Project-based Learning Integrated Padlet and Motivation on Students' Writing Skill

Sofia Idawati Lubis[1*], Syafrina Prihartini[2] (iD)

[1,2] Pendidikan Bahasa Inggris, Universitas Al Washliyah, Medan, Indonesia

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ABSTRAK

Saat Salah satu strategi paling efektif dalam menghadapi tantangan era digital ini adalah dengan mengintegrasikan teknologi ke dalam Pembelajaran Berbasis Proyek (PjBL) di kelas bahasa Inggris. Inovasi dan kreativitas guru diharapkan dapat meningkatkan kompetensi siswa dalam berbahasa Inggris khususnya dalam menulis. Penelitian ini bertujuan untuk menganalisis pengaruh model pembelajaran proyek berbasis padlet terintegrasi dan motivasi terhadap keterampilan menulis siswa. Metode penelitian ini merupakan penelitian eksperimen post-test only dengan desain faktorial 2x2. Populasinya adalah siswa kelas VIII SMP. Sampel sebanyak 2 kelas dipilih menggunakan cluster random sampling dan dibagi menjadi dua kelompok; yaitu kelompok eksperimen dan kelompok kontrol. Instrumen yang digunakan adalah angket motivasi dan tes menulis. Data dianalisis dengan uji ANOVA dua arah dan uji Tuckey. Hasilnya membuktikan bahwa, pertama, terdapat perbedaan yang signifikan dalam kompetensi menulis siswa antara siswa yang diajar dengan Padlet terintegrasi PjBL dan siswa yang diajar secara konvensional. Kedua, terdapat pengaruh interaksional yang signifikan terhadap kompetensi menulis siswa antara model pembelajaran yang diterapkan dan motivasi siswa. Ketiga, terdapat perbedaan yang signifikan dalam kompetensi menulis siswa antara siswa yang memiliki motivasi tinggi ketika diajar dengan Padlet terintegrasi PjBL dan model konvensional. Keempat, terdapat perbedaan yang signifikan dalam kompetensi menulis siswa antara siswa yang memiliki motivasi rendah ketika diajar dengan Padlet terintegrasi PjBL dan model konvensional.

ABSTRACT

One of the most effective strategies in facing the challenges of this digital age is to integrate technology into Project-based Learning (PjBL) in English classrooms. Teacher innovation and creativity are expected to improve students' competence in English, especially in writing This study aims to analyze the effect of a project-based learning model integrated Padlet and motivation on students' writing skills. This research method is post-test-only experimental research with a 2x2 factorial design. The population is grade VIII students at junior high school. Samples of 2 classes were selected using cluster random sampling and divided into two groups; that is, the experimental group and the control group. The instruments used were motivation questionnaires and writing tests. Data were analyzed with a two-way ANOVA and Tuckey test. The results proved that, first, there was a significant difference in the students' writing competence between the students who were taught with PjBL-integrated Padlet and students who were taught conventionally. Second, there was a significant interactional effect on students' writing competence between the learning model applied and student motivation. Third, there was a significant difference in the students' writing competence between the students who had high motivation when they were taught with PjBL-integrated Padlet and the conventional model. Fourth, there was a significant difference in the students' writing competence between the students who had low motivation when they were taught with PjBL-integrated Padlet and the conventional model.

1. INTRODUCTION

In English language learning, there are four fundamental skills that must be mastered. The four language skills are speaking skills, reading skills, listening skills, and writing skills. Writing is a tough skill to perfect since it involves understanding structure, grammar, vocabulary, and writing style. In addition,

Corresponding author
*E-mail addresses: sofya.romianda@gmail.com (Sofia Idawati Lubis)

most students often have difficulty in coming up with ideas, choosing ideas to write about, outlining, compiling, revising, and editing their writing (Ruegg, 2018; Sidauruk et al., 2020). Students experience some problems when writing in English. First, writing skills. Students do not have sufficient vocabulary, grammar skills, and proficiency in constructing paragraphs. This problem is caused by the tendency of students who rarely use English in daily activities. Students find it difficult to develop ideas and construct English sentences because they are unfamiliar with the language. The second problem is student motivation. Motivation is the direction of behavior that makes a person want to repeat a certain behavior and vice versa (Ahmadi, 2017; Alizadeh, 2016). Student motivation is seen as an important factor in success in learning English. Because students are not proficient in writing, they become less motivated in writing. So, it has a negative impact on students' writing skills. Based on preliminary observations, students of SMP Al Washliyah 8 Medan, students find it difficult and lazy if given writing assignments by the teacher because students do not have ideas to write. Then the English teacher stated that the student's ability to write was very low. This is proved by students' low scores in writing. It can be caused by various factors, such as inappropriate learning strategies, models, or methods, low student motivation, low student ability, material used, and so on. Therefore, teachers must equip themselves with skills using various kinds of strategies, models, and learning methods that can help students in learning so that learning objectives are achieved.

Project-based learning (PjBL) is one of the important models or methods in learning to achieve learning objectives because it provides important 21st-century skills as learning innovations. Project-based learning (PjBL) emerged as an educational method that successfully answered the demands of students in learning foreign languages because PjBL emphasizes more on encouraging students to use their creativity (Duc Thuan, 2018; McMahan-Krepop, 2020). Student interest in learning increases because the material presented attracts students' attention so as to help students understand it and achieve learning objectives. Learning becomes more interactive and creative by integrating technology into learning. The use of technology in the learning process helps teachers collect, develop, and present information, assignments, and more (Antepli et al., 2019; Negara, 2019). In other words, Project-based learning (PjBL) is an important educational strategy that promotes creativity and increases student enthusiasm for learning foreign languages. It meets student demands by combining technology, which assists teachers in gathering, developing, and presenting knowledge, making learning more dynamic and creative.

One of the uses of technology in learning is using Padlet. This web 2.0 tool can be used to share information, images, audio, or video files on virtual walls. Padlet-based learning significantly increases student participation in classroom activities and easier understanding of the material (Megat et al., 2020; Rashid et al., 2019). Padlet motivates students to participate in classroom activities, reduces fear, promotes communication between students and instructors, and improves language accuracy through peer learning (Demirkan, 2019; Meletiadou, 2021). To put it another way, Padlet, a web 2.0 tool, improves learning by allowing users to share information, images, and videos on virtual walls. Through it peer learning is done. It encourages student participation, decreases fear, boosts communication, and improves language correctness.

Previous research proved that out of 40 prospective teacher students who received project-based learning treatment through videos and tourism-based video final projects, they experienced improved speaking skills (Hidayati et al., 2023). Furthermore, a quasi-experimental study obtained that 65 students experienced an increase in TOEFL scores after receiving project-based learning treatment (Syakur et al., 2020). Then, a case study found that students showed a positive attitude toward project-based learning and liked Wattpad as a learning medium in writing classes (Suharto & Maulidiyah, 2023). PjBL also significantly improves students' English proficiency. In addition, PjBL is able to increase students' interest, confidence, creativity, independent learning, and collaborative abilities. For teachers, this encourages teacher motivation and satisfaction in teaching (Astawa et al., 2017; Shin, 2018). Student motivation and self-efficacy also increase with the application of this PjBL in the classroom. Students' English skills also improved and showed a positive attitude towards the implementation of PjBL. Then students' critical thinking skills, independent learning, social and personal responsibility, and better communication skills (Essien, 2018; Ningzi et al., 2021; Rohmahwati, 2016). Furthermore, the vocabulary mastered by 28 pre-school students also increased and they were increasingly active in learning PjBL (Duman & Yavuz, 2018; Kimsesiz, 2017). Students also showed a positive attitude towards PjBL.

In relation to the previous research above, generally, these studies are carried out at the university level, and very few did it at the junior high level, this is a need to conduct this research at the junior high level as a study material and to explore the shortcomings of previous research. In addition, PjBL research that integrates technology is still very little, so the novelty of this study lie on necessary to conduct research at the junior high school level integrated with Padlet to improve students' writing skills. Students today are very interested in using technology to learn. They often focus more on learning media that incorporate technology. Using and creating with technology is necessary and produces good results for PjBL (Beckett &

Slater, 2018; Ravitz et al., 2012). The use of technology to complete student projects has improved students' ability to concentrate on new tasks. Therefore, this study was conducted to fill the gap of previous research, namely analyze the effect of project-based learning integrated Padlet and motivation on students' writing skills.

2. METHOD

This research is experimental research with a post-test-only control design (Danuri & Maisaroh, 2019). This research was conducted at SMP Al Washliyah 8 Medan. The study population consisted of junior high school students in grade VIII. Samples were taken by cluster random sampling technique, where 1 class was an experimental class and 1 class was a control class. The experimental class conducts learning with a project-based learning model integrated with Padlet, while the control class conducts learning with a conventional model. There are 3 three variables in this study, namely: 2 independent variables and 1 dependent variable. The first independent variable is PjBL(A) as the treatment variable. Treatment variables are classified into Padlet's integrated PjBL (A1) and conventional learning model (A2). Meanwhile, the second independent variable is student motivation in learning English (B) as a moderator variable. Moderator variables are also classified into high motivation and low motivation. The dependent variable is the student's writing competence (Y). Students' writing ability is measured by a writing test which is assessed from 5 components, namely: 1) content; 2) organizing; 3) vocabulary; 4) grammar; and 5) mechanism (Jacobs, 1981; Nasihah & Cahyono, 2017). Student motivation was measured by a motivation questionnaire consisting of 20 statements related to extrinsic motivation and intrinsic motivation. The range of questionnaire statement values is 1 to 5 for each statement. This research began with observation, and preparation of RPP, LKS, and research instruments. In the next stage, learning motivation questionnaires are distributed to students. Furthermore, the implementation of learning in class. Learning in experimental classes was carried out according to project-based learning integrated Padlet syntax. As for the control class, conventional learning was carried out. Both classes receive the same learning materials. The next stage was the provision of test posts, followed by analyzing the data. Data analysis was carried out with two types of statistical analysis, namely descriptive statistical analysis and inferential statistical analysis, with two-way ANOVA followed by the Tukey test. Preliminary tests were carried out before the analysis to check that the data obtained were normal and homogeneous.

3. RESULT AND DISCUSSION

Result

The results of the two-way ANOVA analysis can be seen in Table 1.

Table 1. Two-Way ANOVA for Writing Skills

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5187.363	3	1729.121	49.049	0.000
Intercept	314546.195	1	314546.195	8922.601	0.000
Model	1794.872	1	1794.872	50.914	0.000
Motivation	3375.824	1	3375.824	95.761	0.000
Model * Motivation	31.909	1	31.909	0.905	0.346
Error	1762.637	50	35.253		
Total	324350.000	54			
Corrected Total	6950.000	53			

Based on Table 1, it is obtained that the FA value is 50.914; (p<0.05). Thus, the null hypothesis (H$_0$) which states "There is no significant difference in students' writing skills between students taught using Project-based learning model integrated Padlet and students taught using conventional learning models" is rejected. In other words, H$_a$ is accepted.

Discussion

It can be concluded that there is a significant difference in students' writing skills between students taught using a project-based learning model with integrated Padlet and students taught conventionally. The writing ability of students taught using project-based learning models is higher than students taught using conventional learning models. This finding is in line with the findings that project-based learning has a

significant influence on students' writing skills (Alotaibi, 2020). The project-based learning model assists students in selecting projects based on their interests and needs, teachers model how to write recount text using the PjBL model, and projects assist students in reflecting on their learning using authentic assessments, resulting in students who are motivated, collaborative, and engaged in the learning process. These findings are supported by findings that state intellectual challenges and success, authenticity, teamwork, project management, and reflection identified during the implementation of project-based learning in the classroom (Zheng, 2022). The application of an integrated project-based learning model allows students to be actively involved in the learning process. The use of Padlet provides space for students to collaborate and share ideas so that students are more enthusiastic about writing. This finding is in line with previous findings stating that it is in line with the finding that Padlet motivates students in learning activities (Jong & Kim Hua, 2021; Meletiadou, 2021; Rashid et al., 2019). Padlet is excellent for use in classrooms even online because they allow students to produce meaningful activities as they are tasked with writing on their own or collaboratively. Students can engage in productive discourse with their peers by expressing comments and suggestions for improvement. Students also believe that they can improve their language skills while exploring materials and ideas, monitoring students' writing, and collaborating with each other.

The second finding about the effect of significant interaction on students' writing competence between the applied learning model and student motivation showed that the FAB score was .905 (p>0.05). This means the null hypothesis (H0) which states "There is no significant interaction effect on students' writing competence between applied learning models and student motivation" is accepted. From the outcome, it can be stated that students' writing ability, learning models, and learning motivation do not interact significantly. The third finding states that the F value is obtained 50.914 (p<0.05). The hypothesis of null (H0) which states that there is no difference in students' writing ability between the group taught with project-based learning model integrated Padlet and the group of students taught with a conventional learning model with a high level of motivation, is rejected. In other words, Ha is accepted. Considering a consequence, it can be claimed that that there is a significant difference in students' writing ability between highly motivated students who are taught with project-based learning model integrated Padlet and students who are taught with a conventional learning model. The application of Padlet's integrated project-based learning model can make students comfortable and enjoy their writing activities that allow them to be dynamic (Demirkan, 2019; Thaha Abdullateef, 2021). The students were given some guidance by using Padlet or instructions for their writing assignments. They are also allowed to create groups to discuss their problems before they create their own writing. The fourth finding states that the F value is obtained 95.761 (p<0.05). The hypothesis of null (H0) which states that there is no difference in students' writing ability between the group taught with project-based learning model integrated Padlet and the group of students taught with a conventional learning model with low levels of motivation, is rejected (Meletiadou, 2021; Rashid et al., 2019). To say it more simply, Ha is accepted. As a result, it can be argued that there is a significant difference in students' writing ability between students who have low motivation taught with project-based learning model integrated Padlet and students taught with conventional learning models.

Students who have high motivation and students who have low motivation have different characteristics. Intellectually, highly motivated students are very determined and strive to write as well as possible. This is certainly contrary to students who have low motivation. Students are passive in writing activities. The findings of this study suggest that using project-based learning model integrated Padlet is more effective than using a traditional learning approach. Project-based learning model integrated Padlet paradigm improves students' writing skills. This demonstrates that the traditional learning model, which is still used by teachers, should be reduced. Teachers should think about applying Project-based learning model integrated Padlet as an alternative learning model in teaching writing because this has been proven in learning.

4. CONCLUSION

Based on the results of the analysis and discussion, there are four conclusions obtained as answers to the four research problems posed. First, there is a significant difference in students' writing skills between students taught with Project-based learning integrated Padlet and students taught conventionally. Second, there is no significant interaction effect on students' writing skills between the applied learning model and student motivation. Third, there is a significant difference in students' writing skills between highly motivated students when taught with Project-based learning integrated Padlet and students taught conventionally. Fourth, there is a significant difference in students' writing skills between students who have low motivation when taught with Project-based learning integrated Padlet and students who were taught conventionally.

5. ACKNOWLEDGEMENT

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