as a state. Since aspect can also be expressed lexically, it has been divided into two distinct linguistic categories: grammatical aspect and lexical aspect.

Grammatical aspect according to Collins (1999:13) ‘describes how the situation unfolds as opposed to when it is situated in time. It allows a speaker to express a perspective on the situation being described’. In addition to the grammatical marking of the aspect, the lexical meaning of the verb may convey aspe chatual meaning. This is called lexical aspect (also inherent aspect). Unlike grammatical aspect, which is expressed through the use of overtly marked elements in the verb phrase (be + present participle, have + past participle in English), lexical aspect is an unmarked, inherent semantic property of the verb. According to Cowan (2008) lexical aspect refers to semantic properties of verbs, for example, whether or not an action is characterized by duration, an end point or change. Thus, aspe ctual concepts are also conveyed through lexical aspect. From the lexical point of view, English verbs are divided into two basic categories: Stative verbs and three types of dynamic verbs. Based on Vendler classification (1967), Cowan characterises them as follows:

**Stative verbs**: describe states or situations rather than actions. States are continuous and unchanging and can be emotional, physical or cognitive (e.g. He owns a large car, She hates her boss)

**Dynamic verbs**: stative verbs contrast with dynamic verbs-verbs that require some input of action by the subject. Dynamic verbs can further be classified in terms of lexical aspect features into three subcategories, each with its characteristics or tests.
**Activity verbs:** describe actions that go on for a potentially indefinite period of time. The actions are constant (e.g. run, swim, walk) or involve an inherent change (e.g. decline, develop, grow.)

**Achievement verbs:** describe an action that occurs instantaneously—either punctually (e.g. bounce, hit, kick) or as a change of state (e.g. find). Change of state actions; involves a preliminary activity that is terminated by the achievement verb.

He bounced the ball several times punctual  
She crossed the finish line change of state

**Accomplishment verbs:** they have a termination that is logical in terms of their action, as is the case, for example, with build (a house) or paint (a picture).

He wrote a book about language teaching  
She made a model of the house

A verb may fall in more than one category.  
He ran in the hall activity verb  
He ran to the post office accomplishment verb

( Cowan, 2008:352-355)

How to help learners understand how grammatical and lexical aspect combine in the use of tense? Up to this point, the introduction into the subject of tense and aspect was done on a general linguistic level. We will concentrate in the following section on a specific description of the English tense and aspect system.

**4.2.3.2 The Pedagogy of the English Tense and Aspect System**

From a grammatical point of view, Geoffry Leech and Svartvik describe the notions of tense and aspect as follows: ‘By tense we understand the correspondence between the form of the verb and our concept of time (past, present or future). Aspect concerns the manner in which a verbal action is experienced or regarded’ (1975:305). One way to view the English tense and aspect system is that it consists of the three tenses of past,
present and future categorised according to the time frame: past, present, and future. The present is now. Actions which took place before the present moment belong to the past and actions which will take place after the present moment belong to the future. However, seen from a morphological perspective, verbs in English do not contain the future tense. Since only the present and the past tenses are morphologically marked (change forms). Time references which are not morphologically marked as the future tense cannot be called tenses. Most grammarians (e.g., Leech et al., 1975) do not talk of a future tense in English and the English tense system is viewed as a binary i.e. consisting only of past and present (non-past) tenses. English has no inflected form of the verb to denote futurity. Future is a periphrastic expression of time reference conveyed through syntactic means, i.e. separate words, to express the same grammatical relationship as inflections. This issue concerning the definition of the future tense in English causes contention among grammarians. In this study, future is also referred to as a ‘tense’, disregarding its modal nature. We, thus, keep the threefold opposition: present-past-future tenses.

Verb tenses may also be categorised according to aspect. Two aspects are recognised in English: the perfect aspect and the progressive aspect. Verbs which are not marked for aspect are said to have simple aspect (the three simple tenses). The three English simple tenses describe an action but do not state whether the action is finished. The perfect aspect presents the situation as complete while the progressive presents it as ongoing and thus incomplete. The perfect and the progressive are combined with either present past or future tense to produce the tenses of English (the so-called twelve tenses of English):

i) The four present tenses are:
the simple present
the present progressive
the present perfect
the present perfect progressive

ii) The four past tenses are:
the simple past
the past progressive
the past perfect
the past perfect progressive

iii) The four future tenses are:
the simple future
the future progressive
the future perfect
the future perfect progressive

As mentioned above, learning tense and aspect is a source of difficulty for L2 learners. Likewise teaching these grammatical phenomena is very challenging. How to help L2 learners learn tense and aspect forms appropriately in English? As noted above, several factors have been indicated as responsible for the difficulties in learning to use tense and aspect. Here the focus is on the role of instructional intervention on the development of a learner’s system of tense-aspect. More specifically on the effects or non-effects of input and output-based approaches. The potential influence of these two treatment options is an empirical question that will be investigated in this study.

4.2.4 Instructional Treatments

The treatment refers to anything done to groups in order to measure its effect (Seliger and Shohamy, 1989). It is a controlled or intentional experience, such as exposure to a language teaching method specially constructed for the experiment, or exposure to materials presented under controlled conditions. Treatments are actually the independent variable in this quasi-experimental study. With type of instructional treatment as an independent variable, all participants took part in the same experimental conditions including a pretest, and a posttest. The dependent variable was accuracy improvements on assessment tasks. The details of the three tasks are outlined below.

The instructional treatment to the teaching of the tense and aspect system of English that will be demonstrated in the instructional materials contains the following characteristics (based on Ellis, 2006):
- Draws learners’attention to targeted linguistic structure in such a way that to it helps them to understand it metalinguistically and process it in comprehension so that they can internalize it.
- Draws learners’attention to targeted linguistic structures in such a way that it helps them to understand it metalinguistically and process it in comprehension and/or production so that they can internalize them.

Two instructional material packets were used for each treatment (Appendices A, B and C). The two sets of teaching materials were prepared on the basis of grammar handbooks, coursebooks and online grammar sites. Each treatment was designed to reflect a different instructional approach to tense instruction. We will first describe the treatment packet for the input-only group.

4.2.4.1. Input-based Instructional Material

The treatment packet for the input-only group consisted of explicit information (EI) (Appendix A) about the English tenses along with input-based practices. The instructional treatment in both experimental groups started with explicit presentation of the rules concerning tenses and grammatical aspect. The explicit instruction sheets that were delivered to learners included conceptual explanation as to:

1) How the targeted tense is formed.
2) The basic meanings of the targeted tense.
3) The additional meanings of the targeted tense.

The input-based instructional practices consisted of activities where learners engage with language receptively i.e. work with language input in the form of listening and reading material through more or less implicit interpretation (comprehension) tasks; there is no immediate need to produce them. For example, learners hear or see the target structure in the input and respond in some way to input utterances by stating whether they are true or false or choosing the best answer from among the options presented. Activities used both aural and written stimuli but most of them were written. Table 6 outlines the topics and grammatical focus of the input material.
Table 6: Topics, and grammatical focus of input material used in the study

<table>
<thead>
<tr>
<th>Text</th>
<th>Topic</th>
<th>Grammatical Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text 1</td>
<td>Daily Activities</td>
<td>Simple Present</td>
</tr>
<tr>
<td>Text 2</td>
<td>Louis Pasteur</td>
<td>Simple Past</td>
</tr>
<tr>
<td>Text 3</td>
<td>Killer Oil</td>
<td>Simple Past/Past Progressive</td>
</tr>
<tr>
<td>Text 4</td>
<td>No Wrong Numbers</td>
<td>Present Perfect</td>
</tr>
<tr>
<td>Text 5</td>
<td>Human rights in Africa</td>
<td>Present Perfect</td>
</tr>
<tr>
<td>Text 6</td>
<td>Taxi</td>
<td>Simple past/Present Perfect</td>
</tr>
<tr>
<td>Text 7</td>
<td>The Casbah of Algiers</td>
<td>Past Perfect</td>
</tr>
<tr>
<td>Text 8</td>
<td>Never too Old to learn</td>
<td>Simple Future</td>
</tr>
</tbody>
</table>

The type of instruction used in this study with the input-only group was based on descriptions of input-processing instruction (VanPatten, 1996, 2004) and structured-based instruction (Erlam, 2003) (chapter 3). One of the characteristics of input-based instruction is that during the instructional phases learners are only engaged in input-based practices. They do not engage students in production of the target form in question. This emphasis on input-only practice in input-based instruction corresponds to Van Patten’s (1996, 2004) perspective that comprehension tasks should precede production tasks. However, the input material in this perspective, unlike the pedagogical implications of Krashen’s ‘Input Hypothesis’, is structured and manipulated. We began chapter 1 by noting that the unfocussed exposure to input i.e. raw, natural input, as in the communicative and acquisition-oriented approaches, may not be the most efficient for some grammatical features to be acquired in a classroom (Doughty and Williams 1998). Learners must in some way attend to the input in order to make the appropriate form meaning connections. One possible way to accomplish learners’ noticing of forms is through different methods of ‘enhancing the input’. IE (chapter three) refers to a group of pedagogical applications ‘that shape the input that the students must process’(Cowan 2008:40) for focusing learners’ attention on aspects of the language that may otherwise go unnoticed (chapter three). In accordance with the pedagogical options available for input-based instruction, the types of IE used in this instructional package included:
(i) Input flood: Written or oral texts are modified so as to contain many instances of the same language forms or features. Learners are required to extract meaning from the input. As characterised by Ellis (2001:19) input flood ‘exposes learners to input rich in some specific linguistic feature’ and ‘requires them to process this input primarily for meaning’. Cowan (2008) points out that input flood is a pedagogical application of processing instruction because it provides repeated instances of the target structures ‘that will, it is hoped, be noticed and become intake’ (p.40). The goal of textual enhancement is to get learners to notice the enhanced forms.

(ii) Textual enhancement: it consists of ‘typographically highlighting a particular grammatical structure in written passage’ (Cowan 2008: 41). Target forms are enhanced and made salient in written texts by the use of typographical cues such as italics, putting forms in bold type, underlining or colour coding.

(iii) Structured input tasks: As Thornbury (1999:105) highlighted, ‘such tasks require learners to process input which has been specially structured so as to help them understand the target item. There is no immediate need to produce them.’ This activity is comprehension-based; learners hear or see the target structure in the input and respond in some way to input utterances by, for example, stating whether they are true or false; possible or impossible; by adding information or matching sentences and pictures. The term structured input was put forward by Van Patten (1996, 2004) as part of his input processing approach.

iv) Students were also given consciousness-raising exercises. Consciousness-raising is designed to allow students to develop an explicit knowledge of grammar without necessarily articulating grammatical rules. It aims to help learners understand target forms but does not require production of these forms (Ellis 1994, 1997, 2008).

Table 7 summarizes the time allotted for each stage of the two weekly lessons during the 8-week experimental period.

(2) They are also called grammar interpretation activities (Ellis, 1994, 2008)
Table 7: Time allotted for each stage of the lesson during the experimental period for the input group

<table>
<thead>
<tr>
<th>Stages</th>
<th>Time allotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explicit presentation of verb tenses</td>
<td>30 minutes</td>
</tr>
<tr>
<td>2. Listening /reading material exercises</td>
<td>20+60 minutes</td>
</tr>
</tbody>
</table>

4.2.4.2 Output-based instructional material

The treatment packet for input plus output group consisted of three steps:

(1) The same explicit instruction on tense and aspect as the input-only group. Explicit grammatical information was made equal for both treatment groups so that the difference between them would be limited to the presence or absence of learner output during classroom activities. (2) The same set of input-based tasks covered by the input-only group. However, their focus was the production of the targeted structure. For example, where the input group had to choose the correct option or state whether they are true or false, the output group were required to produce sentences.

(3) The input plus output group performed a number of mechanical, meaningful and then communicative written and oral activities, where the emphasis was placed on production-based activities including traditional production-based activities and tasks based on the output hypothesis.

The traditional production-based material consisted of mechanical, meaningful and communicative activities where the emphasis was placed on production. Mechanical/manipulative output practice activities focus on linguistic forms isolated from context and provide students with opportunities to practise the target forms. In this type of practice
the learners can perform a task without linking the structure and its meaning since they do not have to understand what they are saying to complete the task. Meaningful and communicative production-based require the learners to attend to meaning (Ellis 1993, 1994). This model of teaching draws from both the Audiolingual Method and cognitive theory (DeKeyser 1998) where explicit instruction is followed by form-focused activities which allow students time to think and apply rules they have learnt. For the purposes of this study, oral work that students engaged in was be kept to a minimum, in order to increase attempts at producing the target structure in written output. Thus a greater emphasis was put on individual written activities. In line with Swain’s output hypothesis (1995, 2000, 2005), which claims that ‘pushed output’ production may assist learners to focus attention on problem structures and compare their interlanguage forms with the target form, output-oriented tasks, all of which involve output production, were employed in the present study. These tasks are classroom applications of the research on the output hypothesis and have been used to produce ‘pushed output’.

- **Dictogloss**: dictogloss is a form of dictation which ‘requires learners to process the whole text at once’ (Thornbury 1999:84). Students listen to a short text and then work individually (in pairs or in small groups) reconstruct the text from memory and some notes. The output is then compared with the original text and students identify their linguistic deficiencies. Swain (1998) refers to dictogloss as a procedure through which student can reflect on their own output (the reflective function of the output).

- **Input-output cycles** (Izumi, 2000): an integrated skills technique for language learning in which students learners read (or listen to) a text and individually or in pairs work to write a reconstructed version of the text. In some way these texts contain target structures in the same way these structures are embedded in input flood or enhanced input activities. Once learners complete their reconstruction they are given another text and are asked once again to reconstruct or summarise the information.

Table 8 gives the time allotted for each stage of the lesson during the experimental period for the input plus output allotted for each stage during the 8-week experimental period; Table 9 outlines the topics and grammatical focus of pushed tasks.

---

3 It is also called dictocomp or grammar dictation

4 It is also referred to as text-reconstruction
Table 8: Time allotted for each stage of the lesson during the experimental period for the input plus output

<table>
<thead>
<tr>
<th>Stages</th>
<th>Time allotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explicit presentation of verb tenses</td>
<td>30 minutes</td>
</tr>
<tr>
<td>2. Listening /reading material exercises</td>
<td>10+20 minutes</td>
</tr>
<tr>
<td>3. Traditional production-based material</td>
<td>20 minutes</td>
</tr>
<tr>
<td>(Mechanical/meaningful/communicative activities, Free written production)</td>
<td></td>
</tr>
<tr>
<td>4. ‘Pushed output’ tasks (Dictogloss tasks, Input-output cycles)</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

Table 9: Grammatical focus of pushed output tasks used in the study for the Input plus output group.

<table>
<thead>
<tr>
<th>Text</th>
<th>Topic</th>
<th>Grammatical Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dictogloss Text 1</td>
<td>Morning activities</td>
<td>Simple Present</td>
</tr>
<tr>
<td>Dictogloss Text 2</td>
<td>The Wilsons</td>
<td>Present Progressive</td>
</tr>
<tr>
<td>Input-output cycles Text 3</td>
<td>A Disastrous Dinner</td>
<td>Simple Past /Past Progressive</td>
</tr>
<tr>
<td>Input-output cycles Text 4</td>
<td>Computers</td>
<td>Present Perfect</td>
</tr>
<tr>
<td>Dictogloss Text 5</td>
<td>Hot Snake</td>
<td>Present Perfect simple /progressive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Past Perfect</td>
</tr>
<tr>
<td>Dictogloss Text 6</td>
<td>A Terrible Day</td>
<td>Simple Future</td>
</tr>
<tr>
<td>Input-output cycles Text 7</td>
<td>Cycling through Africa</td>
<td></td>
</tr>
</tbody>
</table>

4.2.5 Testing instruments and scoring procedures

This section describes the testing instruments used as well as an explanation of the scoring procedures. The pre-test which was developed for this study consisted of four tasks: 1) a listening comprehension task (an aural interpretation task) 2) a written
production/completion task 3) a grammaticality judgement test, and 4) picture description task. The function of the pretest was to measure learners’ knowledge of grammatical forms without any previous instruction in verb tense usage—apart from the instruction—if any—they received in pre-university English classes. It aimed to measure both the explicit and the implicit knowledge of the target structures in both constrained production and free production tasks. An identical test was used for pre-testing, post-testing (appendix D). The post-test was conducted immediately after the treatment session (Figure 7). All the subjects performed only three post-treatment tests. The listening comprehension test was not given after the treatment since it was believed that learners might be significantly affected by the multiple administrations of the same test format.

**Pre-test (Week 1)**

- Listening comprehension test
- Written gap-fill production
- Grammaticality judgement test
- Picture description task

**Assignment into two groups**

**Experimental Groups**

**Input-only group**

- Treatment session
- (Output-free input-based practice)

**Input plus output**

- Treatment session
- (Input plus output practice)

**Post-test (week 9)**

- Written gap-fill production
- Grammaticality judgement test
- Picture description task

*Figure 7:* The research design

4.2.5.2.1 Listening comprehension Test
Participants were first asked to listen to the passage. Participants were not allowed to take notes. After they had finished listening they were asked to provide the past tense forms of a list of verbs. The aim was understanding meaning of material that contains target structures (past tense stem + ed and time markers). They listen for the text a second and find out the order of a set of pictures. Students were allowed 20 minutes to do the task. The listening test and accompanying questions are provided in appendix D. A right-wrong scoring method was employed.

4.2.5.2.2 Written gap-fill production

A grammar test covering the various English tense-aspect forms was used to assess the familiarity of EFL learners with these tense-aspect forms. In this test students completed a rational cloze instrument consisting of a descriptive passage eliciting verbs from all three simple tenses: present (12 verbs), past (6 verbs), future tense (1 verb) and 5 aspectual forms of the present, 7 aspectual forms of the past and 3 aspectual forms of the future. This test was not a typical cloze test in that the lexical items were provided (base forms of verbs which learners manipulate using the bracketed cues about tenses). This instrument is very representative of the kind of ‘fill-in-the-blank’ verb exercises classroom learners are familiar with. From the lexical aspect viewpoint, the distribution of the 34 missing verbs includes: 12 state verbs, 22 dynamic verbs (of which 18 are activity verbs and 4 accomplishment verbs). The instructions told the learners to provide the correct tenses for the verbs given in parentheses following the blanks. Thirty-five minutes were allowed for the completion of the items.

4.2.5.2.3 Grammaticality judgement test (GJT)

Grammatical judgment (GJ) tasks are one of the most widespread data-collection methods that linguists use to test their theoretical claims. They are commonly used to measure the impact of specific language instruction in L2 research. In these tasks, speakers of a language are presented with a set of linguistic stimuli to which they must react. Some linguists reject the use of metalinguistic judgment data entirely, while others find them to be a useful tool for the examination of grammatical competence. Gass and Selinker, for example, pointed out that, in grammaticality judgement tests information is obtained not about the system learners are acquiring but ‘about some internalized system
of the learners (i.e. there may be a mismatch between the two systems in question)’ (2008:65). Ellis (1994:673) on the other hand, pointed out that the GJT allows researchers to investigate ‘linguistic properties that would be otherwise very difficult (and perhaps impossible) to investigate’. Although the GJT has been criticised for having problems, it is commonly used to measure the impact of specific language instruction in L2 research. In the context of the present study, the term ‘grammaticality judgement’ will refer to an ‘opinion’ offered by the learner regarding the grammaticality (or not) of sentences in the English language. This learner may give the opinion that the sentence is in some way deviant, or does not conform to his view of what constitutes a correct ‘sentence’ in the English language. On the other hand, he may find that the sentence corresponds exactly to his view of a ‘proper’ sentence in English. In the test, the learners gave grammaticality judgments on 45 test items, half of which contained ungrammatical or problematic tense/aspect usage (29 sentences). These ungrammatical sentences were made by students during previous exams. The rest of the sentences were generated for the purpose of the test. The rationale for selecting these items was primarily pedagogical and practical rather than theoretical. Responses on the grammaticality test were assigned a score according to whether:

- The learner was able to correctly identify an item as grammatical or as ungrammatical. (score = 1). Learners were not asked to provide corrections for the sentences.
- The learner incorrectly identified an item as grammatical or as ungrammatical (score = 0). Consequently, the maximum score in the GJT was 45. The time limit was set at 40 minutes. The instructions, as well as the items tested are presented in Appendix D. In addition, an outline of the various problems tested is provided with some examples.

4.2.5.2.4 Picture description task

A picture description task adapted from Swain and Lapkin (2001) was used in order to evaluate student’s use of the target language features. For this task students looked at 8 numbered pictures of telling a story of a girl involved in various activities (appendix D). Participants had to tell the story that the pictures suggest by writing sentences to describe what was happening in each of the pictures. The contexts carefully elicit the use of target language features such as the simple present and present progressive. Since
students have a limited amount of vocabulary they were provided with the necessary vocabulary to complete the task. They were also permitted to use the dictionary if they wished. Students took approximately 20 minutes to complete the picture elicitation task. A partial-credit scoring method was adopted. As opposed to the right-wrong scoring method, the partial-credit scoring method gives some credit for partially correct responses. For example, in assessing the grammatical knowledge of ‘form’ and ‘meaning’ of the past tense. A response such as ‘the sun rised’ would be assigned partial credit (no credit for ‘form’ and full credit for ‘meaning’).

4.4. Study II: An exploratory study

Study 2 was exploratory in nature and was conducted after the completion of Study I. Building on the work of previous researchers on the role of L2 production (output) in promoting noticing (chapter 3) the exploratory study to be presented in this chapter intends to add to the existing noticing research by providing data derived from a population (young adult learners) that has not featured prominently in previous studies in a new acquisitional context (a foreign language setting). Bearing in mind previous research findings and suggestions for further research to explore learners’ L2 production, we designed a study in which L2 learners engage in writing tasks comprising three stages during a 50-minute class: (i) to write a narrative in response to a picture prompt, (ii) to compare the use of linguistic forms in their own written output and the use of the forms in a text written by a native speaker, and (iii) to make revisions.

While writing the initial picture description, participants had to verbalize linguistic problems encountered during output processing and on differences between their own output and the feedback received on it (gaps) during subsequent input processing. The study was supposed to explore the degree to which (a) noticing gaps and/or holes, and (b) exposure to relevant subsequent input (a native speaker text) would contribute to the correct use of linguistic forms in the rewriting phase.

4.4.1 Why an exploratory study?

The type of research conducted in this study employed an introspective approach with an exploratory objective to understand how output impacts on L2 learning. It is important to examine participants’ learning process, that is, participants’ cognitive
processing involved in their L2 output performance. However, learners’ cognitive processes would not be fully understood if only the learning effect was examined through a quasi-experimental study (as was the case in study I). In the present research, the exploratory study was relatively independent of Study 1 in the sense that the former was administered separately from Study 1 and on different participants, as detailed in section 4.2 above. A study was needed for studying the output-triggered learning processes by employing an introspective methodology as a tool to obtain data from the learners’ perspectives. The L2-related internal processes or composing behaviors in which learners engage while producing their L2 are an unobservable phenomenon. The advantage of using an introspective approach lies in the possibility of using such research methods as think-aloud protocols, note-taking, underlining, personal journals, and interviews. In using this method, we are interested in determining the processes underlying learners’ L2 production. One source of information about these processes is the learner himself, who tells the researcher about what his decision-making processes during or after the activity. Methodologies used to qualitatively and quantitatively account for learners’ noticing and attentional processes fall into two categories: online, which measures the language learners’ noticing during performance of a certain language task, and offline, which employs posttreatment assessment measures. The advantage of online measures, as opposed to postexposure measures, is their instantaneous access to L2 processing, thus minimizing the risk of possible memory decay by the L2 learner (Gass and Mackey, 2000). As such, noticing was operationalized through verbal self-reports in the form of note taking. Verbal reports represent a type of introspective data. They are ‘protocols or reports that come about from asking individuals to say what is going through their minds as they are performing some task’ (Gass and Selinker 2008: 69). In chapters two and three of this study, based on the theoretical framework of Swain’s (1985, 1995, 2005) Output Hypothesis and on research that indicates insufficiency of comprehensible input in driving L2 development, a case has been made for the importance of drawing learners’ attention to noticing of crucial form features to promote learning. Considering the role played by L2 output in noticing and in L2 learning in general, Izumi (2002) has suggested, and the current study also assumes, that output is considered to be one means to achieve this aim by prompting the learners to find problems in their IL through their production attempt. It is further assumed that, on exposure to relevant input immediately
after their production experience, the heightened sense of problematicity experienced during production may cause the learners to process the subsequent input with more focused attention; they may try to examine closely how the TL expresses the intention which they just had difficulty expressing on their own (i.e., the noticing function of output, section 2.2.2.1.3).

A substantial number of studies addressing the language learning potential role of written output have also examined learners ongoing thinking episodes or decision-making while producing their L2, finding salient L2-related internal processes or composing behaviors among second-language learners (e.g. Adams, 2003, Cumming, 1989, 1990; Izumi and Bigelow, 2000; Izumi, Bigelow, Fujiwara and Fearnow, 1999; Qi and Lapkin, 2001; Swain and Lapkin, 1995; Tocalli-Beller and Swain, 2005). The rationale for this research is that it is necessary to make descriptions of the thinking processes learners make before making any claims about any causal relationship between written output and language learning. For our present purposes, the relevant line of research is the one in which researchers have explored the manner in which output encourages learners to recognize problems in their interlanguage (IL) as a result of trying to produce the TL and also the manner in which providing learners with input/feedback and prompting them to process such input has any effects on learning. Accordingly, the participants in these studies were asked to produce a text, and they were then provided with some kind of input or feedback whose effect on learning was assessed. Learning has been operationalized in two main ways: performance of language test pre- and post-treatment, and/or differences between the features of the text produced before and after the provision of input/feedback. As the study’s focus is the processes involved when constructing output and not the outcomes, we used the second procedure i.e. input incorporation and learner uptake. Learner uptake is defined as both the type and the amount of revisions incorporated in the participants’ revised versions of their original texts.

4.4.2 Participants

The participants were 36 young adult students (14 students from Class A and 22 students from Class B) who completed all the stages of the writing task. The data to be
analyzed for this study come from a total of 33 students (13 students from Class A and 20 students from Class B) who completed all the stages of the writing task.

4.4.3 Target Structures

In the present study, no target structures were chosen prior to the study. Instead, the investigation relied entirely on what students reported in the form of note-taking in the analysis of what students noticed in the composing and the comparison stages.

4.4.4 Data collection procedure

The data collection procedure was based on previous studies which have shown the usefulness of multi-stage tasks in eliciting those composing behaviours among L2 writers (e.g. Adams, 2003; Hanaoka, 2007; Qi and Lapkin, 2001). For the present study, a writing task was designed to provide the participants with the opportunity to notice linguistic problems as they wrote a narrative in response to a picture prompt, notice the gaps between their interlanguage and the target language by comparing their own production with a sample model text which was used as feedback and, finally, rewrite their first draft after the comparison procedure.

Stage I: The students were asked to write a story in response to a picture prompt (Appendix E). The students were provided with Sheet 1 and Sheet 2, and the pictures. On Sheet 1, they wrote a narrative and on Sheet 2, they took notes on whatever linguistic problems they noticed as they wrote on Sheet 1 with the following specific examples of note-taking: ‘I don’t know how to say X in English’, ‘I wrote X, but I’m not sure if this is correct’, and ‘I’m not sure/I don’t know whether the picture is describing X’. This should help learners to notice language problems in their linguistic knowledge. Sheet 2 was collected and the students kept their original text (Sheet 1) and the pictures for the Stage 2 task. This first stage took about 15 minutes.

Stage II: In stage 2, which immediately followed the Stage 1, the students received Sheet 3 and a model passage (Appendix F). The students were asked to write on Sheet 3 whatever they noticed as they compared their original output with the model input text used as feedback. Specific examples of note-taking were provided. They were: ‘I couldn’t say X, but the model put Y’, ‘the model text says X, but in my paragraph I wrote Y’. This first stage took about 15 minutes.
Stage III: At the end of the Stage 2, the model passages and Sheet 3 were collected. The students were asked to rewrite their original text on another sheet making the necessary revisions. This task took about 10 minutes.

4.4.5 Instrument

The picture prompt (from Azar Shampfer, B., 2003) given to each participant was used to elicit the data for the study. It consisted of several picture frames requiring learners to write a narrative paragraph. These pictures also helped to control the propositional content of the story that the students wrote. The model input text employed in this study was also taken from the same textbook (Azar Shampfer, B., 2003). This model is thought to be at native-writer level and substantially more advanced than the best writer of all 36 participants and was intended to be used as a basis for comparison.

4.4.6 Data Analysis and Coding

Data analysis methods were partly replicated from Swain and Lapkin (1995) and Qi and Lapkin’s (2001) studies. For the sake of analysis, noticing was operationalized in this study as self-reports in the form of note-taking episodes:

1. Note-taking episodes (Language-related Episodes)

Observable instances of attention to form have been labelled language-related episodes (LREs), defined by Swain and Lapkin (2001, p.104) as ‘any part of a dialogue where students talk about language they are producing, question their language use, other- or self-correct their language production.’ Researchers in the field of second language acquisition have used language-related episodes quite frequently, in their investigation of the role of comprehensible output in second language acquisition. They have been used in the context of classroom-based research to examine the extent to which students address their linguistic problems. The identification of the problems that students encounter during target language production involves drawing on both meaning and language form simultaneously, and hence language-related episodes are generally classified as ‘lexis-based’, ‘form-based.’ The following is an example of a form-based language-related episode taken from Swain (1998), where the focus is on subject and verb agreement:
T: Est-ce que c’est les ‘rues’ qui avaient, ou la ‘ville’ qui avait?
    (Is it the ‘streets’ that had (plural form) or the ‘town’ that had (singular form)?)

R: C’est les ‘rues’ qui avaient. C’est les ‘rues’ qui est le sujet, alors on doit faire
    I ‘accord avec les ‘rues.’ Done, ga doit etre avec e-n-t a la fin.
    (It’s the ‘streets’ that had (plural form). It’s the ‘streets’ that is the subject (of the
    Sentence), so we have to make the verb agree with ‘streets.’ So, it must be written
    with e-n-t (plural form) at the end.)

    (from Swain, 1998, p. 74)

2. The note-taking episodes in our study

    Note taking episodes in our study have to do with the verbalised problems that
    students become aware of when they are engaged in target language production and the
    extent to which students address their linguistic problems. Learners’ descriptive notes are
    a good indication of where they allocated most of their attention and may provide a clue as
    to the nature of learners’ awareness. The note taking episodes that were analyzed for
    this study included all learners’ notes (verbalised problems) in which students became
    aware of and spoke about (notice) linguistic problems they encountered when they are
    engaged in target language production and the extent to which students address their
    linguistic problems. Having been identified, note taking episodes were further analyzed
    and classified into categories portraying the focus of the learners’ language episode. As
    our study involved both composing and comparing (a draft to a model text of it), we
    extended the definition so it could be applied to the comparison stage as well. Thus, in
    addition to what is defined in Swain and Lapkin’s research, a note taking episode in
    stage II refers to instances in which a learner noticing a language-related problem he/she
    encountered while comparing his/her text to a model version of it and addressing it either
    by accepting the difference and incorporating it in subsequent revision (appendix H). In
    the relevant research, LREs are usually divided into three broad categories of lexical,
    form, and discourse. Qi and Lapkin (2001) coded language-related episodes (LREs)
    broadly into lexical, form, and discourse types. Williams’s (2001: 330-31) classification
    of LREs identifies lexical and grammar features as follows:
The lexical category … essentially includes anything that would fit into the categories “What does this mean?” “How do you say/spell this?” or “Which word should I use here?” In contrast, the grammar/morphology/syntax category includes LREs that revolve around tense choices, grammatical morphology, word order, and other features generally considered part of grammar.

Drawing on the classifications above and in response to the data collected, the note-taking episodes were classified for whether they focussed on lexis (choice of expression word choice, word meaning choice of expression), form (verb tense, subject-verb agreement sentence structure), mechanics (spelling and punctuation), discourse (achieving intersentential clarity), content (whatever information depicted in the picture), and others (These note taking episodes were difficult to code). In order to determine the kinds of mental processes we assumed were involved in the changes learners made to their interlanguage (IL) through their production attempt (Stage 1), we categorized the learners’ descriptive notes depending on the way in which learners’ solved their linguistic difficulties both in stage 1 and in stage 2. The following examples (appendices H and I ) illustrate the way in which the Stage 1 problematic features and Stage 2 problem-solving behaviours were coded:

A. The overt focus of the learners’ output

1. Lexis: I can’t find the English word for what was in the hand of the woman so I don’t use it (stage 1)
   Instead of 6:00 pm, I wrote the time in letters (stage 2)

2. Form: ‘when he slept the phone start ringing’ ,What is the past of ring? (stage 1)
   I wrote waked up but the correct one is woke (stage 2)

3. Mechanics (spelling and punctuation): ‘Homework’ one word or two (stage 1)
   ‘no note identified in stage 2

4. Discourse: I don’t know how to combine sentences (stage 1)
   ‘no note identified in stage 2

5 Content (ideational): I couldn’t express entirely the picture 7 (stage 1)
   I should have said the time when he went to school but it was not on the picture (stage 2)
6. Other: In general I don’t write with more detail as the paragraph

The categorization of the problem-solving behaviours depended on the linguistic focus of the note taking episodes (e.g., searching for a lexical item, applying a grammatical rule etc.)

B. Problem-solving behaviours (in an output-only writing condition)

I) searching their L2 their own linguistic resources

1) lexical search

   a) Via L2: ‘Bob was in the dinner room then says I’m not sure that we say dinner room; I don’t find the correct word so I put dinner room

   b) Via French: I really have a miss of vocabulary. I wrote the word that I don’t know their meaning in English at French.

2) Knowledge of grammar (Application of grammatical rules): In the morning he waked up (woke up) early. I wrote he waked up early. I think it’s not correct, the verb should be irregular.

II) resorting to intuition: I say took his dinner, I think it’s right.

C) Noticing of problems (gaps) in subsequent processing of TL input (the Stage 2/3 comparison and revision task)

The categorization of the note taking episodes, as in stage 1, depended on their linguistic focus (e.g. lexical, morpho-syntactic, textual problematic features, etc) and incorporation of the noticed features (mostly model phrases and expressions) in the in subsequent revisions. The following example serves to illustrate the way in which learners modify their output in response to the model input and incorporate the model phrases and the revised versions of their original texts.

The text written at Stage 1: In my paragraph I wrote: when he was finished eating his mother took the plate but normally it is...

The model text: ‘While Bob was eating his dinner Ann came through the door’
The text revised at Stage 3: ‘While Bob was eating his dinner Ann came through the door

4.5 Chapter summary

This chapter described the major elements of research design and methodology employed in the present research work. The first research project employed a quasi-experimental design to investigate the effect of two types of instruction, with a pretest preceding the experimental treatment and a posttest being conducted immediately after it. Two groups of learners were compared with reference to learning English tenses and grammatical aspect: an input-only group and an input-plus-output group. The treatment for both the input-only group and input-plus-output group consisted of sixteen teaching sessions spread over the period of eight weeks and took place during regularly-scheduled classes of grammar. Each of the sessions was designed to last from 75 up to 90 minutes. The instructional treatment in both groups started with explicit presentation of the rules followed by either input practice only or a combination of input-plus-output instructional activities. This study bears significance as, to our knowledge, it is the first study that has been undertaken in an Algerian EFL context (see section 4.2.2) where the relative effects of two instructional interventions under investigation have never been studied. The results will enable the researcher to see whether those engaged in input-plus-output outperform those exposed to the same input for the sole purpose of comprehension (input-only) with regard to their comprehension and production of the English verb tenses and grammatical aspect.

The second study, using an introspective approach, intends to investigate how noticing is implicated in L2 production processes by asking two 36 young adult students during one 50-minute class to engage in writing tasks comprising three stages: (a) to write a picture description, (b) to compare it with a model text, and (c) to rewrite the original description. While writing the initial picture description, participants had to verbalize the problem. In order to determine participants’ level of noticing, the participants were asked to verbalize their language problem by taking notes on whatever they noticed (i) while they were writing the initial picture description, and (ii) while they were comparing it against the model input text provided as feedback 3). By examining each of the three
stages, we intend to investigate how noticing is implicated in L2 writing processes (a) as each individual participant composed an L2 text (Stage 1); (b) as he/she subsequently compared his/her L2 text with a model version of it (Stage 2); and (c) as he/she revised their original texts (Stage 3)
CHAPTER FIVE
ANALYSIS AND RESULTS

5.1 Introduction
The previous chapter has addressed the research design and data collection methods. This chapter reports the results data, which were analyzed as measures of learning outcomes and intervention satisfaction, with the aim of answering the research questions proposed in chapter 4 for study I and study II. Section 5.2. presents the results obtained from the reception and production tests in Study I. Section 5.3 contains an overall summary of the results from both reception and production tasks, including answers to the research questions and hypotheses introduced in Chapter 4. The data generated from study II are described in Section 5.4.

5.2 Analyzing data of participants in Study I
This section presents the analyses of the results obtained from the assessment tasks used as pretest and posttest. The study’s dependent variable, learning performance, was measured by learners’ ability to appropriately produce and comprehend English verb tense and grammatical aspect on testing measures before and after the treatment. Two of them - a written gap-fill production test and a picture-based description test—examined the subjects’ productive knowledge; the other two tests—an interpretation (listening comprehension) test and a grammaticality judgment test—aimed at testing their receptive knowledge. The independent variable was the grouping factor, which was made up of two levels: a) input-based instruction, and b) input-plus-output based instruction. Although the overall conceptual dependent variable is developing L2 competence, the specific dependent (outcome measures) in the study are the interpretation judgment of acceptable target forms (pretest-posttest); and the written production of target forms (pretest-post test).

To examine the effect of the independent variables, the following sets of analyses were conducted:
(A) Descriptive analyses and a series of one-way between-groups ANOVAs investigating significant differences in the pretest findings of the input-only and input-plus-output groups.

The analysis of variance (Anova henceforth) is a widely used statistical methodology for testing the significance of treatment effects and tells us that somewhere in the data there are significant differences (Dörnyei 2007, Seliger and Shohamy, 1989). There are ‘dependent ANOVA’ and ‘independent ANOVA’ according to whether the several means with which the researcher intends to make comparisons come from the same group (i.e. repeated measure) or different groups.

(B) Descriptive analysis and one-way between-groups ANOVA investigating significant differences in posttest findings of the input-only and input-plus-output groups

(C) Descriptive analyses and repeated measures ANOVA analyses investigating whether means scores significantly increased from pretest to posttest to observe how each group performed independently.

Thus, the results are presented in the order of 1) descriptive statistics, 2) one-way ANOVA, and 3) repeated measures ANOVA

The specific objectives of these analyses were to determine whether students improved significantly in their use of the target structure; whether one of the two groups improved more than the other; whether there was a relationship between the students’ achievement and the instructional approach used in their class. The alpha-level of significance $p < .05$ (95% confidence) was determined prior to data collection and was used throughout the study which is a generally accepted standard for all statistical analyses for all social and education research. Mean score differences were considered significant when $F$ values were larger than the critical values or whenever the $p$-values obtained in the calculations were less than than $\alpha = .05$.

5.2.1 Comparison of baseline performances in the pretests

Before examining the effects of the treatments, pretreatment equivalence of groups in their knowledge of English verb tenses and grammatical aspect was checked by submitting the pretest scores to statistical analyses. Therefore, any difference that may be
observed on the posttest or on the pre- to posttests gains is attributable to the respective treatments and not to prior knowledge of the target structure.

For the two tests tapping the participants’ reception (comprehension) of target structure, Table 10 shows the results of the mean test scores and standard deviation for both the input-only and the input-plus-output groups at the pre-test. On all the assessment tasks described, the pretest mean differences in the two groups were quite marginal: on the listening comprehension test the pretest Mean was at 10.92 for the input-only group and 11.31 for the output-plus-output group. On the GJT the pretest Mean was at 19.52 and 19.26 for the input-only and the input-plus-output group respectively. As a follow-up test, one-way Anova’s (Table 11-12) were conducted to assess if the means of the two groups were statistically different from each other.

### Table 10: Descriptive Statistics for pretest reception assessment tasks

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Listening (Max = /16)</td>
<td>10.92</td>
<td>2.07</td>
</tr>
<tr>
<td>GJT (Max/36)</td>
<td>19.52</td>
<td>4.68</td>
</tr>
</tbody>
</table>

### Table 11: One-way Anova on Listening Comprehension tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of Freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1.4803</td>
<td>1</td>
<td>1.4803</td>
<td>0.32</td>
</tr>
<tr>
<td>Within group</td>
<td>167.2368</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168.7171</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<0.0
Table 12: One-way ANOVA on Grammaticality Judgement tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.6579</td>
<td>1</td>
<td>0.6579</td>
<td>0.03</td>
</tr>
<tr>
<td>Within groups</td>
<td>840.4211</td>
<td>36</td>
<td>23.345</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>814.6789</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.05

The F observed value for the effect of the pretest is 0.32 for listening comprehension and 0.03 for grammaticality judgement test (GJT). This amount of F-value at 1 and 36 degrees of freedom is lower than the critical F, that is, 4.11 for both tests. So, it can be concluded that the participants in the two groups, statistically speaking, had about the same knowledge of the target feature (i.e. verb tenses and grammatical aspect) in terms of the listening comprehension and GJT tests before the treatment.

In the case of the tests tapping the participants’ production of the target structure, the descriptive measures indicate that there were some slight differences between the two groups. On the written gap fill production task, the pretest mean score was at 19.15 for the input-only group, and at 16.37 for the input-plus-output group. On the Picture description task, the pretest Mean was at 4.02 for the input-only group and at 4.70 for the group which received the input and output treatments. These differences were marginal as confirmed by one-way Anova’s (Tables 14-15) which were conducted on the raw scores of each of the production tests. The Anova showed that there were no statistically significant differences between the two groups at the p<.05 level in test scores. The F observed value for the effect of the pretest is 0.56 for Written gap-fill production and 0.04 for Picture description. This amount of F-value at 1 and 36 degrees of freedom for written gap fill production is lower than the critical F, that is, 4.11 for both tests. Similarly, the amount of F-value at 1 and 32 degrees of freedom for picture description is lower than critical F, that is, 4.17.
Table 13: Descriptive Statistics for pretest production assessment tasks

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Written gap fill</td>
<td>19.15</td>
<td>8.75</td>
</tr>
<tr>
<td>Production (Max = /34)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture description</td>
<td>4.02</td>
<td>0.92</td>
</tr>
<tr>
<td>(Max/10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both groups performed equally regarding the production of the target structure. When we say that the difference is not statistically significant we mean that the learners from the two groups have obtained scores that are close to each other or at least not very different from each other. In summary, it can be stated that the participants’ receptive and productive knowledge of the target structure before the treatment was almost the same. Hence the analysis indicated that there were no statistically significant differences the scores and that is why it can be safely concluded that learners’ performance on the reception and production of the target structure was similar at the time of pretesting.

Table 14: One-way Anova on written gap fill production tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>11.6053</td>
<td>1</td>
<td>11.6053</td>
<td>0.56</td>
</tr>
<tr>
<td>Within groups</td>
<td>748.9474</td>
<td>36</td>
<td>20.8041</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>760.552637</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.05
Table 15: One-way Anova on picture description tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.1176</td>
<td>1</td>
<td>0.1176</td>
<td>0.04</td>
</tr>
<tr>
<td>Within groups</td>
<td>88.3235</td>
<td>32</td>
<td>2.7601</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>88.4412</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.05

5.2.2 Comparison of students’ mean performance on receptive and productive pretest and posttest

To assess the subjects’ knowledge of English verb tenses after the treatment, the participants were given only three testing measures to minimize the potential test effects of the previous assessment where four tests were used. It was believed that learners would be affected by the test format and the test tapping the participants’ reception (listening comprehension) of target structure was not administered along with the other testing measures. Thus, all the subjects performed a grammaticality judgment test (GJT) aiming at assessing their receptive knowledge of the target items and two other tests --a written gap-fill production test and a picture-based description test-- aiming at testing the subjects’ productive knowledge. For the sake of clarity, the section dealing with the analysis of the results obtained in the course of the assessment procedures is divided in two parts. The first part concerns the data referring to the reception of the targeted feature, whereas the second part has been devoted to the examination of the results of the tests tapping the participants’ production of the target feature.

Reception data

Table 16 displays the descriptive statistics for the groups on the task testing the reception of the target structure. As the results show, the input-plus-output group (Mean = 19.50) outperformed the input-only group (Mean = 18.89) on the grammaticality judgement posttest.
Table 16: Descriptive statistics on reception data

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammaticality Judgement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>19.52</td>
<td>19.26</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.68</td>
<td>4.97</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>18.89</td>
<td>19.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.14</td>
<td>5.26</td>
</tr>
</tbody>
</table>

As a follow-up test, one-way Anova was conducted on the raw scores to explore the impact of the treatment as measured by the grammaticality judgement posttest. A revealed in table 17, the slight growth observed in the scores of group that received the experimental treatment variables (input-plus-output) was statistically insignificant at the $p<.05$ level as confirmed by Anova results.

Table 17: One-way Anova on GJT

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degress of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>3.4803</td>
<td>1</td>
<td>3.4803</td>
<td>0.16</td>
</tr>
<tr>
<td>Within groups</td>
<td>808.2895</td>
<td>36</td>
<td>22.4525</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>811.6997</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is $p<.05$
The degree of improvement in verb tense usage was determined by subtracting the values at pretest from those at posttest. This produced a difference where positive values indicated an increase in verb tense performance from pretest to posttest, while negative values indicated a decrease in improvement. As illustrated in table 18 and the graphical representation in Figure 8, the scores of the comparison group, whose treatment was dominated by reception (input- only) practice did not improve on the posttest. A significant decline (-0.63) was noted from time of pretest to posttest (PreT M = 19.52 and PostT M= 18.89) which seems to be indicative of the fact that there was no practice effect in the case of the reception of the target forms. Subjects from the input-plus-output group showed a slight improvement in performance from the pretest to the posttest (PreT M = 19.26 and PostT M= 19.50) with an over- all mean change of 0.24 suggesting that the treatment had a positive effect on learners’ receptive knowledge of the target structure. What still remained to be seen is whether the differences between the pre- and post- test for the groups were significant and attributable to the respective treatments.

Table 18: Descriptive statistics for the pretest and posttest on reception data

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammaticality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judgement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>19.52</td>
<td>19.26</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.68</td>
<td>4.97</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>18.89</td>
<td>19.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.14</td>
<td>5.26</td>
</tr>
</tbody>
</table>

Thus, additional statistical analyses were conducted; this was accomplished via a repeated measures one- way analysis of variance (Anova) using the average scores obtained from the pre and posttests to observe how each group performed independently.
Repeated Anova procedures indicated that the mean scores were not significantly different over time (Treatment group $F(1,18)= 0.02, p=0.889$; $F(1,18)= 0.02, p=0.889$; comparison group $F (1,18)=1.15, p= 0.297$) (See Appendix G for statistical tables). This suggests that there was no significant loss of learning for comparison group (input-only) on the receptive measures between pretest and posttest.

**Production Data**

Mean scores and standard deviations of the scores obtained in the tasks testing the production of the target structure are summarized in Table 19. The results revealed that the mean scores of the input-plus-output group were higher ($M = 17.39$) than those of the input-only group ($M = 16.28$) on the written gap fill production tests. In Figure 9, a visual representation of the gains shows that the greatest improvement was shown in the input-plus-output group between the pretest and posttest. These means seem to corroborate the trend predicted by the initial hypothesis that the experimental group will
The degree of improvement in verb tense usage was determined by subtracting the values at pretest from those at posttest. This produced a difference where positive values indicated an increase in verb tense performance from pretest to posttest, while negative
values indicated a decrease in improvement. Subjects in the experimental group who received input-based instruction in combination with output-based practice had an overall mean change of 1.02, (PreT M =16.37, PostT M =17.39 ). Conversely, subjects in the

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>11.6053</td>
<td>1</td>
<td>11.6053</td>
<td>0.56</td>
</tr>
<tr>
<td>Within groups</td>
<td>748.9474</td>
<td>36</td>
<td>20.8041</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>760.5526</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
comparison group, who received only output-free input-based instruction, have decreased from the time of the pretest (PreT M = 19.15, PostT M = 16.28). This seems to suggest that the treatment focusing on reception of the target forms proved to be insufficient to trigger any positive change in the production of target structure. On the other hand, the increase observed in the scores obtained by the input-plus-output practice implies that practice in the production of the target structure brought about at least some change. Although the improvement in performance from the pretest to the posttest for the group that received the treatment is evident, what still remained to be seen is whether the differences between the pre- and post-test for the groups were statistically significant and attributable to the different practice methods. Repeated Anova procedures for each group indicated that the mean scores did not significantly change from pretest to posttest over time (Treatment group F(1,18)=0.12, p=0.733; Comparison group F(1,18)=0.23, p=0.637). (See Appendix G for statistical table). Thus, there was no significant gain for the input-plus-output or loss of learning for the input-only group on the written gap fill production posttest.

Table 21 and figure 10 indicate that the subjects from the input-plus-output group showed better performance (M = 5.75) than subjects from the input-only group (M = 5.52) on the picture description task. As a follow-up test, one-way Anova’s were conducted on the raw scores of each of the tests to explore the impact of the treatment on the posttest scores as measured by the picture description task (score out of 10). The Anova results indicate that there was a statistically significant difference at the p<.05 level in scores for the two groups. The F observed value for the effect of the treatment is 0.04 (T. This amount of F-value at 1 and 32 degrees of freedom is lower than the critical F, that is, 4.11 for both tests. This might indicate that both types of instruction are capable of bringing about important changes in the learners’ interlanguage systems as measured by the picture description task.

The degree of improvement in verb tense usage was determined by subtracting the values at pretest from those at posttest. This produced a difference where positive values indicated an increase in verb tense performance from pretest to posttest, while negative values indicated a decrease in improvement. Subjects in the comparison group, who only did output-free input-based instruction, had an over-all mean change of 1.5, (PreT M = 4.02, PostT M = 5.52). These learners did not complete any production task. However,
they were able to complete the second production test successfully, obtaining significant gains. This result provides evidence that the input condition alone aids the development of the ability to produce target structures. As for the group who received the experimental treatment in the form of input-plus-output based practice, there was an over-all mean change of 1.05, (PreT M = 4.70, PostT M = 5.75).

Table 21: One-way anova on picture description tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.1176</td>
<td>1</td>
<td>0.1176</td>
<td>0.04</td>
</tr>
<tr>
<td>Within groups</td>
<td>88.3235</td>
<td>32</td>
<td>2.7601</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>88.4412</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 10. Performance on productive pretest and posttest

Although the improvement in performance from the pretest to the posttest for both groups is evident, what still remained to be seen is whether the differences between the
pre- and post- test for the groups were significant and attributable to the different practice methods. Thus, additional statistical analyses were conducted. This was accomplished via a repeated measures one way analysis of variance. Repeated Anova procedures for each group indicated that the mean scores significantly changed from pretest to posttest. (Treatment group F(1,16)=6.3, p=0.02; comparison group F(1,16)=11.66, p=0.0035) (see Appendix G for statistical tables).

To answer this study’s research questions, a statistical analysis were performed to determine a) whether there were any significant changes within groups regarding their performance over time, and b) whether there were any significant differences between groups regarding their performance after the treatments.

The overall results did not seem to show significant effect on learners’ receptive knowledge of the target structure. Output-free input-based instruction alone did not bring significant improvement over time. Slight progress was observed in the the input-plus-output group but not to a statistically significant level. The results of the analysis of the tasks testing the production of the target structure also suggested that input-based activities alone did not result in a gain in ability to produce the target form as measured by one production task. Only the subjects in the input-plus-output condition showed a slight improvement in performance from the pretest to the posttest but not to a statistically significant level. However both treatment groups improved over time on the second production task obtaining statistically significant gains.

The analysis findings in relation to the effect of the treatment type do not seem to fully substantiate the hypothesis for the superior role of input-plus-output instruction over that of input-based practice. Although for both tests the mean scores of the input-plus-output group were higher than those of the input-only group there was no statistically significant difference between the two groups on both the receptive and productive tests.

This, nevertheless, shows a trend consistent with the initial research question that although both types of treatments will bring about improved performance on tasks involving the reception and production of English verb tenses and grammatical aspect, the input-plus-output would show an overall greater improvement in their use of the target structures than learners with input-based instruction only.
5.4. Analyzing data of participants in Study II

5.3.1. Introduction

As described in chapter 4, the second study is an exploratory study, which was conducted after the completion of the main study i.e. study 1. The first major research question posed in the main study concerned whether or not target language production of syntactic structures (English tense and grammatical aspect) facilitates learning of these structures. This research question was examined mainly through a quantitative quasi-experimental research design. In study II, the aim was to explore learners’ ability to become aware of their linguistic needs (i.e. holes or gaps in their L2 knowledge) both in an output-only writing condition, and via the feedback provided by a model version of learners’ written productions. The two secondary research questions were:

Research question: How does learner’s own written output enable them to recognize gaps in their L2 grammatical knowledge and performance?

Research question: When learners reprocess their performance what mental processes result that impact L2 learning?

These questions followed those investigated by noticing research within the output hypothesis (chapter 3). In particular work by Swain and colleagues (Qi and Lapkin 2001, Swain and Lapkin, 1995, 2001), Hanaoka’s study (2007) and Adams (2003).

Working with 33 students, we investigated the ability of the subjects to autonomously notice and correct their own grammatical problems by comparing the use of a L2 forms in their own written output and the use of the form in a native-speaker text. We were interested in whether engaging learners in such a three-stage L2 writing task is beneficial in terms of linguistic accuracy and greater awareness of the learning process.

Analysis of learners’ descriptive notes (verbalised problems) helped us to identify two different dimensions: linguistic problems learners encounter while composing and cognitive processes involved. In order to answer the research questions, the presentation of results will be in two sections. In the first section, analysis and classification of the
note-taking episodes is reported as data on the evidence of learners’ recognition of linguistic gaps in their L2 knowledge during the initial written description task and subsequent feedback processing in the comparison task. The second section reports on learners’ thought processes employed in focusing on language problems they encountered in their original output at the composing stage and in processing subsequent target language input which was provided as input/feedback in the comparison stage.

5.3.2 Learner noticing in the composing and comparison stages (Question 1)

The data- that is learners’ note taking episodes- were analysed to determine the extent to which learners become aware i.e. notice problems in their linguistic knowledge as they produce their L2 during a written output task. The problematic features noticed by the learners while engaged in output-generation activity are shown in appendix H. As summarized in Table 22, there were 80 occasions in which students consciously noticed a linguistic problem as a result of producing, or trying to produce, the target language that is, an average of 2.42 per participant. The terms noticing problems, problem-recognition or realization are generally used to mean having difficulty in realizing intended messages linguistically. In the study, however, the terms are extended to cover the notion of directing attentional to resources certain parts in output. As Swain (1998) has pointed out noticing refers to a phenomenon that arises by focusing attention. To put it more precisely, noticing arises when learners allocate resources to a certain aspect of language. If a learner pays selective attention to a form, for example, it is likely that noticing a form occurs. This type of noticing is referred to as noticing ‘holes’ (Doughty and Williams, 1998). A qualitative analysis of learners’ descriptive pieces and the notes that the students had taken revealed that the difficulty experienced by participants in their attempt to describe the pictures promoted their awareness of problems or ‘gaps’ in their L2 knowledge during their production attempt. For example, in terms of their lexical knowledge most learners noted that they lacked the knowledge of terms such as ‘the language used when greeting people’, ‘neighbour’ ‘broom’, or ‘dining room’. In terms of grammatical knowledge, many students noted that they were not sure what tense to use in verb phrases like ‘…he was slept at 10:30/ he slept at 10:30’ or ‘…-she go to bed or he went to bed’. As such, these verbal self reports indicated that learners had noticed their linguistic problems at the moment of
production. The other notes concerned either spelling, discourse problems, or queries about the content of the pictures. The overt focus of learner’s self-reports is described below with some examples (see appendix H). As noted previously (see section on data analysis) the definition of note taking episodes was also extended to include learners’ noticing of aspects of their written output when compared with a native-speaker model text used as feedback.

**Lexis:**

(1) - ‘I was six o’clock PM Bob had dinner; I’m not sure if we say have dinner or take dinner I think had dinner better I can’t find another word I put dinner room. (Student 2)

(2) - ‘When he saw his’ voisine’ I don’t know how to write ‘voisine’ in English, perhaps it is nhebor (Student 3)

(3) I don’t know the English word for what was in the hand of the woman. (Student 2)

Lexical episodes included those instances in which the students focused on or sought the meaning of lexical items. Notes taken by learners in Stage 1 revealed that learners had a higher tendency to attend to the lexical items as a problem (30%) at the moment of production. Within the lexical episodes, the focus was predominantly on word choice, and word meaning and word search as shown in the examples above. In these examples, the focus of the note taking episodes is a lexical aspect. In the first example, the student talked about a lexical problem he encountered because of his inadequate linguistic resources; the student evaluates the appropriacy of two lexical choices: ‘take dinner or have dinner’.

In the second example, having difficulty producing a word ‘neighbour’ in English, the student encoded the meaning in French (a language familiar to learners). In example 3, the learner did not have the English word to express the part of the tool that the woman in the picture was handling. Learners’ tendency to focus mainly on lexical problems during production may be simply because they found lexical features easier to report than for instance grammar or discourse-based note taking episodes. Another possible reason could
have been that the learners could not know many words in the pictures to express what they saw and, consequently, they had to focus their attention on lexical items. This semantically-oriented type of noticing at the moment of production is in agreement with William’s (2001) study, in which lexically-centered episodes (LREs) made up 80% of the classroom interactions. This pattern also parallels findings obtained in Hanaoka’s (2007) study.

**Form:**

(4) - ‘…when he slept the phone start ringing’, What is the past of ring? (Student1)

(5) -I wrote ‘He started to eat’ I’m not sure if it is correct may be it should be ‘he started eating’ I don’t know the rule (Student 3) variables

(6) I don’t know which tense in ‘…at 6:05 he ate his food that founded on the plate’ (Student 11)

Form-based note taking episodes involved items whose focus was morphological or syntactical in nature. They were the second most frequently verbalized by the participants (22.5%). However, the findings show that verb tense/aspect (choice and formation) features seemed to be the grammatical aspects of most concern. In other words, learners reported noticing verb tense/aspect more than they reported noticing other language form aspects. The examples above show learners’ concerns about verbal morphology in example 4, verb pattern in 5 and tense choice and formation in 6. This finding might also be attributed to the fact that participants found the use of verb tense more challenging compared to the use of other language aspects. Experience in teaching tenses shows that these grammatical features are persistent areas of concern even for advanced learners. This finding is also consistent with Storch (1998) which also found a similar concerns in her classroom-based study.

**Mechanics /Punctuation:**

(7) - ‘Homework’ one word or two (Student1)

(8) - I don’t know if he is correct spelling for ‘neighbour’ (Student 23)
(9) -I have some vocabulary problem: toock up his, toock or took (Student 28)

Learners cared little about mechanical matters in general. Among the five major categories, this category was the least frequently verbalized (5%). Examples 7,8,9 show learners’ concerns about the spelling of the words: homework, neighbour and took. In the study, the participants were not allowed to use external sources and I think feedback from an external source such as the teacher or the dictionary would have helped to solve the students’ problem. With regard to punctuation, no student (out of 33) commented on the use of punctuation.

**Discourse:**

(10) I don’t know how to combine sentences (Student 9)

(11) I don’t know how to begin the paragraph (Student 16)

(12) I wrote finally but I’m not sure if it’s correct: ’Finally Justin waved to his. (Student 17)

The discourse note-taking episodes referred mainly to inter-sentential relationships and were often verbalized in terms of lack of knowledge with utterances such as ‘I don’t know how to…or ‘I’m not sure if…’ . Discourse considerations were less of a concern to learners. They were the least frequently verbalized among the five major categories (8.75%) after the category of mechanics and punctuation. It seems that the participants tended to approach the composition task on a word-by-word basis; they could not venture beyond the single word and consider the entire sentence, and relationships between ideas in the text. This finding seems to reflect and correspond with the other findings which revealed students’ attention to, and focus on, the linguistic aspects such as vocabulary and grammar during the various stages of the process of L2 production. In this context, Barbier, M. L. (2003, translation by the author) noted that writers seem to devote much attention while they write to morpho-syntactic and lexical aspects rather than to rhetorical and textual one.
Content:

(16) I don’t know who is the woman in the third picture (Student 2)

(17) What does the second picture discuss? (Student 15)

(18) I don’t know whether the picture is describing the morning or the evening (Student 17)

These episodes were defined as any notes concerning content clarification or idea generation other than language-related problems. The content note taking episode were the third most frequently verbalized by the participants (21.25%). The examples above were concerned with what information in the pictures should be included in their paragraph. They suggest that the students were unable to find an adequate description of some pictures. However, they stopped short of mentioning any specific lexical or grammatical features.

Table 22: Frequencies and proportions of features noticed in the Stage 1 and 2.

<table>
<thead>
<tr>
<th>Category</th>
<th>All participants (N = 33)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stage I</td>
</tr>
<tr>
<td>Lexis</td>
<td>24</td>
</tr>
<tr>
<td>Form</td>
<td>18</td>
</tr>
<tr>
<td>Mechanics/ punctuation</td>
<td>4</td>
</tr>
<tr>
<td>Discourse content</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
</tr>
</tbody>
</table>

Other issues:

(19) ‘In my paragraph I just wrote what did Bob not where he was. I didn’t give many details (Student 8)
(20) I can’t talk about all the details (Student 9)

(21) ‘I can’t give the details when he went to sleep’ (Student 21)

The ‘other’ category was intended to cover those features which were difficult to code (12.5%). The majority of other note taking episodes concern queries about the possibility of including learners’ own opinions in the descriptive writing.

The findings regarding Stage 2 suggest that learners had very different priorities about their own written output. As the table shows, the participants noted a total of 48 PFNs, or an average of 1.54 features per participant. The students, however, appeared to make more effort in finding the proper language to express their ideas rather than discussing the language issues. They predominantly noticed problematic features related to the content of the story and the way to express it (87.5%) (see appendix I). These concerns were expressed in a variety of ways that included 1) the students’ acknowledgement of the ideas and expressions used in the models, their perceptions of the differences between their own ideas and ways to express those ideas on the content of the pictures in the model text (e.g. ‘Instead of ‘fell into a deep sleep’ I wrote ‘was sleeping’; ‘…the model text says greeted , I wrote ‘saluted.’), 2) their intention of having used some of the ideas and expressions on the content of the pictures in their original texts instead of the sentences they really wrote (e.g. I intended to say :while Bob was walking to school he met Mrs Smith but I couldn’t imagine it; I didn’t know that there was Mrs Smith I depend on my ideas in the end of paragraph, I intended to say that he didn’t answer the phone but I thought it wasn’t necessary). This increase in the number of content-related issues may be linked to the fact that some students noted that some of the expressions used in the models differed from their own and could be used to improve their original texts. For example, six participants changed the beginning of their story for the one written in the model text ‘Bob was home again’, as they considered the latter to be easier and more accurate. This shows a useful role of models in promoting learner noticing and specifically in drawing learners’ attention to the ideas and expressions i.e. to the content of what they wrote in their original texts. The remaining episodes were related to the language issues and included 4 related to lexis, 2 related to grammar, and 1
discourse-based note taking episode (table 22). With regard to the relationship of the features noticed in the Stage 2 comparison task to the stage 1 composing task, the findings show that only 11 (out of 48) stage 2 features were related to stage 1. Our assumption was that if a certain linguistic feature is realized as a problem in the composing stage, its correspondent in the model input text was more likely to be a focus of attention. The participants’ written reports, however, did not reflect this. The problematic features learners noticed by learners which were related to Stage 1 problematic features involved some words that the participants had not been able to use or access, such as ‘broom’ or ‘wave at’, time expressions such as ‘at 6:00 p.’ instead of ‘at six’ a word that one participant did not know how to spell ‘looking’ and other 8 features concerned with verb forms.

On the other hand, the 37 features that were not related to Stage 1 problematic features included, above all, ideas and ways of expressing them or ideas that students had not imagined in their first production attempt. One participant, for instance, noted the following comment: ‘I intended to say while Bob was walking to school he met Mrs Smith but I couldn’t imagine it’ (student 7).

With respect to the noticing function of output (Swain, 1995; Swain and Lapkin, 1995) the results revealed that there were some distinctive differences in the quality of noticing between the Stage 2 task and the Stage 1 task. In the Stage 2 task, the participants noticed some new problems with their original output while studying the TL models (mostly related to the content category). In the case of the latter the learners said ‘I should have written (said) it this way.’; ‘while in the former case the learner typically wonders, ‘How can I write (say) this?’ I don’t know how to write/say. In this sense, those problems that the participants noticed during stage 1, or ‘holes’ (Swain, 1998) may represent proactive recognition of problems, whereas those problems that they noticed for the first time during the comparison stage without being preceded by noticing of ‘holes’ may be said to be reactive recognition of problems. Furthermore, the fact that the dominant concerns of the participants in Stage 1 and Stage 2 were so different is not in keeping with the findings reported in previous studies that have used applied feedback techniques (Hanaoka, 2007; Qi and Lapkin, 2001). These studies reported that their participants noticed and searched for solutions in the feedback provided for about two-thirds of the solvable ‘holes’ they had previously noticed when writing their original texts in Stage 1.
However, that was not the case with our students as their attention was mainly focused on the ideas and expressions in the models that appealed to them. Therefore, the sense of lack of fulfillment (Qi and Lapkin, 2001) that the participants in those studies had experienced as they noticed “holes” while writing their texts, and which had pushed them to search for satisfactory solutions in the feedback, was not apparent among the participants in our study. We have found that nearly all students were unable to notice a mismatch between their written output and the model input text, the gap between these two not being suitably narrow. It may be concluded, then, that the participants in our study, in their response to the picture prompt in their initial production did not know many words to express what they saw in the picture prompt and, consequently, had to focus their attention on lexical items. In Stage 2 the participants, after their previous attempt to write the narrative paragraph, were especially receptive to the ideas and expressions that now became salient in the models (content-related note taking episodes).

5. 3.3 Processes Employed in Focusing on Language Problems (Question 2).

As noted in the introductory section, another dimension investigated in this concerned the decision-making and thinking processes that were reflected in the changes learners made to IL output when faced with a performance problem and when comparing their original texts with the model input text used as a feedback. The note taking episodes were analysed for the responses justifications and explanations, if any, that students offered and findings were entirely data-dependent and no categories were pre-established.

Based on the learners’ overt statements or on the implications in such statements, we found that each of the students, when faced with a performance problem while composing (stage1), noticed, and responded to, a language problem in their IL output. By engaging in such a task and trying to work out a solution on their own (as feedback from external sources was not available), the learners were involved in some search processes triggering their analysis of their written production and drawing on a number of resources: their own linguistic resources (knowledge of lexis and grammar, intuition), sometimes their knowledge of another language (French, a language familiar to most learners).
I) Searching into their own linguistic resources

1) Lexical search

a) Via L2

Example 1

S2: (student 2 verbal report reads: I wrote ‘It was six o’clock PM Bob had dinner’; I’m not sure if we say have dinner or take dinner, (problem recognition), I think it’s not take dinner the first is better (problem resolution).

Example 2

S8: student 8 writes: ‘Bob was in the dinner room then says ‘I’m not sure that we say dinner room’, (problem recognition); I don’t find the correct word so I put dinner room (problem resolution).

In example 1, the student evaluates the appropriacy of two lexical choices. He had produced ‘had dinner’ and is not pleased with his lexical choice. We see the student struggling with which expression would be the correct one to use ‘take dinner’ or ‘have dinner’. He conducted a lexical search in memory for information which might help solve the problem. Searching out the student consciously draws attention to these two expressions and proposes two different alternatives, from which the student chooses the correct one (‘had dinner’). In example 2, the student talked about a lexical problem he/she encountered because of his/her inadequate linguistic resources; he conducted the lexical search in memory and came up with the word ‘dinner room’. He/she realised that he/she has made a wrong choice of word, but could not work out the problem on his/her own. The student’s solution as displayed in this episode was incorrect. I think these examples where students search out and assess appropriate wording are a good example of how language-related episodes can be occasions for L2 learning. These processes are thought to trigger learners’ L2 development.(see discussion section chapter 6)

Example 3
S3: Student 3 descriptive note reads ‘When he saw his’ voisine’; I don’t know how to write ‘voisine’ in English (problem recognition), perhaps it’s nhebor (problem partially resolved).

Example 4

S20: student 20 explains I couldn’t know ‘servante’ in English and ‘la table sur laquelle on mange’ in English; I really have a miss of vocabulary (problem recognition). I wrote the word that I don’t know their meaning in English at French (problem partially resolved).

In the fifth example, the student wanted an L2 equivalent for the word ‘voisine’. Having difficulty producing the word ‘neighbour’ in English, the student encoded the meaning in French (a language familiar to learners). The Student says he/she thinks it is ‘nhebor’ in . The student is clearly uncertain about the meaning he/she worked out and feedback from an external source would be essential in confirming her assumption. In example 6, the student conducted a lexical search in memory by using the target language, but he failed to translate the words ‘dinner table’ and ‘maidservant’ into English and decided to conduct a lexical search via French and came up with ‘servante’ ‘la table sur laquelle on mange’.

Recourse to the L1 (or any other language known, French as is the case of these participants) appears to be a strategy used by some learners in their attempt to solve the multiplicity of problems involved in their L2 production attempt, and this strategy appears to be one of the most characteristic feature of L2 composing. Research shows that L2 writers resort to their L1 for different purposes: to generate their texts, to tackle linguistic and stylistic problems, as well as to organise and structure their texts (Manchón, Murphy, and Roca de Larios, 2000). In the examples above, learners switched to the French language mainly to in order to search for appropriate words or phrases. Due to its relevance for pedagogy, we shall refer in our section, chapter 6, section 6.3 to the debate as to the possible benefits or drawbacks of the generation of ideas through the L1 while composing in an L2.

2) knowledge of grammar

1. Application of or (or alluding to) grammatical rules
Example 5

S3: I wrote ‘He started to eat’ I’m not sure if it is correct (problem recognition) may be it should be ‘he started eating’ (problem resolution). I don’t know the rules (Student 3)

Example 6

S9-I wrote: At 10:30 Bob was going to sleep: I’m not sure for the tense (problem recognition), may be it’s simple past (problem resolution). ‘At 10:30 Bob went’ not past continuous. (Student 9)

In example 5, the focus of the students’ attention was the grammatical structure ‘started to eat or started eating’ that is, verb + infinitive or verb + ing. Student 3 consciously drew attention to this linguistic structure and proposed two different hypotheses. He/she hypothesizes that may be it should be ‘started eating’ probably alluding to verb pattern rules. By offering alternatives, He/she tests which forms will be confirmed. He/she offers a solution, but he/she cannot justify it because he/she herself is unsure. We can assume that the ‘reasoning and language analysis’ he conducts reflects some grammatical knowledge he has on the use of verb patterns that he is probably applying for the first time to the verb ‘started’. The focus of example 6 was on the tense. The student first used the verb form ‘was going to sleep’. Then he/she felt that she might have used the wrong verb tense; he questions the use of the past continuous, and offers a suggestion that the past tense should be used. The student is probably alluding to the rule that the past continuous should not be used with a past time marker. As feedback from external sources was not available, this indicates hypothesis testing rather than a conviction of the accuracy of the verb phrase. When learners use the L2 in some productive way (say or write something in the L2), they test their own hypotheses against their receptive knowledge (internalized knowledge). In other words, they can test whether their interlanguage is linguistically well-formed. Based on the assumption that output itself is the hypothesis, Swain (1995) states that ‘output represents the learner’s best guess as to how something should be said or written’ (p. 132). A considerable body of research and
theorizing over the last two decades has suggested that output, particularly erroneous output, can often be an indication that a learner has formulated a hypothesis about how the language works, and is testing it out. Sometimes this output invokes feedback which can lead learners to ‘modify’ or ‘reprocess’ their output. (1995:126). However, our data show that, articulating or alluding to grammatical rules seemed to occur much less frequently, and learners’ linguistic choices were generally justified by the students on the grounds of simple intuitions. This may due to the paucity of learners’ linguistic knowledge.

II) Resorting to intuition

Example 7
S12: I wrote: He was finishing her dinner when her mother entered the kitchen I’m not sure if ‘was finishing’ in this sentence is correct. I don’t think it’s correct. (Student 12)

Example 8
S10 - I say took his dinner, I think it’s right. (Student 10)

Resorting to intuition seemed to occur quite frequently. The data seem to indicate that learners appeared to rely considerably on their intuition about language to solve their linguistic difficulties (what sounds right to them) particularly in resolving choices of verb tenses. The reason why participants were less analytic and relied more on intuition for their decisions about linguistic choices may be simply due to the paucity of learners’ linguistic knowledge. The participants were first year university students whose initial experience with their L2 was predominantly communicative (Pre-university English teaching) and have less knowledge of the L2 (at some or all linguistic levels). In Example 7, the student is aware that something is wrong with his sentence but he/she cannot express it in words or work out the problem on her own and resorts to his/her intuition that it just does not sound right. He/she cannot offer another solution neither justify it because he/she himself/herself is unsure. In Example 8 the students is clearly uncertain about the verb form ‘took’ that he/she worked out and feedback from an external source would be essential in confirming her assumption.
These search processes identified above represent processes similar to those other researchers have hypothesised to be involved in L2 learning. This possibility that a potential for language learning might appear in such sequences of problem solving was first raised by Cumming (1990) and Swain and Lapkin’(1995), who suggested that engaging in L2 production with a communicative orientation helps learners to control and refine their knowledge of L2 structures. In Cumming’s (1990) study, learners were found to demonstrate the following types of cognitive processing while composing: 1) to search out and assess appropriate wording, 2) to compare cross-linguistic equivalents and 3) to reason about linguistic choices in the L2. In Swain and Lapkin’(1995) study learners reported using: 1)sound right/doesn’t sound right,2)makes more sense /doesn’t make sense, 3) applied a grammatical rule , 4) lexical search,5) translation , 6)stylistic and 7) spelling. The third category in Cumming’s and Swain and Lapkin’ study are reflected in our category ‘knowledge of grammar-applying or alluding to grammatical rules’. Our category (resorting to intuition ) incorporates Swain and Lapkin’ first and second category.

These finding are consistent with the hypothesized positive function of output in and sheds light on the interconnectedness of input and output processes in SLA (Swain, 2005; Gass, 2010). If learners are required to produce output under a certain condition (here: to start at least a short narrative paragraph in response to a picture prompt), they may identify problematic areas in their L2 abilities and engage in thought processes and problem solving behaviours.

III) Noticing the gap

Our data showed that the need to encode meaning forced learners to turn not only to internal cognitive resources (stage I, i.e., output task) but also to external input and feedback for assistance (Stage II and III). Exposure to relevant input immediately after their production attempt created a favorable condition for learners to attend to what is different between their own output (what they had written) and the IL input (what they need to produce - or what a more competent target language writer had written to convey the same intention), leading them to appropriate the noticed native-like language use, resulting in better performance in a follow-up written output task. For example, six participants changed the beginning of their story for the one written in the model text.
‘Bob was home again’, as they considered the model’s use of ‘Bob was home again’ is more target like than their use of, for example, ‘Bob came back home’ or ‘when he came from school’ or they simply wanted to use an alternative of similar expression. These noticing operations has been commonly referred to as noticing the gap (e.g. Schmidt and Frota, 1986). Ellis (1995) used the term cognitive comparison rather than noticing the gap to refer to these instances of ‘comparisons’ which he considered as important processes in second language acquisition.

It should be pointed out again that the wide gap between their written production and the model text might have caused participants to experience difficulty engaging in cognitive comparisons. When presented with the input passage the L2 learners’ first priority was to comprehend phrases in the input. In order to process the main message of the input passage, nearly all participants focussed on the linguistic means used to express the ideational content of the story (content category) rather on noticing lexical or grammatical gaps in their own language production. The examples below further illustrate the effect of producing the text at Stage 1 (composing) and reading the model text at Stage 2 (comparing) on their revisions at Stage 3.

Example 9

The text written at Stage 1: S4-I should have said Bob sat at the table but I don’t write like this(He wrote: ‘the boy arrived from school then at 6:00 of afternoon he took diner’

The model text: Bob was home again. He sat at that table and began to eat

The text revised at Stage 3: Bob was home again. He sat at that table and began to eat

Example 10

The text written at Stage 1: S 14 In my paragaph I wrote ‘when he was finished eating his mother took the plate’but normally it is…

The model text: ‘While Bob was eating his dinner Ann came through the door’
The text revised at Stage 3: ‘While Bob was eating his dinner Ann came through the door’

Example 11

The text written at Stage 1: S9-I couldn’t describe the action of Bob and the woman.

The model text: Mrs. Smith waved at Bob when she saw him. He greeted her with a smile on his face and continued on his way.

The text revised at Stage 3: ‘He met Mrs Smith and greeted her. She herself greeted him and prayed for him to succeed’

At Stage 1, student S4 in example 9, worked to find his/her way of expressing how Bob arrived from school and sat to take his dinner in Picture 1 and 2. At stage 2, reading the model text, he/she noticed and realized the difference between the description he made and the model’s version. At Stage 3, he/she appropriated ‘was home again ’ and ‘sat at that table and began to eat ’ in his/her revised text.

At Stage 1, student S14, in example 10, completing the description of picture 3 wrote ‘when he was finished eating his mother took the plate’. At Stage 2 he/she noticed that the model text used ‘While Bob was eating his dinner ’ instead of ‘when he was finished eating ’ and used ‘Ann came through the door’’ instead of ‘his mother took the plate’ to describe the action of the characters in Picture 2. He/she appropriated ‘While Bob was eating his dinner Ann came through the door’ in the revised text.

In the last example student S14 couldn’t complete the description of the action of Bob and the woman in picture 7. Reading the model text, he/she appropriated ‘greeted her’ and ‘She herself greeted him’ in his revised text.

These instances involving the noticing and incorporation of the model phrases and expressions in the revised texts illustrate how an L2 task that requires the production of output, encourages learners to re-examine their own linguistic knowledge or consider the input more closely.
5.3.4 Summary of the Results from Study II

The study documented 33 students’ L2 performance in a three-stage L2 production task: from the composing (Stage 1) and comparing (Stage 2, where students compare their own output text with a model text) to the improvement of the written product in their revised paragraph (Stage 3). The above-mentioned findings show that the picture task, as a prompt to produce language, provided the students with opportunities for noticing and explicitly attending to the L2 lexical and grammatical accuracy that would be needed to express their intended meaning and autonomously searched for solutions deploying a variety of thought processes. It is also a finding from this research that through external feedback learners notice the gap between what they can produce and what more proficient users of the L2 (for instance, a native-speaker text) produce and appropriate the noticed native-like language use, resulting in improved performance in revised versions of their original output. These findings bring up new questions, some of which will be discussed in the following chapter.
CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1 Introduction

The chapter discusses the findings with respect to their theoretical and pedagogical implications, points out strengths and limitations of the present study, and, finally, outlines directions for future research on L2 production in SLA.

In Sections 6.2 and 6.3, the findings of the first and second research projects are discussed, respectively, in relation to the hypotheses stated in chapter 4 and within the context of the theoretical and empirical work on the role of input and output. Section 6.4 describes the implications of this study to classroom research in L2 learning. Section 6.5 outlines the limitations of the study. In section 6.6 suggestions for future research are made. Section 6.7 will conclude this thesis.

6.2 Discussion of the findings from study I

The goal of the quasi-experimental study reported in chapter 4 section 4.2 was to investigate the differential effects of input-based (comprehension-focused) treatment and output-based instruction (a combined output- and input-oriented approach) on the comprehension and production of the English tenses and grammatical aspect by young adult Algerian EFL learners. In order to explain the findings, we shall return to the original research question and hypotheses that guided the study (section 4.4.1):

Research question:

Does providing opportunities for output in addition to input of the target structures aid learning of tense/grammatical aspect more than input-based instruction only? It was hypothesized that both types of instruction would have positive effects on learner performance, but that the input-plus-output group would show an overall greater improvement in the use of the target structures than learners with input-based instruction only. This question was examined mainly through a quasi-experimental research design.
To summarize the findings (table 23) in terms of the three research hypotheses set at the outset, our results did not confirm Hypothesis 1, which predicted that L2 instruction that is primarily input-based would lead to improved performance on tasks involving the comprehension and production of English tense and grammatical in the short-term. The interpretation task findings (grammaticality judgement task) and the production task findings suggested that input activities, when used alone, did not result in a gain in ability to use the target forms. These findings are not consistent with other studies that have reported positive effects for input activities from pretest to post-test on comprehension and production tasks (e.g. VanPatten and Cadierno 1993; Cadierno 1995; Morgan-Short and Bowden, 2006). However, hypothesis 1 was partially confirmed, in that the input-only group was able to obtain statistically significant gains on the production of the target forms as measured by a picture-based description. It is important to note that, although students in this group did not engage in any activity requiring them to produce the target structure at any time during instructional treatment, they performed better on a test designed to yield a measure of learners’ productive knowledge. These results are important because they show that input practice has an impact on production of L2 forms. This corroborates other research showing that input-based instruction delivers skills beyond those practiced in instruction (DeKeyser, 1997, 2001). This point will be taken up again in our discussion of Hypothesis 3. Thus, input-only practice did not appear to have facilitated learners’ comprehension and production of the target structures.

The results of the present study provide partial support for hypothesis 2, which stated that a combined output- and input-oriented approach in teaching English tenses and grammatical aspect brings about improved performance for comprehension and production as measured by their respective tasks. According to the comprehension task descriptive findings, learners showed a slight improvement in performance from the pretest to the posttest with an over-all mean change of 0.24. However, this positive effect on learners’ receptive knowledge of the target structure did not reach statistical significance. On the other hand, the increase from the pretest to the posttest on the picture-based description test was statistically significant.
The results of this study do not conclusively support hypothesis 3. They do not conclusively show which predicted that competence in the production and comprehension of tense and grammatical aspect among learners who receive a combined approach.

Table 23: Summary of Findings

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Findings (Descriptives and ANOVA analyses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis 1</strong></td>
<td>A) Comprehension task: No pretest-posttest gain on grammaticality judgement posttest in the short-term (in descriptives). The answer was statistically negative. B) Production task 1: No improvement in the production of target structures as measured by a written gap-fill production task. C) Production task 2: Notable pretest-posttest mean change (in descriptives). As measured by a picture-based description task. Statistically significant.</td>
</tr>
<tr>
<td><strong>Hypothesis 2</strong></td>
<td>A) Comprehension task: Slight pretest-posttest mean change of 0.24 (in descriptives). Did not reach statistical significance. B) Production task 1: An over-all mean change of 1.02 (descriptives). Did not reach statistical significance. C) Production task 2: Notable pretest-posttest mean change of 1.05 (in descriptives); statistically significant.</td>
</tr>
<tr>
<td><strong>Hypothesis 3</strong></td>
<td>A) Comprehension task: The input-only group exhibited a zero pretest-posttest gain. No statistically significant effect. The input-plus-output group showed a small positive gain from the pretest to the posttest. Did not reach statistical significance. B) Production task 1: A zero pretest-posttest gain (in descriptives) for the input-only group. No statistically significant effect. Notable overall mean change of 1.02 for the input-plus-output group. Did not reach statistical significance. C) Production task 2: Notable pretest-posttest mean change for both groups (descriptives). Statistically significant effect.</td>
</tr>
</tbody>
</table>
(input plus output) would increase as measured by differences on the pretest-post test compared to those who receive input-based instruction only. The instructional effect, statistically speaking, did not amount to significant learning gains on the grammaticality judgement and written gap-fill tests. However, both instructional groups made significant gains on the picture description posttest. It is important to mention that the gains made by the input-only group do lend less support to skill-learning theory (chapter 2) which claims that comprehension and production do not draw on the same underlying knowledge source i.e. L2 instruction via input-based practice will only serve to develop learners’ability to comprehend the target feature, not to produce it. It also is important to consider these findings in relation to other studies that have examined the effects of input-based instruction and production-oriented instruction.

To start with, the findings were unexpected and did not statistically confirm what has been largely found by other input-related studies (chapters three) that differences in the types of treatments lead to differences in language learning. The results related to our first hypothesis differ from those of previous research that have found support for the positive effect of input-based instruction (e.g. VanPatten and Cadierno, 1993; Cadierno, 1995; Morgan-Short and Bowden, 2006). On the other hand, the findings seem to be partially consistent with the general trends observed in other studies providing support for the positive effects of production-based instruction (e.g. Benati, 2005; Dekeyser and Sokalski, 1996; Erlam, 2003; Izumi’s, 2002 Kim, 2001 and Salaberry, 1997) where the output conditions did result in greater learning than did the non-output condition. For instance, Erlam’s study showed that when instruction incorporates output-based practice, meaning-oriented output activities in particular, they might be more effective for developing both comprehension and production abilities than when only input-based instruction is provided. The results of Izumi’s (2002) study also showed that output instruction benefited learners to a greater extent than a comprehension-focused instructional treatment for the acquisition of English relativization, with resulting positive gains for output groups suggesting that input-based practice is not more effective than production practice.

Although, the descriptive results appear to suggest some instructional impact on the input plus output group, the results of the ANOVA analyses for the comprehension and the production tests do not reveal a significant difference between the two groups except
for the significant advantage for the input plus output group on one production test. Coupled with the findings for Hypothesis 1 and 2, the weak findings in relation to Hypothesis 3 do not seem to fully substantiate the hypothesis for the superior role of input-plus-output instructional treatments over that of input-based instruction in language learning. Thus, in answer to our first research question, it cannot be stated with confidence that a combined instructional treatment (input plus output) had a significant effect with respect to learners’ comprehension and production of English tense and grammatical aspect.

Why was the impact of the intervention not so promising? Why the receptive and productive measures failed to reach statistical significance? One reason that the impact of the intervention was not as significant as we might have expected might be that our students came from an instructional context in which L2 grammar instruction (if any) was quite traditional and explicit (section 1.1; section 4.2.2). The students were probably less used to learning in the implicit conditions demanded by the type of input tasks such as enriched input and enhanced input or recent classroom applications of the OH such as dictogloss and input-output cycles.

To remind the reader, the treatment session was held two weeks after the pre-test. Over an eight-week period students were exposed to input-based instruction in conjunction with and without output-based practice, during sixteen 90-minute classes. A posttest was held immediately after the treatment session. The experimental groups may have achieved better results had they undergone the experimental treatment for a longer period of time since they probably would have become more accustomed to working with many of the instructional tasks. This could have been an essential factor since the majority of students are not used to working with many of the input or output based instructional techniques, and probably felt awkward doing the instructional tasks during the first few sessions. The students most likely would have benefited more from (a) giving them a longer training period at the beginning of the experimental period, (b) extending the experimental period to the whole semester, or even (c) extending the time allocated for each session which would have given students more time to build up confidence in classroom activities. If this explanation were confirmed by further research, it might be concluded that contextual factors other than the tasks themselves play a role in learners’ ability to comprehend and produce the target forms.
Another reason to account for these results may lie in the students’ competence in the grammatical knowledge investigated. It seems highly likely that the level of difficulty of the grammatical items selected for the study was more advanced than the subjects’ L2 grammatical knowledge. The ability to grasp the full array of English tenses and to be able to apply them comfortably and accurately to every context is, along with accurate use of aspectual differences involved, one of the most difficult tasks that average L2 learners have to face (Cowan, 2008). Another related reason that may explain the findings is the individual differences. Although the participants’ individual differences were not inspected, it might be assumed that the measure of success in the two groups that underwent the treatment was not so much the type of instruction they received, but their individual characteristics, their positive attitude and eagerness to learn. An attempt to establish how many of the participants actually benefited from the treatment and whether the gain was maintained over time would have helped to interpret the collected data more fully. Researchers recognize that individual differences that comprise such factors intelligence, cognitive and learning styles and strategies play an important role in experimentation aiming at establishing effective ways of teaching target language grammar. Erlam’s (2003) study, for example, demonstrates that the cognitions and perceptions the participants hold might be of greater significance than the mode of instruction in a particular group which means that individual variables have to be carefully considered when exploring the effectiveness of different options in L2 instruction. According to Erlam, instruction that targets language input and does not require students to engage in language output, may benefit learners who have higher language analytic ability and greater working memory capacity. In contrast, output-based instruction seems to minimise the effect of differences in language. Does this mean that a cross-sectional study of Algerian EFL students undergoing different types of treatment would reveal more statistical significance for output-based instruction? This raises the need for other further investigations.

Discussion of the findings from study II
Although the main research question investigated has been whether or not input-plus output practice is as effective as input-only practice in the teaching of tense grammatical aspect i.e. focusing on the outcomes, In order to contribute to the need for further
research, the second study, drawing on the psycholinguistic rationale and research on output (e.g. DeBot, 1996; Swain, 2005) has been more concerned with exploring the cognitive and thought processes underlying L2 output. Two research questions, which were adapted from Swain and Lapkin’s (1995) study, aimed to explore whether young adult Algerian first year university EFL students become aware of gaps in their linguistic knowledge as they produce their L2, and if so, what thought processes they engage in an attempt to solve their problems. An additional purpose of the study was to identify the types of linguistic features that learners would attend to during their L2 production attempt.

Overall, the results of the study findings emerged from the data obtained in a three-stage L2 written output task have shown that:

(i) The struggles experienced by the students in their attempt to describe the picture promoted their awareness of ‘holes’ in their linguistic knowledge as they produced their L2 at the composing stage and drew their attention to relevant language forms when they were exposed to the model text at the comparison stage (research question 1).

(ii) When L2 learners encountered problems in producing the target language, they noticed their linguistic needs (holes or gaps) and engaged in thought processes using the tools at their disposal, namely themselves i.e. their internalised knowledge. Subsequent input exposure to input helped learners notice the gap between their L2 output and the modelled target language input (Research question 2).

(iii) This awareness of language gap had an impact on their language learning as revealed in their effort of applying their learning from model texts in subsequent revised versions of their narrative paragraphs (Research question 2).

To start with, research question 1 posed in this study was: how does learner’s own written output enable them to recognize gaps in their L2 linguistic knowledge and performance? The present study, along with earlier research (e.g. Adams, 2003; Hanaoka, 2007; Qi and Lapkin, 2001 and Swain and Lapkin, 1995) has found evidence for the noticing function of output hypothesized by Swain (1995, 2005). It confirmed previous findings that noticing facilitated by input provided as feedback has an impact on learners’ subsequent writing (section 3.2.2.1). During their production attempt, learners noticed
certain gaps and/or holes in their L2 knowledge, found the relevant solutions in the model input, and incorporated them into a follow-up written output task. The results of the investigation revealed that lexical aspects were the most frequently commented on, followed by grammar-based note taking episodes. In other words, learners were aware of restrictions of their L2 lexicon and searched for more appropriate words using their internal resources. This awareness of lexical limitations was generally formulated in terms of lack of knowledge (e.g. I don’t know how to say …; how do you say ?; or alternatively, in the form of proposals for potential solutions (e.g. I am not are not sure how to say… I wrote …; I am not sure whether this is correct… I wrote ….). This form of accounting for their choices, however, seems to suggest that the level of awareness or noticing experienced by the participants was basically simple or perfunctory rather than elaborate or substantive to use Qi and Lapkin’s (2001) words. In other words, their noticing of gaps was taking place at the level of ‘detection’ rather than ‘understanding’ (Robinson, 1995; Schmidt, 2001). Furthermore, this prioritization of lexical concerns before the learners received the model input text is not surprising, since research has shown that learners tend to allocate more attentional resources to lexis than to other linguistic aspects when the focus on form is initiated by the learners themselves (Ellis, 2001; Swain and Lapkin, 1995; Williams, 2001)

The findings from stage 2 suggest that learners had difficulty in attending to the subsequent input to take the necessary information. Although the participants noticed a number of lexical and syntactic (among other) language problems as they wrote their story in response to a picture prompt, the majority of learners gave up dealing with their linguistic problems when comparing their own written draft with a native-speaker text, resulting in partial or total avoidance. Consequently, the participants noticed fewer lexical, morpho-syntactic, or textual problematic features than in the previous stage. As shown in learners’ descriptive notes (appendix I), with the exception of a few occasions on which the focus of attention was on language-related issues, and most features noticed in Stage 2 were related to the ideational content of the story as well as to different ways of expressing it. This reveals that most learners were aware that they could not express themselves as precisely as they wished (e.g. I couldn’t express the actions that Bob made it before sleep but the model text put….; I didn’t know that there was Mrs. Smith I depend on my ideas in the end of paragraph….; In my paragraph I think I talk about the
picture generally the model text they talk about the picture exactly…). This also seems to suggest that either the participants could not capture the essentials of the story cued in the pictures and that the way the story was developed in the texts written by the students differed substantially from the way it was developed in the model input text. Because of this ideational and linguistic distance (Manchón et al., 2007) between students’ written texts and the model input text, the students could not use the input text to solve the language problems or ‘gaps’ previously detected during the writing-only stage. Consequently, the most practical solution for them was the use of the model text as a source to single out the needed ideas and expressions. This may suggest that there may be a threshold of L2 proficiency levels for learners to benefit from input texts as feedback, especially with respect to grammatical processing (Izumi, 2002).

The second research question was: when learners reprocess their performance what mental processes result that impact L2 learning? This question aimed at investigating the processes underlying the learners’ initial output, those occurring as they confronted the model input text and the impact of these processes on the resulting written text i.e. learners’ uptake. The study’s outcomes show that language production gives learners the opportunity to expand their IL capacity by reprocessing their utterances after noticing a problem which triggers internal feedback in the form of what O’Malley and Chamot (1990, in Thornbury, 1997, p. 336.) labelled ‘self-evaluation’ i.e. checking the outcomes of one’s own language performance that is one’s output against an internal measure of completeness and accuracy’. For example, learners searched out and assessed appropriate wording via L2 or one’s native language (or any other language known, French a language familiar to most learners). As pointed out in chapter 5, section 5.4.3, an important question in L2 writing research has been to ascertain whether or not L2 writers switch to their native language (or any other language known) in the process of L2 composing, under what conditions, for what purposes and with what benefits. In general, following Cumming (1989, 1990), proficient L2 learners do not depend heavily on the L1 during the writing process because they have a sufficient level of L2 knowledge to think in their L2. However, lower L2 proficiency writers rely more heavily on their L1 during the writing process in order to sustain the process and prevent a breakdown. What are the possible benefits or drawbacks of the use of the L1?
A look at the research available shows that scholars have opposing views on the beneficial or detrimental effects of L1 use while composing in the L2. While some scholars argue that this procedure may be beneficial (for example, when writing about L1-culture topics), others contend that the very act of encoding messages in the L1 may add to linguistic problems, thus slowing down the writing process and blocking the generation of ideas (Manchón et al., 2011). Because the participants in this study used their L1 in the process of L2 writing in order to compensate for their lack of vocabulary data on L1 use in the framework EFL learning may contribute to the field L2 writing the EFL context. In addition to relying on the French language to search out and assess appropriate wording, learners also searched for optional expressions which revealed their original intentions (i.e. to test hypotheses and sometimes to reason about linguistic choices). Most of the learners’ evaluations of their linguistic choices, as the data show, appeared to have relied on simple intuitions. As already pointed out, this might have been due to their limited L2 grammatical knowledge. It has been suggested that in situations in which feedback from external sources is not available, learners, in their attempt to express themselves in the L2, make use of their resources and stretch their limited linguistic capacities to their fullest (Swain 2005). Izumi (2003) points out that when learners modify their output, they either generate new output or reprocess their original output, both of which trigger additional grammatical encoding. By checking the outcomes of their own language performance against their own internalized knowledge, the learners were ‘sometimes’ able to achieve higher levels of accuracy. On exposure to relevant input immediately after their production experience, the heightened sense for problems encountered pushed learners to process linguistic features in subsequent input with more focused attention. Qi and Lapkin provide the following psycholinguistic explanation for this problem-solving behaviour:

The failure to reach a satisfactory solution to a problem with existing linguistic knowledge may result in a sense of uncertainty or lack of fulfillment on the part of a learner; it is perhaps this sense of lack of fulfillment that may push a learner to look out for any future relevant information available that he/she believes might help solve the problems in a better way (Qi and Lapkin, 2001: 289).

This idea is also argued for in output theory. That is, the problems learners encounter in output could ‘trigger an analysis of incoming data, that is, a syntactic analysis of input’
In the same vein, Johnson (1988, in Thornbury, 1997: 328) contends that exposing learners to the target behaviour after the event rather than providing a model beforehand has greater psychological validity, in that the learners are predisposed to look out for (and notice) those features of the modelled behaviour that they themselves had found problematic in the initial first draft. This is essentially what was shown in the second stage of this study. As the participants experienced difficulty in producing the target language (i.e. output task) and relevant input was immediately available (i.e. input task), the awareness of problematicity (based on their own prior written expression), lead them to observe or notice some linguistic features of their writing such as lexis, form, and particularly the content used in the model input in the hope of narrowing the ‘gap’ between their original output and that of the model text which in turn helped improve their writing as measured by incorporation of target like corrections in their revised texts. Some researchers (e.g. Doughty, 2001; Ellis, 1997; Swain, 2005) argue that the cognitive processes that output triggers allow learners to engage in a cognitive comparison to notice the gap between their interlanguage and the target language contained in the input. According to Ellis (1999), students, while writing, are expected to gain awareness of feedback features like form, content, and organization. In doing so, they should go through three main stages: (I) students notice a particular form, content, or organization in their writing, (II) they proceed to compare the features in their original drafts to their revised ones to identify a gap or problem in both original and revised drafts, and (III) they improve their subsequent written drafts by incorporating the solution(s) into them. After receiving feedback either from their peers or from their teachers, students need to notice gaps or problems found in their pieces of writing. Quoting Saxton’s Contrast Theory Saxton (1997), Izumi (2002) argues that output can place the learner in an ideal position to make a cognitive comparison between the IL and TL forms leading them to expunge the nontarget like form from their developing IL in favor of the TL form. He further claims that SLA, as with L1 acquisition, may be promoted when the learners’ error in their output is followed immediately by a juxtaposed target like form that shows contrast to the learners’ preceding utterance. Nevertheless, the findings from the comparison stage suggest that although L2 learners noticed their linguistic problems while producing the target language, they might have had difficulty in attending to the subsequent input to make the
necessary cognitive comparisons. They were, therefore, less able to notice lexical or grammatical gaps in their own language production and made more effort in finding the linguistic means used to express the content of the story. As noted above, this might have been caused by the wide gap between their written production and the model text. In other words, the ideational and linguistic distance (Manchón, et al., 2007) between the written texts and the model text was so wide that the students could hardly rely on the latter to solve the problematic areas or ‘holes’ previously identified in the writing-only stage. To recapitulate, the effectiveness of producing the L2 through a written output task lied in pushing learners to: 1) to engage in grammatical encoding operations during production processing 2) to find the mismatch or a gap between what they can produce and what they need to produce as well as what they produce and what proficient language speakers produce (Schmidt, 2001). This finding corresponds to Swain’s (1995, 2005) view of output production as not only promoting noticing of linguistic features, but combined with feedback also pushing learners’ awareness towards the gaps and problems in their IL.

The aims of the study presented here were exploratory, pointing toward many issues relevant to a conceptualization of the nature the processes of output modification that learners engaged in during their production attempt, rather than defining what the effects of these processes are. A major question arising for future studies and theory building is, what value might we attribute to these problem-solving behaviours for writing to learn in an EFL context? One question concerns whether (and to what extent) the process of output modification that learners engaged in results not only in immediate improved performance i.e. in short-term effects on learning (as measured by incorporation of corrections in revised texts), but also long-term changes in the learners’ IL.

Returning first to the processes underlying the learners’ initial output (stage one) and to their impact on learning, this study assumes that changes in IL might be associated with learners’ internal thought processes, in particular, the processes of noticing ‘holes’, searching their own linguistic knowledge and trying out new language forms (hypothesis testing). The activation of these processes was triggered off by a search for solution to the ‘identified holes’; a ‘linguistic exercise’ that is thought to contribute to the student’s progress in his/her language learning process. This in line with the claim ‘what goes on between the first output and the second … is part of the process of second language
learning’ (Swain and Lapkin, 1995:386). It is also in accordance with the claims made by other researchers. For instance, Qi and Lapkin (2001) noted that ‘noticing as a result of producing the target language (TL), as in the context of L2 composing, also has important roles to play in L2 development’ (p. 279). Swain (1998) also argued that noticing holes facilitate the retention of the solutions in short-term as well as long-term memory. From an interactionist perspective, Pica (1989:64) suggests that learners when modifying their output also engage in the internalisation of new forms as they ‘experiment with new structures and forms and expand and exploit their interlanguage resources creatively’. In elucidating the mechanisms by which output promotes SLA, Izumi (2000, 2003) argued, by drawing on Levelt’s (1989, 1992, 1993) speech production model, that the processes of grammatical encoding during L2 production and monitoring to check the matching of the communicative intention and the output increase the likelihood that learners become sensitive to what they can and cannot say in the TL, leading to their reappraisal of their IL capabilities.

Similarly, the study established that the processing of subsequent input engaged learners in actions with potential learning effects, such as noticing the gap or cognitive comparison, which led them to correcting earlier nontarget like usage and incorporation of target-like forms in the revised texts. It has been suggested that cognitive comparisons are important for L2 learning. The literature reviewed in chapter two shows that noticing ‘holes’ or ‘gaps’, noticing the gap (also cognitive comparisons) are possible techniques for converting input into intake (Doughty, 2001; Gass, 1997; Schmidt, 1990 Swain, 2005). Swain (2005) put forward the assumption that ‘the processes in which learners engage to modify their output in response to feedback are part of the second language learning process (p. 476). Gass (1997) states that ‘An initial step in grammar change is the learner’s noticing (at some level) a mismatch between the input and his or her own organization of the target language’ (p. 28). In the same vein, Mackey (2006) suggests that learners’ accurate identification of corrective feedback, particularly noticing the gap between IL and L2 forms, may facilitate the integration of L2 input contained in the feedback into learners’ knowledge system. R. Ellis (2003: 112) contends that by ‘making input out of their own output’ (R. Ellis 2003: 112), learners can be incited to compare their performance with ‘what they would have been capable of saying if they had used their most advanced interlanguage knowledge’. Basically, the argument is that the
beneficial effects of output practice on L2 development could be related to both the increase in the students’ abilities to notice linguistic problems, to search for appropriate words and phrases (drawing on their first and second languages as resources in the process), and to seek out relevant input with more focused attention. However, not all the current study’s findings can be interpreted from this perspective in which output-input-output sequences can directly affect learning. IL development, in SLA research, is generally defined as leading to changes in long-term memory as measured by the improvement from pretest to post test (or delayed post testing). In the current study, learning has been operationalized in only one way: Short-term differences between the features of the learner’s texts produced before and after the provision of input/feedback i.e immediate uptake (one 50-minute class). Since this study did not involve any delayed post-testing, it is unknown whether the uptake and incorporation of more target-like forms in the third stage was indicative of long-term changes in the learners’ IL. In addition, noticing the gap involves a deeper linguistic analysis and not the simple noticing of L2 exemplars as most of our learners did. It would be appealing to investigate whether the learners’ processing of the new linguistic items (e.g. content-related items) exceeds simple noticing and immediate uptake, in order to reveal a clearer picture of the relationship between output, uptake, and L2 learning. A possible way of approaching this would be to include a delayed third task to see whether, and to what extent, the initial stage of storing information (i.e. uptake) triggers long-term memory changes.

6.4 Implications of research findings

The absolute predominance of any of the two approaches i.e. input-only vs. input-plus-output was not established in the quasi-experimental study. Nevertheless, the study indicated that the input-plus-output option had a practically (although not statistically) significant effect for the improvement of classroom practice. Despite the relative complexity of the structures and the brevity of instruction, the participants managed to attain better control of linguistic forms, as evidenced by the descriptive results (pretest-posttest gains), particularly with respect to the production of the targeted form. What implications are carried by these findings?
From a theoretical perspective (though the results are not very statistically significant), this study stresses the important roles of output (in addition to input) in L2 learning and contributes to the understanding of the efficacy of L2 teaching interventions more specifically, to the body of comparative studies on input- vs. output-oriented approaches. The results of the study carry implications concerning an emphasis on input-only vs. input-plus-output orientations. They show that apparently one option is more effective than the other. Although it seems warranted to say that the kind of teaching that focuses learners’ attention on the target structure without requiring them to produce it better complies with natural processes involved in learning a foreign language (VanPattern, 2000), the outcomes of the present research project indicate that this approach may fail to provide learners with the means to develop better control of the forms in question. The treatment that comprised both types of intervention, input-plus-output practice, proved to be the most beneficial at least as shown by the descriptive results. Thus, it can be concluded that carefully designed reception-oriented instruction in conjunction with output practice is capable of yielding the most beneficial results.

Pedagogically, the results of the quasi-experimental study bear some implications for L2 instruction. They seem to support the use of output practice as well as input-based practice in the L2 classroom environment as a means for building grammatical accuracy. On the basis of on the design and results of this thesis, it seems legitimate to say that a combination of the two approaches, input-oriented and production-based orientations, constitutes the most advantageous option to be applied in the language classroom. In this study, each of the two approaches utilized resulted in slightly different outcomes that can benefit teachers and researchers in making certain decisions concerning the teaching of English tenses and grammatical aspect. Although the instructional materials incorporating the principles of a combined output- and input-oriented approach are scarce and rare, their preparation is not very problematic, as evidenced by the treatment materials included in the appendices to the present dissertation. At the same time, however, it would be unwise to apply the above guidelines without examining the characteristics of the teaching context. It needs to be remembered that the results and implications of this study are limited to the particular population, particular treatment and assessment tools used in this study. Consequently, the implementation of the approach in the language classroom and the weight given to the two approaches is bound to be the function of the
inherent characteristics of a particular educational context as well as the specific conditions in which teachers operate.

Despite its exploratory nature, other theoretical and pedagogical implications may also be drawn from the second study. The data obtained can be interpreted as shedding further light on the learning potential associated with written output, in our case, in terms of the noticing holes/gaps and uptake that may derive from processing and making use of relevant input. Specifically, the study provided partial support for the noticing function of output suggesting L2 production can promote opportunities for such noticing both in an output-only writing condition, and via the feedback. Implications for L2 writing pedagogy, first suggest that it is important for teachers to promote language-related noticing in L2 composing; to draw learners’ attention to some problematic aspect of their IL through output-input-output treatments.

Second this study suggests that, as a feedback tool, modelling may play a useful role in promoting learner noticing and make progress in their writing performance. To this end, teachers should encourage their students to discuss problematic language forms and provide them with opportunities to do so. The writing task employed in this study could be used in a grammar or writing class as an additional activity which can control the learners’ focus of attentional resources. It would, therefore, be useful in a classroom to devise and use this type of task so that learners can notice, take in, acquire and/or produce a syntactic form in a meaningful context, rather than having learners to acquire only receptive knowledge through input tasks. In terms of different possible orders to present input and output (section 3.2.2.1), some methodologists have argued for an input-first presentation (e.g. Doughty and Varela, 1998), and others argued for for an output-first presentation (e.g. Dekeyser, 1997; Izumi and Bigelow, 2000). Adams (2003) suggested that providing adequate input following output activities (as is the case in this study) may greatly enhance learners’ attention to target forms. Thus, the effect of different sequences of presentation of input and output is worthwhile to examine in pedagogical terms. In theory, L2 production enables learners to become more sensitive to what they can and cannot say in the L2, and requiring that learners produce output first may further enhance the learners’ awareness of L2 forms or meanings, in comparison with the input first presentation. These claims raise the need for full and detailed exploration of the role of
output and the potential effects of output-oriented instruction on L2 knowledge development.

6.5 Limitations

As commonly acknowledged in all studies, due to the limitations of the two studies one needs to take great caution in generalizing the results to other settings, to participants of different characteristics, or to the acquisition of other grammatical features. One of the limitations of the quasi-experimental study that need to be improved in future research is the short duration of the treatment. The study was conducted over the time-span of eight weeks. Given such a time-span and the full array of target forms, it is not easy to see how a number of weeks of instruction directed at some specific grammatical structures are enough to help students to move beyond their current IL towards a more native-like competence of the target language. As mentioned in the previous section, the relative effect of either input practice in conjunction with and without output practice might have been demonstrated more clearly had the treatment sessions been longer. However, due to the constraints of the availability of the participants, the treatment sessions could not last any longer than eight weeks. A related limitation concerns the design of the study, which was constrained by the programme of the current course where this study took place. A longer treatment, with more activities and more class periods mean more time taken away from the ‘normal’ development of topics in the regular programme. Furthermore, the present study had other methodological limitations. The first limitation concerns the way assessment tasks and treatment tasks were prepared and delivered. Both of the comprehension and production assessment and treatment tasks did not reflect natural language use. That is, it cannot be concluded from this study that the treatments would result in improved performance during real-time language production. Secondly, no measure assessing the long-term effects of the two practice methods beyond the eight-week period was implemented because the participants sat for their end of year examinations six weeks after they had finished taking part in this study. As a result, whether the instructional impact identified (at least in the descriptive analysis) in this study could be maintained a few months after the completion of the intervention was not clear. Thus, the longer-term effects remain to be assessed. The study also highlighted the difficulty of doing experimental classroom research in university settings. Research of
this nature requires that students attend all instructional and testing sessions in order for results to be included for analysis. In an instructional situation where students were not obliged to attend classes, it proved impossible to ensure an adequate sample size. Student absence from class meant that only some subjects eventually became study participants and a number of students had to be excluded from the study. Another practical limitation associated with this classroom-based research in a setting where classroom space was scarce is that it was difficult to find rooms that could be used for testing and the researcher was dependent on the rooms used for regular teaching classes. On many occasions, the teacher arrived at a classroom, with a group of students, to find it already occupied.

There were also some important limitations to the second study, which may suggest new avenues for future research. First, since the sample size was not large enough and the participants were from two intact classes, the conclusions cannot be generalized to other educational settings. With regard to the instrument used, the model essay adopted may not be representative of all types of essays; the generalization of the finding pertaining to task differences is also problematic. Ideally, this type of L2 writing study will be repeated with a variety of writing tasks beyond picture description such as writing a complaint letter or a project report administered to a larger sample size to confirm the results of the present study. Another limitation may be that the subjects were not given practice in noticing skills (either becoming aware of a ‘holes’ in their IL or ‘noticing-the-gap’) by confronting them with traces of their activity (e.g. written notes or even recordings) and asking them to comment upon them retrospectively in an attempt to familiarize them with a procedure that was completely new to them. A single lesson may not have been enough for a training effect. The revisions made by the learners in the third stage revealed that students resorted to their memory in their completion of the rewriting task as a result of the short time interval between the comparison and rewriting steps. Therefore, as discussed above, the results presented can simply be viewed only as evidence of learners’ uptake rather than long-term acquisition. There is a need to make use of designs to investigate the long-term effects of modelling as a feedback technique on L2 learning, an issue of great theoretical and practical relevance for SLA studies of feedback on writing and L2 pedagogy (Manchón et al., 2007, 2011). Finally, in this study, we used note-taking
as an on-line measure of learners’ noticing. However, the use of this measure (like the use of any other measure of noticing) raises issues of completeness (Izumi, 2000).

6.6 Directions and Suggestions for Future Research

Following from the foregoing discussion on study limitations in section 6.5, this section will offer suggestions for overcoming the limitations found in the present study, which will hopefully allow other researchers (as well as this researcher) to avoid the presence of, or at least minimize, the shortcomings discussed and additional suggestions and considerations for future directions in later research studies.

Concerning the first study, researchers and teachers could adopt the research methods employed and conduct classroom research in other similar settings to validate the findings. In addition, teachers in the Algerian context could adapt the activities and tests developed for the present study to meet their pedagogical purposes and apply them in their teaching practices (appendices section). There is a need for further research to investigate the effects of L2 instruction, as operationalised in this study, on other school populations in order to determine to what, if any, extent the results obtained in this study were specific to the population utilised. It would be very encouraging to find strong statistical support for the claim that output activities can achieve comparable, if not better, effects than input-based tasks. Another issue worth mentioning is that this research has investigated the effectiveness of instruction in terms of overall group gains. However, it cannot be assumed that the two types of instruction benefited all learners uniformly. Individual differences may mediate the relative effectiveness of the two instructional approaches. Hence, there is a need for additional research that investigates the relationship between the effectiveness of these two instructional methods and individual differences in language aptitude. In other words, future research, which also targets other additional grammatical features need to be carried out to determine if the differential effect of the instructional treatments applies more broadly.

Although the results of the second study are important as a first exploratory step, they should be complemented by further studies. There are several areas that warrant continued investigation before teachers and researchers accept or reject the role of noticing through L2 production attempt as an efficient and effective means for promoting attention to L2 forms. First replications are necessary with different types of
writing under different conditions. It is necessary to bring in other considerations in similar future studies, such as different topics and types of tasks, different types of linguistic items, proficiency levels, or even gender differences within a longer span of time, which may reveal somewhat different findings. Moreover, the study should be replicated with a larger sample population for the purpose of confirming the results. An important factor when investigating learning outcomes that has not been touched upon in this study, due the focus on processes, is retention. No measure assessing the long-term effects of noticing while producing the L2 was implemented. This study is exploratory in its investigation and the results are still quite inconclusive. Further research focusing both on processes and outcomes, targeting other additional grammatical features over longer periods of time could also determine whether the benefits of noticing facilitated by feedback persist over time, and whether they extend to contexts beyond that of the type of task used in this study. Although it was not documented by the results, the role of individual factors that might cause variation among learners could also be investigated. This would help us understand how different learners approach and process output tasks and subsequent input. As Lightbown and Spada (1999) show that one important aspect of classroom language teaching is helping learners to notice form in the L2 through various techniques that direct learners to pay attention to form in the process of learning L2 (section 2.3.2). Such instruction not only allows learners to become more accurate regarding L2 linguistic forms or the particular form in focus but also promotes a language learning skill that learners can carry with them beyond the teacher’s instructional situation.

6.7 Conclusion

In the preceding sections of this chapter, we have summarized and discussed the findings of the study, drawn conclusions in terms of answering the research questions, highlighted the contributions and the implications of the study for EFL teaching and learning, addressed the limitations, and made recommendations for future research. In this final section of this chapter, I would like to present a very brief synthesis of the research project so as to conclude this thesis. The investigation of the effects of input and output in second language acquisition has, so far, revealed that input is the most important factor in SLA. Drawing on a substantial amount of research that has
established the positive effect of L2 production (e.g. Izumi 2000, 2002, 2003, Shehadeh, 1999a; Swain, 2005; Swain and Lapkin, 1995; Toth, 2006), the present study set out to investigate what impacts L2 output has on learning/teaching of L2 linguistic forms in the Algerian educational context. As a result of identifying a clear need to address the research problem addressed in chapter three, the researcher designed and implemented the two studies described in chapter four which outlines the methods and procedures involved in conducting the research project. In order to reliably examine both the learning outcomes and the learning process, a quasi-experimental study (Study 1) and an exploratory study (Study 2) were, respectively, carried out. The first of the two research projects compared two instructional treatment conditions (input in conjunction with and without output) to examine the effects of opportunities for output practice on learning L2 target forms, which were several morphosyntactic structures. The second study, following, Swain and Lapkin (1995), aimed at understanding the role of output in the context of EFL writing, examined to what extent learners are able to demonstrate noticing skills with regard to their written performance (L2 production attempt). The purposes of the study can be summarised as follows: i) to heighten the awareness of learners towards their own written performance, ii) to provide learners with opportunities of assessing samples of their own L2 production, iii) to provide the time and the means to carry out noticing operations; how this ‘noticing’ of forms would activate the kinds of cognitive processes that are believed to affect L2 learning.

The analysis of the results of the first study appears to demonstrate that the best results in terms of gains in grammatical accuracy are brought about by pedagogical intervention that includes both output and input practice. Those engaged in input-plus-output outperformed (at least as descriptive statistics shows) those exposed to the same input for the sole purpose of comprehension in learning English verb tenses and grammatical aspect. Although the absolute predominance of any of the approaches was not statistically established in the course of experimentation- that is the instructional effect, did not amount to statistically significant learning pretest-posttest gains-. a number of observations were made as to the differential effects of the treatments on the development of the learners’ control over the target grammatical structures. In the meantime, it should be understood that this study does not question the essentialness of input to L2 learning or the value of input-based instructional techniques in L2 pedagogy. Nor is there any
implication that simply producing structures solely outside meaningful contexts (as often occurs in traditional pedagogy) advances L2 grammatical performance. Indeed, it may ultimately be that, just as Lee and VanPatten (2003) recommend, the best conditions for instructed learners are regular combinations of both input and output practice.

In general, results from the second study lend support to the research conducted previously which claims, as suggested by the Output Hypothesis (Swain, 2005), that output practice promoted in writing fosters noticing processes, especially noticing the hole (while engaged in text-generation activity) and noticing the gap (via the analysis of the feedback model text received on learners’ own writing). It is also a finding from this research that this noticing activity results in short-term effects on learning (as measured by incorporation of corrections in revised texts).

It is the hope of the author that the implementation of the recommendations outlined above will make L2 grammar instruction more advantageous and conducive to the attainment of higher levels of accuracy and better control of linguistic forms. The regard for accuracy appears to be particularly important at the time when the national curricula in pre-university English language education no longer values the study of the formal aspects of language opting instead for a more communication-oriented approach, often at the expense of the precision of expression. For teachers who wish to take an active interventionist approach to help their students develop their L2 grammatical knowledge, L2 written (and oral) output produced in meaningful contexts may create potential learning opportunities that can be exploited by the teacher. In all cases, learning is believed to be enhanced through the act of producing language, because output, by its mechanisms, increases the likelihood that learners become sensitive to what they can and cannot say in the TL, leading to the reappraisal of their L2 abilities.

Definitely, it would be imprudent to assume that the results of the two studies constitute sufficient grounds for the formulation of far-fetched pedagogical recommendations, and there surely exists the need to explore the issue much further. Hence, the results may not be generalizable across learner populations and acquisitional contexts.
REFERENCES


Fotos and Hinkel (2007) Form Focussed Instruction and output for Second Language Learning Gains In S. Fotos and H. Nassaji (Eds.), Form Focussed Instruction and Teacher Education(pp. 131-142 )Oxford: Oxford University Press.


Hanaoka, O. (2007). Spontaneous attention to form in a four-stage writing task. Output, noticing, and learning: An investigation into the role of spontaneous attention to form in a four-stage writing task. Language Teaching Research 2007; 11; 459


Shehadeh, A. (1999b) The role of comprehension ability and production ability in task selection in the second language classroom. In Expressions, N° 6, Université de Constantine.


APPENDICES

Appendix A
Explicit rule instruction

This presentation aims at explaining some basic concepts that may help you in understanding what the English tense and aspect are about. If you would like to know more about the use of tense and aspect in English, you can consult, for instance, the following books:

The present simple

Form
The simple present tense is represented by the third person singular ‘s’ inflection on verbs. It has a range of meanings, some much more common than others.
Basic Meanings
The simple present tense has a range of meanings, some much more common than others. The most commonly targeted ones are listed below.
The simple present tense expresses states, as exemplified in 1, habitual actions as in 2, and general statements of facts or scientific truths as in 3.
1.a) He owns three cars
b) He seems to be tired.
2.a) They always go to the mosque on Friday
   b) I usually have lunch at around one.
Notice that this meaning requires the use of time expressions (always, frequently etc.)
3.a) The Moon goes round the Earth.
   b) Water boils at 100 degrees centigrade.
Another common meaning is future actions in 4.
4.a) The film starts at two o’clock.
   b) The next train leaves in fifteen minutes.
Additional Meanings
The simple present also occurs in particular contexts:
It is used by commentators at sport events. This is referred to as instantaneous present.
The simple present can be used to refer to past events. This is known as the narrative, or
historical present, as shown in 5.
5.a) The phone rings. She picks it up and listens quietly [...]
   b) A man goes to visit a friend and is amazed to find him playing[...]

The Present Progressive

Form
The present progressive is formed with a present form of be (am is or are) and the
present participle of the main verb.
Basic Meaning
The basic meaning of the present progressive in ongoing action at the time of speaking as
in 1.
   a) I am eating my lunch.
   b) The candle is burning.
   The present progressive is also used for action happening around now (The action may
not be happening exactly now, but it is happening just before and just after now, and it is
not permanent or habitual) as 2.a) and b) show.
2.a) Farid is learning to drive.
   b) I am living with my sister until I find an apartment.
Additional Meanings
We can also use the present continuous tense to talk about the future when we have
planned to do something before we speak as in 3.
3.a) I am taking my exam next month
   b) We’re eating in a restaurant tonight. We’ve already booked the table..
   c) When are you starting your new job?
The present progressive can also be used with stative verbs (stative progressives ) to give
statements more emotional strength and intensity, to focus on change from the norm, to
focus on evolving change and to provide an informal polite tone as in 4.
4.a) This operation is really costing a lot.
   b) You are being very stubborn.
   c) The baby is resembling his father more and more every day
   d) We are hoping you can explain this.
Note: Progressive tenses are also called continuous tenses
The simple past

Form
ed inflection (verb +ed)
Other changes on irregular verbs

Basic Meanings
We use the Simple Past to express the idea that an action started and finished at a specific time in the past. Sometimes, we may not actually mention the specific time, but we do have one specific time in mind. There can also be a few actions happening one after another.
1.a) I saw a movie yesterday.
   b) She washed her car.
2.a) He arrived from the airport at 8:00, checked into the hotel at 9:00, and met the others at 10:00.
   b) Did you add flour, pour in the milk, and then add the eggs?
The Simple Past can be used with a duration which starts and stops in the past. A duration is a longer action often indicated by expressions such as: for two years, for five minutes, all day, all year, etc. as in 3.
3.a) I lived in Brazil for two years.
   b) They sat at the beach all day.
Additional tense meanings for the simple past.
The Simple Past can also be used to describe a habit which stopped in the past. It can have the same meaning as ‘used to’. We often add expressions such as: always, often, usually, never, when I was a child, when I was younger, etc. as in 4.
4.a) I studied French when I was a child.
   b) He played the violin.
The simple past is often used (instead of the simple present) to express a more polite tone.
5. a) I wanted to ask you a favour
   b) Did you want to see me now?

The past progressive

Form
Past of be (was or were) and a present participle.

Basic Meaning
Use the Past progressive to express an ongoing action in the past as in 6. a). Often, we use the past progressive together with a simple past tense. The past progressive refers to a longer action; the simple past refers to a shorter action that happened in the middle of the longer action as in 6. b), c).
6. a) I was studying in the library yesterday from three to five o’clock.
   b) I was having a bath when the telephone rang.
   c) They were sleeping when the thieves broke in.
When you use the Past Continuous with two actions in the same sentence, it expresses the idea that both actions were happening at the same time. The actions are parallel.
7. a) I was studying while he was making dinner.
   b) While Ellen was reading, Tim was watching television.

Additional Meanings
The past progressive is often used with time expressions that indicate a point in time when the action was ongoing as in 8.

8.a) Last night at 6 PM, I was eating dinner.
   b) He was watching television at eight o’clock.

The past progressive continuous (as we saw with the simple progressive) can have an iterative sense with words such as ‘always’ or ‘constantly’ i.e. it expresses the idea that something irritating or shocking often happened in the past as in 9.

9. a) She was always coming to class late.
   b) He was constantly talking. He annoyed everyone.

The Present perfect

Form
Present tense of to have + the past participle

Basic meanings
We use the present perfect tense to talk about a situation (states or actions) that started in the past and continuous to the present. We usually use for or since with this structure to mark the duration of the past states or activities situation as in 3.

1.a) He has lived in this town since 1990. (state)
   b) He has worked in this firm for two years. (action)

We often use the present perfect tense to talk about recently completed actions as in 2.

2.a) He has just gone out.
   b) She has recently written an article on this topic.

Another meaning of the present perfect is to express activities or situations that happened before now at some unspecified time in the past as is shown in 3.

3.a) I have passed my test. (There is no time reference.)
   b) John Smith has written a number of short stories.

Additional meanings
The present perfect is often used to announce a piece of news, we usually change to simple or progressive tenses to give the details as in 4.

4.a) The Prime Minister has decided to continue with his plan to build new types of aircrafts.
   b) The president has resigned. He left his office today and said ‘I want to spend more time with my family’.

The present perfect is often used in letters.

5.a) I’m sorry I haven’t written for such a long time.

   b) We have considered the main issues you raise in the report you sent on April, 26 and we have decided two actions…

The Present perfect progressive
Form
has or have + been + the past participle
Tense meanings
We use the present perfect progressive to express actions that started in the past and continue into the present. It is also used to talk about actions which began in the past and have recently stopped. In most cases, both the simple and the progressive forms are acceptable as in 6. This is not possible with stative verbs which do not appear in the progressive as in 6. c)

There are some situations in which one of the forms sounds better. We tend to use the present perfect progressive to emphasize duration of an action as shown in 7. On the other hand, the present perfect is used to emphasize the result of an action as in 8.

6.a) I have lived in this town since 1985
b) I have been living in this town since 1985.
c) I have known him for years (I have been knowing him for years is not possible)

7.a) I’ve been trading cars for 10 years.
b) I’ve been reading this book since 10 o’clock this morning

8.a) He has just come back from work.
b) I have finished my workout.

The Past perfect

Form
A tense form of the verb have (i.e. had) and a past participle
Basic meanings
The Past Perfect expresses the idea that something occurred before another action in the past. It can also show that something happened before a specific time in the past as in 1.
1.a) I did not have any money because I had lost my wallet.
b) She only understood the movie because she had read the book.
c) Tom had never been to an opera before last night.

We use the Past Perfect to show that something started in the past and continued up until another action in the past.

2.a) We had had that car for ten years before it broke down.
b) By the time Alex finished his studies, he had lived in London for over eight years.

Additional meanings
The Past Perfect is also used with expressions such as: ‘I wish’, ‘as if/though’ and ‘if only’.
3.a) I wish I hadn’t gone there.
   b) John looked as if he had done something terrible

The Past perfect progressive

Form
Had + been + the past participle

The past perfect progressive) is used to talk about actions that began in the past and lasted up until another action in the past.
4.a) I had been running for an hour when it started raining
   b) she put on weight because she had been eating too much sugar. (Use 1)

NOTE
The Past perfect progressive, in contrast to the Present Perfect progressive, never expresses actions that continue up until now.
He has been playing for two hours. (He is still playing or he has just stopped.)
He had been playing for two hours when I arrived. (He is not playing football now.)

The Future simple

Form
Simple Future has two different forms in English:
Will /shall+ infinitive
Be going to + infinitive

Meanings
Both Will /shall and ‘be going to’ refer to a specific time in the future. Although the two forms can sometimes be used interchangeably, they often express two very different meanings. ‘Will’(less commonly shall) is used to express probable occurrence while ‘be going to’ expresses that something is a plan i.e. the idea that a person intends to do something in the future as shown below.

1.a) I will go to Algiers next week. I have some business there.
   b) I am going to go to Algiers next week. I have some business there.(intention+plan)
   Both ‘will and ‘be going to’ can express the idea of a general prediction about the future as in 2. (Predictions are guesses about what might happen in the future)

2.a) This movie will win several Academy Awards
   b) The year 2012 will be a very interesting year.
   c) John Smith is going to be the next President.

‘Will’ is usually used in promises.

3.a) I will call you when I arrive
   b) I promise I will not tell him about the surprise party.

No Future in Time Clauses
The Simple Future cannot be used in clauses beginning with time expressions such as when, while, before, after, by the time, as soon as, if, unless, etc. Instead of Simple Future, Simple Present is used.

The Future Progressive
Form
Future Continuous has two different forms:
will be + present participle
am/is/are + going to be + present participle
Meaning
We mainly use the future progressive to indicate that we will be in the middle of doing something in a specified time in the future as in 4.
4.a) The manager will be meeting with his staff all tomorrow morning.
   b) He will be taking his exam next week at ten o’clock tomorrow.

The future progressive can also be used to indicate that a longer action in the future will be interrupted by a shorter action in the future interruption this can be a real interruption as in 5.a), b) or just an interruption in time as in c), d).

5. a) I will be watching TV when she arrives tonight.
   b) I will be waiting for you when your bus arrives.
   c) Tonight at 6 PM, I am going to be eating dinner.
   d) At midnight tonight, we will still be driving through the desert

The Future Perfect
Form
Will + have + the past participle
Meaning
We use this tense to express an action that will be finished before some point in the future.
Common time expressions used in the Future Perfect: Before / by tomorrow /7 o’clock / next month / until / till

6. a) I will have finished grading the papers by four o’clock.
   b) He will have read the entire book by next week.

The Future Perfect Continuous
Form
Will + have + been + present participle
Meaning

216
The future perfect tense in English isn't very common, but it is useful in some situations, and it’s very important to understand it when you hear it. We use this tense to show that something will continue up until a particular event or time in the future.

7. a) They will have been talking for over an hour by the time Tom arrives.
   b) She is going to have been working at that company for three years when it finally closes.
   c) He will have been teaching at the university for more than a year by the time he leaves for Algiers.

Appendix B

Example of Treatment Activities

Input-based activities

Present tense: simple and progressive

Input-based activity one – oral input

Listen to the passage and number pictures in the correct order that you heard them. The passage is read two times.

Daily Activities

Jim Smith lives on the eighth floor of an apartment building and works for a garment company as an accounts clerk. Jim Smith wakes up at six o'clock every morning. He gets up, takes a shower, gets dressed, and eats breakfast. After breakfast he reads the newspaper until 7:15, then he leaves his apartment for work. He gets on the bus at the bus stop, rides it to University Avenue, gets off, and walks to his office. He works until five o’clock. He usually goes and plays basketball with friends after work. Then he goes home, he watches TV, and then he goes to bed. Jim Smith leads a very boring life.

(Adapted from Routines, daily activities and present tense, no date)
Input-based activity two-written input
a) This is Rachid. What does he do on school days?
Complete the story of Rachid’s day. Use these 12 verbs. You will need to use some of them more than once: Have-do-get-get (dressed)-go-talk-play-watch-be -arrive-wake up-meet

My day

On schoolday, Rachid ................. at 6.30. He ............... a wash. After that he ...................... and at 7.30 he ................. breakfast. He usually .................
Rachid gets up at 8.45 am. He goes to school by bike and arrives at school at 8.45. He has lessons in the morning ’til lunch time. Lunch time at school is from 12.30 to 1.30. In the afternoons he has more lessons or sport. He normally goes home at half past four. Rachid’s family have dinner at 8 p.m. In the evenings Rachid does his homework, watches TV or sees his friends. They talk about their plans for the weekend.

b) Here are some questions. You write the answers.
Questions (for the output group)
1. What time does he always get up?
2. What does he do after that?
3. What does he usually eat for breakfast?
4. What time does he always eat lunch?
5. What does he usually eat and drink for lunch?
6. When does he usually have dinner?
7. What does he do after dinner?
8. What time does he usually go to bed?

b) Let’s change to questions about YOUR day. (for the output group)
Write the answers.
What time do you usually get up?
What do you normally have for breakfast?
Do you usually have lunch at home?
What do you do in the mornings?....

Input-based activity three- consciousness raising - written input

Match the uses of the present simple (B) with example sentences in (A). One example is given.

Uses
Facts and generalization
Habits and routines
Permanent situations
State verbs (e.g. be, have, think, know)
Fixed / official arrangement that we can’t change

A
1. I learn English twice a week
2. I have two eggs
3. The course starts in April
4. I come from the South
5. A dog is an animal
7. The Moon goes round the Earth.
8. John drives a taxi.

B
Facts and generalization
9. He does not drive a bus.
10. We meet every Thursday.

Input-based activity four – consciousness raising (written input)
Indicate whether each of the following sentences is grammatical or ungrammatical. If a sentence is ungrammatical explain why.
1. He is going into town every day
2. Jae Eun takes a statistics course next fall.
3. When a gas is heated it is expanding.
4. She always kids her brother.
5. She is always kidding her brother.
6. They always attends the annual meeting.
7. Good Engineering students has a great future in business.
8. Knowledge are as important as professional experience.
9. Most people don’t likes working at the weekend.
10. Precious metals don’t are always very expensive.

(Cowan, 2008, self-designed)

Input-based activity five - structured input (oral input)
Listen to the sentences about Jennifer. Indicate whether each sentence describes something that is
a) in progress right now?
b) usual or general statement of fact?
c) changing
1. When people need help with their automobile, they call her
2. Right now it is 9:05 A.M., and Jennifer is sitting at her desk.
3. She comes to work on time
4. Her cell phone is ringing.
5. She answers it. It is her friend Bob.
6. He usually works in the first floor but he’s working in the second floor this week while the office is being decorated.
7. In our city it gets dark at around 6 p.m.
8. It’s getting dark - we’d better go home.
9. The bus is stopping.

(Azar Schrampfer Betty, 2003, Self-designed)

Input-based activity six- structured input (written input)
Read Lisa’s letter to Rebecca. Indicate whether each sentence describes something that is
a) In progress right now?
b) usual or general statement of fact?
c) changing
Match the meanings of the present progressive (B) with example sentences in A. One example is given.
uses
A

USE 1 Present or temporary actions

USE 2 Future (personal) arrangements

USE 3 Irritation over something or somebody in the present

B

He is getting married this month
They are swimming in the sea
I’m having my first driving lesson this week
I’m studying to become lawyer one day
I’m drinking hot coffee now

She is always asking me stupid questions.
Is she eating my cake now?
Are you meeting David today?
Is Mary having breakfast now?
Hurry up! We are all waiting for you.

Input-based activity seven – consciousness raising (written input)
Present simple or present continuous? Change the verb if it is wrong.

a) Are you having a motorbike?

b) I’m staying in a hotel near the sea.

c) I’d like to buy this coat. How much is it costing?

d) What you doing?

e) I’m usually getting up at 6.00.

f) This book is difficult. I’m not understanding it.

g) I watch a lot of TV every night.

h) Excuse me. Are you knowing the way to the museum?

Narrative tenses
Past Simple/progress

Input-based activity one (oral input)
Narrating: Talking about someone’s life
Louis Pasteur

Louis Pasteur was born on 27 December 1822 in Dole, Jura, France. He was the son of humble parents. His father was a tanner; his mother’s a gardener’s daughter. As a boy he was in no way unusual. His teacher described him as ‘a good average pupil and one who ‘never affirmed something of which he was not absolutely sure’. His father worked hard and was able to send him to the Ecole Normale in Paris to study chemistry. Later he did advanced work at the Sorbonne.

In 1849, Pasteur got a job as assistant teacher at Strasbourg University where he discovered the role of bacteria in fermentation. There he also met his future wife Marie who patiently helped him with his experiments. In 1860, back to Paris, where he was appointed Director of Science, through experimentation and research with bacteria, he determined that certain microorganisms contaminated fermenting beverages. He used this knowledge to develop a process whereby liquids such as milk were heated to kill all bacteria which were already contained within them. This process became known as pasteurisation. In 1865 Louis went to Alés in the South of France where he investigated the disease of silk worm which was ruining the French silk industry.

In 1857, through experimentation and research with bacteria, he determined that certain microorganisms contaminated fermenting beverages. He used this knowledge to develop a process whereby liquids such as milk were heated to kill all bacteria and moulds which were already contained within them. This process became known as pasteurisation. In 1863, he became a member of the French Academy of Medicine. In 1865, Louis went to Alés in the South of France where he investigated the disease of silk worm which was ruining the French silk industry. Three years later despite serious health problems, Pasteur continued his research on microbes. Pasteur recognised that infectious diseases are caused by microorganisms, and his research soon led him to investigate vaccines. He found out that people could be protected against diseases by injecting them with weakened microbes. Pasteur created and tested vaccines for diphtheria, cholera, yellow fever, plague, rabies, anthrax, and tuberculosis. From 1882 to 1885 he devoted himself to research on rabies, a deadly disease spread by the bite of rabid animals. The rabies vaccine was first tested on a nine-year-old boy named Joseph Meister, on 6 July 1885. Meister was bitten by a rabid dog, and was subsequently treated by Pasteur with a rabies virus he had grown in rabbits but weakened by drying, a treatment he had earlier tried on dogs. The treatment was successful and the boy survived without ever developing rabies. In 1887, Pasteur was appointed Permanent secretary of the Academy of Science. Pasteur was subject to strokes from the early age of 46, and eventually died in 1895 from complications resulting from these strokes.

Pasteur was one of the world’s greatest scientists. He made major contributions to Chemistry, Medicine and Industry that have greatly benefited mankind.

(Adapted from The New Midlines, 2003)

Listening comprehension
a) Listen to the text and write down the dates corresponding to the verbs below.
got  began  
was appointed  determined  
became  investigated  
went  found out  
continued  
devoted himself  
was appointed  
died  

b) Listen again and complete the table with the verbs corresponding to their completions. Notice that these are in scrambled order. An example is given.

- the disease of silk worm
- research on microbes

He became
- a member of the French academy of medicine
- to research on rabies
- that people could be protected against diseases
- Permanent secretary of the Academy of Science
- to Alés in the south of France
- a job as assistant teacher
- Director of Science
- the role of bacteria in fermentation

c) Answer the following questions (for the input-plus-output group).
1. Where did Louis Pasteur study?
2. Where did Louis Pasteur as a scientist work?
3. What awards did Louis Pasteur receive?
4. What is Louis Pasteur famous for?

Input-based activity two (written input)

The Canterville Ghost

There was a horrible storm that night, but apart from that nothing scary happened. The next morning, however, when the family came down to breakfast, they found the terrible stain of blood once again on the floor. Washington cleaned it a second time, but the second morning it appeared again. The third morning it was there, too, although the library had been locked up at night by Mr Otis himself.

The following night, all doubts about the existence of the ghost were finally removed forever. At eleven o’clock the family went to bed and some time after, Mr Otis was awakened by a strange noise in the corridor, outside his room. It sounded like the clank of metal, and it came nearer every moment. Mr Otis got up and looked at the time. It was exactly one o’clock. So Mr Otis put on his slippers, went to the door and opened it. There, right in front of him, stood the ghost - his eyes were as red as burning coals; long grey hair fell over his shoulders and from his wrists and ankles hung heavy chains.

“My dear Sir,” said Mr Otis, ‘you must oil those chains. It’s impossible to sleep with such a noise going on outside the bedrooms. I have therefore brought you this bottle of
lubricator, and I will be happy to supply you with more if you require it.” With these words Mr Otis laid the bottle down, closed his door and went back to bed.

Shocked, the Canterville ghost stood quite motionless for a moment, but then he growled angrily. Just at this moment, the twins appeared on the corridor and threw a large pillow at him! The ghost hastily escaped through the wall, and the house became quiet again.

When the ghost reached his small secret chamber, he took a deep breath. No ghosts in history had ever been treated in this manner!

(English Grammar Online, 2005)

(Excerpt from The Canterville Ghost, by Oscar Wilde)

a) Questions on the text
   i) Which statement is true?
      i) The ghost appears on the first night the Otis family spends in the castle.
      ii) Washington runs out of stain remover.
      iii) The blood-stain is there again every morning.

   What wakes Mr Otis up?
   i) The ghost’s chains.
   ii) His wife’s snoring.
   iii) The screaming of a person.
   iv) Is Mr Otis afraid of the ghost? yes  no

b) Comprehension questions (for the output group).
   Answer the following questions.
   1) What happened when the family came down to breakfast?
   2) why did Mr Otis wake up?
   3) Describe the Canterville ghost.
   4) What did the twins do?
   5) What did the Canterville ghost do?
   6) What things make you scared?
   7) Do you believe in ghosts?

Input-based activity three-consciousness raising (written input)
   a) Did you notice the highlighted forms in the text?

   In English, simple past tense construction (V+ed) means that the action that the verb represents happened in the past and finished. Why do we use the simple past in the following sentences?

   ‘He put on his slippers, went to the door and opened it.’
a) states in the past
b) actions that happened one after the other

‘His eyes were red; grey hair fell over his shoulders and from his wrists hung heavy chains.’

a) states in the past
b) actions that happened one after the other
b) Now decide why do we use the simple past in the following sentences?

1. I saw two colorful fishes in the lake yesterday
2. He entered a room, lit a cigarette and smiled at the guests.
3. Mary tried the soup but it was too hot to eat.
4. I lived in Algiers for 10 years.
5. They saw us playing football.
6. He married a woman who lived in the same village.

Input-based activity four (Irregular past simple verbs). Correct the mistake with the past simple in each of the sentences.

a) I was sick yesterday. I go to the doctor’s.
b) I see the thief go into the house.
c) My sister buyed me a new watch for my birthday.
d) He was lived here for ten years.
e) We taked a photo of the beautiful lake.
f) He finded the camera next to the chair.
g) My friend losed his bag on the bus

Past Progressive
Input-based activity one (textual enhancement-written input)

Killer oil

The story is one of tragedy and fraud. It started in May 1981, when travelling salesmen in Northern and Central Spain started selling cheap olive oil. Like most Mediterranean countries, Spain uses olive oil in its cooking; and when people started falling ill in May nobody suspected that it was the cooking oil which was causing the illness. It was a medical mystery. Doctors and scientists were completely baffled because the strange disease was spreading.

There were several theories about what was happening. At first it was thought that bad fish had caused the food poisoning, and later it was rotten fruit. It wasn’t until June that a children’s doctor in Madrid made the connection between the sickness and the oil. Immediately the government started issuing public warnings, and offered to take any suspected oil, giving pure oil in exchange. This stopped the spread of the poison. But it was too late for the people who had already eaten the contaminated substance. Affected people were constantly having fever and headaches. They could not eat or sleep, had pains all over their body and were having difficulty in breathing. Some of them died.
Doctors and scientists were still not sure what the poison was. The most popular theory was that a Spanish company imported some industrial oil from France and tried to remove the impurities by boiling it at 200°. They mixed it with a small amount of olive oil to give it a taste, and then sent it to the salesman to sell as pure olive oil. When they boiled the oil however they created a new substance which was poisonous and unknown to the authorities. At one time twenty people were analysing the oil trying to find a cure, for the poison. While the medical authorities were carrying out the various analyses the police arrested fourteen people suspected of being responsible for oil poisoning.

(Adapted from The New Midlines, 2003, p.32)

a) Comprehension
Read the text and number the events in their chronological order.

1. The government took measure to stop the spread of the disease.
2. A doctor made the connection between the sickness and the oil.
3. They sent it to the salesmen to sell as pure olive oil.
4. People started falling ill.
5. Travelling salesmen sold vast quantities of olive oil.
6. A Spanish company imported some industrial oil from France.
7. The medical authorities analysed the oil and tried to find a cure.

b) Answer the following questions. (for the input plus output group)
1. Why did many people buy that oil?
2. Why was the oil poisoning a strange disease?
3. What were affected people feeling?
4. What measures did the authorities take to prevent the spread of the disease?

b) Consciousness raising activity (written input)
Did you notice the highlighted forms in the text?
In English, when a verb phrase is used with was/were and its present participle form i.e. past progressive, it reflects that the action was ongoing in the past. Often the past progressive tense constructions are often used together with a simple past tense. The simple past was capitalized and made red. The past progressive was italicized and made blue.

Here are three common concepts expressed by the past progressive:
- Action going on at a certain time in the past
- Actions taking place at the same time
- Action in the past that is interrupted by another action

c) Now find examples from the text for each use listed above:

.................................
Input-based activity two (simple past or past continuous)
Choose which verb tense (simple past or past continuous) fits better.

1. I _______ - I didn’t hear you come in.
   a) was sleeping b) slept
2. I _______ to see her twice, but she wasn’t home.
   a) was coming b) came
3. What _______? I was watching TV.
   a) did you do b) were you doing
4. Hey, did you talk to her? Yes, I _______ to her
   a) was talking b) talked
5. I _______ home very late last night.
   a) came b) was coming
6. How long _______ the flu?
   a) did you have b) were you having
7. _______ a good time in the beach? Yes, I had a blast!
   a) Were you having b) Did you have
8. We _______ breakfast when she walked into the room.
   a) had b) were having
9. Last month I decided to buy a new car, and today I finally _______ it.
   a) bought b) was buying
10. Yesterday at six o’clock, he _______ football.
    a) played b) was playing

(self-designed)

Present perfect: simple/progressive
Input-based activity one-(input flood) (oral input)

No Wrong Numbers

Mr James Scott has a garage in Silbury and now has just bought another garage in Pinhurst. Pinhurst is only five miles from Silbury, but Mr Scott cannot get a telephone for his new garage, so he has just bought twelve pigeons. Yesterday a pigeon carried the first message from Pinhurst to Silbury. The bird covered the distance in three minutes. Up to now Mr James Scott has sent a great many requests for spare parts and other urgent messages form one garage to other. In this way he has begun his own ‘telephone’ service.

(Practice and Progress, 1973, p.21)
i) Comprehension Questions
Mr Scott hasn’t got a telephone in his garage because:
(a) It is not far from his garage so he doesn’t need one.
(b) He has twelve pigeons
(c) He can’t get one
(d) It’s too expensive.

Mr Scott keeps pigeons because:
(a) He uses them to send messages.
(b) It’s his hobby.
(c) He has two garages.
(d) He likes them.

ii) Comprehension questions (for the input plus output group)
(a) Where has Mr Scott opened his second garage?
(b) How far away is his first garage?
(c) What has he bought? why?
(d) Has he sent messages from one garage to another? what for?

iii) Which verbs tell us what has happened i.e. present perfect constructions?
iv) Which words are used with the present perfect?

Input-based activity two-(input flood) (written input)

Human rights in Africa

Freedom of Speech and Human Rights are taken for granted in the west, but recent years have seen conditions deteriorate around the world. The United Nations (UN) has expressed concern that the number of human rights violations has grown since the start of the last decade. As early as 1997 for example, Human Rights conditions were reported to remain unchanged compared to previous years, or in some countries, actually worsen, around the world. The UN reported that even though over a hundred governments have agreed to promote human and peoples’ rights, violations of rights and torture have increased over the past ten years. The African continent, for example, has been the scene of horrific human rights violations by government forces and allied militia which have committed horrific human rights violations. These forces have displaced millions of people in some parts of the continent. They have attacked local populations, raped women, burnt and looted villages. Despite the people’s cries for help, these populations still remain unprotected and denied justice. Victims who speak out face harassment and intimidation at the hands of government forces. People of many African countries, including displaced persons and town-dwellers, human right defenders and lawyers were victims of arbitrary powers of arrest and detention. The government forces, apparently designed to protect the country, have instead used the powers conferred upon them to torture the population.

The African Charter on Human and Peoples’ Rights, an organ of the African Union, is the principal human rights instrument. In recent times it has had to face a range of human rights problems in different parts of the continent. Though this organ has made
some progress in protecting peoples’ rights throughout the African continent and ensured that the victims of grave abuses obtain justice, the system is in need of extensive reforms. It is weak and unable to hold governments accountable for violations of international law. Investigations into human rights violations committed in many African countries are either deeply flawed or simply non-existent. Much discussion is taking place at the African Union as it continues to search for more effective ways to protect and assist these particularly vulnerable groups.

(Self designed)

COMPREHENSION

a) Two statements are false. Which ones?
1. Violations of basic human rights still form a systematic pattern in much of the world.
2. At the start of the twenty-first century, respect for human rights continued to progress.
3. Human rights have recently improved thanks to governments who agreed to adopt and implement international agreements that relate to the protection of human rights.
4. The African Union has worked to build new institutions to advance the protection of human rights.

b) Comprehension (for the output group)
1. What human rights violations has the text referred to?
2. What have governments agreed to do?
3. Show how governments in African countries violate human rights?
4. Has the African union worked to protect human rights? How?

Input-based activity three-consciousness raising (written input)

a) Did you notice the highlighted forms in the text?
In English, when a verb phrase is used with have/has and its past participle form, it reflects a meaning that the action happened in the past, but the time span that the action affects is still present. Here are three common concepts expressed by the present perfect:

1. Something that happened at some unspecified time in someone’s life (or another period of time that continues up until the present)
2. Something that started in the past and continues up until now
3. Something that happened in the past and has some result or relevance to the present.

b) Now decide why the present perfect is used in the following sentences?

i) “Recent years have seen conditions deteriorate around the world”. Line 2.

ii) The UN has expressed concern that the number of human rights violations has grown since the start of the last decade

iii) Over a hundred governments have agreed to promote human and peoples’ rights
c) Match the following examples to the concepts above.
   a. She’s lived here for five years
   b. I’ve never eaten oysters
   c. I’ve lost my glasses
   d. Have you ever been to the Sahara?
   e. I’ve known him since I was a child
   f. He’s broken his arm

   Simple past vs present perfect

   Input-based activity one: (input flood) (written input)

   Taxi
   
   Captain Ben Fawcett has bought a new taxi and has begun a new service. The taxi is a small Swiss Plane. This wonderful plane can carry seven passengers. The most surprising thing about it, however, is that it can land anywhere: on snow, water or even on a ploughed field. Captain Fawcett’s first passenger was a doctor who flew from Birmingham to a lonely village in the Welsh mountains. Since then Captain Fawcett has flown passengers to many unusual places. Once he landed on the roof of a block of flats and on another occasion, he landed on deserted car park. Captain Fawcett has just refused a strange request from a business man. The man wanted to fly to Rockall a lonely island in the Atlantic ocean, but Captain Fawcett did not take him because the trip was too dangerous.

   (Practice and progress, 1973, p.79)

   i) Input Flood Questions
   Two statements are false according to the text. Which ones?
   1. Captain Ben Fawcett has bought an ordinary taxi.
   2. It can carry seven passengers.
   3. Captain Ben Fawcett has flown passengers to many strange places.
   4. He has just managed to fly a lonely traveller to an island on the Atlantic Ocean.

   ii) Answer these questions (for the input plus output group).
   1. Has Captain Ben Fawcett bought an ordinary taxi or not?
   2. How many passengers can it carry?
   3. What is surprising about this plane?
   4. Did Captain Ben Fawcett accept to fly business man a lonely island? Why?

   iii) Using the following two sentences, describe the main difference between the (simple) past in (1) and the present perfect in (2) with regard to meaning.

   1. ‘Captain Fawcett’s first passenger was a doctor who flew from Birmingham to a lonely village in the Welsh mountains.’

   2. ‘Since then Captain Fawcett has flown passengers to many unusual places.’
Input-based activity two-consciousness raising (written input)

a) Which tense is used with the following actions?
   1) Action beginning in the past and still continuing
      a) Present Perfect
      b) Simple Past
   2) Result of an action in the past is important in the present
      a) Present Perfect
      b) Simple Past
   3) Action finished in the past
      a) Present Perfect
      b) Simple Past

b) Find out an example of each from the text.
   iii) Choose the correct verb forms and then ask your partner the questions.
   How long are you doing / did you do / have you done your present job?
   How long did you do / have you done the job before that?
   Did you have / have you had dinner yet?
   Did you ever / have you ever played truant when you were at school?
   How many hours did you work / have you worked today?
   How many countries have you visited / did you visit?
   Where did you go / have you been the last time you went abroad?
   How long have you stayed / did you stay there?
   Tell me everything you have eaten / you ate today?
   Did you do / have you done any physical exercise recently?

Past perfect simple / Progressive

Input-based activity one (written input- textual enhancement)

The Casbah of Algiers

In the northern part of Algeria, the casbah of Algiers undoubtedly the most important position among the historic sites. Its history is closely linked with the history of Algiers. Algiers was built during multiple conquests, that is it had grown up gradually over the centuries and layers of well-refined culture can be found in its architecture and social character. There is little knowledge about its earliest times. It was known to the Carthaginians and to the Romans as Icosium. Earlier, around the ninth century B.C., a group of phoenicians traders had founded it as one of their important trading posts. In the tenth century A.D, Emir Bouloghin rebuilt the town into an important trading port called al-Jaza’ir. Five centuries before, the vandals had captured the city and completely destroyed it. Until it was built by Emir Bouloghin, the city had exercised little influence on international commerce and only the least amount of merchandise transited through it. After the Turkish Baba Arudj brothers had gained control of the city in 1516, Algiers thrived as a relatively independent city under the nominal control of the Ottoman empire. Later the ottomans transformed the architectural character of the city by
constructing mosques and palaces similar to those in Asia Minor and erecting the famous white-washed military fortification known as the Casbah. The casbah still remains the throbbing cultural heart of the city, though it had undergone some changes during the French colonial rule. The casbah is the most important of Algeria’s seven World Heritage sites.

(Adapted from New Prospects 2007, p.23)

a) Mark the two statements which are false according to the text.
1. We don’t have much information about what the city of Algiers was like during the Phoenician and Roman periods.
2. Only the smallest amount of goods transited through the port of Algiers during and after Emir Bouloughin rebuilt the city.
3. The casbah of Algiers was constructed during the French colonial rule.
4. Algeria has many World Heritage sites.

b) Answer the following questions (for the input plus output group)
1. Who was the city of Algiers built by?
2. What did the city of Algiers look like during the Phoenician and Roman periods?
3. Who rebuilt and destroyed the city of Algiers after it had been destroyed?
4. When was the casbah of Algiers built?
5. Is it an important historic site? Why?

c) Input-based activity (consciousness-raising)

The highlighted verb phrases in the text are used with had and its past participle form i.e. past perfect tense construction. Explain why these past perfect tense constructions are used in the text?

Input-based activity two-- consciousness raising (written input)

Explain the difference in meaning between each of the following pairs of sentences.

1. How long had he been living in London?
2. How long has he been living in London?
3. He had been sleeping for 12 hours.
4. He has been sleeping for 12 hours.
5. How long had she been learning English?
6. How long has she been learning English?
7. He has been playing for two hours.
8. He had been playing for two hours.

(Cowan, 2008, self designed)

Future tenses
Never too Old to Learn

I have just received a letter from my old school informing me that that my former headmaster Mr Reginald page, will be retiring next week. Pupils of the school, old and new will be sending him a present to mark the occasion. All those who have contributed to the gift will sign their names in a large album which will be sent to the headmaster’s home. We shall all remember Mr page for his patience and understanding and for the kindly encouragement he gave us when we went so unwillingly to school. A great many former pupils will be attending a farewell dinner in his honour next Thursday. It is a curious coincidence that the day before his retirement, Mr page will have taught for a total of forty years. After he has retired he will devote himself to gardening. For him, this will be an entirely new hobby. But this does not matter, for, as he has often remarked one is never too old to learn.

(Practice and progress, 1973, p.209)

i) Comprehension: One statement is false. Which one?
   a) Mr page, a former head master, has recently retired
   b) Many old pupils will be attending a farewell dinner in honour of Mr Page.
   c) Mr page completed forty years as teacher
   d) After he has retired he will devote himself to gardening

ii) Comprehension (for the output group)
   a) Who has informed the writer about his former headmaster, Mr reginald page retirement?
   b) At what time will he retire?
   c) What will his former pupils do?
   d) What will they take part in?
   e) What will Mr reginald page do after his retirement.

iii) Sentences (a)-(f) illustrate three different constructions for future time:
    1) Will + infinitive;
    2) will be + present participle and
    3) Will + perfect infinitive (have + past participle).

   a) ‘Mr reginald page, will be retiring next week’
   b) ‘All those who have contributed to the gift will sign their names in a large album’
   c) ‘We shall all remember Mr page for his patience and understanding’
   d) ‘A great many former pupils will be attending a farewell dinner’
   e) ‘Mr page will have been teaching for a total of forty years’
   f) ‘he will devote himself to gardening’

iv) What are these tense constructions called? Select a) future simple, b) future progressive or c) future perfect
    1) …………………………………………………
    2) …………………………………………………
v) Verbs: aspect. Among all future tenses, the Future Simple is the most common. It is used in many situations such as when making:

- A personal plan
- A promise or an offer
- A spontaneous decision (Unplanned actions), a promise or an offer
- Predictions based on experience or intuition

Using the following two sentences, describe the main difference between the (future with ‘will’) in (1) and the future with ‘be going to’ in (2) with regard to meaning.

1) ‘All those who have contributed to the gift will sign their names in a large album’

2) ‘All those who have contributed to the gift are going to sign their names in a large album’

Input-based activity two—consciousness raising (written input)
Decide which of the concepts in (iii) the following examples illustrate:

1. I have a two-week vacation in August. I am going to fly to Sahara.
2. You spilled the milk. I’ll clean it up.
3. My father will give me 2500 dinars if I get a good mark in the final exam.
4. My radio is broken. Will you fix it for me?
5. I think he will regret his choice

Input-based activity three—consciousness raising (written input)
All these sentences use for the future ‘will’
In some cases this is incorrect.
Where is the ‘will’ future used correctly?
Where it is incorrectly used, what is the correct future form?

1. I’ll go to London on Friday.
2. I’ll meet my friends for dinner after the class.
3. I’ll probably visit my grandmother in China at Chinese New Year.
4. What will you do at the weekend?
5. Will you take another English course after this one?
6. I’ll clean the house on Saturday afternoon.
7. This course will finish in May.

The Future Progressive

Match the meanings of the future progressive (B) with example sentences in (A). One example is given
A. Meanings
1. Future actions in progress.
2. Guesses about the present or the future.
3. Polite questions about somebody’s intentions

B. Examples
a) I’ll be having a bath when you are back back home.
b) Tomorrow at this time, I will be taking my grammar exam.
c) I’ll be watching TV when my mother arrives…………............Meaning 1
d) Will you be coming home?
e) They will be getting home just about now.
f) We won’t be having supper tomorrow before 8 o’clock.
g) I am not going to be learning English tomorrow at this time.
h) Will you be using the dictionary?
i) He won’t be sleeping now
j) Will you be playing football at 6 p.m.?

Appendix C

Example of Treatment Activities
OUTPUT-BASED ACTIVITIES

Present tense: simple and progressive
Production activity one: mechanical drill-(focus on form)

A. Write either the simple or the continuous form of the verbs in brackets; use only the present tense.

1. He _____________ (teach) his boy to ride.
2. She always _____________ (ring) up and _____________ (ask) questions.
3. Can I borrow your pen or you _____________ (use) it at the moment?
4. Why you _____________ (type) so fast? You _____________ (make) a lot of mistakes.
5. The children are very quiet. Go and see what they _____________ (do).
   They _____________ (cut) up some £5 notes.
6. Mary usually _____________ (learn) languages very quickly but she _____________ (not / seem) able to learn modern Greek.
7. I always (buy) lottery tickets but I never (win) anything.
8. You always (write) with your left hand?
9. _____________ (You / know) why an apple _____________ (fall) down and not up?
10. I (save) up because I (go) abroad in July.
11. I _____________ (think) it a pity you don’t take more exercises.
12. The plane that you (look) at now just _____________ (take) off for Paris.
13. Tom never _____________ (do) any work in the garden; he always (work) on his car.
14. These hens _____________ (lay) brown eggs.
15. She _____________ (have) a bath every evening.
16. My husband _____________ (always / taste) the food while I’m cooking! It’s very annoying.
17. I _____________ (not / think) that’s a good idea.
18. He _____________ (have) a party at the weekend.
19. This coffee _____________ (not / taste) right.
20. What _____________ (you / think) about the war in Iraq?

(Thomson and Martinet, 1980)

Production activity two: dictogloss Task
- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text orally in your own words

Text for Dictogloss Task:

The Present simple

Morning Activities

I usually travel to college by bus. I leave home at 8 o’clock and get to the bus stop at about 8.10. I usually have to wait for about 10 minutes and then the bus arrives. I buy a
weekly ticket and go and sit at the back where it is warm. It usually takes about 15 minutes on the bus. I get off at Barlow Moor Road and walk for 8 minutes. I usually arrive at college at 8.45 and go straight to class. I meet my friends and learn English for three hours - then I go home

(Present simple, 2006, Self-access Grammar)

Production activity three - written output
Describe your typical day. Use as many different descriptions as you can. Write at least 10 sentences.

Production activity four: dictogloss Task
- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:
The Present Progressive Tense

The Wilsons

It’s 7:30 A.M. and the Wilsons are in their kitchen. Mrs. Wilson is sitting at the breakfast table. She is reading the morning paper. She reads the newspaper every morning. Mr. Wilson is pouring a cup of coffee. He usually drinks two cups of coffee every morning before he goes to work. There is a cartoon on TV, but the children aren’t watching it. They are playing with their toys instead. They usually watch cartoons in the morning, but this morning they aren’t paying any attention to the TV. Mr. and Mrs. Wilson aren’t watching the TV either. They do not like to watch cartoons.

(Using the Simple Present or the Present Progressive, no date)

Narrative tenses
Past Simple and Progressive

Production activity one: mechanical drill - (focus-on-form)
Irregular Past Participles
Make the past participle:
1. She has never __________________ (let) her daughter have a boyfriend.
2. Have you already __________________ (read) today's newspaper?
3. The house has been __________________ (sell).
4. He has __________________ (lose) his wallet again.
5. I have __________________ (write) three essays this week.
6. That clock was __________________ (make) in Switzerland.
7. He had __________________ (run) 6 miles when he hurt his ankle.
8. I have never __________________ (see) such a beautiful view.
9. He has __________________ (teach) hundreds of students during his career.
10. Have you ever _____________________ (meet) a famous person?
11. Because she hadn't _____________________ (pay) the bill, the electricity went off.
12. They have _____________________ (send) Christmas cards to all their friends.
13. Where have we _____________________ (put) the car keys?
14. We have never _____________________ (sing) in public before.
15. She had _____________________ (wear) her blue dress many times.
16. John had never _____________________ (speak) English before he came to London.
17. Why have you _____________________ (stand) up? Are we leaving?
18. Have you ever _____________________ (swim) in the Atlantic Ocean?
19. It had _____________________ (take) three hours to reach the station, so they missed the train.
20. I have never _____________________ (say) that I didn't love you.
21. David jumped into the air. He had _____________________ (sit) on a drawing pin.
22. The weatherman had _____________________ (tell) us it would be sunny, but it rained all day.
23. I'm sorry I'm so tired. I haven't _____________________ (sleep).
24. Have you _____________________ (think) about changing jobs?
25. He'd thought he had _____________________ (understand) the problem, but now he realised he had made a mistake

(Perfect English Grammar, 2008)

Production activity two: mechanical drill (focus on form)
B. Write either the simple or the continuous form of the verb in brackets. Use only the past tense; non-perfective aspect.

1. The sun_________________ (rise) at 6:00
2. The children were frightened because it _____________________ (get) dark.
3. The aeroplane in which the football team (travel) crashed soon after taking off.
4. Tom_________________ (sit) in a corner with a book. I told him that he_________________ (read) in a very bad light.
5. I went into the garden to see what the boys_________________ (do). James_________________ (weed) and Alexander (cut) the grass.
6. I'm afraid there is no more bread. We_________________ (eat) it all last night. In any case it_________________ (go) sale.
7. At school we_________________ (study) two foreign languages.
8. The exam had just begun and the candidates_________________ (write) their names at the top of the papers.
9. She_________________ (live) in Rome for a long time.
10. The teacher (tell) us about it this morning.
11. I_________________ (see) you from yesterday from the bus. Why you (use) a stick? I (use) a stick because I had hurt my leg that morning falling off form a horse. Whose horse you (ride)?
12. As I _________________ ( cross ) the road I _________________ ( step ) on a banana skin and _________________ ( fall ) heavily.
13. She was very extravagant. She always _________________ ( buy ) herself new clothes.
14. At eight they _________________ ( eat ) breakfast.
15. Between one and two I _________________ ( do ) the shopping and _________________ ( walk ) the dog.

(Thomson, and Martinet, 1980)

Input-output cycles: The Simple Past and past continuous

Step1 - Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input1).
Step2 - Put the passage away. Reconstruct the passage as accurately as possible (Output1).
Step3 - Class discussion. Important ideas are written on the black board.
Step4 - Show the passage a second time (Input2) and were directed to underline it as in Step1. As in step 2, reconstruct the text as accurately as possible on another output sheet (Output2).

A DISASTROUS DINNER

Last Friday, Mrs. Anderson planned to have a delicious dinner. She bought a T-bone steak and some cream and apples for an apple pie. When she came home from the shops she put her shopping on the table. While she was setting the table, her two pets sat underneath it and watched her. Then she went to the kitchen to make the pastry for the pie. She was a little forgetful so she didn’t realize he steak, cream and apples were still on the table.

While she was making the pastry, the dog jumped on a chair and looked longingly at the steak. At last it took the steak in its mouth and jumped off the chair, just as Mrs. Anderson was coming back into the dining room.

Mrs. Anderson screamed, but the dog ran into the garden. She ran after the dog. While she was chasing the dog, the cat jumped on the table and started drinking the cream.

Mrs. Anderson didn’t manage to catch the dog, and she came back into the dining room. When she saw the cat, she shrieked, and the cat got such a fright that it jumped a meter into the air, and leapt out the window. Mrs. Anderson threw her broom at the cat, but she missed, and broke the window. At the same time she overbalanced and put her hand in the cream, spilling it all over the tablecloth.

Poor Mrs. Anderson - she had no dinner, only a dirty tablecloth and a broken window.

( Past Simple and progressive, English To Go, 2006)
Production activity three: Written production
Say what all these people were doing when the boss opened the door.
(The New Midlines, 2003, p.34)
Production activity four: Written production
Please rewrite Pasteur’s life. Use the verbs the input text, activity 1 and 2 on Pasteur’s life.

Production activity five: written production
An accident took place yesterday on the road to Algiers. Look at the pictures below and write a paragraph describing the accident.
(The New Midlines 2003, p.37)
Present perfect Simple or Continuous

Production activity one: mechanical drill-(focus on form)

Write either the simple or the continuous form of the present perfect

1. It ___________________ (not / rain) for three hours! Only about one hour.
2. How long ________________ (you / live) in London?
3. How long ________________ (you / wait) for the bus?
4. He ________________ (never / be) abroad.
5. ________________ (they / arrive) already?
6. Julie ________________ (not / eat) anything today.
7. She ________________ (drink) ten glasses of water!
8. How long ________________ (you / be) a lawyer?
9. It ________________ (not / rain) all summer, so the garden is dead.
11. She ________________ (have) parties every week for ten years.
12. I ________________ (have) my dog for sixteen years.
13. How long ________________ (Julie / have) problems at school?
14. It ________________ (snow) since last night.
15. How long ________________ (you / think) about changing your job?
16. She ________________ (eat) chocolate all morning so she feels sick.
17. I ( buy ) a new carpet. Come and look at it.
18. It ________________ (rain) but it ( stop) now.
19. He ________________ (teach ) in the school for five years.
20. It is three years since I ________________ (see) Bill

(Perfect-English-Grammar 2010, self designed)

Production activity two: mechanical drill(focus on form)

Rachid is being interviewed for a job. The words ‘for’ and ‘since’ are missing in the questions and answers.

Interviewer: How long have you been working in sales?
Rachid: (1) __________ 2002.
Interviewer: And I see you’ve been working in London (2) __________ five years. Is that right?
Rachid: Yes, I’ve been here (3) __________ I graduated.
Interviewer: And what about other languages. Can you speak any?
Rachid: Well, my mother’s Italian so I’ve been able to speak Italian (4) __________ I was a little girl. I learnt French at school so I’ve been able to speak that (5) __________ more than 10 years.

Interviewer: Now, I presume you’re used to working with computers?
Rachid: Oh yes. I’ve worked with them (6) __________ years.

Interviewer: Now have you got any questions for me?
Rachid: Yes. I was wondering how long you’ve worked here.

Interviewer: Well, I was one of the first people to work here so I’ve been here (7) __________ a very long time, (8) __________ 1982, in fact.

Production activity three :meaningful drill (focus on form and function

Survey questions
In pairs write five questions for a survey on the topics below:
-food, drinks ,countries, emailing people,etc,
e.g., question : have you ever eaten …?

Collected results on 1)Yes I have . 2) No, I have never…are discussed.

Production activity three: input-output cycles

Step1- Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input 1)
Step2- Put the passage away . Reconstruct the passage as accurately as possible (Output 1).
Step 3-Class discussion . Important ideas are written on the black board
Step4- shown the passage a second time (Input 2) and were directed to underline it as in Step 1.As in step 2 , reconstruct the text as accurately as possible on another output sheet(Output 2).

Text for reconstruction task :

The Present perfect tense

Computers
Since computers were introduced to the public in the early 1980's, technology has changed a lot. The first computers were simple machines designed for basic tasks. They didn’t have much memory and they weren’t very powerful. Early computers were often very expensive and customers often paid thousands of dollars for machines which actually did very little. Mostly they were used as expensive typewriters or for playing games. Nowadays, however, computers have become powerful machines with very practical tools. Programmers have created a large selection of useful programs which do everything from teaching foreign languages to bookkeeping.

(Verb Tenses, 2004)
Production activity four: dictogloss Task
- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:

The simple past, the present perfect simple and progressive

Hot snake

At last firemen have put out a big forest fire in California. Since then they have been trying to find out how the fire began. Forest fire are often caused by broken glass or by cigarette ends which people carelessly throw away. Yesterday the firemen examined the ground carefully, but were not able to find any broken glass. They were also quite sure that a cigarette end did start the fire. This morning, however, a fireman accidentally, discovered the cause. He noticed the remains of a snake was wound round the electric wires of a 16,000-volt power line. In this way, he solve able to solve the mystery. The explanation was simple but very unusual. A bird had snatched up the snake from the ground and dropped it onto the wires. The snake then wound itself round the wires. When it did so, it sent sparks down to the ground and these immediately started a fire.

(Practice and Progress 1973, p.135)

Past Perfect Simple/progressive
Present perfect Simple or Continuous

Production activity one: mechanical drill—(focus on form)

Write either the simple or the continuous form of the present perfect

1. It ___________________ (not / rain) for three hours! Only about one hour.
2. How long ___________________ (you / live) in London?
3. How long ___________________ (you / wait) for the bus?
4. He ___________________ (never / be) abroad.
5. ___________________ (they / arrive) already?
6. Julie ___________________ (not / eat) anything today.
7. She ___________________ (drink) ten glasses of water!
8. How long ___________________ (you / be) a lawyer?
9. It ___________________ (not / rain) all summer, so the garden is dead.
11. She ___________________ (have) parties every week for ten years.
12. I ___________________ (have) my dog for sixteen years.
13. How long ___________________ (Julie / have) problems at school?
14. I ___________________ (read) your book all day, it’s very interesting.
15. How long ___________________ (you / think) about changing your job?
16. She __________________ (eat) chocolate all morning so she feels sick.
17. I ( buy ) a new carpet. Come and look at it.
18. It __________________ (rain) but it ( stop) now.
19. He __________________ (teach ) in the school for five years.
20. It is three years since I__________________ (see) Bill

( Perfect-English-Grammar 2010, self-designed)

Production activity two: mechanical drill(focus on form)

Rachid is being interviewed for a job. The words ‘for’ and ‘since’ are missing in the questions and answers.

Interviewer: How long have you been working in sales?
Rachid: (1) __________ 2002.
Interviewer: And I see you’ve been working in London (2) __________ five years. Is that right?
Rachid: Yes, I’ve been here (3) __________ I graduated.
Interviewer: And what about other languages. Can you speak any?
Rachid: Well, my mother’s Italian so I’ve been able to speak Italian (4) __________
I was a little girl. I learnt French at school so I’ve been able to speak that
(5) __________ more than 10 years.
Interviewer: Now, I presume you’re used to working with computers?
Rachid: Oh yes. I’ve worked with them (6) __________ years.
Interviewer: Now have you got any questions for me?
Rachid: Yes. I was wondering how long you’ve worked here.
Interviewer: Well, I was one of the first people to work here so I’ve been here
(7) __________ a very long time, (8) __________ 1982, in fact.

( Self-designed)

Production activity three: meaningful drill (focus on form and function

Survey questions
In pairs write five questions for a survey on the topics below:
- food, drinks, countries, emailing people, etc,
  e.g., question: have you ever eaten …?
Collected results on 1) Yes I have. 2) No, I have never…are discussed.

Production activity three: input-output cycles

Step1- Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input 1)
Step 2- Put the passage away. Reconstruct the passage as accurately as possible (Output 1).

Step 3 - Class discussion. Important ideas are written on the blackboard

Step 4 - shown the passage a second time (Input 2) and were directed to underline it as in Step 1. As in step 2, reconstruct the text as accurately as possible on another output sheet (Output 2).

Text for reconstruction task:

The Present perfect tense

Computers

Since computers were introduced to the public in the early 1980's, technology has changed a lot. The first computers were simple machines designed for basic tasks. They didn’t have much memory and they weren’t very powerful. Early computers were often very expensive and customers often paid thousands of dollars for machines which actually did very little. Mostly they were used as expensive typewriters or for playing games. Nowadays, however, computers have become powerful machines with very practical tools. Programmers have created a large selection of useful programs which do everything from teaching foreign languages to bookkeeping.

(Verb Tenses, 2004)

Production activity four: dictogloss Task

- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:

The simple past, the present perfect simple and progressive

Hot snake

At last firemen have put out a big forest fire in California. Since then they have been trying to find out how the fire began. A forest fire is often caused by broken glass or by cigarette ends which people carelessly throw away. Yesterday the firemen examined the ground carefully but were not able to find any broken glass. They were also quite sure that a cigarette end did start the fire. This morning, however, a fireman, accidently, discovered the cause. He noticed the remains of a snake was wound round the electric wires of a 16,000-volt power line. In this way, he solves able to solve the mystery. The explanation was simple but very unusual. A bird had snatched up the snake from the ground and dropped it onto the wires. The snake then wound itself round the wires. When it did so, it sent sparks down to the ground and these immediately started a fire.

(Practice and Progress 1973, p.135)
Past Perfect Simple/progressive

Production activity two: mechanical drill (focus on form)

A. Supply the past perfect or the simple past.

1. When he _______________ (see) all the pictures he _______________ (express) amazement that one man should have painted so many.
2. After the teacher _______________ (leave) the room, the children _______________ (start) talking.
3. She _______________ (decide) to go to the country by the time her mother _______________ (return).
4. It _______________ (seem) that fate _______________ (take) the matter out of her hands.
5. After she _______________ (break) her promise, she _______________ (be) filled with remorse.
6. They _______________ (saw); that’s why they _______________ (be) covered in sawdust.
7. It _______________ (rain); and the streets _______________ (be) still wet.
8. The doctor took off the plaster that he _______________ (put on) six weeks before.
9. I could not remember the poem we _______________ (learn) the week before.
10. He didn’t realize that he _______________ (go) through a red light, until a policeman _______________ (stop) him.
11. They wondered where she _______________ (go).
12. When we _______________ (arrive) at the station, the train had already left.
13. I opened my handbag to find that I _______________ (forgot) my dictionary.
14. She _______________ (change) so much that I didn’t recognize her.
15. When their mother arrived home, the children _______________ (finish) their homework.
16. The meeting _______________ (start) when I arrived at the office.
17. The meeting was at nine o’clock. When I _______________ (arrive) at ten, the meeting had finished.
18. When I _______________ (wake up) this morning, my roommate _______________ (leave) already.
19. Before I arrived at the theater, the movie had already begun.
20. I _______________ (leave) already my house before you came to pick me up.

(Thomson, A.J. and Martinet, A.V.1980, self-designed)

Production activity five: dictogloss Task
- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:
The Past perfect simple

A Terrible Day
I had a terrible day last week. When I woke up for my morning class, my roommate had already left. It was around 8 o’clock and I was alone as all of the students had gone to classes. I’d just finished my breakfast and was about to leave when I saw that the rubbish bin needed emptying. So I picked up the bin and went to take it outside. I opened the front door and went along the corridor to put the rubbish bin out for collection. As I put the bin down, I felt a current of cold air blowing and heard a bang. When I got back to my room, I found that the door was closed. The wind had blown it shut. I looked for my keys in the pocket of my pyjamas, but I realised that I had left them inside. I knocked at my neighbour’s door, but they had gone to their classes. So I went down to the security man but they told me he had gone out and hadn’t come back yet. So I had to wait in the corridor outside my room until my roommate came at lunch time.

(Self-designed)

Future tenses
Production activity one: mechanical drill (focus on form)

Will / Be Going To
1. A: Why are you holding a piece of paper?
B: I (write) a letter to my friends back home in Texas.

2. A: I'm about to fall asleep. I need to wake up!
B: I (get) you a cup of coffee. That will wake you up.

3. A: I can't hear the television!
B: I (turn) it up so you can hear it.

4. We are so excited about our trip next month to France. We (visit) Paris, Nice and Grenoble.

5. Sarah (come) to the party. Oliver (be) there as well.

6. Ted: It is so hot in here!
Sarah: I (turn) the air-conditioning on.

7. I think he (be) the next President of the United States.

8. After I graduate, I (attend) medical school and become a doctor. I have wanted to be a doctor all my life.

9. A: Excuse me, I need to talk to someone about our hotel room. I am afraid it is simply too small for four people.
B: That man at the service counter (help) you.
10. As soon as the weather clears up, we (walk) down to the beach and go swimming.
(Verb Tenses, 2004)

Production activity two: mechanical drill (focus on form)

Write either the future simple or the future continuous tense.

1. I am sure that you (like) our new house.
2. If you (learn) another language you (get) a better job.
3. If you (think) it over you (see) that I am right.
4. Notice: the management (not be) responsible for articles left on the seats.
5. When we reach England it very likely (rain)
6. I'll call for her at eight.
   No, she still have breakfast then.
7. I (wait) for you when you come out.
8. When you next see me I (wear) my new dress.
9. My son will be in the sixth form next year.
   That means that old Dr Adder (teach) him mathematics.
10. You (do) geometry next term.
11. In a hundred year's time people (go) to Mars for their holiday.
12. I (see) you again.
13. Announcement: Mr Pitt (present) the prizes.
14. You pay and I (owe) you the money.
15. Don't ring her up at 6.00; she (put) the children to bed. Ring later.

(Thomson, A.J. and Martinet, A.V.1980)

Production activity three: mechanical drill (focus on form)

Fill in each blank with the correct words to change each present continuous tense sentence into a future perfect tense sentence:

Eg., I am reading a story: By this time tomorrow, I will have read the story.

1. I am writing a book.
   By this time next month, I __________________________ the book.
2. My mother is making dinner.
   By the time the guests arrive, my mother __________________________ dinner.
3. My sister and I are painting our apartment.
   By this time next week, my sister and I __________________________ our apartment.
4. They are inviting all their friends.
   By you come back, they __________________________ all their friends.
5. She is cleaning the house.
   By the time his parents arrive, she __________________________ the house.

(Self-designed)
B. Put the verbs in brackets into the future perfect tense. Say which actions can be expressed as progressive actions.

1. In a fortnight’s time, we (take) our examination.
2. I (finish) this book tomorrow evening.
3. By the end of next year (be) here twenty-five years.
4. I’ll still be here next summer but Tom (leave).
5. By next winter, they (build) four houses in that field.
6. By this time next year I (save) £250.
7. The train (leave) before we reach the station.
8. By midnight he (be) unconscious for forty-eight hours.
9. By the end of the month 5,000 people (see) this exhibition.
10. By next April I (pay) £3,000 in income tax.

(Thomson, A.J. and Martinet, A.V. 1980)

Production activity one: meaningful drill (focus on form and function)

Write the passage again. Change the verbs so that they tell us what will happen.

I went to the theatre with my friend Reg. Reg and I saw the first performance of a play called ‘The End of the Road’. After the play the producer gave a short speech. He spoke to the audience about the play. The play successful and I think a great many people enjoyed it very much.

(Practice and Progress, 1973, p. 36)

Production activity one: communicative (focus on meaning)

Future plans
2 In pairs, use the prompts 1-6 and the phrases to discuss your future plans. Use these expressions: I’m thinking about … I’m probably going to … I’m not sure yet, but …

1. Learning to drive or buying a new car.
2. Investing in a holiday home to escape to whenever you like.
3. Improving your English.
4. Getting better at one of your current hobbies.
5. Planning a break to somewhere you’ve never visited.
6. Decorating or improving where you live at the moment.

Production activity one: communicative (focus on meaning)
2 In pairs, discuss questions 1-4.
1. How will you be spending your time this evening?
2. How many mobile phone texts or phone calls do you think you’ll have
made by this time tomorrow?
3 Will you be spending much time studying English this weekend?
4 Are there any countries you definitely want to have visited by the time you’re thirty.

Production activity three: input-output cycles

Step1- Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input 1)
Step2- Put the passage away. Reconstruct the passage as accurately as possible (Output 1).
Step 3-Class discussion. Important ideas are written on the black board
Step 4- shown the passage a second time (Input 2) and were directed to underline it as in Step 1.As in step 2, reconstruct the text as accurately as possible on another output sheet(Output 2).

Text for reconstruction task
The simple future
Cycling through Africa

Twenty-nine-year-old French Man Bernard Colso and his dutch wife Geertruida Koop aged 24, are going to set out from Oran on a 30.000 km-trip through Africa on two wheels. After a short stay in Algiers, they intend to travel to Constantine and later head towards El-Oued. From there, they are planning to join Reganne via Timimoun and Adrar. Then they will carry on with their trip to Mali. Their itinerary will lead them to central and East Africa. Up to that point, the journey will have taken over 18 months. The two globe-trotters are thinking of cycling through the Sudan and Egypt before taking the plane to France. Their Journey will last nearly 22 months.

(Adapted form The New Midlines 2003,p.24)
Appendix D  
Testing instruments  

Listening Comprehension (Interpretation test)  

Text  

One day, I decided to make a lovely cup of tea. I thought it would be nice to eat some biscuits while I was drinking the tea, so I put some bus kits onto the plate. Sven, by budgie, stood on my shoulder watching me very, very carefully. After that, I went into the lounge and drank my tea. Suddenly Steve, flew, landed on my nose, reached down and bit me very hard on the lips. Arghh! I shouted and dropped the e-biscuit on the floor. Tea spilled over my shirt. Sven flew away quickly, shouting, ’’incredible’’. Well, after that I went into the kitchen and washed my shirt under the tap. It was covered in tea. I didn’t know, but when I was in the kitchen, Sven very, very, very carefully dropped all of the biscuits into my cup of tea. Finally I came back into the lounge. I was very surprised, I heard a small voice ’’hello’’. I looked… Sven was standing on the plate, but there were no biscuits. ’’Oh my God’’, I thought, ’’He’s eaten all the biscuits’’. I was surprised again when I drank the tea and found that the tea was full of biscuits.

(Teaching with Pictures, eslflow.com, no date)  
www.eslflow.com/Picturelessonsandteachingideas.html
Verb Tenses
These verbs will be used in a story that you are going to listen to. Write the past tense form of the verbs.
drop ............................................... fly ...........................................
think ............................................... bite ........................................
see ............................................... wash ........................................
drink ............................................... put ........................................
land ............................................... spill ........................................

2. Look at these pictures. They illustrate a story you are going to listen to. Guess the order of the pictures.

1. ( )
2. ( )
3. ( )
4. ( )
5. ( )
6. ( )
Choose the correct verb to match the tense in the (parentheses).
Directions: below is a passage from which some verbs have been removed. Read the passage quickly to get its general meaning then go back to the beginning and write the missing words using the verb and the corresponding tense before the blank. If you are not sure of an answer leave the blank and continue on to the next verb. Once you have finished do not go back and change your answer.
Example: now I (write) (present simple). . . am writing... a letter . I (see) (future simple)... will see... you in the afternoon.

Said always (travel) (present perfect) ____________ a lot. In fact, when he (be) (simple past) ____________ only two years old when he first (fly) (simple past) ____________ to Tunisia. His mother (be) (simple present) ____________ Italian and his father (be) (simple present) ____________ Algerian. Said (be born) (simple past (passive)) ____________ in France, but his parents (meet) (past perfect) ____________ there for five years. They (meet) (simple past) ____________ one day while Said’s father (read) (past continuous) ____________ a book in the library and his mother (sit) (simple past) ____________ down beside him. Anyway, Said (travel) (simple present) ____________ a lot because his parents also (travel) (simple present) ____________ a lot.

As a matter of fact, Said (visit) (present continuous) ____________ his parents in France at the moment. He (live) (simple present) ____________ in Tunisia now, but (visit) (present perfect continuous) ____________ his parents for the past few weeks. He really (enjoy) (simple present) ____________ living in Tunisia, but he also (love) (simple present) ____________ coming to visit his parents at least once a year.

This year he (fly) (present perfect) ____________ over 50,000 miles for his job. He (work) (present perfect continuous) ____________, for a software company for almost two years now. He (be) (simple present) ____________, pretty sure that he (work) (future continuous) ____________ for them next year as well. His job (require) (simple present) ____________ a lot of travel. In fact, by the end of this year, he (travel) (future perfect) ____________ over 120,000 miles! His next journey (be) (simple future) ____________ to New Zealand. He really (not like) (simple present) ____________ going to New Zealand because it is so far. This time he is going to fly from Paris after a meeting with the company’s partner. He (sit) (future perfect continuous) ____________ for over 17 hours by the time he arrives!

Said (talk) (past continuous) ____________ with his parents earlier this evening when his sister (telephone) (simple past) ____________ to let him know that the software company (decided) (past perfect) ____________ to merge with another company in New Zealand. The two companies (negotiate) (past perfect continuous) ____________ for the past month, so it really (not be) (simple past) ____________ much of a surprise. Of course, this (mean) (simple present) ____________ that Said will have to catch the next plane back to Tunisia. He (meet) (future continuous) ____________ with his boss at this time tomorrow.

(Adapted from English Verb Resources by Kenneth Beare, About.com, no date)
Grammaticality Judgement Test

In this test, you will read a number of sentences. We want you to concentrate on how you feel about these sentences. Native speakers of English often have different intuitions about such sentences, and there are no right or wrong answers. We want you to tell us for each one whether you think it is possible or impossible in English. Read each sentence carefully before you answer. If you think a sentence is good, circle G (grammatical) next to it. If you consider it a bad English sentence, circle U (ungrammatical). For each sentence, circle only ONE of the answers (either G or U) to show us what you think of this sentence. If you cannot make a judgement leave the sentence blank. Do not go back and change your answers.

Example: Lucy always watches television after school……G……

1. She is finding her watch. .................................................................
2. He ate a cake for an hour. .................................................................
3. By this time next year I will write three chapters. .................................................................
4. It is developed our knowledge. .................................................................
5. They are living in a rented house. .................................................................
6. He said that there is a ball in the water. .................................................................
7. I will come before he will leave. .................................................................
8. I am getting up at 7 every morning .................................................................
9. She always talk a lot. ........................................................................
10. She cannot to come. ........................................................................
11. Julius Caesar has expanded the Roman Empire. .................................................................
12. After he will come we will greet him. .................................................................
13. I didn’t see him since I met you. .................................................................
14. I am seeing my lawyer tomorrow. .................................................................
15. Queen Victoria has reigned for sixty-four years. .................................................................
16. It was foggy since early morning. .................................................................
17. They built a house for two weeks. .................................................................
18. He always carried an umbrella. .................................................................
19. Beethoven has written nine symphonies. .................................................................
20. They finished the exam for less than an hour. .................................................................
21. He left early to catch the last train. .................................................................
22. He lived here all his life. .................................................................
23. I have been to the theatre last night. .................................................................
24. We have left three months ago. .................................................................
25. I am knowing you. ........................................................................
26. The show starts at 7:30 tonight. .................................................................
27. She is recognizing him. .................................................................
28. Our class was winning the race. .................................................................
29. We have written a letter to the Minister last month. .................................................................
30. Genghis Khan conquered China in the early 13th century. .................................................................
31. They saw that movie last month. .................................................................
32. I am seeing someone through the window .................................................................
33. It has been raining since noon. .................................................................
36. He was in the army for two years.
34. The Wright brothers built the first airplane.
35. She smelt something burning.
36. I have seen him last week.
37. It rains tomorrow.
38. Napoleon became emperor of France in 1804.
40. They assembled the bicycle in three hours.
41. Yes, I’m understanding you.
42. He always write long letters
43. He is looking as if he enjoys himself.
44. That sewing machine has been broken for three weeks.
45. Larry washed his car this morning.

An outline of the various problems tested with illustrative examples:

be + infinitive for infinitive
   We are live in this house

Wrong form after modal verb
   She cannot to come

infinitive for infinitive+s
   She always talk a lot.

be + verb + ing for infinitive
   I am getting up at 7 every morning.

Wrong verb form in adverb clause of time
   I will come before he will leave

Error in tense sequence
   He said that there is a ball in the water.

‘Since’ requires perfect
   It was foggy since early morning

Perfect not approriate with situation time.
   I have seen him last week.

Use of simple future tense for future perfect
   By this time next year I will write three chapters.

Perfect not appropriate when talking about the dead
   Shakespeare has written a lot of plays.
Accomplishment verb incompatible with simple duration
  He ate a cake for an hour.

Progressive incompatible with verbs of inert perception
  Yes, I’m understanding you.

Verb not appropriate with progressive(achievement)
  She is recognizing him

Futurate (unexpected future reference) only used for planned events
  It rains tomorrow.

Picture description task
Instructions for the picture description task: You are going to have eight numbered pictures. These pictures tell a story. Based on the pictures learner’s write sentences describing what is shown and tell the story that is suggested. Students were told that they should aim at grammatical accuracy, textual cohesion, and logical sense.

Pictures use in the description task
Appendix E

The picture prompt

(from Azar Shampfer B., 2003)
Appendix F

Model passage

At 6:00 p.m., Bob sat at the table and began to eat. At 6:05, Bob was in the middle of dinner. While Bob was eating his dinner Ann came through the door. She likes Bob a lot and always enjoys her conversations with him.

Before going to bed, Bob prepared everything for the next day. His bedtime is at 10:30 pm. Bob was tired and immediately fell asleep. It’s 11:00. Trr… Trr… Trr… the telephone was ringing and Bob couldn’t answer it. He was sound asleep in his bed. But just another school day! In the morning when Bob woke up, got out of bed and prepared to go school. Bob left his house at 8:00 a.m. and began to walk to class. He goes to school on foot because it’s just down the street. While Bob was walking to school, he saw Mrs. Smith. When Bob saw Mrs. Smith, she was standing on her front porch. She was holding a broom. Mrs. Smith waved at Bob when she saw him. He greeted her with a smile on his face and continued on his way. Another school day!

(Adapted from Azar Shampfer B., 2003)
### Appendix G

Statistical Tables For Grammaticality Judgement Test

#### Table 1GJT (input-only group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>12.7368</td>
<td>1</td>
<td>12.7389</td>
<td>1.15</td>
<td>0.297717</td>
</tr>
<tr>
<td>group variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects error</td>
<td>497.8964</td>
<td>18</td>
<td>11.0702</td>
<td></td>
<td>0.889108</td>
</tr>
<tr>
<td>-Error</td>
<td>199.2652</td>
<td>18</td>
<td>11.0702</td>
<td></td>
<td>0.889108</td>
</tr>
<tr>
<td>Total</td>
<td>749.8947</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 2 GJT (input plus output group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>0.5329</td>
<td>1</td>
<td>0.5329</td>
<td>0.02</td>
<td>0.889108</td>
</tr>
<tr>
<td>group variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects error</td>
<td>518.0921</td>
<td>18</td>
<td>23.6718</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>426.0921</td>
<td>18</td>
<td>23.6718</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>944.7171</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table 3 Written gap fill production (input-only group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>4.11</td>
<td>1</td>
<td>4.11</td>
<td>0.23</td>
<td>0.6372</td>
</tr>
<tr>
<td>group variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects error</td>
<td>448.07</td>
<td>18</td>
<td>24.89</td>
<td></td>
<td>0.3791</td>
</tr>
<tr>
<td>-Error</td>
<td>320.70</td>
<td>18</td>
<td>17.89</td>
<td></td>
<td>0.0397</td>
</tr>
<tr>
<td>Total</td>
<td>775.8837</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4 Written gap fill production (input plus output group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group variance</td>
<td>4.1118</td>
<td>1</td>
<td>4.1118</td>
<td>0.12</td>
<td>0.7330</td>
</tr>
<tr>
<td>Within group Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects</td>
<td>8.317105</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>626.7632</td>
<td>18</td>
<td>34.8202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1462.5855</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistical Tables For Picture Description

Table 5 Picture Description (input-only group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group variance</td>
<td>19.115</td>
<td>1</td>
<td>19.115</td>
<td>1.66</td>
<td>0.003549</td>
</tr>
<tr>
<td>Within group Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects</td>
<td>51.2206</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>26.25</td>
<td>16</td>
<td>164.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>96.5956</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 Picture Description (input plus output group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group variance</td>
<td>9.5294</td>
<td>1</td>
<td>9.5294</td>
<td>6.3</td>
<td>0.23203</td>
</tr>
<tr>
<td>Within group Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects</td>
<td>28.3676</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>24.2206</td>
<td>16</td>
<td>1.5138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.117633</td>
<td>333</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix H

**Learners' linguistic concerns during the initial written production task**

<table>
<thead>
<tr>
<th>N°</th>
<th>Lexis</th>
<th>Form</th>
<th>Mechanics/punctuation</th>
<th>Discourse</th>
<th>Content</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>- ‘And in his way he saw his neighbour and said Hi’: I don’t know how I say: eg: someone say hi and the other say too hi to greet</td>
<td>- ‘when he slept the phone start ringing’, What is the past of ring?</td>
<td>‘Homework’ one word or two</td>
<td></td>
<td>What does the second picture discuss?</td>
<td></td>
</tr>
</tbody>
</table>
| S2 | - I wrote ‘It was six o’clock PM Bob had dinner’: I’m not sure if we say have dinner or take dinner,, I think it’s not to take dinner the first is better  
- ‘It was six and five PM’, I don’t know how to write the time  
- I’m not sure about the preposition for morning I think it should be in |                             |                             |                             | I could’t express entirely the picture 7                               | I don’t know who is the woman in the third picture                      |
| S3 | - ‘When he saw his voisine’ I don’t know how to write ‘voisine’ in English, perhaps its nebor | -- I wrote ‘he started to eat’ I’m not sure if it is correct may be it should be ‘he started eating’ I don’t know the rule  
- ‘he go to bed or he went to bed’  
I’m not sure, perhaps it should be past |                             |                             |                                                                |                                                                      |
| S4 | I don’t know how I can use the time | - The alarm o’clock ‘rang’  
I am not sure that is the past of ring’ |                             |                             | In general I don’t write with more detail as the paragraph |                                                                      |
| S5 | | | | | - I don’t know how to use sentences |                                                                      |
| S6 | | | | | - I wrote he go to the bed but it is not correct, may be the correct is ‘he went’ |                                                                      |

266
<p>| S7 | -I can’t find the English word for what was in the hand of the woman so I don’t use it | -I don’t know how to begin paragraph -I don’t know how to coordinate events |
| S8 | -‘Bob was in the dinner room’ I’m not sure that we say dinner room; I don’t find the correct word so I put dinner room | Bob ate when her mother was entering in the the room: I don’t know if she is her mother |
|  | -I wrote :At 10:30 Bob was going to sleep: I’m not sure for the tense may be it’s simple past ‘went’ not past continuous | In my paragraph I just wrote what did Bob not where he was, I didn’t give many details |
| S9 | -I have a problem with preposition and ask you to advise me | I don’t know how to combine sentences |
|  | -I’m not sure if we say ‘Bob was going to finish eating’ - In the morning he waked up (woke up) early. I wrote he waked up early; I think it’s it should be irregular | I can’t find the fit words to describe my ideas |
|  | I can’t talk about all the details |
| S10 | -I say took his dinner, I think it’s right | I know what he paragraph is talking but I can’t express |
| S11 | -I don’t know which tense in ‘At 6:05 he ate his food that founded on the plate’ -I don’t know which tense in ‘He was sleeping till eleven and half that the alarm was ringing |
| S12 | -Is saluted correct? I can’t find another other word | I wrote Bob at six o’clock took dinner ‘but I’m not sure -I wrote Bob at one past six was taking dinner but I’m not sure - : I wrote::He was finishing her dinner when her mother entered the kitchen I’m not sure if this sentence is correct. I don’t know I think it’s correct. |
|  | 4 |
| S13 | I wrote Bob at six o’clock took dinner ‘but I’m not sure -I wrote Bob at one past six was taking dinner but I’m not sure -I wrote ‘taking dinner’ but I’m not sure: ‘Bob at | ‘Bob was going to school’ I don’t what picture 7 is describing |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S14</td>
<td>six o’clock was taking dinner at two past six and a woman was stand behind him’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S15</td>
<td>‘When he was finished eating his mother took the plate.I don’t know if the tense is correct perhaps it is only finished</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S16</td>
<td>-I don’t know how to say some words in English</td>
<td>I don’t know how to begin the paragraph</td>
<td></td>
</tr>
<tr>
<td>S17</td>
<td>-I don’t know to say the tool’name that his Justin’s mother using mother is using</td>
<td>I wrote finally but I’m not sure if it’s correct: ‘Finally Justin waved to his mother’</td>
<td>‘he went to sleep at 10:30: I don’t know whether picture is describing the morning or evening because if it’s the morning it would be 22:30 not 10:30 I didn’t write in details</td>
</tr>
<tr>
<td>S18</td>
<td></td>
<td></td>
<td>-I don’t know how to express picture 7</td>
</tr>
<tr>
<td>S19</td>
<td>How do you express past continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S20</td>
<td>-I don’t know how to say ‘servante’ in English and ‘la table sur laquelle on mange.In English -I really have a miss of vocabulary.I wrote the word that I don’t know their meaning in English at French</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S21</td>
<td></td>
<td>I can’t give the details when he went to sleep</td>
<td></td>
</tr>
<tr>
<td>S22</td>
<td>-I don’t know the the lady of housework</td>
<td></td>
<td>-I saw Bob going to</td>
</tr>
</tbody>
</table>

268
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>S23</td>
<td></td>
<td>-I don't know if he is correct. spelling for 'neighbour'</td>
<td>school on foot but I don't know why</td>
<td></td>
</tr>
<tr>
<td>S24</td>
<td></td>
<td>John at six o'clock came to his home I don't know if its correct He woke up and said to his Grandmother hello I don't know if its correct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S25</td>
<td>-I have problems with prepositions</td>
<td>I'm not sure if it is correct. I wrote:he was slept at 10:30. 'perhaps it should be slept</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- I don’t know to say the tool name</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S26</td>
<td>-I don’t know which step of education he is.</td>
<td>I don’t know how to describe the woman in the first picture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instead of said details I just said the actions on the picture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S27</td>
<td>-I don’t know how to say greeting in ' an old man who wave to hi and did too’</td>
<td>-I don't know the spelling of the verbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I don’t know if it is morning or night in the picture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S28</td>
<td>I have some problems to give the right tense like the verb to 'ring' the difference between simple past and past continuous:he couldn’t hear the ring of the phone</td>
<td>-I have some vocabulary problem:toock up his breakfast toock or took:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-I don’t find the right expressions to describe the action of Mrs Smith (picture 7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S29</td>
<td>I don’t know how to say the time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I don’t know how to say well my ideas in English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S30</td>
<td>I don’t know how to describe the last picture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S31</td>
<td>I can’t find the words to describe my ideas.</td>
<td>I don’t write all things and exactly things</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S32</td>
<td>I don’t know how to say the tool name</td>
<td>- The phone was ringing at 11:30. I used the past continuous but I don’t know if it is true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S33</td>
<td>- I don’t know how to describe the end</td>
<td>- I don’t know what picture 5 is describing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Next at 10:30 he went to sleep</td>
<td>I wrote next but I’m not sure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix I

**Noticing during the comparison stage**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Note taking episodes</th>
<th>Category</th>
<th>Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>-Instead of Ann I wrote his mother then his mother asked him if he finished dinner</td>
<td>C</td>
<td>-When it was 6:10 came Ann through the door</td>
</tr>
<tr>
<td>S2</td>
<td>-Instead of 6:00 pm, I wrote the time in letters</td>
<td>L</td>
<td>-He sat at the table before the dinner at 6:00 pm</td>
</tr>
<tr>
<td></td>
<td>I think it should be better don’t mention the woman who came through the door</td>
<td>C</td>
<td>-it was 6:00 pm, when Ann came through the door</td>
</tr>
<tr>
<td></td>
<td>I intended to say the didn’t answer the phone but I thought it wasn’t necessary</td>
<td>C</td>
<td>-He was still sleeping when the telephone rang at 11:30 but he couldn’t answer it</td>
</tr>
<tr>
<td></td>
<td>I couldn’t express entirely the picture 7</td>
<td>C</td>
<td>-It was morning he went to school</td>
</tr>
<tr>
<td></td>
<td>I should have said the time when he went to school but it was not on the picture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>-I wrote when: Bob was eating but in the model text says ‘Bob was in the middle of dinner</td>
<td>G</td>
<td>-Bob was in the middle of dinner</td>
</tr>
<tr>
<td></td>
<td>-I wrote he started to eat and I’m not if it I correct. I don’t know the rule maybe the correct is one is ‘started eating’</td>
<td>G</td>
<td>-‘and started eating’</td>
</tr>
<tr>
<td>S4</td>
<td>-I should have said Bob sat at the table but I don’t write like this (the boy arrived from school then at 6:00 of afternoon he took dinner’)</td>
<td>C</td>
<td>-Bob was home again. He sat at that table and began to eat</td>
</tr>
<tr>
<td></td>
<td>-Simply I said then he went to sleep at 10:30</td>
<td>C</td>
<td>-the next day he was very tired so he went to sleep directly</td>
</tr>
<tr>
<td>S5</td>
<td>-Failed to complete the comparison task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>-I wrote:when he was still eating- the model text put ‘when he was in the middle of dinner’</td>
<td>C</td>
<td>-‘when he was in the middle of dinner’</td>
</tr>
<tr>
<td>S6</td>
<td></td>
<td>G</td>
<td></td>
</tr>
</tbody>
</table>
| S7 | Instead of ‘At 10 : 30 I wrote ‘It was 10 : 30’  
-I could’nt express the actions that Bob made it before sleep but the model text put. -‘He prepared everything before going to bed’  
-I intended to say :while Bob was walking to school he met Mrs Smith but I couldn’t imagine it | L | ‘At 10 :30 he went to bed’  
C | -left unresolved  
C | -left unresolved |
| S8 | I wrote‘at 10:30 Bob was going to sleep;Bob slept at 11 o’clock’ | G | ‘At 10:30 he was going to sleep then at 11:00, Bob slept’ |
| S9 | I wrote ‘waked’ up but the correct one is woke  
-I couldn’t describe the action of Bob and the woman. | G | -In the morning he woke up early  
C | -He met Mrs Smith and greeted her. She herself greeted him and prayed for him to succeed |
| S10 | I wrote :Bob when he came from school he took his dinner ; I think its grammatically wrong | C | -Bob was home again. At 6:00 he sat at the table |
| S11 | I wrote  
Bob brought his dinner at 6:00  
I say :at 6:05 he ate his dinner that founded on the table  
I think :after he finished , his mother came to take the plate should be………  
I say :he was sleeping till eleven and a half that the alarm was rining | C | -At 6 P.M.Bob sat at the table and began to eat  
C | -at 6:05 was in the middle of dinner  
C | -while Bob was Bob eating his dinner  
C | -Ann came through the door  
C | -at 11:00 while Bob was sleeping the telephone rang |
| S12 | Instead I wrote ‘Bob came back home’; Bob start to eat  
-I did not describe what was Mrs Smith holding  
-I did not think he was going to school that’s why I did not describe it  
-I intended to say ‘wave at’ but I said ‘saluted’. | C | -Bob was home again. He sat at the table and started eating at 6 o’clock.  
L | -left unresolved  
C | -In the morning Bob was going to school…  
L | -when he saw Mrs Smith.She waved at him |
| S13 | Instead of began to eat I wrote ‘took his dinner’  
-Bob at one past six was taking dinner  
- Instead of ‘was eating his eating his dinner’ I wrote ‘was taking his dinner  
- Instead of fell into a deep sleep I wrote ‘was sleeping’  
- Instead of telephone ‘rang’ I wrote ‘ring’ | C | -At 06:00 He sat at the table and began to eat his dinner  
C | - At 06:00 he was in the middle of his dinner  
C | -While he was eating Ann came through the door  
C | -Bob at 10:30 fell to deep sleep. |
- Instead of Bob woke up I wrote Bob was going to school

S14  
In my paragraph I wrote ‘when he was finished eating his mother took the plate’ but normally it is: ‘While Bob was eating his dinner Ann came through the door’
-I wrote ‘he go to bed at 10:30 but normally it is: ‘‘While Bob was sleeping the telephone rang’
-I wrote ‘in the morning the alarm was runing at 11:30 the reality is: ‘‘While Bob was sleeping the telephone rang’
-I wrote ‘finally Bob get up and went to his work’ but in the model paragraph: ‘‘In the morning at 8:00 Bob woke up he goes to school on foot’

S15  
- Failed to complete the task

S16  
- Failed to complete the task

S17  
- Instead of Bob I wrote Justin
-I didn’t think that there is much difference between my paragraph this one just in some detail like: Bob went to school on foot because school is just down the street.
- I intended to say Mrs Smith….. but I didn’t because I didn’t know the tool’s name and I thought that Mrs Smith is his mother

S18  
Failed to complete the task

S19  
- I wrote the time of Bob that come back home

S20  
- Failed to complete the task

- While he was sleeping at 11:30 his telephone rang
- The morning Bob woke up

- ‘While Bob was eating his dinner Ann came through the door’
- ‘Bob went to bed at 10:30’
- ‘While Bob was sleeping the telephone rang’
- ‘In the morning at 8:00 Bob woke up he goes school on foot’
- ‘While Bob was sleeping the telephone rang’
- ‘In the morning at 8:00 Bob woke up he goes school on foot’

Bob usually goes to school on foot because its near to his house
- At 8:00 Bob went to school he waved to Mrs Smith when she was in front of the door holding a broom

- At 06:00 Bob was home again
| S21 | Instead of he sat at the table and began to eat I wrote he was eating dinner | C | ‘he sat at the table and began to eat’ |
|     | -I didn’t know that there was Mrs Smith I depend on my ideas in the end of paragraph: Bob get up ,he said hellow to his mother | C | -Bob went to school and said hellow to his mother |
| S22 | - Failed to complete the task | | |
| S23 | - Failed to complete the task | | |
| S24 | -I didn’t how to express broom | L | -He take her broom and Bob smiled with her and he smiled with her |
| S25 | I my paragarph I think I talk about the pictur generally the model text they talk abut the picture exactly I couldn’- say woke up I put get up but the model text put woke up | C | -He woke upvery late |
| S26 | - Failed to complete the task | | |
| S27 | - Failed to complete the task | | |
| S28 | -- Failed to complete the task | | |
| S29 | -I think I have the same idea with the model text but the problem is with the expression | C | |
| S30 | -Instead of writing ‘Bob was home again’ I wrote simply ‘Bob was home.’ -I wanted to say Bob went to bed but I didn’t have the idea at that time. -I intended to say ‘He was going to school on foot its just down the street’ but I couldn’t express it. -I thought I should say : He found his neibour in my paragraph -I think it should be a short paragraph because the model is very long | C | -Bob was home again |
|     | C | -Bob went to bed because he felt sleepy |
|     | C | -When he was going to school,he met Mrs Smith holding a broom |
| S31 | I said :-‘Bob comes at home’ - I said :He started his dinner and finished at 6:15 , at 10:30 he went to sleep -I didn’t write sat at the table,Ann came through the door -‘I don’t write the final of the paragraph’ | C | -Bob was home again |
|     | C | -At he took his dinner and he finished at 6:15 when Ann came |
|     | D | |
| S32 | -I should have written Ann came through the door but I forgot to write it:- At 6:05, Bob started eating -I think I should write Bob went to school on | C | -At 6:05 he sat at the table, when he was eating Ann came through the door |
|     | C | -In the morning he went to school on foot |
foot and he went to school
-I couldn’t write Mrs Smith because these pictures did not express it and he said bye bye to his mother

| S33 | At picture 3 I think the woman is her mother and her mother came to cleaned the table’ At picture 4 I couldn’t know that Bob was tired | C | C | -He saw Mrs Smith, he stand in front of her porch

Key: C=content, G=grammar, L=lexis
CHAPTER ONE
INTRODUCTION

1.1 Background

Approaches to L2 instruction that emphasize experiencing language as a medium of communication focusing on meaning over the practice and manipulation of grammatical forms (e.g. immersion and other communicatively-oriented classrooms) have been widely popular since the early 1990s. They have won support from many teachers and learners as well as many researchers in Second Language Acquisition (SLA). In these ‘grammar free communicative natural, or immersion L2 and foreign language programmes’ (N. Ellis, 2007:20), there is a clearly defined outcome other than the use of language. In other words, the language serves as the means for achieving the outcome, not as an end in its own right (R. Ellis, 2009).

It is this approach to teaching or experiential L2 learning approaches growing out of communicative language teaching (CLT) such as thematically-oriented, project-gear approaches (New Prospects, 2007), which informed the new curriculum framework and program development of English Language teaching (ELT) carried out in the late 1990’s and the beginning of the twenty-first century by the Ministry of Education in Algeria.

According to the English syllabus (Ministry of Education, 2005), the stated goals seek to create a real-life communication in the classroom in an attempt to develop language fluency, not just accuracy. The language teaching content of each level of instruction is designed to allow students to engage in using the target language (TL) to convey messages in tasks requiring information-exchange, problem-solving or opinion sharing to achieve specific goals. The main purpose of classroom work is to process messages for meaning practice, to get learners internalise the linguistic elements more naturally (New Prospects, 2007). There is ‘no grammar syllabus’, and what is generally offered is little more than a brief list of suggestions regarding the selection and presentation of new language. Language educators thought that the ability to accurately use the L2 would eventually develop on its own.

However, it has also been acknowledged, as evident in the findings from classroom-based research on communicative classroom contexts (Swain, 1995), that limiting L2 learners to L2 instruction in which language is employed to complete meaningful tasks
cannot guarantee high levels of grammatical competence. Data from these studies showed that these learners have ‘significant shortcomings in the accuracy of their language.’ (N. Ellis, 2007:20). This is true even after learners have had years of meaningful, comprehensible input and many opportunities for interaction. For example, extensive research on learning outcomes in L2 French immersion programs by Swain and her colleagues showed that, despite substantial long-term exposure to meaningful input, the learners did not achieve accuracy in certain grammatical forms. (Swain, 1995; Swain and Lapkin, 1995). This research suggested that some type of focus on grammatical forms was necessary if learners were to develop high levels of accuracy in the target language (TL). In the same context, Robinson and Ellis (2008:493) point out that research into the effects of L2 instruction revealed that input-driven learning as in non-interventionist programmes of instruction, while leading to ‘considerable levels of success in receptive L2 activities (listening and reading), led to a limited ‘(non-natural) acquisitional endstate’ especially in terms of learners L2 production abilities’. In addition, researchers, such as Skehan (1998), claim that language use in itself does not lead to the development of an underlying language system since processing for meaning detracts from attention to language form. In an extensive meta-analysis, Norris and Ortega (2000) summarised findings from experimental and quasi-experimental investigations into the effectiveness of L2 instruction published between 1980 and 1998. They found that focused L2 instruction, in comparison with simple exposure or meaning-driven communication, makes a significant difference to language learning outcomes in that learners exposed to form-focused instruction (FFI) significantly outperformed those who were not. In addition to perspectives from language acquisition theory, there are also pedagogic reasons in favour of L2 FFI in the language syllabus. Ellis (1999) argues that process-oriented syllabuses such as task-based or thematically-based syllabuses do not ensure systematic coverage of the grammar of the L2 that is being taught. Only a structural syllabus guarantees that all the main aspects of the grammar are taught. In recent years, the suggestion that some kind of form-focused activity needs to be incorporated into the L2 classroom has gained importance in the field of SLA (Doughty and Williams, 1998; Ellis, 2006). As will be discussed in the literature review, two proposals have been made in the research literature to overcome the shortcomings of focusing solely on comprehension and excessive focus on meaning and communication.
One is to encourage learners to notice L2 forms in the input (chapter three); the other is to provide learners with opportunities for output (chapter three). The focus of more recent studies, namely those conducted in the late 1990s and in the first years of the new millennium, has largely been influenced by important developments in SLA theory such as the Noticing Hypothesis (Schmidt 1990, 2001); Input Processing Theory (VanPatten 1996, 2004), skill-building perspectives (DeKeyser 1998, 2007), negative feedback (e.g. White 1991), the revised version of the Interaction Hypothesis (Long 1996), and the Output Hypothesis (Swain, 1995, 2005). Among the more commonly addressed questions in the L2 type-of-instruction research literature are (Norris and Ortega, 2001:158-9):

i) Do some kinds of formal instruction work better than others? (Ellis 1999, 2008),

ii) In what ways can TL input (positive evidence) be enhanced to promote noticing and learning?

iii) Is acquisition promoted more effectively when learners process the input in psycholinguistically relevant ways than when they experience traditional grammar explanation and practice? (e.g. VanPatten 1996, 2004)

iv) Is comprehension practice as effective as production practice for learning L2 structures? (e.g. DeKeyser, 1997, 2007)

Research in FFI has been motivated in part by a desire to improve pedagogy. Of particular importance is the need to tease apart the specific contributions that different types of form-focused instruction may make on learning problematic L2 forms, but it has also served as one of the major ways of testing theoretically-based hypotheses (Ellis, 2009). One way of achieving a clearer understanding of how FFI contributes to acquisition might be to examine in detail studies that have investigated the effect of specific instructional options. The present study contributes specifically to the existing research literature that investigates the effects of specific instructional approaches on developing L2 competence by examining two particular form-focused options.

1.2 Current Study

The present study assesses the role of output in the acquisition of L2 morphosyntax by comparing output-free input-based instruction to instruction where input and output
are combined. From the teacher’s point of view, the key question is this: to what extent should instruction be directed at developing form-meaning associations through comprehension practice only as opposed to providing opportunities for learners to practice in production tasks? A second aim has been to explore the cognitive learning processes underlying L2 production as related to composing and subsequent processing of input. Swain’s Output Hypothesis (2005) was used as a theoretical framework to investigate these two issues.

The statement of the Problem, the purpose of the study, as well as the significance, the theoretical underpinning of the study and the research questions and hypotheses are delineated in this section.

1.2.1 Statement of the Problem

Research has demonstrated the need for formal instruction for L2 learners to attain high levels of accuracy which is not only the case in content-based L2 classrooms but also in any L2 educational setting which strives to provide its learners with a chance to become proficient language users. In addition to FFI, many researchers also suggest that language production (output) is an essential requirement (Fotos and Hinkel, 2007; Skehan, 1998; Swain, 2005). In her Output Hypothesis, Swain (1995, 2000, 2005) observes that language comprehension and production have different cognitive requirements. Whereas successful comprehension is possible without a full linguistic analysis of the input, L2 production (both speaking and writing), requires learners to move from the ‘semantic, open-ended strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate production (2000: 99)’. In other words, learners have to experience syntactic processing and focus on language forms in order to achieve the communicative aim appropriately. Among various means or approaches of getting learners to focus on form, the role of L2 output has received comparatively less attention from researchers. Previous L2 acquisition research has built an argument for L2 learning as a natural outcome after receptive acquisition (Krashen, 1985; VanPatten, 2004). SLA research has mainly focused on the importance of relevant input in promoting L2 learners’ linguistic knowledge, rather than on the importance of output. This emphasis has its origins in Krashen’s (1981, 1985) input hypothesis; the hypothesis that holds that language acquisition is driven in a receptive modality and
depends entirely on comprehensible input (Skehan, 1998). According to Gass and Selinker (2008) output has traditionally been viewed not a way of creating L2 knowledge, but a way of practicing already-existing L2 knowledge. In other words, L2 methodology and research considered output as a means for L2 learners to practice what has been learned previously.

With the proposal of Swain’s Output Hypothesis (1985, 1995, 2000, 2005), output has been viewed as part of the learning process itself and not merely as an end product of learning. As a matter of fact, language output has been attended to both theoretically and pedagogically in the last 20 years or so. Theoretically, the importance of output for language learning has been emphasized since the postulation of the comprehensible output hypothesis (COH) (Swain, 1995, 2005). Pedagogically, language production is common in L2 teaching and learning due to the spread of process-oriented syllabuses (e.g. communicative language teaching (CLT), task-based teaching and learning (TBTL); competency-based approaches (CBA). However, how to attain language acquisition through L2 production, especially through written language output, has not been researched adequately. Specifically, few research studies have examined how output could affect L2 learning, and even fewer if different modes of production (i.e. oral output and written output) and different theoretical perspectives (i.e. the cognitive perspective and the sociocultural perspective) are considered.

In teaching English as a foreign language in Algeria, to improve learners’ output ability (i.e. speaking and writing in English) is an important aspect. However, output practice has not been given sufficient weight in relation to input practice. If comprehensible output does provide opportunities for learners to develop accuracy in their language production, then its role is significant, especially for mastering certain grammatical aspects of the TL, an area that experience shows Algerian EFL students are lacking. Even if process-based instruction has been taken as one important approach in classroom teaching -of which meaning-based interaction in L2 is central to the learning experiences- first year students enrolled in the English department demonstrate low levels of linguistic accuracy in speaking and writing, despite gaining in communicative fluency. The type of L2 instruction they have experienced has been meaning-oriented rather than form-oriented. EFL instruction in the middle and secondary education is basically thematically-oriented and project-priced (New Prospects, 2007). These students are able
to understand much of what they hear and read, and to communicate their ideas fairly well in English. However, they are not able to produce the TL accurately as they have problems with morphology and syntax. From our own classroom teaching experience, we have observed that first year students enrolled in the English department, like other students at other levels, have gaps in their knowledge in the use of certain L2 linguistic features such as the use of English tenses and grammatical aspect. Many learners fail to learn the intricacies of the English tense system and show a limited use of tense and aspect forms, even of basic verb morphology. This linguistic feature is relatively complex and places heavy cognitive demands on the students. Moumene (2010) has commented that tenses seem to be a problematic linguistic feature for Algerian students who show limited use of the various tense forms and uses for expressing their ideas (p.76). This interferes with the accuracy of students’ L2 output, especially in the written form. At the same time, it constitutes a major pedagogical preoccupation facing teachers in the Algerian EFL context, a situation that entails the need for a heavy focus on this linguistic area in the university grammar teaching/learning programs. It should be noted, however, that the acquisition of tense and grammatical aspect, like other L2 morphosyntactic structures, is influenced by a variety of learner-internal and learner-external factors. Cowan (2008), among other researchers, argued that tense and aspect is one of the most problematic area of English grammar for EFL students and summarised three factors that converge to explain the problematic nature of tense and aspect: i) The influence of the lexical aspect of verbs, ii) The influence of the student’s L1, and iii) The type of instruction that learner’s receive from teachers and materials (p.389). Similarly, Salaberry and Shirai (2000:14) pointed out, that acquisition of tense and aspect is influenced by a variety of learner-internal and learner-external factors including i) universal (and possibly innate) predisposition by learners to mark some salient grammaticizable notions, ii) L1 influence, iii) individual learner characteristics, iv) input /interaction, and v) instructional variables. It is beyond the scope of this study to solve controversial issues concerning the acquisition of temporal expression in L2 learning. In this study, we attempted to situate the concerns of L2 learning of morphosyntactic structures in a pedagogical context. Although this study is both theoretically and pedagogically driven, the focus is on the role of instructional intervention on the development of a learner’s system of tense-aspect. Very often the decision as to how to teach grammatical forms in
the L2 classroom will be influenced far more by pedagogical factors (e.g. learner motivation or time limitations) than by those based on SLA theoretical models (Ur, 2009). Thus, the focus will be on the role of L2 classroom instruction on the development of a learner’s system of tense-aspect.

Having established two reasons for form-focused instruction in the L2 classroom, one relating in particular to the Algerian context, and the other from the SLA perspective (Ellis, 1999), it would seem to relevant to determine whether some types of FFI are more effective than others. Ellis (2008) argues that studies comparing approaches to grammar teaching are still few and far between and the heated debate on what exactly implicit and explicit teaching involve does not help solve the problem. More classroom-based research is needed to find new approaches to teaching problematic features of English in order to optimally achieve the ways to deal with ELT in Algeria.

After reading the published literature in the field, we believe that in addition to exposure to enhanced TL input, learners need opportunities to be ‘pushed’ to produce linguistically accurate output in the classroom. Current perspectives on SLA have stressed the importance of the L2 production in the language learning process. As the learners’ need for attention and awareness to L2 form in input has become central to understanding and explaining L2 learning processes, output-oriented researchers have begun to look for ways in which the learner’s production of output might play a role in this process. They have also suggested that in order to ensure effective second language learning through instruction that draws attention to form but is not isolated from communication, we must carefully explore the roles not just of input, but also that of output.

A good example of research that has investigated this can be found in studies that have sought to demonstrate that awareness of form generated by output tasks that, engage learners in real syntactic processing (e.g. Swain and Lapkin, 1995). Addressing the shortfalls in the teaching of L2 written output, Fotos and Hinkel (2007:135) observe that L2 learners instructed only through input-based approaches seldom achieve target levels of accuracy. They noted that the majority of researchers on L2 writing pedagogy ‘now postulate that without both FFI and intensive and extensive output learners are unable to develop the range of advanced grammar features required to generate formal written prose’ (p.134). In general, FFI is designed to promote noticing of target forms. Also,
output-oriented instruction that is form-focused is supported on the ground of a number of functions for output particularly the noticing function of output. Swain (2005) and others have continued to offer evidence that L2 production allows learners to achieve a level of linguistic awareness and development that they appear to be unable to attain without sufficient opportunities for output. Studies conducted in the field of output (chapter three) have stressed its importance in second language learning, claiming that L2 learning takes place when learners attempt to produce their developing L2 knowledge. Output, thus, would seem to have a potentially significant role in the development of the development of complex morphosyntactic abilities (Swain 1995:128). As the literature review in the ensuing chapters reveals, there are many issues to be investigated in terms of how beneficial it is to engage in L2 production. Comparative research on the effects of input-based instruction in conjunction with and without output-based instruction has been quite limited and differential effects of both instruction methods need further investigation. It needs also to be remembered that most of the well-known existing research concerns learning a second, not a foreign language, as is the case with English in Algeria, thus giving rise to queries concerning the applicability and generalizability of the research findings to the Algerian setting. Furthermore, research on the output hypothesis was originally based on young ESL learners (students in L2 French immersion classes).

This reinforces the need for specifying the nature of form-focused instructional treatments that may facilitate classroom L2 learning. In particular, the need is to tease apart the specific contributions that different types of FFI may make on learning specific linguistic features in specific classroom situations. It is possible that form-focused output instruction will prove more effective with young adult EFL students. Verifying the effectiveness of diverse instructional options with the specificity of our educational context seems necessary so as not to put forward pedagogic recommendations that would be incompatible with the requirements and characteristics of the Algerian context.

1.2.2 Purpose of the Study

This dissertation aimed to contribute to current understanding of the role of language L2 production by extending theoretical and empirical work on the relationship between input and output within the framework of the output hypothesis. Methodologically, both
learning outcome and learning process are examined in order to demonstrate the impact of output on language learning. While the main research project focused on learning outcomes, the aim of the second research project has been to explore the cognitive learning processes underlying L2 production (chapter four). The purpose of this study is thus:

i) to examine the effects (and non-effects) of output-free input-based instruction (input-only) and input plus output L2 instruction on Algerian EFL learners’ grammar performance.

ii) to develop a framework which would illustrate how to use input-based and output-based instructional techniques in grammar instruction with regard to learners’ receptive and productive knowledge of the target structure.

iii) to explore the nature the processes of output modification that learners engage in during their L2 production attempt.

1.2.4 Theoretical underpinning of the study

Although the output hypothesis was postulated from the cognitive perspective, Swain (2000, 2005) has extended it to the sociocultural paradigm of language learning. Thus, the role of output in SLA has been widened beyond learner-internal (cognitive) factors to include investigation of the impact of social and learning context. Swain (2000, 2005) has argued for an alternative collaborative, sociocultural perspective for viewing and examining L2 learning. According to a collaborative, sociocultural perspective, within the framework of Swain’s approach, collaboration is the primary basis for language learning. One reason for the importance of output in SLA is that language production, especially that in the form of collaborative dialogue, can induce form-focused negotiation of meaning (Long, 1996) or metalinguistic talk (Swain, 2000). In their work, Swain and her colleagues (chapter three) recommend the incorporation of more opportunities for students to produce extended output especially collaborative written output within a communicative context.

In the area of SLA, there has been some debate amongst researchers: those who believe cognitive aspects are primary, usually with quantitative and experimental methods, and those who focus on social and contextual aspects, often with qualitative and ethnographic methods (Larsen-Freeman, 2007). Firth and Wagner (1997) called for a
reconceptualisation of SLA research, which heavily focused on cognitive aspects compared to social and contextual aspects of language learning, by taking more account of the contextual and interactional perspectives of language use. Firth and Wagner(1997) suggest that the social and contextual approaches have been insufficiently influential on L2 learning research with researchers favouring the cognitive over the social variables. The linguists who support the cognitivist perspective, where acquisition is considered as an individual phenomenon, argue that socially situated studies treat target language use (not acquisition) by the learners and do not suggest how their perspective should be combined with the acquisition of the language (Kasper, 1997; Long, 1997; Poulisse, 1997). Poulisse (1997:214) argued that in relation to SLA, the primary consideration should be given to the psycholinguistics approach followed by the sociolinguistic approach. The basic processes of learning need first to be described, and then describe the ‘contextual factors that may influence these processes.’ Skehan(1998), on the other hand, argued that the cognitive and social perspectives have not been in balance with researchers favouring the sociolinguistic dimensions over the psycholinguistic ones. Gass (2003:227) wrote a paper on L2 research in which she made the following remark:

It may be the case that some parts of language are constructed socially, but that does not necessarily mean that we cannot investigate language as an abstract entity that resides in the individual (2003:227).

In the same vein, Ellis (2003) and Swain (2005) contended that the two perspectives are complementary in explaining language development. In the field of SLA, most researchers usually follow either the sociocultural paradigm or cognitive perspective. For example, most of the empirical studies (e.g. Swain and Lapkin, 1998) that focus on the impact of output on L2 grammar acquisition have been carried out within the sociocultural paradigm, while studies focusing on the effectiveness of output for L2 vocabulary acquisition (e.g. Ellis and He, 1999) have mainly been performed from the cognitive perspective.

Although we recognize the importance of L2 learning accounts which provide more of a role for the social context, the present research work is embedded in a cognitive perspective. From a cognitive viewpoint of L2 learning, concepts such as input, output,
and noticing form the rationale of the study. The important theoretical propositions about these concepts are the comprehensible input hypothesis (Krashen, 1985), the input processing model (VanPatten, 1996, 2002, 2004), the interaction hypothesis (Long, 1996), the comprehensible output hypothesis (Swain, 1995, 2005), and the noticing hypothesis (Schmidt, 1990, 2001).

1.2.3 Significance of the Study

The present study addresses a practical and theoretical need evident in the existing L2 SLA literature for research that continues to place the focus of developing L2 output-oriented research on the actual process of acquisition. This area of second language learning has been relatively underexplored in L2 research and pedagogy (Swain, 2000). Specifically, the current study claims that the comparative effectiveness of two instructional form-focused options, namely, output-free input-based instruction and a combination of input and output-based practice is an area of great research value for the following reasons: (1) theoretically, L2 output-oriented research informs the issues such as how to integrate FFI instruction into L2 learning programmes, the proposed role of output (in addition to input) in L2 instruction and the understanding of the issue of output in terms of its noticing effect i.e. mental processes that learners engage when modifying and reprocessing their L2 production. (2) pedagogically, research findings in this area may (a) provide EFL teachers with useful insights that are relevant to their own teaching situations. In settings in which purely communicative methodology is dominant (as in most Algerian EFL teaching contexts) teachers may be provided with an understanding of the need for incorporating form-focused instruction that is not only input-oriented but also output-focused. Similarly, in educational settings where the instructional format has a traditional structural focus (as in some other Algerian EFL teaching contexts), teachers may understand the need for providing a communicative context in which to embed focused instruction and (b) fill in a research gap concerning the effectiveness of input-based instruction and output practice on EFL learners’ grammar performance since (to the author’s knowledge) no study has been undertaken in an Algerian EFL context on the relative effects of the two instructional interventions under investigation. Thus, the findings of this study may help EFL educators and teachers
to make informed decisions in selecting input-based and output-based instructional techniques that can enhance EFL learners’ acquisition of problematic grammatical forms.

Perhaps more importantly, the findings of this study will further our understanding of how language is learned in the L2 classroom, how a learner can learn to use the TL with a greater degree of grammatical accuracy, how educators and language teachers must perceive learner output.

1.2.5 Hypotheses and Research Questions

In light of the theoretical focus of the present study, the following research questions were addressed within the framework of the Output Hypothesis: One major question and two related questions.

Research question 1: Does providing opportunities for written output in addition to input of the target structures aids learning of tense/grammatical aspect more than input-based instruction only?

This study investigated three hypotheses: Hypotheses 1 and 2 were formulated based on the assumption that L2 learners’ acquisition of target structures would be greater when any kind of FFI is given. Hypothesis 3 was formulated based on the assumption that learners’ acquisition of target structures would be greater if output instruction is included than when only input-based instruction operates.

Hypothesis 1: competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structures would increase as measured by differences on the posttest scores. Therefore positive results are expected.

Hypothesis 2: competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structure that include an output component would increase as measured by differences on the posttest scores. Therefore positive results are expected.

Hypothesis 3: competence in the production and comprehension of tense and grammatical aspect among learners who receive input plus output L2 instruction of the target grammatical structures will be more significant as measured by differences on the posttest scores compared to those who receive input-only instruction.

The other two secondary research questions were:
Research question 2: How does learner’s own written output enable them to recognize gaps in their L2 grammatical knowledge and performance?

Research question 3: When learners reprocess their performance what mental processes result in that impact L2 learning?

These questions followed those investigated by noticing research within within the output hypothesis (chapter three); in particular research by Swain and colleagues (Qi and Lapkin 2001, Swain and Lapkin, 1995, 2001), Hanaoka’s study (2007) and Adams (2003). The research questions were examined through an introspective exploratory study where learners were asked to report what they had ‘thought’ during output and input processing.

1.3 Structure of the Thesis

Chapter 1 has described the theoretical basis for the central assertion of the present study that instruction, particularly output-focused instruction, may be effective in developing morphosyntactic accuracy of the L2. Some initial evidence in the literature has been offered in support of the claim as well. The remaining chapters of the thesis are organized in the following way: The background literature was reviewed in two phases. In Chapter 2 a series of SLA models are presented. These clarify how language data are received, processed and turned into some type of L2 knowledge which is for the basis of output. The other areas of focus in the second chapter include some cognitive processes crucial in determining the input to output progression and L2 learning. The perspective taken is that of a cognitive form-focused perspective. In the second phase, chapter 3 further discusses the input and output orientations to L2 learning. Emphasis is put on the role of output. Chapter 4 focuses on the research design by delineating the specific research questions and the data collection methods used for the two studies. Chapter 5 reports the research findings in response to research questions 1 and 2 and 3. Chapter 6 concludes the thesis with a summary of the research findings, an account of the implications of the study for EFL teaching and learning, and a brief discussion of the limitations of the study.
2.1 Introduction

This chapter discusses both the theoretical claims of the role of output and input in SLA. First, a number of models are discussed in terms of their respective theoretical claims regarding the role of output. The remaining discussion complements the first discussion by focusing on research about the role of some ‘microcognitive’ processes in assisting learners to notice L2 input and apply it to their learning.

2.2 Cognitive models of L2 learning

As previously mentioned (chapter one), the perspective adopted in this study is to consider the learning of a foreign language, particularly L2 grammar, from a cognitive perspective. Cognitive approaches are not seen as competitive to, but as complementary with, linguistic approaches to SLA (McLaughlin 1990). When L2 learning research is carried out within a cognitive perspective, the L2 is viewed as a skill, and its acquisition as a linguistic system is assumed to be built up gradually through processes of attention, conscious awareness and practice (Pica, 2005). For cognitive approaches, SLA is essentially the mental process of acquiring systems of knowledge (morphosyntactic, phonological, lexical), which make up the TL. This is specifically what this chapter is about: the presentation of cognitive models which explain how learners are able to extract linguistic information from target language input, convert it into some form grammatical representation in the mind (intake), store it in long-term memory and retrieve it as output. Influential L2 learning theorists and applied linguists who have used the cognitive label in promoting L2 learning theories and models are: Swain’s Output Hypothesis (Swain s (1995, 2005; Swain and Lapkin ,1995) Gass’s (Gass1997, Gass and Selinker, 2008) psycholinguistic model of L2 acquisition; Skill-Learning Theory (Anderson,1983, 1995; Anderson et al, 2004; Dekeyser, 2007; Johnson, 2001; McLaughlin (1990) and VanPatten’s (1996, 2004 ) Input Processing (IP) Model. The sequence used for their description is in terms of their respective theoretical claims regarding output in SLA, starting with those that assign a greater role to L2 production.
2.2.1 Swain’s Output Hypothesis

Over two decades, views about the role of output in (SLA) have shifted from considering it as a result of “acquired competence” (Krashen, 1987:16) to “part of the process of learning” (Swain, 2005: 471). Swain’s (Swain,1995, 2005; Swain and Lapkin,1995) Comprehensible Output Hypothesis (COH) challenges the standard view in L2 learning/teaching that the ability to produce second language (i.e. L2 output) derives from competence which only comes from comprehensible input (e.g. Krashen, 1985). Swain has argued that ‘comprehensible input’ is necessary but not sufficient in promoting L2 accuracy and that opportunities to produce output in the L2 are as important to linguistic development as opportunities to comprehend input. As articulated by Swain (2005), ‘the act of producing language (speaking or writing) constitutes, under certain circumstances, part of the process of second language learning’ (p. 471). According to Swain, to develop full competence in their L2, learners must be provided with opportunities to produce ‘comprehensible output’ where they are stretched’ in their language production: in speaking or writing, learners can stretch their interlanguage(IL) to meet communicative goals (Swain, 2000:98). ‘Stretching’ the L2 is achieved as learners are pushed ‘to process language more deeply-with more mental effort-than does input’ (2000:99). Being ‘pushed’ in output is similar to the notion of i+1comprehensible of input (Swain 2005). Swain contends that when learners are required to produce output, they may be forced to move from semantic processing to syntactic processing:

Output may stimulate learners to move from the semantic, open-ended strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate production (Swain, 2000:99).

The empirical evidence for Swain’s claim comes from a number of studies on L2 French immersion classes where despite years of exposure to sufficiently rich comprehensible input, in communicative classrooms(input-rich classes) learners achieved a level of discourse and sociolinguistic competence, which do not rely heavily on grammar. They evidenced less knowledge and control of complex grammar, less precision in their overall use of vocabulary and morphosyntax, and lower accuracy in pronunciation. Swain found that these students were conveying intended meanings successfully but were not cognitively challenged to further develop their language and
being required to analyze the L2 grammar. Swain and Lapkin (1995) in particular argue that when learners produce the TL, external or internal feedback leads them to notice a gap in their existing IL knowledge. The noticing pushes them to consciously reprocess their utterances to produce modified output. Swain and Lapkin state:

In producing the L2, a learner will on occasion become aware of (i.e. notice) a linguistic problem (brought to his/her attention either by external feedback (e.g. clarification requests) or internal feedback. Noticing a problem ‘pushes’ the learner to modify his/her output. In doing so, the learner may sometimes be forced into a more syntactic processing mode than might occur in comprehension. Thus, output may set ‘noticing’ in train, triggering mental processes that lead to modified output (pp.372-373)

Swain and Lapkin (1995) further explain that in producing the L2, learners will sometimes become aware of a linguistic problem that is brought to their attention either by an external or internal feedback. This awareness pushes the learner to modify his output towards greater comprehensibility. In the process of modifying their output, L2 learners ‘engage in grammatical analysis which, though not essential to comprehension, is essential to accurate production’ (p.384). That is giving some attention to the form of their linguistic output, promotes more grammatical analysis of the L2 than meaning-driven processing alone. It moved them from ‘semantic to grammatical processing’ (pp.386-388). It is this syntactic processing that is believed to be an important element in the underlying SLA mechanism.

This view was advocated by many other researchers who seem to agree that comprehending input is insufficient for acquisition since it is clear that, during language comprehension, grammatical decoding may be bypassed and learners may circumvent syntactic analysis, relying more on contextual cues to decode messages (Skehan, 1998). Skehan noted that the nature of the input comprehension process suggests that input cannot guarantee the occurrence of language learning in that comprehension resources and strategies can prevent learners from doing deep processing and focusing on language forms. According to Skehan, ‘the comprehension process can be partly detached from the underlying syntactic system and from production’ (Skehan, 1998:15). Skehan explained how learners may well understand the meaning of an utterance without reliance on its morphology or syntax but that when they wish to convey meaning, they must be able to manipulate and structure their IL production. In the same vein, Gass and Selinker (2008)
have argued that comprehension and production have different psycholinguistic requirements; whereas successful comprehension is possible without a full linguistic analysis of the input, correct production requires learners to pay attention to the grammaticality of their messages. According to Gass and Selinker, semantic processing (which is achieved during comprehension) is not as useful for intake as the analysis made at the level of syntax which is achieved during production. It follows from this that comprehension-based approaches are unable to direct learners’ attention to form since these approaches are dominated by the need to extract meaning (Skehan1998). Swain and Lapkin proposed the following model (Figure1) that represents an illustration of second language learning from an output perspective.

![Output and second language learning](image)

**Figure 1:** Output and second language learning (based on Swain and Lapkin, 1995)

Swain and Lapkin’s model of output and L2 learning depicts a process concerned with cognitive processes. The learning process is one-way, shown by the arrows pointing from left to right. It begins with ‘the need to communicate’ and ends with the goal of producing output 2 which is modified and more accurate. The elements include learners who receive feedback and produce output, and their cognitive (mental) processes. The cognitive processes occur between output 1 and output 2. They involve the learners engaging in ‘noticing’, using either ‘internal’ or ‘external’ feedback, analysing gaps in their L2 system through ‘simple inspection’ or ‘complex thinking’, producing output 2 when a solution is found or analysing input when no solution is found before producing output 2. Throughout the process, what the learners produce (output1) and reproduce (output 2) as a result of feedback or analysis are implicated in L2 learning. In Swain’s
and Lapkin’s words ‘what goes on between the first output and the second… is part of the process of second language learning’ (p. 386).

Furthermore, Swain attributes considerable importance to corrective feedback. Output and feedback are interrelated constructs that allow learners to selectively attend to useful information in the input and to modify their ill-formed utterances, which are considered important processes in second language learning. The role of output may thus be seen as facilitating the process of input becoming intake.

Since the Output Hypothesis was first proposed, Swain (1985, 1995, 1998) has refined her hypothesis proposed some functions (table 1) to explain why the act of producing output in the L2 might lead to learner’s language development: (a) the hypothesis testing function, and (b) the metalinguistic (reflective) function. (c) the noticing/triggering.

Table 1: Effects of Output on L2 development

<table>
<thead>
<tr>
<th>Output functions</th>
<th>Proposed Effects on learning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis formulation/testing</strong> (e.g. Pica, 1988; Pica et al., 1989; Nobuyoshi and Ellis, 1993; Ellis and He, 1999)</td>
<td>-Learners formulate, modify their output (hypotheses) in response to input or feedback</td>
</tr>
<tr>
<td><strong>Reflective or metalinguistic function</strong> (e.g., Kowal and Swain, 1994; Swain, 1995, 1998; Swain and Lapkin, 2001)</td>
<td>-Learners use the L2 to reflect on the forms he demonstrating an awareness of the output they are producing</td>
</tr>
<tr>
<td><strong>Noticing triggering /function</strong> (e.g., Swain and Lapkin, 1995; Izumi, 2000; Izumi and Bigelow, 2000, 2001; Izumi et al., 1999)</td>
<td>-Learner’s recognition of their linguistic gaps forces them to seek input or search their own developing L2 system for the needed L2.</td>
</tr>
<tr>
<td><strong>Fluency /Automaticity function</strong> (e.g. Bygate, 2001; Debot, 1996; DeKeyser, 1997)</td>
<td>-Output practice leads to automatization of L2 forms which will progressively require less attention</td>
</tr>
</tbody>
</table>

Functions (a) and (c) involve processes equivalent to those proposed in the reformulated interaction hypothesis (IH) (chapter 3). Function b) focuses on an explicit rather than
implicit facet of language learning and stresses the role of the learner as an active agent in the learning process.

These three functions of output relate to L2 accuracy. Swain states, however, that output does affect L2 fluency but did not emphasize this function because she holds that this function of output is natural and self-obvious. Most language learning researchers agree that output is necessary to increase fluency, that is, learners must practise producing second language utterances if they are to learn to use their IL system confidently and routinely. However, the output hypothesis advanced by Swain (1985, 1995) makes a number of claims which go beyond this fluency function of output, and which have to do with the development of the interlanguage system, and not only increased efficiency in using it. These four functions will be addressed in more detail in the next subsections.

2.2.1.1 A Hypothesis Formulation and Testing Function

The fact that the learner devises a rule to account for some grammatical properties of the TL is well established from L2 research. The learner consciously or subconsciously builds ‘a hypothetical grammar’ (Gass and Selinker, 2008). The first function that language production may play in language processing is hypothesis testing: learners acquire L2 knowledge by first forming hypotheses about target structures, and then testing them out based on the resulting feedback from their output. Swain (1995) argues that L2 learners’ oral and written production errors reveal their hypotheses about how the L2 works. As learners use the language, both individually (e.g. a class presentation) and in interaction with others, they test their own hypotheses against their receptive knowledge. To test a hypothesis, the learner needs to use the L2 in some productive way. That is they have to say or write something in the TL. In other words, they can test whether they are understood and whether their IL is linguistically well-formed. Based on the assumption that output itself is the hypothesis, Swain (1995) states that ‘output represents the learner’s best guess as to how something should be said or written’ (p.132). In addition to the argument of learner output (spoken or written) reflecting hypotheses held by the learner about how the L2 works, it is through language production that learners are able to get feedback (either implicit or explicit) about whether these hypotheses are correct. By receiving feedback from their interlocutors, learners engage in...
negotiation of meaning, and their production is pushed to produce more accurate and precise L2 structures:

...producing output is one way of testing a hypothesis about comprehensibility or linguistic well-formedness. A considerable body of research and theorizing over the last two decades has suggested that output, particularly erroneous output, can often be an indication that a learner has formulated a hypothesis about how the language works, and is testing it output...Sometimes this output invokes feedback which can lead learners to ‘modify’ or ‘reprocess’ their output (1995:126).

According to Swain 2005 ‘important in this argument is the assumption that the processes in which learners engage to modify their output in response to feedback are part of the second language learning process (p 476)’. The hypothesis testing role of output has been explored by researchers who have shown that learners modify their output and test their hypotheses about the TL during interaction with other speakers, in response to such conversational moves as clarification requests or confirmation checks (chapter three). For example, Pica’s (1994) research has shown the hypothesis testing function to be important because during language production learners are able to form and test their hypotheses about the comprehensibility and linguistic accuracy of their utterances in response to feedback obtained from their interlocutors.

2.2.1.2 Reflective or Metalinguistic Function

A second function of output that Swain suggests is the metalinguistic or reflective function. This refers to the fact that when learners try to solve linguistic problems in their output they are, very often, consciously involved in reflecting on the nature of their TL use. Output has a metalinguistic function whereby learners’reflection on their language used helps them to internalise L2 linguistic knowledge. Using language to reflect on the language produced either by the self or by others is helpful to ‘control and internalize linguistic knowledge’ (Swain, 1995:126). In Swain’s view, encouraging students to use meta talk when faced with a linguistic problem serves the function of ‘deepening the students awareness of forms and rules and the relationship of the forms and rules to the meaning they are trying to express ’(1998:69). In order to achieve talk about language
(meta talk) and hence greater focus on grammar, Swain (2000) suggests tasks that involve language production outcomes. In their work, Swain and her colleagues, Swain and Lapkin (1995) and Swain (1998) highlight the importance of metalinguistic episodes in dialogues that allow students to think about the language through discussion of rules, language forms, and form-function relationships. Swain and Lapkin (1995) label instances of such meta talk as language-related episodes (LREs). In recent work, Swain (2000: 102) advocates activities which promote a different kind of ‘negotiation’ in which students engage in knowledge building dialogue not because they have misunderstood each other but because ‘they have identified a linguistic problem and sought solutions’. Swain and Lapkin (2001) have developed various classroom activities in which (pairs of) students have to work together to solve ‘form-based’ linguistic problems in the L2 through reflection on them, or through metalinguistic talk.

2.2.1.3 The Noticing/Triggering Function

A third function has been identified as the ‘noticing/triggering’ function of output. This function is indirectly related to input. Swain (1995, 2005) suggests that, through output activities such as speaking and writing, L2 learners become aware that they cannot say what they want to say in the TL. In other words, learners sometimes come to the realization that they don’t know how to produce certain linguistic forms. Swain has hypothesized that, under certain circumstances, output promotes noticing. Swain, (1995:129) wrote: ‘in producing the target language (TL), learners may encounter a linguistic problem leading them to notice what they do not know, or know only partially’. In other words, learners sometimes come to the realization that they don’t know how to produce certain linguistic forms. This recognition of linguistic needs can be internal, so that it is the student himself or herself that notices the gap, or external, that is, detected by the interlocutor or teacher. Noticing linguistic problems may have two subsequent consequences: If input is not immediately available, learners may engage in thought processes by which they revise their knowledge to either ‘consolidate it or to generate new L2 knowledge’. Secondly, if input is immediately available, this recognition of problems prompt the learners to attend to the relevant information in the input, in order to solve their problem and fill their gap. This process is thought to trigger learners’ L2 development. In the same vein, Narcy-Combes (2005:48, translation by the
author) noted that the development of IL toward the target norm is triggered by the learner’s understanding and becoming aware of the gap between one’s IL and the L2 input data. Swain (2000; 1998:66) pointed out that noticing takes place on several levels such as: (a) noticing a form in the input, (b) noticing one’s deficiencies (or holes) in the L2, and (c) noticing the gap i.e. ‘language learners’ awareness of a mismatch between the input and their current interlanguage’ (Truscott, 1998:104). Noticing as described above (type b) is intended by Swain to mean learner’s recognition that they that they do not know how to communicate precisely, either by speaking or writing, the meaning of what they want to say. That is, they can notice that they are unable to produce the meaning they want to express in the TL. This noticing of L2 deficiencies or ‘holes’ (Doughty and Williams, 1998) in the L2 linguistic system may lead to another type of noticing i.e. noticing the gap between learner’s L2 or IL and the TL as proposed by Schmidt’s Noticing Hypothesis (see below). (type c). Swain claims that one the major functions of production in the L2 is to facilitate this type of noticing. Closely associated with the concept of noticing is the concept of cognitive comparison. Doughty (2001) argues that in order to compare what is known against what is unknown (i.e. for learning to take place) there must exist enough available memory resources which are coordinated between working and long-term memory. Feedback provided during interaction may help learners notice the gap between IL and the TL. The last type of noticing (type a) is when, while listening to or reading L2 material, the learner simply attends to the formal aspects of the TL in the input. Ellis, (2008) uses the term ‘noticing’ in this sense, i.e. learners have to notice a linguistic feature in the input for it to be acquired. It should be pointed out, however, that the issue of ‘noticing’ was originally limited to the interaction of attention with input as a way to incorporate new features into the L2 linguistic system (see the Schmidt’s Noticing Hypothesis in the section below). The issue of the interaction of attention with output had been neglected until Swain’s output hypothesis (1998). One important aspect of noticing research has concerned the role of L2 production (output) in promoting noticing. The present study focuses on output because it is considered to promote different types of noticing, particularly noticing in the sense intended by Swain above i.e. types (b) and (c) when L2 learners encounter problems -notice gaps- with the means to communicate their message (i.e. with their developing grammatical system) and engage in thought processes to fill those gaps. One of the two research projects
presented in this thesis (chapter four) examined whether output production would make learners notice the gap between what they know and what they want to produce, and whether it would prompt them to seek out subsequent input with more focused attention and lead to the noticing and learning of a specific L2 form (chapter four).

2.2.1.4 A Fluency/Automaticity Function

Apart from the above three functions, output also has the fluency function. That is, output provides opportunities for developing automaticity in language use. In order to be able to rapidly access already-existing L2 knowledge for fluent productive use, learners need to practice their knowledge in meaningful contexts. This naturally needs output because output can help learners to achieve greater fluency by increasing control over the forms that they have already partially acquired. Swain (1995, 2005) suggested that ‘one function of producing the target language in the sense of ’practicing‘, is that it enhances fluency’ (1995:126). Although this function is ‘self-obvious and non-controversial’ (Swain:126), De Bot (1996) views the fluency function as the most likely way in which output aids acquisition. He points out that production helps learners to increase automaticity of processing, and as a result, enables them to devote more attentional resources to the higher-level processes involved in message generation.

The fluency function of output has been empirically corroborated (Bygate, 2001; DeKeyser, 1997). Perhaps worth mentioning here is another influential view that complements the Output Hypothesis, particularly with respect the importance placed on production for L2 learning, is the position held by Skehan (1998). Skehan proposes a dual-mode processing which includes both exemplar-based and rule-based learning, to explain learner development in an L2 and connects these two systems via production. Skehan reviews evidence that in L1 learning children go from a process of lexicalization to syntacticalization of language before re-lexicalizing language again. According to him, this process of lexicalization and syntacticalization of language will not happen in L2 unless contrived by production, which forces the L2 learner to analyze language at a syntactic level. As pointed out above, Skehan (1998:14) claims that, during language comprehension, syntactic analysis can be circumvented since learners can be helped by contextual cues to comprehend messages whereas this is not possible during language...
production. According to him, L2 learning happens when items from the rule-based system (the system responsible for analyzing language) are transferred to the memory-based system (the system responsible for synthesizing language). When L2 learners produce output and the main goal is fluency (e.g. speaking), they will draw more on the memory-based system whose products are faster than the products of the rule-based system. On the other hand, when the aim is to produce complex or accurate language, learners will draw more on the rule-based system which uses controlled processes (and attention) for its execution (Skehan, 1998:88-92). Thus, in Skehan’s view language production is essential to force the learner to process linguistic data at a syntactic level, forcing the learner to move from one system (memory-based) to the other (rule-based) and vice-versa. Extending Swain’s Output Hypothesis, Skehan (1998) identified six roles for output, some of these roles overlap with those advanced by Swain. These are: 1) generating better input, 2) forcing syntactic processing, 3) testing hypotheses, 4) developing automaticity, 5) developing discourse skills, and 6) developing a personal voice.

The three functions in Skehan’s framework: 1) testing hypothesis about the structures and meanings of L2 and receiving feedback for the verification of these hypotheses; 2) forcing a shift from meaning-based processing of the second language to a more syntactic mode, and 3) developing fluency and automaticity in interlanguage production can be seen as central roles for output. Skehan argues that a theoretical case can be made for the importance of language production on the basis of these roles. Skehan suggests other two roles for language production. The first is that production provides the learners with opportunities to develop discourse skills in the sense that only when taking part in extended discourse (as opposed to sentence-based grammar) can learners extend their capacities. In addition to this, there is the role of developing one’s own voice within the speech community. As Skehan put it, a learner who does not engage in expressing individual meanings is ‘unlikey to be able to develop a personal manner of speaking’ (p.18). In this way output has an important role to play. Ellis (2003:111), reviewing Skehan (1998) adds one other contribution of output in L2 learning: it provides the learner with ‘auto-input’ (i.e. learners can attend to the ‘input’ provided by their own productions) (in the literature auto-input, has also been referred to virtual input or back door learning).
If L2 output pushes learners to further internalize the input (for example, by noticing or hypothesis testing), as Swain argues, then what processes might play a role in the operation of those functions? Such questions are discussed in a number of psycholinguistic models, such as, Gass’s Psycholinguistic Model (Gass and Selinker, 2008), skill learning model (DeKeyser, 2007; Anderson’s 1983, 1995; Johnson, 2001) and VanPatten Input Processing (IP) Model (1996, 2004) A description of these models in relation to L2 output is discussed in the following sections.

2.2.1 Gass’s Psycholinguistic Model of L2 Acquisition

Gass’s (Gass1997, Gass and Selinker, 2008) model combines the sequence input-interaction-output with findings from cognitive approaches to learning and perspectives from Universal Grammar Hypothesis(UG). It distinguishes five stages which are needed to convert input into intake:1) apperceived input 2) comprehended input 3) intake 4) integration 5) output. A graphic representation of the model is presented in figure 2.

![Diagram of Gass’s Psycholinguistic Model of L2 Learning](Adapted from Gass (1997), Gass and Selinker (2008))

The first major stage in acquisition is, of necessity, language data or apperceived input. Apperception is defined as ‘an internal cognitive act identifying a linguistic form as being related to some prior knowledge’ (2008:482). Frequency in the input, prior knowledge and experience help learners to notice forms as apperceived input. These features determine why some input is apperceived and why some is not. The comprehended stage goes a step further beyond noticing; it starts input analysis. Gass points out that in her model comprehension occurs at two distinct levels. At a superficial level, there is comprehension at the level of meaning. At a deeper level, ‘a more analytic understanding takes place with learners performing a mini-linguistic analysis’(484). Prior knowledge and universal grammar (UG) are factors which determine what is comprehended. At the
next stage, the comprehended input is incorporated into the learner’s grammar to become intake. Intake is the process through which linguistic material is assimilated (Gass, 1997). It leads to grammar formation. Assimilation of intake, as Gass points out, is not automatic even if input has been apperceived and comprehended. Aspects of knowledge of L1, L2, quality of analysis and language universals determine what comprehended input is important for intake. Several psycholinguistic processes occur at the level of intake. These include hypothesis testing, hypothesis formation, hypothesis modification, hypothesis rejection or confirmation. The integration stage consists of the development and storage of changes that occurred in the learner’s grammar. According to Gass, hypothesis rejection or confirmation during the intake phase results in integration. Input that is not understood, analysed or processed is not integrated and may be placed in storage for later use. Especially important for the purpose of our study is the final stage is of output. Gass, like Swain (1995, 2005), assigns a causal role to output by pointing out that ‘output has generally been seen not as a way of creating knowledge but as a way of practising already-existing knowledge (1997:139). Gass’s model shows how the output component feeds into the development of the other components. Output provides the learner with opportunities to test hypothesis, getting feedback which feeds back into the intake component (the arrow from output to intake) and pushes the learner to engage in language analysis that goes beyond semantics analysis to the level of syntax. This links learner production with the comprehended component (the arrow from output to comprehended input) and develops automaticity of learners’ language production (1997).

2.2.3 Skill-Learning Theory

Skill-Learning Theory equates language learning with the learning of any other complex skill (cognitive or physical skills), and holds that it is an intentional process which requires attention and effort, and initially involves the development of declarative knowledge (i.e. knowledge that). Since this type of knowledge is factual, slow, and its application places heavy demands on a learner’s channel capacity, fluent and efficient performance is only possible when it is converted, by dint of practice, into procedural, (i.e. knowledge how) knowledge (DeKeyser, 2007; Dörnyei, 2009). This phenomenon may be accounted for by ‘a set of basic principles typical of the processes of learning’ (DeKeyser 2007: 97). Thus, it is assumed that the move from declarative to procedural
knowledge involves three stages. Following Anderson’s (1983, 1995) Adaptive Control of Thought (ACT) and Anderson’s et al. (2004) Adaptive Control of Thought-Rational theory (ACT-R), Dörnyei (2009:153-155) describes the process of skill building as comprising the cognitive or declarative stage in which learners consciously acquire new information through verbal instruction analysis, the associative or procedural stage in which learners apply what they know, and the autonomous or automatic stage in which learners are able to use being able to use the L2, receptively and/or productively fast, unconsciously and without effort or attention.

Declarative knowledge is a rough equivalent of what has been referred to above as explicit knowledge and procedural knowledge is often taken as a synonym for implicit knowledge (Dörnyei, 2009). Within the SLA literature, they are generally considered to refer to the same mental phenomenon (Ellis, 2008). Explicit knowledge has been characterised as ‘conscious, declarative’ available to the learner as a conscious representation through controlled processing in planned language use (Ellis 2008:418). In contrast, implicit knowledge is characterised as knowledge about language that does not involve awareness of that knowledge; it is ‘intuitive, procedural’ available for the learner in fluent, unplanned language use. The learner calls on both explicit and implicit knowledge in communication while the ultimate aim of teaching and learning an L2 remains the development of an implicit linguistic competence sometimes called the ‘true competence’. However, the possibilities raised by implicit learning, such as in first language acquisition are dismissed by some others. The Critical Period Hypothesis (CPH) seeks to limit the incidental acquisition of language to the childhood years due to reduced or eliminated access to the Language Acquisition Device (LAD) in the adult’s brain. It has been suggested that adult L2 learning is fundamentally different from L1 acquisition in its processes and in the level of competence attained and that it is strongly influenced by the learners’ L1 (Bley-Vroman, 1989; Schachter;1988, reported in Gass and Selinker, 2008). Within a cognitive perspective on language learning, Dekeyser (1998, 2007) argues that older learners use a different cognitive system because the decline or attenuation of implicit cognitive mechanisms forces the late L2 learners to rely on explicit learning. In a similar vein, Gaonach (2005, translation by the author), in a discussion of the long-standing debate on the relative advantages of starting L2 learning earlier in the primary education, contended that differences between L2 and L1 learning
strategies indicate that acquisition mechanisms that enable L1 acquisition are not available to late L2 learners resulting in differences in the acquisition process. According to Gaonach, late L2 learners ‘reconstruct an L2 in a way that is fundamentally different from children learning their L1’ (p.69, ‘translation by the author’). He, therefore, supports the views that argue for a subconscious acquisition mechanism available for early child learners only.

Ellis (2004, 2008:418) has distinguished and characterised the constructs of implicit and explicit knowledge as shown in table 2.

**Table 2: L2 Implicit and Explicit knowledge Criterion (based on Ellis 2008:418)**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Implicit knowledge</th>
<th>Explicit knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of awareness</td>
<td>Intuitive</td>
<td>Conscious use of rules</td>
</tr>
<tr>
<td>Type of knowledge</td>
<td>procedural</td>
<td>declarative</td>
</tr>
<tr>
<td>Systematicity</td>
<td>Knowledge is systematic</td>
<td>Knowledge is anomalous and inconsistent</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Knowledge is accessible by means of automatic processing.</td>
<td>Knowledge is accessible by means of controlled processing.</td>
</tr>
<tr>
<td>Use of L2 knowledge</td>
<td>When performing fluently</td>
<td>When learner experiences planning a difficulty</td>
</tr>
<tr>
<td>Self report</td>
<td>non verbalizable</td>
<td>verbalizable</td>
</tr>
<tr>
<td>Learnability</td>
<td>Learnable only within the ‘critical period’</td>
<td>Learnable at any age</td>
</tr>
</tbody>
</table>

In the left-hand column, he puts forward criteria which distinguish implicit and explicit knowledge. Next, Ellis suggests what elements a task would need in order to measure either implicit or explicit knowledge. For example, for ‘degree of awareness’, a task measuring implicit knowledge would require learners to respond by ‘feel’ (intuitively), while a task measuring explicit knowledge would need to encourage learners to consciously draw on their knowledge of L2 rules.

In terms of the acquisition of linguistic skills, the skill-learning theory assumes that explicit (i.e. declarative) knowledge is in some way a prerequisite for the development of implicit (i.e. procedural) knowledge. L2 learners thus have to begin with explicit
declarative knowledge about language elements; what Johnson (2001) calls the ‘learning pathway’ (in contrast to the ‘acquisition pathway’). Dekeyser (2007) referred to Anderson’s model to explain that practice in an L2 has the same effect as it does in other cognitive skills. He suggests that classroom instruction should facilitate the transition from declarative to procedural knowledge. When such procedural knowledge is practiced over a long period of time, automatization is likely to occur. Automatization ‘refers to the whole process of knowledge change from initial presentation of the rule in declarative format to the final stage of fully spontaneous, effortless, fast, and errorless use of that rule, often without being aware of it anymore’ (DeKeyser, 2007:3). By automatizing speech, learners will not need to pay so much attention to how they are communicating a message (i.e. formulation) and will, therefore, be able to concentrate on what is being communicated (i.e. conceptualization). Skehan (1998:8) suggests, however, that this may apply more to some areas of language than to others (e.g. more to morphology and less to word order). Skehan (1998:88-92), as summarised in section 2.2.1.4 above, proposes dual-mode processing which includes both exemplar-based and rule-based learning to explain L2 learning. Skehan’s view is that when L2 learners produce output and the main goal is fluency (e.g. speaking), they will draw more on the memory-based system whose products are faster than the products of the rule-based system. According to Ellis (2008:432), Skehan’s position echoes instance-based theories of fluency which claim that ‘fluent speech is based on the retrieval of ready-made exemplars that require minimal processing capacity’ rather than on a computation of rules. Similarly, Logan’s (1988, cited in Dörnyei, 2009:157) ‘instance theory’ explains the development of automaticity not as a change from one type of knowledge to another but by suggesting that each encounter with a stimulus is stored separately. When enough encounters with certain stimuli have been stored, access to them becomes direct. The more encounters occur, the more information is stored about the stimulus and the faster retrieval of that information becomes. Automaticity in this view is, thus, not based on the computation of ‘initial algorithms’ but on retrieval of ‘one of the stored instances’ or ready-made exemplars’; it is a transition from algorithm-based performance to a memory function’. If rule-based and item-based structures coexist in the language system but involve different processing mechanisms, then it follows that different types of instructional
intervention will have variable effects on changes in rule-based and item-based representations.

Anderson’s approach is in many respects similar to McLaughlin’s. First, McLaughlin’s (McLaughlin 1990) distinction between controlled and automatic processes and Anderson’s distinction between declarative and procedural knowledge both account for the progression from a more cognitively demanding to a more autonomous stage of learning. That is, controlled knowledge becomes automatic and routinized through enough practice and repetitions. Thus, according to McLaughlin’s model, practice makes perfect (McLaughlin, 1990:115). As McLaughlin claims, increased practice provides an opportunity for learners to internalize and restructure their internal representations to match the target language.

In this framework, production practice is the most important variable for acquisition. It is the means through which a skill is built and information is stored in long-term memory (DeKeyser, 2007). Differences exist, however, regarding the nature of the practice that is required to effect the transformation from explicit to implicit knowledge; in particular, researchers disagree on whether this practice can be mechanical or needs to be communicative in nature (Dörnyei, 2009). In traditional methodology, practice has a clear purpose. Practice helps to make perfect by helping the learner to gain control over new knowledge to the point where it can be used automatically and correctly in normal communication (see chapter three, section 3.2.2). This claim is closely associated with the precepts of behaviourist learning theory. Providing that the stimulus is carefully identified with a particular response and care is taken to ensure that the learner produces correct responses. In SLA research, output practice has been seen as a way to promote the building of language as a skill through practice i.e. as a means to facilitate automatisation of language use. One function of output in Swain’s Output Hypothesis described above is the development of fluency and automaticity of processing. McLaughlin (as cited in Gass and Selinker, 2008) claims that automaticity involves ‘a learned process that has been built up through the consistent mapping of the same input to the same pattern of activation over many trials’ (p. 134). Gass (1997), Gass and Selinker 2008, Gass (1997) has applied this to output and argued that the consistent and successful mapping (which is practice) of grammar to output leads to automatic processing. De Bot, (1996) taking the information processing approach as the starting point, related the different functions of
output to Anderson’s ACT model and Levelt’s (1989, 1992, 1993) speech production model. Drawing on Anderson’s ACT model and Levelt’s (1989, 1992, 1993) speech production model, he payed particular attention to the role of output in processing particular L2 linguistic knowledge and proposed that output plays a direct role in the process of turning declarative knowledge into procedural knowledge: ‘the effect of output must be in the transition of declarative to procedural knowledge’ (p.549). Furthermore, De Bot (1996) argues, language learners are likely to benefit more from being pushed to retrieve TL forms, ‘make the right connection on one’s own’ than from merely hearing the correct grammatical structures in the input’ because the retrieval and subsequent production stimulate the development of connections in memory (p. 549). Some researchers in SLA, however, have argued that practicing a particular form or pattern does not mean that it has been permanently established. For example, Lightbown (1990) pointed out that the equation ‘practice makes perfect’ cannot fully account for L2 acquisition. L2 learners appear to forget forms and structures which they had extensively practiced and which they had previously seemed to master. Evidence for that claim can be found in the fact that L2 learners seem to go through a period of restructuring (McLaughlin, 1990) in which performance is worse before it improves again when new forms are taught. Once the restructuring phase is over, performance improves again, mirroring a U-shaped line. This so-called ‘U-shaped behavior’ phenomenon has been often reported in L2 learners. One example of U-shaped behavior comes from the development of English irregular past forms, such as ‘came’ which is later replaced by rule-governed, but deviant past form, ‘comed’(Ellis, 2008:982). These deviant forms are then replaced by the irregular forms that appeared in the initial stages as learners’ knowledge of past forms developed.

In line with other researchers who acknowledge the limitations of cognitive theories to explain L2 development (for example, McLaughlin, 1987; VanPatten, 1996; DeKeyser, 2007), Muranoi (2007:65) also suggests that skill building theories are limited when the skill at hand is L2 learning, since some linguistic rules may not be acquired following the transition path from declarative to procedural knowledge. Muranoi explains that the possible positive effects of practice on the acquisition of some grammatical forms depend on the linguistic features of those particular forms (Muranoi, 2007:65). From another perspective, Ellis (2008) contends (Ellis claims a weak interface position, section 2.3.1
below) that learners can and do acquire certain linguistic feature without explicit attention to them. Ellis, like Krashen (1985), believes that many aspects of L2 learning are governed by linguistic rather than cognitive aspects which means that ‘it is difficult to accept that the acquisition of all L2 features begins with declarative knowledge’ (2008:480). Ellis concludes that neuroscientific research does not provide conclusive answers to show ‘whether or not there is an interface between the two types of knowledge and ‘what the nature of the interface is’(Ellis, 2008:755). Although recent neuroscientific research ‘has not confirmed the declarative to procedural shift suggested by skill acquisition theories’(Dörnyei, 2009:160), some attempts have been made by some researchers who attempted to apply skill acquisition theory to language teaching.

Two important applications of skill learning theory to language pedagogy, have mainly been explored by Johnson (1996) and DeKeyser (1998, 2001). Johnson (1996 cited in Johnson 2001:108-110) argued that learners need to practice specific forms under ‘real operating conditions’ (i.e. in actual communication) to achieve full automatization of linguistic knowledge. One of the key concepts considered here is proceduralization, referred to as DECPRO, and PRODEC, or declarativization. The first one corresponds to the three stages of development from declarative to automatized knowledge outlined above. The second concept in the proposal by Johnson explains how implicit knowledge can be acquired thanks to the exposure to the target feature and how implicit knowledge contributes to the development of explicit representation. In practice, PRODEC encourages language awareness activities in order to create conditions for conscious analysis of the language, and DECPRO proposes planning activities for students in a way that they can pay less attention to forms than they actually need, for example by setting time limits or task cognitive complexity. This last strategy which involves the ‘direct proceduralisation of knowledge’ is ‘what many learners do when they learn an FL in the country where it is spoken’ (Johnson 2001:110).

Another pedagogical proposal has been formulated by DeKeyser (1998, 2001, 2007). According to DeKeyser, second language fluency, which he calls automatic procedural skill, can be achieved thanks to engagement in the practice of this language in the course of communicative tasks with the relevant declarative knowledge available in the working memory. He believes that the availability of declarative knowledge while doing tasks that entail communicating real meaning is an essential condition for skill acquisition. He
questions the utility of mechanical drills, first of all because they may be completed without the use of declarative knowledge. In his opinion, mechanical drills are useless because they do not make the learner engage in what is the essence of language processing i.e. establishing form-meaning connections (2007:11). So both Johnson’s and DeKeyser’s views accord that practice may only facilitate acquisition (proceduralising knowledge of L2 structures) if it is communicative, i.e. meaning-focused in nature. Since the distinction between input practice and output practice formed the foundation of the experimental research that was carried out in this dissertation, we shall try to indicate, in chapter 3, the roles and the importance of practice by discussing two approaches-input-based approaches and output-based approaches-which both assign crucial roles to the concept of practice but do so in fundamentally different ways. Consequently, SLA is said to be only input-dependent, according to some input-based approaches. On the other hand, output-based approaches (like skill acquisition theory) embrace both input (practice) and output (practice) as essential components in SLA.

2.2.4. Van Patten Input Processing (IP) Model

VanPatten (1996, 2004) developed a psycholinguistic model as part of a cognitive theory of second language learning that addresses the incorporation of grammatical knowledge of the learners’ developing system. The input processing (IP) model focuses on the need to understand learners’ psycholinguistic processing strategies. In particular, this model seeks to explain how learners’ processing strategies may hinder the development of their IL system, particularly with linguistic data that have certain features-for example, those that lack communicative value. According to the IP model, processing strategies may mislead learners in the comprehension of input, which results in the development of impoverished intake and eventually a faulty internal language system. Assuming a limited capacity for attention (i.e. that learners cannot attend to different stimuli in the input), and drawing on the work of other language researchers (e.g. Tomlin and Villa 1994) VanPatten identifies ‘detection’ as the key attentional process noting that detecting one bit of information can interfere with the detection of others by consuming available resources in working memory. This model assumes that-all things being equal—form and meaning compete for attentional resources, with meaning more likely to win out particularly at early stages of acquisition. VanPatten’s model views
as essential to L2 development the focus of learner’s attention on the initial stage of the process of acquisition in the course of which learners derive intake form input and use it to create a linguistic system (VanPatten 1996, 2004). As can be seen in Figure 2, IP attempts to explain what processes are responsible for deriving intake, parsing sentences during online comprehension, connecting grammatical structures with their meaning, and interpreting the noun-verb relations in a sentence. The limited attentional resources humans are equipped with a filter of the information that reaches the brain and, consequently, not all language are exposed to gets incorporated into the developing system.

The part of input that gets processed is intake i.e. the portion of input available for incorporation into the IL or the developing system, as ‘the data that can be accommodated by the developing system’ (1996:56). This is equivalent to the conceptualisation of intake in Gass’s model above (that is input or language data attended to and noticed but not yet integrated into the learner’s grammatical system).

The first process (I) indicated in the diagram consists in the conversion of input into intake and is called input processing. The key issue for Van Paten is how learners allocate attention during online processing to detect stimuli in the input. Taking as a point of departure the claim that language acquisition involves making form-meaning connections, VanPatten makes four assumptions about input processing concerning the mechanisms responsible for processing linguistic data in the input which operate when learners are engaged in comprehension (2004:7):

Figure 3: three sets of processes involved in SLA and use (adapted from VanPatten, 1996:154)
(1) learners’ prime focus is on the extraction of meaning from the input (e.g. Krashen 1982);

(2) learners must notice things in the input for acquisition to happen (Schmidt 1990);

(3) noticing is constrained by working memory limitations regarding the amount of information to be processed during real-time computation (Just and Carpenter 1992);

(4) learners may rely on certain universals of input processing but may also use their L1 input processor.

The subsequent process (II) results in the partial or complete incorporation or accommodation of the newly registered information into the developing system. This may bring about some kind of restructuring of the system. Accommodation is described by VanPatten (2004) as ‘either the partial penciling in or complete incorporation of a surface feature (form-meaning connection) of language into the developing system’ (p. 33) and restructuring as ‘what may happen to the developing system after a form has been accommodated (p. 33). Whereas accommodation involves quantitative changes to the developing system or linguistic behaviour, restructuring involves qualitative changes to the developing system of linguistic behaviour (VanPatten, 2004).

In the final stage (III), learners access and extract grammatical knowledge in their developing system through language production (output). Only one of those processes assumes the focal position in the model developed by VanPatten, namely input processing. It is perceived solely as the initial phase of acquisition in the course of which important data are fed into the internal mechanisms for organization and storage. VanPatten and Cadierno (1993) claim that instead of trying to change how learners produce language output, instruction should focus on altering how learners process input. This is more likely to have an impact on the developing language system, given that language acquisition is a sequential process that moves from left to right. According to VanPatten, traditional language instruction has been aimed at the last of these processes, that is, teachers have combined some sort of explicit grammar instruction with activities that concentrate on providing learners with opportunities to produce the target structure. Input processing and skill acquisition theory (described above), share some cognitive
features (e.g. importance of practice, provision of explicit L2 declarative knowledge before attempting to continue with proceduralization). However, the two models disagree with each other on the issue of skill specificity. Whereas input processing does not advocate skill specificity, skill acquisition theory claims that transfer from input-practice does not exist, and that comprehension and production skills should be practised separately.

VanPatten (2004) also disagrees with the claims of the skill-learning theory that acquisition proceeds from proceduralisation and next automatization of declarative knowledge owing to its repeated appearance in the output. VanPatten distinguishes between skill development and the creation of an implicit system. Skills such as accessing forms and phrases, arranging them to make sentences need to be practiced but, as he claims, ‘practicing forms and structures in the output does not result in acquisition’(2004: 27). He stresses that output is actually the result of acquisition that consists in the development of access and production mechanisms. As described above, Swain’s Output Hypothesis asserts that output ‘pushes’ learners from the semantic processing during comprehension to the syntactic processing indispensable for encoding meaning. VanPatten (2004) takes Swain’s (1995, 2005) proposal of output triggering the syntactic processing of language to mean that output plays a facilitative role in acquisition and that making output pushes learners to be better processors of input. Moreover, VanPatten (2004: 13) perceives another role of output in language learning: confronting one’s own output within other’s input facilitates noticing which assists making form-meaning connections needed for intake (see discussion in chapter 3, section 3.2.2.3). He maintains, however, that decontextualized output practice such as mechanical pattern practice plays a limited role in L2 acquisition.

Taking into account the assumptions formulated above and the findings of research on how the incoming data are processed, VanPatten has proposed a set of principles accounting for language learners’ input processing. They have been subject to constant amendments and improvements and some subprinciples have been added to explain the detailed processes happening during input processing. The following set of principles is based on the version proposed by VanPatten in 2004 (7-18):

P1. The Primacy of Meaning Principle. Learners process input for meaning before they process it for form.
P 1a. The Primacy of Content Words. Learners process content words in the input before anything else.

P 1b. The Lexical Preference Principle. Learners will tend to rely on lexical items as opposed to grammatical form to get meaning when both encode the same semantic information.

P 1c. The Preference of Non-Redundancy Principle. Learners are more likely to process non-redundant meaningful grammatical form before they process redundant meaningful forms.

P 2. The First Noun Principle. Learners tend to process the first noun or pronoun they encounter in a sentence as the subject/agent.

P 2a. The Lexical Semantics Principle. Learners may rely on lexical semantics, where possible, instead of word order to interpret sentences.

P 2b. The Event Probabilities Principle. Learners may rely on event probabilities, where possible, instead of word order to interpret sentences.

P 2c. The Contextual Constraint Principle. Learners may rely less on the First Noun Principle if preceding context constraints the possible interpretation of a clause or sentence.

In terms of applications to L2 pedagogy, IP provides a theoretical basis for what VanPatten calls Processing Instruction (PI). As conceived by VanPatten (1996), the goal of PI is to alter the processing strategies that learners take to the task of comprehension and to encourage them ‘to make better form-meaning connections than they would if left to their own devices’; ‘to create grammatically richer intake’ (1996:60). This is done by giving learners the opportunity to process grammatical forms in the input and make form-meaning connection. Thus, IP being input-oriented, will provide learners with opportunities to engage with input receptively through listening and speaking. Ellis (2006:98) contends that this version of input-based ‘psycholinguistic options’ in L2 research and learning is ‘directed at helping learners to overcome the default processing strategies that are a feature of interlanguages (e.g. assuming that the first noun in a sentence is always the agent), (PI is described later in chapter 3 section 3).
Some scholars have challenged the theoretical model of PI (DeKeyser, Salaberry, Robinson, and Harrington, 2002); they critically examined the theoretical grounds in VanPatten’s model of input processing and argued that there are problems in the conceptualization of attention and input processing. According to them, a single limited attentional capacity model as proposed in VanPatten’s model does not specify how and why attention is constrained in capacity and leaves unexplained how exactly processing operates on language. DeKeyser et al also argued that ‘the status of IP as a psycholinguistically testable construct is questionable’ (p.6) mainly because of the difficulty of assessing how learners process input with a meaning-driven parsing mechanism and because this meaning-driven parsing mechanism, although possible, contradicts current sentence-processing approaches and neglects the importance of structural language information.

We need to sum up the discussion about these four models. This summary will highlight the fact that it is difficult to have a model which gives a satisfactory account of the L2 learning processes namely the input-intake-internalisation-output progression. Each of the models described puts stress on one aspect somewhat at the expense of other aspects. However, there is one common consensus among the above-described models: the fundamental source of linguistic data for acquisition is the input learners receive. Another consensus is that learners need to perceive, notice and attend to linguistic feature in the input for learning to occur. Beyond the general consensus, the views diverge on a number of points: 1) the relative weight of processes and subprocesses that work at every stage of the learning process, 2) the degree to which language structures are learnt, and 3) the issue of concern for this study: how learners come to produce output? Gass’s model explains acquisition of L2 linguistic knowledge by focusing on input processing as a central stage in the conversion of input to intake. Input processing is key to the development of an implicit linguistic system in the mind of learners. Similar to Gass’s model, Van Patten emphasises the primacy of deriving meaning from input before acquisition. Van Patten explicitly affirms the centrality of input rather than output. Gass, however, acknowledges the importance of output as a stage of the acquisition process. This links Gass’s model to the skill learning theory (Anderson’s model of L2 learning). Both assign a role to language production (output) as means to automatise already taught language structures. The models also differ on other details. What we can
take from them is the following definition of the process of L2 acquisition. From the perspective of this study, developing L2 learners’ linguistic competence through language production (output) constitutes an essential part of learning. This process takes place at various levels moving from input to intake to internalisation and finally to output. Input becomes intake i.e. part of the learner’s short-term memory through the process of noticing - ‘apperception’ in Gass’s model described above- linguistic features in the input and comparing the target language structures with their own L2 production. Intake needs to be integrated into the learner’s long-term memory and forms the basis for language production (output). Output processes work as a device to (1) proceduralise the internalised linguistic features in order to enable learners access them easily (Anderson’s model), (2) trigger changes in the learners’ developing system particularly through the process of noticing (Swain 1995).

FFI is one way of enabling learners notice and attend to linguistic features. We explain the notions of attention, noticing and focus on form in the following sections.

### 2.2 Cognitive notions

Some researchers and language teaching methodologists have pointed to the natural human ability to learn first languages effortlessly as evidence that attention with awareness is not required. But adult learners of a second language often seem unable to reproduce this type of learning, and these difficulties are most overt in the learning of L2 grammar. The assumption adopted by many researchers (Corder 1967, Dulay and Burt 1973; Felix 198; Krashen 1985) that primary naturalistic input is all that learners’ internal mechanisms need for acquisition to take place, has been minimised, reinterpreted or re-examined. The concepts of attention and noticing have been proposed to understand, and to possibly explain why it is that L2 learning understood basically as an implicit process is not sufficient.

#### 2.2.1 Attention, Awareness, and the Noticing Hypothesis (NH)

Since the mid-1990s, the constructs of attention and noticing have been the primary focus in SLA research. Many researchers argued that subliminal learning, that is learning implicitly without awareness and simply from exposure to TL input is not sufficient and that some degree of conscious awareness is needed for the restructuring i.e. changing of
the learner’s mental representation of the language to take place. In that respect, Sharwood Smith (1994) argues that it is interesting to learn a language in an intuitive manner without external manipulation. However, this may take a very long time to accomplish and may not happen no matter how long the period of exposure is. Therefore, he suggests that teachers provide ‘short-cuts’ to their students to help raise their consciousness by deliberately drawing their attention specifically to the formal properties of the TL. According to Narcy-Combes (2005), recent research has taken an interest in how learners vary when it comes to learning a language. Among working memory, motivation, aptitude, learning strategies and other factors, specifically ‘attention’ has enjoyed recent focus. Narcy-Combes explains that, in general, learners have a limited attention span and that based on these limitations, and other factors, not all input is actually attended to and gets processed. He reinforces this idea that attention plays a significant role as a tool for determining if linguistic structures are noticed or not by the learner (pp.47-48, translation by the author). The NH proposed by Schmidt (1990, 1992, 1995, 2001) attempted to explain this fundamental issue that applied linguistics have been grappling with i.e the question why only a selected portion of the input becomes intake in the learning process. Schmidt formulated the hypothesis in which he identified ‘noticing’ as a key attentional process. In fact, Schmidt argued that attention is an essential notion to understand practically every aspect of L2 acquisition and stated that ‘SLA is largely driven by what learners pay attention to and notice in target language input and what they understand the significance of noticed input to be’ (Schmidt, 2001:3-4). The basic claim is that learning an L2 entails attended learning; ‘people learn about the things they attend to and do not learn much about the things they do not attend to’ (p. 30). According to Schmidt, attention and awareness are closely linked -what we are aware of is what we attend to, so if attention is required for learning then perhaps awareness is as well. However, Schmidt maintained that noticing involves a very low level of awareness (e.g. simply being aware of linguistic forms in the input) directing attention only to the ‘elements of the surface structure of utterances in the input, instances of language, rather than any abstract rules or principles of which such instances may be exemplars’ (Schmidt, 2001:5). Schmidt proposes that, in addition to noticing, that is, awareness at the level of noticing, there is another higher level of awareness, which he refers to as awareness at the level of understanding. This level of awareness is characterized by
learners’ ability to analyze and understand the underlying rules of linguistic forms. It is awareness at the level of noticing that Schmidt claims is crucial for language learning, whereas awareness at the level of understanding is facilitative but not necessary for SLA. According to Skehan (1998:48) ‘Schmidt is claiming, in contrast to Krashen (1985), that a degree of awareness is important before material can be incorporated into a developing interlanguage system’. In this context, it is important to mention that the debate on the potential interface between implicit and explicit knowledge (see section 2.2.3) centers on the extent to which awareness is necessary for L2 development. Most researchers have viewed SLA as an implicit experience that entails the development of implicit knowledge (Pica, 2005). However, there is no consensus on how this is achieved; nor is there a consensus on the role played by explicit knowledge. The nativist perspectives’ (e.g. Krashen’s Monitor Theory, 1981,1985) position is that acquisition has nothing whatsoever to do with explicit knowledge; it is an altogether implicit activity. Cognitive accounts of L2 acquisition, however, are much more mixed. Traditionally, the relationship between the two types of learning/knowledge has been discussed in terms of the interface between them, as shown in three distinct cognitive perspectives (Ellis, 2008). According to the noninterface position, learning under explicit conditions that is, with awareness, cannot convert into acquisition. In other words explicit grammatical knowledge (Krashen, 1982) or learned linguistic knowledge (Shwarts 1993) involves different acquisitional mechanisms which are stored in different parts of the brain and are accessed for performance by different processes, either automatic or controlled (Hulstijn, 2002). In contrast, the strong interface position (DeKeyser 1998, 2007) claims that not only can explicit knowledge be derived from implicit knowledge but also that explicit knowledge can be converted into implicit knowledge through practice. This position has been particularly promoted by skill learning theory (see section 2.2.3). In a weaker form of the noninterface position, that includes the concepts of attention and noticing, the possibility of explicit knowledge becoming implicit is recognized. However, it is believed that L2 knowledge can be built up through both explicit instruction and other interventions that enable learners to notice crucial relationships of L2 form and meaning that are difficult, if not impossible, for them to learn without such intervention. This is a view held by those who carry out research strictly within the cognitive perspective, but also among researchers associated with strategies of consciousness-raising (Sharwood
Smith 1993). As pointed out by Skehan (1998:64), many of the scholars who hold the weak interface position share the premise that the aim of L2 teaching and learning should be to have learners work through consciousness-raising tasks i.e. ‘tasks which draw attention to a particular form but give no explicit information’. The weak interface position has been put forward by R. Ellis (1990). He, too, argues that implicit and explicit knowledge are two separately coexisting knowledge systems. Ellis’s theory tries to allow for findings that suggest that -for some L2 rules- formal instruction is effective only if properly timed: these rules seem to be developmentally constrained. Another important feature of Ellis’s theory is that knowledge does not necessarily start out as being explicit; ‘More often than not L2 knowledge begins as implicit knowledge’ (p.115). For Ellis, acquisition is not so much driven by learners’ needs to understand messages, as Krashen supposes. Rather, Ellis argues that language learners pay attention to features of the input and compare them to their own output; mechanisms referred to by Ellis as noticing and comparing (p.119).

This view also is also held by researchers associated a perspective that has come to be known as Focus on Form, which will be dealt with in the following section of this chapter. As Doughty (2000:225-227) explains, the importance of ‘selective attention’ and ‘cognitive comparison’ may lie in the fact that, in contrast to automatic and inaccessible macro processes of language learning as ‘internalisation of input’, ‘mapping’, ‘analysis’ and ‘restructuring, they represent shorter-term moment-to-moment micro-processes which may be open to immediate influence, and, as such, susceptible to FFI.

The position that we have adopted in this dissertation accords more closely with the second and third of these positions. Although we do not deny the view that L2 learning is largely an implicit process, we view explicit L2 learning and explicit L2 knowledge as essential, at least with regard to syntax, and side with researchers who argue for a role involving aspects such as both explicit instruction and other interventions that enable learners to notice crucial relationships of L2 form and meaning. A basic assumption guiding our research question is that L2 learning is a conscious process (Schmidt, 1990). In agreement with Schmidt (1990), Robinson (1995) and Swain (1995), among many others, a related assumption is that focusing on meaning alone when processing input cannot lead to complete L2 competence if not combined with awareness of form.
By discussing the issue of awareness, we imply that grammar instruction has a role perhaps a key role in the L2 classroom. This does not entail exclusively teaching discrete decontextualised grammar items for their own sake with some overt grammar explanations. The stipulation that learned knowledge can never become acquired knowledge means that the role of noticing (which includes awareness) is reduced in the L2 classroom, where teachers and learners would be expected to rely solely on incidental L2 learning and exposure to comprehensible input to develop language competence (Doughty and Williams, 1998).

Schmidt’s NH has attracted the support of some scholars. In Gass’s model described above, noticing is considered as the first stage in language development. Only the input that is ‘apperceived or ‘noticed’ becomes available for further processing. Skehan (1998) provides a visual visual schematization of Schmidt’s hypotheses (figure 4) concerning noticing and incorporates them into a model of language processing with some factors influencing noticing such as input frequency /salience and language instruction. He describes noticing as having a mediating role between input an memory systems. As Skehan’s diagram illustrates, TL forms that are noticed become available for further processing in working memory and are then stored in long-term memory.

![Figure 4: Influences upon noticing (based on Skehan1998:49)](image)

Skehan clarifies that for language items to be incorporated in the long term-memory, noticing must take place in the short-term memory (working memory). This requires conscious awareness which is triggered by different influences upon noticing. In line with Schmidt’s discussion of the role of ‘teaching’, Skehan observes that instruction assists noticing by making the less obvious aspects of the input more salient, so that when the learner does the extraction and focusing, he or she may be prompted to notice certain
features or parts of the TL in the input, which will in turn determine which part of the input can become intake subsequently. In a sense, learning is still input-driven (since the input is not being transformed) but in this way, instruction can allow the learner to choose what to prioritize in the input.

While Schmidt’s NH has attracted the support of some scholars, other researchers (e.g. Tomlin and Villa, 1994, Truscott, 1998) have questioned the idea that awareness is necessary for acquisition. Tomlin and Villa (1994 cited in Ellis 2008:437-8) posit a somewhat different approach to attention and claim that there are three interrelated processes of attention: alertness, orientation, and detection. Of these three processes, alertness and orientation require conscious awareness and the only process that does not require conscious awareness is detection. According to this view, the process of detection is crucial for learning. That is not to say that alertness and orientation do not have an important role, in fact, their role is to help increase the chance of detection, and in turn facilitate learning. Truscott (1998) criticizes the concept of noticing used in SLA research by stating that ‘the foundations of the hypothesis in cognitive psychology are weak’ and that ‘the hypothesis is not based on any rational theory of language’ (p.104). Truscott also points out that there are conceptual problems with the NH that make interpreting it and also testing it difficult. Truscott (1998) further claims that this hypothesis is ‘too vague to be of much value’ (p. 116).

Notwithstanding many criticisms, it is clear that in SLA, some kind of attention to formal features in the input is necessary for acquisition to occur. Therefore, although a few controversies remain, in the current study, attention to or noticing of relevant aspects of L2 is assumed an important process for learners’ learning of the targeted grammatical feature. Such consideration is indeed at the core of influential pedagogic proposals known as focus on form (Doughty, 2001; Doughty and Williams, 1998; Long and Robinson, 1998) and consciousness-raising or input enhancement (Sharwood Smith, 1993) discussed in section 2.3 and section 3.2.1 respectively.

However, it needs to be pointed out that the theoretical tenets of the NH were originally limited to the interaction of attention with input as a way to incorporate new features into the L2 linguistic system. Assigning a role for noticing in input has been largely accepted. As Narcy-Combes (2005) explains, it is widely recognized that noticing is essential for language acquisition. In addition to input, it is also accepted that interaction plays a
crucial role in the process of learning a second language (p.1, translation by the author). The issue of the interaction of attention with output; how noticing interacts with output in L2 acquisition has hardly been mentioned in the literature. Among various means or approaches of getting learners to focus on form, the role of L2 output has received comparatively less attention from researchers. With the proposal of the Output Hypothesis (Swain, 1995, 2000, 2005), output production has been viewed not merely as an end product of learning, but as a stronger trigger of attention to form than input comprehension. As discussed above, this proposal has been made from several directions. One of them revealed noticing as one of the main reasons why producing output mediates L2 development; the argument which corresponds to Schmidt’s NH (see section 2.2.1). In fact, the value of the NH lies in that it offers justification for different variants of form focused instruction.

Taking the central role of attention in learning as a starting point of investigation, recent SLA research has begun to explore whether and how the learners’ attentional processes may be influenced for the sake of their greater IL development (Doughty and Williams, 1998). This research is reviewed later in chapter three of this dissertation. In the following section, we shall focus on how prominent teaching methodologies consider the role of attention and noticing in the classroom.

2.3 The Cognitive Focus on Form (FonF) Approach

The cognitive focus on form (FonF) approach has its basis in SLA models which treat L2 input as an important factor affecting learning processes. This approach draws on research by the Interaction and Output Hypothesis which aimed at discovering factors conducive to L2 learning. Doughty (2001: 206) explains that progress in SLA is thought often to depend crucially upon cognitive processes such as paying attention to features of target input, noticing interlocutor reactions to (IL) output, and making insightful comparisons involving differences between input and output utterance details. In particular this approach points out the need to incorporate instructional techniques for learners to attend to form during a communicative activity, as they may help learners briefly draw their attention to form, meaning and use during one cognitive event (Doughty 2001: 211). At the outset, it should be stressed that the FonF approach has been discussed within the broad category of the so-called form-focused instruction (FFI) (also
known as focus on form instruction) which is used to characterize a wider range of instructional approaches.

The concepts of FonF and FFI are rather vague and have been interpreted in somewhat different ways. It is important to clarify the terminology used by different researchers to refer to instruction that deliberately focuses on the formal properties of language with the aim of facilitating the development of the L2. The first distinction with regard to the type of instruction can be made between FFI and meaning-focused instruction (MFI). FFI has been distinguished from MFI which focuses exclusively on meaning exchange (meaningful input) during classroom instruction and no overt reference is made to rules and language forms. Spada (1997) defined FFI as ‘any pedagogical effort which is used to draw the learners’ attention to language form either implicitly or explicitly’ (p. 73). Ellis (2001:1-2) wrote about FFI and defined it as ‘any planned or incidental activity that is intended to induce language learners to pay attention to linguistic form’. Depending on the instructional approach, attention may be directed to specific linguistic properties or not at all. In language teaching, these types of instruction have been referred to respectively as synthetic and analytic language teaching strategies (Wilkins, 1976).

Michael Long and Peter Robinson (1998) divide SLA into two notions: focus on forms and focus on meaning based on whether each of them focuses mainly on form or meaning. Focus on form is in between focus on forms and focus on meaning; Long and Robinson provide a diagram which shows the related teaching methods and syllabus type of focus on forms, focus on meaning, and focus on form respectively (Figure 5). In synthetic language strategies, it is the teacher’s role to analyse the TL for the learner. The classroom focus is on the teaching of language forms as separate and discrete. Methods and language teaching approaches associated with the synthetic strategy include the Grammar Translation method (GT), the Audiolingual approach, Grammatical and Notional approaches and some other methodologies (Silent Way and Total Physical Response-TPR). In contrast to the synthetic strategy, the analytic strategy, focuses on communicative practice. Learners experience language a means of communication rather through the study of a grammatical content (e.g. Natural Approach, Immersion and Procedural syllabus). A less radical ‘analytic’ line, while placing a high premium on putting the L2 to communicative use, recognises the value of attention to language form
(task-based language teaching (TBLT), Content-based language teaching (CBLT) and Process syllabus, option 3).

<table>
<thead>
<tr>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytic</td>
<td>Analytic</td>
<td>Synthetic</td>
</tr>
<tr>
<td>Focus on meaning</td>
<td>Focus on meaning</td>
<td>Focus on forms</td>
</tr>
<tr>
<td>Natural Approach</td>
<td>TBLT</td>
<td>GT, ALM</td>
</tr>
<tr>
<td>Immersion</td>
<td>Content-Based Instruction</td>
<td>Silent Way, TPR</td>
</tr>
<tr>
<td>Procedural Syllabus</td>
<td>Process syllabus</td>
<td>Structural/ N-F</td>
</tr>
<tr>
<td>Etc.</td>
<td>Etc.</td>
<td>Syllabuses etc.</td>
</tr>
</tbody>
</table>

**Figure 5:** Language teaching options (Based on Long and Robinson, 1998)

As mentioned in the introductory chapter to this thesis, the interest in FFI was raised in 1990s as a result of research findings that suggested that MFI does not help developing high levels of TL accuracy; that successful mastery of the TL needs to be supported with focus on the formal aspects of the TL (Nassaji and Fotos, 2007; Swain, 1995). Throughout the previous sections, we dealt with the concepts of input, output, attention, awareness and noticing. These constructs offer an explanation of why meaning-focused language teaching (in contrast to form-focused language teaching) is not sufficient to develop full competence in the TL. From an output-based perspective, it has been argued that FFI does not suffice in acquiring language forms; learners can interpret the meaning without the use of syntax (Skehan, 1998; Swain, 1995). In contrast when producing output (spoken or written) one is more likely to attend to the form of the language. That is one is forced to move from ‘semantic processing’ that characterises comprehension to the ‘complete grammatical processing required for accurate production (Swain1995:128). Form focused output was to overcome some of the shortcomings of excessive focus on meaning and input-oriented instruction. It is now widely accepted among SLA researchers that FFI may have a beneficial effect on learners’ interlanguage (Doughty and Williams, 1998). Within the category of FFI, two main types have been largely discussed in recent years, namely Focus on Form (FonF), and Focus on FormS (FonFs). These two types of FFI are described and discussed below.
2.3.1 Focus on Form (FonF)

Focus on form (FonF) refers to drawing learners’ attention to language forms during MFI or communication. The following are commonly accepted definitions:

Focus on form often consists of an occasional shift of attention to linguistic code features - by the teacher and/or one or more students- triggered by perceived problems with comprehension or production (Long and Robinson, 1998: 23).

Focus on form overtly draws students’ attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on mean and communication (Long, 1991: 45-46).

This conceptualisation of paying or ‘shift of” attention to the form in the context of a meaningful communicative activity (i.e. what Long and Robinson (1998) and Long (1991) meant by FonF) has been termed as reactive FonF by Doughty and Williams (1998). These authors claim that adopting a reactive stance may be difficult for a practical implementation, since teachers have to be always ready to notice an error and consequently intervene with an appropriate FonF technique. In contrast, they mention that FonF can also adopt a proactive stance where the teacher chooses in advance which form he/she is going to structure in the context of a meaningful communicative activity. A different division of FonF was also elaborated on by Ellis (2008) who made a distinction between incidental (reactive) and planned (proactive) FonF. When the teacher adopts a proactive (planned) FonF approach, specific, previously prepared, instructional techniques will be employed (e.g. input enhancement) in order to make learners focus on a given form. In the case of a spontaneous, reactive focus on form, the teacher’s decision to address a particular structure always results from the students’ problems while performing a task or an activity.

Apart from planning, another feature which may determine the classification of FonF techniques is obtrusiveness. The least obtrusive FonF methods attempt to enhance detection (without awareness), while other, more obtrusive techniques focus on promoting noticing (which includes awareness) (Doughty and Williams 1998). Doughty (2001: 227) presents three criteria which must be met if a pedagogical intervention is to be considered unobtrusive: i) the primary focus is on meaning; ii) the FonF targets arise incidentally, and iii) learner attention is drawn to forms briefly. Norris and Ortega
(2000: 438) define ‘focus on form’ as that which meets the following criteria: (a) designing tasks to promote learner engagement with meaning prior to form; (b) seeking to attain and document task essentialness or naturalness of the L2 forms; (c) seeking to ensure that instruction was unobtrusive; (d) documenting learner mental processes (‘noticing’).

Throughout the 1990s and the beginning of the 21st century research has expanded FonF definitions. The concept includes now both preplanned and reactive approaches to grammar instruction and is generally understood as any activity that draws the learners’ attention to form within a meaningful context (Dougthy, 2001). The theoretical underpinnings for implementing focus on form in L2 learning have been revised by Ellis (2008: 827-828) as follows:

- learners need the opportunity to engage in meaningful language exchanges in order to be able to use the new forms spontaneously;

- full acquisition of the new language forms is possible only when the form is attended to while using the language in a meaning-focused task (see also Long 1991);

- taking into account learners’ limitations to process L2 data and attend to content and form in the input (VanPatten 1990), it is believed that learners concentrate on the meaning first during the performance of a communicative activity;

- therefore, there is a need to incorporate instructional techniques for learners to attend to form during a communicative activity, as they may help learners briefly draw their attention to form, meaning and use during one cognitive event (Doughty 2001).

In addition, Ellis (2008:879) points out that a focus on form might involve one or all of these options:

1) input-based instruction where input is manipulated in a way that causes attention to forms to take place incidentally;

2) implicit instruction (i.e. absence of rule explanation or instruction to attend to form;

3) output-based instruction which enables learners to create texts; and

4) implicit corrective feedback, (e.g.by means of recasts or requests for clarification).
These options carry the characteristics of implicit FFI in that 1) they do not direct but only attract learners’ attention to target forms while they are engaged in meaning-based activities; 2) they are unobtrusive—minimally interrupts communication, 3) they present target forms in context, 4) they make no use of meta-linguistic terminology, and 5) they encourage free production of target forms.

In order to be able to draw conclusions about the effectiveness of either approach, we need to investigate the other option which is Focus on FormS. This is done in the subsequent section.

2.3.2 Focus on FormS (FonFs)

Focus on FormS ‘refers to instruction that seeks to isolate linguistic forms in order to teach them one at a time’ (Ellis 2008:878) within the context of a planned approach to form-focused instruction. Thus, the TL is acquired through decontextualised explanations of the language point to be taught and series of controlled exercises that enable learners to practice the rules they have been presented (Edge and Carton 2009). This option is related to what Wilkins (1976) and Long and Robinson (1998) termed the synthetic syllabus in which the language is divided into separate parts and consequently taught in different steps. In this sense, it includes the skills-learning approach (advocated mainly by DeKeyser, 1998, 2007) which is based on the assumption that classroom L2 learning derives from general cognitive processes, and thus entails the learning of a skill (see section 2.2.3). The most common and typical focus on forms lesson follows the presentation-practice-production (PPP) procedure (Edge and Carton 2009:18; Ur, 2009). The classroom procedures which come from this approach include, for example, explicit provision of grammar rules (including explanation in the L1, pointing out differences between the L1 and the L2; and then a number of text manipulation (2nd stage) and text-creation (3rd stage) activities follow. In parallel with the ‘focus on form’ options, four main options are distinguished in the focus on forms approach (Ellis 2008:870-871):

- input-based instruction where input is manipulated in a way that directs learners’ attention to the target form;
- explicit instruction involving consciousness-raising or/and meta-linguistic explanation;
output-based instruction which enables learners to manipulate and create texts; and explicit corrective feedback, e.g. by means of meta-linguistic descriptions.

These options are characteristics of explicit FFI discussed by Ellis (2008:879); that is they(1) direct attention to target forms;(2) are planned; (3) and obtrusive; (4) present target forms in isolation; (5) involve the use of meta-language; and (6) include controlled practice of forms.

The difference between these two approaches, therefore, would appear reasonably clear-cut. Unfortunately, however, the use of the two terms in the literature is not always consistent. Some researchers (e.g. DeKeyser 1998; Lightbown 1998, 2000) use ‘focus on form’ to refer to any approach which includes grammar instruction, thus including both ‘focus on form’ and ‘focus on formS’. In a review of focus on form and form focused instruction, Dörnyei (2009:274) pointed out that instead of distinguishing the two terms, ‘it might be more useful to refer to two aspects of the same approach with focus on form being used to talk about both the theoretical principles and psycholinguistic underpinnings of the approach, and FFI when discussing the pedagogical applications of these’.

The concepts have, thus, been interpreted in different ways and to decide whether ‘focus on form’ or ‘focus on forms’ is more effective, one needs some firm evidence coming from research.

The present study was carried out in the context of the debate as to how to most effectively implement FFI in the second language classroom. At the heart of the debate is the question whether learners may need to have their attention drawn explicitly to some linguistic features. A corollary to this question is to what extent should instruction be directed at developing form-meaning associations through comprehension practice (input) only as opposed to providing opportunities for learners to practice in production tasks(output). The pedagogical intervention employed in the first research project (chapter four) does not meet the requirements of focus on form decribed in the earlier section. It is thus, if we follow both Long’s criteria (see above), and criteria (a) and (c) of Norris and Ortega themselves, clearly an exponent of a ‘focus on formS’. That is L2 grammar is treated as entailing discrete forms which it teaches initially by means of explicit instruction in separate lessons, with an emphasis on form (and is, thus, in the terms of Doughty (2001) obtrusive before proceeding to comprehension and/or
production exercises enabling students to recognize form-meaning relationships. Thus, this study will primarily consider instructional approaches that relate to a planned approach to FFI, that is, approaches relating more to ‘focus-on-forms’. For the purposes of this study we will adopt the definitions of FFI as used Ellis (2001), and Spada (1997) above. The model provided by Ellis (2001) conceptualized FFI as ‘any planned or incidental instructional activity that is intended to induce language learners to pay attention to linguistic form’ (pp. 1-2). Similar to Spada, Ellis included both planned and incidental interventions, which is also consistent with an expanded definition of focus on form. However, Ellis’s definition incorporates form-oriented interventions that do not occur in the context of meaning or communication. In other words, Ellis included instructional activities that are associated with traditional grammar teaching following a synthetic syllabus.
CHAPTER THREE

INPUT- AND OUTPUT-BASED APPROACHES

3.1 Introduction

Different theoretical orientations were identified concerning the necessity, sufficiency or facilitative role of input, output, and negotiated interaction. In our discussion, we shall refer to these two theoretical perspectives as the input and the output orientations. The third orientation i.e negotiated interaction accounts for L2 learning both through input and output. After laying the theoretical background, a review of empirical studies investigating the effects of three linguistic environments related to the hypotheses above – input, interaction, and output – on L2 learning will be presented.

3.2 Input- and Output-Based Approaches

In many occasions throughout chapter 1 and 2, we have seen that some theorists and methodologists see L2 learning arising from exposure to input rather than from language practice (output). Claims about the value of each of these factors and variables have led to different perspectives towards the way L2 learning is fostered. Research on classroom instruction and particularly the competing theories of SLA do not always agree on what fosters learning. For example input-based approaches say that output plays no role in learning whereas output-oriented approaches say that output is crucial to developing accuracy and IL. According to Ellis (1997) language instruction can at least be viewed from two perspectives (figure 6): some researchers and language teaching methodologists have taken an input-based approach to classroom instruction which aims at providing learners with language input in the form of listening and reading tasks. Others take an output-based approach that provides learners with opportunities to engage with the L2 productively i.e. through speaking and writing.

How should teachers react to these claims? Should we choose one position and ignore the other?

This study will focus on the two components, input, and output in comparing input-based instructional techniques with output-based instructional techniques.
The specific focus of the study will be how these instructional techniques affect the acquisition of L2 structures. Therefore, the theoretical background to the present research project includes the input hypothesis (IH) (Krashen, 1982,1985) and the comprehensible output hypothesis (COH), (Swain,1995,2005), the Input Processing (IP) model (VanPatten, 1996,2004), and the interaction hypothesis (IH) (Long, 1996) (table 3).

The input-based theories—the input, the interaction hypotheses, and the Input processing (IP) model - are presented first and are followed by the output hypothesis.

### 3.2.1 Input-based approaches

Input-based instruction, the focus in the treatment used in this study, involves an attempt to intervene directly in the process of L2 learning by manipulating the input to which learners are exposed (Ellis 1999). There are various approaches to L2 instruction that prioritize input, many of them proposing innovative ways of manipulating the input in order to maximize learning outcomes. Thus, it is possible to distinguish between early and contemporary input-based approaches to L2 instruction. In the first, L2 instruction is unfocused in the sense that it is geared to providing roughly tuned comprehensible input.

Table 3: Language learning theories reviewed
<table>
<thead>
<tr>
<th>Language learning theories/models</th>
<th>Roles for input</th>
<th>Roles for output</th>
<th>Empirical evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensible input hypothesis (CIH)</td>
<td>Comprehensible input is sufficient for SLA</td>
<td>Output is a result not a cause of SLA</td>
<td>No empirical evidence</td>
</tr>
<tr>
<td>Input Processing (IP) model</td>
<td>Input is fundamental for SLA</td>
<td>Output merely facilitates access to an already developed L2 system</td>
<td>Processing instruction is superior to traditional output-based instruction</td>
</tr>
<tr>
<td>Interaction hypothesis (IH)</td>
<td>Input is necessary for SLA; negotiation provides comprehensible input</td>
<td>Negotiation provides modified output, facilitating SLA</td>
<td>Mixed findings on how interaction affects comprehension and acquisition; negotiated interaction provides input, feedback, and output</td>
</tr>
<tr>
<td>Comprehensible output hypothesis (COH)</td>
<td>Input is necessary but insufficient for SLA</td>
<td>Output plays important roles in SLA: noticing, hypothesis-testing, metalinguistic/syntactic processing</td>
<td>Mixed findings on how output affects L2 from a cognitive perspective; positive results about learning effect within sociocultural paradigm</td>
</tr>
</tbody>
</table>

through written and spoken texts, as recommended by Krashen (1981). In other words, this instructional approach caters to incidental acquisition or what was described in chapter two as a ‘focus on form’ approach. According to Ellis (2006:85) such view is based on ‘the conviction that learners (including classroom learners) would automatically proceed along their built-in syllabus as long as they had access to comprehensible input and were sufficiently motivated (2006:85)’. In the second, in what has become known as ‘processing instruction’ (PI) (VanPatten 1996), learners are expected to pay conscious attention to specially designed input in order to learn a specific target structure. Another type known as ‘Input Enhancement’ (Sharwood, 1993) provides learners with input that has been flooded with exemplars of the target structure in the context of meaning-focused activities. Although these approaches make use of different pedagogical techniques they are all based on a common assumption—namely, that experience in L2 reception (listening to L2 speech and reading L2 texts) lays the foundation for L2 learning, including L2 production. What they also have in common is that they do not require learners to produce the target structure.
3.2.1.1 Early Input-Based Approaches

In the 1960s and 1970s, input-based approaches were promoted by Asher (1969) and Winitz and Reeds (1973). Asher (1977), quoted in Richards and Rodgers (1986) recommended the delay of practice (speaking) in foreign language teaching until the teacher is convinced that the language forms which are being taught are fully comprehended. According to Richards and Rodgers (p. 87) this emphasis on comprehension skills is known as the ‘Comprehension approach’. This methodological approach assigns a central role to comprehension in L2 learning and puts an emphasis on meaning rather than form. The premise of the ‘Comprehension approach’ is that L2 acquisition is very similar, if not identical, to L1 acquisition. Thus, the classroom should be a space where language development can proceed ‘naturally’ via acquisition activities that do not force learners to speak (produce output) before they are ready. It is important to mention that comprehension or input-based instruction positions itself in opposition to the traditional approach to the teaching of L2. It has, particularly, been advanced as an alternative to the production practice traditionally utilised in L2 instruction which claims that in L2 learning we first learn rules or items consciously and then gradually automatize them through practice (Ellis 1994: 280). The evidence for this alternative hypothesis is strong. It has been shown that comprehensible-input-based methods are very successful when compared to practice (output)-based teaching methods. As noted by Larsen-Freeman and Long (1991: 141) method comparison studies show superiority of input-based methods (e.g. Total Physical Response (TPR), the Natural Approach) over production-oriented methods (e.g. Audiolingual or audiovisual methods, Silent way, Community Language Learning (CLL) which ‘insist on early production’ and usually after ‘minimal exposure’. However, the success of these input-based instructional methods, commonly referred to as comprehension-based approaches, was done in the context of global comparative method studies. In our discussion, we will focus more on recent research on input-based instructional techniques.

3.2.1.1.1 Comprehensible Input (CI)

In the early 1980s, the case for input was made by Krashen (1981, 1982, 1985, 1998)) as part of his Monitor Model, a theory whose central tenet was the Comprehensible Input Hypothesis (CIH), (later known as the Comprehension
Hypothesis), which assigns a crucial role to comprehension. In short, the input hypothesis identifies ‘comprehensible input’ as the only causative variable in SLA claiming that language can be acquired only by understanding content, that is, by receiving ‘comprehensible input’. Krashen defines comprehensible input as that bit of language beyond the learners current level of grammatical knowledge. The learner’s current level of L2 knowledge is defined as \( i \) and the next level as \( i+1 \); ‘we move from our current level, to \( i+1 \) the next level along the natural order by understanding input containing \( i+1 \)’ (1985:2). Krashen (1982, 1983) makes the following claims:

1) Learners progress along a natural order by understanding input that contains structure a little bit beyond their current level of competence.

2) Although comprehensible input is necessary for acquisition to take place, it is not sufficient because learners also need to be disposed affectively to receive the input that they comprehend.

3) Input becomes comprehensible as a result of simplification and with the help of contextual and extralinguistic clues.

4) Speaking is the result of acquisition, not its cause. If the learner receives a sufficient amount of comprehensible input, speech will develop on its own. Learners’ production does not contribute directly to acquisition.

5) If input is understood and there is enough of it, the necessary grammar is provided automatically.

Krashen (1982) lists the following sources of evidence in support of his hypothesis:

1) Caretaker speech - People responsible for looking after children tend to talk ‘simpler’ in order to be understood. This speech is not strictly graded but ‘roughly tuned’ to the child’s level.

2) Simple codes - By this he refers to teacher and foreigner talk where utterances are modified in order to help comprehension.

3) The silent period - Often children acquire the TL, go through a period of not talking.
4) The limited contribution of L1 - Learners may ‘outperform’ their competence by using an L1 rule before learning the appropriate L2 rule. However, the L1 rule and the L2 rule may differ resulting in error. This situation can only be resolved by further acquisition.

5) Method comparison research - He suggests methods emphasising input have been more successful (1982) and also stresses the success of immersion and sheltered language teaching (1985).

Over the years, many premises that underlie this hypothesis, which include the claim that understanding messages is not only necessary but sufficient for learning an L2, have been challenged. While it is generally acknowledged in L2 learning and teaching research that comprehensible input is necessary for L2 knowledge to continue toward target-language norms (Larsen Freeman and Long, 1991); it is also acknowledged that the definition of CI is imprecise, and efforts to operationalize it have been problematic (Gass and Selinker 2008). First, The term CI suggests the provision of TL data for learners through listening and reading texts; it does not involve learner in active engagement in the sense of having to engage in the L2 learning process through speaking and writing. As Brown put it, it ‘paints a picture of learners at the mercy of input that others offer’ (2000:280).

Returning to the discussion of Gass and Selinker’s model (2008) reviewed in chapter 2, five stages were identified. A main suggestion made in this model was that for input to become intake, three conditions must be met: 1) features in the input must be noticed; 2) input must be comprehended by the learner, 3) intake must be integrated into the learners implicit knowledge system. The interesting stages from the perspective of the present discussion are the first stage which involves ‘apperceive’ or ‘notice’ some feature in the TL input and the next stage where the feature which has been noticed is comprehended at some level. The prerequisite for learning is still seen as comprehensible input but attention is drawn to the conditions that make input available for processing. Gass and Selinker distinguish comprehensible input from comprehended input. The former implies that the person providing input controls the comprehensibility, whereas the latter is ‘learner-controlled’; the focus is on the learner and the extent to which the learner is doing the ‘work’ to understand (2008:484). According to Gass and Selinker, comprehension of the input refers to a continuum of possibilities that range from
understanding the general message to performing a mini-structural analysis. When the comprehended item has been ‘assimilated’, it is considered to have become intake. Gass and Selinker suggest that the factors that influence what gets noticed are: frequency in the input (either very frequent or very infrequent), affective variables such as motivation, attitudes, prior knowledge (of the L1, other languages, of the world), and selective attention. They propose that explicit grammatical teaching can influence acquisition at the apperception phase. In other words, learners can make use of such knowledge in order to ‘selectively attend’ to the linguistic feature in the input. This view which considers explicit L2 knowledge to have an effect on the process of the acquisition of structures through meaningful input (i.e. the apperceived input stage) is different and somewhat in contrast to Krashen’s ‘no-interface’ position (section 2.3.1). Other criticism is mainly centered on the fact that Krashen’s supports a Chomskyan (nativist) view and places excessive emphasis on the role CI-positive evidence- in language development without recognizing the role of the factors such as language output and negative evidence (i.e. corrective feedback). For example, White (1987 cited in Sharwood, 1994) criticises the input hypothesis and points out the importance of feedback, particularly as a source of negative evidence to indicate the inadequacy of learners’ interlanguage system i.e. to indicate that a form in the input is not correct. Sharwood Smith suggests that positive evidence alone is insufficient in L2 learning. He writes that ‘the input itself provides no clear evidence of how the grammar should be changed’ (p.106). Learners need more than just comprehensible input to allow them to recognize their inadequate rule system, they also need incomprehensible input. Most significant to the concern of this study is the argument for the role of comprehensible output (CO) (statement 4 above). According to Krashen (1985, p. 2) ‘Speaking is a result of acquisition and not its cause. Speech cannot be taught directly but ‘emerges’ on its own as a result of building competence via comprehensible input’. In other words, the CIH asserts that as long as students receive adequate comprehensible input, their language production ability can be fostered automatically. In chapter two, we reviewed Swain’s (and Swain and Lapkin’s, 1995) account of L2 learning. As evident in their argument, the possibility of change in learners’ L2 developing system comes from attempts by the learner to process output, to produce comprehensible output (further discussion of the role of output in L2 learning will follow later in this chapter).
By calling into question the importance of L2 production (speaking), Krashen’s theory downplayed the role of conversation. Some researchers argue that it is doubtful whether mere exposure to input, even if it is comprehensible, actually promotes language development, and that conversation in itself is productive because it reflects the effort on the part of the learner to comprehend input. Input studies have taken Krashen’s claims as the fundamental basis against which to examine how input can be made comprehensible to the learner and more precisely, how learners can be guaranteed that comprehensible input is actually contributing to L2 development. There has been agreement among researchers that L2 input has to be modified in order to make it both and available and accessible to the learner. What has been the source of disagreement is the kind of input modifications and adjustments that should be made. Ellis (2001) identified four domains in instructional methods that researchers sought to determine in order to meet what kind of input works as the greatest facilitator of L2 comprehension and L2 development. (pp.69-70):

i) Comprehension: while comprehension (comprehensible input) is important for completing language tasks successfully, it does not guarantee learning of targeted forms.

ii) Simplified input: making the meaning of L2 input accessible to the learner (e.g. through simplification or elaboration) affects comprehension and learning.

iii) Interactionally modified input: Giving students the opportunity to signal non-understanding of input is effective both for comprehension and acquisition.

iv) Modified output: Allowing learners the opportunity to clarify their own output has a qualitative effect on the interaction that facilitates both comprehension and L2 learning.

Studies on input modification concentrate on describing simplification or modifications (oral or written) that different speakers (e.g., mother, father, native speaker, teacher) make when addressing an ‘acquirer’ or an L2 learner. Long (1980, cited in Ellis 1999) refers to input modifications as the grammatical or ungrammatical changes made in the formal properties of utterances addressed to learners. The assumption is that such
modifications aid comprehension. Of the different interaction patterns mentioned, we shall be focusing on pre-modifications made in oral and written classroom input. Pre-modified input occurs in teacher-learner interactions and TL samples. The input-oriented language resulting from such interactions is known as foreigner talk or teacher talk respectively. The modifications in teachers’ speech can lead to a special type of discourse which has been referred to as ‘teacher talk’.

Another claim for the role of premodified input comes from research on classroom materials where simplification is used as a means of providing access to the meaning of written linguistic input. It is argued that ‘authentic input’ (i.e. input that naturally occurs outside of pedagogic settings) that would be of pedagogical utility to the learner is problematic for the same reason that it is useful. It contains language structures that the learner does not comprehend. As a consequence, the learner needs help with the input in order to comprehend it both semantically and syntactically. This help can consist of changes to reading and listening texts through features such as simplification, elaboration, (or marginal glosses with translation) (Larsen-Freeman and Long 1991).

Simplification consists of modifications of texts that change syntax and vocabulary of the text to make listening and reading material accessible for the learner. Elaboration helps learners gain access to the text by adding grammatical structures such as phrases, clauses rather than removing the language forms in the input. It ‘often involves lengthening sentences in an attempt to make the meaning clear’ (Ellis 1994:256). The assumption is that modification of the linguistic input enhances comprehension and, therefore, has the potential of affecting L2 learning.

Although modified input (whether simplified or elaborated) might be highly effective in facilitating comprehension (Chaudron, 1988), Long (1996), it was Long (1983, 1996) who made an important distinction between modified input and modified interaction arguing that learners cannot just be passive recipients of i+1 if they wish to acquire a new language. He put forward the argument that input is most beneficial when it is part of two-way communication and not when the learner is simply exposed to TL input. Unlike the premodified condition in which input had less complexity, the interactional input is modified through opportunities to interact and negotiate.

3.2.1.1.2 Input and the Interactionist Approach
Those working from an interactionist perspective proposed views that consider both the individual and the environment as important components of L2. They focus on the role the linguistic environment in interaction with the learner’s innate capacities. Language learning in determining is the outcome both of input factors and of learners’ innate mechanisms (Gass 1997). Within this approach, language is not viewed as a separate faculty or organ as the innatists claim. Understanding a language is the result of a continuing interaction between the learner and his linguistic environment. According to Ellis (1985) L2 is learning is seen as the product of the interaction between external input and external factors.

The interactionist view sees language development as the result of both input factors and innate mechanisms. Language acquisition derives from the collaborative efforts of the learner and his interlocutors and involves a dynamic interplay between external and internal factors (p.129).

The interactionist approach has paid particular attention to the nature of the interactionist approach has paid particular attention to the nature of conversational exchanges and linguistic modifications L2 learners typically engage in (Gass, 1997). Their focus is on the ways in which learners engage themselves in negotiating for meaning i.e. try to understand and to make themselves understood by conversational partners. Interactionists maintain that positive evidence is important but not sufficient for acquisition; they contend that negative evidence - or what is not possible in a language- which is available to learners through the interactive feedback that is offered as interlocutors negotiate for meaning when attempting to resolve communication breakdowns - has an important role to play. The modifications and negotiation of meaning that take place in interaction facilitate L2 learning because they contribute to the accessibility of input for mental processing. Narcy-Combes (2005:58, translation by the author) mentions one factor influencing the acquisition process, within French studies on interaction, called ‘séquences potentiellement acquisitionnelles’ (SPA). This concept refers to the fact that inside interaction (or some sequences of interaction) the ‘more competent interlocutor’ or the native speaker (NS) signals to the learner a ‘gap’ in his L2 linguistic knowledge and overtly draws his attention to linguistic elements as they arise incidentally in a natural flow of conversation, where the focus is on meaning or...
communication. At this critical juncture, communication can either break down, or through negotiated interaction, the interlocutors can work through the communication breakdown until the new L2 form has been modified to the point where it is entirely understood. The interaction hypothesis (IH) - an extension of Krashen’s IH - proposed by Long and investigated by other researchers (e.g. Pica 1994, Ellis, 1999; Gass, 1997; Larsen-Freeman and Long, 1991) revealed that it was the learners’ interaction with learners that mattered as much as the input directed to them (Pica, 2005:273). The early version of the IH (Long, 1985) postulated an indirect causal relationship between interaction and acquisition by claiming that negotiation of meaning can generate more profitable comprehensible input and hence lead to language acquisition. This first formulation of the IH was based on the following three claims: (1) Interactional modification makes input comprehensible, (2) Comprehensible input promotes acquisition and (3) Interactional modification promotes acquisition.

While Long, like Krashen, emphasizes the importance of comprehensible input, he places more importance on the interactional aspect of two-way communication, as well as the adjustments that have to be made as a result of negotiation of meaning.

The revised version of the IH was proposed by Long in 1996 and offered the following advancements: Firstly, it seeks to account for the role of interactionally modified input in L2 by specifying the learner internal mechanisms that are involved. Secondly, CI is one of the several processes required for acquisition to occur. Thirdly, the additional processes of attention (the learner’s focused consideration on the input received) and noticing (the learner’s conscious capacity to perceive differences between their own output and the input received) are introduced as key factors.

In Long’s view, the strength of negotiated interaction lay in the way it linked the various processes involved:

It is proposed that environmental contributions to acquisition are mediated by selective attention and the learner’s developing L2 processing capacity, and that these resources are brought together most usefully, although not exclusively, during negotiation for meaning. Negative feedback obtained during negotiation work or elsewhere may be facilitative of L2 development, at least for vocabulary, morphology, and language
specific syntax, and essential for learning certain specifiable L1-L2 forms (Long, 1996:414)

...negotiation for meaning and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways (Long, 1996:151-52).

Long’s statements emphasize that interaction is a connection between ‘input’ and ‘learner internal capacities’. It explicitly mentions the concepts of ‘negative feedback’ and ‘selective attention’ to be important to L2 learning. Ellis (1999) refers to the IH as the conversational exchanges that arise when interlocutors seek to prevent a communicative breakdown or to remedy communication problems. He believes that L2 learning is fostered when the input to which learners are exposed is made comprehensible through the interactional modifications that arise when learners perceive or experience difficulties in message comprehension. Ellis (2001:71) pointed out that whereas in the early version of the IH, in which only comprehended input is important for L2 acquisition, ‘the latter version also recognises that interaction can contribute to language acquisition by providing negative feedback, and opportunities for learners to modify their output’. (p. 71). Therefore, according to the updated IH, negotiation of meaning could assist language learning because it provides learners with comprehensible input, feedback, and modified output. Negotiation of meaning is the central concept for both the early and the updated version of the IH. SLA research on negotiated interaction supported the argument that when interaction is modified conditions for language development are enhanced considerably (Pica1994, 2005).

Swain’s Output Hypothesis, discussed in chapter two, also shares with Long’s (1996) IH its emphasis on meaning negotiation, though unlike Long’s emphasis on selective attention and negative evidence, Swain (2005) believes it is the process of producing the TL that enhances language learning (see also discussion below).

In the Deep-end approach (as opposed to the shallow-end) or strong version (Howart 1984) of CLT interaction between the teacher and learners or between learners is considered an important condition by which the L2 is learnt. It is argued that by
providing large amounts of input and engaging learners in life-like interaction the grammatical system will be acquired implicitly. Thus, the best way to approach learning an L2 was to provide the learners with large amounts of input and opportunities for interaction and meaningful communication. More generally, instructional options which rely on interaction-based theories have been criticised for emphasising meaning over form. We have seen in chapter two, section 2.32, increasing concerns with CLT approaches to promote accuracy has promoted interest form focused approaches. As proposed in this study, form focused output was to overcome some of the shortcomings of relying solely on comprehension and excessive focus on meaning and communication (see section on output-based approaches below). From an SLA perspective, other researches also questioned the benefits of interaction in the development of L2 learning. Skehan (1998:203) pointed out that ‘it is one thing for successful negotiation to take place, but quite another for this to have beneficial consequences for IL development’ (Ellis, 2001). has also suggested that limited support is provided for the claim that interaction directly contributes to learning. He considered it difficult to find a direct relationship between comprehension of L2 input and the internalization of L2 forms. Quoting Sharwood Smith (1986) he argues (p.55) that input can be processed in two different ways: exclusively for comprehension, or for comprehension and acquisition. Interaction will only lead to acquisition if input functions as ‘intake’ for both comprehension and learning and not simply for top-down processing i.e.to infer meaning. In other words, only when learners become aware of gaps between their developing L2 grammar and the target language and when they consciously attend to attend to linguistic items in the input does L2 learning take place. Input has to be assimilated into intake for L2 learning to occur. Recently, other proposals have been made in the research literature to overcome some of the shortcomings of earlier input-based methods that rely solely on input comprehension.

3.2.1.2 Contemporary Input-based Approaches

The early comprehension-based methods inspired by Krashen’s IH (e.g. Natural Approach) intentionally limited L2 instruction to implicit exposure only, that is, no attempt is made to manipulate the input to focus on particular grammatical structures. Contemporary input-based methods gradually shifted to more focused techniques that
manipulate the input to make a particular feature of the L2 grammar more salient and thus more likely to be noticed by the learner. This strand of research on types of formal exposure (e.g. input enhancement, input flooding, and implicit vs explicit learning conditions) fits under the broad category of FonF which has already been described in chapter two. Currently, FonF refers to any technique that draws the learners’ attention to form in the classroom within meaning-based approaches, and may be either preplanned or reactive. Alternatively, these input-based techniques can also be classified as Input Enhancement (Sharwood Smith, 1993), a term used to refer to deliberate attempts to make the input more salient for learners. The term FonF is similar to IE in that both techniques refer to external efforts to draw the learners’ attention to form. However, while focus-on-form techniques dictate that the technique should occur in the context of communicative events, IE does not. Among the samples that Sharwood Smith (1994) offered as input enhancement techniques are input flood, typographically enhanced input, and rule explanation. Another input-based option for targeting problematic grammatical forms is Processing Instruction and Structured Input (SI). The following sections outline each one of these treatment types and also includes a brief description of the results of some of the relevant research in this area (a complete review of some of these studies is found in Chapter 4).

3.2.1.2.1 Input Enhancement (IE)

One line of research linked to types of formal exposure that has been pursued recently is the investigation of the theoretical premise that input can be enhanced or manipulated (consisting both of CI and attention to L2 forms) or made more apparent as a means to draw the learners’ attention to form contained in the input. Various pedagogical techniques have been devised to help learners pay attention to grammatical form while also providing them with the input they need for successful language learning, including consciousness-raising or input enhancement (Sharwood Smith 1994). For Sharwood Smith 1994, L2 certain grammatical features in the input to which the learners are exposed are inherently non-salient, and hence their presence often escapes the learners’ attention. Sharwood Smith proposed a continuum of consciousness-raising techniques, ranging from the extremely overt metalinguistic explanations found in traditional grammar instruction, to highlighting relevant aspects
of the input without any overt explanation ‘(1994:178). According to Sharwood-Smith (1994:178) ‘the most obvious way of to affect subconscious processes beneficially is by making relevant evidence in the input salient’. The ‘frequency’ and the ‘perceptual saliency’ of L2 forms affect to a large extent learners ability to notice (Narcy-Combes, 2005, translation by the author). Enhancing input is one way in which L2 forms are made more salient and likely to be noticed by a learner. It is expected the greater saliency a particular linguistic feature has in the L2 input to which the learner is exposed, the greater the chances are for it to be selected by the L2 learner (Skehan, 1998). Saliency, simply put, is to make learners notice what stands out in the input. Input enhancement was a term designed to replace the term ‘grammatical consciousness-raising’ (CR). ‘Consciousness-raising’ or what Sharwood Smith also termed ‘input salience enhancement’ (p. 179) consists of focusing of learner’s attention on the formal properties of the language in order to accelerate the acquisition process. While CR describes what happens in the mind of the learner, the term input enhancement, coined by Sharwood-Smith ‘emphasizes the work that is carried out on the linguistic material. It highlights ways in which input is made salient to learners’ (Gass and Selinker 2008: 387-388). In input enhancement, students are not required to produce the structures right away and are not required to produce them correctly from the start. As Sharwood-Smith noted, the aim is to ‘heighten metalinguistic awareness of relevant input without appealing to systematised metalinguistic knowledge’ (1994:179). Sharwood Smith (1993, cited in Vanpatten, 1996: 84) proposes two types of input enhancement: positive and negative input enhancement. Positive input enhancement highlights the salience of correct forms in the input. An example of this would be visual input enhancement of a reading text. Negative input enhancement would highlight forms that are not correct (e.g. pointing out errors). As a kind of focus on form instruction, textual enhancement, also known as visual enhancement, begins with a meaningful context (written input). The input could appear in the form of an article, a letter, a story or anything else that is written and meaning-bearing. The target item in this input is then enhanced by visually altering its appearance in the text by using typographical cues such as bolding, italics, underlining, capitalizing or bigger fonts to draw the reader’s attention to particular information in a text. One of the advantages of textual enhancement is that it directs the learners’ attention to form while also encouraging them to process meaning-bearing input. Another advantage is that
textual enhancement can be easily integrated into different types of instruction regardless of the teaching approach adopted.

Falling within the parameters of input enhancement is enriched input (also referred to as input flooding). Input flood can make use of both aural and written input. During an input flood task, learners are held responsible for the meaning of the text and not asked any questions dealing specifically with the target forms embedded (flooded) in the text. Therefore, because the target forms occur frequently in the input, it is hypothesized that L2 learners will attend to them in some way. Gass (1997) states that ‘something that is very frequent in the input is likely to be noticed’ (p.17). Therefore, because the target forms occur frequently in the input (the input is flooded with exemplars), it is hypothesized that L2 learners will attend to them in some way. Narcy-Combes (2005:48, translation by the author) suggests that learners need to pay proper attention to L2 elements of the target language and look out for ‘exemplars’ of the target features; that unattended (incidental) learning is limited compared to attended (intentional) learning. According to Narcy-Combes, the rationale for the use of such techniques as enhanced input and enriched input (flooding) is that they are likely to encourage intentional learning.

Studies that have investigated the effects of Textual Enhancement (Shook, 1994; Alanen, 1995; Doughty, 1995; Jourdenais, Ota, Stauffer, Boyson, and Doughty, 1995; Robinson, 1997; White, 1998; Williams, 1999; Izumi, 2002) and Input flood (Trahey and White, 1993; Spada and Lightbown, 1999; Williams and Evans, 1998) on SLA have produced mixed results. As summarised by Simard (2001, translation by the author), some of these studies (Jourdenais et al., 1995; Leeman et al., 1995; Shook, 1994) yielded positive findings and found evidence for the claim that learners are more prone to notice and produce those features that have been made more salient in the target input. In other words, typographical enhancement of selected input features positively affects L2 learning, since they integrate attention to form with attention to meaning. Some reported partial effects (Alanen, 1995); or no effect for textual enhancement (Leow, 1997, 2001; Overstreet, 1998, Wong 2000). Studies (Doughty, 1991; Izumi, 2002; Robinson, 1997; White, 1998) which have investigated the variables and linguistic forms in L2 English produced mixed results. One study by Izumi (2002) investigated the potentially positive effects of output and input enhancement on the acquisition of English relative clauses by
L2 learners of English within the framework of the output hypothesis (Swain 1995, 2005). This study is described later in section 3.3.3.2. R. Ellis (1999) identified three main goals of such studies: (a) to investigate whether the forms targeted are noticed by learners (Jourdenais, Ota, Stauffer, Boyson, and Doughty, 1995), (b) to investigate whether enhanced input promotes acquisition (e.g. Trahey and White, 1993), and (c) to compare the effects of enhanced input with some other instructional option (e.g. White, 1998). In all of these studies, learners were exposed to large amounts of input that they process for comprehension. Although the findings are somewhat mixed, Ellis concluded that these studies show that enhanced input can promote noticing of specific forms, can lead to acquisition, and, in some cases, works as effectively as (or more effectively than) other instructional techniques that involve more traditional, explicit instruction.

3.2.1.2.2 Processing Instruction (PI)

As the name indicates, PI is a type of instruction. It is a type of FFI informed by VanPatten’s work on learners’ input processing strategies (Morgan-Short and Bowden, 2006) that seeks to manipulate the way in which learner process input, thus leading to better intake. Unlike other input-based techniques (e.g., input flood, textual enhancement), PI is much more explicit; learners are told what to notice and how to process it. VanPatten (1996, 2004) has argued that PI, which helps learners process information via comprehension practice might be more effective than traditional instruction (TI) which requires learners to produce language too prematurely. The PI approach maintains that L2 learning occurs through a series of processes. As elaborated by Van Patten (1996, 2004), PI consists of:

1) explicit grammatical explanation of the relationship between a given form and the meaning it can convey;

2) information about processing strategies showing learners how natural processing strategies may not work to their benefit; and

3) Input-based materials, ‘structured input activities’, in which learners are given the opportunity in the input in a controlled situation so that better form-meaning connections might happen compared with might happen in less controlled situations. (1996: 60).
Structured input (SI) activities, include:

(a) Referential SI, or input that ‘requires the learner to pay attention to form to get meaning and have a right or wrong answer’ (Van Patten, 2004: 43).

(b) Affective SI, or input ‘require the learner to express an opinion, belief or some affective response as they are engaged in processing information about the real world’ (p.43). These activities unlike type (a), do not have right or wrong answers.

In PI, activities are structured so that learners can make changes in their developing system via focus on input and only afterward should instructional material provide opportunities for learners to develop their productive abilities. In this way, PI falls largely within input-based instructional techniques, reception-based theories and communicative methodologies to grammar instruction, which require learners to engage with the target language via comprehension practice rather than through attempts at producing the language. Despite the fact that PI is an input-based approach which does not provide any opportunity for output practice, VanPatten(1996) claimed that PI has consistently promoted improvement in production comparable to that achieved by output-based instruction. VanPatten and his colleagues have carried out numerous investigations to examine the effectiveness of processing instruction in relation to a more traditional language teaching, which emphasizes production of the L2. The key issue investigated was whether acquisition is promoted more effectively when learners process the input in psycholinguistically relevant ways than when they experience traditional grammar explanation and practice? (e.g. VanPatten and Cadierno, 1993a, 1993b). In these studies, processing instruction has often resulted in improved learner performance in both comprehension and production (e.g. VanPatten, 2004). Van Patten writes: In a series of studies, ‘we have demonstrated, the relative superior effects of PI to more traditional instruction…’. We find that participants who undergo processing instruction in which they never produce a structure ‘do not only perform better on particular kinds of interpretation tasks’, but also ‘they can access their newly created knowledge for production on a variety of tests’ (p.279).
VanPatten (2004) argued in favour of ‘an interventionist’ approach to L2 instruction (VanPatten’s IP model, section 1.6.) but not in favour of output-based traditional instruction (TI) to which processing instruction (PI) has often been compared.

TI is the term used to refer to the instructional treatments that are contrasted with and input processing instruction (IPI).TI, which was chosen as a basis for comparison, was, and probably still is, the most pervasive pedagogical tool in the L2 classroom and characterizes the most typical way of manipulating input, i.e. through providing learners with metalinguistic information and rules (Morgan-Short and Bowden, 2006). The main difference between output-based instruction, which is referred to as traditional instruction (TI) and the processing instruction approach is that PI attempts to change the strategies and mechanisms used by language learners when processing L2 input, whereas TI involves explanation and output practice of a grammatical point and focuses on the manipulation of learner output to affect change in the developing system. Other differences between traditional instruction (TI), and input processing instruction (IPI) are summarised in Table 4.

**Table 4:** A comparison of Traditional (TI) and Input Processing Instruction (IPI) (Based on Morgan-Short and Bowden, 2006)

<table>
<thead>
<tr>
<th>Traditional instruction</th>
<th>Processing Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Paradigmatic</td>
<td>-Information is presented non-paradigmatically.</td>
</tr>
<tr>
<td>-TI involves output practice</td>
<td>-Input-focused activities (reading or listening)</td>
</tr>
<tr>
<td>-Some focus on meaning</td>
<td>-Meaning always in focus</td>
</tr>
<tr>
<td>-No Processing strategy Information.</td>
<td>-Processing strategy information</td>
</tr>
</tbody>
</table>

Although PI has not been shown to be superior to other types of instruction (notably traditional instruction (TI)) in all cases (VanPatten, 2004). What appears to be the key factor in its success are the type of comprehension-based grammar activities called ‘structured input activities’. Structured input tasks (also called grammar interpretation
activities, Ellis, 1997, 2001, 2008), is another explicit form of input-based instruction that organizes the input to meet a particular goal. Students work at activities that are designed to encourage them to pay attention to form and to process input for meaning. Ellis (2001) defines structured input instruction as fitting within the focus-on-forms (see discussion of FonFS, chapter two) category because it aims to focus student attention on form and because attention is repeatedly drawn to a preselected linguistic feature. According to Ellis (2008), structured input is achieved by means of what he calls ‘interpretation tasks’. An interpretation activity consists of an input stimulus to which learners must make some kind of response. The stimulus can take the form of spoken or written input. The response can take various forms (e.g. indicate true-false, check a box, select the correct picture, draw a diagram, perform an action) but in each case the response will be either completely ‘nonverbal or minimally verbal’ (2008:875). Erlam (2003: 561) characterises structured input instruction as follows:

- It involves a primary focus on form.

- Students are required to work with language input that focuses their attention on a particular target structure.

- Students are given listening or reading tasks that require them to pay attention to the form and process its meaning.

- Students are not at any stage engaged in activities requiring them to produce this structure.

Students do not engage in activities that require them to produce the target structure in either written or spoken form. Unlike input processing instruction, the activities that students work at do not aim to direct them away from an unhelpful processing strategy. Van Patten uses the term structured-input activities to refer to the input-based activities that he gives to his students in his processing-instruction treatments. This led to the misunderstanding that structured-input activities are synonymous with input-processing instruction (Erlam, 2003). Unlike input processing instruction, the activities that students work at in structured input instruction ‘do not make any mention of altering an unhelpful, natural-processing strategy’ (p.560). Ellis (2008:875) pointed out that
‘input processing instruction makes use of structured input but it cannot be equated with it’. Structured input activities, in VanPatten’s approach, are informed by the strategies that learners use to process input. The goal, in VanPatten’s framework, is not just to get learners to notice the target forms, but also to alter any incorrect strategies they may be using, to process input so that they can make form-meaning connections correctly and more efficiently. They are, as VanPatten defines them, ‘a type of grammar instruction whose purpose is to affect the ways in which learners attend to input data. It is input-based rather than output based’ (VanPatten 1996:2). According to VanPatten (1996:63) the term ‘structured’ is used to ‘refer to the fact that the input has been manipulated in particular ways’. The activities are structured in that in order to complete the tasks successfully, the learners must match the meaning of the target structure to its form, (e.g. a sentence or a set of pictures and are asked to match them with one of two proposed interpretations). The rationale behind structured input activities, says VanPatten, ‘is the push to get learners to make form meaning-mappings in order to create grammatically richer intake’ (p.55). In this study, structured input activities are used in the sense intended by Erlam (2003) and Ellis (2005, 2008) above.

In short, what can be understood from Van Patten’s framework is that in L2 learning situations where input is not enough, PI represents the best kind of classroom intervention to help learners focus on problematic L2 forms. Within the last few years, Input Processing Instruction (IPI) has received considerable attention. A sizable amount of research has been carried out to determine the extent to which PI is superior to other types of instruction, notably traditional instruction (TI). This research is examined in the following section.

3.2.1.2.3 Criticism about Input Processing Instruction (IPI)

Some scholars have challenged both the findings and the theoretical model of PI. DeKeyser (1997, 2001) and Dekeyser et al, (2002) called into question any basis for assuming the superiority of this input-based method of instruction over one that engages students in output activities. These researchers remain skeptical about the claim that PI, as suggested by research findings, may be effective in improving both the interpretation and production of certain target forms, especially when learners practice only comprehension strategies, not production skills, during treatment. They suggested that both input and output develop corresponding comprehension and production skills. The
researchers found that the relative effectiveness of the two types of instruction depends upon on the type of structure. Input processing works well for teaching things such as verb endings but complex structures are more effectively taught with output practice. They concluded that ‘comprehension and production skills in an L2 are to some extent learned separately (p.105). In other words, input processing is more effective for promoting comprehension skills, whereas production-based instruction is more effective for promoting production skills. Similarly, DeKeyser et al. (2002) in their critique of research on PI, which suggest that interpretation practice (comprehension ) shows the same effect in production test as production practice, point out that recent studies on processing have reported that both processing and output-based instruction (which is more meaning-based) have equal beneficial effects on the acquisition of semantically complex target forms. According to DeKeyser et al., whether output-based instruction has positive effects equal to those of IP seems to depend on the operationalisation of the treatments, on the complexity of the target structure and on the delay between practice and testing. One criticism from DeKeyser et al, questions the cognitive underpinnings of PI. They claim that VanPatten’s input processing model is based on an outdated model of ‘attention’ and processing and questioned whether there is any psycholinguistic basis for the theoretical tenets of input processing instruction. They caution that it would be premature to draw conclusions about what type of processing students need to engage in to acquire various language structures. Without casting doubt on the value of PI, Toth (2006: 324-325), argued that the question that arises is ‘whether output requirements during meaningful interaction come at a cost for acquisition acquisition-still putting the ‘cart before the horse,’ as in TI- or whether they play a facilitative role independent of the one played by input processing’. If this is the case, then a treatment involving input and output in meaningful interaction might provide benefits to learners’ linguistic knowledge that go beyond those of PI alone.

This has led a number of researchers to compare PI or PI-like input-only groups to output practice groups (e.g. Allen, 2000; Bowden and Morgan 2006;Collentine, 1998; DeKeyser and Sokalski, 1996; Erlam, 2003; Salaberry, 1997) with resulting positive gains for output practice on L2 development, especially when it is utilized in conjunction with the appropriate input. Findings from these studies are presented in subsequent sections.
As mentioned above, the framework of instructional options proposed in this thesis includes a distinction between input-based vs. output-based instructional orientations. In light of the previous discussion on the role of input and focus of the present study on developing L2 learning through language production, the question emerges as to whether output plays a similar role in learners’ acquisition of L2 competence.

3.2.2 Output-Based Approaches

In chapter two, the overall process of L2 acquisition was illustrated. The language performed by the learner was described as output. While, it was postulated, that exposure to input was sufficient for language learning, not all models regarded output as playing an important role in the acquisition process. Theoretically, the major approaches to L2 learning, ranging from the skill building theory (Ellis 1994; Dekeyser 2007) to the updated the input-interaction framework (Long, 1996; Pica, 1994, 2005), all recognize the need for language production though they attach different importance to its role in L2 learning. There are conflicting views regarding the primacy of input or output for L2 acquisition. The debate over the role of output revolves around whether it plays a primary or secondary role. In contrast to input-oriented approaches to L2 acquisition, an output-centered approach to teaching emphasizes the importance of building into instruction opportunities for L2 production. One form of output-based instruction is the one practiced in traditional ELT methodology in which target structures were practiced devoid of any communicative context through different types of mechanical drills. Output-based options may also serve as an opportunity for output-based tasks, which, according to some researchers (e.g. Gass and Selinker, 2008; Swain 1995, 1998, 2005; Skehan, 1998) push the learners to use their full grammatical resources and allow learners to become aware of gaps in their current state of interlanguage development. The current meaning of output practice is that it not the means by which learners practice their language for fluency, but it is also believed to play an important role in the process of SLA, as learners need to employ their cognitive resources to produce language (Izumi, 2002). Both traditional and recent perspectives on L2 output practice are discussed below.

3.2.2.1 Output Practice in Conventional L2 Methodology
Pedagogically, L2 production has always been an important feature of L2 classroom instruction. Many L2 teachers upgrade the importance of classroom activities that push students to produce the L2 either in speaking or writing. As noted by some scholars, the view that L2 production is an important part of learning constitutes a central part of ‘traditional’ foreign language teaching methodology (DeKeyser, Sokalski 2001:83). In traditional methodology, practice has a clear purpose. Practice helps to make perfect by helping the learner to gain control over new knowledge. This claim is closely associated with the precepts of skill learning theory— as outlined in chapter two. Based on our experience, we believe that participation in classroom activities that lead to output practice (speaking or writing) is important for developing learners’ abilities to communicate in the target language. As a component of L2 instruction, output practice encompasses different kinds of language-related performance, but some general design choices are considered basic. Most methodologists distinguish two general stages in the teaching of linguistic knowledge: presentation and practice (Edge and Garton, 2009:123-130). The purpose of the presentation stage is to introduce a grammatical feature (deductively or inductively) to help the learner acquire new linguistic knowledge. During the production stage, learners are required to engage in extensive production of utterances containing the new structure. These stages correspond to the PPP model; (Byrne, 1976; Harmer, 2001; Ur, 2009). A common distinction found in most training manuals is that between controlled and free practice. Controlled practice takes the form of various oral and written transformation and substitution drills which require the mechanical production of specific linguistic forms. Free practice involves engaging in simulated communication which has been set up to provide opportunities for the use of those forms that have been presented and practised in a controlled manner. In free practice the learner is concerned with meaning rather than with form. In between the two poles are other kinds of practice (e.g. guided and meaningful or contextualised practice). Ellis (1997:90) refers to these two types of practice as ‘text-manipulation’ and ‘text-creation’ activities. ‘Text-manipulation’ supply learners with the sentences to produce and ask them to operate on them in some limited way-fill in a blank, make a choice from items supplied, substitute another item, transform them into some other pattern, and so on.’ ‘Text-creation activities require learners to produce their own sentences containing the target structure.’ Some proponents of a communicate methodology are more radical, advocating
a re-ordering of the customary three steps of the teaching process, so that instruction starts with communicative use (e.g. Brumfit, 1980). Even here, however, a place is still provided for the controlled practice of those features of which the learner displays a lack in mastery.

Thus, there is a received tradition about the role of practice which assigns it a prominent place in L2 classroom learning. However, the agreement is not unanimous. There are a number ELT methods which reject any role whatsoever for traditional practice-oriented instruction. In the comprehension-based approaches discussed throughout section 3.2.1, (the Natural approach based on Krashen’s (1985, 1998) CIH and VanPatten’s IP Model), all that is required for L2 development is input. Input is solely responsible for the development of L2 whereas output helps in the learner’s ability to access the L2 system already developed by the intake of CI. VanPatten criticized the form of output-based instruction practiced in traditional classrooms in which target structures were practiced devoid of any communicative context through different types of mechanical drills. VanPatten did not agree with the claim that ‘using a form in one’s output is a direct path to acquisition’ (2004: 27) and suggested instead, on the basis of current evidence, that acquisition does not appear to be dependent on output.

Output practice is a form of classroom interaction and, as such, is a varied phenomenon subject to a host of social and personal factors. As suggested by Dekeyser (2007:12) ‘the need for and usefulness of different kind of practice varies considerably on the institutional context and the characteristics of the individual learners’. Van Lier (1996) distinguishes ‘practice’ from ‘mal practice’ suggesting that guidance for classroom practice should be based on local judgments. Muranoi (2007) investigates how output based practice, which she defined as ‘any activity designed to provide L2 learners with opportunities to produce output’ (p.52) influences the development of productive skills L2 learners need for communication. She points out that output practice is viewed by L2 practitioners as essential; nonetheless, there is an ongoing debate to whether this intuitive view is confirmed by empirical research. Muranoi reviews studies on the role of output practice in: text reconstruction, essay writing, output-oriented interaction, and communication tasks. A summary of the findings and methodological limitations of the studies are provided. Muranoi concluded by suggesting that ‘we should be careful not to assume that output practice can be useful for any learner with any linguistic form under
any condition”; the researcher noted that the possible positive effects of practice on the acquisition of some grammatical forms depend on ‘various factors including learners’ psycholinguistic readiness and linguistic features of the target form’ (pp. 59-60).

It should be clear from the discussion above that both input-based practice and output-based types of language practice are equally important in language learning. Input-based practice develops learners’ underlying linguistic system while output-based practice enables learners to develop a skilfull use of the language. In this study, the term output practice is used to refer to any activity designed to provide L2 learners with opportunities to produce output. The term practice, therefore, is used in a wider meaning than that used in the traditional Presentation-Practice-Production sequence (PPP), in which practice refers to a mechanical drill-like activity such as repetition and manipulation. In line with recent development the construct of ‘output’ has been proposed as a possible contributing factor to L2 learning. Several researchers drew attention to the value of the L2 learner’s production in the second language acquisition process allocating more positive and causal role to output in developing L2 system.

3.2.2.1 Recent Views on Output Practice

According to Gass and Selinker (2008) the standard and traditional viewpoint on output is that it is not a way of creating L2 knowledge, but a way of practicing already-existing L2 knowledge. In other words, output has traditionally been viewed as the means for L2 learners to practice what has previously been learned. Most language learning researchers agree that output practice is necessary to increase fluency, that is, learners must practise producing second language utterances if they are to learn to use their interlanguage confidently and routinely. However, we have seen in chapter two, section 2. that some theoretical accounts of L2 learning advanced by some researchers make a number of claims which go beyond this ‘practice’function of output, and which have to do with the development of the IL system, and not only increased efficiency in using it. These researchers do not deny the essential role of input in L2 acquisition; they do, however, reject the view that input alone is sufficient for the development of the learner’s linguistic system. For example, in Gass and Selinker’s (2008) model (see chapter one), the learner went from noticing a form in the input, to analyzing that form, and then to integrating it into the developing grammar. The result is a second language
acquisition model in which output becomes an integral part of the process, rather than solely a product of acquisition. Similarly, the updated interaction hypothesis (section 3.2.1), while still focussing on input processes, has emphasized the role of interactional modifications on the learner’s output. From an input interactionist perspective, Pica (1994, 2005) asserted that the production of CO is essential to the process of language acquisition. She argued that engaging learners in interaction and pushing them to produce output is another effective way to promote L2 learning. The sequence of output, feedback, and reprocessed or modified output plays an important role in ‘pushing’ learners beyond their current performance level. Pica, Kang and Sauro (2006:308) contend that ‘meaningful input and communicative experiences need to be accompanied by opportunities for learners to produce and modify their output if they are to become more syntactically accurate’. According to Swain (2005) ‘important in this argument is the assumption that the processes in which learners engage to modify their output in response to feedback are part of the second language learning process (p.476). In Skehan’s (1998) account of SLA (section 2.2.1), language production plays a key role in language learning. According to Skehan, the nature of the input comprehension process suggests that input cannot guarantee the occurrence of language learning in that comprehension resources and strategies can prevent learners from doing deep processing and focusing on language forms. In Skehan’s words, ‘the comprehension process can be partly detached from the underlying syntactic system and from production’ (Skehan, 1998:15). Skehan explained how learners may well understand the meaning of an utterance without reliance on its morphology or syntax, that is grammatical decoding may be bypassed and learners rely more on contextual cues to decode messages; the same cannot be said for production which requires grammatical encoding. Thus, in Skehan’s view language production is essential to force the learner to process linguistic data at a syntactic level, forcing the learner to move from one system (memory-based) to the other (rule-based) and vice-versa. Overall, the current view of learner output is then that output a means by which to practice one’s language for greater fluency, but also that it plays a potentially important role in L2 learning. A strong claim for this idea of ‘output as a process’ came from Merril Swain (1995, 2000, 2005) who in response to Krashen’s input hypothesis (1985), suggested that in addition to being the end result of the language
learning process, output can actually have an important role in promoting language development; Its main tenet is that the activity of producing the target language (speaking or writing) is, under some (yet-to-be-specified) circumstances, part of the process of second language learning (Swain 2005). It is important to recognize that the Output Hypothesis (OH) in no way negates the importance of input or input comprehension. The intention is to complement and reinforce, rather than replace, input-based approaches to language acquisition so that learners will go beyond what is minimally required for overall comprehension of a message. The importance of output in learning is that it is a means for learners’ active deployment of their cognitive resources. That is, output presents learners with unique opportunities to process language more deeply in ways that may not be necessary for comprehension (Izumi 2000). These observations have led other L2 learning researchers to suggest important roles for L2 production in language instruction as well. The contributions that output can make are summarized below:

- Language production (output) serves to generate better input through the feedback elicited by learners’ efforts at production.

- Output obliges learners to pay attention to grammar.

- Output allows learners to test hypotheses about the TL grammar.

- Output helps to automatize existing knowledge.

- Output provides opportunities for learners to develop discourse skills, for example, by producing long turns in conversation.

- Output helps learners develop a personal voice by steering conversation to topics to which they are interested in contributing.

- Output provides the learner with auto-input—that is, learners can attend to the input provided by their own language production.

   (Based on Swain, 1995, 2005; Skehan, 1998; and Ellis, 2003)

One fundamental question is then how to maximize the effects of output instruction in increasing learners’ proficiency.
The present study, in part, touched upon the issues formulated above, especially with regard to the importance of output task types as an important trigger that directs learners’ attention to the linguistic items. Previous studies addressing these issues have concentrated on the relative effects of linguistic input and/or output on learning a particular linguistic feature (e.g. Erlam, 2003; Toth, 2006). The theoretical assumption underlying this question focuses directly on ways to draw learners’ attention to target linguistic features more effectively. Another issue concerns the cognitive learning processes underlying learners’ L2 production attempt and subsequent input processing. These issues are discussed in the two sections below.

3.2.2.2. Output as an attention-drawing device

We have seen in section 2.3.1 that SLA research has emphasized the beneficial effects of attention and awareness on L2 learning. Schmidt (1990, 2001) proposed the noticing hypothesis (NH), in which he emphasized the significance of focal attention and awareness and excluded learning without awareness. Researchers have proposed several pedagogical approaches which encompass from the most explicit method of instructing grammatical rules to the most implicit method of just exposing learners to the input in which a specific grammatical form is enhanced. The question of how output enables L2 learners to acquire the TL more effectively than input or other conditions does might be answered with the concepts called attention, awareness and noticing. From an output-based perspective, it has been argued that meaning-focused instruction does not suffice in acquiring language forms. The rational underlying the effectiveness output is that L2 production induces high cognitive involvement and is more effective that simple exposure to TL (Izumi 2000). To quote Swain again, while producing the L2 one is forced to move from ‘semantic processing’ that characterises comprehension to the ‘complete grammatical processing required for accurate production (Swain 1995:128). De Bot (1996) explains that if this attention to the form of output leads learners to attend to language forms the output may have a bona fide role in SLA. However, among various means or approaches of getting learners to pay attention to L2 forms, the role of output has received comparatively less attention from researchers. To the researcher’s knowledge, only a few studies have investigated the claims for a role of output in attention to L2 form (Izumi and Bigelow, 2000; Izumi et al., 1999). Therefore, more
research needs to be done to investigate what the suitable means of getting learners to focus on form are. Hence, in the current study, attention to or noticing (awareness at the level of noticing and understanding) of relevant aspects of L2 through learners’ production attempt, is assumed an important process for learners’ learning of the targeted grammatical feature.

Pedagogically, the output-input issue (the question of how output enables L2 learners to acquire the TL more effectively than input or other conditions) can be tackled in relation to the following teaching strategies which, although by no means exhaustive, use learner output in coordination with TL input:

1) simultaneous attention to input and output,

2) attention to input prior to output, and

3) attention to output prior to input.

(Basturkmen (2006); Thornbury, 1997)

These claims are based on which of these conditions researchers believe that learners focus more on target features. Regarding the first order, it is generally agreed that learners fail to give simultaneous attention to input and output. One proposed explanation is that learners’ mental capacity is a limited-capacity attentional processing system, only allowing a certain amount of information to be attended to at one time (Doughty and Williams, 1998). Advocates for an input-first presentation (i.e. Doughty and Varela, 1998), argue that input supplies an external inducement to notice the gap between the IL and the TL. That is, when the learners are provided linguistic information from external sources, learners are enabled to make cognitive comparisons between their IL system and the TL. Thus, L2 learners are engaged in explicit cognitive activity in which noticing the gap occurs.

On the other hand, advocates for an output-first presentation (Dekeyser, 1997; Izumi and Bigelow, 2000) argue that this sequence is more advantageous to create an environment promoting a greater degree of focused attention, given that L2 learners notice gaps in their IL knowledge when they attempt to produce the TL, and such gaps bring expectations affecting allocation of selective attention. Thus, under this claim,
output is an effective device for drawing attention to target features since it provides a strong motive for L2 learners to solve their linguistic problems. Basturkmen (2006), following Stern (1992), distinguished between two teaching macro strategies that he referred to as input-based strategies and output-based strategies. Input-based strategies were defined as strategies in which ‘learning occurs primarily through exposure to language input in the form of written or spoken texts’ (p.134). Here, it is important note that the emphasis on input-only practice leading to gains in language production has given rise to a number of empirical studies on the comparability of Processing Instruction (PI) and traditional output-based instruction. These studies supported the claim that learners who received instruction which excludes any kind of output practice performed as well on comprehension and even production tasks as those who had an output-based instruction (see the discussion in 3.2.1.2.2). Output-based instruction, the other strategy, was described either as ‘predominantly output’ or output-to-input strategies (in contrast to input-output). The first is based on ‘the premise that using the language (producing output) is sufficient for learning’. It is based on the belief that learning occurs through output prompting learners to stretch their current IL to reach their linguistic ceilings. This last option was adopted in the second research project (outlined in chapter four) which investigated whether the awareness of problems L2 written output can prompt the learner to seek out subsequent input with more focused attention. This issue is discussed in the ensuing section.

3.2.2.3 Effects of Output on Attention to Input

In addition to output being an attention-directing option for language teachers, it was important to ask not only whether output-based activities indeed alter learners’ subsequent input processing, and if it promotes the acquisition of target forms. It has been suggested that language production may have a role to play by orienting the learner’s attention to language forms in the input (Ellis 1997). For example, when learners produce output and encounter difficulties in expressing message meaning, the awareness of those shortcomings can direct learner’s attention to the form of their L2 output and as a result pushing learners to attend more carefully to the input in search for the needed language forms which then may be used in subsequent output. According to Ellis (1997) output is a result (rather a cause) of acquisition and is thought to be beneficial to L2 learning only
when learners treat it as auto-input (also referred to as virtual input or back door learning). Gass (1997), Gass and Selinker (2008) explain that output processing serves as a priming device in which learners are prompted to process relevant information during subsequent input processing. Subsequent input processing may also serve as a reinforcing device in which learners can confirm or disconfirm information about lexical and grammatical problems encountered during output processing. The role of output here is proposed to facilitate the process of noticing the relevant features in the input. Whereas attention in output arises internally through production processes, in that learners themselves decide what they find problematic in their L2 production attempt; input functions as an external attention-drawing technique. In other words attention to L2 forms is induced by external means (Izumi 2000).

L2 production attempt (e.g. Writing) is often employed in L2 teaching, the purpose of which is for learners to produce better compositions so that their writing skills can be enhanced. Research and theory on EFL teaching and learning indicate that writing can be viewed in two ways—either as a skill to be taught, learned, and assessed (the learning-to-write dimension) or as a means and basis for learning (writing-to-learn line of research dimension). A number of studies addressing the language learning potential role of written output have also examined learners ongoing thinking episodes or decision-making while producing their L2, finding salient L2-related internal processes or composing behaviors among second-language learners (e.g. Adams, 2003; Cumming, 1989, 1990; Izumi and Bigelow, 2000; Izumi, Bigelow, Fujiwara and Fearnow, 1999; Qi and Lapkin, 2001; Swain and Lapkin, 1995; Tocalli-Beller and Swain, 2005). Furthermore research in SLA emphasizes the need to help L2 learners notice their own L2 use (in comparison to the use of the TL). One of the central issues in the FonF approach (section 2.3.2.1) is ‘how to lead the learner’s attention to a linguistic mismatch between IL (interlanguage) and TL (target language)’ (1998: 238). Specific tasks have been identified in the SLA literature that demonstrate the gains that learners make when they locate a mismatch between their IL and the TL, most notably when engaged in tasks that involve the written modality (Qi and Lapkin, 2001). The second research project in this dissertation (to be described later in chapter four) is framed in the writing-to-learn line of research dimension where practice in writing can be seen as one form of output practice.
that (in conjunction with feedback as input) as a means for language learning that is thought to stimulate learners’ noticing of L2 forms.

3.3 Research on the Effects of Input and Output

In the first part of this chapter (section 3.2.1.2) we distinguished between two broad types of input-based approaches to L2 teaching. In the first, ‘enriched input’ provides learners with input that has been flooded with exemplars of the target structure in the context of meaning-focused activities. In other words, this instructional approach caters to incidental acquisition and what Long (1991) has referred to as ‘focus on form’ (chapter two). Another input-based instructional technique, namely VanPatten’s (1996, 2004) processing instruction (PI) posits that it affects the acquisition of target forms by actively engaging learners in processing structured input. In this way, learners are pushed to alter their existing processing strategies by changing the ways they attend to input data that result in better intake. This kind of approach invites learners to engage in intentional learning and caters to a ‘focus on forms’ approach. What these two approaches have in common, however, is that they do not require learners to produce the target structure.

Although the research findings related to effect input enhancing methods are somewhat mixed, they show that enriched input can promote noticing of specific forms, and improve accuracy in the use of problematic grammatical structures, and, in some cases, works as effectively as (or more effectively than) other instructional techniques that involve more traditional, explicit instruction. The input-processing studies examined in section 3.3 involved experimental comparisons of processing instruction and traditional output-based instruction. These studies provided evidence that learners who received instruction which excludes any kind of traditional grammar explanation and output practice performed as well on comprehension and even production tasks as those who had output-based instruction. In other words, L2 development both in comprehension and production results from comprehension practice alone. More specifically, there are studies which suggest that the role of output is secondary to the role of input and output merely facilitates access to an already developed L2 system (e.g. Benati, 2001; VanPatten and Cadierno, 1993; VanPatten and Wong, 2004). Thus, it has not been within the scope of the research in processing instruction to clarify what roles L2 production might have in
L2 learning. The arguments for the importance of output practice in L2 learning have been supported by other strands of research on the role of output.

Thus, this section examines how this strand of research has viewed and examined output in L2 learning. Grounded in either the cognitive (or the sociocultural perspective), the output-oriented researchers have focused on different issues. In this study, studies on output are represented by input vs output studies, negotiated interaction studies (output and negotiation), and studies based on the comprehensible output hypothesis (including the sociocultural studies) (table 5). The researchers in input vs output studies involved

<table>
<thead>
<tr>
<th>Line of Research</th>
<th>Relevant Research Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output vs input studies</td>
<td>(Allen, 2000; Collentine, 1998; Dekeyser and 2001; DeKeyser and Sokalski 1996; Erlam, 2003; Nagata, 1998; Salaberry 1997; Morgan-Short and Bowden, 2006)</td>
</tr>
<tr>
<td>Interaction research into the role of language production in L2 development</td>
<td>(Ellis and He, 1999; Nobuyoshi and Ellis, 1993; Pica et al., 1989; Shehadeh, 1991; Shehadeh, 2001)</td>
</tr>
<tr>
<td>Research within the framework of the Output Hypothesis (OH)</td>
<td>(Izumi, 2002; Izumi and Bigelow, 2000; Izumi et al., 1999; Izumi and Izumi, 2004; Swain and Lapkin’s, 1995; Lapkin, Swain and Smith, 2002; Swain and Lapkin, 1998, 2001)</td>
</tr>
</tbody>
</table>

comparing instruction that enhances input with instruction that focuses on production (output). The interaction research into the role of language production in L2 development has focused primarily on modified output, specifically the role of negotiated interaction in providing opportunities for interlanguage modification and CO. Research based on the OH has investigated how learners, their mental processes and output inter-relate. The researchers in both the input-interactionist and output vs input perspectives have enhanced our understanding of how the relationship between language production

86
and L2 learning has been viewed and examined. Nevertheless, as mentioned in the introductory chapter, the present study remains framed within Swain’s (1995, 2005) Output Hypothesis framework.

3.3.1 Output vs Input Studies

It has not been within the scope of the research on processing instruction (section 3.2.1.2.2) to clarify what roles L2 production (output) might have in L2 learning. A line of research deserving important notice with regard to the role of input processing in L2 learning is the area concerning the effect output practice compared to that of receptive practice. As noted above, the arguments for the importance of output practice in L2 learning have been supported by other studies, all of which involve comparing instruction that enhances structured input instruction (sometimes under the PI framework) with instruction that focuses on production. They specifically focused on the exploration of any differential effects of input-based as compared to output-based instructional conditions. Accordingly, much of this research has made attempts to methodologically isolate the variable of output (Morgan-Short and Bowden, 2006). These studies were not included in the strand of research on processing instruction (PI) because they are substantially different from PI research in that they have not methodologically followed the design of VanPatten and colleagues’ studies. Instead, they may be considered more general output vs input studies interested particularly in understanding how input and output affect learners’ comprehension and production of L2 target forms (Morgan-Short and Bowden, 2006).

In one study, responding to VanPatten and Cardierno’s (1993) argument, DeKeyser and Sokalski, 1996 selected object pronouns and the conditional tense in Spanish as the target items. The two experimental groups both received EI as well as practice exercises that progressed from mechanical to meaningful and communicative, except that the practice set for one group was input-based in nature, whereas that for the other group was primarily output-based. Both groups were provided with EI and compared to a control group. Results concerning object clitic pronouns showed that input-based activities were correlated with better performance on the comprehension task only; the output-based group did better on the production task. For the conditional, the output-based group obtained better scores in both comprehension and production. This prompted DeKeyser
and Sokalski to conclude that PI is not superior to TI and that PI could not bring about transfer of task skills from interpretation to production even within the paradigm of one particular feature.

Dekeyser and Solasky (2001) investigated the role of comprehension and production practice of 82 first-year Spanish students in a traditional context. Students were divided into a control group, an input group, and an output group for practicing material in different ways. The findings basically reflect the predictions of skill acquisition theory (chapter two); input practice is better for comprehension skills, and output practice for is better for production skills. They also found that the relative effectiveness of the two types of instruction depends upon the type of structure. Input processing works well for teaching things such as verb endings but complex structures are more effectively taught with output practice. Similar results were also obtained by Salaberry (1997) and Collentine (1998).

Salaberry (1997) replicated VanPatten and Cadierno’s (1993) study, again targeting the form of Spanish object pronouns. Both the input processing group and the output processing group were presented with sequenced activities moving from mechanical to communicative language. The only difference was that the latter group was required to produce the target form, while the former, other than receiving instruction that was input-based but not composed of SI, was not. When compared to the control group, no significant differences were found between the two treatment groups’ performances on the comprehension test, the discrete-item production test, and the free video narration test. Salaberry thus concluded that PI is not better than TI.

Collentine’s (1998) study compared PI to an output-oriented instruction for the Spanish subjunctive. The results revealed no significant differences between experimental groups on either comprehension or production tasks; both PI and output-processing (OP) groups improved after instruction on the uses of the Spanish subjunctive. Collentine’s finding of no differences between the instructional groups offers some evidence that PI is not necessarily superior to all output-based instruction.

Allen (2000) (cited in Morgan-Short and Bowden, 2006)) investigated acquisition of French causatives and compared the effects of processing instruction and production-based instruction. She did not find an advantage for the processing instruction group
compared with the production group, but both groups did improve compared with a control group. Another study investigating the relative effectiveness of structured-input instruction and output-based instruction on the acquisition of direct object pronouns in French was conducted by Erlam (2003). Erlam (2003) found that the output-based group outperformed the structured-input group on the listening comprehension test and the written production test (form placement). However, no significant differences were found between groups on a reading comprehension test, the written production test (form correctness), or on an oral production test. In Erlam’s words structured-input and output-based instruction made ‘greater gains on tests of comprehension and production than those evidenced by the control group’ (p.576). However, when the relative effectiveness of these two types is concerned, the findings suggest that there is ‘no greater advantage for structured-input instruction over meaning-oriented, output-based instruction’ (p. 579). Erlam concluded that research is needed ‘to ascertain whether giving students opportunities to produce language leads to greater gains in automaticity and the development of oral skills’ (p. 579).

Toth (2006) examined the role of input and output in the acquisition of L2 Spanish morphosyntax by comparing PI (as a form of input-based instruction) to communicative output instruction (COI). Statistically speaking, the results of Toth’s study showed that both PI and COI performed equally on a timed grammaticality judgement, but that the COI group outperformed the PI group in the guided written production test, though PI outperformed the control group in both tests. This study has ‘questioned an account of output’s role in L2 acquisition that is limited to accuracy and fluency in accessing the implicit system, as well as assertions that system development occurs only via input processing’ (2006:371).

Apart from the three studies discussed above, the effectiveness of output-based instruction was also explored in the study by Morgan-Short and Bowden (2006). As the researchers claim ‘it contributes to a growing body of literature that suggests that output— as well as input—can promote linguistic development and might constitute a direct path to acquisition’ (2006:55). The learners on the different measures, Morgan-Short and Bowden (2006: 59) offer a conclusion that ‘meaningful output-based instruction can, like processing instruction, lead to linguistic development, at least when practice is
meaningful and leads learners to make form-meaning’. These results suggest that not only input-based but also output-based instruction can lead to linguistic development.

Although the previous studies have contributed to our understanding of how input and output affect learners’ comprehension and production of L2 target forms and structures it remains unclear which of these two forms of practice is more effective. Some studies have shown that input-based instruction is more effective for target-structure acquisition than output-based instruction, and others have not. It is possible to classify these studies into three categories:

- Studies which indicate that input-based and output-based instructions are equally effective in promoting L2 knowledge (e.g. Erlam)

- Studies which provide evidence for the advantage of input-based over (in particular traditional) output-based instruction (e.g. Studies by and his colleagues VanPatten 1996, 2004 and his colleagues)

- Studies which suggest the superiority of output-based over input-based instruction (e.g. Allen, 2000; Toth, 2006; Morgan-Short and Bowden, 2006)

It must be remembered that these studies have employed various designs, investigated different output-based options and compared them with some specific input-based techniques. Therefore, it is difficult to draw definitive conclusions, because the treatments and assessment tasks are not equivalent across the studies (Morgan-Short and Bowden 2006). As commented on by Ellis (2006: 99), studies which compared the relative effectiveness of input-based and production-based instruction produced mixed results, ‘resulting in ongoing debate about the relative merits of these two options’. Ellis argued that both options are likely to result in input-processing and production. In an input-based approach, individual learners silently produce the L2 structure. Similarly, in a production-based approach, utterances produced by one student serve as input for another. According to Ellis ‘It is, therefore, not surprising that both options have been shown to result in acquisition’.

Although such efforts have implications for the present study, they have done little to make clear the possible contributions of output to learners’ developing L2 grammatical
system. Studies with greater implications for the exploration of output are explored in the following sections, but are shown to have many limitations as well. For the most part, the construct of output as a causative variable in developing L2 competence has gone unexplored in any meaningful way (Swain, 2000). It seems, therefore, that more research is needed to ascertain the effectiveness of the particular options.

3.3.2 Interaction Research into the Role of L2 Production

In section 3.2.1.1.2 on input and interaction, it was reported that interaction in general and meaning negotiation in particular which is elicited by interactional modifications foster input comprehensibility. What has been particularly suggested was that learners who have opportunities for interaction which lead them to signal their non-understanding of input learn better than learners who do not (Ellis, 2001). Other (output-oriented) researchers have looked at other ways in which negotiated or modified interaction can contribute to language learning. In addition to the provision of comprehensible input, producing modified output has been identified as an other additional contribution of negotiated interaction to the learning process. Modified output, that is L2 learners’ reformulation of their own utterances either in response to feedback or without feedback, has been attracting researchers’ interest as an important component of learner interactions, and as a manifestation of interlanguage development and psycholinguistic processing. Swain’s OH, like the IH, also generated researchers’ interest in the role of modified output as a component of interaction. Researchers such as Pica have argued for the importance of negotiated interaction not just because it provides learners with an opportunity to receive input that they have made comprehensible through negotiation, but also because it provides them with an opportunity for the production of comprehensible output as well. Pica argued that modification of interaction may occur when L2 learners and their interlocutors have to work to achieve comprehensibility by ‘repeating a message verbatim, adjusting its syntax, changing its words, or modifying its form and meaning in a host of other ways’ (1994: 494). Pica (2005) maintained that the learner’s interaction with interlocutors is as important as the input they receive. We have already pointed out that by ‘modified’ ‘pushed’ output researchers refer to a learning process whereby learners are given the opportunity both to produce and modify their sentences so as to make them more target-like. It can also be
described as a ‘speech or writing that makes demands on them (learners) for correct and appropriate use of the L2’ (Ellis 1994:27). Modified output may ‘occur following feedback, or as a result of self-monitoring’ (Ellis, 2008:971). Within the framework of the OH, Swain explained that:

Negotiation of meaning need to incorporate the notion of being pushed toward the delivery of a message that is not only conveyed but that is conveyed precisely, coherently and appropriately (Swain, 2005:472-473).

The importance placed on L2 learners production led to a number of studies which have studied the effects of negotiation on language learner’s output within the context of the IH. This research attempted to address a number of issues. One issue is whether and how negotiated interaction between interlocutors may provide learners with pushed output opportunities. Much of the research has been motivated by the claim that, although a great deal of L2 learning takes place through exposure to comprehensible input, producing target-like output may help learners notice gaps in their L2 knowledge. This happens through negative evidence (i.e. information about ungrammaticality), or explicit instruction, when learners are not able to discover through exposure alone how their interlanguage differs from the L2.

Pica’s (1988) study was designed to find out whether and how speakers modify their output to make it more target like when their interlocutors signal their non-understanding that is as a result of meaning negotiation. Pica examined the interactions between a native speaker (Ns) and ten non-native speakers (NNSs) of English. She hypothesised that NNSs would modify their IL morphosyntax, phonology and lexicon using more target-like forms when asked by their interlocutor to provide clarifications or confirmations of their utterances. The results indicated that the NNSs did ‘modify their interlanguage to achieve output that was both more comprehensible and more target-like.’ (p.58) when the speakers requested clarification or confirmation. However, Pica (p.64) noted that ‘such adjustments were relatively infrequent’ since the interlocutors themselves ‘produced much of the modification for them’ when comprehension problems arose. This led her to suggest that though the study supports the claim that ‘learners can shape their interlanguage toward target norms when asked to make themselves
understood, the data were less conclusive, however with regard to other possible contributions of negotiated interaction to interlanguage production and development’ (p.68). The assumption is that this process of output modification contributes to L2 learning. As suggested by Pica and her colleagues learners in modifying their output ‘…test hypotheses about the second language, experiment with new structures and forms and expand and exploit their interlanguage in creative ways’ (1988:64).

Another follow up study by Pica et al (1989, cited in Ellis 1994; Shehadeh, 1999, 2001) showed that learners did modify their output by making it more grammatical in response to negotiated interaction involving clarification requests. That is modified output occurred most often when learners are requested to clarify their output rather than provided a model utterance for confirmation (confirmation checks, see section 3.4.3 for definitions). A clarification request as described earlier is a type of implicit feedback which indicates a request for clarification of utterances in terms of non-targetlike use (Ellis, 1994). Similarly this study investigated the effect of meaning negotiation on self correction by learners when ‘pushed’ to modify their output. Pica and her colleagues, after an analysis the language produced by learners, found that learners’ semantic and morphosyntactic modification of their L2 output was prevalent but was affected by the type of signal of comprehension difficulty that the interlocutor provided: requests for clarification led to more modifications of L2 output as opposed to confirmation requests and repetition. In terms of classroom practice, this suggests is that giving time for learners to reformulate and clarify their messages rather than simply modelling or repeating correct versions of their responses may better contribute to learners’ progress. In support for the need for learners to attempt producing the L2, Pica suggested that:

…learners must have opportunities to produce comprehensible output during interaction involving meaningful content. Such opportunities allow them to modify interlanguage toward greater clarity, to make hypotheses about the L2, and to try to map L2 form on L2 meaning (Pica, 1992:6).

In a similar vein, Pica et al. pointed out:
Although research has focussed mainly on the ways in which negotiation with the interlocutor helps the learner to understand unfamiliar input, we believe that it is through negotiation that learners gain opportunities to attempt production of L2 new words and grammatical structure as well (Pica et al. 1989:65).

Shehadeh further explored this issue by examining students’ ability to modify their output. He looked at output in non-native, non-native interaction and lent some support to the claim that interaction between learners working in pairs or small groups triggered greater opportunities for negotiation. Shehadeh (1991, reported in Shehadeh 1999a,b) investigated the ability of non native speakers (NNSs) to modify their output to make it more target like (phonologically, morphosyntactically and semantically) and the degree to which such learners attempts at modification were self-initiated or in response to signals of comprehension difficulty from their partners (other-initiated). More importantly he looked at opportunities which NNNs have to modify their output to make it more target like phonologically, morphosyntactically and semantically. The findings of the study showed that learners were able to adjust their interlanguage but also revealed that ‘self-initiated clarification attempts occurred in significantly greater proportions than other-initiated clarification requests’ (70 percent versus 30 percent respectively) and ‘instances of self-initiated comprehensible output occurred in significantly greater proportions than instances of other-initiated comprehensible output (70 percent versus 30 percent respectively’ (1999a:3). Shehadeh (1999b:36) suggests that from a pedagogical perspective this may ‘support the underlying assumption that the role of L2 learners’ production is not only to give feedback in order to generate more comprehensible input, but also to facilitate SLA by ‘offering NNSs opportunities to modify their IL utterances in the direction of comprehensible output’; that learner-based (rather than other- or teacher-based) initiations should be encouraged in classroom asks and activities. Shehadeh (2001) examined the role self- and other-initiations play in providing opportunities for modified output (MO). Thirty-five adults (4 male and 4 female native speakers NSs, 12 male and 15 female non-native speakers- NNSs-) ranging in age from 22 to 37 years participated in the study. The NNS participants represented 13 different L1 backgrounds. The NS participants were university teachers and postgraduate students.
experienced in talking to NNSs. Three communication tasks were developed for the purpose of the Study: a) a picture description task in which a NNS described a picture for a NS or a NNS to reproduce, b) an opinion exchange task in which the interactants (NS/NNS and NNS/NNS pairs) in the opinion exchange task, interactants were required to discuss their opinions on a short newspaper article, and c) a group decision-making task in which the NNSs created part of the constitution of a newly independent (invented) country. The first two tasks were performed in NS-NNS and NNS-NNS pairs and were audiotaped, and the third was completed in NNS groups and was audio- and videotaped.

The results showed that both self- and other-initiations provided NNSs prompted modified output, a greater number of these were self-initiated. Modified output (MO) was defined as ‘the modifications non-native speakers (NNS) make to their output in order to make an initial utterance or part of an utterance more accurate or more comprehensible in response to: (a) other-initiation or (b) self-initiation’ (p.437). However, in four of the five interactional contexts examined in the study, significantly more instances of MO resulted from self-initiation than from other-initiation. This suggested that self-initiations play an important role in prompting MO and that learners need both time and opportunity to initiate and complete repair of their own messages. Shehadeh (2001) argues that the main conclusion to be drawn from these results is that if production of MO is integral to successful L2 learning self initiations as well as other-initiations matter. In addition, the researcher concluded that in terms of classroom interaction, this ‘implies that learners need both time and opportunity for self-initiated, self-completed repair of their messages (p.451).

The research areas discussed above have been conducted to examine whether learners modify their output in the interaction. It has shown that negotiated interaction particularly interactional moves such as clarification requests (compared to confirmation requests) foster modified output as L2 learners push their L2 abilities to their linguistic limits in trying to more precisely convey messages. However, this research usually did not go further once modified output was produced. They have only managed to demonstrate the type of output and their occurrences. They have yet to demonstrate how output impacts learning outcomes.

Another area of research has addressed the question of whether the target-like output that results from negotiated interaction are maintained in the learner’s IL. The focus of
the research is on the changes in learner developing linguistic system before and after the production of modified output. Nobuyoshi and Ellis (1993) explored this issue. This study studied the use of the past tense by a small group of learners and found that two out of the three learners in the experimental group were able to improve the accuracy (i.e. learning) of their use of the target forms as a result of being ‘pushed’ to modify their productions by means of requests for clarifications (rather than by being given explicit corrections) and maintained this improvement over time (one week later). The control group showed no gains in accuracy. Ellis and He (1999) also tested Krashen’s and Long’s input-based theories, as well as Swain’s output hypothesis. To this end, they investigated the effects of three linguistic conditions - premodified input, interactionally modified input, and pushed output - on the comprehension and acquisition of L2 vocabulary and found that the pushed output condition yielded better comprehension and acquisition results. They chose 50 students from six intermediate-level classes studying English at university level. The participants were randomly assigned to one of three groups: the premodified input group, the interactionally modified input group or the negotiated output group. The results of the study show that the negotiated output group outperformed the other two groups in comprehension. As far as the input groups are concerned, the differences in comprehension were not statistically significant. As regards subsequent word recognition, once again the negotiated output group obtained significantly higher recognition scores than the other two groups on the three posttests. The difference between the input groups was significant only on the second posttest, with the interactionally modified group faring better than the premodified input group. Finally, with regard to subsequent word production, the negotiated output group also performed significantly better than the other two groups on the two posttests that measured the oral production of the 10 furniture-related lexical items. Again, the difference between the input groups was not statistically significant. study of the differential effects of premodified input, interactionally modified input, and modified output on the comprehension of directions in a listen-and-do task and the acquisition of new words embedded in the directions. The modified output group achieved higher comprehension and vocabulary acquisition scores than either of the input groups. There was no difference between the premodified and interactionally modified input groups.
Another aspect of interaction that has been demonstrated to foster modified learner’s production is corrective feedback. Lyster (1998) emphasizes that negotiated interaction is particularly important to learners because it allows for feedback, that encourages self-correction which then leads to more output rather than just simple comprehension. When L2 learners receive feedback on their attempts to communicate, learners may attempt to reformulate their initial utterances, making them more comprehensible. One way in which teachers may modify and manage interaction in their classroom is through their use of feedback. It has been argued that successful L2 learning not only requires opportunities for students to receive comprehensible input and produce comprehensible output but also for them to obtain ample feedback. Many researchers (Lyster, 1998a, 1998b; Lyster and Ranta, 1997; Panova and Lyster, 2002; Swain, 1995, 1998; Swain and Lapkin, 1995) have stated that interactional feedback is important for L2 learning. However, results of studies revealed that the extent to which, and the ways in which, learners interactionally modified their output during negotiated interaction were determined by the type of feedback they received. It has been suggested that the interactional feedback that encourages modification of learners’ output is more conducive to language learning than those which provide learners with linguistic models. Researchers found that when feedback enabled learners to engage in a cognitive comparison between their own erroneous utterance and the target grammatical structure, the students learned better than in learning situations in which they are simply provided with a series of model utterances of the new L2 structures. Lyster (1998 1998b) and Lyster and Ranta (1997) emphasize that negotiated interaction is particularly important to learners to modify their output because it allows for feedback, that encourages self-initiated modification involving accuracy and precision and not simply comprehensibility. Lyster and Ranta (1997) suggest that ‘producing comprehensible output entails the provision of useful and consistent feedback from teachers and peers’ (p.41). In line with Swain’s OH, Lyster and Ranta argued that learning not only requires opportunities for students to receive comprehensible input but also opportunities for them to obtain comprehensible output ‘involving, on the one hand, ample opportunities for student output and, on the other, the provision of useful and consistent feedback from teachers and peers ample feedback’ (1997:41). Lyster (1998) suggests that corrective feedback
involving the negotiation of form may help second language learners to modify their use of nontarget language forms. Furthermore, ‘corrective feedback that invites student-generated repair in the form of self- or peer-repair provides opportunities for learners to proceduralize target language knowledge’ (Lyster, 1998:53). According to Lyster, learners who receive limited opportunities to interact and obtain corrective feedback from their teachers or more competent speakers) native English-speaking peers may be restricted in their acquisition of the L2. In the same context, Ellis (2006) considers: (a) whether the feedback is implicit or explicit and (b) whether the feedback is input or output based. As a response to learner error, implicit feedback is masked. Explicit feedback includes a number of forms, such as direct correction or metalinguistic explanation. Ellis (2006) cites evidence that ‘explicit feedback is more effective in both eliciting the learner’s immediate correct use of the structure and in eliciting subsequent correct use’ (p.99). Ellis further explains that implicit feedback ‘is more compatible with the FonF approach’ and that ‘it ensures that learners are more likely to stay focused on meaning’ (p.100). Considering whether the feedback is input- or output-based, Ellis notes that ‘Input-based feedback models the correct form for the learner (e.g. by means of a recast). Output-based feedback elicits production of the correct form from the learner (e.g., by means of a request for clarification)’ (p.100). The problem remains: how, when and how often to apply the various kinds of feedback for optimal learning.

Pica’s descriptive studies (1988, 1989) cited above have shown that clarification requests (what Ellis refers to as Output-based feedback) are more likely to lead to learners to reformulate their initial erroneous utterances, making them more comprehensible.

Lyster and Ranta (1997) conducted an observational study of interactional feedback and learner uptake from the perspective of an analytic teaching strategy (i.e. settings ranging from communicative and content-based immersion classrooms to form-oriented analytic classrooms) in four French classrooms. The overall aim of the study was to determine, ‘whether error treatment is indeed “negotiable” and, if so, to what extent such pedagogically motivated negotiation (i.e., of form) occurs in communicative classrooms’ and ‘what moves constitute such an exchange’ (1997:42). The database analyzed for this study consisted of 27 lessons totaling 18.3 hours of classroom interaction. In their study, six types of feedback techniques were first identified. Results include the distribution and frequency of the six different feedback types in addition to...
the distribution of different types of learner response following each feedback type. The findings indicate that most of the time teachers tended to correct learners with a recast (i.e. repetitions of a learner’s incorrect utterance, but with changes made in order to make it correct) rather than through the negotiation of form. They found that recasts were the least likely to lead to uptake. Uptake is another important construct in interaction research similar to modified output (MO). It is defined by Lyster and Ranta as ‘a student’s utterance that immediately follows the teacher’s feedback and that constitutes a reaction in some way to the teacher’s intention to draw attention to some aspect of the student’s initial utterance” (p. 49). A difference can be pointed out here between uptake and modified output. Uptake assumes the provision of feedback while modified output does not do. Some researchers (e.g. Swain 1995) consider the process of producing modified output identical regardless of the provision of feedback, and argue for the positive role of self-repair on L2 learning. As described above, Swain’s Output Hypothesis, proposes a facilitative role for output ‘even without implicit or explicit feedback provided from an interlocutor about the learner’s output” (Swain and Lapkin, 1995:373). Therefore, modified output in Swain’s framework, does not exclude learner’s output produced without interactional feedback from an external source. The four other types of feedback (elicitation, metalinguistic feedback, clarification request, and repetition) led to a greater number of student-generated repair moves. From a practical standpoint, these findings suggest the need for teachers to implement various types of feedback, particularly those that lead to student-generated repair, namely elicitation, metalinguistic clues, clarification requests, and repetition of error. These four types initiated what Lyster and Ranta characterize as negotiation of form (as opposed to negotiation of meaning) in that they engage learners more actively by helping them to draw on what they already know, rather than providing learners with correct linguistic models. Lyster (1998) was interested in determining the functional properties of recasts. In terms of their functional properties, Lyster (1998) described two types of recasts: interrogative and declarative. Interrogative recasts differ from declarative recasts in that the reformulation is delivered with rising intonation in the former, whereas no change in intonation occurs in the latter. Lyster found that 34% of the total of learners’ incorrect utterances was followed by recasts, and that 27% of learners’ correct utterances were followed by noncorrective repetition. While recasts and noncorrective repetition have
similar functions and distribution, recasts were much more successful at drawing student uptake (students responded after 31% of teachers’ recasts) than noncorrective repetition (students responded to 5% of teachers’ noncorrective repetitions). In light of the findings, Lyster (1998) argues that simple provision of the correct form may not always be the only - or indeed the most effective form of error correction since it bars the way to the learner testing alternative hypotheses. Making a learner try to discover the right form could often be more instructive to both learner and teacher. Lyster noted that ‘corrective feedback that invites student-generated repair in the form of self- or peer-repair provides opportunities for learners to proceduralize TL knowledge that has already been internalized in declarative form’ (p. 53).

Lyster’s claims for the potential effectiveness of pushing learners to produce the correct form and to get involved in some analysis of their errors is closely associated with assumption of the OH that pushed output can help learners to focus on form and the accuracy of the meanings they want to convey. Panova and Lyster (2002) have shown that interactional feedback results in modified output, the production of which has a direct impact on L2 learning. They present an observational study of patterns of error treatment in an adult ESL classroom. The study examines the range and types of feedback used by the teacher and their relationship to learner uptake and immediate repair of error. They applied Lyster and Ranta’s model (study described above) of corrective feedback types in a new context: low-proficiency, adult ESL learners. The results reveal a clear preference for implicit types of reformulative feedback, namely, recasts and translation, leaving little opportunity for other feedback types that encourage learner-generated repair. Consequently, rates of learner uptake and immediate repair of error are low in this classroom. These results are discussed in relation to the hypothesis that L2 learners may benefit more from retrieval and production processes than from only hearing L2 target forms in the input. The researchers noted that ‘corrective techniques that promote negotiation of form by allowing students the opportunity to self-correct or to correct their peers resulted in the highest rates of uptake’. In contrast, feedback types that provide learners with target forms-implicit, reformulative types of feedback such as recasts and translation, and explicit correction-‘tend not to push students to modify the nontarget output in their responses immediately following feedback’ (p.591).
Although the interactionist perspective allows for the role of modified output in language learning, the theory that gives the most emphasis to the role of output in SLA is the Comprehensible Output Hypothesis. Swain and Lapkin (1995) pointed out that whether modified output contributes to acquisition is still an assumption as ‘no one has yet shown directly that these modified, or reprocessed, responses are maintained in the learner’s interlanguage’ (p. 373). Research based on the Output Hypothesis is examined next.

3.3.3 Research within the framework of the Output Hypothesis (OH)

The studies described in this section, unlike input vs output studies seen above, investigate no contrast between two types of instruction, but the sole effect of output, in addition to input, on L2 learning. Representative of output-focused research in L2 learning is Swain and Lapkin’s (1995 and elsewhere) research on the output hypothesis. Working within the framework of the Output Hypothesis, Swain and her colleagues tried to provide empirical evidence of a strong role for Output in the acquisitional process. It has examined whether learner output promotes noticing and L2 learning and how learners, their mental processes and output inter-relate. Swain’s research has viewed the relationship between output and L2 learning from a cognitive perspective on language learning. This psycholinguistic perspective on language learning, taken in conjunction with more qualitative work (sociocultural approach) by Swain and colleagues (Swain and Lapkin, 1995, 1998, 2001, Lapkin, Swain and Smith, 2002) motivate the present research into the role of output. As pointed out in the introduction to this dissertation, in the area of L2 learning research, there has been some debate amongst researchers: those who believe cognitive aspects are primary, usually with quantitative and experimental methods, and those who focus on social and contextual aspects, often with qualitative and ethnographic methods (Dörnyei, 2007). Firth and Wagner (2003) called for a reconceptualisation of SLA research, which heavily focused on cognitive aspects compared to social and contextual aspects of language learning, by taking more account of the contextual and interactional perspectives of language use. The linguists who support cognitivist disciplines, where L2 learning is considered as an individual phenomenon, argue that studies based on the sociocultural perspective do not investigate learners’ language acquisition (Kasper, 2003; Long, 2003; Poulisse, 2003). Influenced
by Swain’s output hypothesis, other researchers (Izumi et al., 1999; Izumi and Bigelow, 2000; Izumi, 2002; Izumi Y. Izumi and Izumi, 2004) focusing on the cognitive context have investigated whether learner output assists L2 learning and why, whether output is better than input for, whether learner output promotes noticing and L2 learning. Evidence from these studies investigating the output hypothesis lends some support to the notion that output might have beneficial effects on L2 development in addition to—not in opposition to—the key role of input. Because work by Swain and colleagues and Izumi and associates on the function of output informs and constitutes the basis of this study, we discuss it here in some detail under separate sections.

3.3.3 1. Swain and colleagues

Swain and Lapkin presented the Output Hypothesis in a study in 1995. Swain and Lapkin examined the extent to which ‘learners would identify problems as a result of trying to produce the target language’ and ‘what they might report doing to overcome them.’ (p.376). In other words, whether output encourages learners to recognize problems in their IL and whether L2-related internal processes may be triggered as a consequence. In their study they were guided by the following basic questions: (a) Do learners notice their own gaps when producing L2? (b) If they are aware of the gaps, does this trigger cognitive processes that contribute to SLA? and (c) Do the learners engage in grammatical analysis of their output when trying to solve linguistic problems?

In order to address these questions, Swain and Lapkin carried out a writing task with the learners. They were asked to assume the role of journalists, and to write a short article (one to two paragraphs) on ecological problems. The researcher sat with the students and asked them to think aloud when their behavior suggested that there was a problem, (e.g. when there was a pause or correction of text) to see the impact of output upon the learners’ thought processes.

From the transcripts, the researcher identified and selected ‘language-related episodes’ and analyzed them in depth in order to find out what cognitive processes were generated by the output problems. ‘Language related episodes’ were defined as:

…any segment of the protocol in which a learner either spoke about a language problem he/she encountered while writing and solved it either correctly or incorrectly, or
simply solved it (again, either correctly or incorrectly) without having explicitly identified it as a problem (p. 37).

Swain and Lapkin (1995) did identify evidence of learners’ noticing their gaps. They found that each of the students noticed, and responded to language problems in their output. In addition, they showed that these L2 learners became aware of the gaps in their linguistic knowledge while producing the L2 and analyzed their knowledge of the L2 in order to solve their problems, applied various strategies to overcome the problems and engaged in particular thought processes. These thought processes which are assumed to facilitate L2 learning included: a) applying L1 meanings to L2 contexts b) extending L2 meanings to new L2 contexts, and c) hypothesis formulation and testing about language forms and functions (pp. 383-4). Swain and Lapkin found that there were ‘190 occasions in which students consciously recognized a linguistic problem as a result of producing, or trying to produce, the target language’ (p. 384). In each case the students forced themselves to modify their output toward greater message comprehensibility. Production of oral/written language required paying more attention to grammatical form. That is, communicative needs engendered by the tasks pushed students into thinking about the form of their linguistic output, to moving them from ‘semantic’ to ‘syntactic’ analysis of the TL. Swain and Lapkin (p. 384) wrote that ‘on each occasion, the students engaged in mental processing that may have generated linguistic knowledge that is new for the learner, or consolidated existing knowledge. In other words, it was argued that in the process of modifying their utterances in the direction of greater comprehensibility, L2 learners were engaged in some restructuring of the L2 system which affected their access to the knowledge base; that this restructuring process is part of the process of second language learning. The need to produce output, it was suggested, has either helped the learner realize the distinction between L2 forms (transitive and intransitive verbs) for the first time, or it has consolidated the learner’s knowledge of this distinction, in that it has been applied to additional forms. Output led to noticing the gap, additional syntactic processing, the creation of a more accurate output, and the development of the student’s interlanguage system in the process. The entire process can be considered as an example of L2 learning through ‘private speech-an internal dialogue’. In other words, all of these things took place, it was noted, without any external feedback from the teacher or the
researchers. According to Swain and Lapkin, this clearly suggests that output has the potential to influence the general L2 learning process. Swain and Lapkin concluded that while output is not the only source of L2 learning, producing output can promote learning through noticing. Their study, thus, lends support to the role of output in moving ‘learners from semantic to grammatical processing’ (pp. 387-8). Swain and Lapkin are continuing to explore the output hypothesis. The research described above has its theoretical basis in psychological and cognitive constructs of SLA that concentrate on the mental processes related to individual language development. In the same vein, research by Izumi and his associates (described below) concerning output and L2 acquisition have also been carried out from this perspective. In recent years, however, Swain and her colleagues has defined the role of linguistic production in sociocognitive terms focussing on the way learners’ language develops through the help they give and receive as they construct meaning. The scope of the Output Hypothesis(OH) has widened beyond learner-internal (cognitive) factors to include investigation of the impact of social and learning context, that tends to be the province of research with a sociocultural theoretical perspective. Swain (2005) takes the position that both the cognitive perspective and the sociocultural paradigm provide valuable insights about mind and memory. In their work, Swain and her colleagues recommend the incorporation of more opportunities for students to produce extended output especially collaborative written output within a communicative context. Output studies based on sociocultural theory, in contrast to the more quantitatively oriented studies based on a cognitive view of language learning have tended to use qualitative methodology and have been very sensitive to context. Relevant studies based on sociocultural theory are, therefore, included in this review. Nevertheless, the present study is embedded within the cognitive approach, since the purpose of the study is to examine the issue of how beneficial to linguistic knowledge building it is to engage in the production of L2. This issue was originally examined within a cognitive orientation. In recent years, Swain( 2000, 2005 ) has argued for an alternative perspective for viewing and examining L2 learning within Vygotskian (1978, 1987) sociocultural theory. According to a Vygotskian perspective, within the framework of Swain’s approach, collaboration is the primary basis for language learning, and neither input nor output by themselves are adequate units of analysis. This approach extends how output has been viewed and examined; whereas as in the past, input and output were studied in

According to Swain, research has tended to view dialogue between learners as a rich source of comprehensible input, but there are now strong arguments to suggest that producing output itself is a key factor in acquisition (Swain, 2000). Swain advocates tasks which promote a different kind of ‘negotiation’ in which students engage in knowledge building dialogue not because they have misunderstood each other but because ‘they have identified a linguistic problem and sought solutions’ (p.102). A series of studies by Swain and Lapkin (Swain and Lapkin 1998, 2001, Lapkin, Swain and Smith, 2002) on collaborative tasks with the goal of linguistic accuracy were designed to assist students to extend their language output. Swain (2000) suggests that collaborative tasks, which by their very nature are communicative and encourage output, are more likely to encourage noticing and hypothesis testing and the use of meta talk; that is, tasks that are communicatively oriented but where students talk about and reflect on their own language. Furthermore, Swain (p.102) notes that this type of collaborative dialogue becomes not only problem solving but also knowledge building. Thus, three functions of output underly collaborative tasks: 1) noticing the L2 while attempting to produce it, 2) using output as a means of hypothesis formulating and testing, and 3) engaging in meta talk. Collaborative tasks such as dictogloss, jigsaw and reformulation were used in these studies to produce language related episodes. Research results indicate that collaborative tasks increased the amount of output, helped students to focus on language as they formulate and tested hypothesis and provided opportunities for output. This provides support for the theoretical position that dialogue can be both a means of communication and a cognitive tool (Swain, 2000). Swain and Lapkin (1998) investigated language-related episodes (LREs) and language acquisition within dyadic interaction between two teenage French students as they write a short narrative for evidence of language being used as a tool to help L2 learning. One of their goals was to see what linguistic changes occur when two learners engage in collaborative dialogue. Their hypothesis was that collaborative dialogue provides the context and conditions for L2 learning. Swain and Lapkin’s study set up an activity in which students in collaborated in dyads by
completing an information-gap jigsaw activity about a picture story, then writing up the story. The pair produced 23 LREs while working collaboratively on their jigsaw task. Results suggest that that LREs lead to acquisition of certain structures during these instances. They noted examples of lexis-based and form-based language-related episodes (LREs) as evidence of acquisition taking place. However, they note that they chose strong students, and that research is needed to evaluate the effectiveness of such an approach with lower proficiency students. The findings of Swain and Lapkin (1998: 321) provide some evidence of language use ‘as both an enactment of mental processes and as an occasion for L2 learning’. Swain, M., and Lapkin, S. (2001) compared students performance on an information gap tasks involving a picture story and a dictogloss task. In the picture story (a jigsaw task) the students worked in pairs to reconstruct a story based on a series of pictures. The dictogloss task required to first listen to a passage and take notes to reconstruct it. Swain and Lapkin anticipated that students doing the dictogloss tasks would focus more on form than the students doing the jigsaw task. As Swain and Lapkin found in their results ‘both tasks generated a similar and substantial proportion of form-focused language-related episodes’ (p.111). There were no statistically significant differences in the frequency language-related episodes which were defined by Swain and Lapkin as negotiation of form activities any part of a dialogue where the students talk about the language they are producing, ‘question their language or other- or self-correct their language production’ (p.104).

However, the range of language-related episodes produced by the learners completing the dictogloss task was notably smaller suggesting that ‘the use of the dictogloss task may focus student’s attention, thus constraining student’s output somewhat more than the jigsaw task which is more open ended linguistically’ (p.110). That is, while the jigsaw task led students to use a wide range of vocabulary and language-related episodes, the dictogloss task increased accuracy in the production of target structures and prompted students to notice and reproduce complex linguistic structures. Although taken from a different perspective, Swain and Lapkin’s study has suggested the pedagogical usefulness of form-focused tasks which require learner’s to produce written output collaboratively. However, if this notion that learners can help each other notice L2 language features when they collaborate in solving linguistic tasks, the long-term effects of these negotiation of form activities on L2 learning has not yet been demonstrated. Lapkin,
Swain, and Smith (2002) examined collaborative dialogues between lower- and higher proficiency levels of L2 learners of French who worked together in pairs. The subjects first jointly wrote or reconstructed a story, and then noticed the differences between their story and a reformulation of it. They then talked about what they noticed during a stimulated recall session, after which they revised their story and finally took part in an interview. The first-draft story and the final revised story were considered as pre-test and posttest respectively. The authors specifically investigated the effect of collaboration on the acquisition of French pronominal verbs. The language-related episodes (LREs) selected for close analysis, along with the post test data, provide evidence that in most cases, learners have progressed in their correct use of pronominal verbs. For the dictogloss task, the stronger pair produced 11 verbs compared to the 8 verbs produced by the weaker pair. The same trend occurred for the jigsaw task: 17 verbs for the stronger pair and 9 verbs for the weaker pair. However, the length and quality of the LREs differed among pairs. Overall, the stronger pair on the jigsaw task produced the most sets of LREs. Nonetheless, the authors noted that in looking at changes in LREs over the first three stages, learning was facilitated by the collaborative environment.

Swain and colleagues’ studies motivated further research into the role of output. An interpretation of this line of research—whether in cognitive or social—has been that although input is essential to L2 acquisition, output might also bring about mental processes that both directly and indirectly affect L2 learning. We turn our attention to the studies by Izumi and associates that have discussed the potential impact of L2 output on learning within the framework the Output Hypothesis from a cognitive perspective.

### 3.3.3.2 Izumi and Associates

The work of Schinichi Izumi and colleagues (Izumi et al. 1999; Izumi, 2000) tested the Output Hypothesis by examining the effects of output on noticing, and how it contributes to interlanguage development, and how it relates to input. Izumi et al. (1999) tested the Output Hypothesis by examining the effects of output on noticing and SLA. examined the effect of written output on the acquisition of the English past hypothetical conditional, group read a passage first and then reconstructed a short text, followed by a second chance to read the same text and to reconstruct again. In the Phase 2 treatment, learners in the experimental group first wrote an essay on a guided topic that prompted
the use of the target structure, followed by the reading of a model essay and a second opportunity to write an essay on the same topic. The comparison group read the same text and answered true-or-false comprehension questions. By using pre-tests and post-tests, the results revealed that, while the Phase 1 tasks did not lead the experimental group to improve on the first posttest, the Phase 2 tasks led to significant improvement of this group on the subsequent production test, a gain significantly larger than that of the comparison group. The results of this study failed to reveal the effects of output on noticing of linguistic form. The following study (Izumi and Bigelow, 2000), investigated the noticing function of output again, examining whether output promotes noticing and SLA. This study is a replication of Izumi et al. (1999). The only difference is that Izumi and Bigelow (2000) reversed the delivery order of the two phases of the treatment in Izumi et al. (1999) in order to examine the task-ordering effects and the replicability of the previous results. Izumi and Bigelow, compared an output group with a non-output group in terms of noticing and acquisition the English past hypothetical conditional. The researchers attempted to answer this question: Does noticing the linguistic problems promote the noticing of relevant forms in subsequent input and result in learning? They made two groups (an experimental group and a control group) and gave two types of writing tasks to both groups: text reconstruction tasks and guided essay-writing tasks. In the text reconstruction tasks, learners in the experimental group were required to read a short written passage that had been seeded with the target structures (the English past hypothetical conditional) and to underline the parts they felt were important for the subsequent reconstruction of the passage texts for the succeeding writing tasks; on the other hand, the control group read the same texts only for comprehension. In the guided essay-writing tasks, the experimental group performed writing tasks for given topics before the model input while the control group performed writing tasks for unrelated topics. Both groups wrote essays after the model input. The researchers examined the learners’ noticing while reading, the use of the target forms (the past hypothetical conditional) in their writing tasks, and the performance in the multiple-choice recognition tests and the picture-cued production tests. The data indicated that output alone could not necessarily be associated with noticing but that extended opportunities to receive relevant input along with opportunities to produce output were helpful in improving learners’ use of the target form, the past hypothetical conditional. As Izumi and Bigelow (2000) noted:
Output did not always succeed in drawing the learners’ attention to the target grammatical form. The analyses of the interview data and of the production data collected during the treatment suggest that this occurred because not all learners necessarily found their IL grammar to be problematic during production, which in turn affected their attention to the grammatical form when they were exposed to the input (p.271).

Although the results showed no unique effects of output, extended opportunities to produce output and receive relevant input were found to be crucial in improving learners’ use of the grammatical structure. They authors called for further research to ‘to examine the effects of noticing on other grammatical forms under varying conditions using various focusing devices, and ‘the conditions under which output, in combination with input, can most effectively promote SLA’(p.272). Whitlow (2001) raises questions about theoretical and methodological issues in the research reported by Shinichi Izumi and Martha Bigelow. Whitlow asks, in particular, asks whether manipulated forms of input and output actually lead to grammatical learning or whether any such gains are due to long-term exposure to the target language(input driven learning). In line with Krashen’s and Schwartz’s (1993) arguments she argues that only positive linguistic data can activate innate language mechanisms. Izumi and Bigelow(2001) responded that this theoretical position is interesting theoretically but is yet without empirical substantiation and the theoretical claim Whitlow appears to rely on as fact is far from categorically accepted in the profession. Izumi (2002) improved on the methodology of the previous studies and investigated the effects of output and input enhancement(IE) on noticing and SLA by focusing on English relative clauses. The purpose of including input enhancement as a variable in this study was to investigate the relative efficacy of different focus on form techniques. Izumi’s (2002) central research question was whether output and (visual) input enhancement promote noticing and learning of an L2 grammatical form. In this study, 61 adult ESL learners were randomly divided into four treatment groups and one control group. Of the four treatment groups, one was exposed to regular un-enhanced input and was required to produce output; another received typographically enhanced input and was required to produce output; the third group received enhanced input without output; and the fourth group received un-enhanced input without output. The
control group participated only by taking the tests. A text reconstruction task similar to those used in previous studies was used. The results revealed a strong positive effect of output on L2 learning. The major findings of this study are the following: those engaged in output-input activities outperformed those exposed to the same input for the sole purpose of comprehension in learning gains, and those who received visual input enhancement failed to show measurable gains in learning, despite the positive impact of enhancement on the noticing of the target form items in the input. Learners exposed to the input enhancement noticed the target form, but they did not perform better than the other groups involved in the experiment. Input enhancement did not make a significant contribution to learning outcomes. Therefore, no support was found for the hypothesis that the effect of input enhancement is comparable to that of output. The above three studies all examined the effect of the reading / writing mode on L2 learning and obtained positive results generally. However, Izumi and Izumi (2004, cited in Gass and Selinker, 2008) investigated the impact of the aural /oral mode on the acquisition of relative clauses in English, and the results indicated that the output group failed to outperform the non-output groups.

3.3 Chapter Summary

In this chapter, we situated the current study in relevant theories of L2 learning and reviewed the research on three main components that have emerged from these theories: input, interaction, and output. We specifically addressed a number of issues which resolve themselves into the following question: what is the relative importance of TL production in L2 learning. From a pedagogical perspective, we have made connections between two classroom interventions claimed to facilitate L2 learning - input and output-based learning. That is the effectiveness of having students work with language input, as opposed to having them produce language output. For this purpose, the chapter was divided into two parts.

In the first part of sections 3.2.1, we described the theoretical framework for input and interaction research and discussed the findings of key input/interaction research studies that have investigated the claims of the IH (Krashen, 1982), the IH (Long, 1983). The theories discussed above, which attempt to explain the relationship between input and L2, all agree that linguistic input is essential for learning. We have seen that the notion that providing CI is the only necessary condition for language acquisition to take
place had a significant impact on the field of L2 learning and has been the topic of much debate. Most importantly, Krashen’s (1982) IH, has led researchers to question the standard assumption in L2 learning research that language acquisition is an implicit process that is only input-driven, as Krashen suggested. Theoretical and empirical arguments supported the view that input can be enhanced or manipulated so that learners become more aware of the L2 forms. A basic theoretical premise of this orientation is that attention to form is the necessary and sufficient condition for L2 learning. Different from the IH, the IH (Long, 1983, 1996) reasoned that learners comprehend and learn L2 input through verbal interaction. Our discussion of the theoretical work of Long following Krashen, led to a pedagogical issue concerning the role of interaction in L2 learning. Particularly it has influenced the development of classroom pedagogy which as noted by L2 researchers gave interaction an important role in the learning process - Input-interaction based teaching.

This first part was followed by the examination of a crucial concept to this study in sections 3.2 that is L2 output. In line with other developments in L2 learning research, we argued that although various kinds of input provide different ways of focusing on form, input alone is not sufficient, and its importance relative to other factors such as output practice is still not known. We suggested that in order to ensure effective L2 learning that draws attention to form, we must explore the roles not just of input, but also that of output. Specifically, we addressed the claim that engaging in L2 production potentially leads to linguistic development. A number of speculations about how production can contribute to learning were summarized. As we have seen one of the most important reasons for promoting output as a means to improve L2 learning is that when learners experience communication difficulties, they need to be pushed into making their output more precise and appropriate. This claim is supported by research from the latest interactionist theories. However, the strong argument for the importance of output in the development of L2 learning came from Swain in the form of the Output Hypothesis. This hypothesis was described at length along with some empirical studies. The studies reviewed in sections 3.3.2 and 3.3.3 have each served to clarify a part of the picture of how output impacts the acquisition of L2 competence. The contributions of the various studies, whether experimental or descriptive in design, are useful in the effort to understand developing output more fully. It must be noted however, that most studies
have investigated vocabulary and few others examined relatively simple grammatical rules. In order to ensure effective L2 learning through instruction we must carefully explore the roles of output (in addition to input) in acquiring various linguistic rules, especially complex syntactic rules (Muranoi 2007). At the same time the results from these studies point to the lack of overwhelming evidence supporting the claims put forth by Swain and her colleagues; the impact on other internal processes such as noticing (e.g. Izumi, 2000) hypothesis formulation, cognitive comparison, and syntactic processing has not been directly examined.

Thus, it remains unclear, however, from these studies how output functions as facilitator of L2 learning. There is little, if any research that clearly shows that L2 learning is output dependent and even less has examined the effect of output on the acquisition of L2 morphosyntactic structures. The present research effort takes these points into account and aims to further our understanding of the input-output relationships. Specifically, building on earlier studies, the present study examines whether output and input, in isolation or in combination, promote noticing and learning of an L2 grammatical form. Previous research has informed the design of the current study in a number of ways. Chapter 4 outlines the methodology, and procedures of the study.
CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter outlines the methodology adopted in this study to investigate the roles of input and output in combination and alone as factors promoting learning of English in a foreign language context.

The answers to the research questions for the current study were sought through a two-fold research design. The first major research question posed in the main study concerned whether or not target language production of syntactic structures (English tense and grammatical aspect) facilitates learning of these structures. This research question was examined mainly through a quantitative quasi-experimental research design. The second phase of the research design, aimed to explore whether EFL students become aware of gaps in their linguistic knowledge as they produce their L2, and if so, what thought processes they engage in an attempt to solve their problems. Description of the two research designs is presented in sections 4.2 and 4.3, respectively, as well as information on the subjects, the target structures, the different experimental treatments used, the testing instruments and scoring procedures.

4.2. STUDY 1: Quasi-experimental design

4.2.1 Research design

A research design refers to the general plan of data collection or analysis in order to shed light on the problem under investigation (Seliger and Shohamy, 1989). The aim is to obtain data which will serve to answer the research questions. In second/foreign language research, two different types of approaches are commonly used for data collection: the quantitative and the qualitative approaches. The quantitative approach uses data collection procedures that ‘result primarily in numerical data, which is then analysed primarily by statistical methods’ (Dörnyei 2007:24). The main aim of this approach is to draw conclusions from an objective detached perspective. The researcher is not involved and the reality of the question under investigation can be described objectively. The qualitative approach is described as the method of analysis that provides open-ended,
non-numerical data does not make use of statistical procedures in the examination and interpretation of data (Dörnyei 2007).

As far as the present study is concerned, the author of this thesis believes that a quantitative (experimental) approach would serve better the objective of the present research. An experimental study is beneficial for studying the issue more reliably because it allows the researcher to state the research problem using very specific terms which in turn help to follow the set research aims. More importantly, a quantitative (experimental) approach helps to determine whether the predictive hypothesis underlying the present research holds true.

Experimental studies can be true experimental or quasi-experimental. The difference is that true experimental studies require random assignment of subjects to different groups, while quasi-experimental studies use subjects not randomly assigned since they naturally belong to one group or the other, for example, intact classes (Dörnyei 2007, Seliger and Shohamy, 1989). Quasi-experimental designs, as asserted by Seliger and Shohamy, do not disturb ongoing programmes and are less disruptive to participants’ normal teaching and learning since they are ‘constructed from situations which already exist in the real world’, they are ‘more representative of the conditions found in educational contexts’, and ‘are more likely to have external validity’ (Seliger and Shohamy, 1989:148-149).

Considering that we could easily and conveniently gain access to intact classes, the present study was quasi-experimental in character and was conducted by the participants’ regular teacher in the course of normally scheduled classes. The students remained in their original groups as allocated at the beginning of the academic year. Two groups of learners were allocated to one of the two treatment options: (1) an input-only group that received output-free input-based instruction and (2) an input-plus-output group that received input- and output-based instructional material designed by the researcher. The treatment in both experimental groups consisted of two weekly ninety-minute sessions over a period of 8 weeks. To determine the short-term effects of the two treatments, four types of assessment tasks were used: a listening comprehension (aural interpretation) test, a written production test, a grammaticality judgement test and a picture description task.
Based on the purpose of the study, the following research questions were addressed within the framework of the Output Hypothesis: One major question and two related questions.

The first research question concerned whether or not target language production of syntactic structures (English tense and grammatical aspect) facilitates learning of these structures.

**Research question**: Does providing opportunities for written output in addition to input of the target structures aids learning of tense/grammatical aspect more than input-based instruction only?

It was hypothesized that both types of instruction would have positive effects on learner performance, but that the input-plus-output learning condition would show an overall greater improvement in their use of the target structures than learners with input-based instruction only. This first question was examined mainly through a quasi-experimental research design. In order to answer the research question the following hypotheses were formulated in relation to the impact of written modified output.

**Hypothesis 1**: competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structures would increase as measured by differences on the post-test scores. Therefore positive results are expected.

**Hypothesis 2**: competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structure that include an output component would increase as measured by differences on the post test scores. Therefore positive results are expected.

**Hypothesis 3**: competence in the production and comprehension of tense and grammatical aspect among learners who receive opportunities for input of the target grammatical structure that include an output component would increase as measured by differences on the post test scores compared to those who receive input-based instruction only.
4.2.2 Subjects
The present study was carried out in an EFL context at the university level. In this context, students have very few opportunities to use English outside the classroom; they have limited exposure to English culture, most often through TV or music. The teacher may be the only native speaker they have exposure to. Another important contextual parameter is that French, which is familiar to most students, is the dominant language after their L1, Arabic.

The participants in this study were all Algerian undergraduate students taking their first semester in BA course in English Studies. In this programme, the first two years (four semesters) are mainly devoted to teaching language skills (reading, writing, grammar, etc.). The teaching approach adopted by the department during the first four semesters places an emphasis on developing communicative skills in English although there is also a considerable amount of content teaching. The main focus of the remaining semesters is on teaching some academic linguistic, literature and civilisation courses. Admission into this course was based on the learners’ ability to meet any one of the following criteria: (1) a given score on the Baccalauréat examination and (2) a given score on the English language examination. These students received at least seven years of school instruction in English. English is taught as one of many school subjects during four years in the middle school and three years of secondary education school. Their level in English should correspond to their years of instruction and also to personal effort in their studies. In addition, the type of L2 instruction they have experienced has been meaning-oriented. EFL instruction in the middle and secondary education is basically competency-based, thematically-oriented and project-oriented (New Prospects, 2007). Consequently, students receive minimal explicit instruction on language forms. This population of learners is also homogenous consisting principally of Algerian students with Arabic as L1, although eight participating students were African students with different L1 backgrounds and were also learning English as a foreign language. These students were not excluded from the study since their level of comprehension and production of English was similar to that of the Algerian students. Participants averaged about 19 years of age with some others
as old as 30. Concerning gender there were more females than males. Learners’ main contact with the language is limited to the EFL classroom.

Students attended one of two intact classes, all of which were selected to test the hypotheses. After the administration of the pretest, two classes were assigned to the treatment conditions (input-only and input plus output). Students had to be present at all treatment and testing sessions in order to be included in the study. A total of 38 students (those who had attended all treatment/testing sessions) were included in the final analyses of results.

4.2.3. Targeted Linguistic Structures

One important factor affecting the choice of linguistic forms for instruction is whether these forms are problematic for learners, that is whether or not learners have difficulties in producing them (for example, in writing or speaking). The target forms chosen for this study were tense and grammatical aspect. Tense and grammatical aspect were chosen as target features of the study for the following reasons:

a) The acquisition of tense and aspect figure among the central grammatical categories in L2 learning.

b) Tense and aspect occupy a prominent place in course books and pedagogical grammars used in the Algerian EFL context.

From our past English teaching experience, we have found that tense and aspect constitute a major source of errors for students at different stages in L2 learning. As noted in the introductory chapter, Algerian EFL learners show limited use of tense and aspect forms and fail to learn the intricacies of the English tense system (Moumene, 2010). This linguistic feature is relatively complex and places heavy cognitive demands on the students. Tens if not hundreds of inappropriate uses of tense and grammatical aspect are somewhat familiar to teachers and even predictable. This interferes with the accuracy of students’ L2 production, especially in the written form. At the same time, it constitutes a major pedagogical preoccupation facing teachers in the Algerian EFL context.

In addition, recent L2 studies of the development of tense-aspect of English (and certain romance languages such as French, Spanish, Italian) reveal that the acquisition of tense and aspect morphology is problematic. It is, however, still unclear why L2 learners perceive these linguistic structures as problematic. Recent accounts of L2 tense-aspect
acquisition research proposed several factors as responsible for the difficulties in learning to use tense and aspect. Cowan (2008:379) summarised three factors that converge to explain the problematic nature of tense and aspect for EFL/ESL learners:

i) The influence of the lexical aspect of verbs

ii) The influence of the student’s L1

iii) The type of instruction that learner’s receive from teachers and materials and the frequency with which, within this instruction, certain types of verbs are associated with particular tense forms.

Cowan also identifies as a fourth factor ‘cognitive principles that constrain hypotheses that learners make about associating tense markers with certain activities and actions (p.389).

Similarly, Collins (1999:3) explained that a number of studies of both tutored and untutored learners have found that interlanguages at various stages of development may be characterised by inappropriate use and incomplete knowledge of the grammatical devices that exist in the L2 for situating events in time (tense) and expressing perspectives on how situations develop (aspect). The development of temporal-aspectual systems (tense and aspect) has been a prolific topic of research in the field of L2 acquisition. One major concern for researchers was to understand how learners come to know what morphological markers go with what verbs? In the 1970’s studies by Dulay and Burt 1973; Krashen 1977 (referred to as the morpheme studies) established a common acquisition order for a number of English morphemes such as nouns and verb inflections. With reference to verb inflections, Krashen’s (1977) ‘Natural Order’ postulated the acquisition of the ‘ing-morpheme’ as the first stage. Irregular past is acquired in the next stage; whereas regular past is acquired later in the order. In the 1980’s other approaches were taken to the L2 acquisition of L2 tense-aspect morphology. Bardovi-Harling (2000:10) points out that ‘two main strands of inquiry can be distinguished: the investigation of the expression of semantic concepts through various linguistic devices and the investigation of distribution of verbal morphology as an indicator of the underlying semantic system of interlanguage’. Most studies in L2
research concentrate on the relation between verb semantics and the development of tense aspect morphology. Some researchers have claimed that the developmental sequence of tense-aspect morphology in L1 and L2 acquisition follows a universal pattern and it is strongly influenced by the inherent semantic aspect of the verb to which the inflections are attached. This perspective has been referred to as the Aspect Hypothesis. In its current formulation, this hypothesis predicts that ‘patterns in the emergence and development of tense and grammatical aspect will reflect associations made by learners between the verb morphology of the target language and the inherent situational aspect of the verb or predicate (Collins1999 :7)’. According to Gass and Selinker (2008:207) this approach to tense-aspect acquisition is ‘semantic in nature and focuses on the influence of lexical aspect in the second language acquisition of tense-aspect morphology.’

The study of tense-aspect morphology has been the focus of many accounts of L2 language acquisition and the aspect hypothesis is only one way of looking at the acquisition of tense and aspect (Gass and Selinker 2008). Theoretical perspectives range from functional to typological-linguistic (Sallberry and Shirai, 2002). In summary, tense and aspect can be considered complex and is most likely to be conditioned by other factors. As Sallberry and Shirai (2000:14) pointed out, the aspect hypothesis is only one part of the total picture and that acquisition of tense and aspect is influenced by a variety of learner-internal and learner-external factors including:

(1) universal (and possibly innate) predisposition by learners to mark some salient grammaticizable notions  
(2) L1 influence  
(3) individual learner characteristics  
(4) input/interaction  
(5) instructional variables

It is beyond the scope of this study to solve controversial issues concerning the acquisition of temporal expression in L2. In this study we attempt to situate the concerns

---

1 A review of the empirical studies the on the Aspect Hypothesis with untutored and tutored learners of various target languages is presented in Bardovi-Harlig (2000).
of L2 learning research in a pedagogical context. The study investigates of the effects (and non-effects) of input and output on L2 learning by considering the acquisition of tense and aspect in an instructional setting. The focus is on the role of instructional intervention on the development of a learner’s system of tense-aspect. Thus, the reason for choosing English tense and aspect was both psycholinguistically and pedagogically motivated. However, we need first to review what is it that L2 learners are expected to acquire, what do we understand by the notions tense and aspect? Explaining these two concepts that may help us in understanding what the English tense and aspect are about.

4.2.3.1 The Concepts of Tense and Aspect

The grammatical expressions of time are tense and aspect. The two terms, in spite of the fact that they are basic notions have been variably conceptualised in linguistics and grammar. On a general linguistic level, one view characterises them in the following way: ‘Tense and aspect are semantic notions concerning temporality encoded implicitly and explicitly in the verb’ (Sallaberry and Shirai 2002:2). We define first what is understood by the notion of tense. Tense, as a grammatical category, is defined as the ‘grammaticalized expression of location in time’ (Comrie, 1985:9 cited in Collins 1999:7). It refers to the location of an event in time with respect to another reference time. There are two concepts on tense. They are (1) absolute tense and (2) relative tense. Absolute tense refers to a relationship between moment of speech (S) and moment of event (E) where -E before S- defines past, E simultaneous with S, indicates present, and -E after S- specifies future. In English absolute tenses are the simple present and simple past tenses which include the present moment as the center in their meaning. They consist of one word that is morphologically marked and relate either to past or present. Examples of relative tenses are the compound tenses composed of an auxiliary, which is morphologically marked to indicate time reference, and the participle of the main verb.

The second grammatical category expressing time in language is aspect. Many formulations can be found in the literature describing the subject of aspect, each emphasizing a different detail. Biber, Conrad and Leech (2002:455), for example
describe aspect as ‘a choice in the verb phrase that expresses time meanings related to whether an action is finished or still in progress.’ According to Cowan (2008:351) ‘aspect expresses how the speaker views the action of the verb’. Cowan distinguished between actions that are perfect in aspect and action that are imperfect in aspect. The first type of actions are bound and complete while the second type are seen as incomplete. Other distinctions include iterative, for actions seen as repeated and habitual for actions described as occurring regularly i.e. bound and complete; actions that are inceptive signalling the beginning of a action, inchoative (or ergative) signalling entrance into a state (Cowan 2008:251-289).

Briefly explained, aspect indicates not only when the event occurred, but also how the action developed over time; whether the action ended, came into being, or existed continuously as a state. Since aspect can also be expressed lexically, it has been divided into two distinct linguistic categories: grammatical aspect and lexical aspect.

Grammatical aspect according to Collins (1999:13) ‘describes how the situation unfolds as opposed to when it is situated in time. It allows a speaker to express a perspective on the situation being described’. In addition to the grammatical marking of the aspect, the lexical meaning of the verb may convey aspe ctual meaning. This is called lexical aspect (also inherent aspect). Unlike grammatical aspect, which is expressed through the use of overtly marked elements in the verb phrase (be + present participle, have + past participle in English), lexical aspect is an unmarked, inherent semantic property of the verb. According to Cowan (2008) lexical aspect refers to semantic properties of verbs, for example, whether or not an action is characterized by duration, an end point or change. Thus, aspe ctual concepts are also conveyed through lexical aspect. From the lexical point of view, English verbs are divided into two basic categories: Static verbs and three types of dynamic verbs. Based on Vendler classification (1967), Cowan characterizes them as follows:

**Stative verbs**: describe states or situations rather than actions. States are continuous and unchanging and can be emotional, physical or cognitive (e.g. He owns a large car, She hates her boss).

**Dynamic verbs**: stative verbs contrast with dynamic verbs-verbs that require some input of action by the subject. Dynamic verbs can further be classified in terms of lexical aspect features into three subcategories, each with its characteristics or tests.

121
**Activity verbs**: describe actions that go on for a potentially indefinite period of time. The actions are constant (e.g. run, swim, walk) or involve an inherent change (e.g. decline, develop, grow.)

**Achievement verbs**: describe an action that occurs instantaneously—either punctually (e.g. bounce, hit, kick) or as a change of state (e.g. find). Change of state actions involve a preliminary activity that is terminated by the achievement verb.

He bounced the ball several times punctually
She crossed the finish line change of state

**Accomplishment verbs**: they have a termination that is logical in terms of their action, as is the case, for example, with build (a house) or paint (a picture).

He wrote a book about language teaching
She made a model of the house

A verb may fall in more than one category.
He ran in the hall activity verb
He ran to the post office accomplishment verb

(Cowan, 2008:352-355)

How to help learners understand how grammatical and lexical aspect combine in the use of tense? Up to this point, the introduction into the subject of tense and aspect was done on a general linguistic level. We will concentrate in the following section on a specific description of the English tense and aspect system.

**4.2.3.2 The Pedagogy of the English Tense and Aspect System**

From a grammatical point of view, Geoffry Leech and Svartvik describe the notions of tense and aspect as follows: ‘By tense we understand the correspondence between the form of the verb and our concept of time (past, present or future). Aspect concerns the manner in which a verbal action is experienced or regarded’ (1975:305). One way to view the English tense and aspect system is that it consists of the three tenses of past,
present and future categorised according to the time frame: past, present, and future. The present is now. Actions which took place before the present moment belong to the past and actions which will take place after the present moment belong to the future. However, seen from a morphological perspective, verbs in English do not contain the future tense. Since only the present and the past tenses are morphologically marked (change forms). Time references which are not morphologically marked as the future tense cannot be called tenses. Most grammarians (e.g., Leech et al., 1975) do not talk of a future tense in English and the English tense system is viewed as a binary i.e. consisting only of past and present (non-past) tenses. English has no inflected form of the verb to denote futurity. Future is a periphrastic expression of time reference conveyed through syntactic means, i.e. separate words, to express the same grammatical relationship as inflections. This issue concerning the definition of the future tense in English causes contention among grammarians. In this study, future is also referred to as a ‘tense’, disregarding its modal nature. We, thus, keep the threefold opposition: present-past-future tenses.

Verb tenses may also be categorised according to aspect. Two aspects are recognised in English: the perfect aspect and the progressive aspect. Verbs which are not marked for aspect are said to have simple aspect (the three simple tenses). The three English simple tenses describe an action but do not state whether the action is finished. The perfect aspect presents the situation as complete while the progressive presents it as ongoing and thus incomplete. The perfect and the progressive are combined with either present past or future tense to produce the tenses of English (the so-called twelve tenses of English):

i) The four present tenses are:
the simple present
the present progressive
the present perfect
the present perfect progressive

ii) The four past tenses are:
the simple past
the past progressive
the past perfect
the past perfect progressive

iii) The four future tenses are:
the simple future
the future progressive
the future perfect
the future perfect progressive

As mentioned above, learning tense and aspect is a source of difficulty for L2 learners. Likewise teaching these grammatical phenomena is very challenging. How to help L2 learners learn tense and aspect forms appropriately in English? As noted above, several factors have been indicated as responsible for the difficulties in learning to use tense and aspect. Here the focus is on the role of instructional intervention on the development of a learner’s system of tense-aspect. More specifically on the effects or non-effects of input and output-based approaches. The potential influence of these two treatment options is an empirical question that will be investigated in this study.

4.2.4 Instructional Treatments

The treatment refers to anything done to groups in order to measure its effect (Seliger and Shohamy, 1989). It is a controlled or intentional experience, such as exposure to a language teaching method specially constructed for the experiment, or exposure to materials presented under controlled conditions. Treatments are actually the independent variable in this quasi-experimental study. With type of instructional treatment as an independent variable, all participants took part in the same experimental conditions including a pretest, and a posttest. The dependent variable was accuracy improvements on assessment tasks. The details of the three tasks are outlined below.

The instructional treatment to the teaching of the tense and aspect system of English that will be demonstrated in the instructional materials contains the following characteristics (based on Ellis, 2006):
- Draws learners’ attention to targeted linguistic structure in such a way that to it helps them to understand it metalinguistically and process it in comprehension so that they can internalize it.

- Draws learners’ attention to targeted linguistic structures in such a way that it helps them to understand it metalinguistically and process it in comprehension and/or production so that they can internalize them.

Two instructional material packets were used for each treatment (Appendices A, B and C). The two sets of teaching materials were prepared on the basis of grammar handbooks, coursebooks and online grammar sites. Each treatment was designed to reflect a different instructional approach to tense instruction. We will first describe the treatment packet for the input-only group.

**4.2.4.1. Input-based Instructional Material**

The treatment packet for the input-only group consisted of explicit information (EI) (Appendix A) about the English tenses along with input-based practices. The instructional treatment in both experimental groups started with explicit presentation of the rules concerning tenses and grammatical aspect. The explicit instruction sheets that were delivered to learners included conceptual explanation as to:

1) How the targeted tense is formed.
2) The basic meanings of the targeted tense.
3) The additional meanings of the targeted tense.

The input-based instructional practices consisted of activities where learners engage with language receptively i.e. work with language input in the form of listening and reading material through more or less implicit interpretation (comprehension) tasks; there is no immediate need to produce them. For example, learners hear or see the target structure in the input and respond in some way to input utterances by stating whether they are true or false or choosing the best answer from among the options presented. Activities used both aural and written stimuli but most of them were written. Table 6 outlines the topics and grammatical focus of the input material.
Table 6: Topics, and grammatical focus of input material used in the study

<table>
<thead>
<tr>
<th>Text</th>
<th>Topic</th>
<th>Grammatical Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text 1</td>
<td>Daily Activities</td>
<td>Simple Present</td>
</tr>
<tr>
<td>Text 2</td>
<td>Louis Pasteur</td>
<td>Simple Past</td>
</tr>
<tr>
<td>Text 3</td>
<td>Killer Oil</td>
<td>Simple Past/Past Progressive</td>
</tr>
<tr>
<td>Text 4</td>
<td>No Wrong Numbers</td>
<td>Present Perfect</td>
</tr>
<tr>
<td>Text 5</td>
<td>Human rights in Africa</td>
<td>Present Perfect</td>
</tr>
<tr>
<td>Text 6</td>
<td>Taxi</td>
<td>Simple past/Present Perfect</td>
</tr>
<tr>
<td>Text 7</td>
<td>The Casbah of Algiers</td>
<td>Past Perfect</td>
</tr>
<tr>
<td>Text 8</td>
<td>Never too Old to learn</td>
<td>Simple Future</td>
</tr>
</tbody>
</table>

The type of instruction used in this study with the input-only group was based on descriptions of input-processing instruction (VanPatten, 1996, 2004) and structured-based instruction (Erlam, 2003) (chapter 3). One of the characteristics of input-based instruction is that during the instructional phases learners are only engaged in input-based practices. They do not engage students in production of the target form in question.

This emphasis on input-only practice in input-based instruction corresponds to Van Patten’s (1996, 2004) perspective that comprehension tasks should precede production tasks. However, the input material in this perspective, unlike the pedagogical implications of Krashen’s ‘Input Hypothesis’, is structured and manipulated. We began chapter 1 by noting that the unfocussed exposure to input i.e. raw, natural input, as in the communicative and acquisition-oriented approaches, may not be the most efficient for some grammatical features to be acquired in a classroom (Doughty and Williams, 1998). Learners must in some way attend to the input in order to make the appropriate form meaning connections. One possible way to accomplish learners’ noticing of forms is through different methods of ‘enhancing the input’. IE (chapter three) refers to a group of pedagogical applications ‘that shape the input that the students must process’ (Cowan, 2008:40) for focusing learners’ attention on aspects of the language that may otherwise go unnoticed (chapter three). In accordance with the pedagogical options available for input-based instruction, the types of IE used in this instructional package included:
(i) **Input flood**: Written or oral texts are modified so as to contain many instances of the same language forms or features. Learners are required to extract meaning from the input. As characterised by Ellis (2001:19) input flood ‘exposes learners to input rich in some specific linguistic feature’ and ‘requires them to process this input primarily for meaning’. Cowan (2008) points out that input flood is a pedagogical application of processing instruction because it provides repeated instances of the target structures ‘that will, it is hoped, be noticed and become intake’(p.40). The goal of textual enhancement is to get learners to notice the enhanced forms.

(ii) **Textual enhancement**: it consists of ‘typographically highlighting a particular grammatical structure in written passage’(Cowan 2008: 41). Target forms are enhanced and made salient in written texts by the use of typographical cues such as italics, putting forms in bold type, underlining or colour coding.

(iii) **Structured input tasks**: As Thornbury (1999:105) highlighted, ‘such tasks require learners to process input which has been specially structured so as to help them understand the target item. There is no immediate need to produce them.’ This activity is comprehension-based; learners hear or see the target structure in the input and respond in some way to input utterances by, for example, stating whether they are true or false; possible or impossible; by adding information or matching sentences and pictures. The term structured input was put forward by Van Patten (1996, 2004) as part of his input processing approach.

iv) Students were also given consciousness-raising exercises. Consciousness-raising is designed to allow students to develop an explicit knowledge of grammar without necessarily articulating grammatical rules. It aims to help learners understand target forms but does not require production of these forms (Ellis 1994, 1997, 2008).

Table 7 summarizes the time allotted for each stage of the two weekly lessons during the 8-week experimental period.

---

(2) They are also called grammar interpretation activities (Ellis, 1994, 2008)
Table 7: Time allotted for each stage of the lesson during the experimental period for the input group

<table>
<thead>
<tr>
<th>Stages</th>
<th>Time allotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explicit presentation of verb tenses</td>
<td>30 minutes</td>
</tr>
<tr>
<td>2. Listening /reading material exercises</td>
<td>20+60 minutes</td>
</tr>
</tbody>
</table>

4.2.4.2 Output-based instructional material

The treatment packet for input plus output group consisted of three steps:

(1) The same explicit instruction on tense and aspect as the input-only group. Explicit grammatical information was made equal for both treatment groups so that the difference between them would be limited to the presence or absence of learner output during classroom activities.

(2) The same set of input-based tasks covered by the input-only group. However, their focus was the production of the targeted structure. For example, where the input group had to choose the correct option or state whether they are true or false, the output group were required to produce sentences.

(3) The input plus output group performed a number of mechanical, meaningful and then communicative written and oral activities, where the emphasis was placed on production-based activities including traditional production-based activities and tasks based on the output hypothesis.

The traditional production-based material consisted of mechanical, meaningful and communicative activities where the emphasis was placed on production. Mechanical/manipulative output practice activities focus on linguistic forms isolated from context and provide students with opportunities to practise the target forms. In this type of practice
the learners can perform a task without linking the structure and its meaning since they
do not have to understand what they are saying to complete the task. Meaningful and
communicative production-based require the learners to attend to meaning (Ellis
1993, 1994). This model of teaching draws from both the Audiolingual Method and
cognitive theory (DeKeyser 1998) where explicit instruction is followed by form-
focused activities which allow students time to think and apply rules they have learnt. For
the purposes of this study, oral work that students engaged in was be kept to a minimum,
in order to increase attempts at producing the target structure in written output. Thus a
greater emphasis was put on individual written activities. In line with Swain’s output
hypothesis (1995, 2000, 2005), which claims that ‘pushed output’ production may assist
learners to focus attention on problem structures and compare their interlanguage forms
with the target form, output-oriented tasks, all of which involve output production, were
employed in the present study. These tasks are classroom applications of the research on
the output hypothesis and have been used to produce ‘pushed output’.

- **Dictogloss**: dictogloss is a form of dictation which ‘requires learners to process the
whole text at once’ (Thornbury 1999: 84). Students listen to a short text and then work
individually (in pairs or in small groups) reconstruct the text from memory and some
notes. The output is then compared with the original text and students identify their
linguistic deficiencies. Swain (1998) refers to dictogloss as a procedure through which
student can reflect on their own output (the reflective function of the output).

- **Input-output cycles** (Izumi, 2000): an integrated skills technique for language learning
in which students learners read (or listen to) a text and individually or in pairs work to
write a reconstructed version of the text. In some way these texts contain target structures
in the same way these structures are embedded in input flood or enhanced input activities.
Once learners complete their reconstruction they are given another text and are asked
once again to reconstruct or summarise the information.

Table 8 gives the time allotted for each stage of the lesson during the experimental
period for the input plus output allotted for each stage of during the 8-week
experimental period; Table 9 outlines the topics and grammatical focus of pushed tasks.

---

3 It is also called dictocomp or grammar dictation
4 It is also referred to as text-reconstruction
Table 8: Time allotted for each stage of the lesson during the experimental period for the input plus output

<table>
<thead>
<tr>
<th>Stages</th>
<th>Time allotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explicit presentation of verb tenses</td>
<td>30 minutes</td>
</tr>
<tr>
<td>2. Listening /reading material exercises</td>
<td>10+20 minutes</td>
</tr>
<tr>
<td>3. Traditional production-based material</td>
<td>20 minutes</td>
</tr>
<tr>
<td>(Mechanical/meaningful/communicative activities, Free written production)</td>
<td></td>
</tr>
<tr>
<td>4. ‘Pushed output’ tasks</td>
<td>30 minutes</td>
</tr>
<tr>
<td>(Dictogloss tasks, Input-output cycles)</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Grammatical focus of pushed output tasks used in the study for the Input plus output group.

<table>
<thead>
<tr>
<th>Text</th>
<th>Topic</th>
<th>Grammatical Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dictogloss Text 1</td>
<td>Morning activities</td>
<td>Simple Present</td>
</tr>
<tr>
<td>Dictogloss Text 2</td>
<td>The Wilsons</td>
<td>Present Progressive</td>
</tr>
<tr>
<td>Input-output cycles Text 3</td>
<td>A Disastrous Dinner</td>
<td>Simple Past /Past Progressive</td>
</tr>
<tr>
<td>Input-output cycles Text 4</td>
<td>Computers</td>
<td>Present Perfect</td>
</tr>
<tr>
<td>Dictogloss Text 5</td>
<td>Hot Snake</td>
<td>Present Perfect simple</td>
</tr>
<tr>
<td></td>
<td>/progressive</td>
<td></td>
</tr>
<tr>
<td>Dictogloss Text 6</td>
<td>A Terrible Day</td>
<td>Past Perfect</td>
</tr>
<tr>
<td>Input-output cycles Text 7</td>
<td>Cycling through Africa</td>
<td>Simple Future</td>
</tr>
</tbody>
</table>

4.2.5 Testing instruments and scoring procedures

This section describes the testing instruments used as well as an explanation of the scoring procedures. The pre-test which was developed for this study consisted of four tasks: 1) a listening comprehension task (an aural interpretation task) 2) a written
production /completion task 3) a grammaticality judgement test, and 4) picture description task. The function of the pretest was to measure learners’ knowledge of grammatical forms without any previous instruction in verb tense usage-apart from the instruction-if any- they received in pre-university English classes. It aimed to measure both the explicit and the implicit knowledge of the target structures in both constrained production and free production tasks. An identical test was used for pre-testing, post-testing (appendix D). The post-test was conducted immediately after the treatment session (Figure 7). All the subjects performed only three post-treatment tests. The listening comprehension test was not given after the treatment since it was believed that learners might be significantly affected by the multiple administrations of the same test format.

**Pre-test (Week 1)**

Listening comprehension test  
Written gap-fill production  
Grammaticality judgement test  
Picture description task

**Assignment into two groups**

**Experimental Groups**

<table>
<thead>
<tr>
<th>Input-only group</th>
<th>Input plus output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment session</td>
<td>Treatment session</td>
</tr>
<tr>
<td>(Output-free input-based practice)</td>
<td>(Input plus output practice)</td>
</tr>
</tbody>
</table>

**Post-test (week 9)**

Written gap-fill production  
Grammaticality judgement test  
Picture description task

**Figure 7**: The research design

4.2.5.2.1 Listening comprehension Test
Participants were first asked to listen to the passage. Participants were not allowed to take notes. After they had finished listening they were asked to provide the past tense forms of a list of verbs. The aim was understanding meaning of material that contains target structures (past tense stem + ed and time markers). They listen for the text a second and find out the order of a set of pictures. Students were allowed 20 minutes to do the task. The listening test and accompanying questions are provided in appendix D. A right-wrong scoring method was employed

4.2.5.2.2 Written gap-fill production

A grammar test covering the various English tense-aspect forms was used to assess the familiarity of EFL learners with these tense-aspect forms. In this test students completed a rational cloze instrument consisting of a descriptive passage eliciting verbs from all three simple tenses: present (12 verbs), past (6 verbs), future tense (1 verb) and 5 aspectual forms of the present, 7 aspectual forms of the past and 3 aspectual forms of the future. This test was not a typical cloze test in that the lexical items were provided (base forms of verbs which learners manipulate using the bracketed cues about tenses). This instrument is very representative of the kind of 'fill-in-the-blank' verb exercises classroom learners are familiar with. From the lexical aspect viewpoint, the distribution of the 34 missing verbs includes: 12 state verbs, 22 dynamic verbs (of which 18 are activity verbs and 4 accomplishment verbs). The instructions told the learners to provide the correct tenses for the verbs given in parentheses following the blanks. Thirty-five minutes were allowed for the completion of the items.

4.2.5.2.3 Grammaticality judgement test (GJT)

Grammaticality judgment (GJ) tasks are one of the most widespread data-collection methods that linguists use to test their theoretical claims. They are commonly used to measure the impact of specific language instruction in L2 research. In these tasks, speakers of a language are presented with a set of linguistic stimuli to which they must react. Some linguists reject the use of metalinguistic judgment data entirely, while others find them to be a useful tool for the examination of grammatical competence. Gass and Selinker, for example, pointed out that, in grammaticality judgement tests information is obtained not about the system learners are acquiring but ‘about some internalized system
of the learners (i.e. there may be a mismatch between the two systems in question)’ (2008:65). Ellis (1994:673) on the other hand, pointed out that the GJT allows researchers to investigate ‘linguistic properties that would be otherwise very difficult (and perhaps impossible) to investigate’. Although the GJT has been criticised for having problems, it is commonly used to measure the impact of specific language instruction in L2 research. In the context of the present study, the term ‘grammaticality judgement’ will refer to an ‘opinion’ offered by the learner regarding the grammaticality (or not) of sentences in the English language. This learner may give the opinion that the sentence is in some way deviant, or does not conform to his view of what constitutes a correct ‘sentence’ in the English language. On the other hand, he may find that the sentence corresponds exactly to his view of a ‘proper’ sentence in English. In the test, the learners gave grammaticality judgments on 45 test items, half of which contained ungrammatical or problematic tense/aspect usage (29 sentences). These ungrammatical sentences were made by students during previous exams. The rest of the sentences were generated for the purpose of the test. The rationale for selecting these items was primarily pedagogical and practical rather than theoretical. Responses on the grammaticality test were assigned a score according to whether:

- The learner was able to correctly identify an item as grammatical or as ungrammatical. (score = 1). Learners were not asked to provide corrections for the sentences.
- The learner incorrectly identified an item as grammatical or as ungrammatical (score = 0). Consequently, the maximum score in the GJT was 45. The time limit was set at 40 minutes. The instructions, as well as the items tested are presented in Appendix D. In addition, an outline of the various problems tested is provided with some examples.

4.2.5.2.4 Picture description task

A picture description task adapted from Swain and Lapkin (2001) was used in order to evaluate student’s use of the target language features. For this task students looked at 8 numbered pictures of telling a story of a girl involved in various activities (appendix D). Participants had to tell the story that the pictures suggest by writing sentences to describe what was happening in each of the pictures. The contexts carefully elicit the use of target language features such as the simple present and present progressive. Since
students have a limited amount of vocabulary they were provided with the necessary vocabulary to complete the task. They were also permitted to use the dictionary if they wished. Students took approximately 20 minutes to complete the picture elicitation task. A partial-credit scoring method was adopted. As opposed to the right-wrong scoring method, the partial-credit scoring method gives some credit for partially correct responses. For example, in assessing the grammatical knowledge of ‘form’ and ‘meaning’ of the past tense. A response such as ‘the sun rised’ would be assigned partial credit (no credit for ‘form’ and full credit for ‘meaning’).

4.4. Study II: An exploratory study

Study 2 was exploratory in nature and was conducted after the completion of Study I. Building on the work of previous researchers on the role of L2 production (output) in promoting noticing (chapter 3) the exploratory study to be presented in this chapter intends to add to the existing noticing research by providing data derived from a population (young adult learners) that has not featured prominently in previous studies in a new acquisitional context (a foreign language setting). Bearing in mind previous research findings and suggestions for further research to explore learners’ L2 production, we designed a study in which L2 learners engage in writing tasks comprising three stages during a 50-minute class: (i) to write a narrative in response to a picture prompt, (ii) to compare the use of linguistic forms in their own written output and the use of the forms in a text written by a native speaker, and (iii) to make revisions.

While writing the initial picture description, participants had to verbalize linguistic problems encountered during output processing and on differences between their own output and the feedback received on it (gaps) during subsequent input processing. The study was supposed to explore the degree to which (a) noticing gaps and/or holes, and (b) exposure to relevant subsequent input (a native speaker text) would contribute to the correct use of linguistic forms in the rewriting phase.

4.4.1 Why an exploratory study?

The type of research conducted in this study employed an introspective approach with an exploratory objective to understand how output impacts on L2 learning. It is important to examine participants’ learning process, that is, participants’ cognitive
processing involved in their L2 output performance. However, learners’ cognitive processes would not be fully understood if only the learning effect was examined through a quasi-experimental study (as was the case in study I). In the present research, the exploratory study was relatively independent of Study 1 in the sense that the former was administered separately from Study 1 and on different participants, as detailed in section 4.2 above. A study was needed for studying the output-triggered learning processes by employing an introspective methodology as a tool to obtain data from the learners’ perspectives. The L2-related internal processes or composing behaviors in which learners engage while producing their L2 are an unobservable phenomenon. The advantage of using an introspective approach lies in the possibility of using such research methods as think-aloud protocols, note-taking, underlining, personal journals, and interviews. In using this method, we are interested in determining the processes underlying learners’ L2 production. One source of information about these processes is the learner himself, who tells the researcher about what his decision-making processes during or after the activity. Methodologies used to qualitatively and quantitatively account for learners’ noticing and attentional processes fall into two categories: online, which measures the language learners’ noticing during performance of a certain language task, and offline, which employs posttreatment assessment measures. The advantage of online measures, as opposed to postexposure measures, is their instantaneous access to L2 processing, thus minimizing the risk of possible memory decay by the L2 learner (Gass and Mackey, 2000). As such, noticing was operationalized through verbal self-reports in the form of note taking. Verbal reports represent a type of introspective data. They are ‘protocols or reports that come about from asking individuals to say what is going through their minds as they are performing some task’ (Gass and Selinker 2008: 69). In chapters two and three of this study, based on the theoretical framework of Swain’s (1985, 1995, 2005) Output Hypothesis and on research that indicates insufficiency of comprehensible input in driving L2 development, a case has been made for the importance of drawing learners’ attention to noticing of crucial form features to promote learning. Considering the role played by L2 output in noticing and in L2 learning in general, Izumi (2002) has suggested, and the current study also assumes, that output is considered to be one means to achieve this aim by prompting the learners to find problems in their IL through their production attempt. It is further assumed that, on exposure to relevant input immediately
after their production experience, the heightened sense of problematicity experienced during production may cause the learners to process the subsequent input with more focused attention; they may try to examine closely how the TL expresses the intention which they just had difficulty expressing on their own (i.e., the noticing function of output, section 2.2.2.1.3).

A substantial number of studies addressing the language learning potential role of written output have also examined learners ongoing thinking episodes or decision-making while producing their L2, finding salient L2-related internal processes or composing behaviors among second-language learners (e.g. Adams, 2003, Cumming, 1989, 1990; Izumi and Bigelow, 2000; Izumi, Bigelow, Fujiwara and Fearnow, 1999; Qi and Lapkin, 2001; Swain and Lapkin, 1995; Tocalli-Beller and Swain, 2005). The rationale for this research is that it is necessary to make descriptions of the thinking processes learners make before making any claims about any causal relationship between written output and language learning. For our present purposes, the relevant line of research is the one in which researchers have explored the manner in which output encourages learners to recognize problems in their interlanguage (IL) as a result of trying to produce the TL and also the manner in which providing learners with input/feedback and prompting them to process such input has any effects on learning. Accordingly, the participants in these studies were asked to produce a text, and they were then provided with some kind of input or feedback whose effect on learning was assessed. Learning has been operationalized in two main ways: performance of language test pre- and post-treatment, and/or differences between the features of the text produced before and after the provision of input/feedback. As the study’s focus is the processes involved when constructing output and not the outcomes, we used the second procedure i.e. input incorporation and learner uptake. Learner uptake is defined as both the type and the amount of revisions incorporated in the participants’ revised versions of their original texts.

4.4.2 Participants

The participants were 36 young adult students (14 students from Class A and 22 students from Class B) who completed all the stages of the writing task. The data to be
analyzed for this study come from a total of 33 students (13 students from Class A and 20 students from Class B) who completed all the stages of the writing task.

4.4.3 Target Structures

In the present study, no target structures were chosen prior to the study. Instead, the investigation relied entirely on what students reported in the form of note-taking in the analysis of what students noticed in the composing and the comparison stages.

4.4.4 Data collection procedure

The data collection procedure was based on previous studies which have shown the usefulness of multi-stage tasks in eliciting those composing behaviours among L2 writers (e.g. Adams, 2003; Hanaoka, 2007; Qi and Lapkin, 2001). For the present study, a writing task was designed to provide the participants with the opportunity to notice linguistic problems as they wrote a narrative in response to a picture prompt, notice the gaps between their interlanguage and the target language by comparing their own production with a sample model text which was used as feedback and, finally, rewrite their first draft after the comparison procedure.

Stage I: The students were asked to write a story in response to a picture prompt (Appendix E). The students were provided with Sheet 1 and Sheet 2, and the pictures. On Sheet 1, they wrote a narrative and on Sheet 2, they took notes on whatever linguistic problems they noticed as they wrote on Sheet 1 with the following specific examples of note-taking: ‘I don’t know how to say X in English’, ‘I wrote X, but I’m not sure if this is correct’, and ‘I’m not sure/I don’t know whether the picture is describing X’. This should help learners to notice language problems in their linguistic knowledge. Sheet 2 was collected and the students kept their original text (Sheet 1) and the pictures for the Stage 2 task. This first stage took about 15 minutes.

Stage II: In stage 2, which immediately followed the Stage 1, the students received Sheet 3 and a model passage (Appendix F). The students were asked to write on Sheet 3 whatever they noticed as they compared their original output with the model input text used as feedback. Specific examples of note-taking were provided. They were: ‘I couldn’t say X, but the model put Y’, ‘the model text says X, but in my paragraph I wrote Y’. This first stage took about 15 minutes.
Stage III: At the end of the Stage 2, the model passages and Sheet 3 were collected. The students were asked to rewrite their original text on another sheet making the necessary revisions. This task took about 10 minutes.

4.4.5 Instrument
The picture prompt (from Azar Shrampfer, B., 2003) given to each participant was used to elicit the data for the study. It consisted of several picture frames requiring learners to write a narrative paragraph. These pictures also helped to control the propositional content of the story that the students wrote. The model input text employed in this study was also taken from the same textbook (Azar Shrampfer, B., 2003). This model is thought to be at native-writer level and substantially more advanced than the best writer of all 36 participants and was intended to be used as a basis for comparison.

4.4.6 Data Analysis and Coding
Data analysis methods were partly replicated from Swain and Lapkin (1995) and Qi and Lapkin’s (2001) studies. For the sake of analysis, noticing was operationalized in this study as self-reports in the form of note-taking episodes:

1. Note-taking episodes (Language-related Episodes)
Observable instances of attention to form have been labelled language-related episodes (LREs), defined by Swain and Lapkin (2001, p.104) as ‘any part of a dialogue where students talk about language they are producing, question their language use, other- or self-correct their language production.’ Researchers in the field of second language acquisition have used language-related episodes quite frequently, in their investigation of the role of comprehensible output in second language acquisition. They have been used in the context of classroom-based research to examine the extent to which students address their linguistic problems. The identification of the problems that students encounter during target language production involves drawing on both meaning and language form simultaneously, and hence language-related episodes are generally classified as ‘lexis-based’, ‘form-based.’ The following is an example of a form-based language-related episode taken from Swain (1998), where the focus is on subject and verb agreement:
T: Est-ce que c’est les ‘rues’ qui avaient, ou la ‘ville’ qui avait?
(Is it the ‘streets’ that had (plural form) or the ‘town’ that had (singular form)?)

R: C’est les ‘rues’ qui avaient. C’est les ‘rues’ qui est le sujet, alors on doit faire
I ‘accord avec les ‘rues.’ Done, ga doit etre avec e-n-t a la fin.
(It’s the ‘streets’ that had (plural form). It’s the ‘streets’ that is the subject (of the
Sentence), so we have to make the verb agree with ‘streets.’ So, it must be written
with e-n-t (plural form) at the end.)

(from Swain, 1998, p. 74)

2. The note-taking episodes in our study
Note taking episodes in this study have to do with the verbalised problems that
students become aware of when they are engaged in target language production and the
extent to which students address their linguistic problems. Learners’ descriptive notes are
a good indication of where they allocated most of their attention and may provide a clue
as to the nature of learners’ awareness. The note taking episodes that were analyzed for
this study included all learners’ notes (verbalised problems) in which students became
aware of and spoke about (notice) linguistic problems they encountered when they are
engaged in target language production and the extent to which students address their
linguistic problems. Having been identified, note taking episodes were further analyzed
and classified into categories portraying the focus of the learners’ language episode. As
our study involved both composing and comparing (a draft to a model text of it), we
extended the definition so it could be applied to the comparison stage as well. Thus, in
addition to what is defined in Swain and Lapkin’s research, a note taking episode in
stage II refers to instances in which a learner noticing a language-related problem he/she
encountered while comparing his/her text to a model version of it and addressing it either
by accepting the difference and incorporating it in subsequent revision (appendix H). In
the relevant research, LREs are usually divided into three broad categories of lexical,
form, and discourse. Qi and Lapkin (2001) coded language-related episodes (LREs)
broadly into lexical, form, and discourse types. Williams’s (2001: 330-31) classification
of LREs identifies lexical and grammar features as follows:
The lexical category … essentially includes anything that would fit into the categories “What does this mean?” “How do you say/spell this?” or “Which word should I use here?” In contrast, the grammar/morphology/syntax category includes LREs that revolve around tense choices, grammatical morphology, word order, and other features generally considered part of grammar.

Drawing on the classifications above and in response to the data collected, the note-taking episodes were classified for whether they focused on lexis (choice of expression word choice, word meaning choice of expression), form (verb tense, subject-verb agreement sentence structure), mechanics (spelling and punctuation) discourse (achieving intersentential clarity), content (whatever information depicted in the picture), and others (These note taking episodes were difficult to code). In order to determine the kinds of mental processes we assumed were involved in the changes learners made to their interlanguage (IL) through their production attempt (Stage 1), we categorized the learners’ descriptive notes depending on the way in which learners’ solved their linguistic difficulties both in stage 1 and in stage 2. The following examples (appendices H and I) illustrate the way in which the Stage 1 problematic features and Stage 2 problem-solving behaviours were coded:

A. The overt focus of the learners’ output

1. **Lexis:** I can’t find the English word for what was in the hand of the woman so I don’t use it (Stage 1)
   
   Instead of 6:00 pm, I wrote the time in letters (stage 2)

2. **Form:** ‘when he slept the phone start ringing’, What is the past of ring? (Stage 1)
   
   I wrote waked up but the correct one is woke (Stage 2)

3. **Mechanics (spelling and punctuation):** ‘Homework’ one word or two (Stage 1)
   
   ‘no note identified in stage 2

4. **Discourse:** I don’t know how to combine sentences (Stage 1)
   
   ‘no note identified in stage 2

5. **Content (ideational):** I couldn’t express entirely the picture 7 (Stage 1)
   
   I should have said the time when he went to school but it was not on the picture (Stage 2)
6. Other: In general I don’t write with more detail as the paragraph

The categorization of the problem-solving behaviours depended on the linguistic focus of the note taking episodes (e.g., searching for a lexical item, applying a grammatical rule etc.)

B. Problem-solving behaviours (in an output-only writing condition)

I) searching their L2 their own linguistic resources

1) lexical search

a) Via L2: ‘Bob was in the dinner room then says ‘I’m not sure that we say dinner room’; I don’t find the correct word so I put dinner room

b) Via French: I really have a miss of vocabulary. I wrote the word that I don’t know their meaning in English at French.

2) Knowledge of grammar (Application of grammatical rules): In the morning he waked up (woke up) early. I wrote he waked up early. I think it’s not correct, the verb should be irregular.

II) resorting to intuition: I say took his dinner, I think it’s right.

C) Noticing of problems (gaps) in subsequent processing of TL input (the Stage 2/3 comparison and revision task)

The categorization of the note taking episodes, as in stage 1, depended on their linguistic focus (e.g. lexical, morpho-syntactic, textual problematic features, etc) and incorporation of the noticed features (mostly model phrases and expressions) in the in subsequent revisions. The following example serves to illustrate the way in which learners modify their output in response to the model input and incorporate the model phrases and the revised versions of their original texts.

The text written at Stage 1: In my paragraph I wrote: when he was finished eating his mother took the plate ‘but normally it is...

The model text: ‘While Bob was eating his dinner Ann came through the door’
4.5 Chapter summary

This chapter described the major elements of research design and methodology employed in the present research work. The first research project employed a quasi-experimental design to investigate the effect of two types of instruction, with a pretest preceding the experimental treatment and a posttest being conducted immediately after it. Two groups of learners were compared with reference to learning English tenses and grammatical aspect: an input-only group and an input-plus-output group. The treatment for both the input-only group and input-plus-output group consisted of sixteen teaching sessions spread over the period of eight weeks and took place during regularly-scheduled classes of grammar. Each of the sessions was designed to last from 75 up to 90 minutes. The instructional treatment in both groups started with explicit presentation of the rules followed by either input practice only or a combination of input-plus-output instructional activities. This study bears significance as, to our knowledge, it is the first study that has been undertaken in an Algerian EFL context (see section 4.2.2) where the relative effects of two instructional interventions under investigation have never been studied. The results will enable the researcher to see whether those engaged in input-plus-output outperform those exposed to the same input for the sole purpose of comprehension (input-only) with regard to their comprehension and production of the English verb tenses and grammatical aspect.

The second study, using an introspective approach, intends to investigate how noticing is implicated in L2 production processes by asking two 36 young adult students during one 50-minute class to engage in writing tasks comprising three stages: (a) to write a picture description, (b) to compare it with a model text, and (c) to rewrite the original description. While writing the initial picture description, participants had to verbalize the problem. In order to determine participants’ level of noticing, the participants were asked to verbalize their language problem by taking notes on whatever they noticed (i) while they were writing the initial picture description, and (ii) while they were comparing it against the model input text provided as feedback. By examining each of the three
stages, we intend to investigate how noticing is implicated in L2 writing processes (a) as each individual participant composed an L2 text (Stage 1); (b) as he/she subsequently compared his/her L2 text with a model version of it (Stage 2); and (c) as he/she revised their original texts (Stage 3)
CHAPTER FIVE
ANALYSIS AND RESULTS

5.1 Introduction

The previous chapter has addressed the research design and data collection methods. This chapter reports the results data, which were analyzed as measures of learning outcomes and intervention satisfaction, with the aim of answering the research questions proposed in chapter 4 for study I and study II. Section 5.2 presents the results obtained from the reception and production tests in Study I. Section 5.3 contains an overall summary of the results from both reception and production tasks, including answers to the research questions and hypotheses introduced in Chapter 4. The data generated from study II are described in Section 5.4.

5.2 Analyzing data of participants in Study I

This section presents the analyses of the results obtained from the assessment tasks used as pretest and posttest. The study’s dependent variable, learning performance, was measured by learners’ ability to appropriately produce and comprehend English verb tense and grammatical aspect on testing measures before and after the treatment. Two of them—a written gap-fill production test and a picture-based description test—examined the subjects’ productive knowledge; the other two tests—an interpretation (listening comprehension) test and a grammaticality judgment test—aimed at testing their receptive knowledge. The independent variable was the grouping factor, which was made up of two levels: a) input-based instruction, and b) input-plus-output based instruction. Although the overall conceptual dependent variable is developing L2 competence, the specific dependent (outcome measures) in the study are the interpretation judgement of acceptable target forms (pretest-posttest); and the written production of target forms (pretest-post test).

To examine the effect of the independent variables, the following sets of analyses were conducted:
(A) Descriptive analyses and a series of one-way between-groups ANOVAs investigating significant differences in the pretest findings of the input-only and input-plus-output groups.

The analysis of variance (Anova henceforth) is a widely used statistical methodology for testing the significance of treatment effects and tells us that somewhere in the data there are significant differences (Dörnyei 2007, Seliger and Shohamy, 1989). There are ‘dependent ANOVA’ and ‘independent ANOVA’ according to whether the several means with which the researcher intends to make comparisons come from the same group (i.e. repeated measure) or different groups.

(B) Descriptive analysis and one-way between-groups ANOVA investigating significant differences in posttest findings of the input-only and input-plus-output groups

(C) Descriptive analyses and repeated measures ANOVA analyses investigating whether means scores significantly increased from pretest to posttest to observe how each group performed independently.

Thus, the results are presented in the order of 1) descriptive statistics, 2) one-way ANOVA, and 3) repeated measures ANOVA

The specific objectives of these analyses were to determine whether students improved significantly in their use of the target structure; whether one of the two groups improved more than the other; whether there was a relationship between the students’ achievement and the instructional approach used in their class. The alpha-level of significance \( p < .05 \) (95% confidence) was determined prior to data collection and was used throughout the study which is a generally accepted standard for all statistical analyses for all social and education research. Mean score differences were considered significant when F values were larger than the critical values or whenever the \( p \)-values obtained in the calculations were less than \( \alpha = .05 \).

5.2.1 Comparison of baseline performances in the pretests

Before examining the effects of the treatments, pretreatment equivalence of groups in their knowledge of English verb tenses and grammatical aspect was checked by submitting the pretest scores to statistical analyses. Therefore, any difference that may be
observed on the posttest or on the pre- to posttests gains is attributable to the respective treatments and not to prior knowledge of the target structure.

For the two tests tapping the participants’ reception (comprehension) of target structure, Table 10 shows the results of the mean test scores and standard deviation for both the input-only and the input-plus-output groups at the pre-test. On all the assessment tasks described, the pretest mean differences in the two groups were quite marginal: on the listening comprehension test the pretest Mean was at 10.92 for the input-only group and 11.31 for the output-plus-output group. On the GJT the pretest Mean was at 19.52 and 19.26 for the input-only and the input-plus-output group respectively. As a follow-up test, one-way Anova’s (Table 11-12) were conducted to assess if the means of the two groups were statistically different from each other.

Table 10: Descriptive Statistics for pretest reception assessment tasks

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Listening (Max = /16)</td>
<td>10.92</td>
<td>2.07</td>
</tr>
<tr>
<td>GJT (Max/36)</td>
<td>19.52</td>
<td>4.68</td>
</tr>
</tbody>
</table>

Table 11: One-way Anova on Listening Comprehension tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1.4803</td>
<td>1</td>
<td>1.4803</td>
<td>0.32</td>
</tr>
<tr>
<td>Within group</td>
<td>167.2368</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168.7171</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.0
Table 12: One-way ANOVA on Grammaticality Judgement tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.6579</td>
<td>1</td>
<td>0.6579</td>
<td>0.03</td>
</tr>
<tr>
<td>Within groups</td>
<td>840.4211</td>
<td>36</td>
<td>23.345</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>814.6789</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.05

The F observed value for the effect of the pretest is 0.32 for listening comprehension and 0.03 for grammaticality judgement test (GJT). This amount of F-value at 1 and 36 degrees of freedom is lower than the critical F, that is, 4.11 for both tests. So, it can be concluded that the participants in the two groups, statistically speaking, had about the same knowledge of the target feature (i.e. verb tenses and grammatical aspect) in terms of the listening comprehension and GJT tests before the treatment.

In the case of the tests tapping the participants’ production of the target structure, the descriptive measures indicate that there were some slight differences between the two groups. On the written gap fill production task, the pretest mean score was at 19.15 for the input-only group, and at 16.37 for the input-plus-output group. On the Picture description task, the pretest Mean was at 4.02 for the input-only group and at 4.70 for the group which received the input and output treatments. These differences were marginal as confirmed by one-way Anova’s (Tables 14-15) which were conducted on the raw scores of each of the production tests. The Anova showed that there were no statistically significant differences between the two groups at the p<.05 level in test scores. The F observed value for the effect of the pretest is 0.56 for Written gap-fill production and 0.04 for Picture description. This amount of F-value at 1 and 36 degrees of freedom for written gap fill production is lower than the critical F, that is, 4.11 for both tests. Similarly, the amount of F-value at 1 and 32 degrees of freedom for picture description is lower than critical F, that is, 4.17.


Table 13: Descriptive Statistics for pretest production assessment tasks

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th></th>
<th>Input-plus-output</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Written gap fill</td>
<td>19.15</td>
<td>8.75</td>
<td>19</td>
<td>16.37</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Max = /34)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picture description</td>
<td>4.02</td>
<td>0.92</td>
<td>17</td>
<td>4.70</td>
</tr>
<tr>
<td>(Max/10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Both groups performed equally regarding the production of the target structure. When we say that the difference is not statistically significant we mean that the learners from the two groups have obtained scores that are close to each other or at least not very different from each other. In summary, it can be stated that the participants’ receptive and productive knowledge of the target structure before the treatment was almost the same. Hence the analysis indicated that there were no statistically significant differences the scores and that is why it can be safely concluded that learners’ performance on the reception and production of the target structure was similar at the time of pretesting.

Table 14: One-way Anova on written gap fill production tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>11.6053</td>
<td>1</td>
<td>11.6053</td>
<td>0.56</td>
</tr>
<tr>
<td>Within groups</td>
<td>748.9474</td>
<td>36</td>
<td>20.8041</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>760.552637</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.05
### Table 15: One-way Anova on picture description tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.1176</td>
<td>1</td>
<td>0.1176</td>
<td>0.04</td>
</tr>
<tr>
<td>Within groups</td>
<td>88.3235</td>
<td>32</td>
<td>2.7601</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>88.4412</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is at p<.05

#### 5.2.2 Comparison of students’ mean performance on receptive and productive pretest and posttest

To assess the subjects’ knowledge of English verb tenses after the treatment, the participants were given only three testing measures to minimize the potential test effects of the previous assessment where four tests were used. It was believed that learners would be affected by the test format and the test tapping the participants’ reception (listening comprehension) of target structure was not administered along with the other testing measures. Thus, all the subjects performed a grammaticality judgment test (GJT) aiming at assessing their receptive knowledge of the target items and two other tests -- a written gap-fill production test and a picture-based description test - aiming at testing the subjects’ productive knowledge. For the sake of clarity, the section dealing with the analysis of the results obtained in the course of the assessment procedures is divided in two parts. The first part concerns the data referring to the reception of the targeted feature, whereas the second part has been devoted to the examination of the results of the tests tapping the participants’ production of the target feature.

#### Reception data

Table 16 displays the descriptive statistics for the groups on the task testing the reception of the target structure. As the results show, the input-plus-output group (Mean = 19.50) outperformed the input-only group (Mean = 18.89) on the grammaticality judgement posttest.
Table 16: Descriptive statistics on reception data

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammaticality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Judgement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>19.52</td>
<td>19.26</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.68</td>
<td>4.97</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>18.89</td>
<td>19.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.14</td>
<td>5.26</td>
</tr>
</tbody>
</table>

As a follow-up test, one-way Anova was conducted on the raw scores to explore the impact of the treatment as measured by the grammaticality judgement posttest. A revealed in table 17, the slight growth observed in the scores of group that received the experimental treatment variables (input-plus-output) was statistically insignificant at the p<.05 level as confirmed by Anova results.

Table 17: One-way Anova on GJT

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degress of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>3.4803</td>
<td>1</td>
<td>3.4803</td>
<td>0.16</td>
</tr>
<tr>
<td>Within groups</td>
<td>808.2895</td>
<td>36</td>
<td>22.4525</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>811.6997</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The significance level is p<.05
The degree of improvement in verb tense usage was determined by subtracting the values at pretest from those at posttest. This produced a difference where positive values indicated an increase in verb tense performance from pretest to posttest, while negative values indicated a decrease in improvement. As illustrated in table 18 and the graphical representation in Figure 8, the scores of the comparison group, whose treatment was dominated by reception (input-only) practice, did not improve on the posttest. A significant decline (-0.63) was noted from time of pretest to posttest (PreT M = 19.52 and PostT M = 18.89) which seems to be indicative of the fact that there was no practice effect in the case of the reception of the target forms. Subjects from the input-plus-output group showed a slight improvement in performance from the pretest to the posttest (PreT M = 19.26 and PostT M = 19.50) with an over-all mean change of 0.24 suggesting that the treatment had a positive effect on learners' receptive knowledge of the target structure. What still remained to be seen is whether the differences between the pre- and post-test for the groups were significant and attributable to the respective treatments.

Table 18: Descriptive statistics for the pretest and posttest on reception data

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammaticality Judgement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>19.52</td>
<td>19.26</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.68</td>
<td>4.97</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>18.89</td>
<td>19.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>4.14</td>
<td>5.26</td>
</tr>
</tbody>
</table>

Thus, additional statistical analyses were conducted; this was accomplished via a repeated measures one-way analysis of variance (Anova) using the average scores obtained from the pre and posttests to observe how each group performed independently.
Repeated Anova procedures indicated that the mean scores were not significantly different over time (Treatment group $F(1,18)= 0.02, p=0.889$; $F(1,18)= 0.02, p=0.889$; comparison group $F(1,18)=1.15, p=0.297$) (See Appendix G for statistical tables). This suggests that there was no significant loss of learning for comparison group (input-only) on the receptive measures between pretest and posttest.

**Production Data**

Mean scores and standard deviations of the scores obtained in the tasks testing the production of the target structure are summarized in Table 19. The results revealed that the mean scores of the input-plus-output group were higher ($M = 17.39$) than those of the input-only group ($M = 16.28$) on the written gap fill production tests. In Figure 9, a visual representation of the gains shows that the greatest improvement was shown in the input-plus-output group between the pretest and posttest. These means seem to corroborate the trend predicted by the initial hypothesis that the experimental group will
ouperform the comparison group. However, even though the experimental group surpassed the comparison group by a mean difference of 1.11, there was no group difference at a statistically significant level, thus making it impossible to decide which of the treatments was more beneficial. The F observed value for the effect of treatment is 0.56. This amount of F-value at 1 and 36 degrees of freedom is lower than the critical F, that is, 4.11 for both tests (Table 20). This might indicate that both types of instruction are capable of bringing about important changes in the learners’ performance as as measured by the written gap-fill production posttest.

Table 19: Descriptive statistics for the pretest and posttest on production data

<table>
<thead>
<tr>
<th>Test</th>
<th>Input-only</th>
<th>Input-plus-output</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written gap fill production</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>19.15</td>
<td>16.37</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>8.75</td>
<td>7.75</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>16.28</td>
<td>17.39</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>5.25</td>
<td>4.55</td>
</tr>
<tr>
<td><strong>Picture description</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Mean</td>
<td>4.02</td>
<td>4.70</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.89</td>
<td>1.10</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Mean</td>
<td>5.52</td>
<td>5.75</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.93</td>
<td>1.34</td>
</tr>
</tbody>
</table>

The degree of improvement in verb tense usage was determined by subtracting the values at pretest from those at posttest. This produced a difference where positive values indicated an increase in verb tense performance from pretest to posttest, while negative
Table 20: One-way Anova on written gap fill production tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>11.6053</td>
<td>1</td>
<td>11.6053</td>
<td>0.56</td>
</tr>
<tr>
<td>Within groups</td>
<td>748.9474</td>
<td>36</td>
<td>20.8041</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>760.5526</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Values indicated a decrease in improvement. Subjects in the experimental group who received input-based instruction in combination with output-based practice had an overall mean change of 1.02, (PreT M =16.37, PostT M =17.39). Conversely, subjects in the...
comparison group, who received only output-free input-based instruction, have
decreased from the time of the pretest (PreT M = 19.15, PostT M = 16.28). This seems to
suggest that the treatment focusing on reception of the target forms proved to be
insufficient to trigger any positive change in the production of target structure. On the
other hand, the increase observed in the scores obtained by the input-plus-output practice
implies that practice in the production of the target structure brought about at least some
change. Although the improvement in performance from the pretest to the posttest for the
group that received the treatment is evident, what still remained to be seen is whether the
differences between the pre- and post-test for the groups were statistically significant and
attributable to the different practice methods. Repeated Anova procedures for each group
indicated that the mean scores did not significantly change from pretest to posttest over
time (Treatment group F(1,18)=0.12, p=0.733; Comparison group F(1,18)=0.23,
p=0.637) (See Appendix G for statistical table). Thus, there was no significant gain
for the input-plus-output or loss of learning for the input-only group on the written gap
fill production posttest.

Table 21 and figure 10 indicate that the subjects from the input-plus-output group
showed better performance (M = 5.75) than subjects from the input-only group (M =
5.52) on the the picture description task. As a follow-up test, one-way Anova’s were
conducted on the raw scores of each of the tests to explore the impact of the treatment on
the posttest scores as measured by the picture description task (score out of 10). The
Anova results indicate that there was a statistically significant difference at the p<.05
level in scores for the two groups. The F observed value for the effect of the is 0.04 (T.
This amount of F-value at 1 and 32 degrees of freedom is lower than the critical F, that is, 4.11 for both tests. This might indicate that both types of instruction are capable of
bringing about important changes in the learners’ interlanguage systems as measured
by the picture description task.

The degree of improvement in verb tense usage was determined by subtracting the
values at pretest from those at posttest. This produced a difference where positive values
indicated an increase in verb tense performance from pretest to posttest, while negative
values indicated a decrease in improvement. Subjects in the comparison group, who only
did output-free input-based instruction, had an over-all mean change of 1.5, (PreT M =
4.02, PostT M = 5.52). These learners did not complete any production task. However,
they were able to complete the second production test successfully, obtaining significant gains. This result provides evidence that the input condition alone aids the development of the ability to produce target structures. As for the group who received the experimental treatment in the form of input-plus-output based practice, there was an over-all mean change of 1.05, (PreT M = 4.70, PostT M = 5.75).

Table 21: One-way anova on picture description tests.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>0.1176</td>
<td>1</td>
<td>0.1176</td>
<td>0.04</td>
</tr>
<tr>
<td>Within groups</td>
<td>88.3235</td>
<td>32</td>
<td>2.7601</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>88.4412</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Figure 10. Performance on productive pretest and posttest](image)

Although the improvement in performance from the pretest to the posttest for both groups is evident, what still remained to be seen is whether the differences between the
pre- and post-test for the groups were significant and attributable to the different practice methods. Thus, additional statistical analyses were conducted. This was accomplished via a repeated measures one way analysis of variance. Repeated Anova procedures for each group indicated that the mean scores significantly changed from pretest to posttest. (Treatment group F(1,16)=6.3, p=0.02; comparison group F(1,16)=11.66, p=0.0035) (see Appendix G for statistical tables).

To answer this study’s research questions, a statistical analysis were performed to determine a) whether there were any significant changes within groups regarding their performance over time, and b) whether there were any significant differences between groups regarding their performance after the treatments. The overall results did not seem to show significant effect on learners’ receptive knowledge of the target structure. Output-free input-based instruction alone did not bring significant improvement over time. Slight progress was observed in the input-plus-output group but not to a statistically significant level. The results of the analysis of the tasks testing the production of the target structure also suggested that input-based activities alone did not result in a gain in ability to produce the target form as measured by one production task. Only the subjects in the input-plus-output condition showed a slight improvement in performance from the pretest to the posttest but not to a statistically significant level. However both treatment groups improved over time on the second production task obtaining statistically significant gains.

The analysis findings in relation to the effect of the treatment type do not seem to fully substantiate the hypothesis for the superior role of input-plus-output instruction over that of input-based practice. Although for both tests the mean scores of the input-plus-output group were higher than those of the input-only group there was no statistically significant difference between the two groups on both the receptive and productive tests.

This, nevertheless, shows a trend consistent with the initial research question that although both types of treatments will bring about improved performance on tasks involving the reception and production of English verb tenses and grammatical aspect, the input-plus-output would show an overall greater improvement in their use of the target structures than learners with input-based instruction only.
5.4. Analyzing data of participants in Study II

5.3.1. Introduction

As described in chapter 4, the second study is an exploratory study, which was conducted after the completion of the main study i.e. study 1. The first major research question posed in the main study concerned whether or not target language production of syntactic structures (English tense and grammatical aspect) facilitates learning of these structures. This research question was examined mainly through a quantitative quasi-experimental research design. In study II, the aim was to explore learners’ ability to become aware of their linguistic needs (i.e. holes or gaps in their L2 knowledge) both in an output-only writing condition, and via the feedback provided by a model version of learners’ written productions. The two secondary research questions were:

Research question: How does learner’s own written output enable them to recognize gaps in their L2 grammatical knowledge and performance?

Research question: When learners reprocess their performance what mental processes result that impact L2 learning?

These questions followed those investigated by noticing research within the output hypothesis (chapter 3). In particular work by Swain and colleagues (Qi and Lapkin 2001, Swain and Lapkin, 1995, 2001), Hanaoka’s study (2007) and Adams (2003).

Working with 33 students, we investigated the ability of the subjects to autonomously notice and correct their own grammatical problems by comparing the use of a L2 forms in their own written output and the use of the form in a native-speaker text. We were interested in whether engaging learners in such a three-stage L2 writing task is beneficial in terms of linguistic accuracy and greater awareness of the learning process.

Analysis of learners’ descriptive notes (verbalised problems) helped us to identify two different dimensions: linguistic problems learners encounter while composing and cognitive processes involved. In order to answer the research questions, the presentation of results will be in two sections. In the first section, analysis and classification of the
note-taking episodes is reported as data on the evidence of learners’ recognition of linguistic gaps in their L2 knowledge during the initial written description task and subsequent feedback processing in the comparison task. The second section reports on learners’ thought processes employed in focusing on language problems they encountered in their original output at the composing stage and in processing subsequent target language input which was provided as input/feedback in the comparison stage.

5.3.2 Learner noticing in the composing and comparison stages (Question 1)

The data—that is learners’ note taking episodes—were analysed to determine the extent to which learners become aware i.e. notice problems in their linguistic knowledge as they produce their L2 during a written output task.

The problematic features noticed by the learners while engaged in output-generation activity are shown in appendix H. As summarized in Table 22, there were 80 occasions in which students consciously noticed a linguistic problem as a result of producing, or trying to produce, the target language that is, an average of 2.42 per participant. The terms noticing problems, problem-recognition or realization are generally used to mean having difficulty in realizing intended messages linguistically. In the study, however, the terms are extended to cover the notion of directing attentional to resources certain parts in output. As Swain (1998) has pointed out noticing refers to a phenomenon that arises by focusing attention. To put it more precisely, noticing arises when learners allocate resources to a certain aspect of language. If a learner pays selective attention to a form, for example, it is likely that noticing a form occurs. This type of noticing is referred to as noticing ‘holes’ (Doughty and Williams, 1998). A qualitative analysis of learners’ descriptive pieces and the notes that the students had taken revealed that the difficulty experienced by participants in their attempt to describe the pictures promoted their awareness of problems or ‘gaps’ in their L2 knowledge during their production attempt. For example, in terms of their lexical knowledge most learners noted that they lacked the knowledge of terms such as ‘the language used when greeting people’, ‘neighbour’ ‘broom’, or ‘dining room’. In terms of grammatical knowledge, many students noted that they were not sure what tense to use in verb phrases like ‘…he was slept at 10:30/ he slept at 10:30’ or ‘…-‘he go to bed or he went to bed’. As such, these verbal self reports indicated that learners had noticed their linguistic problems at the moment of
The other notes concerned either spelling, discourse problems, or queries about the content of the pictures. The overt focus of learner’s self-reports is described below with some examples (see appendix H). As noted previously (see section on data analysis) the definition of note taking episodes was also extended to include learners’ noticing of aspects of their written output when compared with a native-speaker model text used as feedback.

**Lexis:**

(1) - ‘I was six o’clock PM Bob had dinner’; I’m not sure if we say have dinner or take dinner I think had dinner better I can’t find an other word I put dinner room. (Student 2)

(2) - ‘When he saw his’ voisine’ I don’t know how to write ‘voisine’ in English, perhaps it is nhebor (Student 3)

(3) I don’t know the English word for what was in the hand of the woman. (Student 2)

Lexical episodes included those instances in which the students focused on or sought the meaning of lexical items. Notes taken by learners in Stage 1 revealed that learners had a higher tendency to attend to the lexical items as a problem (30%) at the moment of production. Within the lexical episodes, the focus was predominantly on word choice, and word meaning and word search as shown in the examples above. In these examples, the focus of the note taking episodes is a lexical aspect. In the first example, the student talked about a lexical problem he encountered because of his inadequate linguistic resources; the student evaluates the appropriacy of two lexical choices: ‘take dinner or have dinner’.

In the second example, having difficulty producing a word ‘neighbour’ in English, the student encoded the meaning in French (a language familiar to learners). In example 3, the learner did not have the English word to express the part of the tool that the woman in the picture was handling. Learners’ tendency to focus mainly on lexical problems during production may be simply because they found lexical features easier to report than for instance grammar or discourse-based note taking episodes. Another possible reason could
have been that the learners could not know many words in the pictures to express what they saw and, consequently, they had to focus their attention on lexical items. This semantically-oriented type of noticing at the moment of production is in agreement with William’s (2001) study, in which lexically-centered episodes (LREs) made up 80% of the classroom interactions. This pattern also parallels findings obtained in Hanaoka’s (2007) study.

**Form:**

(4) - ‘…when he slept the phone start ringing’, What is the past of ring? (Student 1)

(5) -I wrote ‘He started to eat’ I’m not sure if it is correct may be it should be ‘he started eating’ I don’t know the rule (Student 3)

(6) I don’t know which tense in ‘…at 6:05 he ate his food that founded on the plate’ (Student 11)

Form-based note taking episodes involved items whose focus was morphological or syntactical in nature. They were the second most frequently verbalized by the participants (22.5%). However, the findings show that verb tense/aspect (choice and formation) features seemed to be the grammatical aspects of most concern. In other words, learners reported noticing verb tense/aspect more than they reported noticing other language form aspects. The examples above show learners’ concerns about verbal morphology in example 4, verb pattern in 5 and tense choice and formation in 6. This finding might also be attributed to the fact that participants found the use of verb tense more challenging compared to the use of other language aspects. Experience in teaching tenses shows that these grammatical features are persistent areas of concern even for advanced learners. This finding is also consistent with Storch (1998) which also found a similar concern in her classroom-based study.

**Mechanics /Punctuation:**

(7) - ‘Homework’ one word or two (Student 1)

(8) - I don’t know if he is correct spelling for ‘neighbour’ (Student 23)
(9) -I have some vocabulary problem: toock up his, toock or took (Student 28)

Learners cared little about mechanical matters in general. Among the five major categories, this category was the least frequently verbalized (5%). Examples 7,8,9 show learners’ concerns about the spelling of the words: homework, neighbour and took. In the study, the participants were not allowed to use external sources and I think feedback from an external source such as the teacher or the dictionary would have helped to solve the students’ problem. With regard to punctuation, no student (out of 33) commented on the use of punctuation.

**Discourse:**

(10) I don’t know how to combine sentences (Student 9)

(11) I don’t know how to begin the paragraph (Student 16)

(12) I wrote finally but I’m not sure if it’s correct:’Finally Justin waved to his. (Student 17)

The discourse note-taking episodes referred mainly to inter-sentential relationships and were often verbalized in terms of lack of knowledge with utterances such as ‘I don’t know how to…or ‘I’m not sure if…’. Discourse considerations were less of a concern to learners. They were the least frequently verbalized among the five major categories (8.75%) after the category of mechanics and punctuation. It seems that the participants tended to approach the composition task on a word-by-word basis; they could not venture beyond the single word and consider the entire sentence, and relationships between ideas in the text. This finding seems to reflect and correspond with the other findings which revealed students’ attention to, and focus on, the linguistic aspects such as vocabulary and grammar during the various stages of the process of L2 production. In this context, Barbier, M. L. (2003, translation by the author) noted that writers seem to devote much attention while they write to morpho-syntactic and lexical aspects rather than to rhetorical and textual one.
Content:

(16) I don’t know who is the woman in the third picture (Student 2)

(17) What does the second picture discuss? (Student15)

(18) I don’t know whether the picture is describing the morning or the evening (Student 17)

These episodes were defined as any notes concerning content clarification or idea generation other than language-related problems. The content note taking episode were the third most frequently verbalized by the participants (21.25%). The examples above were concerned with what information in the pictures should be included in their paragraph. They suggest that the students were unable to find an adequate description of some pictures. However, they stopped short of mentioning any specific lexical or grammatical features.

Table 22: Frequencies and proportions of features noticed in the Stage 1 and 2.

<table>
<thead>
<tr>
<th>Category</th>
<th>All participants (N = 33)</th>
<th>Stage I</th>
<th>Stage II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Lexis</td>
<td>24</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>Form</td>
<td>18</td>
<td>22.5</td>
<td>2</td>
</tr>
<tr>
<td>Mechanics/ punctuation</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Discourse content</td>
<td>7</td>
<td>8.75</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.0</td>
<td>48</td>
</tr>
</tbody>
</table>

Other issues:

(19) ‘In my paragraph I just wrote what did Bob not where he was, I didn’t give many details (Student 8)
(20) I can’t talk about all the details (Student 9)

(21) ‘I can’t give the details when he went to sleep’ (Student 21)

The ‘other’ category was intended to cover those features which were difficult to code (12.5%). The majority of other note taking episodes concern queries about the possibility of including learners’ own opinions in the descriptive writing.

The findings regarding Stage 2 suggest that learners had very different priorities about their own written output. As the table shows, the participants noted a total of 48 PFNs, or an average of 1.54 features per participant. The students, however, appeared to make more effort in finding the proper language to express their ideas rather than discussing the language issues. They predominantly noticed problematic features related to the content of the story and the way to express it (87.5%) (see appendix I). These concerns were expressed in a variety of ways that included 1) the students’ acknowledgement of the ideas and expressions used in the models, their perceptions of the differences between their own ideas and ways to express those ideas on the content of the pictures in the model text (e.g. ‘Instead of ‘fell into a deep sleep’ I wrote ‘was sleeping’; ‘…the model text says greeted , I wrote ‘saluted.’), 2) their intention of having used some of the ideas and expressions on the content of the pictures in their original texts instead of the sentences they really wrote (e.g. I intended to say :while Bob was walking to school he met Mrs Smith but I couldn’t imagine it; I didn’t know that there was Mrs Smith I depend on my ideas in the end of paragraph, I intended to say that he didn’t answer the phone but I thought it wasn’t necessary). This increase in the number of content-related issues may be linked to the fact that some students noted that some of the expressions used in the models differed from their own and could be used to improve their original texts. For example, six participants changed the beginning of their story for the one written in the model text ‘Bob was home again’, as they considered the latter to be easier and more accurate. This shows a useful role of models in promoting learner noticing and specifically in drawing learners’ attention to the ideas and expressions i.e. to the content of what they wrote in their original texts. The remaining episodes were related to the language issues and included 4 related to lexis, 2 related to grammar, and 1
discourse-based note taking episode (table 22). With regard to the relationship of the features noticed in the Stage 2 comparison task to the stage 1 composing task, the findings show that only 11 (out of 48) stage 2 features were related to stage 1. Our assumption was that if a certain linguistic feature is realized as a problem in the composing stage, its correspondent in the model input text was more likely to be a focus of attention. The participants’ written reports, however, did not reflect this. The problematic features learners noticed by learners which were related to Stage 1 problematic features involved some words that the participants had not been able to use or access, such as ‘broom’ or ‘wave at’, time expressions such as ‘at 6:00 p.’ instead of ‘at six’ a word that one participant did not know how to spell ‘looking’ and other 8 features concerned with verb forms.

On the other hand, the 37 features that were not related to Stage 1 problematic features included, above all, ideas and ways of expressing them or ideas that students had not imagined in their first production attempt. One participant, for instance, noted the following comment: ‘I intended to say while Bob was walking to school he met Mrs Smith but I couldn’t imagine it’ (student 7).

With respect to the noticing function of output (Swain, 1995; Swain and Lapkin, 1995) the results revealed that there were some distinctive differences in the quality of noticing between the Stage 2 task and the Stage 1 task. In the Stage 2 task, the participants noticed some new problems with their original output while studying the TL models (mostly related to the content category). In the case of the latter the learners said ‘I should have written (said) it this way.’; ’ while in the former case the learner typically wonders, ‘How can I write (say) this?’ I don’t know how to write/say. In this sense, those problems that the participants noticed during stage 1, or ‘holes’ (Swain, 1998) may represent proactive recognition of problems, whereas those problems that they noticed for the first time during the comparison stage without being preceded by noticing of ‘holes’ may be said to be reactive recognition of problems. Furthermore, the fact that the dominant concerns of the participants in Stage 1 and Stage 2 were so different is not in keeping with the findings reported in previous studies that have used applied feedback techniques (Hanaoka, 2007; Qi and Lapkin, 2001). These studies reported that their participants noticed and searched for solutions in the feedback provided for about two-thirds of the solvable “holes” they had previously noticed when writing their original texts in Stage 1.
However, that was not the case with our students as their attention was mainly focused on the ideas and expressions in the models that appealed to them. Therefore, the sense of lack of fulfillment (Qi and Lapkin, 2001) that the participants in those studies had experienced as they noticed “holes” while writing their texts, and which had pushed them to search for satisfactory solutions in the feedback, was not apparent among the participants in our study. We have found that nearly all students were unable to notice a mismatch between their written output and the model input text, the gap between these two not being suitably narrow. It may be concluded, then, that the participants in our study, in their response to the picture prompt in their initial production did not know many words to express what they saw in the picture prompt and, consequently, had to focus their attention on lexical items. In Stage 2 the participants, after their previous attempt to write the narrative paragraph, were especially receptive to the ideas and expressions that now became salient in the models (content-related note taking episodes).

5. 3.3 Processes Employed in Focusing on Language Problems (Question 2).

As noted in the introductory section, another dimension investigated in this concerned the decision-making and thinking processes that were reflected in the changes learners made to IL output when faced with a performance problem and when comparing their original texts with the model input text used as a feedback. The note taking episodes were analysed for the responses justifications and explanations, if any, that students offered and findings were entirely data-dependent and no categories were pre-established.

Based on the learners’ overt statements or on the implications in such statements, we found that each of the students, when faced with a performance problem while composing (stage 1), noticed, and responded to, a language problem in their IL output. By engaging in such a task and trying to work out a solution on their own (as feedback from external sources was not available), the learners were involved in some search processes triggering their analysis of their written production and drawing on a number of resources: their own linguistic resources (knowledge of lexis and grammar, intuition), sometimes their knowledge of another language (French, a language familiar to most learners).
I) Searching into their own linguistic resources

1) Lexical search

   a) Via L2

   Example 1

   S2: (student 2 verbal report reads: I wrote ‘It was six o’clock PM Bob had dinner’; I’m not sure if we say have dinner or take dinner, (problem recognition), I think it’s not take dinner the first is better (problem resolution).

   Example 2

   S8: student 8 writes: ‘Bob was in the dinner room then says ‘I’ m not sure that we say dinner room’, (problem recognition); I don’t find the correct word so I put dinner room (problem resolution).

   In example 1, the student evaluates the appropriacy of two lexical choices. He had produced ‘had dinner’ and is not pleased with his lexical choice. We see the student struggling with which expression would be the correct one to use ‘take dinner’ or ‘have dinner’. He conducted a lexical search in memory for information which might help solve the problem. Searching out the student consciously draws attention to these two expressions and proposes two different alternatives, from which the student chooses the correct one (‘had dinner’). In example 2, the student talked about a lexical problem he/she encountered because of his/her inadequate linguistic resources; he conducted the lexical search in memory and came up with the word ‘dinner room’. He/she realised that he/she has made a wrong choice of word, but could not work out the problem on his/her own. The student’s solution as displayed in this episode was incorrect. I think these examples where students search out and assess appropriate wording are a good example of how language-related episodes can be occasions for L2 learning. These processes are thought to trigger learners’ L2 development. (see discussion section chapter 6)

Example 3
S3 : Student 3 descriptive note reads ‘When he saw his’ voisine’ ; I don’t know how to write ‘voisine’ in English (problem recognition) , perhaps it’s nhebor (problem partially resolved)

Example 4

S20: student 20 explains I couldn’t know ‘servante’ in English and ‘la table sur laquelle on mange’ in English; I really have a miss of vocabulary (problem recognition). I wrote the word that I don’t know their meaning in English at French (problem partially resolved)

In the fifth example, the student wanted an L2 equivalent for the word ‘voisine’. Having difficulty producing the word ‘neighbour’ in English, the student encoded the meaning in French (a language familiar to learners). The Student says he/she thinks it is ‘nhebor’ in. The students is clearly uncertain about the meaning he/she worked out and feedback from an external source would be essential in confirming her assumption. In example 6, the student conducted a lexical search in memory by using the target language, but he failed to translate the words ‘dinner table’ and ‘maidservant’ into English and decided to conduct a lexical search via French and came up with ‘servante’ ‘la table sur laquelle on mange’

Recourse to the L1 (or any other language known, French as is the case of these participants) appears to be a strategy used by some learners in their attempt to solve the multiplicity of problems involved in their L2 production attempt, and this strategy appears to be one of the most characteristic feature of L2 composing. Research shows that L2 writers resort to their L1 for different purposes: to generate their texts, to tackle linguistic and stylistic problems, as well as to organise and structure their texts (Manchón, Murphy, and Roca de Larios, 2000). In the examples above, learners switched to the French language mainly to in order to search for appropriate words or phrases. Due to its relevance for pedagogy, we shall refer in our section, chapter 6, section 6.3 to the debate as to the possible benefits or drawbacks of the generation of ideas through the L1 while composing in an L2.

2) knowledge of grammar

1. Application of or (or alluding to) grammatical rules
Example 5

S3: I wrote ‘He started to eat’ I’m not sure if it is correct (problem recognition) may be it should be ‘he started eating’ (problem resolution). I don’t know the rules (Student 3)

Example 6

S9-I wrote : At 10:30 Bob was going to sleep: I’m not sure for the tense (problem recognition), may be it’s simple past (problem resolution). ‘At 10:30 Bob went’ not past continuous. (Student 9)

In example 5, the focus of the students’ attention was the grammatical structure ‘started to eat or started eating’ that is, verb + infinitive or verb + ing. Student 3 consciously drew attention to this linguistic structure and proposed two different hypotheses. He/she hypothesizes that may be it should be ‘started eating’ probably alluding to verb pattern rules. By offering alternatives, He/she tests which forms will be confirmed. He/she offers a solution, but he/she cannot justify it because he/she herself is unsure. We can assume that the ‘reasoning and language analysis’ he conducts reflects some grammatical knowledge he has on the use of verb patterns that he is probably applying for the first time to the verb ‘started’. The focus of example 6 was on the tense. The student first used the verb form ‘was going to sleep’. Then he/she felt that she might have used the wrong verb tense; he questions the use of the past continuous, and offers a suggestion that the past tense should be used. The student is probably alluding to the rule that the past continuous should not be used with a past time marker. As feedback from external sources was not available, this indicates hypothesis testing rather than a conviction of the accuracy of the verb phrase. When learners use the L2 in some productive way (say or write something in the L2), they test their own hypotheses against their receptive knowledge (internalized knowledge). In other words, they can test whether their interlanguage is linguistically well-formed. Based on the assumption that output itself is the hypothesis, Swain (1995) states that output represents the learner’s best guess as to how something should be said or written (p.132). A considerable body of research and
theorizing over the last two decades has suggested that output, particularly erroneous output, can often be an indication that a learner has formulated a hypothesis about how the language works, and is testing it out. Sometimes this output invokes feedback which can lead learners to ‘modify’ or ‘reprocess’ their output. (1995:126). However, our data show that, articulating or alluding to grammatical rules seemed to occur much less frequently, and learners’ linguistic choices were generally justified by the students on the grounds of simple intuitions. This may due to the paucity of learners’ linguistic knowledge.

II) Resorting to intuition

Example 7
S12: I wrote: He was finishing her dinner when her mother entered the kitchen I’m not sure if ‘was finishing’in this sentence is correct. I don’t think it’s correct. (Student 12)

Example 8
S10 - I say took his dinner, I think it’s right. (Student 10)

Resorting to intuition seemed to occur quite frequently. The data seem to indicate that learners appeared to rely considerably on their intuition about language to solve their linguistic difficulties (what sounds right to them) particularly in resolving choices of verb tenses. The reason why participants were less analytic and relied more on intuition for their decisions about linguistic choices may be simply due to the paucity of learners’ linguistic knowledge. The participants were first year university students whose initial experience with their L2 was predominantly communicative (Pre-university English teaching) and have less knowledge of the L2 (at some or all linguistic levels). In Example 7, the student is aware that something is wrong with his sentence but he/she cannot express it in words or work out the problem on her own and resorts to his/her intuition that it just does not sound right. He/she cannot offer another solution neither justify it because he/she himself/herself is unsure. In Example 8 the students is clearly uncertain about the verb form ‘took’ that he/she worked out and feedback from an external source would be essential in confirming her assumption.
These search processes identified above represent processes similar to those other researchers have hypothesised to be involved in L2 learning. This possibility that a potential for language learning might appear in such sequences of problem solving was first raised by Cumming (1990) and Swain and Lapkin’(1995), who suggested that engaging in L2 production with a communicative orientation helps learners to control and refine their knowledge of L2 structures. In Cumming’s (1990) study, learners were found to demonstrate the following types of cognitive processing while composing: 1) to search out and assess appropriate wording, 2) to compare cross-linguistic equivalents and 3) to reason about linguistic choices in the L2. In Swain and Lapkin’(1995) study learners reported using: 1)sound right/doesn’t sound right, 2)makes more sense /doesn’t make sense, 3) applied a grammatical rule, 4) lexical search, 5) translation, 6)stylistic and 7) spelling. The third category in Cumming’s and Swain and Lapkin’ study are reflected in our category ‘knowledge of grammar-applying or alluding to grammatical rules’. Our category (resorting to intuition ) incorporates Swain and Lapkin’ first and second category.

These finding are consistent with the hypothesized positive function of output in and sheds light on the interconnectedness of input and output processes in SLA (Swain, 2005; Gass, 2010). If learners are required to produce output under a certain condition (here: to start at least a short narrative paragraph in response to a picture prompt), they may identify problematic areas in their L2 abilities and engage in thought processes and problem solving behaviours.

III) Noticing the gap

Our data showed that the need to encode meaning forced learners to turn not only to internal cognitive resources (stage I, i.e., output task) but also to external input and feedback for assistance (Stage II and III). Exposure to relevant input immediately after their production attempt created a favorable condition for learners to attend to what is different between their own output (what they had written) and the IL input (what they need to produce - or what a more competent target language writer had written to convey the same intention), leading them to appropriate the noticed native-like language use, resulting in better performance in a follow-up written output task. For example, six participants changed the beginning of their story for the one written in the model text.
‘Bob was home again’, as they considered the model’s use of ‘Bob was home again’ is more target like than their use of, for example, ‘Bob came back home’ or ‘when he came from school’ or they simply wanted to use an alternative of similar expression. These noticing operations has been commonly referred to as noticing the gap (e.g. Schmidt and Frota, 1986). Ellis (1995) used the term cognitive comparison rather than noticing the gap to refer to these instances of ‘comparisons’ which he considered as important processes in second language acquisition.

It should be pointed out again that the wide gap between their written production and the model text might have caused participants to experience difficulty engaging in cognitive comparisons. When presented with the input passage the L2 learners’ first priority was to comprehend phrases in the input. In order to process the main message of the input passage, nearly all participants focussed on the linguistic means used to express the ideational content of the story (content category) rather on noticing lexical or grammatical gaps in their own language production. The examples below further illustrate the effect of producing the text at Stage 1 (composing) and reading the model text at Stage 2 (comparing) on their revisions at Stage 3.

Example 9

The text written at Stage 1: S4-I should have said Bob sat at the table but I don’t write like this(He wrote: ‘the boy arrived from school then at 6:00 of afternoon he took diner’

The model text: Bob was home again. He sat at that table and began to eat.

The text revised at Stage 3: Bob was home again. He sat at that table and began to eat.

Example 10

The text written at Stage 1: S 14 In my paragaph I wrote ‘when he was finished eating his mother took the plate’ but normally it is…

The model text: ‘While Bob was eating his dinner Ann came through the door’
The text revised at Stage 3: ‘While Bob was eating his dinner Ann came through the door’

Example 11

The text written at Stage 1: S9-I couldn’t describe the action of Bob and the woman.

The model text: Mrs. Smith waved at Bob when she saw him. He greeted her with a smile on his face and continued on his way.

The text revised at Stage 3: ‘He met Mrs Smith and greeted her. She herself greeted him and prayed for him to succeed’

At Stage 1, student S4 in example 9, worked to find his/her way of expressing how Bob arrived from school and sat to take his dinner in Picture 1 and 2. At stage 2, reading the model text, he/she noticed and realized the difference between the description he made and the model’s version. At Stage 3, he/she appropriated ‘was home again’ and ‘sat at that table and began to eat’ in his/her revised text.

At Stage 1, student S14, in example 10, completing the description of picture 3 wrote ‘when he was finished eating his mother took the plate’. At Stage 2 he/she noticed that the model text used ‘While Bob was eating his dinner’ instead of ‘when he was finished eating’ and used ‘Ann came through the door’ instead of ‘his mother took the plate’ to describe the action of the characters in Picture 2. He/she appropriated ‘While Bob was eating his dinner Ann came through the door’ in the revised text.

In the last example student S14 couldn’t complete the description of the action of Bob and the woman in picture 7. Reading the model text, he/she appropriated ‘greeted her’ and ‘She herself greeted him’ in his revised text.

These instances involving the noticing and incorporation of the model phrases and expressions in the revised texts illustrate how an L2 task that requires the production of output, encourages learners to re-examine their own linguistic knowledge or consider the input more closely.
5.3.4 Summary of the Results from Study II

The study documented 33 students’ L2 performance in a three-stage L2 production task: from the composing (Stage 1) and comparing (Stage 2, where students compare their own output text with a model text) to the improvement of the written product in their revised paragraph (Stage 3). The above-mentioned findings show that the picture task, as a prompt to produce language, provided the students with opportunities for noticing and explicitly attending to the L2 lexical and grammatical accuracy that would be needed to express their intended meaning and autonomously searched for solutions deploying a variety of thought processes. It is also a finding from this research that through external feedback learners notice the gap between what they can produce and what more proficient users of the L2 (for instance, a native-speaker text) produce and appropriate the noticed native-like language use, resulting in improved performance in revised versions of their original output. These findings bring up new questions, some of which will be discussed in the following chapter.
CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1 Introduction

The chapter discusses the findings with respect to their theoretical and pedagogical implications, points out strengths and limitations of the present study, and, finally, outlines directions for future research on L2 production in SLA.

In Sections 6.2, and 6.3. the findings of the first and second research projects are discussed, respectively, in relation to the hypotheses stated in chapter 4 and within the context of the theoretical and empirical work on the role of input and output. Section 6.4 describes the implications of this study to classroom research in L2 learning. Section 6.5 outlines the limitations of the study. In section 6.6 suggestions for future research are made. Section 6.7 will conclude this thesis.

6.2 Discussion of the findings from study I

The goal of the quasi-experimental study reported in chapter 4 section 4.2 was to investigate the differential effects of input-based (comprehension-focused) treatment and output-based instruction (a combined output- and input-oriented approach) on the comprehension and production of the English tenses and grammatical aspect by young adult Algerian EFL learners. In order to explain the findings, we shall return to the original research question and hypotheses that guided the study (section 4.4.1):

Research question:

Does providing opportunities for output in addition to input of the target structures aid learning of tense/grammatical aspect more than input-based instruction only? It was hypothesized that both types of instruction would have positive effects on learner performance, but that the input-plus-output group would show an overall greater improvement in the use of the target structures than learners with input-based instruction only. This question was examined mainly through a quasi-experimental research design.
To summarize the findings (table 23) in terms of the three research hypotheses set at the outset, our results did not confirm Hypothesis 1, which predicted that L2 instruction that is primarily input-based would lead to improved performance on tasks involving the comprehension and production of English tense and grammatical in the short-term. The interpretation task findings (grammaticality judgement task) and the production task findings suggested that input activities, when used alone, did not result in a gain in ability to use the target forms. These findings are not consistent with other studies that have reported positive effects for input activities from pretest to post-test on comprehension and production tasks (e.g. VanPatten and Cadierno 1993; Cadierno 1995; Morgan-Short and Bowden, 2006). However, hypothesis 1 was partially confirmed, in that the input-only group was able to obtain statistically significant gains on the production of the target forms as measured by a picture-based description. It is important to note that, although students in this group did not engage in any activity requiring them to produce the target structure at any time during instructional treatment, they performed better on a test designed to yield a measure of learners’ productive knowledge. These results are important because they show that input practice has an impact on production of L2 forms. This corroborates other research showing that input-based instruction delivers skills beyond those practiced in instruction (DeKeyser, 1997, 2001). This point will be taken up again in our discussion of Hypothesis 3. Thus, input-only practice did not appear to have facilitated learners’ comprehension and production of the target structures.

The results of the present study provide partial support for hypothesis 2, which stated that a combined output- and input-oriented approach in teaching English tenses and grammatical aspect brings about improved performance for comprehension and production as measured by their respective tasks. According to the comprehension task descriptive findings, learners showed a slight improvement in performance from the pretest to the posttest with an over-all mean change of 0.24. However, this positive effect on learners’ receptive knowledge of the target structure did not reach statistical significance. On the other hand, the increase from the pretest to the posttest on the picture-based description test was statistically significant.
The results of this study do not conclusively support hypothesis 3. They do not conclusively show which predicted that competence in the production and comprehension of tense and grammatical aspect among learners who receive a combined approach.

Table 23: Summary of Findings

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Findings (Descriptives and ANOVA analyses)</th>
</tr>
</thead>
</table>
| **Hypothesis 1** | A) Comprehension task:  
No pretest-posttest gain on grammaticality judgement posttest in the short-term (in descriptives). The answer was statistically negative.  
B) Production task 1:  
No improvement in the production of target structures as measured by a written gap-fill production task.  
C) Production task 2:  
Notable pretest-posttest mean change (in descriptives). As measured by a picture-based description task. Statistically significant. |
| **Hypothesis 2** | A) Comprehension task:  
Slight pretest-posttest mean change of 0.24 (in descriptives). Did not reach statistical significance.  
B) Production task 1:  
An over-all mean change of 1.02 (descriptives). Did not reach statistical significance.  
C) Production task 2:  
Notable pretest-posttest mean change of 1.05. (in descriptives); statistically significant. |
| **Hypothesis 3** | A) Comprehension task:  
The input-only group exhibited a zero pretest-posttest gain. No statistically significant effect.  
The input-plus-output group showed a small positive gain from the pretest to the posttest. Did not reach statistical significance.  
B) Production task 1:  
A zero pretest-posttest gain (in descriptives) for the input-only group. No statistically significant effect.  
Notable overall mean change of 1.02 for the input-plus-output group. Did not reach statistical significance.  
C) Production task 2:  
Notable pretest-posttest mean change for both groups (descriptives). Statistically significant effect. |
(input plus output) would increase as measured by differences on the pretest-post test compared to those who receive input-based instruction only. The instructional effect, statistically speaking, did not amount to significant learning gains on the grammaticality judgement and written gap-fill tests. However, both instructional groups made significant gains on the picture description posttest. It is important to mention that the gains made by the input-only group do lend less support to skill-learning theory (chapter 2) which claims that comprehension and production do not draw on the same underlying knowledge source i.e. L2 instruction via input-based practice will only serve to develop learners’ability to comprehend the target feature, not to produce it. It also is important to consider these findings in relation to other studies that have examined the effects of input-based instruction and production-oriented instruction.

To start with, the findings were unexpected and did not statistically confirm what has been largely found by other input-related studies (chapters three) that differences in the types of treatments lead to differences in language learning. The results related to our first hypothesis differ from those of previous research that have found support for the positive effect of input-based instruction (e.g. VanPatten and Cadierno, 1993; Cadierno, 1995; Morgan-Short and Bowden, 2006). On the other hand, the findings seem to be partially consistent with the general trends observed in other studies providing support for the positive effects of production-based instruction (e.g. Benati, 2005; Dekeyser and Sokalski, 1996; Erlam, 2003; Izumi’s, 2002 Kim, 2001 and Salaberry, 1997) where the output conditions did result in greater learning than did the non-output condition. For instance, Erlam’s study showed that when instruction incorporates output-based practice, meaning-oriented output activities in particular, they might be more effective for developing both comprehension and production abilities than when only input-based instruction is provided. The results of Izumi’s (2002) study also showed that output instruction benefited learners to a greater extent than a comprehension-focused instructional treatment for the acquisition of English relativization, with resulting positive gains for output groups suggesting that input-based practice is not more effective than production practice.

Although, the descriptive results appear to suggest some instructional impact on the input plus output group, the results of the ANOVA analyses for the comprehension and the production tests do not reveal a significant difference between the two groups except
for the significant advantage for the input plus output group on one production test. Coupled with the findings for Hypothesis 1 and 2, the weak findings in relation to Hypothesis 3 do not seem to fully substantiate the hypothesis for the superior role of input-plus-output instructional treatments over that of input-based instruction in language learning. Thus, in answer to our first research question, it cannot be stated with confidence that a combined instructional treatment (input plus output) had a significant effect with respect to learners’ comprehension and production of English tense and grammatical aspect.

Why was the impact of the intervention not so promising? Why the receptive and productive measures failed to reach statistical significance? One reason that the impact of the intervention was not as significant as we might have expected might be that our students came from an instructional context in which L2 grammar instruction (if any) was quite traditional and explicit (section 1.1; section 4.2.2). The students were probably less used to learning in the implicit conditions demanded by the type of input tasks such as enriched input and enhanced input or recent classroom applications of the OH such as dictogloss and input-output cycles.

To remind the reader, the treatment session was held two weeks after the pre-test. Over an eight-week period students were exposed to input-based instruction in conjunction with and without output-based practice, during sixteen 90-minute classes. A posttest was held immediately after the treatment session. The experimental groups may have achieved better results had they undergone the experimental treatment for a longer period of time since they probably would have become more accustomed to working with many of the instructional tasks. This could have been an essential factor since the majority of students are not used to working with many of the input or output based instructional techniques, and probably felt awkward doing the instructional tasks during the first few sessions. The students most likely would have benefited more from (a) giving them a longer training period at the beginning of the experimental period, (b) extending the experimental period to the whole semester, or even (c) extending the time allocated for each session which would have given students more time to build up confidence in classroom activities. If this explanation were confirmed by further research, it might be concluded that contextual factors other than the tasks themselves play a role in learners’ ability to comprehend and produce the target forms.
Another reason to account for these results may lie in the students’ competence in the grammatical knowledge investigated. It seems highly likely that the level of difficulty of the grammatical items selected for the study was more advanced than the subjects’ the L2 grammatical knowledge. The ability to grasp the full array of English tenses and to be able to apply them comfortably and accurately to every context is, along with accurate use of aspectual differences involved, one of the most difficult tasks that average L2 learners have to face (Cowan, 2008). Another related reason that may explain the findings is the individual differences. Although the participants’ individual differences were not inspected, it might be assumed that the measure of success in the two groups that underwent the treatment was not so much the type of instruction they received, but their individual characteristics, their positive attitude and eagerness to learn. An attempt to establish how many of the participants actually benefited from the treatment and whether the gain was maintained over time would have helped to interpret the collected data more fully. Researchers recognize that individual differences that comprise such factors intelligence, cognitive and learning styles and strategies play an important role in experimentation aiming at establishing effective ways of teaching target language grammar. Erlam’s (2003) study, for example, demonstrates that the cognitions and perceptions the participants hold might be of greater significance than the mode of instruction in a particular group which means that individual variables have to be carefully considered when exploring the effectiveness of different options in L2 instruction. According to Erlam instruction that targets language input and does not require students to engage in language output, may benefit learners who have higher language analytic ability and greater working memory capacity. In contrast, output-based instruction seems to minimise the effect of differences in language. Does this mean that a cross-sectional study of Algerian EFL students in different levels undergoing different types of treatment would reveal more statistical significance for output-based instruction? This raises the need for other further investigations.

**Discussion of the findings from study II**

Although the main research question investigated has been whether or not input-plus output practice is as effective as input-only practice in the teaching of tense grammatical aspect i.e. focusing on the outcomes, In order to contribute to the need for further
research, the second study, drawing on the psycholinguistic rationale and research on output (e.g. DeBot, 1996; Swain, 2005) has been more concerned with exploring the cognitive and thought processes underlying L2 output. Two research questions, which were adapted from Swain and Lapkin’s (1995) study, aimed to explore whether young adult Algerian first year university EFL students become aware of gaps in their linguistic knowledge as they produce their L2, and if so, what thought processes they engage in an attempt to solve their problems. An additional purpose of the study was to identify the types of linguistic features that learners would attend to during their L2 production attempt.

Overall, the results of the study findings emerged from the data obtained in a three-stage L2 written output task have shown that:

(i) The struggles experienced by the students in their attempt to describe the picture promoted their awareness of ‘holes’ in their linguistic knowledge as they produced their L2 at the composing stage and drew their attention to relevant language forms when they were exposed to the model text at the comparison stage (research question 1).

(ii) When L2 learners encountered problems in producing the target language, they noticed their linguistic needs (holes or gaps) and engaged in thought processes using the tools at their disposal, namely themselves i.e. their internalised knowledge. Subsequent input exposure to input helped learners notice the gap between their L2 output and the modelled target language input (Research question 2).

(iii) This awareness of language gap had an impact on their language learning as revealed in their effort of applying their learning from model texts in subsequent revised versions of their narrative paragraphs (Research question 2).

To start with, research question 1 posed in this study was: how does learner’s own written output enable them to recognize gaps in their L2 linguistic knowledge and performance? The present study, along with earlier research (e.g. Adams, 2003; Hanaoka, 2007; Qi and Lapkin, 2001 and Swain and Lapkin, 1995) has found evidence for the noticing function of output hypothesized by Swain (1995, 2005). It confirmed previous findings that noticing facilitated by input provided as feedback has an impact on learners’ subsequent writing (section 3.2.2.1). During their production attempt, learners noticed
certain gaps and/or holes in their L2 knowledge, found the relevant solutions in the model input, and incorporated them into a follow-up written output task. The results of the investigation revealed that lexical aspects were the most frequently commented on, followed by grammar-based note taking episodes. In other words, learners were aware of restrictions of their L2 lexicon and searched for more appropriate words using their internal resources. This awareness of lexical limitations was generally formulated in terms of lack of knowledge (e.g. I don’t know how to say …; how do you say ?; or alternatively, in the form of proposals for potential solutions (e.g. I am not are not sure how to say… I wrote …; I am not sure whether this is correct… I wrote ….). This form of accounting for their choices, however, seems to suggest that the level of awareness or noticing experienced by the participants was basically simple or perfunctory rather than elaborate or substantive to use Qi and Lapkin’s (2001) words. In other words, their noticing of gaps was taking place at the level of ‘detection’ rather than ‘understanding’ (Robinson, 1995; Schmidt, 2001). Furthermore, this prioritization of lexical concerns before the learners received the model input text is not surprising, since research has shown that learners tend to allocate more attentional resources to lexis than to other linguistic aspects when the focus on form is initiated by the learners themselves (Ellis, 2001; Swain and Lapkin, 1995; Williams, 2001).

The findings from stage 2 suggest that learners had difficulty in attending to the subsequent input to take the necessary information. Although the participants noticed a number of lexical and syntactic (among other) language problems as they wrote their story in response to a picture prompt, the majority of learners gave up dealing with their linguistic problems when comparing their own written draft with a native-speaker text, resulting in partial or total avoidance. Consequently, the participants noticed fewer lexical, morpho-syntactic, or textual problematic features than in the previous stage. As shown in learners’ descriptive notes (appendix I), with the exception of a few occasions on which the focus of attention was on language-related issues, and most features noticed in Stage 2 were related to the ideational content of the story as well as to different ways of expressing it. This reveals that most learners were aware that they could not express themselves as precisely as they wished (e.g. I couldn’t express the actions that Bob made it before sleep but the model text put….; I didn’t know that there was Mrs. Smith I depend on my ideas in the end of paragraph….; In my paragraph I think I talk about the
picture generally the model text they talk about the picture exactly…). This also seems to suggest that either the participants could not capture the essentials of the story cued in the pictures and that the way the story was developed in the texts written by the students differed substantially from the way it was developed in the model input text. Because of this ideational and linguistic distance (Manchón et al., 2007) between students’ written texts and the model input text, the students could not use the input text to solve the language problems or ‘gaps’ previously detected during the writing-only stage. Consequently, the most practical solution for them was the use of the model text as a source to single out the needed ideas and expressions. This may suggest that there may be a threshold of L2 proficiency levels for learners to benefit from input texts as feedback, especially with respect to grammatical processing (Izumi, 2002).

The second research question was: when learners reprocess their performance what mental processes result that impact L2 learning? This question aimed at investigating the processes underlying the learners’ initial output, those occurring as they confronted the model input text and the impact of these processes on the resulting written text i.e. learners’ uptake. The study’s outcomes show that language production gives learners the opportunity to expand their IL capacity by reprocessing their utterances after noticing a problem which triggers internal feedback in the form of what O’Malley and Chamot (1990, in Thornbury, 1997, p. 336.) labelled ‘self-evaluation’ i.e. checking the outcomes of one’s own language performance that is one’s output against an internal measure of completeness and accuracy’. For example, learners searched out and assessed appropriate wording via L2 or one’s native language (or any other language known, French a language familiar to most learners). As pointed out in chapter 5, section 5.4.3, an important question in L2 writing research has been to ascertain whether or not L2 writers switch to their native language (or any other language known) in the process of L2 composing, under what conditions, for what purposes and with what benefits. In general, following Cumming (1989, 1990), proficient L2 learners do not depend heavily on the L1 during the writing process because they have a sufficient level of L2 knowledge to think in their L2. However, lower L2 proficiency writers rely more heavily on their L1 during the writing process in order to sustain the process and prevent a breakdown. What are the possible benefits or drawbacks of the use of the L1?
A look at the research available shows that scholars have opposing views on the beneficial or detrimental effects of L1 use while composing in the L2. While some scholars argue that this procedure may be beneficial (for example, when writing about L1-culture topics), others contend that the very act of encoding messages in the L1 may add to linguistic problems, thus slowing down the writing process and blocking the generation of ideas (Manchón et al., 2011). Because the participants in this study used their L1 in the process of L2 writing in order to compensate for their lack of vocabulary data on L1 use in the framework EFL learning may contribute to the field L2 writing the EFL context. In addition to relying on the French language to search out and assess appropriate wording, learners also searched for optional expressions which revealed their original intentions (i.e. to test hypotheses and sometimes to reason about linguistic choices). Most of the learners’ evaluations of their linguistic choices, as the data show, appeared to have relied on simple intuitions. As already pointed out, this might have been due to their limited L2 grammatical knowledge. It has been suggested that in situations in which feedback from external sources is not available, learners, in their attempt to express themselves in the L2, make use of their resources and stretch their limited linguistic capacities to their fullest (Swain 2005). Izumi (2003) points out that when learners modify their output, they either generate new output or reprocess their original output, both of which trigger additional grammatical encoding. By checking the outcomes of their own language performance against their own internalized knowledge, the learners were ‘sometimes’ able to achieve higher levels of accuracy. On exposure to relevant input immediately after their production experience, the heightened sense for problems encountered pushed learners to process linguistic features in subsequent input with more focused attention. Qi and Lapkin provide the following psycholinguistic explanation for this problem-solving behaviour:

The failure to reach a satisfactory solution to a problem with existing linguistic knowledge may result in a sense of uncertainty or lack of fulfillment on the part of a learner; It is perhaps this sense of lack of fulfillment that may push a learner to look out for any future relevant information available that he/she believes might help solve the problems in a better way (Qi and Lapkin, 2001: 289).

This idea is also argued for in output theory. That is, the problems learners encounter in output could ‘trigger an analysis of incoming data, that is, a syntactic analysis of input’
In the same vein, Johnson (1988, in Thornbury, 1997: 328) contends that ‘exposing learners to the target behaviour after the event rather than providing a model beforehand has greater psychological validity, in that the learners are predisposed to look out for (and notice) those features of the modelled behaviour that they themselves had found problematic in the initial first draft. This is essentially what was shown in the second stage of this study. As the participants experienced difficulty in producing the target language (i.e. output task) and relevant input was immediately available (i.e. input task), the awareness of problematicity (based on their own prior written expression), lead them to observe or notice some linguistic features of their writing such as lexis, form, and particularly the content used in the model input in the hope of narrowing the ‘gap’ between their original output and that of the model text which in turn helped improve their writing as measured by incorporation of target like corrections in their revised texts. Some researchers (e.g. Doughty, 2001; Ellis, 1997; Swain, 2005) argue that the cognitive processes that output triggers allow learners to engage in a cognitive comparison to notice the gap between their interlanguage and the target language contained in the input. According to Ellis (1999), students, while writing, are expected to gain awareness of feedback features like form, content, and organization. In doing so, they should go through three main stages: (I) students notice a particular form, content, or organization in their writing, (II) they proceed to compare the features in their original drafts to their revised ones to identify a gap or problem in both original and revised drafts, and (III) they improve their subsequent written drafts by incorporating the solution(s) into them. After receiving feedback either from their peers or from their teachers, students need to notice gaps or problems found in their pieces of writing. Quoting Saxton’s Contrast Theory Saxton (1997), Izumi (2002) argues that output can place the learner in an ideal position to make a cognitive comparison between the IL and TL forms leading them to expunge the nontarget like form from their developing IL in favor of the TL form. He further claims that SLA, as with L1 acquisition, may be promoted when the learners’ error in their output is followed immediately by a juxtaposed target like form that shows contrast to the learners’ preceding utterance. Nevertheless, the findings from the comparison stage suggest that although L2 learners noticed their linguistic problems while producing the target language, they might have had difficulty in attending to the subsequent input to make the
necessary cognitive comparisons. They were, therefore, less able to notice lexical or grammatical gaps in their own language production and made more effort in finding the linguistic means used to express the content of the story. As noted above, this might have been caused by the wide gap between their written production and the model text. In other words, the ideational and linguistic distance (Manchón, et al., 2007) between the written texts and the model text was so wide that the students could hardly rely on the latter to solve the problematic areas or ‘holes’ previously identified in the writing-only stage. To recapitulate, the effectiveness of producing the L2 through a written output task lied in pushing learners to: 1) to engage in grammatical encoding operations during production processing 2) to find the mismatch or a gap between what they can produce and what they need to produce as well as what they produce and what proficient language speakers produce (Schmidt, 2001). This finding corresponds to Swain’s (1995, 2005) view of output production as not only promoting noticing of linguistic features, but combined with feedback also pushing learners’ awareness towards the gaps and problems in their IL.

The aims of the study presented here were exploratory, pointing toward many issues relevant to a conceptualization of the nature the processes of output modification that learners engaged in during their production attempt, rather than defining what the effects of these processes are. A major question arising for future studies and theory building is, what value might we attribute to these problem-solving behaviours for writing to learn in an EFL context? One question concerns whether (and to what extent) the process of output modification that learners engaged in results not only in immediate improved performance i.e. in short-term effects on learning (as measured by incorporation of corrections in revised texts), but also long-term changes in the learners’ IL.

Returning first to the processes underlying the learners’ initial output (stage one) and to their impact on learning, this study assumes that changes in IL might be associated with learners’ internal thought processes, in particular, the processes of noticing ‘holes’, searching their own linguistic knowledge and trying out new language forms (hypothesis testing). The activation of these processes was triggered off by a search for solution to the ‘identified holes’; a ‘linguistic exercise’ that is thought to contribute to the student’s progress in his/her language learning process. This in line with the claim ‘what goes on between the first output and the second … is part of the process of second language
learning’ (Swain and Lapkin, 1995:386). It is also in accordance with the claims made by other researchers. For instance, Qi and Lapkin (2001) noted that ‘noticing as a result of producing the target language (TL), as in the context of L2 composing, also has important roles to play in L2 development’ (p. 279). Swain (1998) also argued that noticing holes facilitate the retention of the solutions in short-term as well as long-term memory. From an interactionist perspective, Pica (1989:64) suggests that learners when modifying their output also engage in the internalisation of new forms as they ‘experiment with new structures and forms and expand and exploit their interlanguage resources creatively’. In elucidating the mechanisms by which output promotes SLA, Izumi (2000, 2003) argued, by drawing on Levelt’s (1989, 1992, 1993) speech production model, that the processes of grammatical encoding during L2 production and monitoring to check the matching of the communicative intention and the output increase the likelihood that learners become sensitive to what they can and cannot say in the TL, leading to their reappraisal of their IL capabilities.

Similarly, the study established that the processing of subsequent input engaged learners in actions with potential learning effects, such as noticing the gap or cognitive comparison, which led them to correcting earlier nontarget like usage and incorporation of target-like forms in the revised texts. It has been suggested that cognitive comparisons are important for L2 learning. The literature reviewed in chapter two shows that noticing ‘holes’ or ‘gaps’, noticing the gap (also cognitive comparisons) are possible techniques for converting input into intake (Doughty, 2001; Gass, 1997; Schmidt, 1990 Swain, 2005). Swain (2005) put forward the assumption that ‘the processes in which learners engage to modify their output in response to feedback are part of the second language learning process (p. 476). Gass (1997) states that ‘An initial step in grammar change is the learner’s noticing (at some level) a mismatch between the input and his or her own organization of the target language’ (p. 28). In the same vein, Mackey (2006) suggests that learners’ accurate identification of corrective feedback, particularly noticing the gap between IL and L2 forms, may facilitate the integration of L2 input contained in the feedback into learners’ knowledge system. R. Ellis (2003: 112) contends that by ‘making input out of their own output’ (R. Ellis 2003: 112), learners can be incited to compare their performance with ‘what they would have been capable of saying if they had used their most advanced interlanguage knowledge’. Basically, the argument is that the
beneficial effects of output practice on L2 development could be related to both the increase in the students’ abilities to notice linguistic problems, to search for appropriate words and phrases (drawing on their first and second languages as resources in the process), and to seek out relevant input with more focused attention. However, not all the current study’s findings can be interpreted from this perspective in which output-input-output sequences can directly affect learning. IL development, in SLA research, is generally defined as leading to changes in long-term memory as measured by the improvement from pretest to post test (or delayed post testing). In the current study, learning has been operationalized in only one way: Short-term differences between the features of the learner’s texts produced before and after the provision of input/feedback i.e immediate uptake (one 50-minute class). Since this study did not involve any delayed post-testing, it is unknown whether the uptake and incorporation of more target-like forms in the third stage was indicative of long-term changes in the learners’ IL. In addition, noticing the gap involves a deeper linguistic analysis and not the simple noticing of L2 exemplars as most of our learners did. It would be appealing to investigate whether the learners’ processing of the new linguistic items (e.g. content-related items) exceeds simple noticing and immediate uptake, in order to reveal a clearer picture of the relationship between output, uptake, and L2 learning. A possible way of approaching this would be to include a delayed third task to see whether, and to what extent, the initial stage of storing information (i.e. uptake) triggers long-term memory changes.

6.4 Implications of research findings

The absolute predominance of any of the two approaches i.e. input-only vs.input-plus-output was not established in the quasi-experimental study. Nevertheless, the study indicated that the input-plus-output option had a practically (although not statistically) significant effect for the improvement of classroom practice. Despite the relative complexity of the structures and the brevity of instruction, the participants managed to attain better control of linguistic forms, as evidenced by the descriptive results(pretest-posttest gains), particularly with respect to the production of the targeted form. What implications are carried by these findings?.
From a theoretical perspective (though the results are not very statistically significant), this study stresses the important roles of output (in addition to input) in L2 learning and contributes to the understanding of the efficacy of L2 teaching interventions more specifically, to the body of comparative studies on input- vs. output-oriented approaches. The results of the study carry implications concerning an emphasis on input-only vs. input-plus-output orientations. They show that apparently one option is more effective than the other. Although it seems warranted to say that the kind of teaching that focuses learners’ attention on the target structure without requiring them to produce it better complies with natural processes involved in learning a foreign language (VanPattern, 2000), the outcomes of the present research project indicate that this approach may fail to provide learners with the means to develop better control of the forms in question. The treatment that comprised both types of intervention, input-plus-output practice, proved to be the most beneficial at least as shown by the descriptive results. Thus, it can be concluded that carefully designed reception-oriented instruction in conjunction with output practice is capable of yielding the most beneficial results.

Pedagogically, the results of the quasi-experimental study bear some implications for L2 instruction. They seem to support the use of output practice as well as input-based practice in the L2 classroom environment as a means for building grammatical accuracy. On the basis of the design and results of this thesis, it seems legitimate to say that a combination of the two approaches, input-oriented and production-based orientations, constitutes the most advantageous option to be applied in the language classroom. In this study, each of the two approaches utilized resulted in slightly different outcomes that can benefit teachers and researchers in making certain decisions concerning the teaching of English tenses and grammatical aspect. Although the instructional materials incorporating the principles of a combined output- and input-oriented approach are scarce and rare, their preparation is not very problematic, as evidenced by the treatment materials included in the appendices to the present dissertation. At the same time, however, it would be unwise to apply the above guidelines without examining the characteristics of the teaching context. It needs to be remembered that the results and implications of this study are limited to the particular population, particular treatment and assessment tools used in this study. Consequently, the implementation of the approach in the language classroom and the weight given to the two approaches is bound to be the function of the
inherent characteristics of a particular educational context as well as the specific conditions in which teachers operate.

Despite its exploratory nature, other theoretical and pedagogical implications may also be drawn from the second study. The data obtained can be interpreted as shedding further light on the learning potential associated with written output, in our case, in terms of the noticing holes/gaps and uptake that may derive from processing and making use of relevant input. Specifically, the study provided partial support for the noticing function of output suggesting L2 production can promote opportunities for such noticing both in an output-only writing condition, and via the feedback. Implications for L2 writing pedagogy, first suggest that it is important for teachers to promote language-related noticing in L2 composing; to draw learners’ attention to some problematic aspect of their IL through output-input-output treatments.

Second this study suggests that, as a feedback tool, modelling may play a useful role in promoting learner noticing and make progress in their writing performance. To this end, teachers should encourage their students to discuss problematic language forms and provide them with opportunities to do so. The writing task employed in this study could be used in a grammar or writing class as an additional activity which can control the learners’ focus of attentional resources. It would, therefore, be useful in a classroom to devise and use this type of task so that learners can notice, take in, acquire and/or produce a syntactic form in a meaningful context, rather than having learners to acquire only receptive knowledge through input tasks. In terms of different possible orders to present input and output (section 3.2.2.1), some methodologists have argued for an input-first presentation (e.g. Doughty and Varela, 1998), and others argued for for an output-first presentation (e.g. Dekeyser, 1997; Izumi and Bigelow, 2000). Adams (2003) suggested that providing adequate input following output activities (as is the case in this study) may greatly enhance learners’ attention to target forms. Thus, the effect of different sequences of presentation of input and output is worthwhile to examine in pedagogical terms. In theory, L2 production enables learners to become more sensitive to what they can and cannot say in the L2, and requiring that learners produce output first may further enhance the learners’ awareness of L2 forms or meanings, in comparison with the input first presentation. These claims raise the need for full and detailed exploration of the role of
output and the potential effects of output-oriented instruction on L2 knowledge development.

6.5 Limitations

As commonly acknowledged in all studies, due to the limitations of the two studies one needs to take great caution in generalizing the results to other settings, to participants of different characteristics, or to the acquisition of other grammatical features. One of the limitations of the quasi-experimental study that need to be improved in future research is the short duration of the treatment. The study was conducted over the time-span of eight weeks. Given such a time-span and the full array of target forms, it is not easy to see how a number of weeks of instruction directed at some specific grammatical structures are enough to help students to move beyond their current IL towards a more native-like competence of the target language. As mentioned in the previous section, the relative effect of either input practice in conjunction with and without output practice might have been demonstrated more clearly had the treatment sessions been longer. However, due to the constraints of the availability of the participants, the treatment sessions could not last any longer than eight weeks. A related limitation concerns the design of the study, which was constrained by the programme of the current course where this study took place. A longer treatment, with more activities and more class periods mean more time taken away from the ‘normal’ development of topics in the regular programme. Furthermore, the present study had other methodological limitations. The first limitation concerns the way assessment tasks and treatment tasks were prepared and delivered. Both of the comprehension and production assessment and treatment tasks did not reflect natural language use. That is, it cannot be concluded from this study that the treatments would result in improved performance during real-time language production. Secondly, no measure assessing the long-term effects of the two practice methods beyond the eight-week period was implemented because the participants sat for their end of year examinations six weeks after they had finished taking part in this study. As a result, whether the instructional impact identified (at least in the descriptive analysis) in this study could be maintained a few months after the completion of the intervention was not clear. Thus, the longer-term effects remain to be assessed. The study also highlighted the difficulty of doing experimental classroom research in university settings. Research of
this nature requires that students attend all instructional and testing sessions in order for results to be included for analysis. In an instructional situation where students were not obliged to attend classes, it proved impossible to ensure an adequate sample size. Student absence from class meant that only some subjects eventually became study participants and a number of students had to be excluded from the study. Another practical limitation associated with this classroom-based research in a setting where classroom space was scarce is that it was difficult to find rooms that could be used for testing and the researcher was dependent on the rooms used for regular teaching classes. On many occasions, the teacher arrived at a classroom, with a group of students, to find it already occupied.

There were also some important limitations to the second study, which may suggest new avenues for future research. First, since the sample size was not large enough and the participants were from two intact classes, the conclusions cannot be generalized to other educational settings. With regard to the instrument used, the model essay adopted may not be representative of all types of essays; the generalization of the finding pertaining to task differences is also problematic. Ideally, this type of L2 writing study will be repeated with a variety of writing tasks beyond picture description such as writing a complaint letter or a project report administered to a larger sample size to confirm the results of the present study. Another limitation may be that the subjects were not given practice in noticing skills (either becoming aware of a ‘holes’ in their IL or ‘noticing-the-gap’) by confronting them with traces of their activity (e.g. written notes or even recordings) and asking them to comment upon them retrospectively in an attempt to familiarize them with a procedure that was completely new to them. A single lesson may not have been enough for a training effect. The revisions made by the learners in the third stage revealed that students resorted to their memory in their completion of the rewriting task as a result of the short time interval between the comparison and rewriting steps. Therefore, as discussed above, the results presented can simply be viewed only as evidence of learners’ uptake rather than long-term acquisition. There is a need to make use of designs to investigate the long-term effects of modelling as a feedback technique on L2 learning, an issue of great theoretical and practical relevance for SLA studies of feedback on writing and L2 pedagogy (Manchón et al., 2007, 2011). Finally, in this study, we used note-taking
as an on-line measure of learners’ noticing. However, the use of this measure (like the use of any other measure of noticing) raises issues of completeness (Izumi, 2000).

6.6 Directions and Suggestions for Future Research

Following from the foregoing discussion on study limitations in section 6.5, this section will offer suggestions for overcoming the limitations found in the present study, which will hopefully allow other researchers (as well as this researcher) to avoid the presence of, or at least minimize, the shortcomings discussed and additional suggestions and considerations for future directions in later research studies.

Concerning the first study, researchers and teachers could adopt the research methods employed and conduct classroom research in other similar settings to validate the findings. In addition, teachers in the Algerian context could adapt the activities and tests developed for the present study to meet their pedagogical purposes and apply them in their teaching practices (appendices section). There is a need for further research to investigate the effects of L2 instruction, as operationalised in this study, on other school populations in order to determine to what, if any, extent the results obtained in this study were specific to the population utilised. It would be very encouraging to find strong statistical support for the claim that output activities can achieve comparable, if not better, effects than input-based tasks. Another issue worth mentioning is that this research has investigated the effectiveness of instruction in terms of overall group gains. However, it cannot be assumed that the two types of instruction benefited all learners uniformly. Individual differences may mediate the relative effectiveness of the two instructional approaches. Hence, there is a need for additional research that investigates the relationship between the effectiveness of these two instructional methods and individual differences in language aptitude. In other words, future research, which also targets other additional grammatical features need to be carried out to determine if the differential effect of the instructional treatments applies more broadly.

Although the results of the second study are important as a first exploratory step, they should be complemented by further studies. There are several areas that warrant continued investigation before teachers and researchers accept or reject the role of noticing through L2 production attempt as an efficient and effective means for promoting attention to L2 forms. First replications are necessary with different types of
writing under different conditions. It is necessary to bring in other considerations in similar future studies, such as different topics and types of tasks, different types of linguistic items, proficiency levels, or even gender differences within a longer span of time, which may reveal somewhat different findings. Moreover, the study should be replicated with a larger sample population for the purpose of confirming the results. An important factor when investigating learning outcomes that has not been touched upon in this study, due the focus on processes, is retention. No measure assessing the long-term effects of noticing while producing the L2 was implemented. This study is exploratory in its investigation and the results are still quite inconclusive. Further research focusing both on processes and outcomes, targeting other additional grammatical features over longer periods of time could also determine whether the benefits of noticing facilitated by feedback persist over time, and whether they extend to contexts beyond that of the type of task used in this study. Although it was not documented by the results, the role of individual factors that might cause variation among learners could also be investigated. This would help us understand how different learners approach and process output tasks and subsequent input. As Lightbown and Spada (1999) show that one important aspect of classroom language teaching is helping learners to notice form in the L2 through various techniques that direct learners to pay attention to form in the process of learning L2 (section 2.3.2). Such instruction not only allows learners to become more accurate regarding L2 linguistic forms or the particular form in focus but also promotes a language learning skill that learners can carry with them beyond the teacher’s instructional situation.

6.7 Conclusion

In the preceding sections of this chapter, we have summarized and discussed the findings of the study, drawn conclusions in terms of answering the research questions, highlighted the contributions and the implications of the study for EFL teaching and learning, addressed the limitations, and made recommendations for future research. In this final section of this chapter, I would like to present a very brief synthesis of the research project so as to conclude this thesis. The investigation of the effects of input and output in second language acquisition has, so far, revealed that input is the most important factor in SLA. Drawing on a substantial amount of research that has
established the positive effect of L2 production (e.g. Izumi 2000, 2002, 2003, Shehadeh, 1999a; Swain, 2005; Swain and Lapkin, 1995; Toth, 2006), the present study set out to investigate what impacts L2 output has on learning/teaching of L2 linguistic forms in the Algerian educational context. As a result of identifying a clear need to address the research problem addressed in chapter three, the researcher designed and implemented the two studies described in chapter four which outlines the methods and procedures involved in conducting the research project. In order to reliably examine both the learning outcomes and the learning process, a quasi-experimental study (Study 1) and an exploratory study (Study 2) were, respectively, carried out. The first of the two research projects compared two instructional treatment conditions (input in conjunction with and without output) to examine the effects of opportunities for output practice on learning L2 target forms, which were several morphosyntactic structures. The second study, following, Swain and Lapkin (1995), aimed at understanding the role of output in the context of EFL writing, examined to what extent learners are able to demonstrate noticing skills with regard to their written performance (L2 production attempt). The purposes of the study can be summarised as follows: i) to heighten the awareness of learners towards their own written performance, ii) to provide learners with opportunities of assessing samples of their own L2 production, iii) to provide the time and the means to carry out noticing operations; how this ‘noticing’ of forms would activate the kinds of cognitive processes that are believed to affect L2 learning.

The analysis of the results of the first study appears to demonstrate that the best results in terms of gains in grammatical accuracy are brought about by pedagogical intervention that includes both output and input practice. Those engaged in input-plus-output outperformed (at least as descriptive statistics shows) those exposed to the same input for the sole purpose of comprehension in learning English verb tenses and grammatical aspect. Although the absolute predominance of any of the approaches was not statistically established in the course of experimentation- that is the instructional effect, did not amount to statistically significant learning pretest-posttest gains-, a number of observations were made as to the differential effects of the treatments on the development of the learners’ control over the target grammatical structures. In the meantime, it should be understood that this study does not question the essentialness of input to L2 learning or the value of input-based instructional techniques in L2 pedagogy. Nor is there any
implication that simply producing structures solely outside meaningful contexts (as often occurs in traditional pedagogy) advances L2 grammatical performance. Indeed, it may ultimately be that, just as Lee and VanPatten (2003) recommend, the best conditions for instructed learners are regular combinations of both input and output practice.

In general, results from the second study lend support to the research conducted previously which claims, as suggested by the Output Hypothesis (Swain, 2005), that output practice promoted in writing fosters noticing processes, especially noticing the hole (while engaged in text-generation activity) and noticing the gap (via the analysis of the feedback model text received on learners’ own writing). It is also a finding from this research that this noticing activity results in short-term effects on learning (as measured by incorporation of corrections in revised texts).

It is the hope of the author that the implementation of the recommendations outlined above will make L2 grammar instruction more advantageous and conducive to the attainment of higher levels of accuracy and better control of linguistic forms. The regard for accuracy appears to be particularly important at the time when the national curricula in pre-university English language education no longer values the study of the formal aspects of language opting instead for a more communication-oriented approach, often at the expense of the precision of expression. For teachers who wish to take an active interventionist approach to help their students develop their L2 grammatical knowledge, L2 written (and oral) output produced in meaningful contexts may create potential learning opportunities that can be exploited by the teacher. In all cases, learning is believed to be enhanced through the act of producing language, because output, by its mechanisms, increases the likelihood that learners become sensitive to what they can and cannot say in the TL, leading to the reappraisal of their L2 abilities.

Definitely, it would be imprudent to assume that the results of the two studies constitute sufficient grounds for the formulation of far-fetched pedagogical recommendations, and there surely exists the need to explore the issue much further. Hence, the results may not be generalizable across learner populations and acquisitional contexts.
REFERENCES


Fotos and Hinkel (2007) Form Focussed Instruction and output for Second Language Learning Gains In S. Fotos and H. Nassaji (Eds.), Form Focussed Instruction and Teacher Education (pp. 131-142 ) Oxford: Oxford University Press.


Hanaoka, O. (2007). Spontaneous attention to form in a four-stage writing task output, noticing, and learning: An investigation into the role of spontaneous attention to form in a four-stage writing task. Language Teaching Research 2007; 11; 459


Shehadeh, A. (1999b) The role of comprehension ability and production ability in task selection in the second language classroom. *In Expressions, N° 6*, Université de Constantine.


APPENDICES

Appendix A
Explicit rule instruction

This presentation aims at explaining some basic concepts that may help you in understanding what the English tense and aspect are about. If you would like to know more about the use of tense and aspect in English, you can consult, for instance, the following books:
London: Longman

The present simple

Form
The simple present tense is represented by the third person singular ‘s’ inflection on verbs. It has a range of meanings, some much more common than others.

Basic Meanings
The simple present tense has a range of meanings, some much more common than others. The most commonly targeted ones are listed below.

The simple present tense expresses states, as exemplified in 1, habitual actions as in 2, and general statements of facts or scientific truths as in 3.

1. a) He owns three cars
b) He seems to be tired.
2.a) They always go to the mosque on Friday
    b) I usually have lunch at around one.
Notice that this meaning requires the use of time expressions (always, frequently etc.)
3.a) The Moon goes round the Earth.
    b) Water boils at 100 degrees centigrade.
Another common meaning is future actions in 4.
4.a) The film starts at two o’clock.
    b) The next train leaves in fifteen min
Additional Meanings
The simple present also occurs in particular contexts:
It is used by commentators at sport events. This is referred to as instantaneous present.
The simple present can be used to refer to past events. This is known as the narrative, or
historical present, as shown in 5.
5.a) The phone rings. She picks it up and listens quietly [...]
    b) A man goes to visit a friend and is amazed to find him playing[...]

The Present Progressive
Form
The present progressive is formed with a present form of be (am is or are) and the
present participle of the main verb.
Basic Meaning
The basic meaning of the present progressive in ongoing action at the time of speaking as
in 1.
   a) I am eating my lunch.
   b) The candle is burning.
   The present progressive is also used for action happening around now (The action may
not be happening exactly now, but it is happening just before and just after now, and it is
not permanent or habitual) as 2.a) and b) show.
2.a) Farid is learning to drive.
    b) I am living with my sister until I find an apartment.
Additional Meanings
We can also use the present continuous tense to talk about the future when we have
planned to do something before we speak as in 3.
3.a) I am taking my exam next month
    b) We’re eating in a restaurant tonight. We’ve already booked the table..
    c) When are you starting your new job?
The present progressive can also be used with stative verbs (stative progressives) to give
statements more emotional strength and intensity, to focus on change from the norm, to
focus on evolving change and to provide an informal polite tone as in 4.
4.a) This operation is really costing a lot.
    b) You are being very stubborn.
    c) The baby is resembling his father more and more every day
    d) We are hoping you can explain this.
Note: Progressive tenses are also called continuous tenses
The simple past

Form
ed inflection (verb +ed)
Other changes on irregular verbs

Basic Meanings
We use the Simple Past to express the idea that an action started and finished at a specific time in the past. Sometimes, we may not actually mention the specific time, but we do have one specific time in mind. There can also be a few actions happening one after another.

1. a) I saw a movie yesterday.
   b) She washed her car.
2. a) He arrived from the airport at 8:00, checked into the hotel at 9:00, and met the others at 10:00.
   b) Did you add flour, pour in the milk, and then add the eggs?

The Simple Past can be used with a duration which starts and stops in the past. A duration is a longer action often indicated by expressions such as: for two years, for five minutes, all day, all year, etc. as in 3.

3. a) I lived in Brazil for two years.
   b) They sat at the beach all day.

Additional tense meanings for the simple past.
The Simple Past can also be used to describe a habit which stopped in the past. It can have the same meaning as ‘used to’. We often add expressions such as: always, often, usually, never, when I was a child, when I was younger, etc. as in 4.

4. a) I studied French when I was a child.
   b) He played the violin.

The simple past is often used (instead of the simple present) to express a more polite tone.

5. a) I wanted to ask you a favour
   b) Did you want to see me now?

The past progressive

Form
Past of be (was or were) and a present participle.

Basic Meaning
Use the Past progressive to express an ongoing action in the past as in 6. a). Often, we use the past progressive together with a simple past tense. The past progressive refers to a longer action; the simple past refers to a shorter action that happened in the middle of the longer action as in 6. b), c).

6. a) I was studying in the library yesterday from three to five o’clock.
   b) I was having a bath when the telephone rang.
   c) They were sleeping when the thieves broke in.

When you use the Past Continuous with two actions in the same sentence, it expresses the idea that both actions were happening at the same time. The actions are parallel.

7. a) I was studying while he was making dinner.
   b) While Ellen was reading, Tim was watching television.

Additional Meanings
The past progressive is often used with time expressions that indicate a point in time when the action was ongoing as in 8.

8.a) Last night at 6 PM, I was eating dinner.

b) He was watching television at eight o’clock.

The past progressive continuous (as we saw with the simple progressive) can have an iterative sense with words such as ‘always’ or ‘constantly’ i.e. it expresses the idea that something irritating or shocking often happened in the past as in 9.

9. a) She was always coming late to class.

b) He was constantly talking. He annoyed everyone.

The Present perfect

Form
Present tense of to have + the past participle

Basic meanings
We use the present perfect tense to talk about a situation (states or actions) that started in the past and continuous to the present. We usually use for or since with this structure to mark the duration of the past states or activities situation as in 3.

1.a) He has lived in this town since 1990. (state)

b) He has worked in this firm for two years. (action)

We often use the present perfect tense to talk about recently completed actions as in 2.

2.a) He has just gone out.

b) She has recently written an article on this topic.

Another meaning of the present perfect is to express activities or situations that happened before now at some unspecified time in the past as is shown in 3.

3.a) I have passed my test. (There is no time reference.)

b) John Smith has written a number of short stories.

Additional meanings
The present perfect is often used to announce a piece of news, we usually change to simple or progressive tenses to give the details as in 4.

4.a) The Prime Minister has decided to continue with his plan to build new types of aircrafts.

b) The president has resigned. He left his office today and said ‘I want to spend more time with my family’.

The present perfect is often used in letters.

5.a) I’m sorry I haven’t written for such a long time.

b) We have considered the main issues you raise in the report you sent on April 26. and we have decided two actions…

The Present perfect progressive

213
Form
has or have + been + the past participle
Tense meanings
We use the present perfect progressive to express actions that started in the past and continue into the present. It is also used to talk about actions which began in the past and have recently stopped. In most cases, both the simple and the progressive forms are acceptable as in 6. This is not possible with stative verbs which do not appear in the progressive as in 6. c)

There are some situations in which one of the forms sounds better. We tend to use the present perfect progressive to emphasize duration of an action as shown in 7. On the other hand, the present perfect is used to emphasize the result of an action as in 8.

6. a) I have lived in this town since 1985
   b) I have been living in this town since 1985.
   c) I have known him for years (I have been knowing him for years is not possible)

7. a) I've been trading cars for 10 years.
   b) I've been reading this book since 10 o'clock this morning

8. a) He has just come back from work.
   b) I have finished my workout.

The Past perfect

Form
A tense form of the verb have (i.e. had) and a past participle
Basic meanings
The Past Perfect expresses the idea that something occurred before another action in the past. It can also show that something happened before a specific time in the past as in 1.

1. a) I did not have any money because I had lost my wallet.
    b) She only understood the movie because she had read the book.
    c) Tom had never been to an opera before last night.

We use the Past Perfect to show that something started in the past and continued up until another action in the past.

2. a) We had had that car for ten years before it broke down.
    b) By the time Alex finished his studies, he had lived in London for over eight years.

Additional meanings
The Past Perfect is also used with expressions such as: ‘I wish’, ‘as if/though’ and ‘if only’.
3. a) I wish I hadn’t gone there.
   b) John looked as if he had done something terrible

The Past perfect progressive

Form
Had +been +the past participle

The past perfect progressive is used to talk about actions that began in the past and lasted up until another action in the past.

4. a) I had been running for an hour when it started raining
   b) she put on weight because she had been eating too much sugar. (Use 1)

NOTE
The Past perfect progressive, in contrast to the Present Perfect progressive, never expresses actions that continue up until now.

He has been playing for two hours. (He is still playing or he has just stopped.)
He had been playing for two hours when I arrived. (He is not playing football now.)

The Future simple

Form
Simple Future has two different forms in English:
Will /shall+infinitive
Be going to +infinitive

Meanings
Both Will /shall and ‘be going to’ refer to a specific time in the future. Although the two forms can sometimes be used interchangeably, they often express two very different meanings. ‘Will’ (less commonly shall) is used to express probable occurrence while ‘be going to’ expresses that something is a plan i.e. the idea that a person intends to do something in the future as shown below.

1. a) I will go to Algiers next week. I have some business there.
   b) I am going to go to Algiers next week. I have some business there. (intention+plan)
Both ‘will’ and ‘be going to’ can express the idea of a general prediction about the future as in 2. (Predictions are guesses about what might happen in the future)

2. a) This movie will win several Academy Awards
   b) The year 2012 will be a very interesting year.
   c) John Smith is going to be the next President.

‘Will’ is usually used in promises.

3. a) I will call you when I arrive
   b) I promise I will not tell him about the surprise party.

No Future in Time Clauses
The Simple Future cannot be used in clauses beginning with time expressions such as when, while, before, after, by the time, as soon as, if, unless, etc. Instead of Simple Future, Simple Present is used.

The Future Progressive
Form
Future Continuous has two different forms:
will be + present participle
am/is/are + going to be + present participle
Meaning
We mainly use the future progressive to indicate that we will be in the middle of doing something in a specified time in the future as in 4.
4.a) The manager will be meeting with his staff all tomorrow morning.
   b) He will be taking his exam next week at ten o’clock tomorrow.

The future progressive can also be used to indicate that a longer action in the future will be interrupted by a shorter action in the future interruption this can be a real interruption as in 5.a), b) or just an interruption in time as in c), d).

5. a) I will be watching TV when she arrives tonight.
   b) I will be waiting for you when your bus arrives.
   c) Tonight at 6 PM, I am going to be eating dinner.
   d) At midnight tonight, we will still be driving through the desert

The Future Perfect
Form
Will + have + the past participle
Meaning
We use this tense to express an action that will be finished before some point in the future.
Common time expressions used in the Future Perfect: Before / by tomorrow / 7 o’clock / next month / until / till

6.a) I will have finished grading the papers by four o’clock.
   b) He will have read the entire book by next week.

The Future Perfect Continuous
Form
Will + have + been + present participle
Meaning
The future perfect tense in English isn't very common, but it is useful in some situations, and it’s very important to understand it when you hear it. We use this tense to show that something will continue up until a particular event or time in the future.

7. a) They will have been talking for over an hour by the time Tom arrives.
   b) She is going to have been working at that company for three years when it finally closes.
   c) He will have been teaching at the university for more than a year by the time he leaves for Algiers.

Appendix B

Example of Treatment Activities
Input-based activities
Present tense: simple and progressive

Input-based activity one – oral input
Listen to the passage and number pictures in the correct order that you heard them. The passage is read two times

Daily Activities

Jim Smith lives on the eighth floor of an apartment building and works for a garment company as an accounts clerk. Jim Smith wakes up at six o'clock every morning. He gets up, takes a shower, gets dressed, and eats breakfast. After breakfast he reads the newspaper until 7:15, then he leaves his apartment for work. He gets on the bus at the bus stop, rides it to University Avenue, gets off, and walks to his office. He works until five o'clock. He usually goes and plays basketball with friends after work. Then he goes home, he watches TV, and then he goes to bed. Jim Smith leads a very boring life.

(Adapted from Routines, daily activities and present tense, no date)
Input-based activity two-written input

a) This is Rachid. What does he do on school days?

Complete the story of Rachid’s day. Use these 12 verbs. You will need to use some of them more than once: Have-do-get-get (dressed)-go-talk-play-watch-be -arrive-wake up-meet

My day

On schoolday, Rachid................. at 6.30. He ............... a wash. After that he .......................and at 7.30 he ............... breakfast. He usually ...............
cornflakes, bread, and tea. He ...............to school by bike and ............... at school at 8.45. He ............... lessons in the morning ’til lunch time. Lunch time at school is from 12.30 to 1.30. In the afternoons he ............... more lessons or ............... sport. He normally ............... home at half past four. Rachid’s family ............... dinner at 8 p.m. In the evenings Rachid ............... his homework, ............... TV or ............... his friends. They ............... about their plans for the weekend.

(Self-designed)

b) Here are some questions. You write the answers.
Questions(for the output group)
1. What time does he always get up?
2. What does he do after that?
3. What does he usually eat for breakfast?
4. What time does he always eat lunch?
5. What does he usually eat and drink for lunch?
6. When does he usually have dinner?
7. What does he do after dinner?
8. What time does he usually go to bed?

b) Let’s change to questions about YOUR day. (for the output group)
Write the answers.
What time do you usually get up?
What do you normally have for breakfast?
Do you usually have lunch at home?
What do you do in the mornings?....

Input-based activity three- consciousness raising -written input

Match the uses of the present simple (B) with example sentences in (A). One example is given

Uses
Facts and generalization
Habits and routines
Permanent situations
State verbs (e.g. be, have, think, know)
Fixed / official arrangement that we can’t change

A                      B
1. I learn English twice a week
2. I have two eggs
3. The course starts in April
4. I come from the South
5. A dog is an animal
7. The Moon goes round the Earth. Facts and generalization
8. John drives a taxi.
9. He does not drive a bus.
10. We meet every Thursday.

Input-based activity four – consciousness raising (written input)
Indicate whether each of the following sentences is grammatical or ungrammatical. If a sentence is ungrammatical explain why.
1. He is going into town every day
2. Jae Eun takes a statistics course next fall.
3. When a gas is heated it is expanding.
4. She always kids her brother.
5. She is always kidding her brother.
6. They always attends the annual meeting.
7. Good Engineering students has a great future in business.
8. Knowledge are as important as professional experience.
9. Most people don’t likes working at the weekend.
10. Precious metals don’t are always very expensive.

(Cowan, 2008, self-designed)

Input-based activity five - structured input (oral input)
Listen to the sentences about Jennifer. Indicate whether each sentence describes something that is
a) in progress right now?
b) usual or general statement of fact?
c) changing
1. When people need help with their automobile, they call her
2. Right now it is 9:05 A.M., and Jennifer is sitting at her desk.
3. She comes to work on time
4. Her cell phone is ringing.
5. She answers it. It is her friend Bob.
6. He usually works in the first floor but he’s working in the second floor this week while the office is being decorated.
7. In our city it gets dark at around 6 p.m.
8. It’s getting dark - we’d better go home.
9. The bus is stopping.

(Azar Schrampfer Betty, 2003, Self-designed)

Input-based activity six- structured input (written input)
Read Lisa’s letter to Rebecca. Indicate whether each sentence describes something that is
a) In progress right now?
b) usual or general statement of fact?
c) changing
Match the meanings of the present progressive (B) with example sentences in A. One example is given.
uses
A

USE 1 Present or temporary actions

USE 2 Future (personal) arrangements

USE 3 Irritation over something or somebody in the present

B

He is getting married this month
They are swimming in the sea
I’m having my first driving lesson this week
I’m studying to become lawyer one day
I’m drinking hot coffee now
She is always asking me stupid questions.
Is she eating my cake now?
Are you meeting David today?
Is Mary having breakfast now?
Hurry up! We are all waiting for you.

Input-based activity seven – consciousness raising (written input)
Present simple or present continuous? Change the verb if it is wrong.

a) Are you having a motorbike?
......Do........... .....you..... .have.. a... ...motorbike..?...
...................................................................................................................
b) I’m staying in a hotel near the sea.
............................................................................................................................
c) I’d like to buy this coat. How much is it costing?
............................................................................................................................
d) What you doing?
............................................................................................................................
e) I’m usually getting up at 6.00.
............................................................................................................................
f) This book is difficult. I’m not understanding it.
............................................................................................................................
g) I watch a lot of TV every night.
............................................................................................................................
h) Excuse me. Are you knowing the way to the museum?
............................................................................................................................

Narrative tenses
Past Simple/progress

Input-based activity one (oral input)
Narrating: Talking about someone’s life
Louis Pasteur

Louis Pasteur was born on 27 December 1822 in Dole, Jura, France. He was the son of humble parents. His father was a tanner; his mother’s a gardener’s daughter. As a boy he was in no way unusual. His teacher described him as ‘a good average pupil and one who ‘never affirmed something of which he was not absolutely sure’. His father worked hard and was able to send him to the Ecole Normale in Paris to study chemistry. Later he did advanced work at the Sorbonne.

In 1849, Pasteur got a job as assistant teacher at Strasbourg University where he discovered the role of bacteria in fermentation. There he also met his future wife Marie who patiently helped him with his experiments. In 1860, back to Paris, where he was appointed Director of Science, through experimentation and research with bacteria, he determined that certain microorganisms contaminated fermenting beverages. He used this knowledge to develop a process whereby liquids such as milk were heated to kill all bacteria which were already contained within them. This process became known as pasteurisation. In 1865 Louis went to Alés in the South of France where he investigated the disease of silk worm which was ruining the French silk industry.

In 1857, through experimentation and research with bacteria, he determined that certain microorganisms contaminated fermenting beverages. He used this knowledge to develop a process whereby liquids such as milk were heated to kill all bacteria and moulds which were already contained within them. This process became known as pasteurisation. In 1863, he became a member of the French Academy of Medicine. In 1865, Louis went to Alés in the South of France where he investigated the disease of silk worm which was ruining the French silk industry. Three years later despite serious health problems, Pasteur continued his research on microbes. Pasteur recognised that infectious diseases are caused by microorganisms, and his research soon led him to investigate vaccines. He found out that people could be protected against diseases by injecting them with weakened microbes. Pasteur created and tested vaccines for diphtheria, cholera, yellow fever, plague, rabies, anthrax, and tuberculosis. From 1882 to 1885 he devoted himself to research on rabies, a deadly disease spread by the bite of rabid animals. The rabies vaccine was first tested on a nine-year-old boy named Joseph Meister, on 6 July 1885. Meister was bitten by a rabid dog, and was subsequently treated by Pasteur with a rabies virus he had grown in rabbits but weakened by drying, a treatment he had earlier tried on dogs. The treatment was successful and the boy survived without ever developing rabies. In 1887, Pasteur was appointed Permanent secretary of the Academy of Science. Pasteur was subject to strokes from the early age of 46, and eventually died in 1895 from complications resulting from these strokes.

Pasteur was one of the world’s greatest scientists. He made major contributions to Chemistry, Medicine and Industry that have greatly benefited mankind.

(Adapted from The New Midlines, 2003)

Listening comprehension
a) Listen to the text and write down the dates corresponding to the verbs below.
b) Listen again and complete the table with the verbs corresponding to their completions. Notice that these are in scrambled order. An example is given.

<table>
<thead>
<tr>
<th>the disease of silk worm</th>
<th>research on microbes</th>
</tr>
</thead>
<tbody>
<tr>
<td>He became</td>
<td>a member of the French academy of medicine</td>
</tr>
<tr>
<td>to research on rabies</td>
<td>that people could be protected against diseases</td>
</tr>
<tr>
<td>Permanent secretary of</td>
<td>to Alès in the south of France</td>
</tr>
<tr>
<td>the Academy of Science</td>
<td>a job as assistant teacher</td>
</tr>
<tr>
<td>Director of Science</td>
<td>the role of bacteria in fermentation</td>
</tr>
</tbody>
</table>

c) Answer the following questions (for the input-plus-output group).
1. Where did Louis Pasteur study?
2. Where did Louis Pasteur as a scientist work?
3. What awards did Louis Pasteur receive?
4. What is Louis Pasteur famous for?

Input-based activity two (written input)

The Canterville Ghost

There was a horrible storm that night, but apart from that nothing scary happened. The next morning, however, when the family came down to breakfast, they found the terrible stain of blood once again on the floor. Washington cleaned it a second time, but the second morning it appeared again. The third morning it was there, too, although the library had been locked up at night by Mr Otis himself.

The following night, all doubts about the existence of the ghost were finally removed forever. At eleven o’clock the family went to bed and some time after, Mr Otis was awakened by a strange noise in the corridor, outside his room. It sounded like the clank of metal, and it came nearer every moment. Mr Otis got up and looked at the time. It was exactly one o’clock. So Mr Otis put on his slippers, went to the door and opened it. There, right in front of him, stood the ghost - his eyes were as red as burning coals; long grey hair fell over his shoulders and from his wrists and ankles hung heavy chains.

“My dear Sir,” said Mr Otis, ‘you must oil those chains. It’s impossible to sleep with such a noise going on outside the bedrooms. I have therefore brought you this bottle of
lubricator, and I will be happy to supply you with more if you require it.” With these words Mr Otis laid the bottle down, closed his door and went back to bed. Shocked, the Canterville ghost stood quite motionless for a moment, but then he growled angrily. Just at this moment, the twins appeared on the corridor and threw a large pillow at him! The ghost hastily escaped through the wall, and the house became quiet again. When the ghost reached his small secret chamber, he took a deep breath. No ghosts in history had ever been treated in this manner!

(English Grammar Online, 2005)
(Excerpt from The Canterville Ghost, by Oscar Wilde)

a) Questions on the text
i) Which statement is true?
   i) The ghost appears on the first night the Otis family spends in the castle.
   ii) Washington runs out of stain remover.
   iii) The blood-stain is there again every morning.

What wakes Mr Otis up?
   i) The ghost’s chains.
   ii) His wife’s snoring.
   iii) The screaming of a person.
   iv) Is Mr Otis afraid of the ghost? yes  no

b) Comprehension questions (for the output group).
Answer the following questions.
1) What happened when the family came down to breakfast?
2) Why did Mr Otis wake up?
3) Describe the Canterville ghost.
4) What did the twins do?
5) What did the Canterville ghost do?
6) What things make you scared?
7) Do you believe in ghosts?

Input-based activity three-consciousness raising (written input)
a) Did you notice the highlighted forms in the text?

In English, simple past tense construction (V+ed) means that the action that the verb represents happened in the past and finished. Why do we use the simple past in the following sentences?

‘He put on his slippers, went to the door and opened it.’
a) states in the past
b) actions that happened one after the other

‘His eyes were red; grey hair fell over his shoulders and from his wrists hung heavy chains.’
a) states in the past
b) actions that happened one after the other
b) Now decide why do we use the simple past in the following sentences?

1. I saw two colorful fishes in the lake yesterday
2. He entered a room, lit a cigarette and smiled at the guests.
3. Mary tried the soup but it was too hot to eat.
4. I lived in Algiers for 10 years.
5. They saw us playing football.
6. He married a woman who lived in the same village.

Input-based activity four (Irregular past simple verbs). Correct the mistake with the past simple in each of the sentences.

a) I was sick yesterday. I go to the doctor’s.
b) I see the thief go into the house.
c) My sister buyed me a new watch for my birthday.
d) He was lived here for ten years.
e) We taked a photo of the beautiful lake.
f) He finded the camera next to the chair.
g) My friend losed his bag on the bus

Past Progressive
Input-based activity one (textual enhancement-written input)

Killer oil

The story is one of tragedy and fraud. It started in May 1981, when travelling salesmen in Northern and Central Spain started selling cheap olive oil. Like most Mediterranean countries, Spain uses olive oil in its cooking; and when people started falling ill in May nobody suspected that it was the cooking oil which was causing the illness. It was a medical mystery. Doctors and scientists were completely BAFFLED because the strange disease WAS SPREADING.

There WERE several theories about WAS HAPPENING. At first it was thought that bad fish had caused the food poisoning, and later it was rotten fruit. It wasn’t until June that a children’s doctor in Madrid made the connection between the sickness and the oil. Immediately the government started issuing public warnings, and offered to take any suspected oil, giving pure oil in exchange. This stopped the spread of the poison. But it was too late for the people who had already eaten the contaminated substance. Affected people WERE constantly HAVING fever and headaches. They could not eat or sleep, had pains all over their body and WERE HAVING difficulty in breathing. Some of them died.
Doctors and scientists were still not sure what the poison was. The most popular theory was that a Spanish company imported some industrial oil from France and tried to remove the impurities by boiling it at 200°. They mixed it with a small amount of olive oil to give it a taste, and then sent it to the salesman to sell as pure olive oil. When they boiled the oil however they created a new substance which was poisonous and unknown to the authorities. At one time twenty people were analysing the oil trying to find a cure, for the poison. While the medical authorities were carrying out the various analyses the police arrested fourteen people suspected of being responsible for oil poisoning.

(Adapted from The New Midlines, 2003, p.32)

a) Comprehension
Read the text and number the events in their chronological order.

1. The government took measure to stop the spread of the disease.
2. A doctor made the connection between the sickness and the oil.
3. They sent it to the salesmen to sell as pure olive oil.
4. People started falling ill.
5. Travelling salesmen sold vast quantities of olive oil.
6. A Spanish company imported some industrial oil from France.
7. The medical authorities analysed the oil and tried to find a cure.

b) Answer the following questions. (for the input plus output group)
1. Why did many people buy that oil?
2. Why was the oil poisoning a strange disease?
3. What were affected people feeling?
4. What measures did the authorities take to prevent the spread of the disease?

b) Consciousness raising activity (written input)
Did you notice the highlighted forms in the text?
In English, when a verb phrase is used with was / were and its present participle form i.e past progressive, it reflects that the action was ongoing in the past. Often, the past progressive tense constructions are often used together with a simple past tense. The simple past was capitalized and made red. The past progressive was italicized and made blue.

Here are three common concepts expressed by the past progressive:
- Action going on at a certain time in the past
- Actions taking place at the same time
- Action in the past that is interrupted by another action

c) Now find examples from the text for each use listed above:

.................................................................
Input-based activity two(simple past or past continuous)
Choose which verb tense (simple past or past continuous) fits better.

1. I ________ - I didn’t hear you come in.
a) was sleeping b) slept
2. I ________ to see her twice, but she wasn’t home.
a) was coming b) came
3. What ________? I was watching TV.
a) did you do b) were you doing
4. Hey, did you talk to her? Yes, I ________ to her
a) was talking b) talked
5. I ________ home very late last night.
a) came b) was coming
6. How long ________ the flu?
a) did you have b) were you having
7. ________ a good time in the beach? Yes, I had a blast!
a) Were you having b) Did you have
8. We ________ breakfast when she walked into the room.
a) had b) were having
9. Last month I decided to buy a new car, and today I finally ________ it.
a) bought b) was buying
10. Yesterday at six o’clock, he ________ football.
a) played b) was playing

(self-designed)

Present perfect:simple/progressive
Input-based activity one-(input flood) (oral input)

No Wrong Numbers

Mr James Scott has a garage in Silbury and now has just bought another garage in Pinhurst. Pinhurst is only five miles from Silbury, but Mr Scott cannot get a telephone for his new garage, so he has just bought twelve pigeons. Yesterday a pigeon carried the first message from Pinhurst to Silbury. The bird covered the distance in three minutes. Up to now Mr James Scott has sent a great many requests for spare parts and other urgent messages form one garage to other. In this way he has begun his own ‘telephone’ service.

(Practice and Progress, 1973, p.21)
i) Comprehension Questions
Mr Scott hasn’t got a telephone in his garage because:

a) It is not far from his garage so he doesn’t need one.

b) He has twelve pigeons

c) He can’t get one

d) It’s too expensive.

Mr Scott keeps pigeons because:

a) He uses them to send messages.

b) It’s his hobby.

c) He has two garages.

d) He likes them.

ii) Comprehension questions (for the input plus output group)

a) Where has Mr Scott opened his second garage?

b) How far away is his first garage?

c) What has he bought? Why?

d) Has he sent messages from one garage to another? What for?

iii) Which verbs tell us what has happened i.e. present perfect constructions?

iv) Which words are used with the present perfect?

Input-based activity two-(input flood) (written input)

Human rights in Africa

Freedom of Speech and Human Rights are taken for granted in the west, but recent years have seen conditions deteriorate around the world. The United Nations (UN) has expressed concern that the number of human rights violations has grown since the start of the last decade. As early as 1997 for example, Human Rights conditions were reported to remain unchanged compared to previous years, or in some countries, actually worsen, around the world. The UN reported that even though over a hundred governments have agreed to promote human and peoples’ rights, violations of rights and torture have increased over the past ten years. The African continent, for example, has been the scene of horrific human rights violations by government forces and allied militia which have committed horrific human rights violations. These forces have displaced millions of people in some parts of the continent. They have attacked local populations, raped women, burnt and looted villages. Despite the people’s cries for help, these populations still remain unprotected and denied justice. Victims who speak out face harassment and intimidation at the hands of government forces. People of many African countries, including displaced persons and town-dwellers, human right defenders and lawyers were victims of arbitrary powers of arrest and detention. The government forces, apparently designed to protect the country, have instead used the powers conferred upon them to torture the population.

The African Charter on Human and Peoples’ Rights, an organ of the African Union, is the principal human rights instrument. In recent times it has had to face a range of human rights problems in different parts of the continent. Though this organ has made
some progress in protecting peoples’ rights throughout the African continent and ensured that the victims of grave abuses obtain justice, the system is in need of extensive reforms. It is weak and unable to hold governments accountable for violations of international law. Investigations into human rights violations committed in many African countries are either deeply flawed or simply non-existent. Much discussion is taking place at the African Union as it continues to search for more effective ways to protect and assist these particularly vulnerable groups.

(Self designed)

COMPREHENSION

a) Two statements are false. Which ones?
1. Violations of basic human rights still form a systematic pattern in much of the world.
2. At the start of the twenty-first century, respect for human rights continued to progress.
3. Human rights have recently improved thanks to governments who agreed to adopt and implement international agreements that relate to the protection of human rights.
4. The African Union has worked to build new institutions to advance the protection of human rights.

b) Comprehension (for the output group)
1. What human rights violations has the text referred to?
2. What have governments agreed to do?
3. Show how governments in African countries violate human rights?
4. Has the African union worked to protect human rights? How?

Input-based activity three-consciousness raising (written input)
   a) Did you notice the highlighted forms in the text?
   In English, when a verb phrase is used with have/has and its past participle form, it reflects a meaning that the action happened in the past, but the time span that the action affects is still present. Here are three common concepts expressed by the present perfect:

   1. Something that happened at some unspecified time in someone’s life (or another period of time that continues up until the present)
   2. Something that started in the past and continues up until now
   3. Something that happened in the past and has some result or relevance to the present.

   b) Now decide why the present perfect is used in the following sentences?
   i) ‘recent years have seen conditions deteriorate around the world’. Line 2.

   ii) The UN has expressed concern that the number of human rights violations has grown since the start of the last decade

   iii) Over a hundred governments have agreed to promote human and peoples’ rights
c) Match the following examples to the concepts above.
   a. She’s lived here for five years
   b. I’ve never eaten oysters
   c. I’ve lost my glasses
   d. Have you ever been to the Sahara?
   e. I’ve known him since I was a child
   f. He’s broken his arm

   Simple past vs present perfect

Input-based activity one: (input flood) (written input)

Taxi

Captain Ben Fawcett has bought a new taxi and has begun a new service. The taxi is a small Swiss Plane. This wonderful plane can carry seven passengers. The most surprising thing about it, however, is that it can land anywhere: on snow, water or even on a ploughed field. Captain Fawcett’s first passenger was a doctor who flew from Birmingham to a lonely village in the Welsh mountains. Since then Captain Fawcett has flown passengers to many unusual places. Once he landed on the roof of a block of flats and on another occasion, he landed on deserted car park. Captain Fawcett has just refused a strange request from a business man. The man wanted to fly to Rockall a lonely island in the Atlantic ocean, but Captain Fawcett did not take him because the trip was too dangerous.

(Pactice and progress, 1973, p.79)

i) Input Flood Questions

Two statements are false according to the text. Which ones?
1. Captain Ben Fawcett has bought an ordinary taxi.
2. It can carry seven passengers.
3. Captain Ben Fawcett has flown passengers to many strange places.
4. He has just managed to fly a lonely traveller to an island on the Atlantic Ocean.

ii) Answer these questions (for the input plus output group).

1. Has Captain Ben Fawcett bought an ordinary taxi or not?
2. How many passengers can it carry?
3. What is surprising about this plane?
4. Did Captain Ben Fawcett accept to fly business man a lonely island? Why?

iii) Using the following two sentences, describe the main difference between the (simple) past in (1) and the present perfect in (2) with regard to meaning.

1. ‘Captain Fawcett’s first passenger was a doctor who flew from Birmingham to a lonely village in the Welsh mountains.’

2. ‘Since then Captain Fawcett has flown passengers to many unusual places.’
Input-based activity two-consciousness raising (written input)
a) Which tense is used with the following actions?
1) Action beginning in the past and still continuing
   a) Present Perfect
   b) Simple Past
2) Result of an action in the past is important in the present
   a) Present Perfect
   b) Simple Past
3) Action finished in the past
   a) Present Perfect
   b) Simple Past

b) Find out an example of each from the text.
   iii) Choose the correct verb forms and then ask your partner the questions.
   How long are you doing / did you do / have you done your present job?
   How long did you do / have you done the job before that?
   Did you have / have you had dinner yet?
   Did you ever / have you ever played truant when you were at school?
   How many hours did you work / have you worked today?
   How many countries have you visited / did you visit?
   Where did you go / have you been the last time you went abroad?
   How long have you stayed / did you stay there?
   Tell me everything you have eaten / you ate today?
   Did you do / have you done any physical exercise recently?

   Past perfect simple / Progressive

Input-based activity one (written input- textual enhancement)

The Casbah of Algiers

In the northern part of Algeria, the casbah of Algiers undoubtedly the most important position among the historic sites. Its history is closely linked with the history of Algiers. Algiers was built during multiple conquests, that is it had grown up gradually over the centuries and layers of well-refined culture can be found in its architecture and social character. There is little knowledge about its earliest times. It was known to the Carthaginians and to the Romans as Icosium. Earlier, around the ninth century B.C., a group of phoenicians traders had founded it as one of their important trading posts. In the tenth century A.D, Emir Bouloughin rebuilt the town into an important trading port called al-Jaza’ir. Five centuries before, the vandals had captured the city and completely destroyed it. Until it was built by Emir Bouloughin, the city had exercised little influence on international commerce and only the least amount of merchandise transited through it. After the Turkish Baba Arudj brothers had gained control of the city in 1516, Algiers thrived as a relatively independent city under the nominal control of the Ottoman empire. Later the ottomans transformed the architectural character of the city by
constructing mosques and palaces similar to those in Asia Minor and erecting the famous white-washed military fortification known as the Casbah. The casbah still remains the throbbing cultural heart of the city, though it had undergone some changes during the French colonial rule. The casbah is the most important of Algeria’s seven World Heritage sites.

(Adapted from New Prospects 2007, p.23)

a) Mark the two statements which are false according to the text.
1. We don’t have much information about what the city of Algiers was like during the phonecian and Roman periods.
2. Only the smallest amount of goods transited though the port of Algiers during after Emir Bouloughin rebuilt the city.
3. The casbah of Algiers was constructed during the French colonial rule.
4. Algeria has many World Heritage sites.

b) Answer the following questions (for the input plus output group)
1. Whe was the city of Algiers built?
2. What the city of Algiers was like during the phonecian and Roman periods?
3. Who rebuilt destroyed the city of Algiers after it had been destroyed?
4. When was the casbah of Algiers built?
5. Is it an important historic site? Why?

c) Input-based activity (consciousness-raising)
The highlighted verb phrases in the text are used with had and its past participle form i.e. past perfect tense construction. Explain why these past perfect tense constructions are used in the text?

Input-based activity two– consciousness raising (written input)
Explain the difference in meaning between each of the following pairs of sentences.

1. How long had he been living in London?
2. How long has he been living in London?
3. He had been sleeping for 12 hours.
4. He has been sleeping for 12 hours.
5. How long had she been learning English?
6. How long has she been learning English?
7. He has been playing for two hours.
8. He had been playing for two hours.

(Cowan, 2008, self designed)
Never too Old to Learn

I have just received a letter from my old school informing me that my former headmaster Mr Reginald Page, will be retiring next week. Pupils of the school, old and new, will be sending him a present to mark the occasion. All those who have contributed to the gift will sign their names in a large album which will be sent to the headmaster’s home. We shall all remember Mr Page for his patience and understanding and for the kindly encouragement he gave us when we went so unwillingly to school. A great many former pupils will be attending a farewell dinner in his honour next Thursday. It is a curious coincidence that the day before his retirement, Mr Page will have taught for a total of forty years. After he has retired he will devote himself to gardening. For him, this will be an entirely new hobby. But this does not matter, for, as he has often remarked one is never too old to learn.

(Practice and progress, 1973, p.209)

i) Comprehension: One statement is false. Which one?
   a) Mr Page, a former headmaster, has recently retired
   b) Many old pupils will be attending a farewell dinner in his honour of Mr Page.
   c) Mr Page completed forty years as a teacher
   d) After he has retired he will devote himself to gardening

ii) Comprehension (for the output group)
   a) Who has informed the writer about his former headmaster, Mr Reginald Page retirement?
   b) At what time will he retire?
   c) What will his former pupils do?
   d) What will they take part in?
   e) What will Mr Reginald Page do after his retirement?

iii) Sentences (a)-(f) illustrate three different constructions for future time:
   1) Will + infinitive;
   2) will be + present participle and
   3) Will + perfect infinitive (have + past participle).

   a) ‘Mr Reginald Page, will be retiring next week’
   b) ‘All those who have contributed to the gift will sign their names in a large album’
   c) ‘We shall all remember Mr Page for his patience and understanding’
   d) ‘A great many former pupils will be attending a farewell dinner’
   e) ‘Mr Page will have been teaching for a total of forty years’
   f) ‘He will devote himself to gardening’

iv) What are these tense constructions called? Select a) future simple, b) future progressive or c) future perfect
   1) ...........................................
   2) ...........................................
v) Verbs :aspect. Among all future tenses, the Future Simple is the most common. It is used in many situations such as when making:

- A personal plan
- A promise or an offer
- A spontaneous decision (Unplanned actions), a promise or an offer
- Predictions based on experience or intuition

Using the following two sentences, describe the main difference between the (future with ‘will’) in (1) and the future with ‘be going to’ in (2) with regard to meaning.

1) ‘All those who have contributed to the gift will sign their names in a large album’
   …………………………………………………………………………………

2) ‘All those who have contributed to the gift are going to sign their names in a large album’
   …………………………………………………………………………………

Input-based activity two– consciousness raising (written input)
Decide which of the concepts in (iii) the following examples illustrate:

1. I have a two-week vacation in August. I am going to fly to Sahara.
2. You spilled the milk. I’ll clean it up.
3. My father will give me 2500 dinars if I get a good mark in the final exam.
4. My radio is broken. Will you fix it for me?
5. I think he will regret his choice

Input-based activity three– consciousness raising (written input)
All these sentences use for the future ‘will’
In some cases this is incorrect.
Where is the ‘will’ future used correctl?
Where it is incorrectly used, what is the correct future form?

1. I’ll go to London on Friday.
2. I’ll meet my friends for dinner after the class.
3. I’ll probably visit my grandmother in China at Chinese New Year.
4. What will you do at the weekend?
5. Will you take another English course after this one?
6. I’ll clean the house on Saturday afternoon.
7. This course will finish in May.

The Future Progressive

Match the meanings of the future progressive (B) with example sentences in (A). One example is given
A. Meanings
1. Future actions in progress.
2. Guesses about the present or the future.
3. Polite questions about somebody’s intentions

B. Examples
a) I’ll be having a bath when you are back back home.
b) Tomorrow at this time, I will be taking my grammar exam.
c) I’ll be watching TV when my mother arrives.................Meaning 1
d) Will you be coming home?
e) They will be getting home just about now.
f) We won’t be having supper tomorrow before 8 o’clock.
g) I am not going to be learning English tomorrow at this time.
h) Will you be using the dictionary?
i) He won’t be sleeping now
j) Will you be playing football at 6 p.m.?

Appendix C
Example of Treatment Activities
OUTPUT-BASED ACTIVITIES

Present tense: simple and progressive
Production activity one: mechanical drill—(focus on form)

A. Write either the simple or the continuous form of the verbs in brackets; use only the present tense.

1. He ____________ (teach) his boy to ride.
2. She always ____________ (ring) up and ____________ (ask) questions.
3. Can I borrow your pen or ____________ (use) it at the moment?
4. Why you ____________ (type) so fast? You ____________ (make) a lot of mistakes.
5. The children are very quiet. Go and see what they ____________ (do). They ____________ (cut) up some £5 notes.
6. Mary usually ____________ (learn) languages very quickly but she ____________ (not / seem) able to learn modern Greek.
7. I always ____________ (buy) lottery tickets but I never ____________ (win) anything.
8. You always ____________ (write) with your left hand?
9. ____________ (You / know) why an apple ____________ (fall) down and not up?
10. I ____________ (save) up because I ____________ (go) abroad in July.
11. I ____________ (think) it a pity you don’t take more exercises.
12. The plane that you ____________ (look) at now just ____________ (take) off for Paris.
13. Tom never ____________ (do) any work in the garden; he always ____________ (work) on his car.
14. These hens ____________ (lay) brown eggs.
15. She ____________ (have) a bath every evening.
16. My husband ____________ (always / taste) the food while I’m cooking! It’s very annoying.
17. I ____________ (not / think) that’s a good idea.
18. He ____________ (have) a party at the weekend.
19. This coffee ____________ (not / taste) right.
20. What ____________ (you / think) about the war in Iraq?

(Thomson and Martinet, 1980)

Production activity two: dictogloss Task
-Listen to the following text
-On the second reading, students note down key words.
-Reconstruct the text orally in your own words

Text for Dictogloss Task:
The Present simple

Morning Activities
I usually travel to college by bus. I leave home at 8 o’clock and get to the bus stop at about 8.10. I usually have to wait for about 10 minutes and then the bus arrives. I buy a
weekly ticket and go and sit at the back where it is warm. It usually takes about 15 minutes on the bus. I get off at Barlow Moor Road and walk for 8 minutes. I usually arrive at college at 8.45 and go straight to class. I meet my friends and learn English for three hours - then I go home

(Present simple, 2006, Self-access Grammar)

Production activity three - written output
Describe your typical day. Use as many different descriptions as you can. Write at least 10 sentences.

Production activity four: dictogloss Task
- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:

The Present Progressive Tense

The Wilsons

It’s 7:30 A.M. and the Wilsons are in their kitchen. Mrs. Wilson is sitting at the breakfast table. She is reading the morning paper. She reads the newspaper every morning. Mr. Wilson is pouring a cup of coffee. He usually drinks two cups of coffee every morning before he goes to work. There is a cartoon on TV, but the children aren’t watching it. They are playing with their toys instead. They usually watch cartoons in the morning, but this morning they aren’t paying any attention to the TV. Mr. and Mrs. Wilson aren’t watching the TV either. They do not like to watch cartoons.

(Using the Simple Present or the Present Progressive, no date)

Narrative tenses
Past Simple and Progressive
Production activity one: mechanical drill-(focus-on-form)
Irregular Past Participles
Make the past participle:
1. She has never ___________________ (let) her daughter have a boyfriend.
2. Have you already ___________________ (read) today’s newspaper?
3. The house has been ___________________ (sell).
4. He has ___________________ (lose) his wallet again.
5. I have ___________________ (write) three essays this week.
6. That clock was ___________________ (make) in Switzerland.
7. He had ___________________ (run) 6 miles when he hurt his ankle.
8. I have never ___________________ (see) such a beautiful view.
9. He has ___________________ (teach) hundreds of students during his career.
10. Have you ever _____________________ (meet) a famous person?
11. Because she hadn't _____________________ (pay) the bill, the electricity went off.
12. They have _____________________ (send) Christmas cards to all their friends.
13. Where have we _____________________ (put) the car keys?
14. We have never _____________________ (sing) in public before.
15. She had _____________________ (wear) her blue dress many times.
16. John had never _____________________ (speak) English before he came to London.
17. Why have you _____________________ (stand) up? Are we leaving?
18. Have you ever _____________________ (swim) in the Atlantic Ocean?
19. It had _____________________ (take) three hours to reach the station, so they missed the train.
20. I have never _____________________ (say) that I didn't love you.
21. David jumped into the air. He had _____________________ (sit) on a drawing pin.
22. The weatherman had _____________________ (tell) us it would be sunny, but it rained all day.
23. I'm sorry I'm so tired. I haven't _____________________ (sleep).
24. Have you _____________________ (think) about changing jobs?
25. He’d thought he had _____________________ (understand) the problem, but now he realised he had made a mistake.

(Peefect English Grammar, 2008)

Production activity two: mechanical drill (focus on form)
B. Write either the simple or the continuous form of the verb in brackets. Use only the past tense; non-perfective aspect.

1. The sun_________________ (rise) at 6:00
2. The children were frightened because it _________________ (get) dark.
3. The aeroplane in which the football team (travel) crashed soon after taking off.
4. Tom_________________ (sit) in a corner with a book. I told him that he_________________ (read) in very bad light.
5. I went into the garden to see what the boys_________________ (do). James_________________ (weed) and Alexander (cut) the grass.
6. I'm afraid there is no more bread. We _________________ (eat) it all last night. In any case it_________________ (go) sale.
7. At school we _________________ (study) two foreign languages.
8. The exam had just begun and the candidates _________________ (write) their names at the top of the papers.
9. She_________________ (live) in Rome for a long time.
10. The teacher (tell) us about it this morning.
11. I_________________ (see) you from yesterday from the bus. Why you (use) a stick? I (use) a stick because I had hurt my leg that morning falling off from a horse. Whose horse you (ride)?
12. As I _________________ (cross) the road I _________________ (step) on a banana skin and _________________ (fall) heavily.
13. She was very extravagant. She always _________________ (buy) herself new clothes.
14. At eight they _________________ (eat) breakfast.
15. Between one and two I _________________ (do) the shopping and _________________ (walk) the dog.

(Thomson, and Martinet, 1980)

Input-output cycles: The Simple Past and past continuous

Step 1 - Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input1).
Step 2 - Put the passage away. Reconstruct the passage as accurately as possible (Output 1).
Step 3 - Class discussion. Important ideas are written on the blackboard.
Step 4 - Show the passage a second time (Input 2) and were directed to underline it as in Step 1. As in step 2, reconstruct the text as accurately as possible on another output sheet (Output 2).

A DISASTROUS DINNER

Last Friday, Mrs. Anderson planned to have a delicious dinner. She bought a T-bone steak and some cream and apples for an apple pie. When she came home from the shops she put her shopping on the table. While she was setting the table, her two pets sat underneath it and watched her. Then she went to the kitchen to make the pastry for the pie. She was a little forgetful so she didn’t realize the steak, cream and apples were still on the table.

While she was making the pastry, the dog jumped on a chair and looked longingly at the steak. At last it took the steak in its mouth and jumped off the chair, just as Mrs. Anderson was coming back into the dining room.

Mrs. Anderson screamed, but the dog ran into the garden. She ran after the dog.

While she was chasing the dog, the cat jumped on the table and started drinking the cream.

Mrs. Anderson didn’t manage to catch the dog, and she came back into the dining room. When she saw the cat, she shrieked, and the cat got such a fright that it jumped a meter into the air, and leapt out the window. Mrs. Anderson threw her broom at the cat, but she missed, and broke the window. At the same time she overbalanced and put her hand in the cream, spilling it all over the tablecloth.

Poor Mrs. Anderson - she had no dinner, only a dirty tablecloth and a broken window.

(Past Simple and progressive, English To Go, 2006)
Production activity three: Written production
Say what all these people were doing when the boss opened the door.
Production activity four: Written production
Please rewrite Pasteur’s life. Use the verbs the input text, activity 1 and 2 on Pasteur’s life.

Production activity five: written production
An accident took place yesterday on the road to Algiers. Look at the pictures below and write a paragraph describing the accident.
Present perfect  Simple or Continuous

Production activity one: mechanical drill-(focus on form)

Write either the simple or the continuous form of the present perfect

1. It ___________________ (not / rain) for three hours! Only about one hour.
2. How long ___________________ (you / live) in London?
3. How long ___________________ (you / wait) for the bus?
4. He ___________________ (never / be) abroad.
5. ___________________ (they / arrive) already?
6. Julie ___________________ (not / eat) anything today.
7. She ___________________ (drink) ten glasses of water!
10. I ___________________ (wait) for three hours already!
8. How long ___________________ (you / be) a lawyer?
9. It ___________________ (not / rain) all summer, so the garden is dead.
11. She ___________________ (have) parties every week for ten years.
12. I ___________________ (have) my dog for sixteen years.
16. How long ___________________ (Julie / have) problems at school?
13. I ___________________ (read) your book all day, it’s very interesting.
14. It ___________________ (snow) since last night.
15. How long ___________________ (you / think) about changing your job?
16. She ___________________ (eat) chocolate all morning so she feels sick.
17. I (buy) a new carpet. Come and look at it.
18. It ___________________ (rain) but it (stop) now.
19. He ___________________ (teach) in the school for five years.
20. It is three years since I ___________________ (see) Bill

(Perfect-English-Grammar 2010, self designed)

Production activity two: mechanical drill(focus on form)

Rachid is being interviewed for a job. The words ‘for’ and ‘since’ are missing in the questions and answers.

Interviewer: How long have you been working in sales?
Rachid: (1) __________ 2002.
Interviewer: And I see you’ve been working in London (2) __________ five years. Is that right?
Rachid: Yes, I’ve been here (3) __________ I graduated.
Interviewer: And what about other languages. Can you speak any?
Rachid: Well, my mother’s Italian so I’ve been able to speak Italian (4) __________ I was a little girl. I learnt French at school so I’ve been able to speak that (5) __________ more than 10 years.

Interviewer: Now, I presume you’re used to working with computers?
Rachid: Oh yes. I’ve worked with them (6) __________ years.

Interviewer: Now have you got any questions for me?
Rachid: Yes. I was wondering how long you’ve worked here.

Interviewer: Well, I was one of the first people to work here so I’ve been here (7) __________ a very long time, (8) __________ 1982, in fact.

( Self designed)

Production activity three :meaningful drill (focus on form and function
Survey questions
In pairs write five questions for a survey on the topics below:
-food, drinks ,countries, emailing people,etc,
   e.g., question : have you ever eaten …?
Collected results on 1)Yes I have . 2) No, I have never…are discussed.

Production activity three: input-output cycles

Step1- Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input 1)
Step2- Put the passage away . Reconstruct the passage as accurately as possible (Output 1).
Step 3-Class discussion . Important ideas are written on the black board
Step4- shown the passage a second time (Input 2) and were directed to underline it as in Step 1.As in step 2, reconstruct the text as accurately as possible on another output sheet(Output 2).

Text for reconstruction task :

The Present perfect tense

Computers
Since computers were introduced to the public in the early 1980's, technology has changed a lot. The first computers were simple machines designed for basic tasks. They didn’t have much memory and they weren’t very powerful. Early computers were often very expensive and customers often paid thousands of dollars for machines which actually did very little. Mostly they were used as expensive typewriters or for playing games. Nowadays, however, computers have become powerful machines with very practical tools. Programmers have created a large selection of useful programs which do everything from teaching foreign languages to bookkeeping.

(Verb Tenses, 2004)
Production activity four: dictogloss Task

- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:

The simple past, the present perfect simple and progressive

Hot snake

At last firemen have put out a big forest fire in California. Since then they have been trying to find out how the fire began. Forest fires are often caused by broken glass or by cigarette ends which people carelessly throw away. Yesterday the firemen examined the ground carefully, but were not able to find any broken glass. They were also quite sure that a cigarette end did start the fire. This morning, however, a fireman, accidentally, discovered the cause. He noticed the remains of a snake was wound round the electric wires of a 16,000-volt power line. In this way, he solve able to solve the mystery. The explanation was simple but very unusual. A bird had snatched the snake from the ground and dropped it onto the wires. The snake then wound itself round the wires. When it did so, it sent sparks down to the ground and these immediately started a fire.

(Practice and Progress 1973, p.135)

Past Perfect Simple/progressive
Present perfect Simple or Continuous

Production activity one: mechanical drill—(focus on form)

Write either the simple or the continuous form of the present perfect

1. It ___________________ (not / rain) for three hours! Only about one hour.
2. How long _________________ (you / live) in London?
3. How long _________________ (you / wait) for the bus?
4. He _________________ (never / be) abroad.
5. _________________ (they / arrive) already?
6. Julie _________________ (not / eat) anything today.
7. She _________________ (drink) ten glasses of water!
8. How long _________________ (you / be) a lawyer?
9. It _________________ (not / rain) all summer, so the garden is dead.
11. She _________________ (have) parties every week for ten years.
12. I _________________ (have) my dog for sixteen years.
13. How long _________________ (Julie / have) problems at school?
14. I _________________ (read) your book all day, it’s very interesting.
15. How long _________________ (you / think) about changing your job?
16. She __________________ (eat) chocolate all morning so she feels sick.
17. I (buy) a new carpet. Come and look at it.
18. It __________________ (rain) but it (stop) now.
19. He __________________ (teach) in the school for five years.
20. It is three years since I__________________ (see) Bill

(Perfect-English-Grammar 2010, self-designed)

Production activity two: mechanical drill (focus on form)

Rachid is being interviewed for a job. The words ‘for’ and ‘since’ are missing in the questions and answers.

Interviewer: How long have you been working in sales?
Rachid: (1) __________ 2002.
Interviewer: And I see you’ve been working in London (2) __________ five years. Is that right?
Rachid: Yes, I’ve been here (3) __________ I graduated.
Interviewer: And what about other languages. Can you speak any?
Rachid: Well, my mother’s Italian so I’ve been able to speak Italian (4) __________ I was a little girl. I learnt French at school so I’ve been able to speak that (5) __________ more than 10 years.
Interviewer: Now, I presume you’re used to working with computers?
Rachid: Oh yes. I’ve worked with them (6) __________ years.
Interviewer: Now have you got any questions for me?
Rachid: Yes. I was wondering how long you’ve worked here.
Interviewer: Well, I was one of the first people to work here so I’ve been here (7) __________ a very long time, (8) __________ 1982, in fact.

(Self-designed)

Production activity three: meaningful drill (focus on form and function)

Survey questions
In pairs write five questions for a survey on the topics below:
-food, drinks, countries, emailing people, etc,
e.g., question: have you ever eaten …?
Collected results on 1) Yes I have. 2) No, I have never… are discussed.

Production activity three: input-output cycles

Step 1- Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input 1)
Step 2 - Put the passage away. Reconstruct the passage as accurately as possible (Output 1).
Step 3 - Class discussion. Important ideas are written on the black board.
Step 4 - Show the passage a second time (Input 2) and were directed to underline it as in Step 1. As in step 2, reconstruct the text as accurately as possible on another output sheet (Output 2).

Text for reconstruction task:

The Present perfect tense

Computers
Since computers were introduced to the public in the early 1980's, technology has changed a lot. The first computers were simple machines designed for basic tasks. They didn’t have much memory and they weren’t very powerful. Early computers were often very expensive and customers often paid thousands of dollars for machines which actually did very little. Mostly they were used as expensive typewriters or for playing games. Nowadays, however, computers have become powerful machines with very practical tools. Programmers have created a large selection of useful programs which do everything from teaching foreign languages to bookkeeping.

(Verb Tenses, 2004)

Production activity four: dictogloss Task
- Listen to the following text
- On the second reading, students note down key words.
- Reconstruct the text in your own words

Text for Dictogloss Task:

The simple past, the present perfect simple and progressive

Hot snake
At last firemen have put out a big forest fire in California. Since then they have been trying to find out how the fire began. A forest fire is often caused by broken glass or by cigarette ends which people carelessly throw away. Yesterday the firemen examined the ground carefully but were not able to find any broken glass. They were also quite sure that a cigarette end did start the fire. This morning, however, a fireman, accidently, discovered the cause. He noticed the remains of a snake was wound round the electric wires of a 16,000-volt power line. In this way, he solves able to solve the mystery. The explanation was simple but very unusual. A bird had snatched up the snake from the ground and dropped it onto the wires. The snake then wound itself round the wires. When it did so, it sent sparks down to the ground and these immediately started a fire.

(Practice and Progress 1973, p. 135)
Past Perfect Simple/progressive

Production activity two: mechanical drill (focus on form)

A. Supply the past perfect or the simple past.

1. When he ___________ (see) all the pictures he _____________ (express) amazement that one man should have painted so many.
2. After the teacher _____________ (leave) the room, the children ___________ (start) talking.
3. She ____________ (decide) to go to the country by the time her mother ___________ (return).
4. It ___________ (seem) that fate (take) the matter out of her hands.
5. After she (break) her promise, she will fill with remorse.
6. They (saw); that’s why they (be) (cover) in sawdust.
7. It ___________ (rain); and the streets ___________ (be) still wet.
8. The doctor took off the plaster that he ___________ (put on) six weeks before.
9. I could not remember the poem we ___________ (learn) the week before.
10. He didn’t realize that he ___________ (go) through a red light, until a policeman (stop) him
11. They wondered where she ___________ (go)
12. When we ___________ (arrive) at the station, the train had already left.
13. I opened my handbag to find that I ___________ (forgot) my dictionary.
14. She ___________ (change) so much that I didn’t recognize her.
15. When their mother arrived home, the children ___________ (finish) their homework
16. The meeting ___________ (start) when I arrived at the office.
17. The meeting was at nine o’clock. When I ___________ (arrive) at ten, the meeting had finished.
18. When I ___________ (wake up) this morning, my roommate ___________ (leave) already.
19. Before I arrived at the theater, the movie had already begun.
20. I ___________ (leave) already my house before you came to pick me up.

(Thomson, A.J. and Martinet, A.V.1980, self-designed)

Production activity five: dictogloss Task
-Listen to the following text
-On the second reading, students note down key words.
-Reconstruct the text in your own words

Text for Dictogloss Task:
The Past perfect simple

A Terrible Day
I had a terrible day last week. When I woke up for my morning class, my roommate had already left. It was around 8 o’clock and I was alone as all of the students had gone to classes. I’d just finished my breakfast and was about to leave when I saw that the rubbish bin needed emptying. So I picked up the bin and went to take it outside. I opened the front door and went along the corridor to put the rubbish bin out for collection. As I put the bin down, I felt a current of cold air blowing and heard a bang. When I got back to my room, I found that the door was closed. The wind had blown it shut. I looked for my keys in the pocket of my pyjamas, but I realised that I had left them inside. I knocked at my neighbour’s door, but they had gone to their classes. So I went down to the security man but they told me he had gone out and hadn’t come back yet. So I had to wait in the corridor outside my room until my roommate came at lunch time.

(Self-designed)

Future tenses
Production activity one: mechanical drill (focus on form)

Will / Be Going To
1. A: Why are you holding a piece of paper?
B: I (write) a letter to my friends back home in Texas.

2. A: I’m about to fall asleep. I need to wake up!
B: I (get) you a cup of coffee. That will wake you up.

3. A: I can't hear the television!
B: I (turn) it up so you can hear it.

4. We are so excited about our trip next month to France. We (visit) Paris, Nice and Grenoble.

5. Sarah (come) to the party. Oliver (be) there as well.

6. Ted: It is so hot in here!
   Sarah: I (turn) the air-conditioning on.

7. I think he (be) the next President of the United States.

8. After I graduate, I (attend) medical school and become a doctor. I have wanted to be a doctor all my life.

9. A: Excuse me, I need to talk to someone about our hotel room. I am afraid it is simply too small for four people.
   B: That man at the service counter (help) you.
10. As soon as the weather clears up, we (walk) down to the beach and go swimming.
   (Verb Tenses, 2004)

Production activity two: mechanical drill (focus on form)

Write either the future simple or the future continuous tense.

1. I am sure that you (like) our new house.
2. If you (learn) another language you (get) a better job.
3. If you (think) it over you (see) that I am right.
4. Notice: the management (not be) responsible for articles left on the seats.
5. When we reach England it very likely (rain).
6. I'll call for her at eight.
   No, she still have breakfast then.
7. I (wait) for you when you come out.
8. When you next see me I (wear) my new dress.
9. My son will be in the sixth form next year.
   That means that old Dr Adder (teach) him mathematics.
10. You (do) geometry next term.
11. In a hundred year’s time people (go) to Mars for their holiday.
12. I (see) you again.
13. Announcement: Mr Pitt (present) the prizes.
14. You (pay) and I (owe) you the money.
15. Don’t ring her up at 6.00; she (put) the children to bed. Ring later.

(Thomson, A.J. and Martinet, A.V.1980)

Production activity three: mechanical drill (focus on form)

Fill in each blank with the correct words to change each present continuous tense sentence into a future perfect tense sentence:

Eg., I am reading a story: By this time tomorrow, I will have read the story.
1. I am writing a book.
   By this time next month, I _________________________ the book.
2. My mother is making dinner.
   By the time the guests arrive, my mother _________________________ dinner.
3. My sister and I are painting our apartment.
   By this time next week, my sister and I _________________________ our apartment.
4. They are inviting all their friends.
   By you come back, they _________________________ all their friends.
5. She is cleaning the house.
   By the time his parents arrive, she _________________________ the house.

(Self-designed)
B. Put the verbs in brackets into the future perfect tense. Say which actions can be expressed as progressive actions.

1. In a fortnight’s time, we (take) our examination.
2. I (finish) this book tomorrow evening.
3. By the end of next year (be) here twenty-five years.
4. I’ll still be here next summer but Tom (leave)
5. By next winter, they (build) four houses in that field.
6. By this time next year I (save) £250.
7. The train (leave) before we reach the station.
8. By midnight he (be) unconscious for forty-eight hours.
9. By the end of the month 5,000 people (see) this exhibition.
10. By next April I (pay) £3,000 in income tax.

(Thomson, A.J. and Martinet, A.V. 1980)

Production activity one: meaningful drill (focus on form and function)

Write the passage again. Change the verbs so that they tell us what will happen.

I went to the theatre with my friend Reg. Reg and I saw the first performance of a play called ‘The End of the Road’. After the play the producer gave a short speech. He spoke to the audience about the play. The play successful and I think a great many people enjoyed it very much.

(Practice and Progress, 1973, p. 36)

Production activity one: communicative (focus on meaning)

Future plans
2 In pairs, use the prompts 1-6 and the phrases to discuss your future plans. Use these expressions: I’m thinking about … I’m probably going to … I’m not sure yet, but …

1. Learning to drive or buying a new car.
2. Investing in a holiday home to escape to whenever you like.
3. Improving your English.
4. Getting better at one of your current hobbies.
5. Planning a break to somewhere you’ve never visited.
6. Decorating or improving where you live at the moment.

Production activity one: communicative (focus on meaning)
2 In pairs, discuss questions 1-4.
1. How will you be spending your time this evening?
2. How many mobile phone texts or phone calls do you think you’ll have
made by this time tomorrow?
3 Will you be spending much time studying English this weekend?
4 Are there any countries you definitely want to have visited by the time you’re thirty.

Production activity three: input-output cycles

Step1- Read the passage and underline the parts that you feel are particularly necessary for its subsequent reconstruction (Input 1)
Step2- Put the passage away. Reconstruct the passage as accurately as possible (Output 1).
Step 3-Class discussion. Important ideas are written on the black board
Step 4- shown the passage a second time (Input 2) and were directed to underline it as in Step 1. As in step 2, reconstruct the text as accurately as possible on another output sheet(Output 2).

Text for reconstruction task
The simple future
Cycling through Africa
Twenty-nine-year-old French Man Bernard Colso and his dutch wife Geertruida Koop aged 24, are going to set out from Oran on a 30.000 km-trip through Africa on two wheels. After a short stay in Algiers, they intend to travel to Constantine and later head towards El-Oued. From there, they are planning to join Reganne via Timimoun and Adrar. Then they will carry on with their trip to Mali. Their itinerary will lead them to central and East Africa. Up to that point, the journey will have taken over 18 months. The two globe-trotters are thinking of cycling through the Sudan and Egypt before taking the plane to France. Their Journey will last nearly 22 months.
(Adapted form The New Midlines 2003, p.24)
Appendix D

Testing instruments

Listening Comprehension (Interpretation test)

Text

One day, I decided to make a lovely cup of tea. I thought it would be nice to eat some biscuits while I was drinking the tea, so I put some bus kits onto the plate. Sven, by budgie, stood on my shoulder watching me very, very carefully. After that, I went into the lounge and drank my tea. Suddenly Steve, flew, landed on my nose, reached down and bit me very hard on the lips. Arrggh! I shouted and dropped the e-biscuit on the floor. Tea spilled over my shirt. Sven flew away quickly, shouting, ‘’incredible’’. Well, after that I went into the kitchen and washed my shirt under the tap. It was covered in tea. I didn't know, but when I was in the kitchen, Sven very, very, very carefully dropped all of the biscuits into my cup of tea. Finally I came back into the lounge. I was very surprised, I heard a small voice ‘’hello’’. I looked... Sven was standing on the plate, but there were no biscuits. ‘’Oh my God’’, I thought, ‘’He’s eaten all the biscuits’’. I was surprised again when I drank the tea and found that the tea was full of biscuits.

(Teaching with Pictures, eslflow.com.no date)
www.eslflow.com/Picturelessonsandteachingideas.html
Verb Tenses

These verbs will be used in a story that you are going to listen to. Write the past tense form of the verbs.

- drop .................................................. fly ...........................................
- think ............................................... bite ............................................
- see .................................................. wash ......................................
- drink ............................................. put ..........................................  
- land ............................................... spill .........................................

2 Look at these pictures. They illustrate a story you are going to listen to. Guess the order of the pictures.

1. ( ) 2. ( ) 3. ( )

4. ( ) 5. ( ) 6. ( )
Choose the correct verb to match the tense in the (parentheses). Directions: below is a passage from which some verbs have been removed. Read the passage quickly to get its general meaning then go back to the beginning and write the missing words using the verb and the corresponding tense before the blank. If you are not sure of an answer leave the blank and continue on to the next verb. Once you have finished do not go back and change your answer. Example: now I (write) (present simple)... am writing... a letter. I (see) (future simple)... will see... you in the afternoon.

Said always (travel) (present perfect) ____________ a lot. In fact, when he (be) (simple past) ____________ only two years old when he first (fly) (simple past) ____________ to Tunisia. His mother (be) (simple present) ____________ Italian and his father (be) (simple present) ____________ Algerian. Said (be born) (simple past passive) ____________ in France, but his parents (meet) (past perfect) ____________ there for five years. They (meet) (simple past) ____________ one day while Said’s father (read) (past continuous) ____________ a book in the library and his mother (sit) (simple past) ____________ down beside him. Anyway, Said (travel) (simple present) ____________ a lot because his parents also (travel) (simple present) ____________ a lot.

As a matter of fact, Said (visit) (present continuous) ____________ his parents in France at the moment. He (live) (simple present) ____________ in Tunisia now, but (visit) (present perfect continuous) ____________ his parents for the past few weeks. He really (enjoy) (simple present) ____________ living in Tunisia, but he also (love) (simple present) ____________ coming to visit his parents at least once a year.

This year he (fly) (present perfect) ____________ over 50,000 miles for his job. He (work) (present perfect continuous) ____________ for a software company for almost two years now. He (be) (simple present) ____________ pretty sure that he (work) (future continuous) ____________ for them next year as well. His job (require) (simple present) ____________ a lot of travel. In fact, by the end of this year, he (travel) (future perfect) ____________ over 120,000 miles! His next journey (be) (simple future) ____________ going to New Zealand because it is so far. This time he is going to fly from Paris after a meeting with the company’s partner. He (sit) (future perfect continuous) ____________ for over 17 hours by the time he arrives!

Said (talk) (past continuous) ____________ with his parents earlier this evening when his sister (telephone) (simple past) ____________ to let him know that the software company (decided) (past perfect) ____________ to merge with another company in New Zealand. The two companies (negotiate) (past perfect continuous) ____________ for the past month, so it really (not be) (simple past) ____________ much of a surprise. Of course, this (mean) (simple present) ____________ that Said will have to catch the next plane back to Tunisia. He (meet) (future continuous) ____________ with his boss at this time tomorrow.

(Adapted from English Verb Resources by Kenneth Beare, About.com, no date)
Grammaticality Judgement Test

In this test, you will read a number of sentences. We want you to concentrate on how you feel about these sentences. Native speakers of English often have different intuitions about such sentences, and there are no right or wrong answers. We want you to tell us for each one whether you think it is possible or impossible in English. Read each sentence carefully before you answer. If you think a sentence is good, circle G (grammatical) next to it. If you consider it a bad English sentence, circle U (ungrammatical). For each sentence, circle only ONE of the answers (either G or U) to show us what you think of this sentence. If you cannot make a judgement leave the sentence blank. Do not go back and change your answers.

Example: Lucy always watches television after school……G……

1. She is finding her watch. ........................................ ..............
2. He ate a cake for an hour. ........................................ ..............
3. By this time next year I will write three chapters. ........................................ ..............
4. It is developed our knowledge. ........................................ ..............
5. They are living in a rented house. ........................................ ..............
6. He said that there is a ball in the water. ........................................ ..............
7. I will come before he will leave. ........................................ ..............
8. I am getting up at 7 every morning ........................................ ..............
9. She always talk a lot. ........................................ ..............
10. She cannot to come. ........................................ ..............
11. Julius Caesar has expanded the Roman Empire. ........................................ ..............
12. After he will come we will greet him. ........................................ ..............
13. I didn’t see him since I met you. ........................................ ..............
14. I am seeing my lawyer tomorrow. ........................................ ..............
15. Queen Victoria has reigned for sixty-four years. ........................................ ..............
16. It was foggy since early morning. ........................................ ..............
17. They built a house for two weeks. ........................................ ..............
18. He always carried an umbrella. ........................................ ..............
19. Beethoven has written nine symphonies. ........................................ ..............
20. They finished the exam for less than an hour. ........................................ ..............
21. He left early to catch the last train. ........................................ ..............
22. He lived here all his life. ........................................ ..............
23. I have been to the theatre last night. ........................................ ..............
24. We have left three months ago. ........................................ ..............
25. I am knowing you. ........................................ ..............
26. The show starts at 7:30 tonight. ........................................ ..............
27. She is recognizing him. ........................................ ..............
28. Our class was winning the race. ........................................ ..............
29. We have written a letter to the Minister last month. ........................................ ..............
30. Genghis Khan conquered China in the early 13th century. ........................................ ..............
31. They saw that movie last month. ........................................ ..............
32. I am seeing someone through the window ........................................ ..............
33. It has been raining since noon. ........................................ ..............
36. He was in the army for two years.       ........................................
34. The Wright brothers built the first airplane.  ........................................
35. She smelt something burning.          ........................................
36. I have seen him last week.          ........................................
37. It rains tomorrow.         ........................................
38. Napoleon became emperor of France in 1804.  ........................................
40. They assembled the bicycle in three hours.  ........................................
41. Yes, I’m understanding you.          ........................................
42. He always write long letters  ........................................
43. He is looking as if he enjoys himself.  ........................................
44. That sewing machine has been broken for three weeks.  ........................................
45. Larry washed his car this morning.  ........................................

An outline of the various problems tested with illustrative examples:

- **be + infinitive for infinitive**  
  We are live in this house

- **Wrong form after modal verb**  
  She cannot to come

- **infinitive for infinitive+s**  
  She always talk a lot.

- **be + verb + ing for infinitive**  
  I am getting up at 7 every morning.

- **Wrong verb form in adverb clause of time**  
  I will come before he will leave

- **Error in tense sequence**  
  He said that there is a ball in the water.

- **‘Since’ requires perfect**  
  It was foggy since early morning

- **Perfect not appropriate with situation time.**  
  I have seen him last week.

- **Use of simple future tense for future perfect**  
  By this time next year I will write three chapters.

- **Perfect not appropriate when talking about the dead**  
  Shakespeare has written a lot of plays.
Accomplishment verb incompatible with simple duration
   He ate a cake for an hour.

Progressive incompatible with verbs of inert perception
   Yes, I’m understanding you.

Verb not appropriate with progressive(achievement)
   She is recognizing him

Futurate (unexpected future reference) only used for planned events
   It rains tomorrow.

Picture description task
Instructions for the picture description task: You are going to have eight numbered pictures. These pictures tell a story. Based on the pictures learner’s write sentences describing what is shown and tell the story that is suggested. Students were told that they should aim at grammatical accuracy, textual cohesion, and logical sense.

Pictures use in the description task
(From Swain and Lapkin, 2001)
Appendix E

The picture prompt

(from Azar Shrampfer B., 2003)
Appendix F

Model passage

At 6:00 p.m., Bob sat at the table and began to eat. At 6:05, Bob was in the middle of dinner. While Bob was eating his dinner Ann came through the door. She likes Bob a lot and always enjoys her conversations with him.

Before going to bed, Bob prepared everything for the next day. His bedtime is at 10:30 pm. Bob was tired and immediately fell asleep. It’s 11:00. Trr… Trr… Trr… the telephone was ringing and Bob couldn’t answer it. He was sound asleep in his bed. but just another school day In the morning when Bob woke up, got out of bed and prepared to go school. Bob left his house at 8:00 a.m. and began to walk to class. He goes to school on foot because it’s just down the street. While Bob was walking to school, he saw Mrs. Smith. When Bob saw Mrs. Smith, she was standing on her front porch. She was holding a broom. Mrs. Smith waved at Bob when she saw him. He greeted her with a smile on his face and continued on his way. Another school day!

(Adapted from Azar Shampfer B., 2003)
Appendix G

Statistical Tables For Grammaticality Judgement Test

Table 1 GJT (input-only group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>12.7368</td>
<td>1</td>
<td>12.7389</td>
<td>1.15</td>
<td>0.297717</td>
</tr>
<tr>
<td>group variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group var</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjects error</td>
<td>497.8964</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>199.2652</td>
<td>18</td>
<td>11.0702</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>749.8947</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 GJT (input plus output group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>0.5329</td>
<td>1</td>
<td>0.5329</td>
<td>0.02</td>
<td>0.889108</td>
</tr>
<tr>
<td>group variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group var</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjects</td>
<td>518.0921</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>426.0921</td>
<td>18</td>
<td>23.6718</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>944.7171</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistical Tables For Written Gap Fill Production

Table 3 Written gap fill production (input-only group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>4.11</td>
<td>1</td>
<td>4.11</td>
<td>0.23</td>
<td>0.6372</td>
</tr>
<tr>
<td>group variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group var</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjects</td>
<td>448.07</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>320.70</td>
<td>18</td>
<td>17.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>775.8837</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4 Written gap fill production (input plus output group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>4.1118</td>
<td>1</td>
<td>4.1118</td>
<td>0.12</td>
<td>0.7330</td>
</tr>
<tr>
<td>Within group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects</td>
<td>8.317105</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>626.7632</td>
<td>18</td>
<td>34.8202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1462.5855</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistical Tables For Picture Description

Table 5 Picture Description (input-only group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>19.115</td>
<td>1</td>
<td>19.155</td>
<td>1.66</td>
<td>0.003549</td>
</tr>
<tr>
<td>Within group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects</td>
<td>51.2206</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>26.25</td>
<td>16</td>
<td>164.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>96.5956</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 Picture Description (input plus output group): Repeated-measures ANOVA

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>9.5294</td>
<td>1</td>
<td>9.5294</td>
<td>6.3</td>
<td>0.23203</td>
</tr>
<tr>
<td>Within group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Subjects</td>
<td>28.3676</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Error</td>
<td>24.2206</td>
<td>16</td>
<td>1.5138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.117633</td>
<td>333</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix H

**Learners’ linguistic concerns during the initial written production task**

<table>
<thead>
<tr>
<th>N°</th>
<th>Lexis</th>
<th>Form</th>
<th>Mechanics/punctuation</th>
<th>Discourse</th>
<th>Content</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>‘And in his way he saw his neighbour and said Hi’: I don’t know how I say: eg: someone say hi and the other say too hi to greet</td>
<td>‘when he slept the phone start ringing’, What is the past of ring?</td>
<td>‘Homework’ one word or two</td>
<td></td>
<td>What does the second picture discuss?</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>- I wrote ‘It was six o’clock PM Bob had dinner’; I’m not sure if we say have dinner or take dinner, I think it’s not to take dinner the first is better</td>
<td></td>
<td></td>
<td></td>
<td>I could’t express entirely the picture?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ‘It was six and five PM’, I don’t know how to write the time</td>
<td></td>
<td></td>
<td></td>
<td>I don’t know who is the woman in the third picture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- I’m not sure about the preposition for morning I think it should be in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>‘When he saw his voisine’ I don’t know how to write ‘voisine’ in English, perhaps its neboor</td>
<td>--I wrote he started to eat I’m not sure if it is correct may be it should be ‘he started eating’ I don’t know the rule - ‘he go to bed or he went to bed’ I’m not sure, perhaps it should be past</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>I don’t know how I can use the time</td>
<td>- The alarm o’clock ‘rang’ I am not sure that is the past of ring’</td>
<td></td>
<td></td>
<td>In general I don’t write with more detail as the paragraph</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td></td>
<td></td>
<td></td>
<td>- I don’t know how to use sentences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>- I wrote he go to the bed but it is not correct, may be the correct is ‘he went’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>-I can’t find the English word for what was in the hand of the woman so I don’t use it</td>
<td>-I don’t know how to begin paragraph</td>
<td>-I don’t know how to coordinate events</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>-‘Bob was in the dinner room’ I’m not sure that we say dinner room; I don’t find the correct word so I put dinner room</td>
<td>-I wrote :At 10:30 Bob was going to sleep: I’m not sure for the tense may be it’s simple past ‘went’ not past continuous</td>
<td>Bob ate when her mother was entering in the the room: I don’t know if she is her mother</td>
<td>In my paragraph I just wrote what did Bob not where he was, I didn’t give many details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S9</td>
<td>-I have a problem with preposition and ask you to advise me</td>
<td>-I’m not sure if we say ‘Bob was going to finish eating’ - In the morning he waked up (woke up) early. I wrote he waked up early; I think it’s it should be irregular</td>
<td>I don’t know how to combine sentences</td>
<td>I can’t find the fit words to describe my ideas</td>
<td>I can’t talk about all the details</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>-I say took his dinner, I think it’s right</td>
<td></td>
<td>I know what he paragraph is talking but I can’t express</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S11</td>
<td>-I don’t know which tense in ‘At 6:05 he ate his food that founded on the plate’ -I don’t know which tense in ‘He was sleeping till eleven and half the alarm was ringing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S12</td>
<td>-Is saluted correct? I can’t find anothe other word</td>
<td>I wrote Bob at six o’clock took dinner ‘but I’m not sure -I wrote Bob at one past six was taking dinner but I’m not sure -I wrote:::He was finishing her dinner when her mother entered the kitchen I’m not sure if this sentence is correct I don’t know I think it’s correct.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S13</td>
<td>I wrote Bob at six o’clock took dinner ‘but I’m not sure -I wrote Bob at one past six was taking dinner but I’m not sure -I wrote ’taking dinner’ but I’m not sure: ‘Bob at</td>
<td></td>
<td>‘Bob was going to school’ I don’t what picture 7 is describing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>268</strong></td>
<td>six o’clock was taking dinner at two past six and a woman was stand behind him’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S14</strong></td>
<td>- ‘When he was finished eating his mother took the plate.I don’t know if the tense is correct perhaps it is only finished</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S15</strong></td>
<td>I don’t know how to say some words in English</td>
<td>What does the second picture discuss?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S16</strong></td>
<td>I don’t know how to begin the paragraph</td>
<td>I didn’t know how to express past continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S17</strong></td>
<td>I wrote finally but I’m not sure if it’s correct: ‘Finally Justin waved to his mother’</td>
<td>‘he went to sleep at 10:30: I don’t know whether picture is describing the morning or evening because if it’s the morning it would be 22:30 not 10:30</td>
<td>I didn’t write in details</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S18</strong></td>
<td>- I don’t know how to say the tool’ name that his Justin’s mother using mother is using</td>
<td>- I don’t know how to express picture 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S19</strong></td>
<td>How do you express past continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S20</strong></td>
<td>I wrote the word that I don’t know their meaning in English at French</td>
<td>- I don’t know how to say ‘servante’ in English and ‘la table sur laquelle on mange. In English</td>
<td>I really have a miss of vocabulary.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S21</strong></td>
<td></td>
<td></td>
<td>I can’t give the details when he went to sleep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S22</strong></td>
<td>- I don’t know the the lady of housework</td>
<td>- I saw Bob going to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S23</td>
<td>-I don't know if he is correct. spelling for 'neibour'</td>
<td></td>
<td></td>
<td>school on foot but I don't know why</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S24</td>
<td>John at six o'clock came to his home I don't know if its correct He woke up and said to his Grandmother hello I don't know if its correct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| S25 | -I have problems with prepositions
- I don't know to say the tool name
I'm not sure if it is correct. I wrote: he was slept at 10:30. 'perhaps it should be slept |   | I see Bob going on foot in picture 7 I don't know where? |
| S26 | -I don't know which step of education he is. |   |   |   |
| S27 | -I don't know how to say greeting in ' an old man who wave to hi and did too'
- I don't know the spelling of the verbs |   | I don't know if it is morning or night in the picture. |
| S28 | I have some problems to give the right tense like the verb to 'ring': the difference between simple past and past continuous: he couldn't hear the ring of the phone
-I have some vocabulary problem: toock up his breakfast toock or took: |   | -I don't find the right expressions to describe the action of Mrs Smith (picture 7) |
| S29 | I don't know how to say the time |   |   | I don't know how to say well my ideas in English |
| S30 | I don’t know how to describe the last picture |
| S31 | I can’t find the words to describe my ideas. | I don’t write all things and exactly things |
| S32 | I don’t know how to say the tool’s name | The phone was ringing at 11:30. I used the past continuous but I don’t know if it is true |
| S33 | I don’t know how to describe the end | Next at 10:30 he went to sleep. I wrote next but I’m not sure | I don’t know what picture 5 is describing |
## Appendix I

### Noticing during the comparison stage

<table>
<thead>
<tr>
<th>Participant</th>
<th>Note taking episodes</th>
<th>Category</th>
<th>Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>-Instead of Ann I wrote his mother then his mother asked him if he finished dinner</td>
<td>C</td>
<td>-When it was 6:10 came Ann through the door</td>
</tr>
<tr>
<td>S2</td>
<td>-Instead of 6 : 00 pm, I wrote the time in letters</td>
<td>L, C</td>
<td>-He sat at the table before the dinner at 6 : 00 pm</td>
</tr>
<tr>
<td></td>
<td>I think it should be better don’t mention the woman who came through the door</td>
<td>C</td>
<td>-it was 6 : 00 pm, when Ann came through the door</td>
</tr>
<tr>
<td></td>
<td>I intended to say tha he didn’t answer the phone but I thought it wasn’t necessary</td>
<td>C</td>
<td>-He was still sleeping when the telephone rang at 11:30 but he could’nt answer it</td>
</tr>
<tr>
<td></td>
<td>I couldn’t express entirely the picture 7</td>
<td>C</td>
<td>-It was morning he went to school</td>
</tr>
<tr>
<td></td>
<td>I should have said the time when he went to school but it was not on the picture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>-I wrote when :Bob was eating but in the model text says ‘Bob was in the middle of dinner</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-I wrote he started to eat and I’m not if it I correct. I don’t know the rule maybe the correct is one is ‘started eating’</td>
<td>G</td>
<td>-Bob was in the middle of dinner</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>-I should have said Bob sat at the table but I don’t write like this (the boy arrived from school then at 6:00 of afternoon he took diner’)</td>
<td>C</td>
<td>-Bob was home again. He sat at that table and began to eat</td>
</tr>
<tr>
<td></td>
<td>-Simply I said then he went to sleep at 10:30</td>
<td>C</td>
<td>-the next day he was very tired so he went to sleep directly</td>
</tr>
<tr>
<td>S5</td>
<td>-Failed to complete the comparison task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>-I wrote: when he was still eating - the model text put ‘when he was in the middle of dinner’</td>
<td>C, G</td>
<td>- ‘when he was in the middle of dinner’</td>
</tr>
<tr>
<td>S7</td>
<td>-Instead of ‘At 10:30 I wrote ‘It was 10:30’ -I could’nt express the actions that Bob made it before sleep but the model text put. ‘He prepared everything before going to bed’</td>
<td>L</td>
<td>-‘At 10:30 he went to bed -left unresolved</td>
</tr>
<tr>
<td></td>
<td>-I intended to say :while Bob was walking to school he met Mrs Smith but I couldn’t imagine it</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>I wrote’at 10:30 Bob was going to sleep;Bob slept at 11 o’clock’</td>
<td>G</td>
<td>‘At 10:30 he was going to sleep then at 11:00, Bob slept’</td>
</tr>
<tr>
<td>S9</td>
<td>-I wrote waked up but the correct one is woke -I couldn’t describe the action of Bob and the woman.</td>
<td>G</td>
<td>-In the morning he woke up early</td>
</tr>
<tr>
<td>S10</td>
<td>I wrote :Bob when he came from school he took his dinner ; I think its grammatically wrong</td>
<td>C</td>
<td>-Bob was home again. At 6:00 he sat at the table</td>
</tr>
<tr>
<td>S11</td>
<td>I wrote Bob brought his dinner at 6:00 I say :at 6:05 he ate his dinner that founded on the table I think :after he finished , his mother came to take the plate should be……… I say :he was sleeping till eleven and a half that the alarm was rining</td>
<td>C</td>
<td>-At 6 P.M.Bob sat at the table and began to eat -left unresolved</td>
</tr>
<tr>
<td>S12</td>
<td>-Instead I wrote ‘Bob came back home’;, Bob start to eat’ -I did not describe what was Mrs Smith holding -I did not think he was going to school that’s why I did not describe it -I intended to say ‘wave at’ but I said ‘saluted’.</td>
<td>C</td>
<td>-Bob was home again.He sat at the table and started eating at 6 o’clock. -left unresolved</td>
</tr>
<tr>
<td>S13</td>
<td>-Instead of began to eat I wrote ‘took his dinner’ -Bob at one past six was taking dinner - Instead of ‘was eating his eating his dinner’ I wrote ‘was taking his dinner - Instead of fell into a deep sleep I wrote ‘was sleeping’ - Instead of telephone ‘rang’ I wrote ‘ring’</td>
<td>C</td>
<td>-At 06:00 He sat at the table and began to eat his dinner C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
| Instead of Bob woke up I wrote Bob was going to school | -While he was sleeping at 11:30 his telephone rang  
- The morning Bob woke up |   |
| S14 | In my paragraph I wrote’ when he was finished eating his mother took the plate’ but normally it is: - ‘While Bob was eating his dinner Ann came through the door’  
- I wrote ‘he go to bed at 10:30 but normally it is: - ‘While Bob was sleeping the telephone rang’  
- I wrote ‘in the morning the alarm was raning at 11:30 the reality is- ‘While Bob was sleeping the telephone rang’  
- I wrote’finally Bob get up and went to his work’ but in the model paragraph: ‘In the morning at 8:00 Bob woke up he goes to school on foot’ | C  
- ‘While Bob was eating his dinner Ann came through the door’  
- ‘Bob went to bed at 10:30  
- ‘While Bob was sleeping the telephone rang’  
- ‘In the morning at 8:00 Bob woke up he goes school on foot’  
- ‘While Bob was sleeping the telephone rang’  
- ‘In the morning at 8:00 Bob woke up he goes school on foot’ |
| S15 | - Failed to complete the task |   |
| S16 | - Failed to complete the task |   |
| S17 | - Instead of Bob I wrote Justin  
- I didn’t think that there is much difference between my paragraph this one just in some detail like: Bob went to school on foot because school is just down the street.  
- I intended to say Mrs Smith….. but I didn’t because I didn’t know the tool’s name and I thought that Mrs Smith is his mother | C  
Bob usually goes to school on foot because it’s near to his house  
L  
- At 8:00 Bob went to school he waved to Mrs Smith when she was in front of the door holding a broom |
| S18 | Failed to complete the task |   |
| S19 | - I wrote the time of Bob that come back home | C  
- At 06:00 Bob was home again |
| S20 | - Failed to complete the task |   |
| S21 | Instead of he sat at the table and began to eat I wrote he was eating dinner | C | ‘he sat at the table and began to eat’ |
|     | -I didn’t know that there was Mrs Smith I depend on my ideas in the end of paragraph: Bob get up, he said hellow to his mother | C | -Bob went to school and said hellow to his mother |
| S22 | - Failed to complete the task |
| S23 | - Failed to complete the task |
| S24 | -I didn’t how to express broom | L | -He take her broom and Bob smiled with her and he smiled with her |
| S25 | I my paragarph I think I talk about the pictur generally the model text they talk abut the picture exactly I couldn’t say woke up I put get up but the model text put woke up | C | -He woke up very late |
| S26 | - Failed to complete the task |
| S27 | - Failed to complete the task |
| S28 | -- Failed to complete the task |
| S29 | -I think I have the same idea with the model text but the problem is with the expression |
| S30 | -Instead of writing ‘Bob was home again’ I wrote simply ‘Bob was home.’ -I wanted to say Bob went to bed but I didn’t have the idea at that time. -I intended to say ‘He was going to school on foot its just down the street’ but I couldn’t express it. -I thought I should say : He found his neibour in my paragraph -I think it should be a short paragraph because the model is very long |
|     | C | -Bob was home again |
|     | C | -Bob went to bed because he felt sleepy |
|     | C | -When he was going to school, he met Mrs Smith holding a broom |
| S31 | I said : ‘Bob comes at home’ -I said : He started his dinner and finished at 6:15, at 10:30 he went to sleep -I didn’t write sat at the table, Ann came through the door -‘I don’t write the final of the paragraph’ |
|     | C | -Bob was home again |
|     | C | -At he took his dinner and he finished at 6:15 when Ann came |
|     | D | |
| S32 | -I should have written Ann came through the door but I forgot to write it: -At 6:05, Bob started eating -I think I should write Bob went to school on foot | C | -At 6:05 he sat at the table, when he was eating Ann came through the door |
|     | C | -In the morning he went to school on foot |
foot and he went to school
-I couldn’t write Mrs Smith because these pictures did not express it and he said bye bye to his mother

| S33 | At picture 3 I think the woman is her mother  
:and her mother came to cleaned the table’  
At picture 4 I couldn’t know that Bob was tired | C | C | -While he was eating Ann came and she always discuss with him  
-Bob went to the bedroom to sleep because he was tired | 

Key: C=content, G=grammar, L=lexis