Paragraph Writing by Iwate University Language Students

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1. Introduction

This paper results from the efforts of a graduate student and a professor in the course, Theory of English Teaching Methods, at Iwate University Graduate School of Education. This course is aimed at three goals: first, to give a Japanese graduate student learning EFL teaching theory an opportunity to carry out research collecting data, analyzing it, reviewing literature, discussing the results, and writing a paper in English.   The second goal is to facilitate research collaboration between faculty and graduate students.   The third goal is to enhance the undergraduate students' EFL writing skills by receiving feedback from faculty and a teaching fellow (a graduate student) on their collaborative research work.

To express oneself in English by writing is one of the most difficult skills for Japanese college students to develop.   Writing requires language proficiency at multiple levels: English learners need not only grammatical, vocabulary, and reading proficiency, but also they must attain competence in the structure of the English essay.   Moreover, essay structure for English speakers is different from that of Japanese.[1]   The first step EFL students need to learn to write well in English is to understand the structure of an essay.   Even more elementary, students must learn the structure and purpose of the paragraph.   Next, they must learn to compose and organize several paragraphs, including the introduction (which contains a thesis statement), body (at least three paragraphs), and a conclusion in which the thesis statement is reiterated.

Thus, this paper investigates how Japanese college students have improved their writing skills in English and examines relationship between writing skills and other language skills in terms of assisting students in learning how to write good essays in English.

In this research project, roles were allotted as follows: Yamazaki, the teacher of the graduate course, Theory of English Teaching Methods, designed the research, created pre- and post-tests, scored language proficiency tests taken by the 30 participants, and wrote parts of the Introduction, Method, and Concluding Remarks in the paper.   Hatakeyama, the course's graduate student, was in charge of generating computer statistics, giving feedback to the students in carrying out their assignments, reading relevant literature, and writing parts of Results, Analysis, and Literature Review in the paper.

2. Literature Review

Hairston (1982) claims that "the writing process not linear" but "messy, recursive, convoluted, and uneven." This suggests that the writing process is complex. Educators believe that many factors are involved in the writing process. However, it is quite difficult to identify the factors. Stotsky (1983) has suggested a strong relationship between reading skills or the amount of reading one does and writing skills. Eisterhold (1990) argues that teachers must be explicit about this relationship when teaching writing skills. However, as far as we know, no one has ever explored the factors that directly influence writing ability.

3. Method

Participants: Participants are the students at Iwate University, who took Writing II, a required course for students majoring in English Education, in the fall semester, 2000. Demographic data of the participants in this study is shown in Table 1.

Table 1. The Demographic Data of the Participants

	Freshmen	Sophomores	Total
Male	8	5	13
Female	9	8	17
Total	17	13	30

Procedure: During the first class, the instructor, Yamazaki, explained the purpose of this research, introduced a graduate student, Hatakeyama, both as a teaching fellow of this class and as a co-researcher, and asked students to fill in a consent form for participation in the research project. All the students in the first class submitted a consent form.

At the first class, the 23 participants took a writing test, in which they were requested to write an essay in 30 minutes, about why they study English. They were told that they should write more than ten sentences. They were given 20 minutes to take the language proficiency test on vocabulary (see Appendix 1) and 15 minutes on grammar (see Appendix 2), and 15 minutes to answer Questionnaire 1, which asked them about their English learning experience. During the second class, 30 students were given a reading proficiency test. These tests were called pre-tests. Seven students, who could not attend the first class because of confusion on the starting date of the fall semester, were asked to take the language tests on vocabulary and grammar at home and to take the pre-writing test at school. Students were not allowed to use a dictionary either in class or at home. As

not all of them submitted the language proficiency tests, the number of the data we utilized for this research is shown in Table 2. At the end of the 12-week course, post-tests were given to the 30 participants.

For the prepared language proficiency test, students were given 22 grammar questions from TOEFL, and the 4th-to-9th Grade Illinois Vocabulary Inventory TEST, to take in class. Among 44 grammar questions and 200 vocabulary questions, odd numbers were used for creating the pre-test, and even numbers were used for creating the post-test. The number of the participants in each test is shown in Table 2.

Table 2. The Number of the Participants Who Took the Tests

	Essay	Language Proficiency Test		
	Writing	Reading	Grammar	Vocabulary
Pre-test	30	27	28	23
Post-test	30	30	30	30

During the course, students were given handouts that clearly explained what a paragraph is and how paragraphs are organized to form an essay; the handouts included practice examples of grammar. Two entire 90-minute classes concentrated on computer practice: Because the majority of participants had never used a computer before, they were taught how to type and how to access an Internet. Afterwards, students were assigned to write about Benjamin Franklin, the American President, and writing skills, based on the information they found on the internet on a website that is created to assist American children improve their writing skills. Through the access to this website, (www.thestorytrain.com), students obtained hints for writing from the site, and they were encouraged to post a poem on the site. Students in our class were required to write a paragraph or work on grammar exercises at home every week, and received feedback from either the instructor or the teaching fellow.

During the thirteenth class, students took post-tests: They were given 30 minutes to write an essay about how to master a foreign language, and they were given 15 minutes to take a grammar test and 20 minutes to take a vocabulary test. During the tests, they were not allowed to use a dictionary. During the fourteenth week of class, they took a language proficiency test on reading and answered Questionnaire 2 which asked them if and how much they thought they had improved their writing skills.

Scoring: Essays in the pre- and the post-writing tests were scored by two native speakers of English. The mean scores of the two coders were used as the score of individual

participants. The coders scored the writing based on two scoring systems: the Test of Written English in TOEFL (TWE) evaluation system, which employs a 6-point scale, and is holistic, and an item-discrete scoring system, in terms of content, grammar, and organization.

<Holistic>

Score 6: Very good grasp of English and interesting and persuasive content

Score 5: Good English and interesting points in the content despite several
grammatical errors.

Score 4: English is comprehensible but contains some errors. Content is also
comprehensible even though sometimes hard to follow.

Score 3: Because of errors and illogical word order, content is sometimes hard to
understand.

Score 2: Very hard to comprehend.

Score 1: Cannot comprehend at all.

<Item-Discrete>

Organization: 3 ―very good, 2―good, 1―poor

Grammar & Spelling: 3―very good (almost no mistake),

　　　　　　　　　　2― good (some but not crucial),

　　　　　　　　　　1 ―poor (many mistakes)

Content: 3―very good, 2 ―good, 1―poor

Teaching Materials: The instructor gave students handouts on a basic form of a paragraph, how an essay is organized, several useful writing skills, and several important grammatical tools. Instructions on:

* the basic structure and purpose of a paragraph was taken from *Effective Writing: From the Paragraph Up* (Ueda & Althaus, 1999);

* how to prepare for using strategies such as brainstorming and clustering was taken from *Write Ahead* (McElroy, 1997), and

* how to use grammatical tools such as articles and conjunctions were taken from *Writing strategies* (Hasegawa, 1999)

* Students were also required to access web sites: www.famousamericans.com and www.thestorytrain.com.

4. Research Questions

We investigate two research questions in this study:

(1) Has participants' writing skills improved over a three-month course?

(2) Is there any relationship between writing and reading skills, and is there a relationship between writing skills and grammatical and lexical knowledge?

5. Result

This section presents and describes the data collected in an attempt to answer the research questions.   Although two kinds of evaluation methods were used for the data that undergraduates scored: holistic evaluation and item-discrete evaluation, we use the latter for the analysis because the correlation between them are very high ($0.43\sim0.83$) and because the latter is more precise in measuring the participants' writing scores in the pre- and post-test

5.1. Gains of Writing Scores

The primary research question of this study aims to examine gains of writing scores between the pre-test and the post-test takers.   The number of participants, means, and standard deviations of writing scores are represented in Table 3.   The gains, measured by the means of grammar / organization / content / total writing scores in the post-test are 0.57 / 0.13 / 0.29 (on a 0-to-3-point scale) / 0.99 (on a 0-to-9-point scale), respectively.   Gains of organization, content, and total scores in writing are statistically justified ($p < 0.05$). More specifically, the gains of grammar, organization, content, and total writing scores in the post-test ranged from -0.5 to 1.5, from -0.5 to 1.0, from -1.0 to 1.0, and from -2.0 to 3.0, respectively.   However, we did not find a significant difference between the means of grammar scores in the pre- and post-test, ranging from -0.5 to 1.0 ($p > 0.05$).   In terms of grammar, organization, content, and total writing scores in the post-test, scores increased for 24 out of 30 students, 18 out of 30 students, 16 out of 30 students, 25 out of 30 students, respectively.

**Table 3. Descriptive Statistics for the Whole Group on Writing Scores
in the Pre- and Post-test**

Scores	Mean	SD	N
O1	1.77*	0.28	30
O2	2.34*	0.48	30
GO	0.57		
G1	1.18	0.33	30
G2	1.31	0.35	30
GG	0.13		
C1	2.15*	0.40	30
C2	2.44*	0.36	30
GC	0.29		
T1	5.10*	0.71	30
T2	6.09*	0.98	30]
GT	0.99		

O1 = Organization Writing Scores in the Pre-test

O2 = Organization Writing Scores in the Post-test

GO = Gains of Organization Writing Scores

G1 = Grammar Writing Scores in the Pre-test

G2 = Grammar Writing Scores in the Post-test

GG = Gains of Grammar Writing Scores

C1 = Content Writing Scores in the Pre-test

C2 = Content Writing Scores in the Post-test

GC = Gains of Content Scores

T1 = Total Writing Scores in the Pre-test

T2 = Total Writing Scores in the Post-test

GT = Gains of Total Writing Scores

N = 30

*p < 0.05

5.2. Correlation

Before answering the second research question, let us refer to grammar, reading, and vocabulary proficiency scores. Table 4 shows the means and standard deviations of grammar and reading proficiency scores in the pre- and post-test. Each score increased at the rate of 21% and 60%, respectively, for pre- and post-test. These results are statistically significant ($p < 0.05$). Notice, however, that no significant difference exists

between the means of vocabulary proficiency scores in the pre- and post- test, because the probability is greater than 0.05.   Keeping this in mind, let us move on to the second research question.

Table 4. Descriptive Statistics for the Whole Group on Grammar / Reading / Vocabulary Proficiency Scores in the Pre- and Post-test

Scores	Mean	SD	N
G1	8.57*	2.27	28
G2	10.33*	2.51	30
GG	1.76		
R1	3.85*	1.54	27
R2	6.17*	1.90	30
GR	2.32		
V1	52.74	12.73	23
V2	53.47	9.93	30
GV	0.73		

G1 = Grammar Proficiency Scores in the Pre-test

G2 = Grammar Proficiency Scores in the Post-test

GG = Gains of Grammar Proficiency Scores

R1 = Reading Proficiency Scores in the Pre-test

R2 = Reading Proficiency Scores in the Post-test

GR = Gains of Reading Proficiency Scores

V1 = Vocabulary Proficiency Scores in the Pre-test

V2 = Vocabulary Proficiency Scores in the Post-test

GV = Gains of Vocabulary Proficiency Scores

N = 30.   Two students did not take the Grammar Proficiency Pre-test; three students did not take the Reading Proficiency Pre-test; seven students did not take the Vocabulary Proficiency Pre-test.

*$p < 0.05$

To answer the second research question concerning the relationship between writing and reading skills, grammar knowledge and lexical knowledge, we calculated four sets of correlation: between total writing scores and grammar, reading, and vocabulary proficiency scores respectively for the pre- and post-test.   All relations are significantly correlated at $p < 0.05$, except for the relation between writing scores in the post-test and

reading proficiency scores in the post-test.　(See Table 5.)

　　Total writing scores in the pre-test correlate moderately significantly to reading proficiency scores in the pre-test and vocabulary proficiency scores in the post-test: the correlation coefficient is 0.35 and 0.30, respectively for the pre- and post-test.　We found no significant correlation between total writing scores and grammar proficiency scores both in the pre- and post-test.

Table 5. Correlations between Total Writing Scores in the Pre- and Post-test
and Grammar / Reading / Vocabulary Proficiency Scores
in the Pre- and Post-test/

Scores	G1	R1	V1	G2	R2	V2
T1	0.22*	0.35*	0.11*	0.26*	0.23*	0.30*
T2	0.06*	0.07*	-0.04*	0.21*	-0.10	-0.04*

　　T1 = Total Writing Scores in the Pre-test

　　T2 = Total Writing Scores in the Post-test

　　G1 = Grammar Proficiency Scores in the Pre-test

　　G2 = Grammar Proficiency Scores in the Post-test

　　R1 = Reading Proficiency Scores in the Pre-test

　　R2 = Reading Proficiency Scores in the Post-test

　　V1 = Vocabulary Proficiency Scores in the Pre-test

　　V2 = Vocabulary Proficiency Scores in the Post-test

　　N = 30 for G2, R2, and V2 correlations; 28 for G1 correlations; 27 for R1 correlations; 23 for V1 correlations.

　　*$p < 0.05$

　　In order to examine the correlation between total writing scores and grammar, reading and vocabulary proficiency scores, we divided the entire group of 30 students into two smaller groups of higher-scoring and lower-scoring students, for comparisons of total writing scores.

　　The correlation between total writing scores and grammar, reading, and vocabulary proficiency scores in the pre- and post-test for the two groups are represented in Table 6.

Table 6. Correlations between Total Writing Scores of the Higher and Lower Group in the Pre- and Post-test and Grammar / Reading / Vocabulary Proficiency Scores in the Pre- and Post-test

Score	N	G1	N	R1	N	V1	N	G2	N	R2	N	V2	N
T1H	10	-0.21	9	0.39*	9	0.29*	6	-0.66*	10	0.17	10	0.06*	10
T1L	10	0.56*	9	0.36*	8	0.43*	9	0.09*	10	0.48*	10	0.47*	10
T2H	10	-0.15*	9	0.54*	8	0.61*	9	0.50*	10	0.28*	10	0.20*	10
T2L	10	0.17*	10	-0.12*	7	-0.21*	7	-0.32*	10	0.17*	10	-0.31*	10

T1H = Total Writing Scores of the Higher Group in the Pre-test

T1L = Total Writing Scores of the Lower Group in the Pre-test

T2H = Total Writing Scores of the Higher Group in the Post-test

T2L = Total Writing Scores of the Lower Group in the Post-test

G1 = Grammar Proficiency Scores in the Pre-test

G2 = Grammar Proficiency Scores in the Post-test

R1 = Reading Proficiency Scores in the Pre-test

R2 = Reading Proficiency Scores in the Post-test

V1 = Vocabulary Proficiency Scores in the Pre-test

V2 = Vocabulary Proficiency Scores in the Post-test

N = 10 for all correlations, unless otherwise indicated.

*$p < 0.05$

Let us take a closer look at the correlation between total writing scores in the pre-test and grammar, reading, and vocabulary proficiency scores in the pre- and post-test. We found no strong correlation between total writing scores and grammar proficiency scores in the pre-test. However, as far as total writing scores of the lower-scoring group is concerned, total writing scores in the pre-test and grammatical proficiency scores in the pre-test are significantly related at the correlation coefficient of 0.56. Furthermore, total writing scores of the higher-scoring group in the pre-test and grammatical proficiency scores in the post-test correlate negatively at a correlation coefficient of -0.66.[2]

Now, let us move on to the correlation between total writing scores in the post-test and grammar, reading, and vocabulary proficiency scores of the higher-scoring group in the pre- and post-test. Total writing scores of the higher-scoring group in the post-test and the reading, and vocabulary proficiency scores of the higher-scoring group in the pre-

test are significantly and positively correlated at 0.54 and 0.61, respectively. Moreover, the total writing scores of the higher-scoring group in the post-test and this same group's grammar proficiency scores in the post-test are significantly related at 0.50 of the correlation coefficient.[2]

6. Analysis

The answer to the first research question, whether total writing ability had improved is "yes," based on four reasons. First, 83% of all the students increased their scores in the total score of writing. Second, every student's writing sample was better organized on the post-test than the pre-test. Third, all the students wrote more sentences in the post-test than in the pre-test. This means that they are more fluent in writing than before. Fourth, 19 students (63%) stated that they believed that their writing skills had improved, as is shown in a questionnaire filled out by the 30 students.

Although the total writing scores for the entire group raised at the rate of 83%, we found many grammatical errors in the students' writing, such as "Or, when you wants [want] to be...." And "We know these country [countries], ..." Some of the students found it difficult to express themselves within a limited amount of time, 30 minutes. This might suggest that students placed emphasis on fluency rather than accuracy in writing at this stage of their writing development.

Let us now comment on the students' reading skills and grammar and lexical knowledge. Comparing the pre-test and the post-test scores, it appears that the students' reading skills improved significantly from the pre- to the post-test, although their scores in grammar and vocabulary did not increase as we had expected. Probably, this is because they had a chance to read more authentic English as much as possible. For example, they read about methods of structuring paragraphs in English, both in class and at home, and they were instructed to access to English skills websites as homework. Despite this, the students' grammar and vocabulary scores did not improve in the post-test over the pre-test.

As far as the grammar proficiency is concerned, the mean scores of the 30 students in Parts A and B of this test, in which the highest scores were 10 and 7, were 6.67 and 2.81, respectively. We surmise that Part B was so difficult that the overall grammar proficiency test was not entirely appropriate for evaluating their grammar proficiency precisely.

We are now ready to discuss the second research question: Is there a relationship between writing and reading skills / grammar / lexical knowledge? Although no strong correlation was found between these four sets of skills, total writing scores and reading-

vocabulary proficiency scores in the pre-test correlate moderately significantly at the level of 0.30. Furthermore, we found a strong correlation between the writing scores of the 10 students in the lower group and their grammar proficiency scores in the pre-test. Based on this, we speculate that there is a strong significant correlation between total writing scores of the higher group in the post-test and reading, vocabulary scores in the pre-test. This suggests that grammatical knowledge is necessary for establishing basic writing skills; once this basis is established, this can be followed by developing reading skills and lexical knowledge to polish writing quality.

7. Concluding remarks

In this paper, we have explored the basic component of writing skills. We attempted to answer the two research questions, repeated here for convenience:

(1) Did the English writing skill improve for the group of 30 L1 Japanese college students learning English?

(2) Is there a relationship between writing and reading skills or between writing skills and grammatical / lexical knowledge?

Based on the data, we found that writing skills improved after a three-month English writing course especially in students' ability to organize and incorporate content into their writing. We might claim, however, that grammatical knowledge is necessary to build a scaffold for writing while both reading skills and lexical knowledge is needed to further improve writing skills.

However, we did not find a strong, significant correlation between writing skill and grammar-reading-vocabulary competence as a whole. This might derive from the fact, as Hairston (1982) claimed, that the English writing process is "complicate, messy, and convoluted." We need to further investigate writing development to discover the correlation between these skills. However, we can conclude, at least, the minimum level of grammar proficiency is necessary for Japanese college students' to learn EFL writing skills, but we cannot conclude that grammar proficiency is the sole key to achieve EFL writing skills. To be able to read quickly and having a strong vocabulary will lead to fluency in writing in English.

Furthermore, we found different relations of skills across the lowers-scoring and the higher-scoring groups. Thus, we hope the instructor's awareness of this fact could enhance the teaching of writing skills.

8. Appendix

(1) Appendix 1

Proficiency Test for Vocabulary adapted from 4th to 9th Grade Vocabulary Inventory in Illinois, the U.S.A.

Instruction: Choose the word which has the similar meaning to the one on the left.

1) (4th grade level) ability: a) learning   b) skill   c) hope

2) (9th grade level) dedicated: a) serious   b) devoted   c) reliable

(2) Appendix 2

Proficiency Test for Grammar adapted from the TOEFL practice book.

<Part A>

Directions: In Part A each problem consists of an incomplete sentence. Four words or phrases, each marked (A), (B), (C), (D), are given beneath the sentence. You are to choose the one word or phrase that best completes the sentence. Then, on your answer sheet, find the number of the problem and mark your answer.

1. When a body enters the earth's atmosphere, it travels _____.

(A) very rapidly

(B) in a rapid manner

(C) fastly

(D) with great speed

<Part B>

Directions: In questions 11-20 each sentence has four underlined words or phrases. The four underlined parts of the sentence are marked (A), (B), (C), and (D). Identify the one underlined word or phrase that must be changed in order for the sentence to be correct. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

Q11. The study of optics comprises three fields, which are

    (A)   (B)

its physical, physiological, and geometry aspects.

    (C)   (D)

(3) Appendix 3

[A] Sample essays from the pre-test

The highest-scored essay (Holistic score: 5)

Because we must talk to a lot of people in

the world. When I went to England, I couldn't

speak English well. But my host family tried
to communicate with me. I was very happy!
And I thought I want to be able to talk to
them about more things next time. I think English
is a global language. If we can speak English
very well, we can communicate with a lot of
people and we can learn culture.

Holistic   [5]

Organization [2]

Grammar   [3]

Content   [2]

One of the lowest-scored essay (Holistic score: 3)
We had studied English to the examination when
We were junior highschool or highschool students.
But we must study it to use actually
If we study English hard, we could speak
or write, listen it.
We can use English in many countries in the
world.   And we communicate to many people in the
world by English.   When we study English,
we have perpose   each other.

Holistic [3]

Organization [2]

Grammar   [1]

Content   [2]

[B] Sample essays from the post-test

One of the highest-scored essay (Holistic: 5)

    Now, we study foreign language at school.
When I was a high school student, I red **[read]** and
wrote English everyday. But I don't **[didn't]** master
English. I think there are some reasons that **[why]**
I can't master English.

    First, I had red **[read]** English not with my mouth
but with my eyes. It is necessary to pronounce

words. We Japanese can speak Japanese well, because we pronounce Japanese everyday. Second, I hadn't listened to English very well. So, I can't communicate with people who speak English. Therefore I think it is necessary to pronounce and listen to a foreign language in mastering a foreign language.

Well, what should we do in order to master a foreign language? We must speak a foreign language without being afraid of mistakes. And we must listen to a foreign language, too. If we do so every day, we will be able to master a foreign language.

Holistic   [5]

Organization [2]

Grammar   [2]

Content   [2]

One of the lowest-scored essay (Holistic: 3)

To master English, we should pronounce and listen and write English.   The best way is to talk to <u>American</u>. We talk with <u>American</u>   so that we learn English well.   Because the English we speak is very different from the English <u>American</u> speak.   What we must learn is "real" English.   If we don't have time <u>we</u>   talk with <u>American</u>, we will not master English.   So we had better go to America.   Because in Japan we don't have · chance <u>we</u>   talk with American.   In   America

Holistic [3]

Organization [2]

Grammar   [1]

Content　　　[2]

9. Notes

[1]　Canale and Swain (1980) presented a communicative competence model that consists of grammatical, strategic, discourse, and sociolinguistic competences.

[2]　We have no crystal-clear explanations for these significant correlations.

10. References

Brown, H. D. and S. Gongo (1995) *Readings on Second Language Acquisition,* Upper Saddle River, New Jersey, Prentice Hall Regents.

Canale, M. and M. Swain (1980) "Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing," *Applied Linguistics* 1, 1-47.

Connor, U. and M. Farmer (1990) "The Teaching of Topical Structure Analysis as a Revision Strategy for ESL Writers," *Second Language Writing,* 126-139, Cambridge, Cambridge University Press.

Celce-Murcia, M. (1991) *Teaching English as a Second or Foreign Language,* Boston, Massachusetts, Heinle & Heinle Publishers.

Eisterhold, J. C. (1990) "Reading-writing Connections: Toward a Description for Second Language Learners," *Second Language Writing,* 88-101, Cambridge, Cambridge University Press.

Hairston, M. (1982) "The Winds of Change: Tomas Kuhn and the Revolution in the Teaching of Writing," *College Composition and Communication,* 33(1), 76-88.

Kroll, B. (1990) *Second Language Writing,* Cambridge, Cambridge University Press.

Stotsky, S. (1983) "Research on Reading/Writing Relationships: A Synthesis and Suggested Directions," *Language Arts,* 60, 627-642.

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