

## PAIRED TECHNOLOGIES IMPLEMENTATION TO ENHANCE EFL STUDENT'S WRITING SKILL

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**Abstract;** The pandemic of COVID-19 has forced educational institutions to move their teachings online around the world. As the Indonesian Government released SK Mendiknas No. 107/U/2001, educational institutions had to constantly merge their learning process with technology. So, this research aims to measure the effectiveness of students' writing skills through paired technologies, such as WhatsApp, Facebook, and the video conference as a learning technique to develop students' writing skills. The method used in this research was pre-experimental testing of pre-test and post-test configurations in a single group. The subjects of research consisted of 20 students from the EFL's first high school who were involved in a census sampling methodology. The data were collected utilizing a written exam. The data study shows a large improvement in the total student output in English writing. The mean student pre-test score was 65.30, while the mean student post-test score was 78.05. The t-table was also smaller than the t-test, i.e.  $2,093 < 6,04$ . Based on the results, the researchers hypothesized that the use of paired technology; the combination of teaching tools in English learning increased the ability of EFL students to write.

**Keywords;** Writing, technology, collaborative tool, EFL students, social media

### Introduction

Writing is one of the linguistic skills that help students to think critically and talk about the idea in sentences. The standard competence of the teaching text is that students should build and establish an adequate English text. Referring to the English syllabus

of Curriculum 2013, students of secondary school are taught how to introduce themselves and others and make a simple text related to introducing self and others. In making text, students can inform the reader about their personal identity.

Based on the writer's observation, it was found that the EFL students who are the subject of this study in the academic year, 2020/2021 encountered problems in writing their personal identity or other's personal identity. The main problem was students have a low score in writing personal identity text. This has arisen because they have problems with arranging text, creating a clear present, lack of vocabulary, and the major issue is that they don't have a reasonable chance of learning the content that the teacher has provided. It is because the teacher had a lack of capability in using technology and getting difficulty when implementing the material through the technology that the teacher used in the teaching-learning process. And those problems become complicated problems because there are four major skills and many topics within need to be taught. It is also important to use suitable teaching media. Through the use of paired technologies or a combined teaching tool, it gives teachers the ability to use technological advancement to enhance student outcomes. In line with this, the writer intended to use WhatsApp, Facebook, and the video conference "paired technologies" as a tool to facilitate learning. Because the Utilization of information technology (IT) for learning activities in Indonesia nowadays is more conducive with the issuance of the Ministerial of National Education Decree (SK Mendiknas) number 107/U/2001. The decree encourages conventional schools to implement distance education, making the learning environment take on a dual-mode. Applying e-learning in teaching English as a Foreign Language (EFL) for students in the early stage is challenging for parties involved in education, especially considering the status quo of the COVID-19 pandemic.

Based on the above evidence, the author aims to test the value of integrating or using paired technologies; WhatsApp, Facebook, and the teaching video conference. This research was performed using pre-experimental research. This research aimed to determine whether paired technologies were used effectively for seven high school students in EFL in the academic year 2020/2021.

## Literature Review

### A. Concept of Paired Technologies

Paired technologies or collaborative tools are typically network based, and users can quickly access them. Web-based tools can help community communication efforts with no high cost charge, only use the internet connection, and no extra hardware is needed. Becker and Cline offer many resources that are called interactive such as electronic e-mails, audio conferences, coordination presentation software, video conferencing in the conference room, desktop video chat, discussion database, software for document management, electronic white boarding, community planning, GDSS, scheduler and organizing group schedules, information management systems, one-way committees.<sup>1</sup>

### B. The Use of Whatsapp as paired Technologies

Today, both teachers and students use social media to make daily contact. Social networking refers to a type of media that allows people to connect. Examples of popular social media platforms and software include WhatsApp, Facebook, Twitter, Blogs, and YouTube. Currently, one of the online applications that the students seem attractive is WhatsApp and it becomes a trend among teenagers because of the features like group chatting, voice messages, and location sharing. Furthermore, WhatsApp is easy to use with quick steps to get started and it supports operating systems such as Android and iOS. According to Jebakumar and Jisha-K "WhatsApp was developed by Brian Acton and Jan Koum for smoother and quicker collaboration and delivery of electronic messages.<sup>2</sup> One of the features in WhatsApp that commonly used in English language teaching especially for writing is the WhatsApp group, as Mistar and Embi stated that to improve students' writing skill using WhatsApp, the teacher can send a text about a particular topic in a group and ask students to do some exercises such as write comments or any responses.<sup>3</sup> Students are not just practicing writing, but they also have

<sup>1</sup> Jack D Becker & Melinda Cline. Effectiveness of collaborative tool usage for virtual team activities. *AMCIS 2005 Proceedings* (2005): 3.

<sup>2</sup> Jisha, K. Jebakumar.(2014).Whatsapp: A Trend Setter in Mobile Communication Among Chennai Youth. *IOSR Journal of Humanities and Social Science*, 19(9), 01-06.

<sup>3</sup> Iziani Binti Mistar and Mohamed Amin Embi. Students 'perception on the use of WhatsApp as a learning tool in ESL classroom. *Journal of Education and Social Sciences* 4 (2016): 96-104.

a chance to be assessed by the teacher. This is also in line with Fattah that state through the use of WhatsApp groups, the teacher can ask students to write and have a discussion.<sup>4</sup>

### C. Facebook-Based Writing Instructional Material

Indonesia has some 70 million active Facebook users, and is now the four-largest Facebook community after the United States, India, and Brazil, and an active user who opens his Facebook Account at least once a month. Of course, 86% of these Indonesian Facebook users can access the Facebook account using a mobile device.<sup>5</sup> The data indicate that social media have allowed improvements in the way Indonesian people live, communicate and learn. Taking into account social computing and modern participatory methods has an effect on public institutions, including governments as well as on health and training, that could be motivated, especially in EFL contexts, as the medium of English teaching and learning in Indonesian schools and universities.

In this research Facebook used to share the material as the basic knowledge of writing material. The materials presented in the Facebook group worked well as visual material. The writing materials in the Facebook community allow students to see the connection between ideas as well as to create and relate their ideas as their minds make connections. Facebook-based writing instructional materials offer an attractive and stimulating framework for writing practice. Since the students were taught by the Facebook group, they got the ability in understanding the material given by the teacher as their basic knowledge in writing.

Some have been conducted in the field of social media, Facebook, and effects. Yunus and Salehi released a report to determine the value of teaching and writing in Facebook communities: student awareness.<sup>6</sup> The research concluded that the Facebook community is an effective tool for developing student

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<sup>4</sup> Said Fathy El Said Abdul Fattah. The Effectiveness of Using WhatsApp Messenger as One of Mobile Learning Techniques to Develop Students' Writing Skills. *Journal of Education and practice* 6.32 (2015): 115-127.

<sup>5</sup> Nur Aeni, et al. English oral communication apprehension in students of Indonesian maritime. *International Journal of English Linguistics* 7.4 (2017): 158-167.

<sup>6</sup> Melor Md Yunus and Hadi Salehi. The effectiveness of Facebook groups on teaching and improving writing: Students' perceptions. *International journal of education and information Technologies* 1.6 (2012): 87-96.

writing skills, especially in the brainstorming of ideas before the actual writing. Shih did research on the Consequences of Using Facebook to Assist Networking English Course Training. The results of the study show that introducing Facebook to the ESP program would effectively assist college students in learning the language. Students can develop their technical skills not only through in-class teaching but also through Facebook networking.<sup>7</sup>

#### **D. The Importance of Video Conference in Online Learning**

The video conference was used as a synchronous meeting by the writer. Video conference is one of the most popular synchronous learning methods used in online education. The video conference is essential in Online Instruction. Video conferencing helps students and teachers to interact directly with traditional teaching experiments in real-time. Through eye communication to the teacher, students can interpret facial expressions and hear the sound of the voice, two missing components in an online world or sometimes misconstrued.<sup>8</sup>

Past investigations have found that students at video conferencing are more likely to attend their courses, improve and use technologies.<sup>9</sup> The analysis further reveals that synchronous elements in the classroom allow students to improve their participation.<sup>10</sup> The studies have also shown that engaging with students is important to the progress of students.<sup>11</sup> Students often seek a sense of community and a teacher presence which is difficult one synchronous part, for example, video conferencing.<sup>12</sup> In reality, video conferencing helps teachers as well as various advantages for students. This tool encourages teachers to be innovative and involved in the quality of

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<sup>7</sup> Ru-Chu Shih. Effect of using Facebook to assist English for business communication course instruction. *Turkish Online Journal of Educational Technology-TOJET* 12.1 (2013): 52-59.

<sup>8</sup> Denis P Rudd. The value of video in online instruction. *Journal of Instructional Pedagogies* 13 (2014).

<sup>9</sup> Denis P Rudd.

<sup>10</sup> Enid Acosta-Tello. Enhancing the Online Class: Effective Use of Synchronous Interactive Online Instruction. *Journal of Instructional Pedagogies* 17 (2015).

<sup>11</sup> Cynthia Foronda and Christine Lippincott. Graduate Nursing Students'experience With Synchronous, Interactive Videoconferencing Within Online Courses. *Quarterly Review of Distance Education* 15.2 (2014): 1.

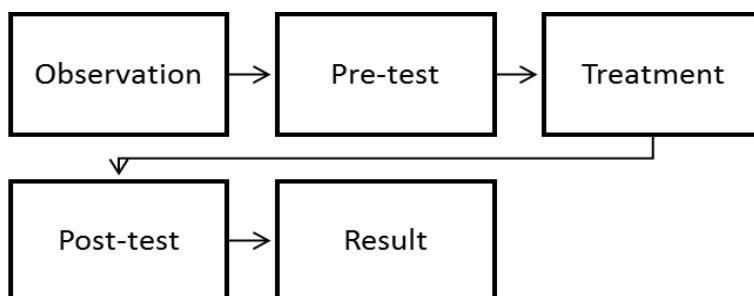
<sup>12</sup> Karyn W Tunks,. An Introduction and Guide to Enhancing Online Instruction with Web 2.0 Tools. *Journal of Educators Online* 9.2 (2012): n2.

their teaching for their pupils.<sup>13</sup> It also encourages teachers to hold personalized discussions with students to help them excel independently. This ensures that students are more aware of their educational participation and are more critical for teachers, who are crucial for students taking the online course.<sup>14</sup>

## Research Methodology

This research employs a pre-experimental approach to the quantitative method. The independent variable used to teach English writing with Paired technologies. The dependent variable was written for the students. The outcomes obtained after certain learning exercises are learning success. The importance that students gain after studying and learning is achieved in the form of the average mark is the metric used to assess the students' learning achievements.

The researchers used 20 high school EFL students in the first semester of 2020/2021. In this analysis, the census sampling procedure was used. Writing exercises are used by researcher to obtain data in this study. A test can be performed, as Brown says, to assess a person, to evaluate their abilities, and in a given context, to achieve success.<sup>15</sup> In this analysis, pre-and post-test measurements are taken. Figure 2.1 demonstrates the flow of this pre-experimental analysis.



**Figure 2.1** Experimental Research Setting

<sup>13</sup> Karyn W Tunks.

<sup>14</sup> Elizabeth Rodriguez-Keyes, Dana A. Schneider, and Elizabeth King Keenan. Being known in undergraduate social work education: The role of instructors in fostering student engagement and motivation. *Social Work Education* 32.6 (2013): 785-799.

<sup>15</sup> James Dean Brown. *The elements of language curriculum: A systematic approach to program development*. Heinle & Heinle Publishers, 20 Park Plaza, Boston, MA 02116., 1995

## Result And Discussion

This part described the students' achievement in the experimental class. The performance measurement of the students deals with the percentage of the performance of the students, including the mean score, standard deviation, t-test value of students' pre-test and post-test on the experimental classes.

### A. Students' Achievement in Pre-test

Table 1 indicates that the pre-test outcome was seen in the equal group for most students for the experimental class. Four students (20%) were good, five students (25%) were fairly good, eight students (40%) were fair, 1 student (5%) was poor, and two students (10%), were very poor. None of them had a very good score. The table below shows the pre-test scoring and percentage of students.

Table 1. The percentage of students' pre-test score

Classification	Score	Experimental Class	
		Frequently	Percentage
Very good	89-100	0	0%
Good	78-88	4	20%
Fairly good	67-77	5	25%
Fair	56-66	8	40%
Poor	45-55	1	5%
Very poor	33-44	2	10%
Total		20	100%

### B. Student's Achievement in Post-Test

The table below displays the number of post-test students who have been trained using paired technologies.

Table 2. The percentage of students' post-test score

Classification	Score	Experimental Class	
		Frequently	Percentage
Very good	89-100	3	15%
Good	78-88	5	25%
Fairly good	67-77	11	55%
Fair	56-66	1	5%
Poor	45-55	0	0%
Very poor	33-44	0	0%
Total		20	100%

The above findings indicate that the success of the students in the post-test increases. There were three students (15%) who were very good, five students (25%) were good, 11 students (55%) were fairly good, 1 student (5%) was fair, and no students got poor and very poor.

### **C. The Mean Score and Standard Deviation of Pre-test and Post-test**

Before the experimental class was taken, the pre-test was done to know the achievement of the students. Furthermore, the experimental class aimed to decide whether it was at the same level before and after treatment or not. The following table shows the outcomes of the mean score, the standard deviation score, and post-testing for students using paired technologies to develop written skill:

Table 3. The pre-test and post-test's mean score and standard deviation

Class	Mean Score	Standard Deviation
Pre-test	65.3	13.52
Post-test	78.05	12.79

The above table indicates that the average pre-test student score for experimental groups is 65.3, which is classified as fair and the post-test is 78.05, classified as good classification. Thus, according to the aforementioned table, the overall student scoring is higher than the exam scoring. It means that the findings of the experiment and the post-test following treatment with paired technologies vary considerably (WhatsApp, video conference, and Facebook). The pre-test standard deviation is greater than the post-test ( $13.52 > 12.79$ ).

### **D. Test of Significance**

The hypothesis was evaluated using an inferential analysis. For the independent sample test, the researcher used t-tests (significance test). This is an investigation aimed at determining the biggest disparity between the outcomes of mean post-test results and pre-test results of the test class after teaching with paired technologies. The sense level ( $\alpha$ ) = 0,05 is the only significant thing, the level of freedom ( $df$ ) = 19, where  $N-1$  (20-1) is seen. Table 4 shows the effect.

Table 4. The t-test of student achievement on pretest and posttest

Variables	t-test	t-table	Remarks
Pre-test and Post-test experimental classes	6.04	2.093	Significantly different

The researcher observed that the t-test was higher than the t-table ( $6.04 > 2.093$ ), which indicates a substantial change, depending on the findings of the data analyses outlined in table 4 for the pre-test and after-test experimental groups. There were slightly different outcomes of the pretest and the post-test averages. The alternate hypothesis ( $H_1$ ) was decided and the null hypothesis ( $H_0$ ) was, of course, rejected. This was not appropriate. It shows that paired technologies significantly enhance student writing performance.

Based on the result of above study the researcher found out that before (in the pretest) treatment, most of the students were poor and fair graded in their written production of ideas. Students are facing several obstacles in creating and coordinating the project, arranging text, creating a clear present tense, lack of vocabulary, and the major issue is that they don't have a reasonable chance of learning the content that the teacher has provided. Furthermore, from the researchers' observation during the treatments on topics of writing that were provided with paired technologies (WhatsApp, Facebook-based writing instructional materials, and the video conference). Using WhatsApp is a perfect way to provide students with the knowledge and to correct the assignment of students, and video conferencing is a medium to have synchronous student meetings and conferences. The video conferences can be used to provide students with useful knowledge of lessons and assignments and to allow students to meet their teachers and classmates face-to-face. While Facebook is the most precise and accurate in conveying messages and will greatly assist students' understanding. With Facebook, the educator sends Facebook as students' basic knowledge in writing and students will better understand the material presented by the educator.

Students could improve their ability in developing ideas in paragraphs through paired technologies. Using paired technologies was very helpful to stimulate and motivate the students in developing their learning process and outcome. The methodology of treatment

plays an important part in improving the compositional abilities of students. It reveals that students have been able to write after giving treatment using paired technologies. Paired technologies offer an attractive and stimulating framework for writing practice. Since the students were taught by using paired technologies, their ability in English writing skills was rising significantly. This research found the students' improvement from fair to good. The students' mean score on the pre-test is 65.3 can prove this and mean score of the post-test is 78.05. The post-test score is higher than the pretest score. The t-test is higher than the T-table ( $6.04 > 2,093$ ). To sum it up, it is better to learn to write through paired technologies because it can significantly increase the students' writing skill outcome.

## Conclusion

It can be inferred that using paired technologies is beneficial to use in learning activities, based on the research results and discussion in this report; students were engaged in learning activities. The use of paired technologies is incredibly helpful for the student to learn the content. After the treatment, there was a significant change in student writing. The pre-test findings were found to be 65.30, which is lower than the overall post-test of 78.05. In fact, the T-table is less than the  $2.093 < 6.04$  t-test.

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