Enhancing Students' Fluency in Writing: Learning to Use Transition Words

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This study uses experimental and control group data to investigate whether learning to use transition words results in enhancing students' fluency in writing. Common sentence connectors, such as *moreover*, *however*, *thus*, etc were chosen in order that students learn the use of transition words in text and improve their writing fluency. 36 first-year university students were placed in an intermediate class: 18 control group students and 18 experimental group students. Over a 12-week period, both groups received equal amounts of writing assignments. During the first half of the period, both groups were given content and form feedback, but the experimental group was given additional marginal comments on the use of sentence connectors. After six weeks, both groups were given identical types of feedback and comments. Fluency was measured by the number of words written and successful connections (SCs). These results were analyzed to determine if there was a significant difference in fluency between the two groups. Findings suggest that writing teachers should teach students the effectiveness of using transition words in EFL writing classes, and this may in part help to improve students' fluency.

Keywords: Writing Fluency; Feedback; Transition Words

Introduction

English education in Japan has traditionally emphasized teaching sentence patterns, vocabulary and grammatical rules, and thus has focused mostly on accuracy in teaching English. In the field of writing instruction, a large survey conducted on 1,027 Japanese university students revealed that more than 90% of the students practiced translation of Japanese into English in writing classrooms and more than 80% of the students had no experiences in longer paragraph writing (Hirota et al., 1995). Moreover, a survey conducted to examine 786 Japanese university-level writing teachers' view on the instruction resulted in structure and expression practice (31.7%), translation from Japanese to English (31.2%), free composition (17.6%), item replacement (6.6%), and others (JACET, 1993). These survey results indicate that most Japanese teachers of English have considered writing instruction to be characterized by accuracy-centered activities in order to reinforce the teaching of grammatical structures or vocabulary.

As globalization proceeds, it is quite likely that Japanese students will have to learn and use English for the purpose of international communication. In accordance with such social needs, the importance of developing students' practical communication abilities has been emphasized, and many researchers and educators in Japan have proposed a paradigm shift from accuracy-oriented to fluency-oriented writing instruction (e.g., Iseno, 1991; Kurihara, 1994; Oi, 2004). As a result of their efforts, this evolution of writing pedagogy for Japanese learners of English is clearly reflected in the government guidelines for foreign language teaching published by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). The objective of "Writing" is a good example to illustrate the fluency-oriented instruction: To further develop students' abilities to write down information, ideas, etc. in English in accordance with the situation and the purpose, and to foster a positive attitude toward communicating by utilizing these abilities

(MEXT, 1999)

However, considering the results of 2003 and those of 1995 given above, the same tendency can be seen in the experiences of word-by-word translation (83.9% - 77.1%) and longer paragraph writing (31.9% - 34.6%). These figures may reflect the fact that the shift in emphasis from accuracy to fluency in writing has not strongly reinforced fluency-oriented instruction in writing classrooms (Hayashi et al., 2003). Consequently, researchers and educators in Japan need to consider again the practical demands of the learning situation and contribute to this pedagogic transformation by facilitating improvement in students' writing fluency.

Conceptual Frameworks

The primary purpose of this research is to investigate whether learning to use transition words results in enhancing students' fluency in writing. The conceptual framework is based on the work of Halliday and Hasan (1976), and Halliday (1994). The set of Halliday and Hasan's cohesive relations is comprised of reference, substitutions, ellipsis, conjunctions and lexical relations. Reference is the relation between a linguistic expression and its pronoun. Substitution is marked at representing a preceding expression by a pro-form like *one*, *do* or *so*. Ellipsis is the omission of part of a sentence whose meaning will be retrievable from the preceding text. A conjunction is a cohesive device which makes logical-semantic relations between linguistic expressions and links paragraphs. Lexical cohesion is the writer's choice of particular lexical items, which are related to the relevant preceding expressions.

In this classification, the use of conjunctions is an effective way for L2 writers to build connections between ideas in text. White and McGovern (1994) call them "cohesive markers" (p. 67), and Jordan (1990) describes them as "connectives" (p. 121). These sources point out that such conjunctions lend a framework to meaning, helping the reader to follow the development of a text. According to Parrot (2004), learning to use conjunctions also helps learners to show how the points they relate to each other and to the whole text. He defines transitions as words which indicate logical relationships and sequences as "textual discourse markers" (p. 302), and explains the main functions as numbering and ordering points, adding something, linking similar things together, introducing something that contrasts with expectations, generalizing, exemplifying and narrowing down, re-stating, and rounding off (see Textual discourse markers in Appendix 1). In teaching ESL or EFL students' writing, Fukushima and Sato (1989) investigated the effectiveness of teaching transition words in expository discourse writing. Their research revealed that the teaching of transition words helps average student writers "construct proper organization in which their ideas are logically sequenced and developed, and this entails writing of better quality" (p. 35). Spycher (2007) also found that a student at lower levels of English proficiency could constitute logical relationships by using newly learned conjunctions (although, such as) and guide the reader to logical understanding.

However, there seems to be surprisingly few attempts to examine the effectiveness of teaching transition words in terms of writing fluency. Some potentially challenging areas might be identified from the previous research on the use of connectives as an effective device for improving oral fluency. For example, Ejzenberg (1992) found that connectives were one of the facilitating factors to promote nonnative speakers' fluency. Yashima et al. (1995) also found that the high school students' fluency was facilitated by the use of connectives such as "and", "but", "or", "so", "because", "then", etc. Kawaguchi and Kamimoto (2000) observed distinctive features of oral production by fluent and nonfluent EFL learners, and the results indicated that the fluent speakers employed significantly more cases of coordination ("and", "so", "but", etc.) and subordination ("because," "when", "unless", "that", etc.) than the nonfluent speakers. They referred to the fact that "connectives were used to combine sentences successively and to develop the idea of the previous sentence" (p. 29). It follows from the previous studies that the use of connectives facilitates speeches and that learning to use different types of transition words increases fluency in spoken discourse.

Although results from the studies mentioned above cannot be used for making predictions about what results will show in the present study, many language specialists and theorists point out similarities between speaking and writing, and emphasize the close relationship of oral and written language (Cook, 1989; Halliday, 1989, Burns & Seidlhofer, 2002). Therefore, it is presumed that the instruction of the appropriate use of transition words helps students improve fluency in written discourse as well as in spoken discourse. Furthermore, since written discourse is not as time bound as spoken one, which has specific time lag between production and reception (Brown & Yule, 1983; Nunan, 1993), it seems reasonable to suppose that students have more time to think of connections between sentences and to organize ideas logically while they are writing, rather than while speaking. Accordingly, learning to use transition words could be more effective at facilitating students' fluency in written language than in oral language, so that the use of connectives may enable students to write more about the relevant information and to enhance their fluency in writing.

This paper is intended as an investigation of how students learn the use of transition words from the teachers' feedback of connectives and improve their fluency in writing. Common sentence connectors, such as *moreover*, *however*, *thus*, etc were chosen in order that students learn how to use connectives effectively and try to use them in writing assignments over a 12week period. The results of the period were analyzed in order to determine if there was a significant effect on fluency improvement between the experimental and control groups. Thus, this study uses experimental and control group data to investigate whether learning to use transition words results in enhancing students' fluency in writing.

The Study

Research Ouestions

In order to examine how students learn the use of transition words from the teachers' feedback of connectives and improve their writing fluency, the following questions were addressed in this study:

1) How did the experimental group respond to intentional feedback that explicitly focused their learning to use transition words?

2) To what extent did the students' learning to use transition words enhance fluency in new pieces of writing?

Participants

Thirty-six first-year nursing students at a Japanese university were invited to participate in the study. From April to July 2010, they took one 90-minute General English class every week, with the aim of developing students' practical communication skills in listening, speaking, reading and writing. Each class was comprised of pre-reading activities, reading comprehension and vocabulary learning. As a post-reading activity, writing assignments were given to all the students and speech presentation based on the written text was made by three students at the beginning of the following class. No specific transition-word instruction was conducted in class during the 12-week period.

To be placed in an intermediate class, they achieved scores between 140 and 150 on the TOEIC Bridge Test. According to the test scores, the students were randomly divided into two groups: the control and experimental groups. Both groups received the same amount of writing assignments. Since this study was conducted sequentially over 12 weeks, the data of those who did not submit any assignments were excluded from analysis. Thus, the final number of the participants was 30 (2 males and 28 females). **Table 1** indicates more information about students' overall English proficiency and writing fluency levels of each group. There was no significant difference between the two groups.

Design and Measures

The General English class in which this study was conducted provided an appropriate setting to examine the research questions because the 12 written homework assignments were intended to have identical writing structures: a topic sentence, two or three reasons representing students' opinion, and a concluding sentence. Although each topic of the reading passages in the textbook was different, the topic sentence was given in a clear general statement, such as "I agree/disagree with Professor X's proposal". The concluding sentence was also provided beforehand as in the form of "For these reasons, I agree/disagree with Professor X's proposal." Thus, the students could concentrate on thinking and writing about reasons to support their opinion or choice, and the reasons they gave were supposed to coherently relate to the main statement.

According to the feedback schedule shown in **Table 2**, during Period 1, the control group was given the content and form feedback, and the experimental group was given additional marginal comments on the use of sentence connectors as well as the content and form feedback. During Period 2, both groups were given identical types of feedback and comments.

Many previous studies measured fluency by number of words written (e.g., Carlson, Bridgeman, Camp & Waanders, 1985; Fathman & Whalley, 1996; Reid & Findlay, 1986; Reid, 1996). In this present study, fluency is defined as length of body paragraphs coherently related to the main statement. Therefore, the experimental and control groups were compared in terms of the changes in the amount of body paragraphs over a 12-week period. Another measure of fluency has been the number of connectives used in a written text. As pointed out in "Conceptual frameworks," the use of connectives may enable students to write more about the relevant information and thus the numbers of connectives reveal the enhancement of their fluency in writing.

Although we know that the use of sentence connectors cre-

Table 1.

Student information.

| | TOEIC B | ridge | Writing fluency | | |
|-------|------------|---------|-----------------|---------|--|
| Group | Experiment | Control | Experiment | Control | |
| Ν | 15 | 15 | 15 | 15 | |
| Mean | 143.6 | 142.5 | 44.7 | 41.3 | |
| SD | 2.75 | 2.20 | 18.2 | 16.2 | |
| Min. | 140 | 140 | 17 | 19 | |
| Max. | 148 | 146 | 66 | 67 | |

Note: Writing fluency shown in the table is the number of words written in Assignment 1.

Table2.

Assignment-feedback schedule.

| | Classes | Writing Assignments | Given Feedback |
|----------|---------|---------------------|----------------|
| | Week 1 | Assignment 1 | Feedback 1 |
| | Week 2 | Assignment 2 | Feedback 2 |
| | Week 3 | Assignment 3 | Feedback 3 |
| | Week 4 | Assignment 4 | Feedback 4 |
| Period 1 | Week 5 | Assignment 5 | Feedback 5 |
| | Week 6 | Assignment 6 | Feedback 6 |
| | Week 7 | Assignment 7 | Feedback 7 |
| | Week 8 | Assignment 8 | Feedback 8 |
| | Week 9 | Assignment 9 | Feedback 9 |
| Period 2 | Week 10 | Assignment 10 | Feedback 10 |
| | Week 11 | Assignment 11 | Feedback 11 |
| | Week 12 | Assignment 12 | Feedback 12 |

ates cohesion in a text, their overuse or misuse often becomes obtrusive (Cooley & Lewkowicz, 2003). Aoki (1991) analyzed the coherence of English compositions of Japanese university students. He described the coding system, which is comprised of the following six schemes: local connections, multi connections, local-remote connections, remote connections, unsuccessful connections, and topic change (p. 104).

In order to examine the use of connectives with the concept of coherence, one of Aoki's schemes, "Unsuccessful connections (UC)" was chosen, which is defined as "a sentence which has no semantic relation with any other sentence and a topic, or causes inconsistency" (p. 104). A new scheme, "Successful connections (SC)" was also developed for this research. The definition is "a sentence which is semantically connected with a previous sentence and/or a topic." When sentence connectors are found in a text, their use is classified into SC or UC (see *Examples* in Appendix 2). Thus, connectives classified into SC are only counted as the number of connectives which affect writing fluency.

Procedures

The teacher-researcher evaluated all written texts of each assignment, giving feedback and/or comments according to the experimental or control group conditions. I tried to provide at least one comment on the use of connectives to each student of the experimental group during Period 1 and to both groups during Period 2. Then, in the new pieces of writing I counted the number of words written, and calculated frequency on successful connections (the actual number of SCs) as evidence for the benefits of intentional comments.

Group type (C: feedback only, E: feedback and comments) was treated as a *between-participants* factor, and time at five levels (Period 1: Weeks 3 - 7, Period 2: Weeks 8 - 12) was treated as a *within-participants* factor. In order to investigate interactions between factors as well as the effects of individual factors, a two-way ANOVA was chosen as an appropriate statistical procedure. A mixed between-within participants analysis was used to analyze the fluency at two levels (number of words, and number of SCs). If a test showed statistical significance, a Scheffé test to evaluate differences among specific means was also conducted. Additionally, in order to examine to what extent each factor can affect fluency, the effect size was obtained. Among some index of effect sizes (Mizumoto & Takeuchi, 2008), the present study uses eta squared (η^2).

Results

The 1st Period (Weeks 3 - 7)

This section presents the results of Period 1, investigating the extent to which marginal comments on the use of transitional words helped students improve the fluency of their writing. The mean and standard deviation (SD) for each group are shown in **Table 3**.

As an example of the information revealed in this table, it can be seen that as for the number of words written in Assignment 3 (Week 3), participants who received feedback and comments (Experimental group) had a mean score of 51.1 and a standard deviation of 16.3. As for the number of SCs in Assignment 4 (Week 4), participants who received feedback only (Control group) had a mean score of 2.3, while the mean score of Experimental group was 3.4. **Figure 1** illustrates the result

for the frequency of using connectives between the two groups.

The data during Period 1 (Weeks 3 - 7) were then used to find out whether there was an effect of interactions between factors as well as effects of individual factors. **Table 4** presents the results of the two-way ANOVA for SCs.

Although the interaction effect of feedback type and time was not significant [F(4, 168) = 1.34, p = .25, $\eta^2 = .024$], the average successful connections (SCs) differed according to the type of feedback provided: F(1, 28) = 19.32, p < .01. In addition, the effect size indicated that the type of feedback had a large effect ($\eta^2 = .160$, large: $.14 < \eta^2$) on the frequency of using connectives. The effect of time was also significant: F(1, 12) = 3.68, p < .01, $\eta^2 = .067$ (medium: $.06 < \eta^2 < .14$). In **Figure 1**, we can see that Experimental group began to use more transition words after the third week, and the Scheffé test showed a significant difference across the four writing assignments: Week 4 = 38.16, Week 5 = 53.81, Week 6 = 25.19, and Week 7 = 53.81; p < .01. Accordingly, the results confirmed that the comments on the use of transition words had a signifi-

Table 3.

Descriptive statistics of group performance.

| | | Word v | written | Successful conne | | | connectio | ns |
|--------|---------|--------|---------|------------------|--------------|-----|-----------|-----|
| Group | Experin | nental | Cont | rol | Experimental | | Control | |
| Time | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Week 1 | 44.7 | 18.2 | 41.3 | 16.2 | 1.8 | 1.2 | 1.7 | 1.1 |
| Week 2 | 49.3 | 15.4 | 49.4 | 16.6 | 2.2 | 1.3 | 2.0 | 1.1 |
| Week 3 | 51.1 | 16.3 | 49.3 | 22.8 | 2.5 | 1.2 | 2.3 | 1.4 |
| Week 4 | 59.5 | 18.5 | 54.6 | 15.6 | 3.4 | 0.7 | 2.3 | 0.9 |
| Week 5 | 56.3 | 18.1 | 50.9 | 14.2 | 4.0 | 1.3 | 2.7 | 1.0 |
| Week 6 | 57.9 | 18.6 | 50.2 | 17.3 | 3.3 | 0.8 | 2.5 | 0.8 |
| Week 7 | 61.3 | 15.2 | 52.8 | 11.0 | 3.6 | 0.9 | 2.3 | 1.2 |

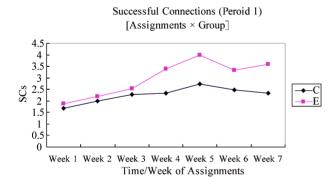


Figure 1.

Frequency of SCs by groups.

Table 4.

Results of two-way ANOVA for SCs.

| | SS | df | MS | F |
|------------------------------|--------|-----|--------|---------|
| Group (A) | 33.61 | 1 | 33.613 | 19.32** |
| S | 48.69 | 28 | 1.73 | |
| Time (B) | 14.20 | 4 | 3.55 | 3.69** |
| $\mathbf{A}\times\mathbf{B}$ | 5.16 | 4 | 1.29 | 1.34 |
| $\mathbf{S}\times\mathbf{B}$ | 107.84 | 112 | 0.96 | |
| Total | 209.50 | 149 | | |

 $p^{**} < .01.$

cant effect on the frequency of the students using successful connectives.

Table 5 shows the result of the two-way ANOVA for number of words. As for the amount of writing in each assignment, the interaction effect of feedback type and time was not significant, F(4, 112) = .30, p = .87, $\eta^2 = .004$. The average number of words did not vary according to the types of feedback provided: F(1, 28) = 1.57, p = .21. Taking the effect size into account, the effect of group type is small (.027, small: $.01 < \eta^2 < .06$). Although the ANOVA test did not indicate that the number of words written over the five weeks differed significantly according to the time in which the writing was produced [F(4, 112) = 1.40, p = .23, $\eta^2 = .023]$, the Scheffé test showed a significant difference across the two writing assignments: Week 6 = 7.61, Week 7 = 9.28; p < .01. The results are also presented in **Figure 2**.

To put these results together, it can be stated that the comments on the use of transition words have a significant effect on the students using successful connectives. However, no main effect was revealed for increased number of words written during this period except for the differences in Weeks 6 and 7, and thus it cannot be concluded that the type of feedback provided have a significant effect on increasing the amount of writing. In order to verify the effectiveness of learning and using connectives on fluency performance, the subsequent research was conducted over a period of the following five weeks.

The 2nd Period (Weeks 8 - 12)

This section presents the results of Period 2. During this period, both groups were given identical types of feedback and comments: the content and form feedback and the additional marginal comments on the use of sentence connectors. The mean and standard deviation (SD) for each group are shown in **Table 6. Figure 3** shows that Control group gradually increases

| Table 5. |
|----------|
|----------|

Results of two-way ANOVA for words.

| | SS | df | MS | F |
|------------------------------|---------|-----|--------|------|
| Group (A) | 1187.2 | 1 | 1187.2 | 1.57 |
| S | 21100.3 | 28 | 753.58 | |
| Time (B) | 973.77 | 4 | 243.44 | 1.40 |
| $\mathbf{A}\times\mathbf{B}$ | 209.64 | 4 | 52.41 | 0.30 |
| $\mathbf{S}\times\mathbf{B}$ | 19448.5 | 112 | 173.64 | |
| Total | 42919.5 | 149 | | |

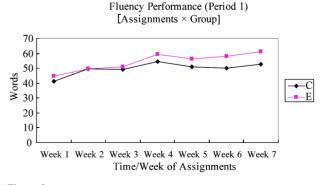


Figure 2. Average number of words by group.

the frequency of successful connections.

The data were then used to find out whether there was an effect of interactions between factors as well as effects of individual factors. **Table 7** presents the results of the two-way ANOVA for SCs.

Although the interaction effect of feedback type and time was not significant [F(4, 112) = 1.22, p > .10, $\eta^2 = .0002$], the average SCs differed between Experimental and Control groups: F(1, 28) = 6.35, p < .05. The effect size is moderately large ($\eta^2 = .085$), while a larger effect ($\eta^2 = .160$) was revealed during Period 1. There was a significant difference between the two groups across one assignment (Week 8): F(1, 105) = 10.21, p < .01. The Scheffé test also showed a significant difference across the four writing assignments: Week 8 = 51.08, Week 9 = 8.54, Week 10 = 15.19, Week 11 = 8.54; p < .01. No significant difference was found in the assignment of Week 12. Judging from these results, the difference in the frequency of the students using successful connectives between the groups gradually decreased due to the identical types of feedback and comments on the use of sentence connectors.

As Figure 4 indicates, the differences in number of words

Table 6.

Descriptive statistics of group performance.

| Word written | | | | Successful connections | | | | |
|--------------|----------------------|------|---------|------------------------|------|-----|------|-----|
| Group | Experimental Control | | Experin | nental | Cont | rol | | |
| Time | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Week 8 | 63.3 | 16.0 | 52.3 | 13.6 | 4.0 | 1.3 | 2.5 | 1.2 |
| Week 9 | 57.6 | 15.0 | 51.5 | 14.4 | 3.6 | 1.5 | 3.0 | 0.8 |
| Week 10 | 56.4 | 16.3 | 48.9 | 10.0 | 3.9 | 1.3 | 3.1 | 0.8 |
| Week 11 | 60.4 | 20.5 | 53.9 | 12.9 | 4.0 | 1.6 | 3.4 | 0.7 |
| Week 12 | 57.9 | 18.4 | 53.8 | 16.0 | 3.9 | 1.6 | 3.5 | 1.3 |

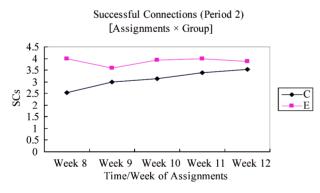


Figure 3.

Frequency of SCs by groups.

Table 7.

Results of two-way ANOVA for SCs.

| | SS | df | MS | F |
|------------------------------|--------|-----|-------|------|
| Group (A) | 21.66 | 1 | 21.66 | 6.35 |
| S | 95.44 | 28 | 3.40 | |
| Time (B) | 5.27 | 4 | 1.32 | 1.17 |
| $\mathbf{A}\times\mathbf{B}$ | 5.51 | 4 | 1.38 | 1.22 |
| $\mathbf{S}\times\mathbf{B}$ | 125.63 | 112 | 1.12 | |
| Total | 253.50 | 149 | | |

*p < .05

between the groups are disappearing. **Table 8** shows the result of the two-way ANOVA for number of words. As for the amount of writing in each assignment, the average number of words did not vary between Experimental and Control groups: F(1, 28) = 3.08, p > .10. Taking the effect size into account, the size is still small ($\eta^2 = .050$), but it became almost twice as large as that of the first period ($\eta^2 = .027$). Although the ANOVA test did not indicate that the number of words written over the five weeks differed significantly according to the time in which the writing was produced [F(4, 112) = 0.84, p < .10, $\eta^2 = .014$], the Scheffé test showed a significant difference across the four writing assignments: Week 8 = 18.72, Week 10 = 8.62; p < .01, Week 9 = 5.82, Week 11 = 6.47; p < .05. No significant difference was found in the assignment of Week 12.

These results imply that the identical types of feedback and comments had a positive effect on the number of words written by Control and Experimental groups, respectively. The results, therefore, suggest that the type of feedback provided during Period 1 may have a significant effect on the number of words written by students during this period. In addition, the effect size indicated that different types of feedback during Period 1 result in producing a certain effect on students' writing fluency during this period, instead of the previous period. Furthermore, the statistical results did not show significant differences both in the frequency of SCs and the number of words written in the assignment of Week 12. This can be attributed to the enhancement of writing after the four opportunities of receiving feedback and comment (Feedback 8 - 11). Therefore, it can be presumed that students need a certain experimental period to learn and use transition words, so that they will probably succeed in significantly increasing the amount of writing.

Findings and Discussion

Research Question #1

How did the experimental group respond to intentional feed-

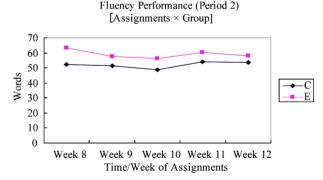


Figure 4.

Average number of words by groups.

Table 8.

Results of two-way ANOVA for Words.

| | SS | df | MS | F |
|--------------------------------|---------|-----|---------|------|
| Group (A) | 1851.52 | 1 | 1851.52 | 3.08 |
| S | 16829.8 | 28 | 601.06 | |
| Time (B) | 517.16 | 4 | 129.29 | 0.84 |
| $\mathbf{A} \times \mathbf{B}$ | 193.90 | 4 | 48.47 | 0.31 |
| $\mathbf{S}\times\mathbf{B}$ | 17099.3 | 112 | 152.67 | |
| Total | 36491.8 | 149 | | |

back that explicitly focused their learning to use transition words?

The results of Period 1 confirmed that the intentional feedback that explicitly focused on transition words had a significant effect on the frequency of the students using successful connectives. Teachers' comments on the use of connectives resulted in significantly greater use of transition words. This finding suggests that writing teachers should provide feedback on the use of transition words and teach students the effectiveness of using such words in EFL writing classes. In terms of this result, there are two important points to emphasize.

First, teachers hope that their students will improve in the next assignment while they respond to and influence students' writing. In order to achieve this ultimate goal of feedback, the findings of the previous studies suggest that ESL writing instructors should be straightforward, concrete, and fairly directive in their feedback to L2 writers (Conrad & Goldstein, 1999; Ferris, 1997, 2003a). Bates, Lane, and Lange (1993) also suggest that teachers should make text-specific comments, which relates to the text rather than general rules. During the first period of this study, I provided the experimental group with fairly text-specific comments on using connectives, such as in 1), while I have chosen to express my general comments for the control group, as in 2).

1) Try to use "for example" to mention specific things in order to explain what you mean.

2) *Try to express your ideas as specifically as possible and give extra information.*

It is important here to note that it may be more efficient for students to improve their writing with teachers' explicit advice on what expression they should use, like *for example*. Accordingly text-specific comments on using connectives can extend to future writing behavior.

Second, the results of Period 2 indicated that the difference in the frequency of the students using successful connectives between the groups gradually decreased due to the intentional feedback on the use of sentence connectors. However, until the 12th week, there were significant differences in the frequency, implying that it takes time for students to learn and use transition words. Dekeyser (2007), for instance, points out that once procedural knowledge has been acquired, there is still a long way to go before the relevant behavior can be consistently displayed with complete fluency (p. 98). Therefore, writing teachers should raise awareness of students' sense of coherence even in the earlier stage of writing classes, and thus they understand the effectiveness of learning transition words so that students' acquisition of sentence connectors may be effectively promoted in EFL writing classes.

Research Question #2

To what extent did the students' learning to use transition words enhance fluency in new pieces of writing?

According to the review of previous studies, learning to use transition words could be effective at increasing students' fluency in written language as well as oral language, so that the use of connectives may enable students to write more about the relevant information and to enhance their fluency in writing. The findings of the present study implied that the teacher's marginal comments on the use of transitional words had an effect on increasing the number of words written, and partly confirmed that the instruction of the use of sentence connectors

The first reason is that teachers' comments on the use of connectives meet the students' needs for their writing assignments, resulting in the increased number of words written. It has been recognized that teacher feedback should be constructed according to the most critical needs of individual student writers (Conrad & Goldstein, 1999; Ferris, 1997, 2003b; Reid 1994). The General English class in which this study was conducted provided the 12 written homework assignments with identical writing structures: a topic sentence, two or three reasons representing students' opinion, and a concluding sentence. Thus, the students could concentrate on thinking and writing about reasons to support their opinion or choice, and the reasons they gave were supposed to coherently relate to the main statement. As the previous studies point out that using connectives lends a framework to meaning (Jordan, 1990; White & McGovern, 1994) and helps student writers to show how the points they relate to each other and to the whole text (Parrot, 2004), receiving comments on the use of connectives was helpful and useful feedback when the students wrote reasons for supporting their opinions, and thus had a certain effect on increasing the amount of writing in the subsequent assignment.

The second reason is related to the notion mentioned in the increased number of successful connections. Text-specific comments on the use of connectives may foster the tendency for learners to add ideas in their writing. In other words, providing comments on the use of connectives can make students think logically and affect their attitudes toward writing. Here is an example in point. In the sixth assignment, one student wrote, "I think that personality is the most important for a human being." I provided the student with a text-specific comment, such as "Try to describe specific reasons after the statement by using because." In Week 8, she submitted the assignment including the following sentences: If I don't get along with my email friends, I can easily break off the friendship. This is because I don't keep in touch if I stop sending email to them. We can infer that the student tried to add the reason by using the connective exemplified in my previous comment.

Gordon (2008) mentioned that useful feedback inspires writers to re-plan, re-draft, or re-edit their texts so as to best convey their intended meaning. Since connectives express a number of logical relationships, such as addition, contrast, causation, circumstance and so on, comments on the use of connectives may enable students to think of relevant information logically. As a consequence, learning to use different types of transition words helps students to expand their ideas logically and thus write more about the logical information.

However, it is true that the subsequent research conducted during Period 2 may in part help to confirm that teachers' comments on the use of connectives enhance students' fluency in writing, but the improvement of fluency observed through the entire period is still small, implying that they will probably need a certain experimental period for the acquisition of transition words. Thus, it is prudent to assume that although learning to use different types of transition words helps students to write more about the logical information, further research is necessary to examine how students use transition words to expand their ideas logically and how teachers give more effective comments on the use of connectives, which facilitate their greater fluency performance.

Conclusion

The results of the 12-week period indicate that teachers' comments on the use of connectives were helpful and useful feedback, and resulted in significantly greater use of transition words. However, the effect on the amount of writing was marginally significant and it can be presumed that students need a certain experimental period for the acquisition of transition words, so that they will succeed in more significantly increasing the number of words. At present, the assumption that learning to use transition words enhances students' fluency in writing is nearly verified.

The main findings also suggest that writing teachers should provide feedback on the use of transition words and teach students the effectiveness of using sentence connectors. This also helps to improve students' fluency in EFL writing classes. However, this study only partly confirms the effectiveness of teaching transition words in terms of writing fluency. In order to be able to investigate the tendency for learners to add logical information in their writing and observe patterns of consistent improvement, there could be a need for research to longitudinally examine the effects of such instruction. Therefore, a further direction of this study will be to provide more evidence for these findings and to improve the effectiveness of teachers' written feedback on the use of transition words.

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Appendices

Appendix 1: Textual Discourse Markers

Numbering and ordering points

First, firstly, in the first place, first of all, Second, secondly/ third, thirdly/last, lastly, finally Adding something Moreover, and, in addition, also, furthermore, additionally, alternatively, instead Linking similar things together Similarly, equally, likewise Introducing something that contrast with expectations However, but, nevertheless, although, though, on the other hand, by contrast, conversely, on the contrary Cause and results Therefore, so, then, as a result, thus, consequently, that's because, for, because (of), since, for this reason. Generalizing Generally, in general, on the whole Exemplifying and narrowing down Specifically, that is, for example, in fact, namely **Re-stating**

In other words, in a sense, that is (to say)

Rounding-off

In summary, to summarize, in conclusion, to conclude, to sum up

Appendix 2: Examples of Successful and Unsuccessful Connections (Excerpts from Chapter 2)

Successful connection: American young people like to be on their own. In Japan, *however*, young people tend to stay at home with Mom and Dad.

Unsuccessful connection: Many Japanese young women live with their parents much longer. *In addition*, they have the less chance of marrying.

Unsuccessful connection: There would be not so many parasite singles in Japan. *And, in fact,* there are a lot of young people who depend on their parents.

Unsuccessful connection: Parasite singles can have no children. *In short*, her family will die out in the future.

Unsuccessful connection: We can think of how to use money *although* we live with parents at home.