

Does EFL Students' Grammatical Ability Account For Writing Ability? A Case Study

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Abstract

EFL students' grammatical ability has been often discussed in apposition with writing ability. The role of grammar in writing has been extensively argued, yet not reaching a consensus conclusion. The major reason is due to how grammatical and writing abilities are defined as well as the variables of the design and assessment of the tests. Thus, this study proposed a theoretical model for each ability. Based on the models, this study tried to examine whether grammar instruction could promote the students' grammatical ability, thereby further helping their writing. In this study, the test, divided into a grammar subset and a writing subset, was administered to ten senior high school students in a lower-intermediate English class at a cram school in Southern Taiwan. The grammar subtest and the writing subtest comprised 40% and 60% of the whole test respectively. The results indicated that most students' grammar subtests outperformed their writing subtests. The finding implied that there was no strong relationship between the knowledge of grammar and usage among lower-intermediate learners. In addition, some suggestions were provided for improving instruction and both grammar and writing subtests.

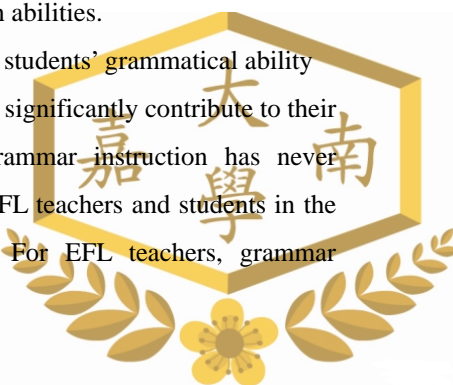
Keywords: grammar ability, writing ability, grammar and writing

INTRODUCTION

EFL students' grammatical ability has been often discussed in apposition with writing ability. Various grammar instruction has been developed in order to promote students' writing ability (Hudson, 2001). The role of grammar in writing has been extensively argued and yet not reached a consensus conclusion. The major reason for this unresolved debate is mainly due to how

grammatical and writing abilities are defined as well as the variables of the design and assessment of the tests for both abilities.

Even though students' grammatical ability might or might not significantly contribute to their writing ability, grammar instruction has never been ignored by EFL teachers and students in the writing context. For EFL teachers, grammar



between grammatical ability and communicative competence, and Canale and Swain (1980) also propose a theoretical model in which communicative competence comprises grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. From Bachman and Palmer (1991)'s perspective, grammatical competence including vocabulary, morphology, phonology, syntax, and semantics is embedded in communicative competence. In addition, Celce-Murcia (1991) presents a model in which grammar is considered to be one element of communicative competence. In summary, all these support the view that grammatical competence is one crucial component of communicative competence.

Yet, there are also some other concepts which are concerned more with syntax and semantics. According to these concepts, grammar is in fact a reflection, a synonym of syntax (Greenbaum & Quirk, 1990); further, in order to develop an adequate meaning, Rea-Dickens (1991) emphasizes that meaning should take a priority place in communication rather than extensively focusing on form.

In addition to the above concepts, different frameworks have been developed in previous studies addressing the pragmatic concept as well. For example, the theoretical model known as a three-dimensional grammar framework devised by Larsen-Freeman (1991) treats grammar in combinations of form (structure), meaning (semantics), and pragmatics. In this model, form (structure) consists of morphemes, phonemic/graphemic patterns, and syntactic patterns; meaning (semantics), lexical meaning and grammatical meaning; pragmatics, social context, linguistic discourse context, and

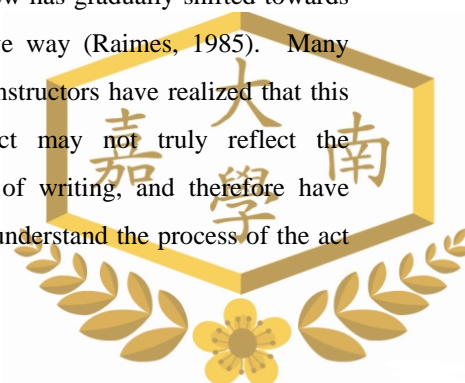
presuppositions about context. In terms of grammar teaching, Larsen-Freeman thinks that grammar helps learners "use linguistic forms accurately, meaningfully, and appropriately" (p.280).

According to these concepts of grammatical competence, a theoretical model of grammatical ability was therefore developed and used in this study, and based on this model, a grammatical test was devised to measure the students' mastery of a particular grammatical feature taught in class.

Writing Ability

With regard to communicative activities, writing is also regarded as an act of communication which takes place between the writer and the reader in the form of text (Olshtain, 1991). If grammatical ability is viewed as an essential component in communicative competence which interacts with other components, then writing is one of the ways of presenting communicative competence to convey thought via text.

In ESL education, writing has received great concern from ESL researchers and instructors who have contributed much to the concepts of ESL writing, both in theory, and teaching. In early ESL writing research and instruction, like those of native English speakers' writing, writing skills were measured with a focus mostly on the written products, and thus language proficiency was taken into greater account. However, this view has gradually shifted towards a new perspective way (Raimes, 1985). Many researchers and instructors have realized that this focus on product may not truly reflect the complete nature of writing, and therefore have started trying to understand the process of the act



of writing in communication (Zamel, 1982). Raimes (1985) also acknowledges that writing is not merely a language skill as an adjunct to language learning, but an effective approach to developing language from words, sentences, and thereafter to discourse in language.

Many researchers have devoted considerable efforts to investigations of the comparison and contrast between the processes in L1 writing and L2 writing. Extensive research has demonstrated the similarities between L1 and L2 composing processes. In Zamel's studies (1982), a finding shows that students benefit little from grammar study in composing. From her point of view, the exploration, discovery, and conveyance of thoughts and ideas have the same influence and importance upon the processes of both L1 and L2 writing. Jones (cited in Krapels, 1990) echoes the significance of generation and development of ideas. In Jones's studies, the major distinction of a good writer and bad writer reflects on the effectiveness of generating thoughts and ideas; moreover, a good writer does not show a better grammatical proficiency than a poor writer. These findings reveal that the L1 and L2 composing processes are essentially the same.

In contrast, other research presents contradictory findings against the above assertion. Raimes (1985) reports a finding in which L2 unskilled writers, unlike native writers, were concerned more with generating ideas than finding errors. In addition, Siliva (1997) indicates that ESL writers do not plan and review their writing as much as native writers, and their limited vocabulary causes more difficulty in writing. Similar to Raimes' viewpoints, Siliva sees ideas, rhetorical control, and linguistic form

as crucial indices in writing. A suggestion thus given is that in the composing processes, L2 writers need more work on content, organization, and language to develop good writing.

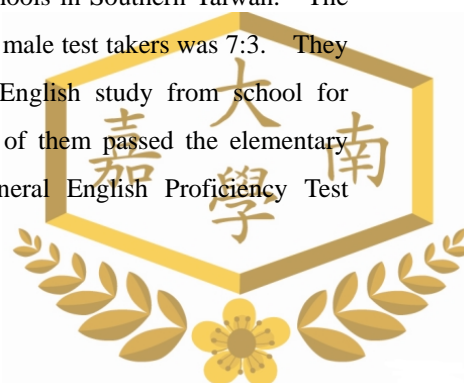
In these studies on L1 and L2 writing, all emphasize the importance of ideas and organization. Yet, in L1 writing, some other elements such as vocabulary and linguistic forms/grammar take additional positions for ESL writers. As suggested by D'Eloia (1987), the study of a grammatical concept should be integrated into the process of writing. Furthermore, Olshtain (1991) is also concerned about the mastery of mechanics in writing since mechanics deal with spelling, punctuation, capitalization, and formatting, all of which function crucially to foster the intelligibility of writing. In Raimes' theoretical model, she also propose a diagram which includes syntax, grammar, mechanics, organization, word choice, content, and so on.

Based on these views, the theoretical model of writing ability adopted in this study will cover four major variables to measure the students' writing ability: content control, rhetorical control, lexico-grammatical control, and mechanics.

METHOD

Participants

The study was administered to ten students at a private tutoring center. All of the test takers were senior high school students of the first year from different schools in Southern Taiwan. The ratio of female to male test takers was 7:3. They received formal English study from school for four years; none of them passed the elementary level of the General English Proficiency Test (GEPT).



Instrument and Procedure

Test Specifications

The test was divided into two subtests: a grammar subtest and a writing subtest, both of which were devised based on one theme “My first experience in”. The grammar subtest consisted of eight multiple-choice questions with four possible choices but one correct answer for each. Each correct answer received 1 point and an incorrect answer received zero according to the dichotomous scoring method. The total score possible was 8 points for this task.

The writing subtest was scored with an

analytic rubric with a 4-point scale of 1-4 by two raters who were non-native English teachers, and therefore the possible total in this subtest was 16 points. The grammar subtest and the writing subtest were designed to be taken within 15 minutes and 50 minutes in class, respectively.

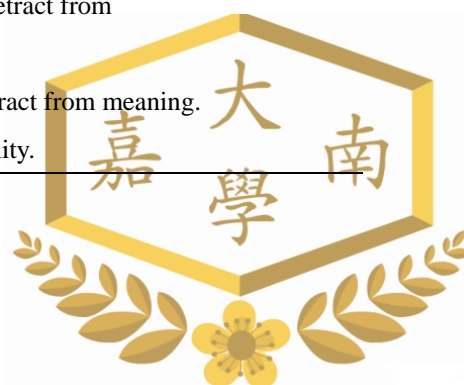
The grammar subtest and the writing subtest comprised 40% and 60% of the whole test, respectively.

Scoring Rubric

The scoring rubric employed is analytical rubric, illustrated in Table 1.

Table 1 Analytic rubric for the writing subtest

Construct	Explanations of Scores
Content	4 Fully addresses the topic with elaborated text.
	3 Addresses the topic with some digressions, not evenly elaborated.
Control	2 Addresses the topic with many digressions.
	1 No clear idea. Little or no elaboration.
	4 Well-develops a clear topic sentence, supporting ideas and a clear conclusion. Good cohesion and coherence.
Rhetorical Control	3 Has a topic sentence, supporting ideas, and a conclusion, but does not fully develop them. Partial cohesion and coherence.
	2 Develops some components with one or two components missing. Little cohesion and coherence.
	1 Poor structure. Lack cohesion and coherence at all.
	4 Good use of vocabulary in text. Few grammatical errors.
Lexico-Grammatical Ability	3 Some good use of vocabulary in text. Some grammatical errors but no affect on the whole text.
	2 Vocabulary varies little. Grammatical errors affect intelligibility.
	1 Limited vocabulary. Grammatical errors prevent from reading.
Mechanics	4 Effective use of punctuation, spelling, capitalization, and formatting.
	3 Mostly effective use of mechanics; errors do not detract from meaning.
	2 Some errors with spelling and punctuation that detract from meaning.
	1 Poor mechanics. Many errors result in unintelligibility.



RESULTS AND ANALYSIS

Results for the Entire Test

Test Statistics

The mean was 16.25, the median was 16, and the standard deviation was 2.46 out of a total possible score of 24. The minimum score was 12,

and the maximum score was 20, producing a range of 8. The standard error was .78. The mean score of the entire test was slightly higher than the median score ($16.25 > 16$). The test scores showed a negatively skewed distribution with a skewness of $-.118$ and a kurtosis of $-.629$. The descriptive statistics is shown in Table 2.

Table 2 Descriptive statistics of the entire test (N=10)

Mean	16.25	Median	16	Range	8
Std Dev	2.46	Skewness	-.118	Minimum	12
Std Error	0.78	Kurtosis	-.629	Maximum	20

Figure 3 displays the histogram of the distribution of the total test scores for our group compared to a normal curve. The distribution of scores had a skewness of $-.118$ and a kurtosis of $-.629$. The results suggested that the overall performance of the test takers was good as it

should be expected in this achievement test. Besides, this test group was fairly homogeneous since most scores ranging between 15 and 19 were close to the mean score, 16.25. Whether the test scores showed significant reliability will be further examined in the following discussion.

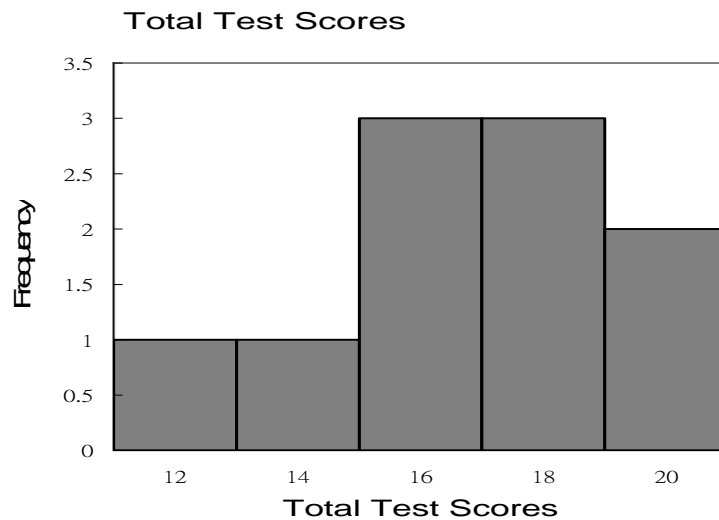


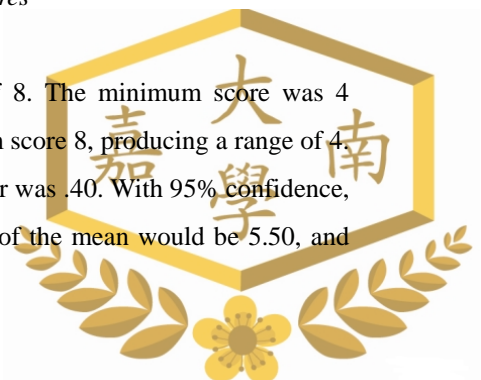
Figure 3. Histogram Of The Entire Test Scores

Results for the Separate Test Sections

Grammar Subtest Results

The means was 6.40, the median was 6.50, and the standard deviation was 1.26 out of a total

possible score of 8. The minimum score was 4 and the maximum score was 8, producing a range of 4. The standard error was .40. With 95% confidence, the lower bound of the mean would be 5.50, and



the upper bound of the mean would be 7.30. The mean score was slightly lower than the median score (6.40 < 6.50). The grammar subtest

displayed a negatively skewed distribution with a skewness of -.544 and a kurtosis of -.026. The descriptive statistics is shown in Table 3.

Table 3 Descriptive statistics of the grammar subtest (N=10)

Mean	6.40	Median	6.50	Range	4
Std Dev	1.26	Skewness	-.544	Minimum	4
Std Error	0.40	Kurtosis	-.026	Maximum	8

The histogram of the distribution of scores for the grammar subtest is revealed in Figure 4. The distribution was quite close to a normal distribution. As indicated below, the value of the skewness was -.544 which implied that the test takers performed pretty well in the grammar subtest in this achievement test. It might be that the grammar subtest was easy the test takers, or most test takers had acquired this grammar point-past tense. However, this result should be further compared with that of the writing subtest later.

The mean was 9.85, the median was 9.00, and the standard deviation was 1.49 out of a total possible score of 16. The minimum score was 8, and the maximum score was 13, forming a range of 5. The standard error was .47. With 95% confidence, the lower bound of the mean would be 8.78, and the upper bound of the mean would be 10.92. Evidently, the mean score of the writing subtest was higher than the median score (9.85 > 9.00). However, the value of skewness was 1.053, and the value of kurtosis .795. The descriptive statistics can be seen in Table 4.

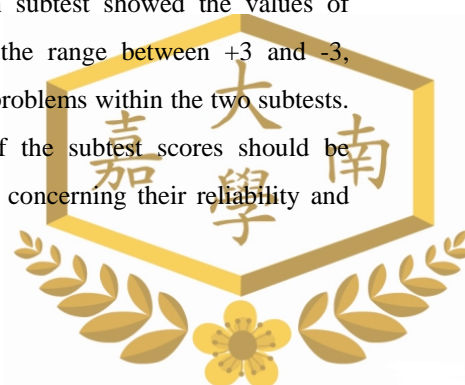
Writing Subtest Results

Table 4 Descriptive statistics of the writing subtest (N=10)

Mean	9.85	Median	9.00	Range	5
Std Dev	1.49	Skewness	1.053	Minimum	8
Std Error	0.47	Kurtosis	.795	Maximum	13

The histogram of the score distribution for the writing subtest is revealed in Figure 4. Compared with the grammar subtest, this distribution of the writing subtest scores indicated that the test takers' performance in the writing subtest was not as well as that in the grammar subtest. As discussed earlier, it might be due to an easy grammar test which did not adequately

measure the test takers' true abilities, or due to some random factors which will be discussed later. In addition, both subtest showed the values of kurtosis outside the range between +3 and -3, indicating some problems within the two subtests. In short, both of the subtest scores should be further examined concerning their reliability and validity.



Writing Subtest Average Score from R1 and R2

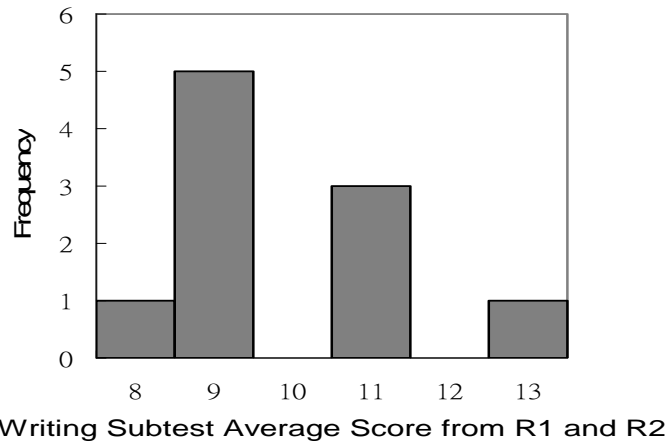


Figure 4.

Histogram Of The Writing Subtest Scores

Correlational Analysis between Grammar and Writing Subtests

According to the review of the literature, the proposed model of writing ability in this study suggests that the knowledge and use of grammar can be observed in writing; that is, grammatical ability and writing ability have some close relationship. To examine this assumption, Pearson Product-Moment Correlations were used to compute the correlation between grammar and writing, and the results provided some

information as to whether the determined variables were valid or not. The results showed that the correlation coefficient was .595, indicating a moderate correlation between grammar and writing. However, this figure was not statistically significant on account of a probability level being at .07. This indication means that the resulting correlation between grammar and writing was due to chance. Evidently, more test takers and more test items could have contributed to its statistical significance. The results can be seen in Table 5.

Table 5 Correlation between Grammar and Writing Subtests

	Grammar	Writing
Grammar	1.00	
Writing	.595 (P=.070)	1.00

* Correlation is significant at the 0.05 level (2-tailed).



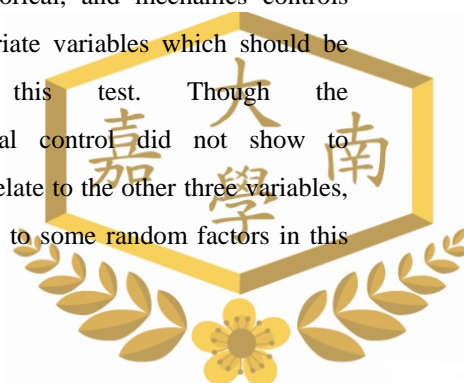
DISCUSSION AND CONCLUSION

Since the test was an achievement test, the purposes of this study were to seek answers to the following questions: 1) How well did the students master the grammar features instructed in class and to what extent was the instruction effective or not? 2) Whether there was a high correlation between grammatical ability and writing ability to verify the hypothesis? A discussion of the results obtained in this study is as follows.

The entire test scores showed a negatively skewed distribution with a value of $-.118$, suggesting that most students performed as well as expected in the achievement test. However, the differences of distribution of skewness of the grammar test scores and the writing test scores revealed some problems. The histogram distribution of the grammar test scores had a skewness of $-.544$, while that of the writing test scores had a skewness of 1.053 . This suggests that the students did not perform as well in the writing subtest as in the grammar subtest. This also implies that the lower-intermediate learners' knowledge of grammar features was not well carried out in the writing test. This result responded to Raimes' claim (1985) that there was no strong relationship between the knowledge of grammar and usage among lower-intermediate learners, since they thought that the errors were something being corrected. Nevertheless, there were other possible factors resulting in a better performance in the grammar test but a worse performance in the writing test. For the better results performed on the grammar subtest, this might be because the students achieved the

grammar learning features due to the in-class instruction, or because the students had already mastered the grammar points learned in their former instruction experiences, or because the test was too easy to discriminate the high- and low-performers. As for the writing test, it might be due to other variables such as content, organization and mechanics involved in the rating of their writing, affecting the overall performance rating of the writing. The analysis of reliability of the test in the following paragraph might further account for the test results.

The correlation between the grammar and writing subtests was $.595$, with no significance. Yet, grammar and the lexico-grammatical control did show a significantly positive correlation. In other words, to some extent, knowledge of grammar can be transferred to usage. Besides, the correlational analysis of both subtests can also account for the construct validity of both subtests. In the grammar subtest, there was no statistical significance to support the correlation between all the observed variables, thus indicating no evidence of construct validity in this subtest. The results could be attributed to some test items and distractors which needed revising. In the writing subtest, the correlation between the content and rhetorical controls was found to be significantly high ($.712$); that between the content and mechanics controls, significantly moderate ($.662$); that between the rhetorical and mechanics controls, significantly high too ($.740$). In short, the content, rhetorical, and mechanics controls were the appropriate variables which should be included in this test. Though the lexico-grammatical control did not show to significantly correlate to the other three variables, this could be due to some random factors in this



test. A larger rating scale might give the raters more options as determining the test takers' similar performance in this control.

The results of low reliability of the test and invalid constructs could be attributed to some factors in this study. First, the small numbers of test takers and test items might have reduced the statistical reliability. Second, test items should be more elaborate and challenging, and the distractor, more attractive, to discriminate high- and low-performers. Third, the instruction in the writing test was informative; for example, it required the test takers to state "what happened, who was involved, when and where it happened, and how you felt" in the essay of "My First Experience in ...", so that the test takers, following the instruction, performed better in the content and rhetorical controls than in the lexico-grammatical control. Fourth, the rating scale of the rubric for the writing test should have been larger and ranging from 1 to 5 so as to better discriminate those students who got the same scores in each control. Last, including a third rater or native English speaker could have contributed to a higher inter-rater reliability.

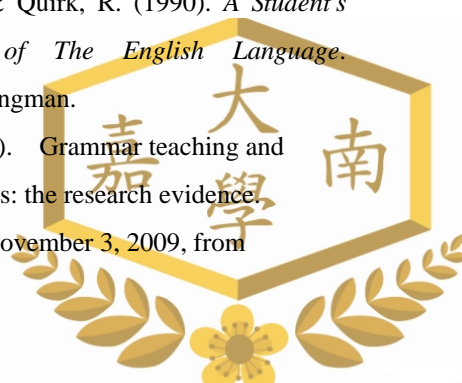
In conclusion, although the test did not provide evidence in support of the proposed models in this study due to some limitations, the factors found in this study can be improved so as to help to develop a more successful test in the future. This is also one of the motives upon which this study was implemented.

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APPENDIX A

Grammar Test

Grammar Test (15 min.)

Student Name: _____

Time: 15 minutes

Sara wrote a letter to her friend talking about her experience going to a Mariah Carey concert. The following are some of the sentences she wrote in her letter. Please circle the **ONE** that best completes the sentence.

1. When I heard of the news regarding a Mariah Carey concert, I immediately _____ to go. [simple past tense-regular verb]
a) decide b) decided* c) decides d) deciding
2. It was a beautiful evening. My friends and I _____ 200 miles to Los Angeles for her concert. [simple past tense-irregular verb]
a) drive b) are driving c)drove* d) was driving
3. Unfortunately, we spent one hour looking for a parking space in Los Angeles because we _____ home earlier enough. [simple past tense in negative]
a) do leave b) don't leave c) did leave d) didn't leave*
4. You went to a Mariah Carey concert last year. How much _____ on the ticket? [simple past tense in Wh-question]
a) did* you spend b) do you spend c) you spent d) you spend
5. When we arrived, thousands of fans _____ in a long line. [past progressive aspect]
a) wait b) waiting c) was waiting d) were waiting*
6. While she _____, a secret special guest, her daughter, showed up on the stage to sing with her. [past progressive aspect]
a) sing b) sings c) was singing* d) were singing
7. She _____ to see her daughter on the stage. [past passive voice-regular verb]
a) is surprised b) was surprised* c) is surprising d) was surprising
8. My breath _____ by her powerful voice as she sang "Without you". [past passive voice-irregular verb]
a) was taken away* b) was taking away c) don't take away d) didn't take away



APPENDIX B

Writing Test

Writing Test (50 minutes)

Directions: You have 50 minutes to write an essay on the topic presented below. Please write your essay on a piece of paper and be sure that your handwriting is **CLEAR**. Take 5 to 10 minutes to **OUTLINE** your essay which consists of a topic sentence in each paragraph, introduction, supporting statements in the body, and conclusion. Leave a few minutes in the end to check grammar and spelling.

Topic: Everybody has many first experiences in his/her life. For example, the first time you lived in a foreign country, took a driving test, became a mother/father, went to a job interview, learned a skill, stayed in a hospital, and so on. Please choose **ONE** first experience in your life that you think is unforgettable and write an essay about it.

Hint: The title of the essay should be “**My First Experience in XXXX**.” Be sure that, in your essay, you tell exactly **WHAT** was it, **WHEN**, **WHERE** and **HOW** it happened, **WHO** was involved in that experience, **HOW** you thought of it and **WHY**, and **WHAT YOU GOT** from that experience.



個案研究: EFL 學生的文法能力是否說明其寫作能力?

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摘要

EFL 學生文法能力常與寫作能力被相提並論，文法在寫作中之角色一直被廣泛爭論卻仍未達一致結論，主因是如何定義文法寫作，及其能力之測驗設計和評量等變數有關。故本研究設計評量文法及寫作能力模型，以檢視文法指導是否提升學生文法能力並進而幫助其寫作。本研究中測驗含文法及寫作兩項目，文法及寫作分數比各佔 40% 及 60%，被執行於南台灣補習班英文課中十位中低英文能力之高中生。結果顯示大部分學生文法測驗表現比寫作好。此發現暗示文法知識及其使用，在中低英文能力學生身上無明顯關聯。一些建議也被提出，以供改進教學與文法寫作測驗設計。

關鍵字：文法能力、寫作能力、文法與寫作

