Effects of Feedback Types on Writing Accuracy, Fluency, and Complexity

Chongwon Park

(Pukyong National University)

This paper investigates how two different modes of feedback (selective vs. comprehensive) affect selected students' writing development in terms of three different types of measurement (accuracy, fluency, and complexity). 139 university students participated in the study, and 278 writing samples were analyzed. The results of the study indicate that participants who received selective feedback wrote more accurately and fluently than their counterparts. However, in terms of complexity, both selective and comprehensive groups showed no sign of improvement in semester-based investigations. The results of this study support Skehan's (2009) theory of trade-off effects, suggesting that 'natural' tension exists between accuracy and complexity when resources are limited. Moreover, this finding contrasts with the theory of Cognition Hypothesis, which proposes that task complexity will be associated with increases in complexity and accuracy. In the study, selected participants (N=21) strongly nominated their error sources as unfamiliarity toward using key words, usage, transition, and sentence types. This study not only contributes to the accumulation of our current knowledge in the related area of theory, but offers educational implications for those who are dealing with intermediate-level students when deciding what particular teaching content should constitute a priority within a limited instructional period.

[accuracy/fluency/complexity/selective feedback]

I. INTRODUCTION

On a daily basis, teachers encounter a countless number of writing errors in their classes. In responding to student errors, the majority of writing teachers may be willing to devote a considerable amount of time to providing written corrective feedback (WCF), believing that their efforts will help students improve their grammatical accuracy in their subsequent writing (Ashwell, 2000). Although linguistic accuracy may not be equally important for all

L2 learners, one can not ignore highly motivated students' expectations that their teachers will help them improve the accuracy of their writing (Norman, Hartshorn, McCollum & Wolfersberger, 2010). Manchon (2008) also explored the potential instrumental functions of writing in learning a foreign language and summarized them as noticing, hypothesis testing, and meta-linguistic functions. According to Manchon, a noticing function allows learners to monitor their own output and to focus their attention on input. Secondly, a hypothesis-testing function allows learners to judge their own production. Thirdly, a meta-linguistic function draws learners' attention to the means of expression needed for the successful communication of learners' meaning.

In spite of the potential benefits of WCF and teachers' and students' expectations toward a unique writing practice, the question of whether WCF is effective or not in increasing students' writing accuracy is still at the heart of the debate. Most of the studies addressing this issue have focused on a single rule-governed item like articles. Although it is obviously important to increase students' writing accuracy in articles, the effects of WCF on other linguistic items that are equally important have been placed in a peripheral position. Apart from linguistic items, writing accuracy in content or organization definitely enhances the overall quality of written communication. Therefore, the purpose of this study is to further investigate the effectiveness of WCF by extending other items ranging from grammar, organization, and contents to better understand students' second language writing development.

II. LITERATURE REVIEW

In searching for the answer to the question of whether WCF is effective or not, most of the research focused on the different types of WCF, and how it ultimately affects students' grammatical accuracy. These different types of WCF, which were conceptualized and classified in the previous studies, may broadly fall into two categories in terms of range of focus and level of directness in delivering feedback. The first one investigates whether a difference exists between a feedback group receiving a broad range of items and a no-feedback group (Ashwell, 2000; Fathman & Whalley, 1990; Ferris & Roberts, 2001). Ashwell (2000), for example, compared the effects of (1) content comment, then indirect feedback; (2) indirect feedback, then content comment; (3) a combination of (1) and (2); and (4) no feedback. The results favored all groups receiving feedback, but there was no sign of improvement for the control group who did not receive any feedback.

In addition, Fathman and Whalley (1990) investigated seventy-two intermediate English as a Second Language (ESL) students at two U.S. colleges. The subjects were divided into four treatment groups: (1) no feedback; (2) grammar feedback only; (3) content feedback

only; (4) grammar and content feedback. Grammar feedback consisted of "underlining all grammar errors" (p.182). In the same line of inquiry, Ferris and Roberts (2001) looked at seventy-two ESL students divided into three treatment groups: (1) no feedback; (2) errors underlined; (3) errors underlined with error codes attached. Unlike many other earlier studies addressing the effect of feedback vs. no feedback, all of the aforementioned three studies focused solely on control and experimental groups, which has made a direct comparison between the two groups possible. All of the three studies showed significant effects for the feedback group. However, the fact that these studies measured the effectiveness of WCF in different ways makes it very difficult to compare results and reach any conclusions with regard to the general effectiveness of any specific approach. Some researchers evaluated students' improvement in accuracy based on an analysis of the revisions which students made in their subsequent drafts (Fathman & Whalley, 1990; Ferris & Roberts, 2001); others looked at improvement in new pieces of writing (Ellis, Younghee Sheen, Murakami, & Takashima, 2008; Younghee Sheen, 2007).

Rather than providing a broad range of feedback, other studies investigated the effectiveness of focused feedback when it was compared with the no-feedback group (Bitchener, 2009; Bitchener, 2008; Bitchener & Knoch, 2008; Younghee Sheen, 2007). Overall, the results of the studies support the claim that focused WCF is more effective than no feedback in bringing about improvements in the accuracy of ESL learners. Bitchener (2008), for example, compared the difference among four groups of learners, that is, direct corrective feedback only, written and oral-metalinguistic explanation, a combination of direct corrective feedback and written metalinguistic explanation, and no feedback. To confirm the acquisition of two functional uses of the English article system (referential indefinite "a" and referential definite "the"), a pre-test, immediate post-test, and delayed post-test design were utilized. The results of the study indicate that the students who received WCF in the immediate post-test outperformed those in the control group with no feedback, and that this level of performance was retained two months later. However, whether or not there is an advantage for metalinguistic explanation over error correction alone for some forms/structures still remains an avenue of inquiry.

The second category of research presupposes that the effect of WCF is positive or at least influential and explores the degree of the directness of feedback and its effect, that is, whether WCF is carried out directly or indirectly (Baker & Bricker, 2010; Bitchener & Knoch, 2010; Bitchener, 2008; Bitchener & Knoch, 2008; Chandler, 2003; Ellis et al., 2008; Fathman & Whalley, 1990; Lalande, 1982; Robb, Ross, & Shortreed, 1986; Semke, 1984; Younghee Sheen, 2007). Direct feedback was operationalized as explicit corrections provided by the teacher or another reader, and indirect feedback is called to the learners' attention and left for the students to correct (Ferris, 2010). Some studies indicate the superiority of direct feedback, at least for a few targeted features such as articles and

prepositions (Baker & Bricker, 2010; Bitchener, 2008; Bitchener & Knoch, 2008; Ellis et al., 2008; Ferris & Helt, 2000; Lalande, 1982; Younghee Sheen, 2007). Others report no difference between the two approaches (Robb et al., 1986; Semke, 1984) or even an insignificant or infinitesimal role of indirect feedback when it was compared with that of metalinguistic explanation or self-correction (Bu-Ja Kim, 2009).

Why are the results inconclusive? According to Ferris (2010), WCF that focuses on only one or two specific errors will not address students' accuracy issues comprehensively enough because student writers tend to make a broad range of written errors. In the same vein, Xu (2009) argued that an increase in the use of articles does not necessarily lead to an increase in all other linguistic items. In order to look at the evidence of acquisition, one needs to investigate further the relationships between articles and other linguistic items because an article cannot be used in an isolated way. In addition, Bitchener, Young, and Cameron (2005) warn that different linguistic categories should not be treated as if they are equivalent because they represent separate domains of knowledge that are acquired through different stages and processes. Therefore, in terms of the desirability of providing appropriate responses to each learner's stage, the aforementioned studies offer few educational implications.

Finally, rather than focusing on a single rule-governed item like articles or prepositions, some studies raised the need to explore a wide range of linguistic features and compare differences between the experimental (selective, focused feedback) and control group (no feedback) (Ellis et al., 2008; Yanghee Kim & Mijin Joo, 2010; Younghee Sheen, 2010; Younghee Sheen, et al., 2009). In an examination of a narrative task, Younghee Sheen et al. (2009), for example, reports that the highest accuracy gain scores for both articles and the other four other grammatical structures (i.e, copular 'be', regular past tense, irregular past tense, and preposition), followed by, in order, the focused, unfocused, writing practice, and control groups. They concluded that unfocused corrective feedback is of limited pedagogical value, whereas focused corrective feedback can contribute to grammatical accuracy in a second language. As the authors suggested, there exists an obvious need to investigate what effects the two types of corrective feedback have on a broader range of grammatical structures. However, it has not been established what the most appropriate number of WCF categories should be (Ferris, 2010). In other words, it is not clear whether research designs must be limited to narrowly drawn treatable categories (i.e., errors that can be addressed by remainders of a clear and succinct rule) or if more complex features (such as lexical issues or sentence structure) should also be considered.

Ferris (2010) attributed this uncertainty to the different starting point of inquiry between Second Language Acquisition (SLA) researchers and L2 writing studies. The studies of WCF designed by SLA researchers examine whether WCF facilitates long-term acquisition of particular linguistic features, and, if so, how this occurs. Related

sub-questions include the number of features (and which ones in particular) should be examined in one treatment or study. On the other hand, L2 writing researchers start with the question of whether WCF helps student writers to improve the overall effectiveness of their texts and to develop as more successful writers. Therefore, Bruton (2009) argues that the effect of language focus in L2 writing should not be limited purely to questions of grammatical accuracy from WCF. In this regard, Truscott's (2010) claim that WCF is a bad idea cannot be supported because it has narrowed academic attention to grammatical accuracy scores in L2 writing, which can actually overshadow the possible development of new language (Bruton, 2007). Norman, et al. (2010) also argue that analyzing without regard for other important dimensions of writing would be meaningless because an improvement in writing would need to be viewed in terms of any potential trade-off effects that might be observed among complexity, fluency, and accuracy. To Norman, et al., this contextual information in the development of writing is what is generally lacking in previous studies. In concert with Norman, et al.'s claim, Skehan (2009) contrasts his Trade-off Hypothesis to Robinson's Cognition Hypothesis in terms of processing at any one time—as opposed to over time—in the following way: "We have seen that a trade-off interpretation proposes that the 'natural' tension when resources are limited is between accuracy and complexity. This contrasts with the Cognition Hypothesis, which proposes that task complexity will be associated with increases in complexity and accuracy." (p.521) By citing couple of relevant research works, Bruton (2010) concludes that in no case do both accuracy and complexity decrease over time, though both may increase or one or the other may deteriorate. Another conclusion that Bruton draws is that any measure of accuracy would have to be accompanied by a measure of complexity, except perhaps in reproduction tasks. Therefore, there is a need to conduct further research to provide empirical evidence on students' writing development according to different modes of measurement in writing. In addition, with regard to genres, most of the previous studies focused either on narrative or journal entries.

Although previous studies on WCF offer some insights, further research is still needed in terms of exploring diverse genres (an exclusively "opinion paragraph" in this study), an extension of the focus of WCF from solely linguistic categories to organization and content, and provision of overall pictures of language development by looking at accuracy, fluency, and complexity at the same time. Thus, informed and guided by the previous studies, the following research question is deduced:

Do different types of WCF (comprehensive vs. selective) have a positive effect on accuracy, fluency, and complexity in opinion paragraph writing tasks?

III. THE STUDY

1. Subjects

To obtain answers to the research question, 139 university students—the majority of whom were English majors—participated in the spring semesters of 2008, 2009, and 2010 respectively. The course was *Basic English Composition*, and it is a prerequisite for sophomore students who go on to take intermediate or advanced English composition courses, which are mostly taught by native speakers of English. The participants in this study ranged from first-year to fourth-year students, with the distribution being freshman (N=3), sophomore (N=73), senior (N=53), and junior (N=10). 103 students were females, while 36 were males, and 278 writing samples from the pre- and post-test were collected and analyzed. All of the students received instruction from the same instructor using the same textbook.

2. Procedures and Instrument

At the beginning of the semesters, students answered the pretest question, which asked whether they preferred living in a city or the countryside. The test was administered in a computer lab, and the students were allowed to finish their writing in 30 minutes. After collecting 139 students' pretest writing samples, their errors were categorized into three domains and 35 sub-domains according to the similarities of the error types, that is, grammar, organization, and contents. For the assessment rubric of this study, a combination of Dulay, Burt, and Krashen's (1982), Smazler's (1996), and ETS's writing evaluation guidelines was adopted because it covers not only grammar, but organization and contents. If the goal of writing is to communicate, this extended guideline is thought to be more appropriate and comprehensive. The revised version of evaluation guideline for this study is provided in the appendix section of this study. Once the students' errors are identified from the given criteria, the students' linguistic development was assessed in terms of accuracy, fluency, and complexity. In this study, accuracy was measured by the number of errors divided by 100 words (Mehnert, 1998). Complexity was also counted by the total number of different words used (types) divided by the total number of words in the text (tokens) (Robinson, 1995). Finally, fluency was measured by writing rate (syllables per minute) (Ellis & Barkhuizen, 2009). To examine the reliability of the scoring of the writing tests, 30 texts from the pre-test were randomly selected from the two groups and re-scored by the same researcher one month after they were initially scored. The Pearson Product Moment Correlation (r) for the two sets of scores was .95 (Ellis & Barkhuizen, 2009).

Throughout the semesters, *Great Paragraphs* written by Folse, Muchmore-Vokoun, and Solomon (2004) was used as the main textbook, which starts with a definition of the paragraph in general. It also covers five different forms of paragraph writing, that is, definition, process analysis, descriptive, opinion, and narrative paragraphs. After reviewing critical elements of each type of paragraph writing, students were required to write three written assignments. Rather than being subjected to the time constraints that constitute writing tests, students had sufficient time to control their time spent on writing at their own pace. The teacher researcher corrected their errors based on the evaluation guideline that he had developed for this study. The 139 students were divided into two groups and received different treatment, that is, comprehensive vs. selective feedback. Students who took the course in the spring of 2008 and 2009 (N=70) received comprehensive error treatment, whereas selective treatment was given to those who took the course in 2010 (N=69). All of the errors that the comprehensive group made were corrected and given to the students. In contrast, the selective group received selected feedback. The feedback selection for the selective group was chosen from Chongwon Park's (2007) study, in which he identified critical variables enhancing writing performance. According to him, these are parallel structures, connectives, clear demonstration of introduction, body, and conclusion, clear demonstration of thesis statement, the balance among introduction, body, and conclusion (in terms of the length of the sentences), level of coherence, and sentence types. Both the comprehensive and selective groups took four quizzes dealing with these items. In addition, a writing conference was held four times during the semesters in the instructor's office. Twenty-one students participated in the conference on a willingness or availability basis. Students were permitted to bring anything related to writing with them, including the feedback provided in class. Throughout the sessions, the researcher did not have any predetermined questions and followed the individual student's lead. All of the conference sessions were tape-recorded and completely transcribed. In order to identify learner nominated variables, the discussions between the instructor and students were analyzed using NVivo 8, which is an optimal tool in analyzing unstructured data and finding patterns or frequencies.

At the end of the semester, both groups took the post-essay test asking whether they agreed or disagreed with the idea of having pets at home. The topics of the pre- and post-test were selected from the TOEFL essay test (http://www.ets.org). A persuasive type of essay was adopted in the hope that it would lead to some cognitive complexity, and also because persuasive writing is an important and difficult mode of discourse, especially for ESL/ English as a Foreign Language (EFL) learners who often bring linguistic, rhetorical, and strategic deficits to the task of persuasion in English (Jin-Wan Kim, 1997).

3. Main Tools of Inquiry

In this study, NVivo 8, developed by Richards (2008), was used for two purposes. One of the purposes was to accumulate and analyze students' writing errors in a naturally occurring order. The second purpose of using NVivo 8 was to integrate qualitative data with quantitative analysis. Most of the previous error analysis (EA) studies focused on the qualitative analysis of learner errors by showing the frequencies. With NVivo 8, it became possible and feasible for the researcher to look not only at error frequencies, but also their significance by integrating qualitative data with statistical analysis (Chongwon Park, 2007). To analyze quantitative data, SPSS version 17 was used. Knowing the order of importance is especially relevant to teachers in terms of guiding them as to what should be taught first in their own class.

IV. RESULTS AND DISCUSSION

Immediately after administering the pretest, a group homogeneous test was administered to see if these two groups were identical in terms of error rates per 100 words. Table 1 reports the results of the group homogeneous test.

From the test, it was concluded that comparing the two groups was legitimate because they showed the same ability at the beginning of the study. This was followed up with a group homogeneous test to seek an answer to the research question, while an independent t-test was conducted to see if there was a difference between the comprehensive and selective group. The results of the findings will be reported according to the three different measurements of English writing.

TABLE 1

Group Homogeneous Test between Comprehensive and Selective Feedback

Feedback Types	N	Mean	SD	P-value
Comprehensive	70	.1179	.06875	.702
Selective	69	.1125	.06525	

Mean is reported as the percentage of incorrect items.

p<.05: statistically significant

1. Accuracy

Table 2 reports the results of the t-test analysis on the measurement of accuracy when the post test scores between comprehensive and selective groups are compared.

TABLE 2

Impact of Different Feedback Types on Two Groups in Accuracy

| Post test		Comprehensive	Selective	T-value	P-value
Accuracy	M	.08	.05	3.389	.001
	SD	.07	.04		

Mean is reported as the percentage of incorrect items.

p<.05: statistically significant

The statistical test of mean differences between the comprehensive and selective groups shows different results according to the different modes of measurement. First of all, in the case of accuracy, the selective feedback group shows decrease in error rates (M=.05) than those undertaking the comprehensive one (M=.08), which is supported by statistical significance (p<.05).

Further analysis was conducted to investigate each group's development over time. Figure 1 demonstrates the comprehensive and selective group's differences in accuracy according to the time lapse (pre- and post-test).

FIGURE 1

Comprehensive and Selective Groups' Accuracy Differences over Time
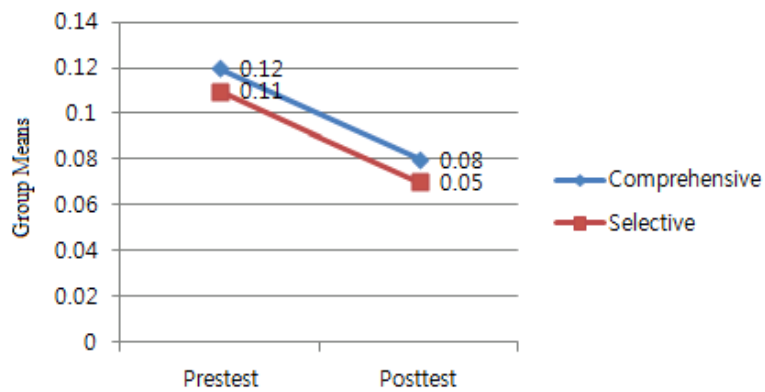
The results of the analysis of the comprehensive group's mean differences in time indicate that decrease in mean error rates between pre-test (M=.12) and post-test (M=.08) are statistically significant (p<.01). In case of selective group, decrease in mean error rates between the pre-test (M=.11) and post-test (M=.05) are also statistically significant (p<.01).

2. Fluency

In the case of fluency, the selective feedback group shows more fluency (M=11.7) than their counterparts (M=8.1), and this difference is also statistically significant (p<.01). Further analysis was conducted to investigate each group's development over time. Figure 2 demonstrates the comprehensive and selective group's differences in fluency according to the time lapse (pre- and post-test).
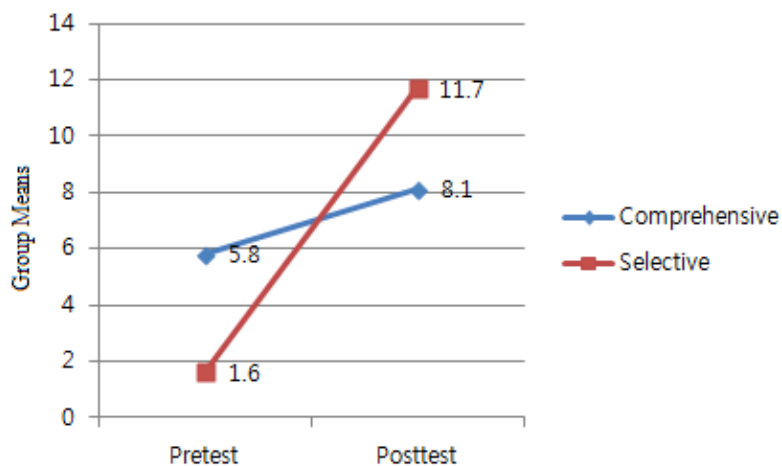
TABLE 3

Impact of Different Feedback Types on Two Groups in Fluency

Post test		Comprehensive	Selective	T-value	P-value
Fluency	M	8.1	11.7	5.267	.000
	SD	4.3	3.6		

Mean is reported as the total mean of syllables per minute.

p<.01: statistically significant

FIGURE 2

Comprehensive and Selective Groups' Fluency Differences over Time

According to figure 2, it was indicated that mean differences between pre-test (M=5.8) and post-test (M=8.1) are statistically significant to the comprehensive group (p<.01). For the selective group, it was also indicated that mean differences between the pre-test (M=1.6) and post-test (M=11.7) are statistically significant (p<.01).

3. Complexity

In terms of complexity, the two groups' mean scores in the post-test show no statistically significant differences.

TABLE 4

Impact of Different Feedback Types on Two Groups in Terms of Complexity

| Post test		Comprehensive	Selective	T-value	P-value
Complexity	M	.53	.52	-.707	.48
	SD	.10	.08		

Mean is reported as the total mean of types divided by tokens.

p<.05: statistically significant

Further analysis was conducted to investigate each group's development over time. Figure 3 demonstrates the comprehensive and selective group's differences in complexity according to the time lapse (pre- and post-test). From the comprehensive group, statistically significant differences are found between pre-test (M=.59) and post-test (M=.53) scores. However, students in the comprehensive group show decrease in complexity from pre-test to post-test. In addition, for the case of selective group, no statistically significant differences are found between the pre-test (M=.54) and post-test (M=.52) scores.

Overall, the results of the statistical analysis indicate that the mean differences in the measurement of accuracy and fluency are in favor of the selective group. However, different types of feedback have no impact on the measurement of complexity for both groups of learners in semester-based investigations. When these two groups of learners' development over time is compared, comprehensive and selective group show improvement in accuracy and fluency, respectively.

FIGURE 3

Comprehensive and Selective Groups' Complexity Differences over Time
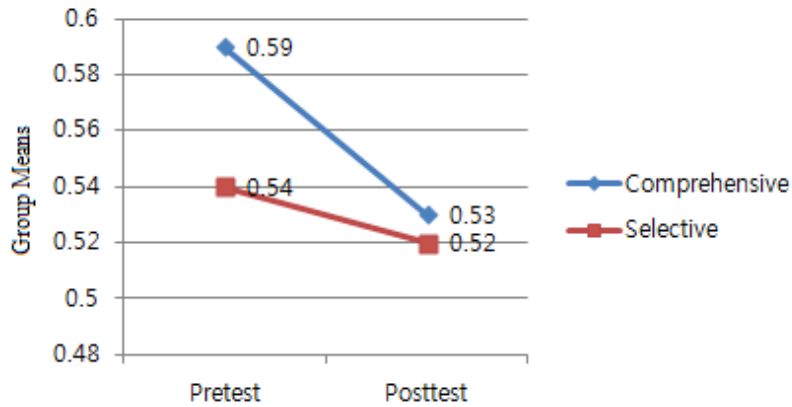
However, no sign of improvement is identified from both groups in complexity.

Table 5 reports the summary of learner-identified causes of errors in writing. As one can notice from table 5, words, sentence types, and English usage comprise almost half of the sources of difficulty for the selected participants of the study. For example, Chanho wrote that, "Above all, the city have many environmental problems, for example, relate with the water and air, earth." His original intention was to mention the seriousness of the pollution problem that the city might be experiencing, and "pollution" was the key word that he was struggling to find (Conference Journal 1). Simple key words or expressions are the major sources of difficulty for the selected participants of the study. As the students acknowledged, this may be attributable to their lack of experience in writing.

One of the repeated themes that emerged from the conference was students' lack of awareness in using the sentence types. For example, Younghee originally wrote, "So, we live in a city companies location is important point." Obviously, this is an ungrammatical structure, and she was encouraged to reformulate the structure starting from Korean to

TABLE 5

Learner Nominated Critical Variables in Writing (N=21)

Rank	The causes of errors	Frequency (%)
1	Unfamiliarity with the key words	20
2	Lack of understanding toward the types of sentences	20
3	Misuse in English usage	8

4	Being poor at using transitions among sentences	5
5	Lack of experience in writing	5
6	Tenses	5
7	Comparison	5
8	Main verbs	5
9	Differences in expression between the Korean and English languages	3
10	Lack of time spent on task	3
11	It for object to root structure	3
12	Brainstorming	2
13	Parallel structure	2
14	Logical fallacy	2
15	Question words	2
16	Agreement	2
17	Relative pronouns	2
18	Redundancy	2
19	Inappropriate use of metaphors	2
20	Prepositions	2
21	Voice	2
Total		100

English sentence types. The following illustrates this process.

Step 1. 우리가 도시에서 사는 이유 중 하나 회사의 위치 또한 중요한 이유이다.

Step 2. 회사의 위치는 우리가 도시에 사는 중요한 이유중의 하나이다.

Step 3. 회사의 위치는 이다 중요한 이유중의 하나 우리가 도시에 사는

Therefore, the final structure that was suggested to the student was:

The location of a company is one of the most important reasons for us to live in a city.

As an example of the incorrect use of English, Boram wrote in her original writing that, "Therefore, we need to show good manners to others, take good of the internet, and make

the best use of it." In the conference, Boram suggested that she would prefer to use 'take advantages of' rather than using 'take good of.' Obviously, she knew the correct expression, and was able to use it appropriately provided that there was sufficient time for her to process the information in her brain (Conference Journal 2). However, timed tasks can be a good indicator in identifying which critical elements of writing are internalized or not. In addition to this, all of the standardized English tests have time limits because time has been considered a very important element in judging test takers' abilities. Any teacher can have one's own goal as a teacher, and that of the writing instructor in this study was to improve students' writing to pass these standardized tests after his class or even after graduating from the university.

According to the participants' perspectives, items from one through five in table 5 seem to be related to each other, thus indicating cause and effect relationships. In other words, rather than unknowing the words, usage, transitions, and sentence types, lack of experience in writing and timed task may yield many unwanted error-ridden sentences. In the conference, Sookhee brought her self-corrected version of writing and reached an almost target-like production. For example, she originally wrote that, "Since I have been covered and satisfied with these facilities…." (Sookhee pre-test). In terms of structure, this is ungrammatical because it lacks a subject and a verb as a main clause. In the conference, she responded, " I knew what to write, but time chased after me, and I was sort of blank when I wrote this sentence. I needed time to review, but I did not have enough time." (Conference Journal 1) Finally, her self revised version of the sentence was, "Since I was born in the city, I have been covered and satisfied with these facilities." (Conference Journal 1) In sum, what matters to Sookhee is not the knowledge, but the frequent use of written English language.

V. CONCLUSION AND IMPLICATION

Unlike previous studies exclusively focusing on the grammatical accuracy of students' writing, this study was conducted to better understand students' linguistic development by extending the types of measurement from accuracy to fluency and complexity. In addition, compared to the narrative-oriented tasks that were the primary concern of previous studies, this study chose opinion paragraph tasks to determine if the results were the same or different. First, the comprehensive feedback group who received feedback of all the errors that they had made showed an improvement in accuracy and fluency. However, in terms of complexity, the comprehensive group's ability decreased over time. Second, the selective group who received feedback on the selected items showed an increase only in accuracy and fluency. However, unlike the comprehensive group, the selective group's complexity

showed no difference as time passed. Third, when these two groups were compared with the post-test, the selective group wrote more accurately and fluently than the comprehensive group did. In terms of complexity, however, no difference was detected between the two modes of feedback.

Given that one of the most important goals of writing instructors is arguably to make a difference to the students' writing ability within an instructional period, this study lends support to the superiority of the effect of selective feedback on the accuracy and fluency of students' writing. In the initial stage of the investigation, the students in all groups had a similar level of error rates and received the same amount and type of instruction involving the identical writing and reading materials. Thus, it can be said that the selective group's superiority over the comprehensive group in terms of accuracy and fluency is the result of different treatment of WCF.

In this study, there were partial trade-off effects among three different modes of measurement. That is, there were no trade-off effects between accuracy and fluency in either the selective or comprehensive groups, but a trade-off effect was found with regard to complexity. This result is congruent with that of Norman et al.'s study (2010), which found that students' efforts to write accurately at the expense of complexity resulted in contradicting developmental patterns between two modes of writing measurement. Because of this, the accuracy and complexity of their writing may be inhibited slightly as they monitor their production more carefully.

Considering the fact that the focus of the feedback for the selective group was geared mostly to organizational elements of English writing, the results of this study in favoring the selective group in terms of accuracy and fluency is striking. This result partially supports and contradicts the claim of previous WCF advocates that focused corrective feedback can contribute to grammatical accuracy in a second language (Younghee Sheen, 2011). The effect of feedback *does* result in differences, but it should not necessarily be limited to grammatical accuracy. In the case of this study, even if grammatical accuracy were not the major concern of feedback for the selective group, its members showed improvement both in accuracy and fluency.

In addition, the fact that the selective group produced more fluent writing than the comprehensive group requires further investigation before jumping to a harsh conclusion because fluency was not the major concern of either the WCF advocates or Truscott. One possible explanation for the selective group's remarkable increase in fluency is that by focusing less on the grammatical aspects of writing, their anxiety was reduced. In other words, the selective group arguably experienced more freedom in terms of their writing in the error-free environment. As a result, the students in the selective group became more fluent writers than their counterparts.

As the selected students strongly pointed out in the writing conference, a lack of

experience in writing might only be the case for the participants of this study. Instead of jumping to the conclusion that the students are exposed to a limited environment of using written language in an EFL context, the researcher argues that the instructional contexts and the practical steps of a specific writing class need to be considered beforehand. Most of the participants of this study enrolled in a writing class for the first time immediately after graduating from high school, and therefore their experience in using written English may not be extensive. However, the institution offers many opportunities of English writing connected with the current course, such as intermediate and advanced English composition. As long as students possess the willingness to practice English writing, the institution can at least offer a starting point.

As to the practical practice of a specific writing class, related literature illustrated a typical practice of pre- and post- tests and four to five assignments or in-class 30-minute tests. However, at this point, it is difficult to reach a consensus as to how many hours and weeks students need to write. With regard to offering frequent use of written English, Norman et al. (2010) have developed an instructional strategy that they term *dynamic written corrective feedback*. According to Norman et al., students are instructed to write for ten minutes every time the writing class starts. From the comparison between using a conventional process approach and the dynamic WCF, Norman et al. report the positive effect of dynamic WCF on writing accuracy. However, they also report that writing fluency and complexity were largely unaffected by the dynamic WCF pedagogy.

This study is limited in that the strict sense of a control group—that is, those who did not receive corrective feedback at all—is not considered in this particular study. It can be argued that having a group with no feedback whatsoever is unethical because of the nature of writing class where some types of instruction and learning are expected to occur all the time (Bruton, 2009).

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APPENDIX

The Revised Version of the Evaluation Guideline

Specified criteria of three domains are summarized as follows. Those with asterisks are what the selective group of this study intensively received as feedback. All of the 35 elements displayed below, with and without asterisks, are the focus of the feedback for the comprehensive group.

1. Grammar

   1) Noun (pluralization):   I have several <u>reason</u> that a city life is better than a country life.
   2) Pronoun (reference): Then, grandmother and mother made ancestor-memorial rites food and I helped <u>it</u> in the side.
   3) Agreement (subject and verb): My English is terribly poor. So, it <u>take</u> me some time to write a letter in English.
   4) Article: I plan to read <u>the many</u> books.
   5) Preposition: A big city is always full <u>by</u> people.
   6) Tenses (12 tenses): Umm.. <u>Have</u> you <u>go</u> to Baksuk Scholarship Information Stadium?
   7) Determiners: Seoul is a capital <u>in Korea</u>.
   8) Modals (to root, rooting, rooted): I <u>become respect</u> her.
   9) Root: I <u>can't meditation</u>, because there is a lot of noise.
   10) Possessives: ...and small town is the object of the <u>there</u> adoration.
   11) Object of a verb: I can use easy.(what?)
   12) Comparison: And the trees in Seoul seem to be more withered up <u>than Kang</u> <u>Won Do</u>.
   13) Capital letters, punctuation: <u>i</u> often take a walk with my pet.
   14) Spelling errors: I believe in him and that is my <u>faul</u>.
   15) Relative Pronoun: I stayed Mokp'o <u>which is</u> my grandmother lived.
   16) Tag questions: Last week, the basket ball game was very interesting, <u>weren't</u> it?
   17) Noun: I received your letter with <u>delightful</u>.
   18) Adverb: I <u>always</u> had lived there, (position)
   19) Voice: When the movie <u>was end</u>, my heart was breaking.
   20) Verb: The more I <u>approach at</u> a big city, the more I can feel the terrible kinds of pollutions.
   21) Adjective: Many people argue that living in a small town is <u>help</u>.

*22) Sentence types in general:
  (1) Simple (S+V, S+V+SC, S+V+O, S+V+O+OC, S+V+IO+DO):
      Also traffic is <u>convenience</u>.
  (2) Compounds: The air is dirty, some trees are dying. (conjunction is omitted)
  (3) Complex:
      <u>Because of I enjoyed shopping very much</u>, I like big city and life in a big city.
 23) Conjunctions:
      There are lots of people, many vehicles in a big city. (Conjunction is omitted)

2. Contents

 1) Unclear meaning: For example, Seoul has a korean-style house which can feel about ancient
    things.
 2) Word choice: I <u>gain</u> much money in days to come.
 3) Usage: I feel like <u>to eat</u> something.
 4) Redundancy: I <u>went to go</u> to the theater with my sister.
 5)Style: My family member is 4; <u>mom</u>, <u>dad</u>, younger brother and me.
 6)Logic: The man who is well-educated earns a lot of money.

3. Organization

 *1) Parallel Structure:
     I attend a lecture, every Monday, Tuesday, Friday. (Conjunction is omitted)
 *2) Connectives:
     <u>THE</u> first, for my healthy automobile exhaust gas, overcrowding are bring about
     smoke pollution and a noise.
 *3) Clear demonstration of introduction, body, and conclusion
 *4) Clear demonstration of thesis statement
 *5) The balance among introduction, body, and conclusion (in terms of the length of the
     sentences)
 *6) Level of coherence

Examples in: English
Applicable Languages: English
Applicable Levels: Tertiary education

Chongwon Park
Division of English Language and Literature
Pukyong National University
599-1, Daeyeon 3-Dong, Nam-Gu,
Busan, 608-737, Korea
Tel: (051) 629-5386
Fax: (051) 629-5373
Email: chongwonpark@pknu.ac.kr