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The Effect of Peer Scaffolding on College Students' Writing Skills in EFL

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Abstract

The purpose of this study was to examine the effects of peer scaffolding on the writing fluency of English language learners. This study was intended to confirm that peer scaffolding in English as a foreign language (EFL) writing classes can improve students' English proficiency. An analysis of 20 EFL learners studying at a university in Gyeonggi Province was conducted based on the English Proficiency Test. In this study, 20 intermediate learners with similar proficiency levels were included in the sample. Randomly, 10 students were designated as members of the control group, and 10 students were designated as members of the experimental group. In the experimental group, students practiced essay writing, while a skilled student provided scaffolding for a less skilled student. A variety of tools were used to gather data, including tests, questionnaires, and interviews Statistical analyses of quantitative data were conducted using t-tests for independent samples, whereas analyses of qualitative data were conducted based on themes. Pre-test results indicated a significant value of sig. =0.87, which was higher than $\alpha = 0.05$. According to the results of this study, the writing performance of both experimental and control groups of students was equal and homogeneous prior to treatment. However, there were significant differences between the writing of students in the two groups after the completion of the program. Due to the post-test analysis of the writing test, the test resulted in a sig. =0.043, a value lower than $\alpha = 0.05$. As a result, the experimental group participants showed a marked improvement in their writing abilities after treatment.

Keywords: English Fluency, EFL, Peer Scaffolding, Writing

1. INTRODUCTION

Many college students devote much time and effort to creative writing in their English language learning. Nevertheless, many college students feel overwhelmed by writing demands and lose confidence in their abilities due to their own insecurities and shortcomings. As writing has become an increasingly important skill in Korea, it has also become a valuable means to facilitate and present educational knowledge and occupational opportunities for learners. To help their learners develop their writing skills and support them in receiving better educational and employment opportunities, most universities in Korea include many English writing courses in their curriculum. It is true that writing considered one of the most significant skills for students studying EFL, however, it remains one of the most challenging. As a result of their own anxiety and lack of skills, college students lose confidence in their abilities when faced with writing challenges. Since most students can only copy sentence samples from translation tools like Papago or Google Translator, they are

unable to produce complex sentences without the assistance of teachers or translation tools. In addition, EFL writers lack the knowledge and understanding of what to write, and when to express their feelings and thoughts. In this regard, EFL students often find it challenging to write an essay in English without a teacher's or peer's assistance. There is also an issue with the teaching approach in Korea when it comes to EFL writing. EFL teachers in South Korea typically use traditional methods that focus on recitation and imitation and place a greater emphasis on learners' final written products rather than their writing processes. As a result, these teaching methods do not provide learners with opportunities to practice creative writing when faced with real-life writing situations. EFL instructors may also become increasingly interested in how to support their learners' EFL writing development. This includes applying process approaches and other valuable techniques to EFL writing classes. Peer scaffolding is an effective method for assisting EFL learners in learning and using a form of writing language. Further, Zone of Proximal Development (ZPD) and scaffolding have gained considerable attention in studies of second language acquisition. This concept as scaffolding when analyzing the interaction between children and tutors [1], but Vygotsky's ZPD was quickly associated with this concept. Cognitive psychology and research in the field of first language (L1) have derived the concept of scaffolding, which is the process of making supportive conditions during social interactions when a knowledgeable participant takes the initiative. The role of scaffolding in second or foreign language learning has been investigated in terms of a variety of interactions, including teacher-student interactions and student-student interactions. Peer scaffolding is a method of enhancing collaborative learning which can be beneficial in several ways, including clarifying thinking, reorganizing information, addressing misconceptions, and developing new understandings [2]. Students are able to develop a deeper level of comprehension when they are able to provide and receive explanations that can enhance their understanding. It is noteworthy that peer scaffolding plays a vital role in second language (L2) writing since learners will not acquire an L2 in the same manner that they acquired their L1. It is therefore possible to use peer scaffolding strategies in L2 writing to help learners improve their ability to write at higher levels.

Accordingly, this paper examines the impact of peer scaffolding on the writing fluency of English as a foreign language learner. It is therefore the goal of the present study to address the following research questions:

1. How does peer scaffolding affect EFL students' writing fluency?

2. What is the effect of peer scaffolding on English language learners' writing fluency?

3. How does peer scaffolding affect writing fluency of less proficient EFL students?

The following null hypotheses have been developed as a result of the previous research questions:

H01. Students learning English as a second language do not benefit from peer scaffolding.

H02. Peer scaffolding does not affect writing fluency in skilled English language learners.

H03. Less skilled English as foreign language learners are not affected by peer scaffolding for writing fluency.

2. LITERATURE REVIEW

2.1 Vygotsky's Sociocultural Theory

In this study, social context is directly emphasized as a factor in human cognitive development by using Vygotsky's Sociocultural Theory (SCT). SCT approach is applied to classroom settings, where learning is viewed as a product of collaboration through shared activities among learners [3]. Sharing problem-solving tasks with others when participating in any social activity enables learners to construct knowledge and understanding, which enables novice learners to overcome problems after receiving guidance from knowledgeable individuals. ZPD refers to opportunities to learn from others. ZPD is an essential component of the learning process [4]. An individual's potential level of development has been defined as the difference between their current level of development and their potential level of development. This is according to adult

supervision or collaborative learning with more advanced peers.   Among the notable elements of ZPD are the social factors that play a role in the process. These factors include assistance from others or other forms of feedback, as well as modeling. These factors are considered a distance or domain of skills or abilities that learners still need to acquire in order to become more capable and self-reliant [2]. As a result of learning in the ZPD, learners are able to learn with others, gain support from their more knowledgeable peers, and ultimately learn independently. Guidance supports learning and development through the concept of scaffolding, which is closely related to the ZPD [4][5]. In order to elevate a learner's performance to its highest potential level, teacher assistance is initially needed. As the learner becomes more independent, the level of assistance decreases gradually. As a result, learners are responsible for their own performance, and scaffolding is no longer used. At this point, learners can perform independently at the same high level at which they were previously able to perform only with assistance or scaffolding [1]. Therefore, scaffolding is the assistance a knowledgeable person gives a learner through interactions. However, in a classroom setting where learners engage in collaborative work, they are provided with multiple forms of support from not only teachers but also peers [6].

Therefore, scaffolding may not only occur during teacher-learner interactions but also during peer interactions when learners work in small groups or pairs. In terms of collaborative learning, peer scaffolding has many advantages, in particular the ability to provide and receive explanations that can assist learners in engaging in deeper cognitive processes, including clarification of thinking, reorganization of information, correction of misconceptions, and gaining new insight [2]. Furthermore, the process of co-constructing ideas can also lead to improved learning that can be used to solve problems independently in the future [2][7].

In addition, when learners collaborate with others, they may encounter cognitive conflicts that require them to articulate and defend their positions [8][9][10]. They may also recognize uncertainties about beliefs, search for relevant information to resolve disagreements and recognize alternative perspectives. The importance of peer scaffolding in the writing of L2 texts should not be underestimated since learners do not learn a second language in the same manner that they do an L1. They need coaching and explicit instruction in order to acquire the fundamental skills of L2 [2]. As well, it is essential that these students are provided with the opportunity to experience directly what it is like to be a writer. As learners develop their understanding of writers' recursive strategies and techniques, they are emphasized. To assist learners in improving their writing ability from their present level to a higher level, writing processes and scaffolding strategies can be applied in L2 writing.

In this study, three stages of the writing process were investigated: pre-writing, in-writing, and post-writing, using ten instructional plans. Over ten weeks, peers provided learning scaffolding. By talking to themselves, learners were able to support vocabulary brainstorming, vocabulary meaning checks, and idea generation using peer scaffolding strategies during the pre-and post-writing stages. During the post-writing phase, learners were asked to provide assistance with transitions, check their grammar, and confirm their understanding of writing processes [7].

3. METHOD

In this study, participant observation is used to provide an in-depth understanding of individual perspectives. This technique is effective for collecting data in two distinct ways: it allows researchers to gain access to events and groups they would not otherwise access, as well as review the world from the perspective of an insider rather than an outsider. Here, we focus on participants' scaffolding behaviors during writing activities. In the EFL classroom, the researcher has two roles: teacher and participant observer. By observing both the verbal and non-verbal behaviors of EFL learners in the classroom for EFL writing, the researcher can gain a deeper understanding of their learning processes. In each session, the researcher observes 20 EFL college-level learners for two hours at each stage of the writing process. Participating as a participant observer provides the researcher with the opportunity to note certain significant behaviors. These behaviors can be used to supplement data analysis in the final stages.

3.1 Procedure

Twenty English majors with varying English proficiency levels participated in the present study. Through the use of purposive sampling, participants were selected for participant observation. They were divided into two groups based on their scores for paragraph writing before participating in the study: 10 high-intermediate students and 10 low level students. A writing rubric was used to assess peer scaffolding strategies over a 10-week period. While the entire class was introduced to the writing process and scaffolding by peers, their written products were analyzed for writing development. Further, the consent forms for the students who agreed to take part in this study had to be signed before they could take part in the study. Data collected from participant observation was transcribed using anonymous identifiers to consider ethical issues.

3.2 Research Instruments

The students were engaged in writing activities for twenty hours in total. This study examined the writing activities of 20 English students. The research instruments included observation and ten lesson plans. A procedure for designing a research instrument is presented in the following steps:

First, the researcher developed 10 lesson plans for 10 weeks using the course syllabus and writing process as a guide. For each of the writing topics associated with these writing activities, the course syllabus provided ten lesson plans. Various types of paragraphs were presented, such as opinion paragraphs, problem-solution paragraphs, cause-and-effect paragraphs, and advantages and disadvantages paragraphs. The supervisor and experts evaluated the lesson plans to determine whether the content was appropriate.

Secondly, the researcher reviewed the steps involved in designing the observation form based on the research objective. A questionnaire was then sent to experts for assessment of the relatedness of the objective and the questionnaire content.

Then, the researcher repeated the experiment with the other sections, which had similar characteristics to the lesson plans and observation forms. We performed this assessment to determine whether the content and timing were appropriate for the participants. While writing, learners are instructed to able to use also Korean (L1) to ensure they feel free to express themselves.

This study examined peer scaffolding behavior based on the analyzed data. In peer scaffolding, ten EFL learners discuss the language they produce during a conversation among themselves. They could modify others in their native language, Korean, to resolve grammatical and lexical problems either directly in English or through mutual cooperation. Peer scaffolding behaviors during EFL writing activities using language functions [11][12].

4. RESULTS

This study measured writing fluency by averaging word counts and clause counts. Table 1 provides descriptive statistics for each measure of fluency in the pre-test separately for each group, In addition, the mean, standard deviation, and standard error have been calculated. The results of measuring the accuracy of words per minute, T-unit, in pretests and post-tests showed Pre-test and post-test calculations showed a significant positive relationship (r=0.87, p<0.05), and the post-test (r=0.88.4, p<0.05).

Table 1. Writing fluency in pre-test

		Mean	Mean Sq.	F	Sig.
Words (per Min.)	Between Groups	0.055		0.019	0.876
	Within Groups	2.946			
Words	Between Groups	46.938		0.016	0.899
	Within Groups	4572.884			
Clauses	Between Groups	3.728		0.038	0.814
	Within Groups	68.994			
T-units	Between Groups	12.729		0.387	0.048
	Within Groups	23.864			

In the pre-test, both experimental and control groups performed identically on the writing fluency test. Furthermore, for "the number of words per minute" (sig=0.876, F=0.019, p<0.05), with reference to "the average number of words" (sig=0.899, F=0.016, p<0.05), for "the average number of clauses" (sig=0.814, F=0.038, p<0.05), and for the last parameter of writing fluency, " Mean number of T-units" (sig=0.048, F=0.387, p<0.05). Therefore, A significant difference was not observed between the experimental and control groups writing fluency at the beginning of the study.

Table 2 shows In the post-test, ANOVA results were used to compare the experimental and control groups. The data does not show a significant distinction between the groups. The experimental group surpassed the control group regarding "quantity of words" (sig=0.043, F=4.189, p<0.05), "the average number of words" (sig=0.027, F=5.372, p<0.05), and "Mean number of T-unit" (sig=0.056, F=3.275, p<0.05). In contrast, "the average number of clauses," there is no meaningful distinction between the two tables. (sig=0.235, F=1.245, p<0.05).

Table 2. Writing fluency in post-test

		Mean	Mean Sq.	F	Sig.
Words (per Min.)	Between Groups	13.554		4.189	0.043
	Within Groups	3.197			
Words	Between Groups	30145.497		5.372	0.027
	Within Groups	5296.619			
Clauses	Between Groups	117.603		1.245	0.235
	Within Groups	89.879			
T-units	Between Groups	131.504		3.275	0.056
	Within Groups	31.851			

As shown in Table 3, this study to determine whether there is an improvement in writing fluency based on the analysis of the data of skilled and less skilled students in the experimental group shows the following results: there was a significant effect on all four measures of writing fluency. In more detail, for "the number

of words per minute" (sig= 0.038, F= 5.882, p<0.05), for "the average number of words" (sig=0.014, F=8.630, p<0.05), for "the average number of clauses" (sig=0.040, F=5.936, p<0.05) and for "the average number of T-units" (sig=0.053, F=5.128, p<0.05). Therefore, the second null hypothesis is invalid.

Table 3. Within subject writing fluency of less skilled students

	Mean	df	Mean Sq.	F	Sig.
Words (per Min.)	18.796	1	18.796	5.882	0.038
Words	32160.20	1	32160.20	8.630	0.014
Clauses	297.400	1	297.400	5.936	0.039
T-units	130.320	1	130.320	5.128	0.053

As shown in Table 4, less skilled students showed a significant effect on writing fluency as well. Specifically, regarding "the number of words per minute" (sig= 0.008, F= 10.988, p<0.05), "the average number of words" (sig=0.001, F=21.832, p<.05), "the average number of clauses" (sig=0.003, F=5.812, p<0.05) and " the average number of T-units" (sig=0.002, F=5.212, p<0.05).

Table 4. Writing fluency of less skilled students

	df	Mean Sq.	F	Sig.
Words (per Min.)	1	19.698	10.988	0.008
Words	1	40274.320	21.832	0.001
Clauses	1	314.605	5.812	0.003
T-units	1	130.320	5.212	0.002

5. DISCUSSION & CONCLUSION

The purpose of this study was to determine whether peer scaffolding was effective in improving the writing fluency of EFL students. Considering the results of the one-way ANOVA for the first research question, it can be concluded from the results of the one-way ANOVA that The number of words produced per minute may be affected by peer scaffolding (p=0.04), or the average number of words produced (p=0.027), or the average number of T-units written (p=0.05), peer scaffolding has no measurable influence on the average number of clauses produced by learners (p=0.23). There is no way to reject the first null hypothesis since not all the writing fluency indicators, as defined in this study, were significantly improved between pre- and post-tests. An analysis of the statistical data indicates that peer scaffolding does not significantly improve the fluency of writing in EFL learners.

According to ANOVA results, there were significant differences in the writing fluency of skilled students between pre-and post-tests. Skilled students generated more words per minute (p=0.038) and produced more words on average than on the pre-test (p=0.014). There was also a significant increase in clauses (p=0.039) and T-units (p=0.053).   Thus, peer scaffolding has a significant impact on the writing fluency of skilled writers, rejecting the second null hypothesis. When considering the third research question, ANOVA, it showed that low-skilled students have improved their writing performance. Students with less writing skills produce a greater number of words per minute (p=0.008), and their writing ability has increased in terms of

the average number of words, clauses, and T-units (p=0.002). Due to this result, the third null hypothesis is rejected. As a result of peer scaffolding, students with lower skill levels were able to write more fluently after participating in the experiment. We found that while EFL students usually write in pairs while one serves as a scaffold for the other, the process may not increase their ability to write fluently in the long run. Scaffolding, on the other hand, can have a significant impact on both those who provide it and those who receive it in terms of writing fluency. Peer scaffolding can also be investigated in relation to other language skills such as listening, speaking, and reading. There is a need for further research in other learning contexts, considering other proficiency levels, due to the fact that this research was conducted at the university level with intermediate-level students.

6. ACKNOWLEDGEMENT

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