

ผลการนำข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมลมาใช้กับนักศึกษาที่มีระดับสมรรถนะภาษาอังกฤษ  
ระดับอ่อน ในชั้นเรียนการเขียนภาษาอังกฤษเป็นภาษาต่างประเทศ

## The Effects of Using Peer Feedback through Email with Students of Limited English Proficiency in an EFL Writing Class

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### บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาผลการนำข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมลมาใช้กับนักศึกษาที่มีระดับสมรรถนะภาษาอังกฤษระดับอ่อน ในชั้นเรียนการเขียนภาษาอังกฤษเป็นภาษาต่างประเทศ และศึกษาเจตคติของนักศึกษาที่มีต่อการใช้ข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมล รูปแบบการทดลองเป็นงานวิจัยเชิงเดี่ยวซึ่งมีการเปรียบเทียบคะแนนผลสัมฤทธิ์ทางการเขียนก่อนและหลังการทดลอง โดยวิธีการให้ข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมลเป็นตัวแปรต้น และผลสัมฤทธิ์ทางการเขียนเป็นตัวแปรตาม ประชากรคือนักศึกษาคณะครุศาสตร์ สถาบันเทคโนโลยีพระจอมเกล้าพระนครเหนือ ที่ลงทะเบียนเรียนวิชา การเขียน 1 เป็นวิชาเลือก ภาคการศึกษา 2/2551 จำนวน 40 คน โดยกลุ่มตัวอย่างในการศึกษาครั้งนี้ ได้แก่ นักศึกษาคณะครุศาสตร์ที่มีระดับสมรรถนะภาษาอังกฤษระดับอ่อนจำนวน 24 คน ซึ่งได้จากการสุ่มตัวอย่างอย่างง่ายจากผลการเรียนวิชาภาษาอังกฤษ 1 และภาษาอังกฤษ 2 เพื่อให้มั่นใจว่านักศึกษาสามารถให้ข้อมูลป้อนกลับต่องานเขียนของเพื่อนได้อย่างมีประสิทธิภาพ ดังนั้นนักศึกษาจึงได้รับการฝึกวิธีการให้ข้อมูลป้อนกลับเป็นเวลา 6 ชั่วโมงในช่วงต้นของการเรียนการสอน โดยการวิจัยครั้งนี้ เครื่องมือที่ใช้ในการเก็บข้อมูลเชิงปริมาณ ได้แก่ ข้อสอบวัดผลสัมฤทธิ์ทางการเขียน และแบบสอบถามแบบปลายปิด ส่วนการเก็บข้อมูลเชิงคุณภาพได้ใช้แบบสอบถามแบบปลายเปิด และวิธีการสัมภาษณ์ สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ สถิติแบบพรรณนา และ t-test ผลจากการวิจัยพบว่า คะแนนผลสัมฤทธิ์ทางการเขียนภาษาอังกฤษของนักศึกษาเฉลี่ยก่อนการทดลองและหลังการทดลองมีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 หลังจากใช้ข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมล และนักศึกษามีเจตคติที่ดีต่อการนำข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมลมาใช้ในการเรียนวิชาการเขียนภาษาอังกฤษ

**คำสำคัญ:** การให้ข้อมูลป้อนกลับจากเพื่อนผ่านทางอีเมล การสอนการเขียน ผลสัมฤทธิ์ทางการเขียน

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This research article was presented at the 2009 UPALS ICI – An International Conference on Languages in Penang, Malaysia, 27-28 May 2009.

## Abstract

This research study aims to investigate peer feedback through email with students of limited English proficiency in an EFL writing class. It also aims to explore their attitudes towards the use of peer feedback through email. The study was conducted using a single group, peer feedback through email as well as a pre-test and post-test. The population of this study was 40 undergraduate education students who enrolled in Writing I as an elective course at King Mongkut's University of Technology North Bangkok (KMUTNB). 24 students of limited proficiency who received low grades of English I and English II were randomly chosen as subjects. Before the research study, the subjects were trained on how to provide effective peer feedback for 6 hours. The research instruments for quantitative data collection were a writing achievement test and close-ended questionnaire. The qualitative data were gathered from an open-ended questionnaire and interviews. Descriptive statistics and a t-test were used to analyze the data. The results revealed that the students' writing achievement scores on the pre-and post-tests were significantly different at the 0.05 level. Moreover, the students expressed highly positive attitudes towards the use of peer feedback through email in the English writing course.

**Keywords:** peer feedback through email, writing instruction, writing achievement

## Introduction

Writing is not only the most sophisticated skill for students to acquire, but it is a language skill that most EFL students have problems with (Chinnawongs, 2001). This is due to several factors, such as the complexity of the skill itself, a lack of constant practice and inadequate or inappropriate feedback, as well as students' English language proficiency (Thongrin, 2002).

At King Mongkut's University of Technology North Bangkok (KMUTNB), significant communicative problems with the students' English writing, such as inappropriate language use, incomprehensible passages, and disorganized text, were consistently found especially technical education students who had low English proficiency based on their English entrance score. These problems may have been a result of insufficient feedback, the teacher's heavy workload, large class sizes, and students' low English language proficiency and low motivation and negative attitude toward English.

As a result, in order to solve the problems mentioned above successfully, peer feedback was considered as a worthy activity that possibly could help the teachers and students overcome these constraints in the teaching and learning context at the workplace; peer feedback can also promote learners' autonomy, which is one of the main principles of Thailand's National Education Act (The Bureau of National Education Committees, 1999).

Peer feedback is a writing activity in which the writers work in groups collaboratively and provide

information on each other's writing, either in a written, oral, or computer-mediated mode (Liu & Hansen, 2002). Through feedback, the writer learns where he or she has misled or confused the readers by not supplying sufficient information or with illogical organization, lack of the development of ideas, or inappropriate words choice or tense. This supports Vygotsky's zone of proximal development, where skills are extended through the guidance and response of others. It is believed that feedback from more advanced peers can provide scaffolding and can reduce problems associated with peer feedback, such as the lack of credibility of peer evaluation and reluctance to use feedback from peers.

Generally, most previous research in the EFL context studied peer feedback with heterogeneous groups of students. Berg (1999) concluded that peer feedback was beneficial to all students, even low-proficiency students under all circumstances. This idea is similar to ideas found in Nelson and Murphy's study (1993), and the study of Thongrin (2000), as they found that low English proficiency students were also capable of effectively participating in and benefiting from peer feedback. However, many scholars have also suggested that peer feedback should be used with caution when matching group counterparts because weak students might have learned from average and competent groups. On the other hand, it might not be useful to good or average students to be paired with weak students. As such, weak students might receive greater benefits than the other two groups. It can be implied from the previous studies then that the peer feedback activity will be successfully applied when used with mixed ability students or students with sufficient English ability. However, it would be unfair to conclude that peer feedback cannot be used with homogeneous low-proficiency students since no research has been conducted with them. As a result, this study investigates whether homogeneous low-proficiency students can gain benefits from peer feedback and become more independent learners who do not rely heavily on teacher feedback.

Although the efficacy of using peer feedback in the writing class is still a controversial issue among researchers, especially in the EFL context where students have limited English ability and prefer feedback from teachers, the attempts to develop peer feedback through electronic modes, both synchronous and asynchronous, have emerged.

Computer Mediated Communication (CMC) covers a wide range of technologies of writing. These include various forms of synchronous or real-time communication, such as chat programs and asynchronous communications, such as email or web-based bulletin boards. In this study, email peer feedback was used due to the fact that the students were the most familiar with this communication and they already had a personal email account. Furthermore, many scholars have suggested that the asynchronous mode may be better for commenting tasks since it encourages more reflective comments and deeper processing of peer text, as well as provides students with more time and space to comment versus a synchronous mode of CMC (Hewett, 2000;

Liu & Sadler, 2003; Bloch & Brutt-Griffler, 2001; Honeycutt, 2001; Thompson, 1993). The common features and differences between a paper-pencil peer feedback and email peer feedback are summarized in Table 1.

The advantages of using email peer feedback have been suggested by many previous studies. For example, it was found that students using email wrote greater amounts of text (Wang, 1993), made text-specific comments, produced better papers, and improved their academic writing abilities (Mabrito, 1991 and 1992; Braine, 1997); it has also been found that using email peer feedback increases student-student interaction and discussion (Crank, 2002; Hartman et al, 1991).

Due to the number of benefits of integrating writing with innovation, it is promising that using email peer feedback in the EFL writing class may help students improve their writing ability and enhance learner autonomy in some degree. Since no previous research has investigated the efficacy of the use of peer feedback with homogeneous low proficiency students, it is interesting to study whether peer feedback can be used with this group of learners and to what extent it should be applied.

**Table 1:** Common Features and Differences in Paper-Pencil Peer Feedback and E-mail Peer Feedback (Wanchid, 2007)

<b>Criteria</b>	<b>Paper-pencil peer feedback</b>	<b>E-mail peer feedback</b>
1. Type of communication	1. One-way written communication	1. Two way written communication
2. In-class activity	2. The writers write an essay on paper in class and send their work to other friends and the teacher at the end of the class.	2. The writers write an essay by using computers in class and send it to friends and the teacher at the end of the class.
3. Out-of-class time activity	3.1. The readers have to sign their names on the paper and hand in their feedback to the essay's owner by themselves. 3.2 The writers read the feedback but can not ask for clarifications or explanations because no face-to-face session is provided in the class. 3.3 The students have to revise their first draft and produce a second draft for the teacher by themselves in class.	3.1 The readers have to send their feedback to their friends and the teacher via e-mail before the due date. 3.2 The writers read the feedback and ask readers for clarifications and explanations. 3.3 The students have to revise their first draft and produce a second draft for the teacher via e-mail.

**Table 1:** Common Features and Differences in Paper-Pencil Peer Feedback and E-mail Peer Feedback (Wanchid, 2007) (*Continued*)

<b>Criteria</b>	<b>Paper-pencil peer feedback</b>	<b>E-mail peer feedback</b>
4. Other facilities	4.1 Not available  4.2 Not available  4.3 The students stored their work on paper binders.	4.1 The writing process is greatly facilitated by computer functions that allow students to compose, revise, and edit their writing such as cutting and pasting.  4.2 Possibilities to create unlimited messages  4.3 No central repository of messages for discussion lists, but the readers can reply to message.
5. Place and time	5.1 Place and time dependent  5.2 Not available	5.1 Place and time independent  5.2 Unlimited participation online
6. Delivery effort	6. More delivery effort	6. Less delivery effort
7. Immediate response	7. No pressure to immediately respond	7. No pressure to immediately respond
8. Nonverbal components	8. No nonverbal components	8. No nonverbal components
9. Level of cultural barriers	9. Greater cultural barriers	9. Greater cultural barriers but fewer than with the paper-pencil group
10. Mode of communication	10. Traditional paper-pencil written mode	10. Asynchronous (delayed response time frame) computer-mediated communication
11. Level of interaction	11. It depends on the students	11. Increased interaction and negotiation of meaning
12. Communication environment	12. More threatening environment	12. Less threatening, more supportive, anxiety free, and motivating environment
13. Face-to-face cues	13. It depends on the students	13. Lack of face to face cues

### Research Questions

1. Will the writing achievement scores of the low English proficiency students be significantly higher than those of the pre-test after email peer feedback has been used in the writing process?
2. What are the low English proficiency students' attitudes toward the use of email peer feedback?

### Research Objectives

1. To investigate the effect of email peer feedback on the low English proficiency students' writing achievement.
2. To survey the low English proficiency students' attitudes toward the use of email peer feedback.

### Methodology

#### Subjects

The subjects were 24 Thai second-year undergraduate technical education students enrolled in Writing I as an elective course at KMUTNB during the second semester of academic year 2008. The students' age range was 20-22. They were claimed to have low general English proficiency since they passed English I and II with grades ranging from C to D+. In the study, a random sampling technique was used for subject selection and assignment. It was assumed that the subjects had sufficient knowledge and skills on computer literacy especially using the Internet browser and email as they had taken the computer application course in their first year.

#### Instruments and Data Collection

A writing achievement test, a questionnaire, and a semi-structured interview were used in the study. The test was adapted from Wanchid (2007), and it aimed to measure the students' writing ability before and after taking the course. It was composed of 3 main parts: error identification, completion, and paragraph writing. The test was validated by 3 experts, and the Index of Item Objective Congruence (IOC) was 1. The Classical Test Item Analysis and Grading (Sukamolson, 1995) was used to analyze the test items. The result of the item analysis showed that on average, the difficulty index was 0.66, and the discrimination index was 0.54. Moreover, the reliability coefficient was 0.76.

The students had to complete all of the test tasks within 3 hours. For the paragraph writing section, the assessment criteria for writing were based on Jacobs et al.'s (1981) scoring profile (cited in Hughes, 2003), which is divided into five major writing components: content, organization, vocabulary, language use, and mechanics, with each one having four rating levels of excellent to very good, good to average, fair to poor, and very poor. The analytic scoring was applied as the rubric of evaluation because of its outstanding usefulness,

high validity, and washback (Hyland, 2003).

The questionnaire was designed to elicit the students' responses regarding their attitudes toward peer feedback by using five point Likert scales ranging from strongly disagree (1) to strongly agree (5). Both of the instruments were distributed to the students at the end of the course. A t-test and descriptive statistics were used to analyze the data. Semi-structured interviews were applied to gain more in-depth information. It was noted that the instruments were validated by 3 experts, and the Index of Item Objective Congruence (IOC) was 1. The reliability of the questionnaire calculated by Cronbach Coefficient Alpha, SPSS version 11.5 was 0.79.

### **Procedures of Peer Feedback Method**

At the beginning of the course, the students were trained in how to provide useful comments on their friends' paper for 6 hours in order to ensure the quality of the peer feedback. Moreover, in order to ensure their ability to distinguish between the helpful and not-so-helpful comments from their peers, group consultations were arranged out of class time at the beginning of the experiment, at least 2 times for each subgroup or 30 minutes per time.

The students had to write four, in-class essays of different rhetorical focuses. They had to write the essay in the classroom and then submit it to the teacher at the end of that class time. The essays were emailed to their friends who were in the same subgroup of four. Therefore, each student was assigned to give feedback on three papers of their subgroup members by using the peer feedback guideline. They had one week to do the task and they had to email their feedback to their friends before the next class. After the students received the feedback from their peers, they had a weekend to revise their first draft outside the classroom before submitting the second draft to the teacher with the attachment with the peer feedback within the due date. Next, the teacher provided feedback on the students' second drafts using the same guideline. After that they had to revise and then submit the final work to the teacher by the due date.

### **Results**

1. According to the first research objective, which was to investigate the effect of email per feedback on the students' writing achievement, the results from the t-test in Table 2 illustrated that the students' post-test score was significantly higher than that of the pre-test after the email peer feedback had been used in the writing process (  $t = 10.59, p < 0.05$  ).

**Table 2:** Results of the pre-and post-test scores of the students from the t-test analysis

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	POST-PRE	30.79	14.24	2.91	24.78	36.81	10.59	23	.000

2. In order to answer research question two, investigating the students' attitudes towards the use of email peer feedback, 15 questionnaire items were analyzed, as presented in Table 3. A five-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5), was used. To make the data more clear, the students' attitudes were interpreted by using the evaluation criteria described below:

0.00 - 1.50 means that their positive attitude toward peer feedback was very low.

1.51 - 2.50 means that their positive attitude toward peer feedback was low.

2.51 - 3.50 means that their positive attitude toward peer feedback was moderate.

3.51 - 4.50 means that their positive attitude toward peer feedback was high.

4.51 - 5.00 means that their positive attitude toward peer feedback was very high.

**Table 3:** Students' attitudes toward the use of email peer feedback

Statement	Mean	C.V. (%)	Meaning
1. I think email peer feedback is useful when applied in the writing course.	4.42	11.31	High
2. I would like to learn writing by using email peer feedback.	3.79	18.99	High
3. Email peer feedback helps me recognize errors better.	4.33	14.78	High
4. Using the email peer feedback method encourages me to acquire English knowledge in order to give high-quality feedback.	4.38	16.44	High
5. I think peer response from email is helpful.	4.25	26.12	High
6. I didn't feel embarrassed sharing my thoughts/writing with my group via email.	4.25	24.24	High
7. I am not frightened by the group interactions due to my weak language skills.	3.71	29.38	High
8. My writing improved after getting email peer feedback.	3.71	20.49	High

**Table 3:** Students' attitudes toward the use of email peer feedback (*Continued*)

Statement	Mean	C.V. (%)	Meaning
9. I find that comments from peers via email are usually vague or not clear.	3.08	25.32	Moderate
10. I am not sure whether or not I can rely on peer comments via email because my friends might have been afraid to point out weak points in my papers directly.	3.25	22.78	Moderate
11. Some criticism from email peer feedback is too harsh.	2.92	26.71	Moderate
12. I find that reading friends' work via email is useful for me in improving my own writing.	4.42	13.22	High
13. I am not afraid to comment on papers or point out mistakes via email for fear that my friends might be offended.	3.54	32.20	High
14. I can give feedback via email to my friends effectively.	3.71	21.02	High
15. I enjoy giving comments on my friends' papers via email.	3.58	24.58	High

The results illustrated that the students seemed to have highly positive attitudes toward the use of email peer feedback, as they highly agreed with most of the items. For example, the use of email peer feedback was considered to be useful when applied in the writing course (item 1,  $M = 4.42$ ,  $C.V. = 11.33$ ), and reading friends' work via email was considered to be useful in improving the students' writing (item 12,  $M = 4.42$ ,  $C.V. = 13.22$ ), as it encouraged the students to acquire English knowledge in order to give high-quality feedback (item 4,  $M = 4.38$ ,  $C.V. = 16.44$ ) and helped the students recognize errors better (item 3,  $M = 4.33$ ,  $C.V. = 14.78$ ). However, they moderately agreed with item 9 (I find that comments from peers via email are usually vague or not clear), item 10 (I am not sure whether or not I can rely on peer comments via email because my friends might have been afraid to point out weak points in my papers directly), and 11 (Some criticism from email peer feedback is too harsh).

### Conclusion

In conclusion, it could be said that email peer feedback can be used with homogeneous low-proficiency students, as it can enhance writing performance, encourage students to be independent learners that take charge of their own learning, increase critical skills in feedback evaluation, and make the students highly engaged in the course. However, the effectiveness of peer feedback training should be paid even more attention to when applying the activity with homogenous students with low competency. Teacher feedback on the grammar correction on the students' second draft is still considered important because of the students' insufficient grammar knowledge.

## Discussion

1. Why does the email peer feedback have an effect on the low English proficiency students' writing achievement?

This higher score may be owing to three main reasons. First are the benefits of the peer feedback. The students gained advantages of peer feedback as considerably mentioned in the reviewed literature in spite of using with low homogeneous group of students. For example, peer feedback encourages active learner participation, an authentic communicative context, and audience awareness, offers a nonjudgmental environment, reduces writing apprehension (Hyland, 2003), helps to develop students' critical and analytical skills, promotes learner independence (Celce-Murcia, 2001, Keh, 1996), and helps students to learn from friends' strengths and weaknesses (Tsui and Ng, 2000). Moreover, the results from the interview also revealed that the students considered peer feedback useful both as a reader and as a writer. Most of them thought that the comments they received from peers could help them improve their writing, especially regarding organization and content. Although they had to spend a lot of time on rechecking their peers' grammar correction since their friends might not have had sufficient grammar knowledge, the task was quite challenging for them. It motivated them to review what they had studied in the class and to acquire new knowledge from other grammar books. Unlike heterogeneous peer groups, lower-proficiency students are likely to totally agree with and use comments from higher-proficiency students without hesitation (Torwong, 2003).

Additionally, using email as a medium of communication in the peer feedback activity yielded a number of benefits. The characteristics of the electronic mode can increase student-student interaction without time or place restrictions and promote negotiation of meaning since the students can raise questions for more explanations and clarifications on the points that they might not have understood. The results from the interviews illustrated that all of the students expressed their appreciation in applying email peer feedback in the writing process because their writing was facilitated by computer functions that allowed them to compose, peer edit, and easily revise their writing. Moreover, the students stated that it was more convenient for them to provide and receive feedback from their friends in the same subgroup.

The results conformed to Wanchid's (2007) study, which found that the students in the email peer feedback group had higher writing achievement scores than those of the students that were in the paper-pencil peer feedback group. It is clear that such benefits could not be applicable in the traditional classroom. The findings also support the results of Bump's (1990) study, which pointed out that the students that received electronic peer feedback produced a greater volume of written output, unlimited space for comments, more revision, and more improvement in fluency than the students that participated in the traditional oral or written peer feedback. As a result, such striking characteristic which the electronic mode provides leads to more learning

engagement, more exposure to the subject out of class time, and eventually helps the students to improve their writing skills.

Intensive peer feedback training may be another possible reason to explain why the students gained significantly different pre- and post-test writing achievement scores. According to Hyland (2003), peer response practices are most effective if they are modeled, taught, and controlled. Previous research studies have conceded that the success of peer feedback training tends to lead to positive effects on students' cumulative writing development, their ability to provide significantly more and significantly better comments on each other's writing, and on their level of confidence (Mcgroarty and Zhu, 1997; Mittan, 1989; Stanley, 1992; Nelson and Murphy, 1993, Berg, 1999; Hui-TzuMin, 2005); and when peers are trained, the feedback of lower-level writers is not less effective (Berg, 1999).

What can be concluded from the above discussion is that peer feedback training is necessary for students and even more essential when used the students that exhibit low English proficiency because it might be one of the most important factors that leads to the success or failure of writing instruction and the students' writing development.

2. Why do low English proficiency students have highly positive attitudes toward the use of email peer feedback?

This may be due to the fact that the students in the study were trained in how to generate more specific comments and provide suggestions on their peers' work at the beginning of the course in a cooperative learning environment. The role of peer feedback in the writing process, and the benefits of having peers respond to student papers as opposed to teacher feedback, were emphasized and discussed. The students were also encouraged to believe that they could trust their peer group's assistance. As a result, it could be said that such training possibly increases the students' self-confidence in their ability to provide useful feedback to their friends and promotes positive attitudes toward the use of the peer feedback strategy in their writing process because they were provided with opportunity to learn how to effectively respond to their peers' writing, and the benefits that they would gain from the peer feedback process were clearly emphasized during the training.

The findings corroborate the studies of Wanchid (2007), Chinnawongs (2001), Padgate (2001), and Thongrin (2000), who revealed that Thai students seemed to have positive attitudes toward the use of the peer feedback strategy, as they considered peer comments useful to their writing improvement. Although Chinnawong's (2001) study revealed that peer comment was the lowest ranked as a useful corrective strategy comparing to teacher feedback and self-correction, the mean of peer evaluation was considered very high. Such findings also suggest that the peer feedback strategy has a role to play in the EFL writing class.

However, if we focus on details, it was found that the students had moderate attitudes toward

items 9, 10, and 11. This may be caused by the influence of Thai culture. Many researchers have found that the students' culture has a significant impact on the effectiveness of peer feedback groups (Allaei and Connor, 1990). Thailand is considered to be a collectivist culture (Hofstede, 1986), and it is unavoidable to deny the fact that Thai culture, including the notion of face, ego orientation, maintaining harmony, and Kreng Jai, seems to influence the students' response performance and perceptions. That is, they tended to say what the writers wanted to hear rather than provide frank, helpful comments to the writers, fearing that such negative feedback would humiliate their peers and cause a loss of face and discordant personal relationships afterwards. These problems seem to downgrade the value of peer feedback (Thongrin, 2002).

### **Recommendations for Further Research**

1. Replication of the study is recommended for a longer period of time to strengthen the results of the study and further studies should be used with caution in terms of generalization due to a relatively small number of subjects.
2. Other factors that might affect the results of the study, such as gender, age, learning styles, learning strategies, technology apprehension, computer literacy, and group integrity, should be taken into consideration.
3. In order to strengthen the reliability of the study, the use of a control group is recommended for further studies.
4. This research was conducted with undergraduate technical education students in a writing course; consequently, students in other faculties and in other content courses would be interesting to research.

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