The Efficacy of Comprehensive Corrective Feedback in Improving Grammatical Accuracy of EFL Learners’ Writing

Pariyanto
Universitas Islam Negeri Sunan Ampel Surabaya
Indonesia

Bambang Yudi Cahyono
Universitas Negeri Malang
Indonesia

Abstract

This study investigated the effect of comprehensive corrective feedback (CCF) on grammatical accuracy of EFL learners’ writing. Two groups of students, a CCF group (n=13) and a comment on content group (CoC, n =12), participated in a quasi-experiment with a pretest-posttest-delayed posttest design and wrote nine expository essays followed by different feedback treatments. The findings indicated (1) that the CCF group outperformed the CoC group in the accuracy of grammatical features in the immediate posttest, and (2) that there was no significant difference in the two groups’ accuracy in the delayed posttest. These suggest that CCF is more effective in improving the grammatical accuracy of EFL learners’ writing for a short term period than CoC.

Keywords: Comprehensive corrective feedback, EFL writing, grammatical accuracy

1. Introduction

The discussion on the efficacy of a particular type of corrective feedback in L2 written accuracy is increasingly emerging in the literature (e.g. Bitchener & Knoch, 2010b; Ellis, Sheen, Murakami, & Takashima, 2008; Ellis, 2012; Nagata, 1993; 1997; Yeh, & Lo, 2009). Some researchers (i.e. Bitchener & Knoch, 2008; Sheen, 2007; Sheen, Wright, & Moldawa, 2009) believe that focusing on one or few error types contributes to grammatical accuracy in L2 learners’ writing better than focusing on several error types since it is said to better pinpoint problem areas and to reduce the potential confusion and cognitive overload of L2 learners. Confusion and cognitive overload are thought to occur when all existing errors in L2 learners’ writing are corrected. As normally detected in L2 learners’ writing, the grammatical errors are relatively varied. Therefore, concentrating on one or more specific linguistic features (e.g. article, preposition) is considered more effective in helping L2 learners improve their grammatical accuracy in writing.

However, a growing number of scholars (e.g. Ferris, 2010; Liu & Brown, 2015; Storch, 2010) question the ecological validity of these studies for the second language classroom as the purpose of corrective feedback is to assist students improve overall accuracy rather than accuracy of one linguistic form. To address students’ accuracy issue comprehensively, many researchers (i.e. Lalande, 1982; van Beuningen, 2011; van Beuningen, Jong, & Kuiken, 2008, 2012) investigated comprehensive error correction or comprehensive corrective feedback (CCF). It is believed that CCF is effective in helping improve the grammatical accuracy of L2 learners’ writing. According to Lalande (1982) CCF is effective since it raises L2 learners’ awareness of all the errors they have made and can prevent them from ingrained faulty linguistic structure in their interlanguage system. In other words, the accuracy of L2 learner’s writing are unlikely to improve if the existing errors are not corrected. The potential of corrective feedback had attracted some researchers (e.g. Kepner, 1991; Robb, Ross, & Shortreed, 1986; Semke, 1984; Sheppard, 1992) to investigate the effectiveness of CCF in improving the accuracy of L2 learners’ writing. The studies had been conducted in various settings and across proficiency levels. Kepner’s (1991) study that employed direct error correction for a treatment group and content comments for a control group, for instance, involved intermediate Spanish foreign language learners.
Robb et al. (1986) investigated the effectiveness of CCF with the employment of direct error correction, indirect coded feedback, indirect highlighting, and marginal error totals as the feedback treatments and with participation of 134 English as a foreign language (EFL) learners in Japan. A study by Semke (1984) involved 141 German foreign language students in a US university and included three treatment groups (direct error correction, combination of direct error correction and content comments, and indirect coded feedback) and one control group (content comments). Sheppard’s (1992) study of 26 upper intermediate English as a second language (ESL) learners compared direct error correction and conferences with content comments and conferences to investigate the improvement of learners’ accuracy in language use. The findings of these studies showed no significant differences in learners’ accuracy. In other words, CCF was ineffective in helping students improve the accuracy of a new text. Some critiques emerged as a response to these findings. Bitchener and Ferris (2012), Ferris (2003), and Guénette (2007) argued that the studies contained design and methodological shortcomings that cannot be considered unequivocal evidence for or against the effectiveness of CCF. Design related drawbacks pointed out by the researchers include the lack of a proper control group, the differences between treatment groups in time spent on task, and the provision of feedback on all the errors at a time. In light of shortcomings of the earlier studies, van Beuningen, de Jong, and Kuiken (2008; 2012) tried to address these in their investigation of providing multilingual secondary school students in the Netherlands with CCF on errors committed in the use of the Dutch. The students were assigned to four different groups: two treatment groups (direct corrective feedback and indirect corrective feedback) and two control groups (writing practice and revision without corrective feedback). The studies indicated that both treatment groups outperformed the control groups in the immediate posttest and that direct corrective feedback group outperformed the other groups in the delayed posttest.

One of several factors that is believed to contribute to the absence of positive effect of corrective feedback is that the feedback is not selective. This belief leads to the emergence of some research that focuses on one or a few targeted linguistic errors. The studies on the efficacy of providing ESL learners with corrective feedback on two functional uses of the English article system, for example, have been conducted by Bitchener (2008), Bitchener and Knoch (2008; 2009a; 2009b; 2010a; 2010b), Ellis et al. (2008), Sheen (2007), and Sheen et al. (2009). Except for the work by Ellis et al. (2008), all of these studies reported that the focused group outperformed the control group both in the immediate and in the delayed posttest. Ellis et al. (2008) reported that the three groups (direct focused, direct CCF, and control groups) in their study performed with greater accuracy in the immediate posttest, but the direct focused and the direct CCF groups outperformed the control group in ten weeks delayed posttest. The studies investigating the efficacy of focused corrective feedback have consistently shown that it can have positive effect on learners’ accuracy development while the studies seeking the effectiveness of CCF tend to show inconsistent results. Nevertheless, the studies on focused corrective feedback, as Storch (2010) suggests, are lack of ecological validity although they are considered more ‘robust’ in terms of research design (p.43). To provide more evidence on the efficacy of CCF in improving grammatical accuracy of EFL students’ writing, the present research investigated essays composed by a class of Indonesian university students majoring in English. The class was divided into two groups, CCF group and comment on content (CoC) group. The CCF group received direct correction on all grammatical errors described in Dulay, Burt, and Krashen’s (1982) Linguistic Category Taxonomy – the explanation is given in the target structure section. The CoC group received comments on contents and organization, and was interpreted as a control group. The research question is stated as follows:

1. Is the grammatical accuracy of students’ essays improved after receiving CCF and CoC?

2. **Method**

2.1 Design

The study employed a quasi-experimental design involving a class serving as one experimental group – CCF (N=13) and a control (CoC) group (N=12). It should be noted that the control group (CoC) also received treatment from the teacher (who was the first author of this article) since the research was conducted in an educational context where individuals should be treated fairly. However, a special care was taken to ensure that the CoC group was absent from exposure to language form. To provide control for extraneous characteristics of participants that might influence the outcome, random assignment to group was carried out by using random number function in Ms. Office Excel. All two groups wrote nine expository essays consisting of 200-250 words on predetermined topics. A pre-test (essay #1), an immediate posttest (essay #8), and a delayed posttest (essay #9) were administered to measure students’ written accuracy.
The delayed posttest was conducted four weeks after the immediate posttest. From essay #1 to essay #7, the CCF group received direct correction on all grammatical errors while the CoC group received comments on content and organization. All of the students’ works were typed in Ms. Office Word document and so was the feedback given – using Ms. Office Word’s comment feature. Table 1 displays the scheme of the feedback treatment in this study.

<table>
<thead>
<tr>
<th>Week</th>
<th>Session</th>
<th>CCF (correction on all grammatical errors)</th>
<th>CoC (comments on content &amp; organization)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pretest</td>
<td>Writing essay #1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Treatment</td>
<td>Feedback and revision for essay #1/ writing essay #2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Feedback and revision for essay #2/ writing essay #3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Feedback and revision for essay #3/ writing essay #4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Feedback and revision for essay #4/ writing essay #5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Feedback and revision for essay #5/ writing essay #6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Feedback and revision for essay #6/ writing essay #7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Immediate Posttest</td>
<td>Feedback and revision for essay #7/ writing essay #8</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Delayed Posttest</td>
<td>Writing essay #9</td>
<td></td>
</tr>
</tbody>
</table>

### 2.2 The target structures for CCF

The target structures for the CCF group were all grammatical errors, the errors described in Dulay’s, et al. (1982) Linguistic Category Taxonomy. They include the following types:

#### A. Morphology

There are six components that deal with morphological errors: (1) incorrect indefinite article; (2) incorrect possessive case; (3) incorrect third person singular verb; (4) incorrect simple past tense, either regular or irregular past tense; (5) incorrect past participle; and (6) incorrect comparative adjective/adverb.

#### B. Syntax

Syntactical errors consist of (1) noun phrase – i.e. determiners, nominalization, number, use of pronouns, and use of prepositions; (2) verb phrase – i.e. omission of verb, use of progressive tense, agreement of subject and verb; (3) verb- and –verb construction; (4) word order; (5) some transformations – i.e. negative transformation, question transformation, there transformation, and subordinate clause transformation.

Below is an example of a student’s work and the feedback given on all grammatical errors appearing in the sentences.

wants the is to
Every parent wants a good child, but often child so dificul to listen √
of his the is his is
advice √/parent. Sometimes √/parent strict because they child √/naughty, cannot
his
make a parent feel happy.

### 2.3 Participants

The participants were 25 sophomore students majoring in English at Sunan Ampel State Islamic University, Surabaya, Indonesia. Students’ English proficiency was more or less at preintermediate to intermediate levels. The students were taking Writing III (essay writing) when the research was conducted. The students also took English Grammar III and Vocabulary III. The groups were dominated by female students and each group had two to three male students. Their mother tongue varies from Javanese, Madurese, to Bahasa Indonesia. They graduated from either Islamic senior high schools or state senior high schools and rarely wrote compositions in their mother tongue or in Bahasa Indonesia when they were school students.
They formally started learning English since their junior high school education and some even earlier when they were in their elementary school education.

2.4 Instrument

The instrument included writing prompts containing topics familiar to students (see Appendix 1 for a sample of the writing prompts). The topics of writing tasks were selected from most ticked “easy” to “quite easy” of twenty surveyed questionnaires on topics students recognized and believed to be able to write counted 200-250 words within 60 minutes of time period. The nine selected expository writing topics were: (1) Explain why parents are sometimes strict; (2) Explain why it is important to learn to read; (3) Explain why some teens do drugs; (4) Explain why being a Muslim is a good choice for you; (5) Why is English an important subject taught at school and university?; (6) What are the consequences of having a job while in university? Explain!; (7) Why is Surabaya the best place to study for many students? Explain!; (8) Why is a smartphone very popular these days? Explain!; (9) Explain some consequences of national exam (standardized test) for school students! To give advance information of whether or not the instrument was feasible, the writing prompts were tried out to a similar class consisting of 36 students prior to the research. With nine writing prompts, four students in the class wrote an essay on the same topic. It was found that the students could write 200-250 words essay on topics given within specified time (60 minutes) and that many grammatical errors were found in students’ writing for which corrective feedback treatment could be provided.

2.5 Scoring

To maintain the reliability in scoring students’ works, two raters –the first author of this article and an independent rater– were employed. The CCF group received correction on all grammatical errors, yet to avoid swamping the learners with corrections, the errors with the same grammatical forms were corrected maximum twice (see Appendix 2 for a sample of CCF). For instance, a student’s sentence contained missing article “a”. The teacher provided correction on this error type once only. If the student committed the same error (missing article “a”) in the following sentences, the teacher would not provide a correction on this error type anymore. In the CoC group, the teacher provided comments on either content or organization (see Appendix 3 for a sample of CoC). Nevertheless, grammatical errors appeared in this group’s writing was also calculated to obtain grammatical accuracy scores as applied in the CCF group. To ensure that each rater was consistent in identifying errors, all students’ writings of each group in essay #1 (pretest), essay #8 (immediate posttest), and essay #9 (delayed posttest) were rescored by the same rater. The Cronbach’s alpha coefficient obtained was 0.99 for rater 1 and so was for rater 2. In addition, to ensure that the scores given to a student’s work by rater 1 was agreed by rater 2 and vice versa, the same text of students’ writings of each group in the pretest was rescored by rater 1 and rater 2. The Cronbach’ alpha coefficient obtained was 0.98, which was a high reliability coefficient.

Table 2. Mean and Standard Deviation of Grammatical Accuracy Scores per Feedback Group and Testing Period

<table>
<thead>
<tr>
<th>Feedback Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pretest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCF</td>
<td>7.52</td>
<td>.78</td>
<td>13</td>
</tr>
<tr>
<td>CoC</td>
<td>7.61</td>
<td>.99</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>7.56</td>
<td>.87</td>
<td>25</td>
</tr>
<tr>
<td><strong>Immediate Posttest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCF</td>
<td>8.53</td>
<td>.71</td>
<td>13</td>
</tr>
<tr>
<td>CoC</td>
<td>7.79</td>
<td>1.17</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>8.17</td>
<td>1.02</td>
<td>25</td>
</tr>
<tr>
<td><strong>Delayed Posttest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCF</td>
<td>7.80</td>
<td>1.04</td>
<td>13</td>
</tr>
<tr>
<td>CoC</td>
<td>7.90</td>
<td>1.27</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>7.84</td>
<td>1.14</td>
<td>25</td>
</tr>
</tbody>
</table>

The data in this study were the grammatical accuracy scores the two groups obtained in the pretest, the immediate posttest, and the delayed posttest. To score students’ grammatical accuracy in writing, the raters first totalled the number of grammatical errors, then devided the errors by total number of words in the essay and times ten (# errors/ # words x 10). This scoring system was previously used by some researchers (e.g. Chandler, 2003; Truscott & Hsu, 2008) to measure overall accuracy of the text. Nonetheless, for easy identification and easy interpretation, a formula (10 - the generated scores = accuracy scores) was used so that the higher the scores the more accurate the students’ writing was interpreted.
2.6 Data analysis

SPSS software version 19 was used for descriptive and inferential statistics. To answer the research question, a two-way repeated measures ANOVA and independent samples t test were performed.

3. Results

The results of the study – the grammatical accuracy in students’ writing after receiving CCF and CoC – are presented below.

3.1 Grammatical accuracy in students’ writing after receiving CCF and CoC

The descriptive statistics for mean scores of grammatical accuracy in the two groups of students’ expository writing over the three testing periods (pretest, immediate posttest, and delayed posttest) is shown in Table 2.

To compare the relationship between the two feedback strategies (CCF and CoC) and the scores on grammatical accuracy at three times points (pretest, immediate posttest, and delayed posttest), a two-way repeated measures ANOVA was performed with grammatical accuracy scores as a dependent variable and with time (pretest, immediate posttest, delayed posttest) and feedback treatment as independent variables. Table 3 displays the results of the analysis.

<table>
<thead>
<tr>
<th>Source</th>
<th>Df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback treatment</td>
<td>1</td>
<td>.27</td>
<td>.60</td>
</tr>
<tr>
<td>Error</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>2</td>
<td>5.85</td>
<td>.01</td>
</tr>
<tr>
<td>Time x feedback treatment</td>
<td>2</td>
<td>3.88</td>
<td>.03</td>
</tr>
<tr>
<td>Error</td>
<td>46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 3, there was a significant Time x Treatment interaction, indicating that the groups performed differently from each other overtime, $F(2, 46) = 3.88, p < .05$. Independent samples t test was performed to examine if differences in the mean scores of grammatical accuracy between the two groups existed in the immediate posttest. The t test indicated that there were significant between-group differences with the CCF group ($M = 8.53, SD = .71$) and CoC group ($M = 7.79, SD = 1.17$), $t(23) = 1.91, p < .05, d = .77$. In the immediate posttest, the CCF group performed better than the CoC group ($p = .03$) with a large effect size ($d = .77$).

Another independent samples t test was performed to examine if differences in the mean scores of grammatical accuracy between the two groups also existed in the delayed posttest. It revealed non significant between-group differences, CCF group ($M = 7.80, SD = 1.04$) and CoC group ($M = 7.90, SD = 1.27$), $t(23) = - .20, p > .05$. Both the CCF group and the CoC group performed similarly in the delayed posttest ($p = .76$). Therefore, no further analysis was required for the delayed posttest. Figure 1 shows the groups’ performances across three testing periods.

Figure 1: Grammatical Accuracy Scores of CCF and CoC groups across Three Testing Periods.
4. Discussion

The research question deals with whether grammatical accuracy of EFL students’ writing was affected by CCF or CoC. The results show that the CCF group outperformed the CoC group in the immediate posttest. In the short term period, correcting all grammatical errors of students’ writing can help students improve the grammatical accuracy better than commenting on content. However, as shown in the delayed posttest, the accuracy gain cannot be retained by the CCF group. CCF was unhelpful in making students’ accuracy improved in the long-run. None of the two groups’ performance differed significantly. These suggest that CCF is more effective in improving grammatical accuracy of EFL students’ writing than CoC in the short term period. The results are in line with those of van Beuningen’s et al. (2008; 2012) and Ellis’ et al. (2008) study that direct CCF enables EFL students to gain greater accuracy in the short term period. They also concur with some researchers investigating the efficacy of CF using meta-analyses (Li, 2010; Lyster & Saito, 2010; Russell & Spada, 2006). Nevertheless, in the longer term, the results opposed their findings. Van Beuningen et al. (2008; 2012) reported that the direct CCF group outperformed both the indirect CCF and the two control groups in the delayed posttest. The opposing findings in the longer term might be attributed to the differences of students’ activities during the posttest sessions. In van Beuningen’s et al. (2008; 2012) study, the students kept producing a text for at least 15 lines in length on a new topic while in the present study the students had free activities that were absent from writing a text. Keeping writing a text might influence students’ retention of what had previously experienced in the treatment sessions. Thus, this is likely to facilitate students to remember the correct forms provided in the direct CCF group.

Commenting on content as in the CoC group did not trigger the students to gain overall accuracy of grammatical features. This is possibly because the students did not pay sufficient attention to other areas of grammatical errors committed in their writing since the students’ attention was paid to comments provided by the teacher. The students might also be unaware that they actually made errors other than what had been commented. Hence, CoC is less likely to assist students to improve grammatical accuracy. In addition, grammatical accuracy was unlikely to appear automatically in students’ writing without the corrective feedback. This finding contradicts nativists’ school of thought (e.g. Krashen, 1981; 1982; 1985; Krashen & Terrell, 1983; Schwartz, 1993), believing that grammatical competence appears naturally. In fact, it supports cognitive theory and noticing hypothesis and sociocultural theory – requiring the explicitness and the consciousness of the students for grammatical accuracy to improve. This provides evidence for some researchers’ (Ellis, 2005; Long, 2000; Long & Robinson, 1998; Norris & Ortega, 2000; Skehan & Foster, 2001) argument over the fully meaning-based approach to second language acquisition (SLA) that paying attention to linguistic forms is therefore essential for learners to be able to progress towards well-formedness in their second language.

Regarding the central issue raised in this study, the efficacy of CCF, the current study further confirms the efficacy of CCF in promoting the grammatical accuracy of EFL learners’ writing in the short term although it failed to provide evidence in the long term as other studies claim (van Beuningen et al., 2008; 2012; Ellis et al., 2008). It also shows that without explicit correction on all grammatical errors in the students’ writing, the grammatical accuracy is unlikely to improve. Some attention to linguistic forms is therefore crucially important in facilitating the acquisition of grammatical features.

5. Conclusions

The findings of this investigation have shown support for CCF in promoting the grammatical accuracy of EFL learners’ writing. Noticeable effect of CCF on learners’ accuracy was especially shown in the short term. In other words, learners obtained greater gains in grammatical accuracy after receiving correction on a range of grammatical errors from the teacher. In the longer term, however, the CCF cannot be effective in that the level of accuracy improvement the learners showed in the immediate test cannot be retained four weeks later. It indicates that the effect of feedback is temporarily grasped by EFL learners so that when the exposure to language forms is no longer available, the learners may not be able to recall what have been learned. In contrast, grammatical accuracy cannot appear naturally in learners’ writing as shown in the CoC group. Commenting on content does not trigger the students to focus on the accurate use of language use in the writing. Therefore, direct correction on all grammatical errors make the students aware of the language they use in writing. Explicit and conscious attention to form is necessary for language learners to improve the accuracy of language use. It is essential for learners to pay attention to linguistic forms in order to improve the accuracy of the grammatical features.
Although the present research provides clear evidence in favor of CCF, there are various limitations to this empirical work that need to be acknowledged. First, the context of this study was preintermediate to intermediate levels of EFL learners studying English at university. Thus, it is not self-evident that the findings of this study are readily comparable to other research contexts. Second, the number of participants was quite small so that the statistical significance to be affected was possible. Third, the scope of this research was the effects of corrective feedback on learners’ accuracy development in writing. The present research therefore only enabled further understanding of corrective feedback’s potential in yielding a learning effect, in terms of accuracy gains. Further studies are required to confirm the findings of the present study so that certain conclusion can be made on its basis.

References


Appendix 1. A sample of the essay writing prompt

Essay #1 Writing Prompt

Direction

Write an expository essay in English of approximately 200-250 words on the following topic:

Explain why parents are sometimes strict.

Your essay must be typed and saved in Microsoft Office Word. Use the standard, 12 pts Times New Roman font size, double-spaced format. To complete the essay, you are given 60 minutes. When you have finished writing, save it using your name and essay number (for example, AMINAH_ESSAY#1).

Your essay will be read and graded by your teacher. The accuracy of your writing will influence your score. However, you do not need to worry too much. The most important thing is that you write your essay.

Thank you

Appendix 2. A sample of CCF

Explain why being a Muslim is a good choice for you.

Why being a Muslim is a good choice for me? Because Muslim is the one of the good religion in the world. Nabi Muhammad SAW said that Muslim is called as well as possible religion. As a Muslim, we must capable of the command and keep away prohibition from Allah SWT. Muslim is the powerful religion. Although other religion is a good, but Muslim is the last religion. There are many advantage which we get if we choose Muslim as our religion.

The first advantage is free saver. Why? Because in the Muslim, we as Muslimah is obligated to close part of the body (forbiddance) which may not be visible while performing a ritual or out of this. It means that if we close this part of the body, we will || out of danger, for example, violent or misconduct. Besides that, we as Muslimah will || more polite, elegant, and look beautiful. The second advantage is the acquiring many friends who can be brother or sister with unswerving need of skin between Muslim or non-Muslim. Besides that the third advantage, we can discriminated || good thing and bad thing for us which actually can give some impact for our life.

So Muslim is the religion which unites all of the religion. They have many rules and instruction to orientation in our life. So that, our life can be aimed, sober, and we can be || good individual. Because Muslim can give us some advantage, so rarer a good Muslim.

(244 words).