PROMOTING CRITICAL THINKING AND WRITING SKILLS THROUGH PROBLEM-BASED LEARNING

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ABSTRACT

Writing is a crucial language skill that must be actively and consistently developed. This study used a brainstorming technique to improve student's writing skills through two cycles of learning activities using a classroom action research design. The primary data for this study were gathered by administering a questionnaire, post-tests, and pre-tests in an EFL classroom. Compared to the pre-test result, the results demonstrated that the student's writing skills had improved dramatically in the first and second learning cycles. As a result, using the brainstorming technique in writing classes is highly beneficial. According to this study, educators should consider implementing the brainstorming technique to help students become better writers.

Keywords: thinking skill, Problem-Based Learning, promoting

INTRODUCTION

One type of learning model that directs students to a problem must be solved through questions to provoke students to think. Problem-Based Learning (PBL) is a learning model that involves students to be more active in activities discovery so that students learn through a problem presented with the aim of training involved problem-solving skills students' mental activity to understand a learning concept (Mantra & Widiastuti, 2023).

Applying the Problem-based Learning model will explore students' critical thinking and creativity abilities because it uses real-world problems as a basis for students to learn to think critically, solve problems, and relate them to learning concepts (Widiastuti et al., 2023).

Information literacy is an ability that mobilizes someone to search, collect, evaluate, interpret, use, and effectively communicate information from various sources (Handayani et al., 2019). Information Literacy can be defined as behavior in the use of information by identifying various media information that can be used by the needs wisely and ethically in the life of society. So, literacy Information can be interpreted as behavior in using information to identify various information media that can be used by needs wisely and ethically in social life (Astawa et al., 2018).

In the information era we are experiencing now, it is easy to access undeniable information. Whatever happens, it will be accessed quickly, even within seconds, and from anywhere

worldwide. But this doesn't just have a good impact but has some dire consequences (Widiastuti et al., 2020).

One consequence of introducing television technology is that the nation has shifted from speech to viewing culture (Maba et al., 2023). Our nation needs more time to build its society and cultivate reading. This is where information literacy mainly lies as the basis of knowledge needed in the learning context in school. Information literacy makes students learn effectively independently and makes their work more helpful, especially in solving problems regarding their work.

Information literacy skills can be instilled from an early age. Suppose all schools implement information literacy in the learning process. In that case, teachers and students will likely have skills in accessing and processing information that is very valuable and can support the learning process. Besides, students will be able to implement their abilities in form writing and create quality written work (Mantra, 2021).

Literacy is an essential ability and has become a necessity for each person. Literacy is the process of reading, writing, speaking, listening, seeing, and thinking. Literacy requires a series of cognitive abilities, knowledge of written and spoken language, knowledge of genres, and cultural knowledge. Literacy is generally defined as the ability to read, write, and use spoken language (Cahyani et al., 2018).

Problem-based learning (PBL) is a learning model that presents real-world problems as a context for students to learn how to think critically, solve skills problems, and gain knowledge, ideas, and concepts essential for the concept of learning (Mantra et al., 2022).

Problem-based learning is an approach that focuses on students building their learning thinking independently and connecting it with information to be an intermediary for some problems related to the concept of learning (Hussin et al., 2018). This learning focuses students on building their thinking in an integrated and independent way, which links it to the use of information.

Problem-based learning can be interpreted as a learning method that can be used as a stimulus for students to learn how to learn and discuss in groups to find solutions to real-life problems (Lubis et al., 2022). Problem presentation is used to stimulate the curiosity of students before studying an object. Problem-based learning prepares students to think critically and find and use sources that are learning well and correctly.

Based on this, teachers need to plan learning to build students' potential in using their thinking abilities to solve the problem. One of these learning models is Problem-Based Learning. This learning model leads to problems presented by the teacher; then, students solve the problem by involving their' knowledge and skills from available sources and projects (Mantra et al., 2023)

RESEARCH METHOD

Classroom action research, or CAR as it is generally referred to, was used in this study. Research aimed at enhancing the learning process that teachers carry out is known as "classroom action research." Classroom action research is a valuable tool for problem-solving in the classroom and for providing teachers with in-service training that helps them adopt new techniques and sharpen their analytical abilities (Ary et al., 2018). Additionally, it fosters creative learning, enhances the exchange of ideas between educators and scientists, and offers a substitute for issues that crop up in the classroom (Cohen et al., 2018). The four stages of the CAR cycle are planning, action, observation, and reflection.

FINDINGS AND DISCUSSION

Writing is the most effective way to communicate concepts. A skilled writer with strong concept communication skills. It is reasonable that in industrialized nations, writing must be studied in schools from the primary to the tertiary levels. As such, there are a few fundamental standards that a competent writer must adhere to and grasp.

Students use writing to inform, notify, persuade, document, and influence. Someone adept at organizing ideas, thoughts, and arguments and clearly expressing them can effectively accomplish the objective and purpose of writing. Using logic, structure, language, punctuation, and spelling, all affect how transparent something is. Like other language talents, writing abilities necessitate a command of linguistic elements.

Table 1. The comparison between pre-test 1 and post-test 1

Test	Mean score	Differences
Pre-test	40.00	30.00
Post-test 1	70.00	

The information pertaining to the comparison between the pretest and post-test 1 can be summarized as follows.

Table 2. The comparison between post-test 1 and post-test 2

Test	Mean score	Differences
Pre-test	40.00	
Post-test 1	70.00	10.00
Post-test 2	80.00	

The average score on the pretest was 40.00, while 25 students scored higher. As a matter of fact, according to the pretest's criteria, most students needed help to answer every question correctly. Students in cycle I demonstrated enhanced writing abilities following the application of the brainstorming technique. The mean score difference between the pretest and post-test is 10.00, and the average score on the first post-test, which 25 students gave, was 70.00. Consequently, data showed that students' writing abilities had increased after using the brainstorming technique. Based on the necessary standards in the scoring section, most students could respond appropriately. It was discovered that the children could accurately respond to the spoken conversation questions.

Following the second post-test in cycle II, the students' mean score was 80.00. Post-test 2 results demonstrated a considerable improvement in the student's writing abilities. Compared to the pre-test and post-test 1, which had a mean score differential of 10.00, it is much improved. The results of Cycle II suggested that using the brainstorming technique could help the student's writing abilities.

Every student was able to provide grammatical and content-appropriate answers to the questions. Students were more engaged, animated, and appreciative of the teaching and learning process in the second cycle. Additionally, observations revealed that students seemed more severe and engaged in the teaching and learning process. The findings also demonstrated that every student met the predetermined success indicators before the study.

Researchers used questionnaires to get supporting data about students' opinions about using brainstorming to enhance writing abilities. According to the survey, the percentage of respondents who said they strongly disagreed, agreed, disagreed, and did not agree was 70%, 25%, 5%, 0%, and 0%, respectively.

Literacy is broadly defined by language skills, which include listening, speaking, reading, writing, and thinking, which are part of literacy. These language skills are related to content, culture, and the media, and the primary form of this literacy learning model is language skills, which consist of reading skills, writing skills, speaking skills, and listening skills.

Literacy is related to critical thinking. Critical thinking means something stages that are systematic and carried out consciously. The essence of critical thinking is that we can think and adjust our attitudes towards visual media on television, alluring advertising promises, rejecting or criticizing opinions by actors in the news, and revising bad ideas and thoughts. When engaging in critical thinking, one should be fully aware of ideas or behavior, evaluate it, and respond to it.

In education, information literacy skills are competencies that every student must have. Students will be taught one method for searching for information from various information sources, which is constantly developing. Because not a single human being today can follow various kinds of existing information. Literacy skills include reading, writing, thinking critically, speaking, and listening. In this case, writing ability is classified as the most complex among other literacy abilities. Writing activity is not just copying words and sentences but expressing and developing thoughts, ideas, and ideas in an orderly, logical, systematic, easy writing structure captured by the reader. Without realizing it, writing skills involve a person's ability to think critically.

CONCLUSION

The brainstorming approach is a teaching strategy that involves giving students an issue to solve to spark fresh ideas, thoughts, or group discussions. This study sought to determine whether using strategy may improve students' writing abilities. Two learning cycles, each with two learning sessions, were used to conduct this study. Planning, action, observation, and consideration were among each session's interconnected activities. First, the researchers conducted a preliminary reflection by giving the students a pre-test. The average student results showed that students' writing abilities considerably increased after using the brainstorming technique.

The questionnaire also demonstrated that students were more motivated to learn writing techniques after using the brainstorming technique. The four learning stages of the brainstorming technique are activation, reinforcement, application, and brainstorming. These stages are all very successful at encouraging students to participate actively in their education. According to this study, to help students become better writers, educators should consider

incorporating the brainstorming technique into all aspects of teaching and learning.

REFERENCES

Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2018). *Introduction to research in education*. Cengage Learning.

Astawa, I. N., Mantra, I. B. N., & Widiastuti, I. A. M. S. (2018). Communicative English Language Test : A Prospective Measuring Device For Tourism Practitioners ' Employability. *PROCEEDING The 9th International Conference of Rural Research and Planning Group (IC-RRPG)*, *9*(July), 219–230.

Cahyani, I. A. M., Mantra, I. B. N., & Wirastuti, I. G. A. P. (2018). Employing Picture Description to Assess the Students' Descriptive Paragraph Writing. *Soshum : Jurnal Sosial Dan Humaniora*, *8*(1), 86. https://doi.org/10.31940/soshum.v8i1.797

Cohen, L., Manion, L., & Morrison, K. (2018). Case studies. In *Research Methods in Education*. https://doi.org/10.4324/9781315456539-19

Handayani, N. D., Mantra, I. B. N., & Suwandi, I. N. (2019). Integrating collaborative learning in cyclic learning sessions to promote students' reading comprehension and critical thinking. *International Research Journal of Management, IT and Social Sciences*, *6*(5), 303–308. https://doi.org/10.21744/irjmis.v6n5.777

Hussin, W. N. T. W., Harun, J., & Shukor, N. A. (2018). Problem Based Learning to Enhance Students Critical Thinking Skill via Online Tools. *Asian Social Science*, *15*(1), 14. https://doi.org/10.5539/ass.v15n1p14

Lubis, S. P. W., Suryadarma, I. G. P., Paidi, P., & Yanto, B. E. (2022). The Effectiveness of Problem-based Learning with Local Wisdom oriented to Socio-Scientific Issues. *International Journal of Instruction*, *15*(2), 455–472. https://doi.org/10.29333/iji.2022.15225a

Maba, W., Bagus, I., Mantra, N., Ayu, I., Sri, M., Denpasar, U. M., & Info, A. (2023). *Teachers of 21 Century : Teachers ' Roles in*. *2*(6), 2405–2410.

Mantra, I. B. N., Handayani, N. D., & Pramawati, A. A. I. Y. (2022). Problem-Based Learning and Project-Based Learning Integration in Online Learning to Enhance Students' Critical and Creative Thinking Skills. *Jurnal Pendidikan Progresif*, *12*(1), 184–195.

Mantra, I. B. N., Handayani, N. D., Pramawati, A. A. I. Y., & Widiastuti, I. A. M. S. (2023). Brainstorming Combined With Project-Based Learning as an Effective Learning Strategy in Writing Classrooms. *Journal of Language Teaching and Research*, *14*(6), 1590–1596.

Mantra, I. B. N., & Widiastuti, I. A. M. S. (2023). Brainstorming, Exploring, Sharing, Transferring Knowledge (Best) As An Effective Strategy To Upraise Students'writing Skills. *Journal on Studies in English Language Teaching (JOSELT)*, *4*(1), 21–30.

Mantra, I. B. N., (2021). Blended Learning As a Future Learning Model To Enhance Students'Learning Competence. *Journal on Studies in English Language Teaching (JOSELT)*, *2*(2), 34–44.

Widiastuti, I. A. M. S., Mantra, I. B. N., & Sukoco, H. (2020). Mobile Internet-Based Learning To Cultivate Students'speaking Skill During Coronavirus Pandemic. *International Journal of Applied Science and Sustainable Development (IJASSD)*, *2*(1).

Widiastuti, I. A. M. S., Mantra, I. B. N., Utami, I. G. A. L. P., Sukanadi, N. L., & Susrawan, I. N. A. (2023). Implementing Problem-based Learning to Develop Students' Critical and Creative Thinking Skills. *JPI (Jurnal Pendidikan Indonesia)*, *12*(4).