The Role of Explicit Knowledge, Noticing, and Attention in L2 Writing and Error Correction: Quantitative and Qualitative Analyses

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ABSTRACT
This study attempted to find answers for the following questions: (1) Are students' errors in grammatical structures, as they will appear in their written output, due to deficiency in their conscious grammar rules, or to deficiency in their abilities to transfer this knowledge (if it exists) to other language tasks such as writing compositions in English?, and (2) Can conscious rules of grammar guide students' performance in monitoring (self-correcting) their written output once their attention is drawn to an error?. The subjects of this study consisted of fifteen foreign students enrolled in the advanced level of the English Language Institute at the University of Pittsburgh. The instruments of this study were (1) questionnaire; (2) free composition; (3) unfocused correction and focused correction tasks; and (4) interviews. The results of this study demonstrate, among other things, that deficiency in the subjects' knowledge of grammar results in accurate composition writing and unsuccessful correction of errors, even if their attention is drawn to their errors.

Keywords: L₂ writing; correction tasks; transfer of knowledge; attention.
INTRODUCTION

Recent research in second language acquisition has been characterized by continuous efforts to construct theoretical models of learning and in so doing to explain the function of explicit, formally acquired knowledge of the target language (Brown, 2009). In reviewing the literature, I will focus, first, on the following three positions about the function of this knowledge: (1) the non-interface position, (2) the interface position, and (3) the variability position. Each of these positions is relevant to the issue under investigation. It should be emphasized, however, that none of them would qualify as a theory in the strict sense of the word. Instead, each emphasizes certain concepts that are pertinent to the present study (See Loewen et al., 2009; Cook, 2011).

THREE POSITIONS ABOUT THE FUNCTION OF EXPLICIT KNOWLEDGE

The Non-Interface Position

The non-interface position has been advanced most strongly by Krashen (1982). Krashen's theory has been described by McLaughlin (1978: 19) as "the most ambitious theory of the second language learning process"). Spolsky (1989) also maintains that "Krashen's Monitor Model, with all its fundamental weaknesses, makes the best attempt at a comprehensive theory accounting for current research in second language learning". Krashen identifies two types of linguistic knowledge in Second language Acquisition (SLA): (1) acquisition, and (2) learning. He argues that acquired knowledge and learned knowledge are entirely separate and unrelated. In particular, he disputes the view that "learned" knowledge is converted into "acquired" knowledge. Krashen (1982: 83-84) puts it this way: "A very important point that....needs to be stated is that learning does not 'turn into' acquisition. The idea that we first learn a new rule, and eventually, through practice, acquire it, is widespread and may seem to some people to be intuitively obvious... Language acquisition happens in one way, when the acquirer understands input containing a structure that the acquirer is 'due' to acquire, a structure at his or her 'i + 1'. In his discussion of the 'non-interface' position, Ellis (1984) notices that it runs counter to the traditional assumption of language teaching and also to the intuitions of countless language teachers. That is, teachers distinguish "skill-getting" and "skill-using" on the grounds that the former should come before the latter, particularly with adults. In fact, although Krashen does acknowledge that sometimes a rule can be 'learned' before it is 'acquired', he argues that this does not establish that 'learning' is a prerequisite of 'acquisition'. In Krashen's view, having learned a rule does not preclude having to acquire it later on. Since learned knowledge cannot be converted into acquired knowledge, consciousness-raising and formal practice have only a minor role to play in Second Language Development (SLD). Krashen (1982: 112) claims that: "The use of the conscious grammar is limited. Not everyone monitors. Those who do only monitor some of the time and use the Monitor for only a sub-part of the grammar...the effect of self-correction on accuracy is modest. Second language performers can typically self-correct only a small percentage of their errors, even when deliberately focused on form...and even when we only consider the easiest aspects of grammar". According to Krashen's Monitor hypothesis, learning has only one function, and that is as a Monitor or editor and that learning comes into play only to make changes in the form of our utterances, after it has been produced by the acquired system. Krashen suggests that second-language performers can use conscious rules only when three conditions are met. Those conditions are necessary and not sufficient, that is, a performer may not fully utilize his conscious grammar even when all three conditions are met. These conditions are (1) sufficient time; (2) focus on form; and (3) knowing the rule. Krashen further suggests that some of the individual variation we see in adults second-language acquisition and performance can be accounted for in terms of differential use of the conscious Monitor. In this regard, learners can be either (1) Monitor users; (2) Monitor under-users; or (3) optimal Monitor users. Similarly, Bialystok (1978: 78) maintained that "the monitoring strategy operates by bringing information from explicit linguistic knowledge to the language task for the purpose of examining or correcting the response". She also maintained that "monitoring is maximally effective for shaping up the formal aspects of productive response, that is, it is primarily a formal production strategy" (p.78). Elsewhere, Bialystok (1981) suggests that [monitoring] is not restricted to speaking situations. Any language response, including comprehension, may be monitored by reflection upon the formal aspects of the message and concern with its structure. The explicit, formal knowledge that the language learner has obtained may be used in any language encounter to improve the quality of the language (Saddler and Graham, 2005; Andrews and Torgerson, 2006; DeKeyser, 2003).

The Interface Position

The interface position has two forms; one is called the weak version, and the other is the strong one. The weak interface position was proposed by Seliger (1979). Seliger's subjects were twenty-nine monolingual English-speaking children, eleven bilingual children, and fifteen adult ESL learners. The subjects were asked to perform a language task which required the use of the indefinite article. After the task, the subjects were asked to explain their performance. Seliger found no relationship between his subjects' ability to state the rule and their performance. Seliger suggests that different learners end up with different representations of the rules they have been taught and, in turn, these rules do not describe the internal knowledge that is called upon in natural communication. These rules, according to Seliger, act as "acquisition facilitators" by focusing the learners' attention on "critical attributes of the real language concept that must be induced. That is, conscious or pedagogical rules make the inductive hypothesis testing process more efficient" (p.368). Seliger, however, does not propose that "learned" knowledge or pedagogical rules are converted into internalized knowledge. The major problem with Seliger's study is that he did not submit his data to statistical analysis and, therefore, his results should be treated with a great deal of caution.

Another study on the relationship between conscious knowledge of grammar and ESL learners' performance was conducted by Furey (1987). In her study on advanced ESL learners' explicit rule knowledge of five English grammar patterns and their performance on a grammar production task, she investigated how explicit linguistic knowledge and
learner’ performance are associated. Furey found that the subjects with explicit rule knowledge did not perform better on the grammar production task than those without such knowledge. Furey's (1987: iv) conclusion was as follows: “while it appears that for advanced-level students explicit rule knowledge does not contribute to performance, we cannot conclude that knowledge does not play a role in learning grammar at earlier stages of instruction”. On the other hand, the strong interface position is advocated by Stevick (1980), Bialystok (1979, 1981), Bialystok and Frohlich (1977), McLaughlin (1978) and Sharwood-Smith (1981), among others. First, Stevick (1980) develops a model of SLA called “Levertov Machine” which allows for a flow of knowledge from “learning” to “acquisition” and vice versa. Although Stevick sees “acquisition” as the product of communicative experience, he argues that there is a possibility that “learning” can become “acquisition”. Second, Bialystok (1978: 72) proposes a model to deal with differences in skill developed. Specifically, she postulates three hypothetical constructs: First, Explicit Language Knowledge, which contains “all the conscious facts the learner has about the language and the criterion for admission to this category is the ability to articulate these facts”; second, Implicit Language Knowledge which refers to the intuitive information upon which the language learner operates in order to produce responses and third, Other Knowledge which may include knowledge of the native language and of other languages, knowledge of the world, etc. In fact, Bialystok’s model constitutes a theoretical base for Sharwood-Smith’s (1981) model which has been developed as a full interface model to account for the role of formal instruction in SLA. According to this model, the learner can produce L2 output in three different ways: (1) just using implicit knowledge; (2) using just explicit knowledge, and (3) using both explicit and implicit knowledge. As Ellis (1986: 236) explains, “it follows from this model that performance that is planned entirely or partly on the basis of explicit knowledge which is lacking in automaticity can provide feedback into implicit knowledge; if this happens often enough (i.e. through practice), the explicit knowledge can become fully automated as part of implicit knowledge” (See Bitchener, 2008; Ellis, N., 2005).

In another study Bialystok (1979) applied her model to judgment grammaticality and showed that one can make a judgement about grammaticality either on the basis of knowledge of rules or on the basis of intuition. Thus, the task of judging grammatically is one that does not necessarily bias towards implicit or explicit knowledge. To develop her theoretical model, Bialystok (1981) transforms her earlier ‘distinction between “Explicit” and “Implicit” into a distinction between analyzed and unanalyzed knowledge, and adds to this the distinction between automatic and non-automatic to give a four-way matrix of kinds of second language. (See Dekeyser, 2005):

Third, the idea of "automaticity" has been previously discussed by McLaughlin (1978). In his attack on Krashen's distinction between learning and acquisition, McLaughlin suggests another distinction which is "more empirically based and tied into a general theory of human information processing" (p.318). This is a distinction between "controlled" and "automatic" processing. According to McLaughlin (1978), "the advantage of this distinction is that it enables one to avoid disputes about "conscious" or "subconscious" experience, since the controlled-automatic distinction is based on behavioral acts, not on inner states of consciousness" (p.318). Controlled processing requires active attention, so that only a limited number of features can be controlled at a time without interference occurring. Automatic processing takes place without active control or attention. According to McLaughlin, "automatic processes are learned following the earlier use of controlled processes" (p.319). Therefore, SLA entails going from the controlled to the automatic mode of operation, and it is not necessary to presuppose two unconnected knowledge types such as the "acquired/learned" distinction. In another study, McLaughlin et al. (1983) point out that communication in a second language is a complex process involving the coordination and integration of a number of different skills. The problem lies in the fact that information processing requires a great amount of attention, but human beings are limited-capacity processors. Therefore, human beings can allocate much attention only to one task. According to McLaughlin et al., explicit abstract knowledge of linguistic structure can help adult learners process language by creating a shortcut in the learning process. It also saves them the trouble of creating false hypotheses (See Dabagh and Tavakoli, 2008). One of the studies that have been undertaken to examine the relationship between explicit linguistic knowledge and learners' performance from an information processing perspective is Hulstijn and Hulstijn's (1984) study on 32 adult learners of Dutch as L2. This study demonstrated that learners with explicit knowledge generally applied rules better than the learners without such knowledge. Regarding the value of attention, the study showed that "learners without explicit rule knowledge gained just as much from focus on form and absence of time pressure as learners with such explicit knowledge" (p.41).

The Variability Position

The variability position emphasized the interrelationship between use and acquisition. That is, the kind of language use that the learner engages in determines the kind of knowledge that he acquires. One of the attempts to account for the learner's variable control of the L2 system has been made by Bialystok (1984). She distinguishes two continua involving an analyzed factor and a control factor. The analyzed factor, according to Bialystok (1984), refers to the extent to which the learner is able to represent the structure of knowledge along with its content. The control factor refers to the relative ease of access that the learner has to different items of linguistic knowledge; it relates to automaticity. Bialystok makes two basic points: (1) different tasks require different types of knowledge, and (2) different kinds of learners can be identified according to which kind of knowledge they possess (Bitchener et al., 2005).

INSIGHTS FROM COGNITIVE PSYCHOLOGY: THE NOTICING HYPOTHESIS, AND ATTENTION

Over the past two decades, researchers in the field of second language acquisition (SLA) have become increasingly interested in concepts traditionally associated with cognitive psychology. N. Ellis (2002: 299) points out, "We are now at a stage at which there are important connections between SLA theory and the neuroscience of learning and memory". The concept of attention has become especially important because of its crucial role in so many aspects of SLA theory such as
input, processing, development, variation, and instruction. In this regard, R. Ellis (1994: 10) points out that “Schmidt is one of the few linguists who have adopted the conceptual and experimental rigours of experimental psychology in answering questions concerning the role of consciousness in L2 acquisition”. Much of Schmidt’s work (1990a,b; 1992; 1993 a,b; 1994 a,b; 1995 a,b; 2001) ties findings from cognitive psychology into SLA theory. Reviewing the psychological literature on consciousness has led Schmidt to propose the Noticing Hypothesis, which states that “noticing is the necessary and sufficient condition for converting input into intake” (1990: 129). Since then, a considerable amount of research has addressed the issue of noticing in SLA (Brown, 2009; Hoey, 2007; Stubbs, 2007).

Based on reviews of relevant L1 literature and L2 work, Schmidt (1990a, 1990b) argues that forms that are not noticed in the first, lower level sense (i.e., not consciously perceived), do not contribute to learning. That is, there is no such thing as subliminal language learning. He accepts that implicit language learning probably occurs (i.e., learning by noticing forms without understanding the rule or principle involved) but thinks that understanding those rules is highly facilitative in cases where straightforward ones can be formulated. Similar views on the importance of attention, noticing, and ‘mental effort’ in L2 acquisition are expressed in Gass, 1988; Hulstijn, 1989, Schmidt, 1993, 1994; Watanabe, 1992; and Larsen et al., 2007). On this account, failure to learn is due either to insufficient exposure or to failure to notice the items in question, even if exposure occurred and the learner was attending. A learner could attend carefully to a lecture in an L2 and still fail to notice a particular linguistic item in it. This is the opposite position to that taken by Krashen (e.g., 1985, 1989), VanPatten (1988), and others, who have denied there is any evidence of beneficial effects of a focus on form, at least in the early stages of language learning. Krashen has claimed that adults can best learn an L2 like children learn an L1, subconsciously (i.e., incidentally, without intention, while doing something else) and implicitly (via subconsciously abstraction of patterns from input data), while attending to something else (meaning). Attention to (and understanding or awareness of) linguistic forms is supposedly neither necessary nor beneficial. Schmidt’s (1991: 218) claim about the necessity of noticing does not refer to higher level understanding or awareness of language: “I use noticing to mean registering the simple occurrence of some event, whereas understanding implies recognition of a general principle, rule, or pattern. For example, a second language learner might simply notice that a native speaker used a particular form of address on a particular occasion, or at a deeper level the learner might understand the significance of such a form, realizing that the form was used appropriate because of status differences between speaker and hearer. Noticing is crucially related to the question of what linguistic material is stored in memory … understanding relates to questions concerning how that material is organized into a linguistic system” (See Chan, 2010; Kimberly, 2009).

According to Schmidt (1994: 179) noticing refers to the “registration [detection] of the occurrence of a stimulus event in conscious awareness and subsequent storage in long term memory…” Schmidt is careful to distinguish noticing from understanding, which he defines as “recognition of a general principle, rule or pattern” (1995: 29). Understanding represents a deeper level of awareness than noticing which is limited to “elements of the surface structure of utterances in the input” rather than underlying rules (Schmidt, 2001: 5). Tomlin and Villa (1994) suggest that there are four conceptions of attention in SLA. One is that of attention as a limited capacity system. The idea being that the brain may be presented (through the sensory system) with an overwhelming number of stimuli at any given time, and it seems impossible to process them all. The limitations of attention refer not only to the amount (or duration) of attention that may be given to a single stimulus but also to the number of stimuli that may be attended to simultaneously. This leads to a second conception of attention, namely that it constitutes a process of selection. The overwhelming amounts of incoming stimuli force the attentional system to be selective. The third conception of attention, involves controlled rather than automatic processing of information. The underlying assumption here is that some tasks require more processing effort, and hence a higher degree of attention, than others. A person may therefore perform two tasks at the same time, especially if one requires automatic processing (low attention). By the same token, it is more difficult to perform two tasks if both require controlled processing (high attention). The fact that controlled processing of two simultaneous tasks is sometimes possible led researchers to develop a fourth conception of attention, which is that it must involve a process of coordination among competing stimuli and responses. In this process, attention must be established, maintained, discontinued, and redirected in order to perform different actions. Some support for Schmidt’s position lies in Bardovi-Harlig’s (1987) finding that the typologically marked preposition-stranding construction in English is acquired earlier than unmarked pied-piping, even by learners whose L1 only allows pied-piping. Bardovi-Harlig suggests that the frequency of preposition-stranding in English makes it salient and draws learners’ attention to it. Also consistent are the results of experimental studies comparing learning of new L2 vocabulary and morpho-syntax by learners whose attention is partly manipulated by the researcher onto or away from the target items. In general (but not always), superior learning is seen in subjects whose attention researchers attempt to focus on the items during performance of a task using such devices as prior instructions to attend to both form and meaning (Hulstijn, 1989), showing them rules applied to examples in order to structure the input (N. Ellis, 1993), multiple choice margin glosses (Hulstijn, 1992; Watanabe, 1992), highlighting and capitalization (Doughty, 1991), and other forms of what is referred to as “input enhancement” (Sharwood Smith, 1991, 1993). Finally, especially relevant is a study by Alalen (1992) which although failing to find an advantage for input enhancement, nevertheless produced strongly supportive evidence for the claimed importance of noticing. Alalen compared the learning through reading of locative suffixes and a phonological phenomenon, consonant gradation, in Finnish by 36 English speakers under one of four conditions: input enhancement (italicization), rule, rule and enhance, and control. Subjects described their thoughts as they went along in a taped think-aloud procedure. Across all four groups, the think-aloud protocols showed that subjects’ performance on subsequent unexpected tests of the target items was greatly influenced by attentional focus and reported noticing during the two learning tasks, with learners who reported that they paid attention to the target forms generally having acquired them, regardless of the treatment they had received, and no learners having acquired the targets without having noticed them (Ritchie and Bhatia, 1996; Bitchener & Knoch, 2008).
One of the most influential attentional studies in SLA was conducted by VanPatten (1990), who investigated the notion of attention as a limited resource. More specifically, the study examined whether learners were able to consciously attend to both form and meaning when processing input. Results showed that the ‘content only and lexical groups’ significantly outperformed ‘the form and morphology groups’. This led VanPatten to conclude that it was difficult, especially for beginners, to notice content and form at the same time. Moreover, he postulated that learners would notice meaning before form, since their primary objective is to understand the prepositional content of utterances. VanPatten’s findings have led SLA researchers to try and find ways to help learners focus on both form and meaning. One such way is input enhancement, which refers to the manipulation of certain aspects of the input (e.g., form) to make them more salient and thereby more noticeable to learners (Sharwood Smith, 1993). Stronger evidence for the facilitative role of noticing comes from a study by Jourdenais, et al. (1995). Results showed that the Enhanced group used the target structure more often than the Unenhanced group on both the think-aloud protocols and the written production task, suggesting that input enhancement made the target forms more noticeable. Moreover, subsequent production by the Enhanced group was more target-like than the Unenhanced group, suggesting that noticing facilitated acquisition. A more innovative experimental design by Leow (1997, 2000, 2001) provides further evidence for the facilitative role of awareness in SLA. Leow (1997) used a crossword puzzle task as input that was designed to initially induce learner error. Eventual clues in the puzzle provided learners with the correct form, thereby increasing their chances of noticing the mismatch. Similar results were found in a subsequent study (Leow 2000). Results showed that participants who displayed evidence of awareness performed better on the post-exposure tasks than those classified as unaware. In a similar experimental design, Rosa and O’Neill (1999) investigated the role of awareness in acquiring syntactic structures. Among other things, the study found that awareness seemed to increase learners’ ability to recognize the syntactic structures on the post-test. There was also a strong correlation between awareness and intake. Leow’s explanation seems to support VanPatten’s (1990) findings that attention to both form and meaning is difficult. However, the modality of the input in this case (written) differed front that in VanPatten’s study (aural). The question, then, would be “Could modality differentially affect attention to meaning and form?” Wang (2004) tried to address this question with a partial replication of VanPatten (1990). His variations included the addition of a written mode of input and using English (instead of Spanish). Findings for the aural input mirrored those of VanPatten, since there was a significant decrease in performance when participants had to attend to both content and form. However, no significant difference was found when the input was written (which incidentally took less time to read than the aural input). Moreover, when processing both form and meaning, the listening task proved more difficult than the written task, suggesting once again that different modalities may impose different attentional demands (Firth and Wagner, 2007). To conclude, the noticing hypothesis has served to generate important theoretical and empirical debates in SLA. It has also provided an opportunity to integrate useful concepts from cognitive psychology into SLA theory.

To conclude, reviewing the role of conscious knowledge of grammar in second language learning and L2 learners' performance has shown the following: (1) The issue of the relationship between conscious knowledge of grammar and the accuracy of the written production of advanced language learners is worth investigating. This issue is of special importance to both second language pedagogy and theory. (2) Although the literature is replete with a lot of studies that deal with various aspects of L2 learning, there has been little empirical research that directly investigates the relationship between explicit knowledge of grammar and L2 learners’ written production. This study, therefore, is a modest contribution to the empirical research in applied linguistics.

**METHODOLOGY**

Fifteen subjects participated in this study. They were from a variety of language backgrounds. There were nine females and six males. Two subjects were under twenty years of age. Seven subjects were between twenty and twenty-five years of age. Six subjects were over twenty-five years of age. Three subjects had studied English in their home countries for more than eight years. One subject had studied English in her home country for exactly eight years, three for seven years, six for six years, one for four years, and one for five years. Only four subjects indicated that their previous English classes gave the most attention to writing. Emphasis on grammar was mentioned as the core of most subjects’ previous English classes. None of the subjects had ever been in an English-speaking environment before coming to the U.S.A. Twelve had been in the U.S.A. for less than one year. Three had been in the U.S.A. for more than a year, one of them for more than sixteen years. The subjects were from Japan (N=5); Taiwan (N=4); Malaysia (N=1); Turkey (N=1); Indonesia (N=1); Brazil (N=1); Saudi Arabia (N=1) and Korea (N=1).

The instruments of this study consisted of four tasks. First, a questionnaire was constructed to elicit information from each subject about his/her name, country, sex, age, linguistic background, and the extent of his/her exposure to the English language. Each subject was also asked to pinpoint the most difficult areas of grammar that always troubled him/her when he/she wrote in English (see Appendix 1). Second, the subjects were asked to write an essay of about two hundred words. The topic was “The Value of Learning English.” It was chosen because it was related to students’ interest and not technical. In order to keep the classroom’s atmosphere as natural as possible, students’ regular teachers assigned this task as if it were a regular class assignment. Written instructions were given to the students before they wrote. To guarantee that every student knew what he/she should do, teachers read the instructions and asked students to feel free to ask questions if they did not understand. Specifically, students’ attention was drawn to the necessity of concentrating on both form and meaning. The time allowed was forty minutes (see Appendix 2). Third, focused/unfocused correction tasks were used. The basis of these two tasks was the morphosyntactic errors that appeared in each student’s essay. In an unfocused correction task, all sentences with morphosyntactic errors were provided. Each sentence contained one or more errors from the individual’s essay. Each student was told that there were grammatical errors in the sentence and was asked to correct them. Written instructions were given to each student. The time allowed for this task was fifteen minutes.
Having done this task, students were given written instructions on how to work on the “focused correction task” (see Appendix 4). In the focused correction task the same sentences from the student’s essay were presented. This time, the students’ attention was drawn to the specific errors (i.e., the errors were underlined). Before students started to work on this task, their regular teacher explained the written instructions clearly and slowly. Students were asked to correct the errors that appeared in each sentence (see Appendix 4). Fourth, each student was interviewed to explain his/her performance in the essay, the unfocused correction task and the focused correction task. I interviewed the students individually. Conducting the interview, with each subject took about twenty to thirty minutes. Every subject had the opportunity to choose the time of the interview. During the interview, students were asked to explain why changes were made and were probed to clarify as often as necessary. No feedback on the correctness of the changes was given before the end of the interview. Students’ explanations were tape-recorded, and transcribed.

The data analysis had a quantitative and a qualitative, interpretative part. The quantitative part consisted of a statistical comparison of the number of errors in the composition, unfocused correction and focused correction tasks (by means of one-way ANOVA). First, the number of students’ errors in the essay, unfocused correction and focused correction tasks was calculated. Students’ errors in the unfocused correction task were counted as either remaining ones that were previously made in the essay (and never corrected), or new errors. Similarly, students’ errors in the focused correction task were categorized as either remaining, or new errors. Second, the frequency distributions and descriptive statistics for students’ errors in the essay, unfocused correction and focused correction tasks, were made (see Appendix 5). The qualitative part was an analysis of each student’s conception of the grammatical rules that were violated in order to explain any discrepancies between their performances in the tasks. This analysis was inductive, based entirely on the individual’s explanations, and aimed at accounting for the differences between the tasks.

RESULTS

Summary Statistics

The statistical analyses indicate that the condition (essay, unfocused correction, focused correction) affected the number of errors made by students. Students made the most errors in the essay, the fewest errors in the focused correction task. The mean number of errors in the essay is 14.2 with a standard deviation of 6.5. The mean number of errors in the unfocused correction task is 7.6 with a standard deviation of 2.9, while the mean number of errors in the focused correction task is 4.2 with a standard deviation of 3.1. (See Table 1 and Appendix 5, Tables 2-8).

QUALITATIVE ANALYSIS

Subject (1)

Subject (1) is a female student from Taiwan. She studied English in her country for almost seven years. Her previous English classes put a lot of emphasis on grammar, reading vocabulary and writing. She had never been in an English speaking environment before coming to the United States. She had come to the U.S.A. four months before the study was conducted. She indicated that the major area of English grammar that always troubled her was modals. In writing, vocabulary is her biggest problem. An evaluation of her essay shows that she tended not to use modals in her writing and, accordingly, her essay is void of any errors in English modals. This strategy was previously observed by Schachter (1974: 212). Specifically, Schachter suggested that “the learner apparently constructs hypotheses about the target language based on knowledge he already has about his own language. If the constructions are similar in the learner’s mind, he will transfer his native language strategy to the target language. If they are radically different, he will either reject the new construction or use it only with extreme caution”. Schachter’s Chinese and Japanese subjects had difficulty with relative clauses and therefore avoided them. This is probably the case with Subject (1) and English modals. As a whole, Subject (1) made eight morphosyntactic errors in the essay. These errors were in tenses, articles, prepositions and the distinction between “among” and “between”. In the unfocused correction task, she made seven morphosyntactic errors; four of them were previously made in the essay, and the other three errors were new. The four remaining errors were in tenses and articles, and the three new errors were in prepositions. In the focused correction task, she made three errors in “tenses”. In the unfocused correction task, Subject (1) could not figure out what was wrong in the sentence, and since she had to correct the sentences, she tended to focus more on the semantic aspect of her sentences than their grammatical accuracy. In other words, she did not use grammar knowledge to correct her erroneous sentences. Instead, she tended to use what I may call “stylistic variations” of those sentences. When she was asked to explain why she made those changes, her only answer was “I really don’t know….you know, did not see any problem in the sentence. I tried to change something”.

In the focused correction task, Subject (1) was unable to see or correct the error although it was underlined for her. That is, although her attention was drawn towards a specific grammar error, she could not correct it; instead, she tended to express the meaning of the sentence in a different form which sometimes happened to be correct. However, because she appeared to be lacking accurate grammar knowledge, the new versions of her erroneous sentences contain grammar errors that should not be made by an advanced student.

Subject (2)

Subject (2) is a male student from Malaysia. He studied English in his country for more than eight years. His previous English classes gave the most attention to teaching English grammar, then writing, listening, vocabulary, reading and speaking. He came to the U.S.A. four months before the study. He indicated that the major areas of English grammar that always troubled him were tenses, particularly past perfect and continuous tenses, and modals. In his written essay,
Subject (2) made twenty-seven morphosyntactic errors. They were in the plural morpheme [s] (that is, he did not use the plural marker when it was required), articles (particularly the definite article and the indefinite article "an"), copula before an adjective and tenses. In the unfocused correction task, he made thirteen morphosyntactic errors; eight of them were previously made in the essay and never corrected, and the other five errors were new. In this task, Subject (2) corrected his morphosyntactic errors in the indefinite article ‘an’ and the copula before an adjective. In addition, he came up with rather new sentences that were correct. In the focused correction task, he made only morphosyntactic errors in verbs. The following are two examples of his errors in the focused correction task: (1) English was using by people and (2) Recently, English became one of the important languages in the world. The other two errors were in the indefinite article, -i.e., he did not use "the" where it was necessary. Subject (2) explained the reason for making such a high number of errors in the written essay as follows: "when I write an essay I don't think a lot about how to composition, put word after word - sometimes I notice things - sometimes I don’t". However, Subject (2), sometimes, tried to find an excuse for his errors in the essay by simply saying "I forgot - just I forgot - I am sorry". In the unfocused correction task he began to pay some attention to the structures he used in the essay and was able to correct many of his mistakes. In addition, he tried to come up with almost new sentences: a strategy that may suggest that he did not know where the error was and, naturally, failed to correct it. In the focused correction task, he managed to reduce the number of errors to only four: "when you put a line under ‘language’ I noticed that ‘language’ should have ‘s’ because we have ‘many’.

Subject (3)

Subject (3) is a female student from Turkey. She studied English in her country for four years. Her previous English classes gave a lot of attention to vocabulary, then writing, grammar, then reading, listening and speaking. She had never been in an English speaking environment before coming to the U.S.A. She came to the U.S.A. less than a year before the study. She indicated that the major area of English grammar that always troubled her was "tenses". First of all, Subject (3) made nine morphosyntactic errors in the essay, four errors in the unfocused correction task and no errors in the focused correction task. As she indicated in her responses to the questionnaire, Subject (3) had some problems with English tenses. This was very clear in her explanations of her performance in the essay and the unfocused correction task: "In the essay, I wrote 'English becomes' and in grammar task (1) I wrote 'English became' - I don't know why I changed the verb - maybe I'm not confident in myself so I have to change something - but you see - in grammar task (2) when I did not see it underlined I realized I was correct – so I used 'English becomes'". In addition to her problem with tenses, Subject (3) appeared to have a problem with prepositions. In her written essay, her nine morphosyntactic errors were mainly in Prepositions, adjectives in the comparative form, and the definite article. The following is the students' explanation -of why she made errors in the essay: "I know the rule. This is a comparison, so I should use "or" on the adjective - I did this in grammar tasks (1) and (2) but I forgot when I wrote the essay. Can you explain why you forgot to do that?" When I wrote I thought deeply about the subject and I don't pay attention to the rules". In the unfocused correction task; Subject (3) made four morphosyntactic errors; three of them were previously made in the essay and never corrected, and the fourth error was new. She corrected her previous errors in some prepositions, comparative adjectives, and some articles. However, she did not correct her-errors in some other articles and different types of prepositions. Her new error in this task was in tenses. In the focused correction task, she made no errors. Subject (3)'s good performance in the three tasks and her correct explanations during the interview may be due to the following factors: (1) good understanding of English grammar; (2) awareness of her problems in English grammar rules, which enabled her to think deeply before making a decision, and (3) ability to transfer her knowledge of grammar to complex tasks such as writing. Having these three qualities combined helped Subject (3) to perform successfully in writing, grammar tasks, and providing accurate rationalizations for her performance.

Subject (4)

Subject (4) is a male student from Indonesia. He studied English in his country for six years. His previous English classes gave a lot of attention to both reading and writing. He had never been in an English speaking environment before coming to the U.S.A. He came to the United States a year before the study. He indicated that the major area of English grammar that always troubled him was "pronouns". In his essay, he only made one error in reflexive pronouns. In his written essay, Subject (4) made eighteen morphosyntactic errors, mainly in prepositions, articles, word order and adjectives. Subject (4) explained the reason for making errors in the essay: "But you know when I write the composition the ideas - you know - it is very hard - there are too many rules". In the unfocused correction task, he made eleven morphosyntactic errors; seven of them were previously made in the essay and never corrected, and the other four errors were new. The seven remaining errors were mainly in reflexive pronouns, prepositions, and adjectives. His new errors were in structures he already used correctly in the essay, but in this task he changed them to incorrect forms. For example, he wrote in the essay "person can communicate", but in the unfocused correction task, he changed it to "can communicating" and "can communicated". When asked about the reasons for these changes, he gave the following justification:

"Why did you change "can communicate" in your essay to "can communicating" in grammar task (1) and then "can communicated" in grammar task 2? I don't know...I think because communicate is a descriptive verb - I don't know - I just felt "can communicate" is wrong - it is my opinion.

Okay, but can you explain how you came to this decision.

I don't know.

Do you know what comes after "can"?

I don't know (silence for seconds) maybe something like "do"."
Subject (4) made the same four errors he previously made in the unfocused correction task. That is, he corrected all the underlined errors, however, he failed to correct the incorrect structures he came up with in the unfocused correction task.

Subject (5)
Subject (5) is a male student from Brazil. He studied English in his country for almost seven years. His previous English classes gave a lot of attention to teaching English grammar, writing, reading, listening, vocabulary and speaking. He had never been in an English speaking environment before coming to the U.S.A. He came to the United States less than a year before the study. He indicated that the major area of English grammar that always troubled him was English models, and how to use adjectives and adverbs. In his written essay, he made twenty three morphosyntactic errors. These errors were mainly in articles (the, an); subject-verb agreement; "between-among" distinction; object pronouns (plural object pronouns with singular antecedent) and incorrect use of verb to be. His explanation as to why he made errors in the essay was as follows: "you know when I write in English I think in Portuguese and I don't think of grammar alone. When I write in English, I put 80% of my feelings but I don't pay attention to grammar". In the unfocused correction task, he made eight errors; seven of them were remaining errors from the essay and one error was new. In this task, he corrected his errors in some of his usages of the definite article "the"; however, he still made some errors in using "the" appropriately. He also corrected his errors in object pronouns and verb "to be". His errors in the unfocused correction task were mainly in the indefinite article "an", subject verb agreement, "between-among" distinction and, occasionally, the definite article "the". In the focused correction task, he made six errors only in the articles (the, an) and "between-among" distinction..

Subject (6)
Subject (6) is a male student from Japan. He studied English in his country for almost five years. His previous English classes gave a lot of attention to teaching English grammar and reading. He had never been in an English speaking environment before coming to the U.S.A. He came to the United States five months before the study. He indicated that the major area of English grammar that always troubled him was "prepositions". In his written essay, he made seventeen morphosyntactic errors in prepositions, articles, conditional structures, subject-verb agreement and "to + simple form of the verb". In the unfocused correction task, he made twelve morphosyntactic errors; eleven of them were previously made in the essay and never corrected and only one new error in tenses. In the focused correction task, he made twelve morphosyntactic errors in the same structures he incorrectly used in the unfocused correction task. Although Subject (6)'s attention was drawn to his errors, he was unable to correct them successfully. All he did was either leave the incorrect structures as they were or use new structures which were also incorrect. This may suggest that he lacks the necessary knowledge of grammar and, accordingly, drawing his attention to his errors did not improve his performance.

Subject (7)
Subject (7) is a female student from Taiwan. She studied English in her country for almost eight years. Her previous English classes gave a lot of attention to teaching English grammar, writing and speaking. She had never been in an English speaking environment before coming to the United States. She came to the U.S.A. five months before the study. She indicated that her major problem was "prepositions". She made nine morphosyntactic errors in the essay, six errors in the unfocused correction task, and three errors in he focused correction task. During the interview Subject (7) pointed out that when she wrote the essay she thought of her native language. The following is an example:

You put a line under "every countries" – but what is wrong with it. I don't know.

Do you know whether "every" should be followed by a singular or plural noun?
(Silence for seconds) maybe singular...but in my language, I use "every" with all nouns...oh...so I should say "every country".

Her nine morphosyntactic errors in the essay were mainly articles, prepositions and structures such as "to + simple form of the verb", and appropriate forms of nouns after the words (every, this, their). Specifically, she mistakenly used plural nouns after "every" and "this", but singular nouns "their". In addition to relying on her native language forming her structures in the essay, she appeared to lack of understanding of English grammar which led her to make sense assumptions about the target language's structures:

"Alright, why did you write "knowledge...are" in your essay and change it to "knowledge is" in the other two tasks?
I thought "knowledge" is plural, I sometimes say to myself it is plural, sometimes it is singular.. I think it is singular".

In other words, her deficiency in grammar knowledge made uncertain of what she should use. In the unfocused erection task she made six morphosyntactic errors. Only one these errors was previously made in the essay and never erected; the other five errors were new. The new errors e mainly in the plural morpheme marker [s] as shown in: (1)People should study English as second languages, and (2) It is impossible to study every languages.

The fifth error was in "tenses," as the following sentence might show: "It also makes the world developed easily". In the focused correction task, she made three errors as a result of her lack of grammar knowledge. Specifically, she made two errors in using plural nouns after the word "every", and the third error was in using the preposition "with" whereas "to" was required. This clearly suggests that drawing students' attention to their errors is not of great help as long as students lack the necessary knowledge of grammar.
Subject (8)

Subject (8) is a female student from Taiwan. She studied English in her country for almost eight years. Her previous English classes gave a lot of attention to teaching English grammar, reading, vocabulary and writing, and finally listening and speaking. She had never been in an English speaking environment before coming to the United States for six months before the study. She indicated that prepositions and tenses were problematic for her. Subject (8) made twelve morphosyntactic errors in the essay, six errors in the unfocused correction task and only two errors in the focused correction task. Her errors in the essay were mainly in verb “to be” and verb “to do” when used in the negative mood; using incorrect forms of the verb after “can”, particularly, she used “verb+ s” after “can” and, finally, using incorrect prepositions. In the unfocused correction task, she made six errors which were all made in the essay but never corrected. No new errors were made. This means that she corrected six of her errors in the essay but failed to correct the other six errors. She seemed to have some problems with prepositions, articles and tenses. Interestingly, she indicated in her responses to the questionnaire that these three areas of grammar knowledge always constituted a problem for her. In addition, she was able to display and verbalize the grammar rules that govern the structures she corrected in the unfocused correction task: “It is not good to have tense in the present and tense in the past. I know that, but when I write it is difficult to use grammar”. The above explanation may suggest that Subject (8) had problem of transferring her knowledge of grammar to the writing task. That is, although she knew the rules of six of her twelve errors in the essay, and was able to state these rules, she was still unable to transfer her knowledge of these rules of grammar when she was writing the essay. When her attention was partially drawn to her errors, she was able to correct them and clearly state the rules. However, since she appeared to lack the necessary knowledge of grammar for the other six errors, she was unable to correct them or display any understanding of the rules involved. In the focused correction task, she made only two errors, one in prepositions and the other in word order. Both errors were made as a result of her attempts to make new sentences when she was unable to correct the underlined words by only relying on grammar knowledge. When asked to explain the changes she made to correct one of her errors, she provided the following explanation: “See...the sentence is not good...the meaning...I have to change it, all of it...it is not clear - so I changed the words. didn’t make attention for grammar... I want this sentence to mean anything”.

Subject (9)

Subject (9) is a female student from Korea. She studied English in her country for almost eight years. Her previous English classes put a lot of emphasis on teaching writing, grammar, listening, comprehension, vocabulary, reading and speaking. She had never been in an English speaking environment before coming to the United States. She had been in the United States for sixteen years. She indicated that the major area of English grammar that always troubled her was “articles”. Subject (9) made twelve morphosyntactic errors in the essay, nine errors in the unfocused correction task and only three errors in the focused correction task. Subject (9)’s main problem was explicitly expressed by her during the interview: “My problem is I cannot write and think of grammar together - my teacher can read my essay but without...I mean grammar is lacking”. She also explained the rationale of her changes as follows: “Oh...my God...I made the same mistake "knowledges" should be "knowledge" - I should also say "in the U.S."...I always say in the U.S.A. - I forgot when I wrote. Right, you correct it in task (2). Because I concentrated...I thought about - I wasn’t writing”. Subject (9)’s morphosyntactic errors in the essay were mainly in nouns, modals, the definite article “the”, and subject-verb agreement. In the unfocused correction task, she made nine morphosyntactic errors; four of them were previously made in the essay and remained incorrect in this task too, and the other five errors were new. The four remaining errors were mainly in modals, nouns, and articles. The five new errors were made because Subject (9) tended to make new sentences that contained more errors, instead of concentrating on the already written sentences. In the focused correction task, she made three errors in subject-verb agreement, first person/plural pronoun and plural morpheme [s].

Subject (10)

Subject (10) is a female student from Japan. She studied English in her country for six years. Her previous English classes gave a lot of attention to speaking, reading, grammar, vocabulary and writing. She had never been in an English speaking environment before coming to the United States. She came to the United States less than a year before the study. She indicated that the major area of English grammar that always troubled her was “tenses, particularly past and present perfect”. Subject (10) made eleven morphosyntactic errors in the essay; five errors in the unfocused correction task and no errors at all in the focused correction task. In the essay, Subject (10) appeared to have problems with the definite article “the”, prepositions, and nouns. Regarding the definite article “the”, she used it incorrectly; that is, she used it when it was not necessary. Regarding prepositions, she appeared to have a problem making a distinction between “in”, “on” and “to”. She failed to use nouns in the plural form, such as “Many big company”. In the unfocused correction task, she made five errors, only one error was previously made in the essay and never corrected, and the other four errors were new because she tried to correct her errors by coming up with new sentences which contained new errors mainly in prepositions and articles “a” and “the”. However, in the focused correction task she corrected all her errors. Subject (10) had good understanding of the English grammar and she did not have a serious problem transferring this knowledge to other tasks such as writing. In addition, her verbal explanations of the changes she made and why she made them were clear and accurate. She made the least number of errors in the essay and she was one of two students who did not make any error in the focused correction task. However, she failed sometimes to correct her errors. Instead she tended to make new sentences in the unfocused correction task. Consider the following statement made by Subject (10): “(Smiling) sometimes I don't pay attention to grammar...my teacher told me I'm good at grammar but when I write I forget something”. And the reason for forgetting “something” was: “I wanted first to finish the essay.”
Subject (11)

Subject (11) is a female student from China. She studied English in her country for six years. Her previous English classes put a lot of emphasis on teaching grammar and vocabulary. She had never been in an English speaking environment before coming to the U.S.A. She came to the United States two years before the study. She did not give any response regarding the major area of grammar that troubled her. I assume that she did not know the answer. Subject (11) made fifteen morphosyntactic errors in the essay, eight errors in the unfocused correction task and the same number of errors in the focused correction task. Her errors in the essay were in subject-verb agreement, prepositions, articles, adjectives and the verbs, especially those that follow "can". She explained why she always makes errors in writing essays: "because in the essay I just think about the content - I don't think about the grammar - maybe (laugh) the time is not... Maybe I just translate from my native language. I didn't pay attention - I didn't know what was wrong. I emphasize the meaning...I don't think of grammar. I used my experience". In the unfocused correction task, she made eight errors; all were previously made in the essay but never corrected. These eight errors were in prepositions, subject-verb agreement and adjectives. She made these errors because she did not know what was wrong; however, she managed to correct seven of the errors made in the essay.

In the first two sentences Subject (11) corrected her erroneous sentences on the basis of knowledge of grammar. In the second two sentences she did not make use of explicit knowledge of grammar; rather she correctly used different words that expressed the meaning. Her verbal explanations demonstrate that she followed this strategy because she did not know exactly what was wrong and, as a result, she did not apply grammar rules. Her inability to make grammatically judgments about her erroneous sentences may demonstrate that she did not have the grammar knowledge that governed the structures involved. This suggestion gains some credibility when we consider Subject (11)'s performance in the focused correction task. Subject (11) made the same number of morphosyntactic errors in both the focused and unfocused correction task, although her attention was drawn to these errors. This means that she lacks the necessary knowledge of grammar and, as a result, she could not correct her errors. This is the second case of one of the subjects making the same number of errors in the unfocused and the focused correction tasks. The other case was Subject (6) who made twelve errors in each of these two tasks. Comparing both subjects' performances and verbal explanations suggests one conclusion: successful performance requires both knowledge and attention.

Subject (12)

Subject (12) is a female student from Japan. She studied English in her country for more than eight years. Her previous English classes put a lot of emphasis on reading, grammar, vocabulary, writing and speaking. She had never been in an English-speaking environment before coming to the U.S.A. She came to the United States nine months before the study. She indicated that she always had problems with articles and tenses when she wrote English. Subject (12) made eleven morphosyntactic errors in the essay, four errors in the unfocused correction task and three errors in the focused correction task. She attributed her morphosyntactic errors in the essay to two factors:

"But you didn't use "to" in the essay, why is that?

I forgot, always when I am writing English I forgot some prepositions...writing a composition is very ambiguous for me. (Laugh) - you know I don't think much. I forgot "to" again, oh God, prepositions are problem. I cannot decide".

The decrease in the number of errors in the unfocused and the focused correction tasks is due to the fact that Subject (12) tended to change the whole sentence in such a way that she avoided the structures she previously used in the essay. Her eleven errors in the essay were in prepositions; "other- another" distinction, demonstrative pronouns, articles and copula + (past participle of verbs that functions as an adjective). In the unfocused correction task, she made four morphosyntactic errors; two of them were previously made in the essay but never corrected and the other two errors were new. The two remaining errors were in demonstrative pronouns and the definite article "the". The other two errors were made because she tried to correct her errors by expressing the meaning of the sentences in different forms, which happened to contain some new errors. In the focused correction task; she made three errors in the definite article and adjectives. Subject (12)'s explanation of some of the changes she made suggests that drawing students' attention to their errors does not improve their performance as long as they lack the necessary knowledge of grammar: "I changed "other language" to "the second language" - Here when I concentrated I noticed "other" was mistake but I didn't know which word I use so I used "the second language" - I am not sure which word I use").

Subject (13)

Subject (13) is a male student from Saudi Arabia. He studied English in his country for seven years. His previous English classes put a lot of emphasis on writing, grammar, reading, listening, vocabulary and speaking. He had never been in an English speaking environment before coming to the U.S.A. He came to the United States one year before the study. He indicated that his major problem was adjectival clauses. Subject (13) made nine morphosyntactic errors in the essay; six errors in the unfocused correction task and, surprisingly, seven errors in the focused correction task. The subject attributed his errors in the essay to (1) lack of concentration; (2) short time; and (3) his mind was "loaded" since he spent the night before writing the essay working on a research paper until midnight. His nine errors in the essay were in prepositions, missing copula, "make-do" distinction, "other-another" distinction and nouns. He explained the reason for making errors in the essay as follows:

"Why did you miss the verb in the sentence when you wrote the essay?"
because actually there was short time and there was no concentration...I wrote anything...as in any composition I wrote it every time I wrote anything...anything...then come back to rewrite it and change it...I add something...I take something away”.

In addition, Subject (13) was able to provide accurate statements of grammar rules; however, he failed to transfer his knowledge of these rules when he wrote the essay. In this regard, Subject (13) said: “I think...I was very tired...the night before the class I stayed up till midnight to finish the research paper...I couldn't concentrate on every word...you know...as a foreign student I must read a lot - I know the rule but we cannot...I cannot realize every problem...I need more experience”.

In the unfocused correction task, he made six morphosyntactic errors; two of them were remaining errors from the essay and the other four were new. The two remaining errors were in prepositions and “another-other” distinction. The new four errors were in articles, prepositions and nouns. In the focused correction task, Subject (13) made seven errors in “other-another” distinction and nouns. Instead of concentrating on the underlined words that had errors, he tended to come up with new sentences. This behavior was peculiar. I thought that he did not understand the instructions, but during the interview he demonstrated complete understanding of what he was supposed to do. However, he did not do what he was asked to. In such a case, it becomes difficult to pinpoint the influence of grammar knowledge on L2 learners' performance, since Subject (13) had his own way of correcting errors. It must be emphasized, however, that he demonstrated some understanding of grammar rules during the interview.

Here you wrote in the essay “other language” - do you know whether we use singular or plural nouns after "other?"

(Directly) It must be plural.

What if the noun is singular - Do you know which word we must use?

“another”

Surprisingly, although Subject (13) was aware of the “other-another” distinction, he made most of his errors in “using "other" where "another" was required, and vice versa. The only explanation I may offer in this regard is that his knowledge of grammar is still too fragmentary or shaky to be transferred to tasks other than being verbalized.

Subject (14)

Subject (14) is a male student from Japan. He studied English in his country for seven years. His previous English classes put a lot of emphasis on grammar, vocabulary, writing, speaking, listening and reading. He had never been in an English speaking environment before coming to the United States less than a year before the study. He mentioned that present and past perfect tenses were the major problems for him. Subject (14) made eleven morphosyntactic errors in the essay, five errors in the unfocused correction task and four errors in the focused correction task. His errors in the essay were in nouns, prepositions, articles and “other-another” distinction. These errors were made for two reasons: (1) lack of grammar knowledge and (2) carelessness. In the unfocused correction task, he made five morphosyntactic errors in nouns, prepositions and “other-another” distinction. These five errors were remaining errors from the essay and had never been corrected in this task. In the focused correction task, he made four errors in nouns and prepositions. His verbal explanations indicated clearly that he was lacking the ability to verbalize or explain his performance in the three tasks.

Subject (15)

Subject (15) is a female student from Japan. She studied English in her country for six years. Her previous English classes gave a lot of attention to speaking, grammar, writing, reading, listening and finally vocabulary. She had never been in an English speaking environment before coming to the U.S.A. She came to the U.S.A. one year before the study. She indicated that her major problems in English grammar were modals. Subject (15) made twenty-five morphosyntactic errors in the essay; ten errors in the unfocused correction task and five errors in the focused correction task. Instead of correcting the specific error, she tended to correct the whole sentence by choosing new words, new structures and similar meanings to the sentences she previously used in the essay: “I didn't know what the problem is... in task (1) here I tried to change the words...I made a new sentence. I think I did so in task (2)...I don’t know a specific problem”. To sum up, the qualitative analysis of the data indicated that giving students more time to draw on their conscious knowledge of grammar did not always improve the accuracy of their writing because their knowledge was too fragmentary.

DISCUSSION/CONCLUSION

The results of this study demonstrate that students’ errors in the essay were not just due to carelessness or forgetfulness as some of the subjects claimed during the interview. An examination of the performance of the subjects suggests that deficiency in their knowledge of grammar results in inaccurate composition writing and unsuccessful correction of errors. When asked to correct their errors, L1 learners with deficiency in conscious knowledge of grammar seem to rely on their "feelings" about the structures of the target language. However, since these "feelings" are based on incorrect knowledge, L2 learners tend to follow false assumptions and, in turn, their corrections of errors are unsuccessful. In addition, they appear to search for various ways to express the meanings of their erroneous sentences in new forms, but many of these contain new errors. Thus, it can be concluded that relying on "feelings and experience" (to use Subject (4)'s words), without having adequate conceptual knowledge of grammar rules leads to unsuccessful performance, even if students' attention is drawn to their errors. This conclusion is based on four pieces of evidence. First, many errors do not get corrected in the unfocused correction task. An examination of the performance of the subjects shows that none of the subjects was able to correct all his/her errors in the unfocused correction task. For example, Subject (1) failed to correct
four of the eight errors he made in the essay. Subject (2) failed to correct eight of his twenty-seven errors in the essay. Subject (3) also failed to correct three of his nine errors in the essay. Subject (4) failed to correct seven of his eighteen errors previously made in the essay. Subject (5) made eight errors in the unfocused correction task; seven of them were previously made in the essay and never corrected. Subject (6) also failed to correct eleven of the seventeen errors he made in the essay. Likewise, Subject (8) made six errors in the unfocused correction task; all were made in the essay but never corrected. Subject (9), also, made nine morphosyntactic errors in the unfocused correction task; four of them were previously made in the essay and remained incorrect in this task too. Subject (10) made eight errors; all were previously made in the essay but never corrected. Subject (14) made five errors in the unfocused correction task; all were previously made in the essay but never corrected. Finally, Subject (15) made ten errors in the unfocused correction task; eight of them were previously made in the essay but never corrected. Secondly, even when the error is identified (as in the focused correction task), students often fail to correct it. Subject (6) made twelve errors in the unfocused correction task, eleven of which were previously made in the essay and never corrected, and only one of which was new. Although his attention was drawn to his errors, he was unable to correct them successfully. All he did was either leave the incorrect structures as they were or use new structures which were also incorrect. He made twelve morphosyntactic errors in the same structures he had used incorrectly in the unfocused correction task. This clearly suggests that he lacks the necessary knowledge of grammar and, consequently, drawing his attention to his errors did not improve his performance. Likewise, Subject (1) was unable to see or correct the errors although they were underlined for her. That is, although her attention was drawn towards a specific grammar error, she could not correct it; instead, she tended to express the meaning of the sentence in a different form which sometimes happened to be correct. Moreover, because she appeared to be lacking accurate grammar knowledge, the new versions of her erroneous sentences contain yet more grammar errors. Likewise, Subject (11)'s performance demonstrates that even when the mistake is clearly identified, she still often fails to correct it. She made eight errors in the unfocused correction task and in the same number of errors in the focused correction task. She made these errors because she did not know what was wrong. Although her attention was drawn to specific errors, she made the same number of errors in both correction tasks (See Gass & Mackey, 2011; Lillis & Curry, 2011; Locke, 2011; Robinson & Ellis, N., 2011; Sebba et al., 2011; Segalowitz, 2011).

Third, many new errors are introduced, even when the subjects are paying attention. Subject (1) for example, made three new errors in the unfocused correction task, and two new errors in the focused correction task. Subject (2) made five new errors in the unfocused correction task, and three new errors in the focused correction task. Subject (7) made six errors in the unfocused correction task; five of them were new. Five of the nine errors made by Subject (9) were new, and four of the five errors made by Subject (10) were also new in the unfocused correction task. Subject (13) made six errors in the unfocused correction task, four of which were new. Finally, even when the subjects' errors are eliminated, it is often because students tend to write new sentences instead of correcting them. For example, Subject (1) tended to focus more on the semantic aspect of her sentences than on their grammatical accuracy. In other words, she did not use grammar knowledge to correct her erroneous sentences. Instead, she tended to use what one could call “stylistic variations” of those sentences, which happened to be correct. Likewise, Subject (2) managed to reduce the number of his errors from twenty-seven errors in the essay to thirteen in the unfocused correction task because his new sentences were correct. Subject (11) also managed to reduce the number of his errors from fifteen errors in the essay to eight in the unfocused correction task. She managed to correct some of her errors in the essay by coming up with new sentences that happened to be correct. An examination of Subject (12)'s performance also shows that the decrease in the number of errors in the unfocused and the focused correction tasks is due to the fact that she tended to change the whole sentence in such a way that avoided the structures she previously used in the essay. She made eleven errors in the essay, four in the unfocused correction task, and three in the focused correction task. Subject (8) clearly stated that she was relying on making new sentences rather than correcting the already written erroneous sentences: “See... the sentence is not good... the meaning... I have to change it, all of it... it is not clear... so I changed the words. I didn’t make attention for grammar... I want this sentence to mean anything”.

In addition to the above analysis, another interpretation can be provided, which is based on cognitive psychology’s perspective. That is, in addition to the deficiency in grammar knowledge as a reason for students’ inaccurate composition writing, there is another possible reason that makes these students commit many morphosyntactic errors in writing such as the many constraints that writing in a foreign language imposes on foreign language learners and deficiency in students’ abilities to transfer their knowledge of grammar to complex tasks such as writing. It can be argued that composing in English as a second language is a multidimensional activity which requires L2 learners to do more than one thing simultaneously. This argument is compatible with the principles of the attention theory. Two important features within the phenomenon of attention have been identified: 1) an individual can attend to only one thing at a time or think only one thought at a time; 2) attention appears to be serial, and we find it very difficult to mix certain activities. That is, the focus of attention is only on one place at one time. Our ability to attend to several sources of information simultaneously is severely restricted. Consequently, a human who must process information that exceeds his channel capacity will inevitably make errors. Moreover, L2 learners may appear to have the necessary knowledge to make correct responses; however, they are unable to transfer this knowledge while writing; listening to spoken English; reading written texts, and solving certain types of grammatical problems (El-daly, 1999). In this regard, Gelman and Meck (1986:30) rightly point out that knowledge of the correct principles does not guarantee correct performance. Principles specify characteristics that a correct performance must possess, but they do not provide recipes for generating a plan for correct performance. Nor do they guarantee correct execution of plan (Eskildsen, 2008; Reynolds, 2010). In thinking about foreign language learners’ performance as an object of study, therefore, the essence of the underlying knowledge that accounts for their performance must be examined. This examination of the learners underlying knowledge will in turn uncover the basis for the strategies they use in solving language problems. In this regard, Gass (1983: 277) suggests that for foreign language learners the ability to think and talk about language might involve abstract analyses of a number of different types. It might include, for
example, analyses of their own language, a comparison between their native language and the target language, a comparison between their native language and other languages previously learned, or even a comparison between the target language and other languages previously learned. And, as Johnson (1988) maintains, when learning a language is viewed as learning skills, the process appears to be usefully broken into two or three phases. The first is the development of declarative knowledge; however, “declarative linguistic knowledge cannot be employed immediately but only through procedures activating relevant parts of declarative knowledge in speech reception and production” (Fach and Kasper, 1986:51). In the second or associative phase, the skill is performed. In the third phase, the skill is continually practiced, and becomes automatic and faster (Brown, 2009; Cohen, 2008). Accordingly, one can argue that deficiency in the subject's declarative knowledge may result in (1) failure to detect the erroneous item that must be corrected for the sentence to be correct; (2) failure to decide whether the sentence is correct or incorrect; and, in most cases, the sentence seems grammatically correct although it violates a certain invisible grammatical rule (See Ellis, R., 2006; Ellis, R. et al., 2008; Eskildsen, 2008).

In addition, because there was no link between declarative and procedural knowledge, many subjects failed to correct the item they identified as erroneous, or provide accurate rationalizations for their performance. Therefore, examining the relationships between declarative and procedural knowledge is a worthwhile pursuit since students often fail to recognize or construct these relationships, and, sometimes are able to reach correct answers for problems they do not really understand. In his discussion of this issue, Carpenter (1986) points out that three different models have been proposed to describe the relationship between conceptual and procedural knowledge. The first model hypothesizes that advances in procedural knowledge are driven by broad advances in Conceptual knowledge. The second proposes that advances in conceptual knowledge are neither necessary nor sufficient to account for all advances in procedural knowledge. The third model concurs with the first that advances in procedural skills are linked to conceptual knowledge but proposes that the connections are more limited than those suggested by the first model (See Mangubhai, 2006).

It seems, therefore, that the best way for effective classroom instruction and for improving our students’ performance is to link conceptual with procedural. Hiebert and Lefevre (1986) maintain that linking conceptual and procedural knowledge has many advantages for acquiring and using procedural knowledge. These advantages are: (A) Enhancing problem representations and simplifying procedural demands, (B) Monitoring procedure selection and execution, (C) Promoting transfer and reducing the number of procedures required. Moreover, linking conceptual knowledge and procedural knowledge has benefits for conceptual knowledge. According to Anderson (1983), for which no routine procedures are available are solved initially by facts and concepts in an effortful and laborious way. As similar problems are solved repeatedly, conceptual knowledge is gradually transformed into set routines (condition-action pairs) for solving the problem. The condition-action pairs constitute the basic elements of the procedural system. Thus knowledge that is initially conceptual can be converted to knowledge that is procedural. In addition, procedures can facilitate the application of conceptual knowledge because highly routinized procedures can reduce the mental effort required in solving a problem and by making possible the solution of complex tasks (Kubonjiova, 2008; Van Patten and Williams, 2008; Sheen, 2007).

The results of this study show that the existence of knowledge is not sufficient to distinguish skilled or fluent performance from less skilled. Through practice and experience the learner must gain easy access to knowledge. Cognitive psychologists describe this difference in access as automatic or “not automatic” or “controlled”. In other words, foreign language learners may appear to have the necessary knowledge to make correct responses; however, they are unable to display this knowledge in multi-dimensional tasks. In such tasks, learners are required to do more than one thing simultaneously. This argument is compatible with the principles of the attention theory. That is, this study supports Van Patten’s (1990) conclusion that it is difficult, especially for beginners, to notice content and form at the same time. Also, this study provides further evidence for the facilitative role of increased attention in improving L2 learners’ performance. This implies that our students’ failure to perform on language tasks may be due, sometimes, to cognitive deficiency; rather than linguistic one. And, in broad terms, language acquisition may not be fully understood without addressing the interaction between language and cognition. Therefore, further research is needed in this area, at least, to know how our students think and how to teach them to think strategically. As a whole, the results are consistent with Van Patten (1990): the second language learner has difficulty in attending to both form and content in the input. In other words, the attentional resources are limited and therefore it is difficult to understand the content of input when the attention is allocated to a certain form in the input. This can serve as evidence supporting such theoretical, and pedagogical proposals as consciousness-raising (Rutherford & Sharwood-Smith, 1985), input enhancement (Sharwood-Smith, 1993; Alanen, 1995), and focus on form (Doughty & Williams, 1998). They all start with the common assumptions that (1) focus on meaning is necessary with a sufficient amount of input; (2) a certain level of conscious attention to form is also necessary; (3) it is difficult, however, to pay attention to form while processing input for meaning; and (4) therefore some sort of encouragement to attend to form is helpful and facilitative for SLA. The present study and Van Patten (1990) have provided some evidence for Assumption 3: simultaneous attention to form and meaning is difficult. Furthermore, these studies favor focus on form. Van Patten (1990:295) suggests that “if attention to form needs to be conscious at some point, then the input must be easily comprehended”. Therefore the learner is able to allocate most of the attentional resources to the form on the spot, which will facilitate the processing and acquisition of that form (See Gu & Wang, 2008; Hartshom et al., 2010).

This study shows that although ‘noticing’ or ‘conscious awareness’ may have some positive effect on L2 learners’ performance, this effect is constrained by two important factors: (1) learners’ overall linguistic competence, and (2) the nature of the task; that is, whether it requires controlled or automatic processing of information. These two factors determine the amount of attention and degree of coordination on the part of L2 learners. In this sense, this study does not exclusively support Schmidt’s Noticing Hypothesis. Rather, it supports the claim that Noticing is necessary but not sufficient condition for converting input into intake. As a whole, this study supports Van Patten’s claim that L2 learners
have difficulty in attending to both form and content in the input. This is why conscious awareness or ‘Noticing’ is not sufficient condition for converting input into intake (See Tyler, 2011).

To sum up, this study shows that the students’ unsuccessful performance in the essay was due to their fragmentary knowledge of grammar. No matter how attentive L2 learners are in performing language tasks, their performance in error correction tasks will be unsuccessful as long as their knowledge of grammar is fragmentary. It would be useful, therefore, to replicate this study with advanced graduate students. What is needed is more systematic study of the relationship between conscious knowledge of grammar and the written production of advanced graduate students. Special attention should be devoted to the various aspects that constrain foreign students’ written production. In addition to the deficiency in grammar knowledge as a reason for student's inaccurate composition writing, there are other possible reasons that make foreign students commit many morphosyntactic errors in writing, such as the many constraints that writing in a foreign language imposes on foreign language learners, deficiency in students' abilities to transfer their knowledge of grammar to complex tasks such as writing, and students' belief that grammar rules are not important. A better understanding of these factors and of how they interact with the students' (incomplete) knowledge may help teachers to assign more effective writing tasks and to give more appropriate feedback.

REFERENCES


APPENDIX I

Name: ________________________________

Country: ________________________________

Sex: Male: ___ Female: ___

TO: Students in the Advanced Level.

Please answer the following questions by placing an X on the line where indicated.

1. How old are you?
   ___ (A) Under 20
   ___ (B) Between 20 and 25
   ___ (C) Over 25

2. How long did you study English in your country?
   ___ (A) 6 Years
3. What did your previous English classes give most attention to (Please number in order of importance, #1 being most important etc.)
   ___ Listening
   ___ Reading
   ___ Writing
   ___ Grammar
   ___ Vocabulary
   ___ Speaking/Pronunciation

4. Had you ever been in an English speaking environment before coming to the United States?
   ___ (A) Yes
   ___ (B) No

5. If yes, for how long?
   ___ (A) Less than 6 months
   ___ (B) Between 6 months and 1 Year
   ___ (C) Between 1 and 2 Years
   ___ (D) More than 2 Years

6. How long have you been in the United States?
   ___ (A) Less than 1 Year
   ___ (B) 1-2 Years
   ___ (C) More than 2 Years

7. In your view, what areas of grammar trouble you most?

APPENDIX 2

FREE COMPOSITION

Please, write an essay of about 200 words on: “The Value of Learning English”

INSTRUCTIONS

• Please write in ink
• Pay attention to the grammar and meaning of your sentences
• You have forty minutes to write the essay
• Your name is: ____________________________

Now, begin.

APPENDIX 3

Correction Task (1)

INSTRUCTIONS
The sentences used in this task are taken from your essays on "The Value of Learning English." Each sentence contains grammatical errors. Read each sentence carefully and correct what you think is wrong.

APPENDIX 4

Correction Task (2)

INSTRUCTIONS

The sentences used in this task are taken from your essays on "The Value of Learning English." Each sentence contains grammatical errors. These errors are underlined. Read each sentence carefully and correct what is underlined.

APPENDIX 5

The following analysis represents the frequency distributions and descriptive statistics for students' errors in the essay, unfocused correction and focused correction tasks.

Table (1)
Number of students' Errors in the Essay Unfocused Correction and Focused Correction Tasks.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>ESSAY</th>
<th>UNFOCUSED CORRECTION</th>
<th>FOCUSED CORRECTION</th>
</tr>
</thead>
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<td></td>
<td></td>
<td>REMAINING</td>
<td>NEW</td>
</tr>
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<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
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<td>11</td>
<td>1</td>
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<td>7</td>
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<td>1</td>
<td>5</td>
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<td>6</td>
<td>0</td>
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<td>2</td>
<td>2</td>
</tr>
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<td>9</td>
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<td>5</td>
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<tr>
<td>15</td>
<td>25</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>
Figure (1)
Plot of mean number of errors under the three conditions essay, the unfocused correction and the focused correction task.

A. THE ESSAY

Table (2)
The distribution of subjects' errors in the essay

<table>
<thead>
<tr>
<th>Number of Errors</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
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<td>1</td>
</tr>
<tr>
<td>25</td>
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<tr>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total 15</td>
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</table>
Table (3)
The Mean, Standard deviation and other measures of central Tendency of subjects’ errors in the essay

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<td>Median</td>
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<tr>
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<tr>
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<td>S E Kurt</td>
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<td>Skewness</td>
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<tr>
<td>S E Skew</td>
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</tr>
<tr>
<td>Range</td>
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</tr>
<tr>
<td>Sum</td>
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B. UNFOCUSED CORRECTION TASK

Table (4)
The distribution of subjects’ errors in the unfocused correction task.

<table>
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<th>Number of Errors</th>
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</thead>
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<td>12</td>
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<tr>
<td>Total</td>
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Table (5)
The Mean, Standard deviation and other measures of Central Tendency of subjects’ errors in the unfocused correction task

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C. FOCUSED CORRECTION TASK

Table (6)
The distribution of subjects' errors in the focused correction task

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Table (7)
The Mean, Standard deviation and other measures of Central Tendency of subjects' errors in the focused correction task

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<td>S E Kurt</td>
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<td>S E Skew</td>
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<td>Range</td>
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<td>Minimum</td>
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Table (8)
Anova summary table

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