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## Peer Tutoring for EFL Learning: A Multidimensional Analysis of Elementary School Students

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### Abstract

This study investigated dimensions of academic performance, learning motivation and learning attitudes by adapting peer tutoring as the major EFL classroom activities in an elementary school classroom. Exams, classroom observation, exit survey and comments after each class were administered as the source of research data. Results indicated that peer tutoring has a positive effect on tutors' and tutees' academic performance due to the increase in students' grades. Students' learning motivation and attitudes toward EFL learning also increased significantly. On the whole, the use of peer tutoring significantly contributed to better English ability, motivation and attitude.

**Keywords:** *peer tutoring, EFL academic achievement, learning motivation, attitude, elementary school students, Taiwan*

### Introduction

In English as a foreign language (EFL) classes, facing a mixture of abilities is a challenge for the teachers, who must cope with the selection of course materials and determine an appropriate approach to teaching. Great differences in ability can also cause students to become less motivated and to develop negative attitudes towards learning English. An effective way of reversing this disadvantage of a mixed-ability class is to use peer tutoring (Goodlad and Hirst, 1989), a teaching method that has been adapted by teachers in a variety of academic areas such as ESL (English as a Second Language), EFL, mathematics, nursing education, and computer science (Brannagan et al., 2013; Mynard and Almarzouqi, 2006; Vacilotto and Cummings, 2007). Few studies have explored whether peer tutoring can be included as a major teaching method for the purposes of elevating

elementary pupils' academic performance and boosting their learning motivation and learning attitude. This study investigates the extent to which adapting peer tutoring improves elementary school students' academic performance, learning motivation, and attitude in EFL mixed-ability classes.

## **Literature Review**

### **Peer Tutoring in Language Learning**

Numerous studies define peer tutoring as a way of having students who are learning well help those who are having difficulty (Mynard and Almarzouqi, 2006; Vacilotto and Cummings, 2007). Helping young learners to build a solid foundation is the task many elementary school teachers aim to complete, especially when the learners are learning an unfamiliar language (Penn, 2012). Moreover, peer tutoring produces superior academic gains and greater cost efficiency for academic achievement (Fantuzzo, Polite and Grayson, 1990). Slower learners are provided with the chance for one-on-one tutoring. In addition, tutees are less intimidated by peer tutors than by adults (Grubbs and Boes, 2009).

Peer tutoring provides learners with an opportunity to learn by interacting with each other rather than with only the teacher and constructs cognitive processes resulting from social interaction or the zone of proximal development (ZPD) proposed by Vygotsky. The ZPD is the distance between the actual developmental level when solving problems alone and the potential developmental level when working in collaboration with more capable peers (Mynard Almarzouqi, 2006). Wood and Wood (1996) pointed out that tutors serve as the link between tutees' existing knowledge and skills and the new tasks in hand by providing instructions to support tutees' problem solving. Tutors' engagement in instructional activities such as explaining, answering questions, correcting tutee errors, and manipulating different representations contributes to what is known as tutoring learning (Roscoe and Chi, 2008). Adult supervision is also crucial for providing answers as well as feedback to tutors (Grubbs and Boes, 2009). Moreover, it is preferable to match tutors to tutees of similar gender and socioeconomic status, as such matching allows for the best means of collaboration and provides more effective and comfortable communication (Grubbs and Boes, 2009).

### **Language Learning Motivation and Attitude**

Motivation, the instigated and sustained process of goal-directed activity, is one of the most crucial factors in learning English (Carreira, 2006). It is used to explain

why one succeeds or fails in a task in a foreign language classroom (Dörnyei, 1994). Motivation is one of the most influential factors that affect students' academic or non-academic performance. The term refers to the "cognitive, emotional, and behavioral indicators of student investment in and attachment to education" (Tucker, Zayco and Herman, 2002, p. 477). Students who are not motivated usually do not perform as well as those who are motivated.

One avenue of research into L2 motivation is being explored by R.C. Gardner and associates (Masgoret and Gardner, 2003). They have indicated that motivation strongly influences L2 achievement. Gardner further proposed a socio-educational model of second language acquisition, stating that "integrativeness and attitudes toward the learning situation are two correlated variables that support the individual's motivation to learn a second language, but that motivation is responsible for achievement in the second language" (Masgoret and Gardner, 2003, p. 124). Previous research has expanded the notion of whether integrative motivation can be related to achievement in L2, especially in EFL, since in many EFL contexts, contact with L2 speakers and the target culture is quite limited (Lamb, 2004).

People with a favorable attitude toward the learning of a foreign language tend to be more intrinsically motivated (Lamb, 2004). Intrinsically motivated students are likely to become involved based on personal interest, and they receive a sense of pleasure when improving their English ability (Wang and Guthrie, 2004). Other studies have indicated the validity of intrinsic motivation in relation to learners' positive attitudes toward language learning. In a study of 301 eleventh-graders in Budapest, Clément, Dörnyei and Noels (1994) found the intrinsic motivational factor of an interest in the cultural aspects of the English world to correlate with learners' EFL learning attitude.

## **Research Methodology**

### **Participants**

Thirty-four (20 boys, 14 girls), fifth-graders in one class were chosen from an elementary school in central Taiwan, where one of the researchers works as a full-time English teacher. Zimmerman and Martinez-Pons (1990) have examined student differences in self-regulated learning and found higher scores in the domain of goal-setting and planning in fifth-graders. The students had never experienced any form of peer tutoring in their curriculum before.

## Instruments

In the presented research, STYLE was used as a placement test to discover the participants' English ability. STYLE/JET is a children's English proficiency test designed by the Saxoncourt Examinations Center in Britain along with scholars and specialists in related fields from Europe, America, and Asia. The students were sorted into two groups, tutors or tutees, according to the results of a pre-test. Consent forms signed by their parents were collected prior to the study. The textbook, *Kid Castle New Magic Land 6*, was selected by a committee formed by the school authorities in an open meeting and was the main text used for peer tutoring in this study.

The study used a questionnaire called MALESC to measure the participants' motivation and attitude. It was created by Carreira (2006) of the Tsuda College in Japan when she found out that most questionnaires with similar purposes were designed for adults and adolescent students. The questionnaire includes 19 items (cf. Table 1): eight on intrinsic/instrumental motivation to learn English (2&4), five on interest in foreign countries (1), three on caregivers' encouragement (3), and three on anxiety (5). The questionnaire was translated into Mandarin and administrated to the participants before and after the application of peer tutoring in order to identify any differences resulting from the intervention. Open-ended questions were also given to the tutors and the tutees for them to answer anonymously, as supplementary information.

**Table 1.** The list of questionnaire items

	Factor	Item
Learning Motivation	2	1 English lessons are great fun.
		3 I always look forward to the day when we have the English class.
		6 I would like to try to use the English which I have learned.
		8 I hope that we have more English lessons.
	4	7 I study English in order to make English easier for me in junior high school.
		11 I study English because I think English will be necessary for me when I am an adult.
		14 I am studying English for a future job.
		19 I am studying English in order to enter a high school or a university.
Learning Attitude	1	2 I would like to go to various foreign countries.

	Factor	Item
Learning Attitude	1	4 I would like to make a lot of foreign friends.
		12 I would like to try and talk to foreigners when my English becomes proficient.
		15 I would like to live abroad.
		17 I would like to know more about foreign countries.
	3	9 In my family, we all feel that it is very important to learn English.
		13 My parents hope that my English will be proficient.
		18 My parents tell me to study English hard.
	5	5 I get worried when I am doing worse than my classmates in the English class.
		10 I am somehow always anxious in the English class.
		16 I get nervous when I answer or give a presentation in the English class.

### Procedures and data analysis

At the beginning of the semester, the participants took the STYLE exam as a placement test. Fourteen students scored above 90% on the pre-test and were assigned as tutors, distributed evenly into 7 groups with two tutees in each and trained by the teacher before the tutoring session began. The MALESC was given to the participants before the tutoring session and ran for ten weeks. The tutoring sessions were designed into a mission list that was given to the students during the first tutoring session. The mission list contained peer-led activities that were normally done by the teacher or as a class activity. Evaluation, including self-evaluation and group competitions, was an important part of the participants' study to encourage the students to be self-regulated and motivated to lead to greater success. Therefore, at the end of every lesson, both the tutors and the tutees had to evaluate themselves by writing notes of reflection for them to be aware of their own progress. The teacher needed to carefully monitor the amount of support the tutors gave to ensure the effectiveness of the tutoring sessions. At the end of each session, the teacher recorded log entries.

The data collected, including the results of the STYLE/JET, the midterm exams scores, and the MALESC questionnaire, were analyzed using the SPSS computer program. Factor analysis was used for extracting underlying factors behind academic performance, L2 learning motivation, and the attitude of the elementary students before and after the implementation of peer tutoring. The efficacy of different sessions and activities was determined based on classroom observation and

the teacher's log. In addition, the overall performance of the program quality was examined with open-ended questions (an exit survey) completed by the students in the last session.

## Research Results

### Quantitative data analysis

#### The improvement of students' academic achievement

Peer tutoring was implemented after the first midterm. On the second midterm, the average dropped from 85.88 to 81.65 (SD = 17.81678). Three students scored a perfect 100, and sixteen students scored below average. Among them, four students failed. The students had never experienced peer tutoring as the main teaching method of course content. Therefore, the drop in grades may have been caused by their unfamiliarity with peer tutoring. On the final exam, the average rose from 81.65 to 88.90 (SD = 13.61324). The decrease in the SD shows that the data became more concentrated around the mean. Not only was the average improved, but the number of students who failed the exam also fell to one. However, as shown in Table 2, the minimum score dropped from 42 to 33. These grades were from the same student, who actually really enjoyed his lessons, according to the qualitative data (exit survey). For some students, it may take longer than 10 weeks to adjust to a new teaching method.

**Table 2.** Descriptive Statistics of Students' Academic Achievement (N=34)

	N	Minimum	Maximum	Mean	Std. Deviation
1 <sup>st</sup> Midterm	34	42.00	100.00	85.8824	14.74997
2 <sup>nd</sup> Midterm	34	38.00	100.00	81.6765	17.81678
Final Exam	34	33.00	100.00	88.3529	13.99108

#### Learning motivation and attitude

The MALESC questionnaire was given to the participants before and after the implementation of peer tutoring to find out the students' language learning motivation and attitudes. The scores of the items related to learning motivation (1, 3, 6, 7, 8, 11, 14 and 19) on the pre- and post-test were calculated using SPSS. As shown in Table 3, the results of paired-sample t-test indicated no significant differences between the students' pre- and post-motivation. However, the students

wrote about different aspects of their views toward the peer tutoring program. Their responses were analyzed qualitatively.

In addition, factors 1 and 3 (item 2, 4, 5, 9, 10, 12, 13, 15, 16, 17 and 18) were related to the students' attitudes toward learning English. According to the results of the paired samples t-test, there was no significant difference in the students' learning attitudes.

**Table 3.** Descriptive Statistics and t-test for Pre- and Post- Motivation (Paired Samples Statistics)

	Mean	Number	SD	df	t
Pre Motivation	34.6471	34	4.62459	33	.468
Post Motivation	33.7353	34	5.04710		
Pre Attitude	42.4118	34	5.12343	33	.215
Post Attitude	44.0294	34	5.50198		

In terms of the learning attitude, items 13, 15, 16, and 18 had significant differences (cf. Table 4). Items 13 and 18 indicated a possible increase in the parents' involvement in the participants' study of English, since all of the parents were informed from the beginning of the implementation of peer tutoring with the consent form. On Item 15, the participants showed an increased interest in a more positive attitude and heightened curiosity toward foreign countries with the implementation of peer tutoring. That students showed interest in learning English for a practical reason is a good indication of an increased likelihood that they will pursue further study of English. A significant difference was also found on item 16. Because peer tutoring involved more teamwork and competition, the students became more aware of how their own performance would affect their group's performance.

**Table 4.** Paired samples (Pre- and post-Test) t-test for items related to learning motivation

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Item 8	.61765	1.07350	.18410	.24308	.99221	3.355	33	.002*
Item 19	-.88235	1.80512	.30958	-1.51219	-.25252	-2.850	33	.007*

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Item 13	-.44118	1.15971	.19889	-.84582	-.03654	-2.218	33	.034*
Item 15	.50000	1.28511	.22040	.05160	.94840	2.269	33	.030*
Item 16	-.91176	2.00556	.34395	-1.61154	-.21199	-2.651	33	.012*
Item 18	-.55882	1.33010	.22811	-1.02292	-.09473	-2.450	33	.020*

\*p < 0.05 by t-test

### Qualitative data analysis

#### Students exit survey- responses from the tutors

The first question was, "Which of the following best describe your feeling during this English class? And why?" Nine tutors said it was fun, relaxed, and likeable. They wrote, "I like the English class because we always practise with games and activities, which makes it interesting." A few students stated that they felt challenged in the English class. "It is challenging for me, because not only do I need to study for myself, I also need to teach my classmate because I am his/her tutor. I felt there was more responsibility for me now than before."

The second question was, "Are you afraid to attend this English class?" Six tutors responded that the English class was interesting and that they were not afraid to attend it. The third question was, "Do you find it difficult to understand the teacher during the English class?" Most of the tutors just answered with a simple "No," and did not explain any further. One tutor pointed out, "No, because the teacher explained everything to us first, and organized the course materials into charts, forms and activities for us to practise with our classmates."

The fourth question was, "Do you find it helpful for you to be a tutor during the English class? Why?" Some wrote, "Being a tutor gives me more confidence, and I found it fulfilling to teach my classmate." The fifth question was, "Do you think being a tutor gives you more confidence to learn English? Why?" Some wrote, "Yes, I feel more confident. I could only be the one who was being taught before. Now I am the tutor, and I study harder to be a good example for my tutee." "I really like English now! I think it is because of the different method we used to learn in class."

The sixth question was, "Do you enjoy being a tutor? Why or why not?" Eleven out of the fourteen tutors indicated that they enjoyed being a tutor. A few tutors mentioned that tutoring had a positive influence on their temperament and their friendships with classmates. As one wrote, "I am really proud of my tutee, who



worked really hard to improve.” The seventh question was, “How helpful is it for you to assist your fellow classmates who are academically behind?” Some tutors mentioned that being a tutor taught them how to teach, and that helping their classmates gave them a chance to review the material. “I treasure the opportunity to teach others. I think it is helpful for me because I could also review the materials myself while teaching.”

The final question for the tutors was: “Are you in favour of being a tutor in the English class from now on? Why?” Ten of the fourteen tutors were in favour of being a tutor from then on. One tutor wrote, “I think the peer tutoring program not only gave me the chance to help my classmates but also helped me to make more friends.” Most tutors were in favour of the practice because they thought helping others was exhilarating.

#### **Student exit survey – responses from the tutees**

The first question was, “Which of the following best describe your feelings during this English class? And why?” Sixteen of the twenty tutees responded that it was fun and relaxing because they enjoyed the English class. However, one student was apparently not happy to be a tutee. She wrote, “I didn’t like having a tutor, because I didn’t like to be bossed around.”

The second question was, “Are you afraid to attend this English class? Why?” Most of them were not afraid and found it interesting. One tutee said, “The method we used in the English class was different from what I had experienced before. It was diverse and challenging, which made it interesting.” The third question was, “Do you find it difficult to understand the teacher during the English class?” Most tutees mentioned that even though they did not understand at first, the repeated practice with the teacher, the tutor, and their teammates helped them to improve, stating, “My tutor would explain things to me after class if I had any questions.” The fourth question was, “Do you find it helpful to have tutors assisting you during the English class? Why?” Most of them found it helpful because they could get instant responses when they had questions about the course materials.

The fifth question was, “Do you think having tutors to assist you gives you more confidence about learning English? Why?” One tutee said, “My tutor was really nice. Whenever I had a question, he would assist me until I truly understood. I don’t find English so difficult now.” The sixth question was, “Do you enjoy having tutors to assist you? Why or why not?” One tutee said, “I was afraid to ask the teacher questions during class. Now that I have a tutor, I can just ask him instead.” The final question for the tutees was, “Are you in favour of having tutors in the English class from now on? Why?” One tutee wrote, “I like this system because

my grades have improved.” One tutee talked about the benefit of learning English: “I think learning English well with my tutor is important because it will be helpful for my future job hunting.”

## **Discussion and Conclusion**

In this study, one problem that arose between a tutor and a tutee was that the tutee did not seem to understand the tutor’s instruction and therefore showed limited improvement. Apparently, the tutor was frustrated and believed that he was paired with problematic tutees. Therefore, it is suggested that special attention be paid to the initial pairing when implementing peer tutoring to avoid problematic matches. It might be better to wait until students are comfortable with the process before assigning them a partner. One other issue that arose in this study was that some pupils felt they were wrongly chosen to be tutors. Tutors may not feel comfortable with or confident in the task. In such cases, the teacher may have to give the tutors further training to make sure the tutors understand the curriculum and syllabus that they are going to teach and ways to complete the task.

Peer tutoring is a non-traditional learning method not normally applied in public classrooms in Taiwan. Although not significant, an overall improvement in the students’ academic performance was evident from the quantitative data collected. Qualitative information generated from the teacher’s observations (the teaching log), the students’ reflections, and the post-session feedback provided data from different angles. By observing the participants, the researcher/teacher could make necessary adjustments to respond to unexpected problems in the planned syllabus. By writing down reflections after every session, the participants became more aware of their own progress and also provided their opinions so that the researcher could tailor lesson plans to better meet the students’ preferences in order to maximize the effectiveness of the peer tutoring program.

The students enjoyed this alternative way of learning English, and peer tutoring improved their motivation and willingness to study English. Moreover, not only did the students become more aware of the importance of learning English, but their parents also wrote comments in support of the program. They became more actively involved in group discussions and their written feedback showed increased motivation and academic drive. The written feedback at the end of every session contained clear signs of increased motivation and a positive learning attitude. However, sometimes, busy lesson plans caused the feedback to be crammed in at the last minute. Future research should ensure that sufficient time remains

for students to write what they truly think about every activity. Moreover, this research was conducted over a period of only three months. If the time span were expanded, perhaps the effects of peer tutoring would be even more obvious.

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