วารสารอิเล็กทรอนิกส์
ทางการศึกษา

การผสมผสานการให้ข้อมูลย้อนกลับแบบทางตรงและทางอ้อมที่มีต่อความถูกต้องในการใช้ไวยากรณ์ใน งานเขียนชิ้นใหม่ของนักเรียนมัธยมศึกษาตอนปลายในประเทศไทย

The Combination of Direct and Indirect Written Corrective Feedback on Grammatical Accuracy in New Pieces of Writing of Upper Secondary School Students in Thailand

วรัญญา สมวงค์ *

Warunya Somwong

มณีรัตน์ เอกโยคยะ **

Maneerat Ekkayokkaya

บทคัดย่อ

      การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาประสิทธิภาพของการผสมผสานการให้ข้อมูลย้อนกลับแบบทางตรงและ ทางอ้อมที่มีผลต่อความถูกต้องในการใช้ไวยากรณ์ในงานเขียนชิ้นใหม่ของนักเรียนและเพื่อเปรียบเทียบความสามารถใน การใช้ไวยากรณ์ในงานเขียนชิ้นใหม่ของนักเรียนหลังจากได้รับข้อมูลย้อนกลับแบบผสมผสานทั้งแบบทางตรงและ ทางอ้อมในลำดับก่อน-หลังที่แตกต่างกัน กลุ่มตัวอย่างที่ใช้ในการศึกษาครั้งนี้ได้แก่ นักเรียนชั้นมัธยมศึกษาปีที่ 5 จำนวน 40 คน แบ่งออกเป็น 2 กลุ่มซึ่งได้รับข้อมูลย้อนกลับแบบผสมผสานทั้งแบบทางตรงและทางอ้อมในลำดับก่อน-หลังที่ต่างกัน เครื่องมือที่ใช้ในการเก็บข้อมูลได้แก่ แบบวัดข้อผิดพลาดในงานเขียน และการสัมภาษณ์รายบุคคล การ วิเคราะห์ข้อมูลใช้สถิติ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และ *t*-test ผลการศึกษาพบว่า การให้ข้อมูลย้อนกลับแบบ ผสมผสานส่งผลให้นักเรียนมีพัฒนาการความสามารถในการใช้ไวยากรณ์ ปรับปรุงและลดข้อผิดพลาดทางไวยากรณ์ใน งานเขียนชิ้นใหม่ของนักเรียนอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 และเมื่อวิเคราะห์ผลของการให้ข้อมูลย้อนกลับแบบ ผสมผสานในลำดับก่อน-หลังที่แตกต่างกัน พบว่า ลำดับการให้ข้อมูลย้อนกลับที่แตกต่างกัน ไม่ส่งผลที่แตกต่างกันใน การพัฒนาการความสามารถการใช้ไวยากรณ์ในงานเขียน ข้อค้นพบสุดท้ายพบว่านักเรียนมีความคิดเห็นเชิงบวกต่อการ ให้ข้อมูลย้อนกลับแบบทางตรงมากกว่าแบบทางอ้อม

คำสำคัญ: การผสมผสานการให้ข้อมูลย้อนกลับ, การให้ข้อมูลย้อนกลับแบบทางตรงและทางอ้อม

* นิสิตมหาบัณฑิตสาขาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

*Graduate Student of Teaching English as a Foreign Language Division, Department of Curriculum and Instruction, Faculty of Education, Chulalongkorn University

E-mail Address: iam_wry@hotmail.com

**อาจารย์ประจำสาขาวิชาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

**Lecturer of Teaching English as a Foreign Language Division, Department of Curriculum and Instruction, Faculty of Education, Chulalongkorn University

E-mail Address: maneerat.t@chula.ac.th

Abstract

   The purposes of this study were to investigate the transfer effects of the combination of written corrective feedback including direct and indirect corrective feedback on students' grammatical accuracy in new pieces of writing and to compare the difference between providing the combination of written corrective feedback in different orders. The participants in this study were forty eleventh grade students. The participants were divided into two groups and provided with the combination of written corrective feedback which consisted of direct and indirect corrective feedback in different orders in each experimental phase. The study was conducted in the second semester of the academic year 2016. The comparison table of errors, and students' interview were used as the research instruments. The data were analyzed by using means, standard deviation, and *t*-test. The findings revealed that the combination of written corrective feedback had transferring effects on students' grammatical accuracy in their subsequent writing at a .01 significance level. When the effects of providing the combination of written corrective feedback in different orders were analyzed, the finding showed no significant difference in the grammatical accuracy improvement. Lastly, students were found to have positive attitudes towards direct written corrective feedback more than indirect written corrective feedback.

Keywords: the combination of written corrective feedback, direct and indirect written corrective feedback

Introduction

   Written corrective feedback was found to be an issue of interest to teachers and most researchers since it has been a controversial topic about the effectiveness and ineffectiveness of written corrective feedback. As Truscott (2007) pointed that written corrective feedback is ineffective in helping second language learners to improve their writing. It brings out harm and affects to a short-term rather than long-term improvement and should therefore be abandoned from classrooms. However, many researchers provided more evidence to support the use of written corrective feedback. These studies have found that written corrective feedback plays the important role in helping second language writers improve and promote greater grammatical accuracy of their writing over time (e.g., Ellis, 2009; Sheen, 2010). There are many types of written corrective feedback, including direct corrective feedback, indirect corrective feedback, focused corrective feedback and unfocused corrective feedback (Ellis, 2009). Nevertheless, one of the most discussed issues on the effectiveness is between direct and indirect written corrective feedback. Previous studies have compared the effectiveness of direct and indirect written feedback and have found various findings. Some suggested that

direct feedback has shown to be more effective, especially for learners of limited second language proficiency (Van Beuningen et al., 2012). Some research found that indirect feedback provides opportunities for "guided-learning and problem solving" (Lalande, 1982, p. 143) and brings more benefits to students' long-term writing development (Ferris & Helt, 2000). Therefore, it seems that the points about the effects of written corrective feedback on the development of students' writing accuracy, especially for long-term development are still controversial and should therefore be further investigated. Furthermore, many research studies have been conducted to investigate the improvement in immediate revision of existing texts after students receive feedback (Truscott & Hsu, 2008) and the findings suggest that providing written corrective feedback is effective in a revised version of a text. However, the improvement shown on the revision text presents short-term improvement. There is still a question regarding whether this can help students reduce their errors in the long-term improvement and that development in writing may be transferred to their new pieces of writing in the future (Bitchener & Knoch, 2010).

As mentioned above, little is known from the previous studies regarding the effects of combining the two main types of written corrective feedback (i.e., direct and indirect) when giving feedback on students writing task and will there be any difference if the provision of such feedback is in different orders (direct followed by indirect written corrective feedback and vice versa). Purnawarman (2011) mentioned that providing direct and indirect written corrective feedback as the combination may help students better utilize the feedback information to correct errors and may heighten knowledge scaffolding to guide student in understanding the errors and how to correct them properly. Therefore, unlike those studies, the current study attempted to investigate the effects of the combination of direct and indirect written corrective feedback. It also aims to investigate the long term improvement whether students can transfer what they have learned from teacher written corrective feedback on their draft to reduce the same errors in their new pieces of writing. This study also examined students' improvement after receiving two different orders of the combination of written corrective feedback in order to see whether such different orders had any impact on students' grammatical accuracy in new pieces of writing.

Objectives

1. To investigate the transfer effects of the combination of direct and indirect written corrective feedback on the improvement of grammatical accuracy in students' new pieces of writing over time.

2. To investigate the difference between providing written corrective feedback in difference orders.

Methodology

Population and Participants

The population in this study was 240 female 11th grade students studied in Sainampheung School in the second semester, academic year 2016. Forty students who had the same English proficiency level were selected to be the participants of this study. They were assigned into two groups: Group A; DI (Direct feedback followed by Indirect feedback, *n = 20*), Group B; ID (Indirect feedback and followed by Direct feedback, *n = 20*)

Instruments

The comparison table of errors

The table was used to record the errors made by students on their first draft of every task and used to compare whether there was an increase or decrease in the number of errors among the six writing tasks.

The grammar focused in this study were adopted by Ferris et al. (2013). It was classified into three categories: (1) grammatical errors, including morphological error and syntactical errors which are verb tense, article, pronoun, preposition, subject-verb agreement, word form, and, singular/plural noun, (2) lexical errors, including vocabulary and idiomatic expressions and (3) semantic errors, including errors in spelling, punctuation and capitalization.

Interview Questions

Interview questions were designed to investigate the students' attitudes toward the combination of written corrective feedback.

To ensure the quality of the instruments, three experts were asked to evaluate and comment on the appropriateness of the research instruments.

Data Collection Procedure

The participants were required to write six writing tasks to investigate the transfer effects of the feedback process. Research procedures of the current study were composed of two experimental phases. The participants were divided into two experimental groups.

The different type of teacher written corrective feedback was given to the students' writing in both experimental groups on the first draft of each essay. Table 1 shows the schedule of data collection and written corrective feedback.

Table 1

The schedule of data collection and feedback process

Experimental Phase	Writing	Experimental group A	Experimental group B
Experimental phase 1	Writing 1	Received Direct Feedback	Received Indirect Feedback
	Writing 2	Received Direct Feedback	Received Indirect Feedback
	Writing 3	Received Direct Feedback	Received Indirect Feedback
Experimental phase 2	Writing 4	Received Indirect Feedback	Received Direct Feedback
	Writing 5	Received Indirect Feedback	Received Direct Feedback
	Writing 6	Received Indirect Feedback	Received Direct Feedback

At the end of each unit lesson, students were required to write their paragraph(s) and submit in the class hour. After receiving the first draft of students' work, the researcher provided the written corrective feedback following the research design and calculated the percentage of errors, then returned to the students in the following period. Students were required to revise their first draft immediately based on the given feedback and hand in their revised version to the researcher before starting the new unit and making the new writing in the next period. The students' errors made in every first draft were calculated as a percentage of errors and compared to see the improvement in grammatical accuracy.

Data Analysis

The data analysis involved both qualitative and quantitative data analysis. *Quantitative* data was analyzed from the comparison of the students' grammatical accuracy in every first draft which was calculated as a percentage of errors per 100 words (the total number of errors to the total number of words X 100) (Chandler, 2003; Truscott & Hsu, 2008). The percentage of errors of every first draft was used to report students' grammatical accuracy improvement and see the transfer effects of students after receiving written corrective feedback. The data were analyzed by using descriptive statistic and paired-sample t-test. Significance was set as $p < 0.01$. For *qualitative* data, in-depth interview was conducted from 10% of students who showed the most improvement. The conversational and open-ended questions were applied

to interview students on how they used different types of written corrective feedback to help improve their writing.

Results

In order to investigate the transfer effects of the combination of written corrective feedback on grammatical accuracy in students' new pieces of writing, the mean value of percentage of errors in every first draft of students' work was calculated and compared among six writing tasks to find out which group improved particularly in the grammatical accuracy in new pieces of writing. The descriptive statistic of the mean value of percentage of errors among six writing tasks of two experimental groups are shown in Table 2.

Table 2

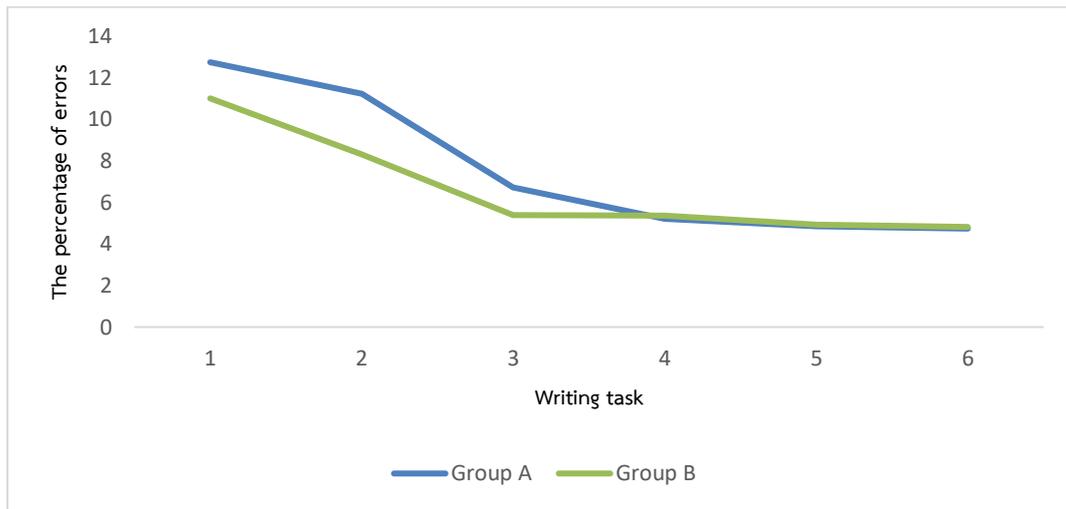*The mean value of percentage of errors among six writing tasks*

	Writing 1		Writing 2		Writing 3		Writing 4		Writing 5		Writing 6	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Group A	12.75	4.32	11.23	4.01	6.73	2.31	5.21	1.56	4.84	1.96	4.74	1.83
Group B	11.01	4.11	8.30	3.27	5.40	1.74	5.36	1.69	4.92	1.90	4.82	1.95

N = 20

The result showed that the overall percentage of errors in both experimental groups declined over the experiment comparing from writing 1 to writing 6. The percentage of errors in experimental group A decreased from 12.75 to 4.74 while the experimental group B reduced from 11.01 to 4.82. Figure 1 shows a total picture of students' mean value of the percentage of errors over six writing tasks in two experimental groups.

Figure 1

The mean value of percentage of errors from Writing 1 to Writing 6

The figure summarizes the difference of mean value of percentage of errors among two experimental groups. It can be seen that the overall mean value of percentage of errors of both experimental groups tended to reduce over time particularly in the writing 1 to writing 3, and continue slightly reduced from writing 4 to writing 6 respectively. From Table 1, it can be seen that the standard deviation of the percentage of errors in both experimental groups also decreased over time. The experimental group A declined from 4.32 to 1.83. While, experimental group B declined from 4.11 to 1.95. This can be analyzed that the variation in the students' grammatical accuracy gap in both groups was small. Overall, both experimental groups show a decrease in the percentage of errors and standard deviations over time, which can indicate that providing both types of written corrective feedback has positive effect which help students to reduce their number of errors on their subsequent writing.

In addition to investigate the transfer effects of written corrective feedback particularly on the grammar targets, the analysis of each error was categorized and calculated to see the percent difference in the first writing (writing 1) and the last writing (writing 6). The positive percent difference in each error type indicated that the students could reduce the amount of repetition in making the same mistake at the end of the experiment while the negative percent difference may imply that students made more errors in the end of the experiment.

7

Table 3

The mean value of percentage of errors in each type of error and the percent difference

	Writing 1		Writing 6		*Percent Difference	
	Group A	Group B	Group A	Group B	Group A	Group B
Verb Tense	1.36	0.86	0.93	0.91	38%	*-6%*
Determiner	0.56	0.52	0.07	0.29	154%	55%
Pronoun	0.89	0.63	0.22	0.17	120%	114%
Preposition	0.27	0.37	0.56	0.66	*-72%*	*-56%*
Subject Verb Agreement	2.55	2.09	0.42	0.39	144%	137%
Word Form	0.27	0.46	0.49	0.47	*-59%*	*-2%*
Singular Plural Noun	0.62	0.92	0.27	0.25	79%	116%
Fragment	2.13	1.84	0.61	0.49	111%	116%
Wrong Word Using	2.25	1.09	0.51	0.47	126%	80%
Spelling	0.47	0.40	0.39	0.34	19%	15%
Punctuation	0.83	0.63	0.07	0.05	167%	171%
Capitalization	0.47	0.75	0.02	0.15	180%	134%

*Percent Difference Formula (%D) = $\dfrac{n1-n2}{\frac{n1+n2}{2}}$ x 100

According to Table 3, the mean value of percentage of errors in each error type in the writing 1 and writing 6, the error mostly occurred in subject and verb agreement in both groups (*M* = 2.55 and 2.09 in group A and B respectively) followed by wrong word used and fragment errors (*M* = 2.25 and 2.13 in group A and 1.09 and 1.84 in group B). After receiving the combination of two types of written corrective feedback, at the end of the experiment, the students could reduce most of their errors. Percent difference was calculated to see the repetition of each error and compare the improvement of each group. It was found that in the experimental group A, the capitalization errors were improved by 180% on average and followed by spelling (167%), determiner error (154%) and wrong word used (126%). While the experimental group B could reduce error on punctuation the most (171%) followed by subject and verb agreement (137%), capitalization (134%), singular-plural and fragment (116%). However, after the experiment, the results also showed that both experimental groups got worst in preposition errors and word form errors in the sixth writing and the experimental group B also got worse in verb tense error in the sixth writing.

To investigate the differences between providing the combination of written corrective feedback in different order, the mean value of the percentage of errors in writing 1 and writing 6 were compared within group to examine whether there was any significant improvement of grammatical accuracy in writing before the experiment (writing 1) and in the end of the experiment, after the students received the combination of written corrective feedback (direct and indirect written corrective feedback). Table 4 shows the comparison of the mean value of percentage before the experiment (writing 1) and in the end of the experiment (writing 6).

Table 4

The comparison of the mean value of percentage of errors

	Percentage of errors Writing 1		Percentage of errors Writing 6		*t*-test	Sig.
	M	SD	M	SD		
Group A (Direct + Indirect)	12.75	4.32	4.74	1.83	9.953*	.000
Group B (Indirect + Direct)	11.01	4.11	4.82	1.95	6.583*	.000

*$p < .01$

As shown in Table 4, mean value of percentage of errors in writing 1 of group A and B were higher than the mean value of percentage of errors in writing 6 of group A and B. To elaborate, the mean value of percentage of errors in writing 1 of both groups (12.75 and 11.01) differed significantly from the mean value of percentage of errors in writing 6 of both groups (4.72 and 4.82) at significant level of $p < 0.01$ level. The result showed that there was a significant improvement at the .000 level in both groups and it can be indicated that both experimental groups could reduce the amount of repetition of the same errors after receiving the combination of written corrective feedback in different order at the end of the experiment.

Furthermore, to examine which order of written corrective feedback can most enhance student's grammatical accuracy, the accuracy gain score in each experimental phase was calculated and compared to see significant difference between groups.

Table 5

The comparison of the accuracy gain scores between group in two experimental phases

	Accuracy gain scores Writing 1-4		Accuracy gain scores Writing 4-6			
	M	*SD*	*M*	*SD*	*t*-test	Sig.
Group A (Direct followed by Indirect)	7.54	3.50	0.47	1.61	1.172	-0.146
Group B (Indirect followed by Direct)	5.70	4.05	0.54	1.18	0.103	0.885

After both experimental groups were provided with the combination of written corrective feedback but in different order, the result showed that the mean value of the accuracy gain scores in the first experimental phase in both groups were higher than the mean value of the accuracy gain scores in the second experimental phase in both groups. In the experimental group A, the gain scores in the first experimental phase were 7.54 which was higher than in the experimental group B (*M* = 5.60). However, the paired sample t-test analysis was conducted to see the differences between both gain scores showed that both experimental phases did not vary in the accuracy gained in the first experimental phase (*t* = 1.172, *p* = 0.103). For the second experimental phase, the mean value of accuracy gain scores in the experimental group B (*M* = 0.54) was slightly higher than the experimental group A (*M* = 0.47) while paired sample t-test analysis showed the difference in accuracy gain scores for these two groups was not significant (*t* = 0.146, *p* = 0.885). To elaborate, the analysis of accuracy gain scores in the two experimental phases between groups showed that the order of written corrective feedback provided on students' writing did not have any significant effect at the end of both experimental phases.

Students' attitudes

The in-depth interview conducted with four students who successfully reduced most errors at the end of the experiment showed that they preferred direct written corrective feedback than indirect corrective feedback. They found that indirect written corrective feedback was time consuming and required more of knowledge to notice their errors. However, they believed that it was useful. Some of the participants' comments are as follows.

"I like direct written corrective feedback more because some grammar rules are very difficult. Direct feedback can help me understand the type of errors I made easily. It is better for me that teacher corrected my writing and let me learn from my errors.

"I could remember more grammar rules when I received indirect written corrective feedback because I had to study the grammar rules by myself first so that I could notice the mistake I made."

Discussions

The first research question investigated whether the combination of written corrective feedback had any transfer effects on the grammatical accuracy improvement in students' new pieces of writing. The results showed that both experimental groups revealed improved accuracy scores immediately after they received written corrective feedback on their writing. The percentage of errors in the six writing tasks decreased consistently in each writing in both experimental groups, the trend line presents a gradual decrease of overall percentage of errors over time. This finding clearly indicated that students can successfully reduce the errors focused in the study by transferring the grammatical rules they learned from teacher written corrective feedback in the initial writing into their subsequent writings. These results corroborate previous studies by Bitchener and Knoch (2010), Chandler (2003), Ellis et al. (2008), Sheen (2010), Ferris and Roberts (2001), Lalande (1982), and Rassaei and Moinzadeh (2011) in that teachers should provide written corrective feedback and require students to make revision to increase grammatical accuracy in students writing before producing the new writing. The improvement found in this study could be because after students received written corrective feedback on their writing, they were asked to pay attention to their grammar errors, to search for the correct usage of grammar and revise them immediately. This revision process may help them successfully correct their grammar errors in their revision and transfer the knowledge to write correctly in their subsequent writings. This supports the point proposed by Schmidt (1990), the Noticing Hypothesis, the extent of what second language students pay attention to may have an effect on developing second language system. When students are provided with written corrective feedback, they then have an opportunity to notice the correction (direct feedback) or the error code of an error occurred (indirect) before making their revision which can lead to the opportunities to notice or chances for pushed output (Swain, 1985). Leow (1997) mentioned that noticing to the errors, producing pushed output are the important factors that lead to the transfer of uptake to long-term memory. This implies that providing teacher written corrective feedback on student writing facilitates transfer effects on student writing and may provide a long-term effect in terms of grammatical accuracy when they write a new piece of writing.

Interestingly, the findings showed the considerable tendency in reduction of the percentage of errors in the first experimental phase but gradually decrease in the second experimental phase in both experimental groups. The possible explanation why students could make more progress when received written corrective feedback in the early stage of the experiment is probably similar to the point that Evans et al. (2010) suggested that students need the constant feedback for the period of time so that they could develop "habits of self-analysis and self-correction" more than from occasional feedback. In addition, this experiment was conducted for almost two months. It required six writing tasks from students and also included students' production of new text after receiving feedback. This supports Ferris (2010)'s suggestion in that students' accuracy might improve, if at least four or more writing tasks were designed for revision and new writing.

For the differences between providing the combination of written corrective feedback in different orders. The result revealed no significant difference between providing the different order of written corrective feedback. This indicated that the order of providing written corrective feedback did not affect the improvement of students' grammatical accuracy, both orders of written corrective feedback helped students successfully reduce the errors.

A possible explanation why the combination of written corrective feedback strategies had transfer effects on the improvement of grammatical accuracy in students' new pieces of writing was because providing both direct and indirect as the combination are helpful in scaffolding information and can guide students to understand the errors they made and how to correct them appropriately (Purnawarman, 2011). Moreover, the order of written corrective feedback provided by the teacher did not affect the students' improvement of grammatical accuracy. Providing direct written corrective feedback followed by indirect written corrective feedback may first help students to immediately notice the correct form provided by teacher (Chandler, 2003). This could help students notice their errors more easily when they were later provided with indirect written corrective feedback. While, for providing indirect written corrective feedback followed by direct written corrective feedback, students had to notice the corrected form and corrected usage before attempting to revise the text by using their knowledge of grammar. This may help foster long-term acquisition of the target forms and probably help reduce the repetition of making the same errors in their subsequent writings.

In conclusion, the findings indicated that the combination of written corrective feedback help students improve their grammatical accuracy in the new writing effectively. The order of providing the two types of written corrective feedback provided by the teacher was

not really matter. Both orders were effective. However, the teacher should provide each type of feedback one at a time and should be constantly enough for students to scaffold the knowledge from the feedback information before changing to another type of feedback.

Recommendations for Future Research Studies

1. Future research should employ more participants with the group of at least 30. It will be more statistically meaningful and helpful.

2. Future research should be conducted with the delayed writing by having some gap time between the last writing and the delayed writing to demonstrate the delayed learning effects from the combination of written corrective feedback.

References

Bitchener, J., & Knoch, U. (2010). Raising the linguistic accuracy level of advanced L2 writers with written corrective feedback. *Journal of second language Writing, 19*(4), 207-217.

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of second language Writing, 12*(3), 267-296.

Ellis, R. (2009). Corrective feedback and teacher development. *L2 Journal, 1*(1), 97-107

Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System, 36*(3), 353-371.

Evans, N. W., Hartshorn, K. J., McCollum, R. M., & Wolfersberger, M. (2010). Contextualizing corrective feedback in second language writing pedagogy. *Language Teaching Research, 14*(4), 445-463.

Ferris, D., & Helt, M. (2000). *Was Truscott right?.* Paper presented at the New evidence on the effects of error correction in L2 writing classes. The American Association of Applied Linguistics Conference, Vancouver, BC, Canada.

Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be?. *Journal of second language Writing, 10*(3), 161-184.

Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA. *Studies in Second Language Acquisition, 32*(02), 181-201.

Ferris, D. R., Liu, H., Sinha, A., & Senna, M. (2013). Written corrective feedback for individual L2 writers. *Journal of Second Language Writing, 22*(3), 307-329.

Lalande, J. F. (1982). Reducing composition errors: An experiment. *The Modern Language Journal, 66*(2), 140-149.

Leow, R. P. (1997). Attention, awareness, and foreign language behavior. *Language learning, 47*(3), 467-505.

Purnawarman, P. (2011). *Impacts of different types of teacher corrective feedback in reducing grammatical errors on ESL/EFL students' writing.* Virginia Polytechnic Institute and State University.

Rassaei, E., & Moinzadeh, A. (2011). Investigating the effects of three types of corrective feedback on the acquisition of English Wh-question forms by Iranian EFL learners. *English Language Teaching, 4*(2), 97.

Schmidt, R. W. (1990). The role of consciousness in second language learning1. *Applied Linguistics, 11*(2), 129-158.

Sheen, Y. (2010). Differential effects of oral and written corrective feedback in the ESL classroom. *Studies in Second Language Acquisition, 32*(02), 203-234.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. *Input in second language acquisition, 15*, 165-179.

Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing, 16*(4), 255-272.

Truscott, J., & Hsu, A. Y. P. (2008). Error correction, revision, and learning. *Journal of Second Language Writing, 17*(4), 292-305.

Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language learning, 62*(1), 1-41.