

An Empirical Study of the Effects of Reading-writing Connection on Non-English Majors' Writing Performance

Feifei Wang

School of Foreign Languages, Taishan University, Tai'an, China

Abstract—College English writing has been considered as one of the most difficult parts in the field of foreign language teaching. On how to improve the writing performance of college students, a great many of scholars both at home and abroad conducted plenty of studies and achieved fruitful results. The purpose of this study is to investigate whether reading-writing connection has positive influence on the Non-English majors' writing performance. The study indicates that reading-writing connection indeed has positive influence on the Non-English majors' writing performance, especially in the aspects of content, language use, organization and vocabulary.

Index Terms—reading-writing connection, writing performance, Non-English majors

I. INTRODUCTION

English writing, as one of the important language skills, is of great significance to both English teaching and learning. Meanwhile, it is one of the indispensable parts in various international and domestic large scale tests. Although it goes without saying that English writing plays a vital role in improving students' English proficiency, domestic researchers are concerned more about the overall proficiency of English. According to the research result from the database of Science Direct, Taylor & Francis, SAGE Publications, and Wiley Online Library, "Performance on Writing" has been the hottest Google search keywords in the fields of L2 writing in 2014. The fact shows that English writing has become a worldwide concern which needs to gather the wisdom and experience around the world.

According to Yang (2009), college students' English writing lags behind other language skills. It is believed that English examinations, to some extent, play a misleading role in the English teaching in China. The teacher-centered method in traditional English class has been seldom changed. Therefore, a number of problems ranging from discourse to grammar arose in students' compositions. The following items are the mistakes that students made in their writing practices: spelling errors, grammatical errors, bad cohesion and coherence, loose structures and vague expressions. Experts attribute these phenomena to the traditional teacher-centered method of teaching (Yu, 2014). The exam-oriented evaluation system is the dominant factor for the teaching method in China, which does not care much about students' reaction during the writing process. No specific writing course is offered for non-English major students in their curricula. Ji (2001), expressed his concern about foreign languages teaching. He noted that Chinese college students did not do well in English, not because of Intelligent Quotient but because of invalid teaching methods.

Huang (2002) also pointed out that writing in English was a discipline with very strong practicality. However, we normally lectured too much but wrote less. Writing was a neglected part in English teaching. Hence, how to improve students' writing ability becomes a serious problem that needs to be solved urgently.

As is mentioned above, Non-English major students, especially students majoring in music face great difficulty in improving writing competence and no special writing courses are offered for them. Music majors in this study refer to students who major in musical education, musical performance and vocal music with comparative lower scores in College Entrance Examination. Therefore, due to historical reasons, their English proficiency is weak in contrast with other non-English majors. The issue that most researchers and teachers face is: On the one hand, there are a large number of students with comparative insufficient English competence in the provincial universities; on the other hand, writing teachers are eager to find out a valid teaching method for writing classes. How can this problem be solved? The primary purpose of the study is to explore an answer for the question. Based on comprehensive literature review, the author came up with the topic "An Empirical Study of the Effects of Reading-Writing Connection on Non-English majors' Writing Performance". Ferris (2013) advised on identifying a research focus that interests, puzzles, or troubles us. The author has been a college English teacher for ten years and all along challenged by the course of English writing and by the need to pursue answers (or at least advice) for the future L2 writing courses. Ferris's remarks light up the author's way to do research on writing.

As is known to all, reading and writing are positively correlated. Based on this precondition, a teaching approach is adopted in this study to testify whether this approach suits the Non-English majors with comparative low English proficiency, and whether it can be popularized to the provincial universities.

II. THE SECOND LANGUAGE ACQUISITION THEORY OF KRASHEN

A. *Input Hypothesis*

Krashen initially formulates the input hypothesis to acquaint learners to acquire a second language. According to Krashen's statement, the precondition for second language acquisition is to understand the target language since comprehensible input is the key ingredient in the process of learning a foreign language. "Acquisition can take place only when people understand messages in the target language, and learners will make rapid progress in learning structures a little bit higher than their current level" (Krashen & Terrell, 1983, p135-153). From the above statement, a fundamental point can be indicated that comprehensible input means that the language materials should be "a little bit beyond" the learner's language acquisition. On the contrary, if it is far higher than the learner's current level, acquisition will not take place, either.

According to Krashen, "i" refers to the learner's current level while "i+1" is defined as "comprehensible input", namely, the next stage that the learner's language development is supposed to get to. Krashen claims that the level of comprehensible input should be appropriately relative to that of the learner's current level, neither too high nor too close. While the activation conditions are suitable enough to activate the learner's brain acquisition mechanism, the comprehensible input will absolutely be absorbed by the learner, and has beneficial effects on the learner's acquisition. It is the teacher who takes vital responsibility of providing abundant comprehensible input for students. Furthermore, "the process of second language acquisition has both automatic process and control process while the automatic process comes from repeated practice" (Ferris & Hedgcock, 1998, p198). Repeated practice is the key ingredient in the learning process of an effective second language acquisition. Another essential condition for this is the learner's attention which is indispensable in the transformation of input into intake.

B. *Affective Filter Hypothesis*

In terms of Krashen's statement, it is not sufficient for learners to take in comprehensible input merely. Language acquisition won't take place under the circumstances of the following condition, that is, when the learners have emotional filtration, such as upset, depression, furiousness, nervousness, and frustration. They will resist the language input, as a result, causing the effective comprehensible input to decrease. The above analysis indicates that the learner fails to take in effective comprehensible input when they come across emotional filtration.

Krashen (1981) also argues that it is not sufficient to rely on comprehensible input for language acquisition, as massive input is not equal to intake. To learn language well, learner's emotional factor should be taken into account. Emotional factor includes motivation, confidence and anxiety. The only approach for language input to obtain acquisition mechanism and to be absorbed by the brain is through emotional filtration. In the process of second language acquisition, the learner's emotional factors have great influence on their language input, either preventing or accelerating the language acquisition. If the learner has strong motivation, clear purpose, faithful confidence, and proper anxiety, the emotional filtration will be weak. Otherwise, the emotional filtration will be strong. Consequently, the language intake will be prevented and the brain could not reach into the language acquisition device.

C. *Jacob's ESL Composition Profile*

Since its introduction in 1981, Jacob's ESL composition profile appeared to be not only the first that experienced an analytic type of scale but also the first that assessed a great many compositions. Jacob's profile consisted of five-component scales—content, organization, vocabulary, language use and mechanics. The five-component scales were originally employed to rate the international students' composition at Texas A. & M. University and later popularized among raters and researchers. What teachers should value most in students' composition was the most valuable item that Jacob emphasized when developing the weighting of each component. To be specific, content had the highest weight (30% of the total score). Moderate weight were given to language use, organization and vocabulary (25%, 20% and 20% of the total score respectively), while mechanic got the lowest weight (only 5% of the total mark). Researchers in China seldom use Jacob's ESL composition profile as an assessment to evaluate students' composition and only a few of them just mentioned it in their papers. In the wake of the above phenomena, a great scope was left for the author to carry on further research about Jacob's ESL composition profile in China.

III. METHODOLOGY

A. *Research Questions*

The primary purpose of this study is to make it clear that whether reading-writing connection can significantly improve non-English majors' writing performance by means of empirical study. To be more specific, the research questions are:

- (1) Is the score in pre-test and post-test statistically different and significant at the level of contrast between experimental class and control class?
- (2) In what aspects does the reading-writing connection affect students' writing performance?
- (3) What are students' attitudes toward the new teaching approach?

B. *Participants*

A total of 80 students majoring in musical education at Taishan University, Shandong province were involved in the study. These 80 students were chosen from 124 freshmen in the school of music. All of them started learning English in primary school and students' age ranged from 17-20. Based on the results of vocabulary test and pre-compliance English test, they were divided evenly into experimental class and control class randomly.

C. Instruments

Three kinds of instruments were employed in this study to collect data—an interview and two writing tests (pre-test and post-test). The interview was designed for qualitative data collection while the pre-test and the post-test were used for the purpose of quantitative data collection to enhance the reliability of the study.

D. Interviews

From April 10th to 19th, the interview was carried out by means of audio-recording and was written down by the author at the end of the experiment. Six students representing three different English proficiency levels were interviewed face to face separately with the same questions. It took 20 minutes for each student to answer all the questions during the interview. The interview included these aspects: (1)What is the students' attitude toward the new teaching method about English writing? (2) In what aspects does reading-writing connection affect students' writing performance? (3)What kind of suggestions do you have for the new teaching method? (4)What kind of books do you like to read in the intensive class apart from the present books?

E. Reading Materials

Since the major objective for the study was to explore whether the reading-writing connection could make great difference to the Non-English majors' writing proficiency, the selection of the reading materials should be attached great importance. Before that, a vocabulary test was held to evaluate the subject's vocabulary and the results indicated that the amount of vocabulary for music majors was approximately 3000. The test paper was adapted from Xu (2013) and Nation (1983), and 100 words correspond to the vocabulary level of 5000. According to the regulation of the Ordinary High School Standard English Curriculum, the amount of vocabulary should be approximately 3500 after graduation from high school. As can be seen from the above data, the English proficiency of music majors remains at the level of high school graduates. Thus, both the degree of difficulty and the attraction of the materials will be taken into consideration in the matter of selecting reading materials.

With regard to what amount of vocabulary could make great difference in improving students' writing ability, the author consulted a great many references, no suggestive figures were confirmed other than the definite time period, that is, about two years. Xu (2007) proposed that it took approximately two years for the students' improvement to become manifested by the approach of reading-writing connection. Due to the limitation of practical conditions, the experimental duration of this study was only six months. To ensure the quality of the experiment, the reading materials were chosen cautiously by the author. Two kinds of reading materials were distributed to the students. One was the *Oxford Bookworm* rank 6 (abridged edition), the other was *Culture Smart!—Britain*.

Foreign language teaching and researching press published a set of abridged edition English novel reading materials—the *Oxford Bookworm*. The set of books which deal with the difficulty of the traditional novels provide a large school of reading materials for diverse readers. There were six ranks for the set of books, among which the 6th rank is intended for the first-year college students. The 6th rank consists of 5 books, including *Jane Eyre* (27400 words), *Oliver Twist* (23700 words), *Pride and Prejudice* (25400 words), *The Woman in White* (29100 words), and *Tess of the D'Urbervilles* (29400) with a total of 135000 words in all. Considering that each article was over 1000 words in *New Horizon College English Reading Book One* (the second edition), the reading materials that the students in the experimental class finished reading equating 135 articles in the text book, which was twice as much as those in the control class.

IV. RESULTS ANALYSIS

Jacob's ESL composition profile assessment was exploited to assess the students' compositions. Practice proved that this assessment was simple and easy to operate as it defined several subscales for the teachers to refer to. As is shown in Table 3.6 of Chapter three, the Pearson correlation for the two teachers' trial marks was significantly correlated to one another. Thus, it was relatively fair and rational to assess students' compositions. The question was analyzed by means of independent sample test and paired sample test in order to assess the resulting difference between EC and CC.

To answer this question, it was necessary to compare and analyze the data from the two classes respectively in the pre-test and post-test, together with the data of the two classes before and after the test.

A. Data Analysis of Pre-test between EC and CC

The data of the pre-test between EC and CC was analyzed by means of SPSS 17.0 with an independent sample test. The mean and standard deviation for each variable, as well as t-value and significance (2-tails) were calculated, and the result was shown in Table 4.1. From the Table, it was clear that the difference between EC and CC in the pre-test at the very beginning of the experiment was not statistically significant ($t=0.13$, $p=.90$). Furthermore, the mean of CC was slightly higher than that in the EC. These results suggested that the students in EC and CC were fair with a similar level

of writing performance at the very beginning of the experiment.

TABLE 4.1
INDEPENDENT SAMPLE TEST OF EC AND CC IN THE PRE-TEST

<i>Group</i>	<i>Number</i>	<i>Mean</i>	<i>S. D.</i>	<i>T</i>	<i>P(2-tailed)</i>
EC	40	68.69	20.31		
CC	40	68.09	20.41	.13	.90

B. Data Analysis of Post-test between EC and CC

Post-test was carried out at the end of the experiment six months after the pre-test and data analysis was conducted in exactly the same way as those in the pre-test. As shown in Table 4.2, the mean of EC was much higher than that in the CC and there was a noticeably statistical significance ($t=2.26$, $p=.03$) between EC and CC. The results suggested that the students in both EC and CC made progress, but the former performed even more apparent compared with the results of the pre-test.

TABLE 4.2
INDEPENDENT SAMPLE TEST OF EC AND CC IN THE POST-TEST

<i>Group</i>	<i>Number</i>	<i>Mean</i>	<i>S. D.</i>	<i>T</i>	<i>P(2-tailed)</i>
EC	40	78.64	14.20		
CC	40	70.44	18.00	2.26	.03

C. Comparison between Pre-test and the Post-test of EC

Comparison between the pre-test and the post-test of EC was analyzed, using SPSS 17.0 with paired sample test. The mean and standard deviation for each variable, as well as t-value and significance (2-tails) were calculated, and the result was presented in Table 4.3. The figures showed that the mean of the post-test was higher than that in the pre-test and it was found out that the relationship between pre-test and post-test was statistically significant ($t=-2.44$, $p=.02$). The results indicated that the new teaching approach—reading-writing connection positively affected students' writing performance in EC.

TABLE 4.3
PAIRED SAMPLE TEST BETWEEN THE PRE-TEST AND THE POST-TEST OF EC

	<i>Number</i>	<i>Mean</i>	<i>S. D.</i>	<i>T</i>	<i>P(2-tailed)</i>
Pre-test	40	68.69	18.00		
Post-test	40	78.64	14.20	-2.44	.02

D. Comparison between Pre-test and the Post-test of CC

TABLE 4.4
PAIRED SAMPLE TEST BETWEEN THE PRE-TEST AND POST-TEST OF CC

	<i>Number</i>	<i>Mean</i>	<i>S. D.</i>	<i>T</i>	<i>P(2-tailed)</i>
Pre-test	40	68.09	20.40		
Post-test	40	70.44	18.00	-.48	.63

As shown in Table 4.3, like-wise, the comparison between the pre-test and the post-test of CC was shown in Table 4.4 (See Table 4.4). From Table 4.4, it was apparent that statistical difference was found to be less significant in the pre-test and post-test of CC ($t=-0.48$, $p=.63$). The results suggested that the traditional teaching approach did not have effective impact on the improvement of students' writing performance.

Research question 2 mainly focuses on the concrete terms, namely, in what aspects does the new teaching approach affects students' writing performance in terms of the five subscales in Jacob's ESL composition profile assessment.

E. Comparison of Five Subscales in the Pre-test between CC and EC

TABLE 4.5
INDEPENDENT SAMPLE TEST OF FIVE SUBSCALES IN THE PRE-TEST (EC VS. CC)

<i>Pre-test</i>	<i>CC</i>		<i>EC</i>		<i>T</i>	<i>P(2-tailed)</i>
	<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>		
Content Organization	22.47	5.55	20.27	5.27	-1.80	.07
Vocabulary	14.52	3.90	13.27	4.07	-1.69	.09
Language Use	14.50	3.70	13.45	4.16	-1.18	.24
Mechanics	17.22	5.40	14.16	6.44	-2.29	.03
	3.58	0.99	3.31	1.01	-1.22	.23

Table 4.5 showed the results of a comparison between EC and CC of the five subscales in the pre-test. The independent sample test revealed no significant difference between EC and CC in terms of content ($t=-1.8$, $p=0.07$),

language use ($t=-2.29$, $p=0.03$), organization ($t=-1.69$, $p=0.09$), vocabulary ($t=-1.18$, $p=0.07$), and mechanics ($t=-1.22$, $p=0.23$). On the basis of the above results, we can see that four of the subscales showed no significant difference between CC and EC. The results indicated that at the beginning of the teaching experiment, students in EC did not differ from those in CC. In other words, students in both EC and CC had similar writing performance.

F. Comparison of Five Subscales in the Post-test between CC and EC

TABLE 4.6
INDEPENDENT SAMPLE TEST OF FIVE SUBSCALES IN THE POST-TEST (EC VS. CC)

Post-test	CC		EC		T	P(2-tailed)
	Mean	S.D.	Mean	S.D.		
Content Organization	19.58	5.09	25.66	4.23	5.79	.00
Vocabulary	13.73	3.72	16.02	3.11	2.98	.00
Language Use	13.77	3.70	16.01	3.11	2.92	.00
Mechanics	16.21	5.64	18.87	4.27	2.38	.02
	3.63	0.96	3.96	0.70	1.73	.09

From the figures in Table 4.6, it was apparent that the situation changed at the end of the experiment. There was significant difference between EC and CC with reference to the content ($t=5.79$, $p=.00$), language use ($t=2.38$, $p=.02$), organization ($t=2.98$, $p=.00$), vocabulary ($t=2.92$, $p=.00$) and mechanics ($t=1.73$, $p=.09$). The results suggested that students in EC surely made remarkable improvement in writing performance after the experiment, especially in the aspects of content, organization, vocabulary and language use, but it did not show obvious progress in CC.

G. Comparison of Five Subscales between Pre-test and Post-test in CC

TABLE 4.7
PAIRED SAMPLE TESTS OF FIVE SUBSCALES BETWEEN PRE-TEST AND POST-TEST IN CC

CC	Pre-test		Post-test		T	P(2-tailed)
	Mean	S.D.	Mean	S.D.		
Content Organization	22.47	5.27	19.58	5.09	6.76	.00
Vocabulary	14.52	3.90	13.73	3.72	5.88	.00
Language Use	14.50	3.76	13.77	3.47	4.64	.00
Mechanics	17.22	5.47	16.21	5.64	5.48	.00
	3.58	0.99	3.63	0.96	-0.81	.42

Table 4.7 presented the results of comparison between the pre-test and the post-test in CC. As shown in Table 4.7, the results did reveal significant difference referring to the content ($t=6.76$, $p=.00$), language use ($t=5.48$, $p=.00$), organization ($t=5.88$, $p=.00$), vocabulary ($t=4.64$, $p=.00$) and mechanics ($t=-0.81$, $p=.42$). Although results showed significant difference, the mean of pre-test was higher than those in the post-test. Thus, the results indicated that, compared with the new teaching approach, the traditional one contributed less to the improvement of students' performance. However, it should be admitted that the traditional one did have great impact on the improvement of the mechanics.

H. Comparison of Five Subscales between Pre-test and Post-test in EC

TABLE 4.8
PAIRED SAMPLE TESTS OF FIVE SUBSCALES BETWEEN PRE-TEST AND POST-TEST IN EC

EC	Pre-test		Post-test		T	P(2-tailed)
	Mean	S.D.	Mean	S.D.		
Content Organization	20.27	5.54	25.66	4.23	-9.58	.00
Vocabulary	13.27	4.07	16.02	3.11	-6.54	.00
Language Use	13.45	4.15	16.01	3.11	-5.61	.00
Mechanics	14.16	6.44	18.87	4.27	-6.40	.00
	3.31	1.01	3.96	0.70	-5.12	.00

Table 4.8 illustrated that massive improvement was made in EC in the post-test in terms of content ($t=-9.58$, $p=.00$), language use ($t=-6.40$, $p=.00$), organization ($t=-6.54$, $p=.00$), vocabulary ($t=-5.61$, $p=.00$) and mechanics ($t=-5.12$, $p=.00$). The results indicated that the new teaching approach had obvious impact on the improvement of students' writing performance.

In summary, there was remarkable statistical significance between EC and CC in the post-test while no obvious difference in the pre-test. Moreover, the mean of EC in the post-test outnumbered that in the CC, which was slightly lower than the mean of CC in the pre-test at the very beginning of the experiment. Thus, it could be concluded that integration reading with writing would be one of the predominant factors in creating the significant difference between EC and CC.

V. KEY FINDINGS OF THE STUDY

A preliminary finding from this study indicated the following results. Firstly, reading-writing connection not only had remarkable influence on Non-English majors' writing performance but also contributed effectively to the improvement of their writing performance, which greatly encouraged the teachers who taught students with similar English proficiency. Secondly, in particular, reading-writing connection showed significant effectiveness for students' writing performance in the aspects of organization, language use and vocabulary. Thirdly, most students had positive attitudes towards the reading-writing connection and considered it to be more interesting and efficient than the traditional one. At last, Jacob's ESL composition profile was simple to operate and reliable for teachers to assess students' compositions, which could be a good reference for other teachers.

For the sake of clarity, the pedagogical implications will be presented from three aspects. In the first place, it will be described from the perspective of the students. The participants in this study were actually majoring in musical education. As an English teacher who had taught music majors for more than five years, the author made attempts to search for a proper way for students with comparatively insufficient English proficiencies, and to prove that most learners could be active and participative when a suitable approach was available. The results of the present study confirmed that students could learn English well and write excellent compositions, as long as the appropriate teaching approach was used to inspire their enthusiasm.

In the second place, there are some implications for college English teachers. Most English teachers all along have been considering writing as the most difficult course since they have no idea on how to deal with the relationship between writing instruction and writing practice during classes. Some teachers just explain writing instructions for the whole class without interacting with students while others assign proposition thesis over and over again without any writing instructions. In this study, it is proved to be successful that the author assigns compositions relating to the reading materials. Even for the students in CC, the writing practices were also based on text books. It will not only reduce the writing difficulty but also increase the total amount of writing practice.

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Feifei Wang is a lecturer of School of foreign languages at Taishan University. Her current research focuses on second language acquisition, second language writing.