Minjong Song and Myeonghee Seong* Sungkyul University and Eulji University

Song, M., & Seong, M. (2010). Exploring writing-learning relationship through Korean EFL college students. *Journal of Pan-Pacific Association of Applied Linguistics*, 14(1), 31-43.

An experimental study explored writing-learning relationship in a Korean college curriculum. Two teachers and 207 students participated and four sections of a freshman English reading course were used. Students in two sections were allocated to an experimental group, and students in the other two sections, to a control group. Based on the premise that different writing tasks can involve students in different kinds of learning, this study adopted essay writing and answering comprehension questions. For a ten-week period, the experimental group wrote essays on their six reading chapters. The control group wrote answers to comprehension questions on the same chapters during the same period. Pre- and posttest data were analyzed by using ANOVA. The analyzed variable was a change in reading comprehension, measured by the comprehension subtest of TOEFL. Results showed that writing essays could improve students' reading comprehension more than answering comprehension questions. That was congruent with the results from previous studies in a native secondary school curriculum, and interpreted as supporting the use of essay writing in EFL learning environments. Supplementarily, the interaction by teacher by treatment had a noticeable effect on the students' reading comprehension. Some directions for further research were suggested.

Key Words: writing-learning relationship, reading curriculum

1 Introduction

This study explored the value of essay writing for learning development in a Korean college reading curriculum. Since the 1980s, "writing to learn" and "writing across the curriculum" have become favored slogans in the U. S. Those slogans have been backed up under the following premise: Teaching writing, especially in the context of academic tasks, improves the quality of thinking required of students and then, the improved thinking naturally leads to developed learning.

-

^{*} First author: Minjong Song; corresponding author: Myeonghee Seong.

On the writing-learning relationship, Langer and Applebee (1987) performed three different studies in a native secondary school curriculum. And, from the studies, it was substantiated that different writing tasks involved students in very different patterns of thinking and led them to different kinds of learning. That is, comprehension questions, note-taking, and summary writing focused their attention rather loosely on the overall content of a text, letting them comprehend the content more or less superficially; essay writing prompted them to focus more deeply on specific sections, allowing them to integrate the text content thoughtfully and recall more information from it.

The current study focuses the learning aspect on reading, and it is needed to describe the present state of English reading ability of many Korean college freshmen. Many instructors in the school environment have said that their comprehension ability is not so satisfactory to the extent that they have some difficulty in understanding the texts for introduction. However, as they move up to higher academic years, they should read and understand more and more abstruse texts for major courses. In other words, they should do more and more advanced reading in English, and that can be a big problem. One of the solutions may be to teach them writing about the content of given texts. At present, many colleges do not offer their first-year students in reading courses opportunities to write, except when answering comprehension questions related to the given content.

So, the current researchers considered to activate essay writing in a first-year reading curriculum, expecting that this could be a scaffold to help the students to do more and more advanced reading in their near future. The expectation came from the above-mentioned results from the Langer and Applebee's (1987) studies. Prior to activating, the researchers performed an experiment in a college to see whether the expectation would come true, with two different writing tasks: answering comprehension questions and writing essays.

The research question was as follows: Do Korean college freshmen, who write essays about their reading content over a ten-week period, improve their reading comprehension ability more than do similar students who answer comprehension questions about the same content during the same period?

2 Theoretical Background

This section deals with (1) writing within a process-centered paradigm, (2) writing in the context of academic tasks, and (3) empirical studies on writing-learning relationship.

2.1 Writing within a process-centered paradigm

Researchers for a process-centered paradigm of writing (Hairston, 1982; Marshall, 1987; Raimes, 1985, 1991; Stotsky, 1983; Tierney, 1992; Tierney

& Shanahan, 1991; Zamel, 1987) assert that writing is a cognitive process as a means of thinking, a creative process for meaning-making, and a recursive process in which pre-writing, writing, and re-writing overlap and intervene. They continuously claim that writing works as a means of learning and developing ideas, because most writers, both experienced and inexperienced, have just a partial idea of what they want to write at the beginning and their ideas develop in the process of writing. In this writing mode, content is more important than form and this requires a writer's active role for discovering and expressing meaning. Therefore, thinking strategies are emphasized which underlie the processes of composing a text. Accordingly, in their teaching of writing, instructors adopt student-chosen topics, free writing, journal entries, multiple drafts, focus on audience and purpose, and attention to error only during the final stages of composing. The reason is that all of these can improve students' thinking strategies, meaning creation, and its development. Also, the instructors intervene in their students' writing process helpfully and give communicative feedback to each student's draft.

2.2 Writing in the context of academic tasks

The premise that writing instruction, especially within academic tasks, improves students' thinking quality originates from the study of literacy development. Scholars for the study claim that acquisition of writing is fundamental to the growth of modern thought which can be labeled rational or scientific. They base this claim on the fact that the writing act itself facilitates a logical, linear presentation of ideas, writing requires explicitness if meaning is to remain constant beyond the context within which it was originally written, and the permanence of written product permits reflection upon and review of what has been written. Thus, writing itself promotes, demands, and allows heightened thinking activity. Also, "writing across the curriculum" movement comes from the premise that if writing itself can promote thinking and learning, writing across the curriculum can promote thinking and learning in all subject areas. Concretely, writing about the content of an academic task improves critical reading of it.

Scholars (Elbow, 1991; Tashlik, 1987; Tierney & Shanahan, 1991) assert that the students who write before they read tend to read more critically than do the students who go through a schema activation task or simply get an introduction to the story. After the writing experiences, those students approach texts written by others with a sense of their own purpose and a view to meaning negotiation beyond the acquiescing to the texts. That is, by exploring probable issues in writing before they read assigned texts, the students are allowed to bring their own experience, knowledge, and cultural background into play, to enhance their interpretive and inferencing skills, and therefore, to approach the authors they subsequently read as other voices (rather than definitive authorities) to which they add their own. In this

way, those students feel themselves engaged in and take ownership of the text. Zamel (1992) also contends that the students, who write while they are reading and/or after they read, come to realize that reading is an act of construction. That is, through the writing experiences, those students can present their original and temporary responses and then return to the text and revise them, and eventually understand that reading changes as they bring new responses to it. In other words, reading is open to revision. At this point, as Petrosky (1982) explains, "the only way to demonstrate reading comprehension is through extended discourse where readers become writers who articulate their understandings of and connections to the text in their responses" (p. 24).

Consequently, writing about academic content helps students think more and comprehend more, that is, learn more about it. Therefore, scholars such as Goodman (1991), Tierney and Shanahan (1991), and Zamel (1992) claim that reading and writing instruction have to be combined, that is, writing has to be taught in the context of academic tasks. They continuously discuss for the reason that the combined instruction generates a more curious attitude to learning, gains more powerful memorization, strengthens reasoning operations, and helps to expand and refine knowledge.

2.3 Empirical studies on writing-learning relationship

Langer and Applebee (1987), with different kinds of writing assignments, performed three different studies on writing-learning relationship in a native secondary school curriculum. The initial study explored the general effects of short-answer study question completion, note-taking, and essay writing, collecting data from six high school students. Think-aloud protocols and measures of passage-specific knowledge were adopted for the outcome tasks. The second study investigated the effects of answering comprehension questions, note-taking, and analytic writing, collecting data from 208 high school students. Topic knowledge, passage comprehension, and extended essay were used for the outcome tasks. The third study examined the relationship between what students did during the study task (a read-andstudy condition, comprehension questions, summary writing, and analytic writing) and what they remembered later, collecting data from 112 high school students. Topic knowledge and recall tasks were used for the outcome tasks. The general conclusions of these three studies were that different writing activities involved those students in very different patterns of thinking and also led to different kinds of learning. Specifically, when completing comprehension questions, the students focused on specific ideas in the text. They did not integrate the text content across the questions but thought about those ideas in an item-by-item fashion. When taking notes, the students focused on concepts larger than those they did when completing comprehension questions. At this time, they integrated ideas across sentence boundaries. However, the ideas were treated relatively superficially since the

students listed the information in a linear fashion in much the same way as it was presented in the text, not reorganizing it in their own ways. When writing summary tasks, the students focused their attention across the text. This led to relatively generalized effects and superficial manipulation of the text being reviewed. When writing essays, the students focused more selectively and thoughtfully on a specific body of information, and they reconceptualized the text content in ways that cut across the specific information presented by centering on larger issues or topics. By integrating ideas and reconstruing their understanding, the students could have a particular interpretation or point of view.

Then, it could be simply concluded that while writing essays enabled the students to comprehend the text content the most, answering comprehension questions, the least, of all those writing tasks.

3 Method

3.1 Design and hypothesis

For this study, an experiment of one-semester length was performed with four intact reading sections of freshman English. Students in two experimental sections wrote essays about reading content, and students in two control sections wrote answers to comprehension questions about the same reading content. Then their improvement on reading comprehension ability was compared. The hypothesis was that the experimental group would attain significantly higher gains in reading ability as compared to the gains in reading ability attained by the control group with the level of significant alpha set at p < .05.

3.2 Participants

The subjects were all female, first-year students and their major field of study each was pharmacy, law, education, or pre-medicine. Prior to the first meeting, pharmacy major and law major students were allocated to experimental groups, and education major and pre-medicine major students to control groups at random by coin toss. At the beginning of the experiment, the population was 207 students and each section was composed of around 50 students.

The two teachers were also females with similar academic backgrounds and teaching experiences in reading. For the experiment both taught two sections, one of the experimental and the other of the control group.

3.3 Procedure

During the first meeting, a pretest was taken for both groups to measure their reading ability. For a pretest, a form of TOEFL reading comprehension section was

used. After that, each treatment started. The teachers followed the same sequence in the course syllabus and gave the same course requirements except writing homework. The experimental group students were asked to write an essay on each of their six reading chapters with self-chosen topics, freely and informally with their own ideas and style (See Appendix A.). They wrote with a sense of purpose and the researcher responded communicatively to their writing, centering on their meaning. The researchers responded only once to their each writing. Accordingly, it can be inferred that while writing the essays, those students were required to focus their thinking more fully since they had to make their own meaning rather than picking up an author's ideas from the reading content, and therefore, in the meaning-making process, they could learn a lot. Then, those aspects in essay writing used for this study - emphasis on meaning, student - chosen topics, free mode, sense of purpose, and communicative response - can represent the features of a process-centered paradigm of writing. Meanwhile, the control group students were asked to write answers to comprehension questions on each of the same six chapters, making a few sentences on each of the teacher-given questions extracted from the reading content (See Appendix B.). They made those sentences, without any sense of purpose, by imitating and manipulating the formal linguistic features such as vocabulary and sentence structure in the given content except when transcribing a set of picked-up ideas. And the researchers responded evaluatively to their answers, centering on their right choice of picked-up ideas. Those researchers responded only once to each of their answer sheets. Accordingly, it can be assumed that while answering the comprehension questions, those students did not have to focus their thinking more fully since they were allowed to answer with predetermined ideas rather than with their own interpretations of the content, and therefore, in the answering process, they could not learn a lot. Because of the classtime constraint, students in this study wrote essays or answered comprehension questions not for a classroom activity but for homework. These procedures continued throughout one semester. During the final meeting, a posttest was taken for both groups to measure their reading improvement. For a posttest, another form of TOEFL reading comprehension section was used.

3.4 Data collection and analysis

Data was collected from the two different forms of TOEFL, which were issued out in 1984 and 1985 respectively. The two forms were randomly crossed by coin toss so that the subjects in each group took one form for the pretest and the other form for the posttest. The test forms taken by each group are presented in Figure 1.

Figure 1. Pre- and posttest forms of TOEFL reading comprehension section

<u> </u>	8	1
Taught by T1 (T2)	Experimental Group	Control Group
Pretest Form	A (B)	B (A)
Posttest Form	B (A)	A (B)

Each form had the same format and degree of difficulty. It included 30 questions, which asked the main idea, specific details, synonyms or antonyms, cause-and-effect relationship, and inference. All the subjects' test forms and answer sheets were collected at the end of each test. Scoring was done just for the 166 subjects who took part in all the process of the experiment. When the scoring of the data was completed, whole class data were averaged for the whole class gains, and the gains were brought to statistical analysis for significant alpha set at p = < .05 through ANOVA.

4 Results and Discussion

This section presents the results and discussions relating to the hypothesis and one supplementary (teacher by treatment) variable.

4.1 Result relating to the hypothesis

A similar result was also mentioned in a study (Min-Jong Song, 2007). The mean changes from pretest to posttest for experimental and control groups were +2.433 and +1.724, respectively, an improvement in both cases. Table 1 indicates the mean changes for the two groups.

Table 1. Analysis of Reading Comprehension Mean Change Pretest to Posttest by Treatment

Treatment	Pretest	Posttest	Change
Experimental G.	16.889	19.322	+2.433
Control G.	16.829	18.553	+1.724

Table 2 presents an overview of the F test of significance by treatment. In this case, while the treatment effect favored the experimental group, it was not statistically significant, F(2, 166) = .8813, p = .3492.

Table 2. Test of Significance for Reading Comprehension by Treatment

Source	Df	F	Sig of F
between groups	1	.8813	.3492
within groups	164		

^{*}p<.05

The hypothesis was not supported by the analyzed data, so the greater gains achieved by the experimental group could have happened incidentally. Nevertheless, essay writing seems to be more effective in developing students' learning, in this case, their reading comprehension, than answering comprehension questions. The reasons are twofold. One is that it can provide an opportunity for thinking about what the students have read more than the traditional questions. The other is that it can elicit higher level

responses like "What's the author's intention here?" rather than lower level responses such as "What's the hero's name?"

4.2 Result relating to a supplementary variable

In the analysis of the data, a strong effect of the interaction by teacher by treatment appeared and confounded the answer to the initial hypothesis. So the effect is reported and discussed here.

The mean change from pretest to posttest for the experimental group by teacher 1 was +4.804, for the experimental group by teacher 2, -0.667, for the control group by teacher 1, -1.300, and for the control group by teacher 2, +5.804, respectively. Two sections showed improvement and the other two sections, deterioration. Table 3 indicates the mean changes for the four sections interacted by teacher by treatment.

Table 3. Analysis of Reading Comprehension Mean Change Pretest to Posttest by Teacher by Treatment

Teacher x Treatment	Mean Change
Teacher 1 x Experimental	+4.804
Teacher 2 x Experimental	-0.667
Teacher 1 x Control	-1.300
Teacher 2 x Control	+5.084

Table 4 presents an overview of the F test of significance by teacher by treatment. In this case, there is a significant interaction between teacher variable and treatment variable, i. e., the result for experimental group and control group respectively by each teacher differs significantly depending on which teacher is involved.

Table 4. Test of Significance for Reading Comprehension by Teacher by Treatment

Treatment			
Source of Variation	df	F	Sig of F
Within cells	162		
Teacher	1	.57	.453
Treatment	1	.09	.771
Teacher by Treatment	1	95.65	.000***

^{***}p < .001

For teacher 1, mean change for the experimental group shows improvement and that for the control group, deterioration. However, for teacher 2, the result is reversed: Mean change for the experimental group shows deterioration and that for the control group, improvement. Here, it is noted that regardless of experimental treatment or control treatment, whether it is improvement or deterioration, teacher 2 group improved more than teacher 1 group and deteriorated less than teacher 1 group. Why is this so? As mentioned

in Min-Jong Song (2008), the reason may be speculated due to the teaching method and approach to reading that the teacher 2 used for her classes. Even though the researchers couldn't observe the classes involved in the study, they could have an idea of what was going on in those classrooms by the teachers' description about how they taught. The researchers took notes of every item on the description and, based on the notes, they could explore possible effects of their teaching methods and reading approaches. For her classes, teacher 1 taught with the Grammar-Translation Method, and used the transmission model of reading with traditional comprehension questions at the end of each reading. On the other hand, for her classes, teacher 2 taught mostly with the eclectic method, and used the interactive approach to reading with pre-, during-, and post-reading activities. Teacher 2 lectured and also activated small group work in the classes and she herself acted as a helper, an organizer, and an idea giver for the groups. Through group presentations, her students could get multiple viewpoints and meanings their peers brought to a given reading. Thus, alternative groupings and a lot of interaction between student themselves were activated in those classes to encourage cooperative and active learning. Accordingly, the students of teacher 2 could have had opportunities to think from more perspectives and learn more about their readings than the students of teacher 1. This teaching method and approach to reading could have contributed to the better result for teacher 2 group.

5 Conclusion and Suggestions

Writing essays about the given readings probably and possibly developed the students' thinking and learning, in this case, their reading comprehension more than answering comprehension questions about the same readings. Therefore, EFL reading teachers had better use essay writing as a means for developing their students' reading comprehension ability. Seeing the result from the variable of the interaction by teacher by treatment, the teacher effect could be stronger than the treatment one. Therefore, regular teacher training is needed for teachers in that school to have opportunities to develop more effective teaching methods and approaches to reading.

As suggestions for further research, first, although the essay writing group achieved better results in reading comprehension ability, it was not statistically significant. That might have come from the fact that writing essays and responding to them was done just one time for each given content. Therefore, it can be assumed that critical reading by thinking more deeply and developing meaning might not have happened for the group. That critical reading could have been done through the students' writing multiple drafts on each reading and helpful intervention of the respondent in their writing process. To solve this problem, hiring research assistants as respondents, who are higher in cognitive and linguistic ability than the essay-writing students, and making the writing and responding an ongoing process might be one possibility.

Second, writing essays can be used and tested as to its effectiveness in the given EFL context - freshman English reading class in a Korean college. Therefore, it is possible to try it in different kinds of EFL contexts, for example, writing essays in a major course for the third- and/or fourth-year students or writing essays across the curriculum throughout school years.

Third, as mentioned in Min-Jong Song (2007), to measure reading comprehension, it would be better to obtain the results of a full, one-hour reading comprehension measure together with a "read aloud/ retell" measure obtained individually for the subjects.

References

- Educational Testing Service. (1984). *TOEFL*. Princeton, NJ: TOEFL Services. Educational Testing Service. (1985). *TOEFL*. Princeton, NJ: TOEFL Services.
- Elbow, P. (1991). Reflections on academic discourse: How it relates to freshmen and colleagues. *College English*, *53*, 135-155.
- Goodman, K. (1991). Whole language: What makes it whole? In B. M. Power & R. Hubbard (Eds.), *Literacy in process* (pp. 88-95). Portsmouth, NH: Heinemann.
- Hairston, M. (1982). The winds of change: Thomas Kuhn and the revolution in the teaching of writing. *College Composition and Communication*, 33, 76-88.
- Langer, J. A., & Applebee, A. N. (1987). How writing shapes thinking: A study of teaching and learning. (NCTE Research Report No. 22). Urbana, IL: NCTE. (ERIC Document Reproduction Service No. ED 286 205)
- Marshall, J. D. (1987). The effects of writing on students' understanding of literary texts. *Research in the Teaching of English*, 21, 30-63.
- Petrosky, A. (1982). From story to essay: Reading and writing. *College Composition and Communication*, 33, 19-36.
- Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly*, 19, 229-259.
- Raimes, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly*, 25, 407-430.
- Song, Min-Jong. (2007). Teaching reading with an interactive approach. *Modern English Education*, 8(3), 220-242.
- Song, Min-Jong. (2008). A dialogue journal study with Korean college freshmen. *Modern English Education*, *9*(1), 168-187.
- Stotsky, S. (1983). Research on reading/writing relationships: A synthesis and suggested directions. *Language Arts*, 60, 627-642.
- Tashlik, P. (1987). I hear voices: The text, the journal, and me. In T. Fulwiler (Ed.), *The journal book* (pp. 171-178). Portsmouth, NH: Boynton/Cook.

Tierney, R. J. (1992). Ongoing research and new directions. In J. W. Irwin & M. A. Doyle (Eds.), *Reading/writing connections: Learning from research* (pp. 246-259). Newark, DE: International Reading Association.

Tierney, R. J., & Shanahan, T. (1991). Research on the reading-writing relationship: Interactions, transactions, and outcomes. In R. Barr, M. L. Kamil, P. B. Mosenthal & P. D. Pearson (Eds.), *Handbook of reading research, Vol. II* (pp. 246-280). New York: Longman.

Zamel, V. (1987). Recent research on writing pedagogy. *TESOL Quarterly*, 21, 697-715.

Zamel, V. (1992). Writing one's way into reading. TESOL Quarterly, 26, 463-485.

Minjong Song Department of General Education Sungkyul University Mt. 8-1, Anyang-8-dong, Anynag-si Gyeonggi-do, Korea Tel: 031-467-8920

E-mail: mjsong43@sungkyul.ac.kr

Myeonghee Seong Department of Leisure Design Eulji University 212 Yangji-dong, Sujeong-gu Seongnam-si, Gyeonggi-do 461-713 Korea Tel: 031-740-7255

E-mail: seong@eulji.ac.kr

Received: February 20, 2010 Revised: June 03, 2010 Accepted: June 15, 2010

Appendix A.

A Sample of an Experimental Group Subject's Essay Writing

Note: A student essay is printed flush left. Investigator response is indented 5 spaces. Marginal comments by the investigator are inserted in the text, and bracketed.

After reading "The New Breed"

This article says there are lots of gaps about the meaning of successful life between the past and the present. The old symbols of success are a job promotion, a new house or new car, an achieving child, and so on. In contrast, the New Breed insist on the importance of "self-fulfillment". <Self-fulfillment through what?> They feel they are obliged to give more attention to their own needs and desires. They also press for greater freedom for the individual, freedom to express impulses and desires.

Thease <?> the insistence on self-satisfaction and the pursuit of freedom may contribute to the improvement of their standard of living. However when they persue their needs and desires, they must think over others lives and freedoms. If they have their own way in everything for their satisfactions, other people will suffer damage and the social order will be broken. Freedom without taking the responsibility cannot be accepted as real that.

Todays, development of industry and growth of economy bring to our fruitful lives. In this period, it is natural that people persue their self-fulfillment. <What kind of self-fulfillment?> But I hope they sometimes think about our society and we. At the present time, individualism is prevalent and the binding together is so weekened. However as we know from the word which is "Man is a social animal", we cannot live alone. Therefore we should be concerned about not only an individual happy life but also the social problems and the social welfare.

Euiyoung, you mentioned self-fulfillment twice as the representative characteristics of the new breed. However, what kind of self-fulfillment do you mean? The generation before the 1970s also pursued self-fulfillment through work and success. And I can see that you are much concerned about social issues through this writing. Good!

Appendix B.

A Sample of a Control Group Subject's Comprehension Questionnaire-Answers

Note: Comprehension questions are printed flush left. Student answers are indented 5 spaces.

Comprehension Questions on "The New Breed"

Department: Name:

Please answer with full sentences in English for each question.

1. In the postwar period, American people found their self-fulfillment through the pursuit of success. However, in the 1970s, many Americans' aspirations for self-fulfillment split away from the traditional symbols of success. What are the reasons for it?

This happened for many complex reasons having to do with the sexual revolution, the effects of the women's movement on the family, the dying off of the generation scarred by the Great Depression of the 1930's, a growing disillusionment with the ability of our institutions to deliver the goods, the failure of the economy to live up to people's expectations of a steady annual increase in income, a questioning of whether the values of a consumption economy are goodies, an almost subliminal awareness that energy shortages and environmental hazards call for a new orientation, and a further evolution of individualism into the quest for less conforming personal life-styles.

2. What are the three noticeable manifestations of New Breed work-related values?

The three noticeable manifestations of New Breed work-related values are the increasing importance of leisure, the symbolic significance of the paid job, and the insistence that jobs become less depersonalized.

3. What's the symbolic meaning of a paid job for the women's movement?

The meaning is that the women with a paid job feel that she no longer has to be totally dependent on the will and whim of a man.