

STUDENTS' PERCEPTIONS OF IMPLEMENTING PROBLEM-BASED LEARNING WITH BLENDED LEARNING IN EFL ACADEMIC READING

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Abstract: The study aimed at exploring students' perception of implementing problem-based learning with blended learning in EFL academic reading. Quantitative and qualitative data were gained by applying a questionnaire and semi-structured interviews. The study occurred at the English Education Program at Muhammadiyah University of Mataram. The respondents involved in this research were thirty-four English foreign language (EFL) students who are joining an academic reading course. The result showed that students have positive perceptions of the use of problem-based learning with blended learning in teaching EFL academic reading. At the same time, the respondents found barriers preventing them from utilizing problem-based learning in teaching EFL academic reading such as requiring sufficient time to complete a topic or find out the solution to a problem, needing additional fees to buy internet quota, and needing prior knowledge in applying problem-based learning. Finally, the finding gained from two types of instruments recommended that PBL with blended learning can be applied in EFL academic reading.

Keywords: *academic reading; blended learning; perception; problem-based learning.*

INTRODUCTION

Reading is one of the essential skills in learning English as a foreign language that connects the knowledge of previous readers (prior knowledge) with the information the author wants to convey in certain situations to build meaning (Ismail *et al.*, 2020). Meanwhile, according to Horn *et al.* (2021), reading is also defined as recognizing text and word symbols in the daily environment. Reading is also defined as a fundamental skill that students must possess to achieve academic success. With it, they can obtain information and increase their knowledge to fulfill their learning objectives (Hassan *et al.*, 2017). Reading has several types, one of which is academic reading.

Academic reading is critical reading (Groen *et al.*, 2020; Padagas & Hajan, 2020) of long texts to study certain subjects (Padagas & Hajan, 2020), which is considered an important ability for students because they are always required to read in order to complete the tasks given by educators (Liu & Read, 2020), and is also considered a job that students cannot avoid to achieve educational

success in higher education (Yulia *et al.*, 2020). Furthermore, Schwabe *et al.* (2022) state that academic reading is vital for many aspects of our daily lives. Academic reading is also considered an important skill (Liu & Read, 2020; Yulia *et al.*, 2020) in higher education because students are generally required to deal with various kinds of reading tasks (Liu & Read, 2020), which are unavoidable by students for successful study in higher education (Yulia *et al.*, 2020).

Academic reading problems in higher education are still often found in various types of researches (Monje & Macasieb, 2020), such as using a very formal vocabulary and having a high content complexity which can make it difficult for students to understand the reading text they are reading if they do not have adequate knowledge (Hartshorn *et al.*, 2017; Muñoz & Valenzuela, 2020). Another problem found is that many activities in academic reading learning emphasize the search for information in reading texts, whereas to get the benefits of reading is to implement critical reading as an essential skill for

college students (Groen *et al.*, 2020). Furthermore, Liu & Read (2020) found the problem in academic reading are comprehension in general, understanding implied meaning, understanding the main idea, local comprehension, integrating information within the text, reading speed, expeditious reading (e.g., skimming and searching), evaluating or critiquing information, integrating information from multiple texts, summarizing in one's own words, applying the knowledge to one's own writing, paraphrasing in one's own words, attention or focus, motivation or attitude toward reading, information retention, and amount of reading.

Many researchers have researched academic reading, including Singh (2019), who investigated the academic reading challenges faced by international English as a foreign language master's students at a Malaysian university. The finding indicates that the students faced difficulties regarding interpreting the text in English instructional settings. Padagas and Hajan (2020) researched the academic reading needs of undergraduate students. The finding states that students need to organize the literature items reviewed and synthesize general concepts to generate a new idea. Liu & Read (2020) surveyed general skills and challenges in university academic reading. They generally found that the academic reading challenges are the length or amount of reading material, a large amount of time spent on reading, the failure to finish reading within the time frame, loss of concentration or focus on reading, as well as demotivation for reading. The study is concentrated on teaching academic reading via problem-based learning to overcome the problems in academic reading learning.

PBL is a student-centered learning process that involves small groups and educators act as facilitators during the learning process to address real problems that are the focus and to provide incentives for students to learn (Nagarajan & Overton, 2019). In PBL, a problem is considered a problem situation (Shuhailo & Derkach, 2021). PBL is implemented in the learning process to solve real problems scientifically through a series of investigations to get any problem solving (Amin *et al.*, 2020). Problems occurring around students are used as a stimulus to start learning using the PBL model. By facing real problems, students become more enthusiastic about gathering information, investigating problems, and solving problems well (Amin *et al.*, 2020). PBL is also defined as a student-centered learning

model that encourages critical and creative thinking for real problem-solving (Kardoyo *et al.*, 2020). PBL is one of the learning strategies that can be chosen to enhance the quality of learning (Kardoyo *et al.*, 2020).

Table 1. *Stages of PBL*

Stages	Educator Activities
Stage 1 Delivering student orientation on the problem	Educators inform learning objectives, propose reading texts to raise problems, and motivate students to be involved in solving selected problems.
Stage 2 Organizing students to study	Educators assist students in defining and organizing tasks related to selected problems.
Stage 3 Guiding individual or group investigations	Educators encourage students to collect appropriate information and conduct experiments to obtain explanations for problem-solving.
Stage 4 Developing and presenting the work	Educators help students plan and prepare experimental results such as reports, videos, and models to be shared with others.
Stage 5 Analyzing and evaluating the problem solving process	Educators help students to reflect and evaluate the investigations and processes that have been carried out.

Many types of research data show that PBL can improve learning outcomes (Amin *et al.*, 2020; Kardoyo *et al.*, 2020; I. S. Sari *et al.*, 2021; Suhirman *et al.*, 2020; Suryanti & Nurhuda, 2021), enhance motivation in continue learning (Silva *et al.*, 2018), develop critical thinking (Saputro *et al.*, 2020; Silva *et al.*, 2018; Ulger, 2018), enrich creative thinking (Ulger, 2018 and Silva *et al.*, 2018), assist the students in taking the lead and becoming responsible for their learning process, enriching students' ability to improve independence as learners, provide an opportunity to work collaboratively under their direction, and encourage students to apply their background knowledge to make decisions with a focus on problem-solving (Silva *et al.*, 2018), become an affective complementary method because it can expose students to real problems (Tortorella & Cauchick-Miguel, 2018). PBL in this study was applied through blended learning.

Blended learning (BL) is a learning process that combines face-to-face learning with online learning by utilizing technology (Sun & Qiu, 2017). Supported by Heilporn *et al.* (Heilporn *et al.*, 2021) who points out that BL is a learning process that combines synchronous and asynchronous activities. While Lakhali *et al.* (2020) state that BL is a continuum of face-to-face and online learning. BL is also considered

very interesting because it has the potential to optimize student engagement in learning (Halverson & Graham, 2019; Manwaring *et al.*, 2017), and educators have a central role in facilitating interaction, providing support in the learning process, and designing learning (Boelens *et al.*, 2018). If blended learning is designed properly, it will affect learning outcomes. In the era of technological innovation, blended learning utilizes technology to create a learning environment that is more efficient, interesting, and student-centered (Yu & Du, 2019). Therefore, the research is focused on students' perception of PBL model with BL in EFL academic reading.

Perception is how students think or feel about the model applied in teaching and learning. Many researchers have investigated perception of problem-based learning, such as Abdalla and Eladl, (2019) performed research on student perception of the effect of problem familiarity on group discussion quality in a problem-based learning environment, Azeem *et al.* (2018) undertook a study about perception of problem-based learning in orthodontic medical education, Sari *et al.* (2018) about perception and career interest in a problem-based learning environment and student opinions, Kusmiati *et al.* (2021) about perception of problem-based learning on medical course, Victor-Ishikaku & Ukpai (2021) about perception on the challenges of utilizing problem-based learning in teaching computer science in public senior secondary schools in port harcourt metropolis, and Mpalanyi *et al.* (2020) about the perception of radiography students toward problem-based learning almost two decades after its indirection at Makerere University, Uganda.

This research aims to explore and identify the students' perception of implementing problem-based learning with blended learning in EFL academic reading.

METHOD

The Research design was utilized in this research is qualitative to analyze the data from the questionnaire and the exploratory qualitative method employed for interview data because the authors considered a suitable method to explore students' perceptions of the usage of PBL via blended learning in teaching and learning academic reading.

The research was carried out in the third semester of the English Education Program Muhammadiyah University of Mataram. The number of participants was 34 who were taken through disproportionate stratified random

sampling because the population is stratified and not proportional (Sugiyono, 2009).

The data was collected through questionnaires and interviews to identify students' responses after utilizing PBL via blended learning in academic reading. Before the writers distributed questionnaires and interviewed the participants, they joined the teaching and learning process for five weeks by applying PBL via blended learning. After completing the learning process, the 30 questionnaires are distributed to them. To strengthen the data obtained from the questionnaires, the researchers utilized the triangulation technique by distributing interview question instruments to the participants through direct questions to ten students who were used as samples in the interview.

The data analysis was undertaken statistically for data from the questionnaire instrument results to find an average score and the data from the interview was analyzed descriptively.

RESULTS AND DISCUSSION

The research explores students' perception of implementing problem-based learning with blended learning in EFL academic reading. In the result and discussion described the motivational variable, learning process variable, learning impact variable, and accompaniment impact variable.

Motivational variable

The result of a survey on students' perception of the usage model of PBL through blended learning showed that the majority of respondents agree that the model can motivate students to learn.

Table 2. *Motivational variable*

No	Statements	Score	Category
1.	This model increases learning motivation because students are directly involved in finding solutions in learning.	4.81	Strongly agree
2.	This model encourages students to collect information according to the problem.	4.4	Agree
3.	This model increases students' curiosity.	4.5	Agree

Table 2 shows that all statements in the motivational variable are strongly agree and agree. One category strongly agrees, namely this model increases learning motivation because

students are directly involved in finding solutions in learning (average score 4.81). Then two categories agree, namely this model encourages students to collect information according to the problem (average score 4.4) and this model increases students' curiosity (mean score 4.5).

The findings of students' perceptions on motivational variables revealed that the PBL model through blended learning could increase students' motivation in the EFL academic reading course. This is similar to Silva *et al.* (2018), who found that the PBL model can enhance students' motivation to learn. Furthermore, the students' agreeable response to the second statement of the motivational variable on the model encourages students to collect information according to the problem. This is congruent with the finding of Tortorella & Cauchick-Miguel (2018) and Amin *et al.* (2020), who revealed that PBL effective complementary method for learning, especially to gather literature, better learning experience to overcome actual problems, provide a more fertile environment to learn, and collect information to solve real problems. Then, the last statement about the model can increase students' curiosity, also responded with agree.

Learning process variable

Table 3. *Learning process variable*

No	Statements	Score	Category
1.	Emphasize student-centered learning.	4.7	Strongly Agree
2.	Lecturers act as facilitators in the learning process.	4.6	Strongly Agree
3.	Encourage students to interact directly with lecturers through discussion and question and answer.	4.2	Agree
4.	Encourage collaboration between students and between students and lecturers.	4.3	Agree
5.	Utilizing blended learning encourages students to complete the tasks given because they have sufficient opportunities to find solutions to the problems being discussed.	4.2	Agree
6.	This learning model directs students to understand the concept of academic reading.	4.1	Agree
7.	This learning model directs students to improve vocabulary mastery.	4.7	Strongly Agree
8.	This learning model directs students to improve critical reading skills.	4.2	Agree
9.	This learning model directs students to actively discuss about the topic being studied.	4.1	Agree

10.	This learning model prioritizes the value of the process in each assessment.	4.7	Strongly Agree
11.	Assignments are given according to the topic being studied.	4.6	Strongly Agree
12.	The time duration to complete the task is sufficient.	4.1	Agree

Table 3 shows the variables of the learning process, five statements strongly agree such as emphasizing student-centered learning (mean score 4.7), lecturers act as facilitators in the learning process (mean score 4.6), this learning model directs students to improve vocabulary mastery (mean score 4.7), the learning model prioritizes the value of the process in each assessment (mean score 4.7), and assignments are given according to the topic being studied (mean score 4.6). Whereas seven statements agree namely encourage students to interact directly with lecturers through discussion and question and answer (mean score 4.2), encourage collaboration between students and between students and lecturers (mean score 4.3), utilizing blended learning encourages students to complete the tasks given because they have sufficient opportunities to find solutions to the problems being discussed (mean score 4.2), this learning model directs students to understand the concept of academic reading (mean score 4.1), this learning model directs students to improve critical reading skills (mean score 4.2), this learning model directs students to actively discuss the topic being studied (mean score 4.1), and the time duration to complete the task is sufficient (mean score 4.1).

The finding of students' perception on variable learning process pointed out that respondents strongly agree with five statements, the first, learning process emphasizes students-center learning. This is in line with Nagarajan and Overton (2019), who put forward that student-center learning is the implementation of PBL which offer educators the opportunity to engage students in solving complex real-world problems. The second, an educator acts as a facilitator in teaching and learning process, to provide more opportunities for students, such as undertake investigation, have a discussion, and explore their opinion. The third, the learning model directs students to improve vocabulary mastery, because they are asked to read several reading texts that have been prepared to be applied in EFL academic reading learning process, the form of reading text used is argumentative text. The fourth, this learning model prioritizes the value of

the process in each assessment, and the fifth, assignments are given according to the topic being studied.

Whereas, respondents agree with seven statement agree namely encourage students to interact directly with lecturers through discussion and question and answer both face to face (offline) or online learning, encourage collaboration between students and between students and lecturers, by utilizing blended learning, it encourages students to complete the tasks given because they have sufficient opportunities to find solutions to the problems being discussed, this learning model directs students to understand the concept of academic reading, this learning model directs students to improve critical reading skills, this learning model directs students to actively discuss about the topic being studied, and the time duration to complete the task is sufficient.

Learning impact variable

Table 4. Learning impact variable

No	Statements	Scores	Category
1.	Improve students' understanding of academic reading concepts.	4.1	Agree
2.	Improve students' vocabulary mastery.	4.6	Strongly Agree
3.	This learning model can improve student learning outcomes.	4.1	Agree
4.	Improve students' critical reading skills.	4.2	Agree
5.	This model has been properly implemented in academic reading learning.	4.7	Strongly Agree
6.	Improve students' understanding of the PBL model steps.	4.8	Strongly Agree

Table 4 shows that three statements of learning impact variable strongly agree likes improving students' vocabulary mastery (mean score 4.6), this model has been properly implemented in academic reading learning (mean score 4.7), and Improve students' understanding of the PBL model steps (main score 4.8). Then, three statements were responded with agree, they improve students' understanding of academic reading concepts (mean score 4.1), this learning model can improve student learning outcomes (mean score 4.1), and improve students' critical reading skills (mean score 4.2).

The findings of students' perceptions of the learning impact variable confirm that academic reading learning using the PBL model via blended learning can improve students' vocabulary mastery, students' understanding of the steps of the PBL model, students' understanding of academic reading concepts, student learning

outcomes, and students' critical reading skills. These students' perception supported by many researchers, who have undertaken many investigations about PBL model (e.g. Ulger, 2018 and Silva *et al.*, 2018).

Accompaniment impact variable

Table 5. Accompaniment Impact variable

No	Statements	Scores	Category
1.	Learning is more interesting.	4.7	Strongly Agree
2.	Improve students' self-confidence by presenting the results of the investigation.	4.6	Strongly Agree
3.	Improve students' collaboration skills.	4.1	Agree
4.	Improve students' problem-solving skills.	4.3	Agree
5.	Improve students' critical thinking skills.	4.1	Agree
6.	Improve students' communication skills	4.2	Agree
7.	Improve students' leadership skills.	4.1	Agree
8.	Improve students' creativity skills.	4.1	Agree
9.	Improve the ability to use technology by utilizing the learning management system (LMS) in learning.	4.0	Agree
10.	Increase student tolerance to accept different opinions.	4.6	Strongly Agree

Table 5 shows that three statements of accompaniment impact variable strongly agree, such as learning more interesting (mean score 4.7), improving students' self-confidence by presenting the results of the investigation (mean score 4.6), and increasing student tolerance to accept different opinions (mean score 4.6). While seven statements were responded with agree. They are Improve students' collaboration skills (mean score 4.1), improve students' problem-solving skills (mean score 4.3), improving students' critical thinking skills (mean score 4.1), improve students' communication skills (mean score 4.2), improve students leadership skills (mean score 4.1), improve students' creativity skills (mean score 4.3), and improve the ability to use technology by utilizing the learning management system (LMS) in learning (mean score 4.3).

The finding of students' perception on accompaniment impact variable addresses that learning using the PBL model via blended learning in academic reading learning can make a positive contribution in increasing trust, students' tolerance for accepting different opinions, students' collaboration skills, students' problem solving skills, students' critical thinking skills,

student communication skills, student leadership skills, enhance student creativity, and ability to use technology because learning process undertaking via blended learning (e.g. Saputro *et al.*, 2020; Silva *et al.*, 2018; Ulger, 2018),.

The average score on each variable can be seen in figure 1 below.

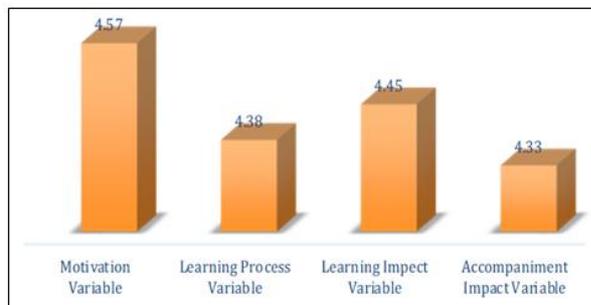


Figure 1. *The average score of each variable*

The average score of each questionnaire variable distributed to find out the data on student responses to the use of the PBL model through blended learning in academic reading learning can be shown that the motivation variable has an average score of 4.2, the learning process variable is 4.3, the learning effect variable is 4.2, and the accompanying impact variable 4.5.

The results of interviews with ten students asking six questions can be explained: (1) The students are motivated and more active to learn EFL academic reading by applying the PBL model because they are directly involved in providing solutions to real problems that are happening. (2) The PBL model can help students to understand academic reading material because they are asked to think critically and creatively not only to understand reading texts. (3) The PBL model through blended learning can help students comprehend deeply about EFL academic reading because they gain additional time to discuss the topic studied with friends. (4) The PBL model can track academic reading skills in each group because they are asked to present the solutions offered to problems in the topic being discussed. (5) The PBL model can make a positive contribution to learning outcomes because the assessment is not only carried out in the mid-semester and final semesters but also process assessments undertaken by both educators and group friends. (6) The students found barriers preventing them to use problem-based learning in teaching EFL academic reading such as requiring sufficient time to complete a topic or find out the solution to a problem, needing additional fees to buy internet quota, and needing prior knowledge in applying problem-based learning.

Regarding the interview result about students' perceptions pointed out that the PBL model via blended learning in EFL academic reading can make students more active and motivated to learn because they are directly involved to obtain many solutions to the problems discussed. This is in line with Silva *et al.* (2018), who put forward that PBL can improve students' motivation. Furthermore, the PBL model contributes positively to learning outcomes such as some of the results of research conducted by many researchers (e.g. Amin *et al.*, 2020; Kardoyo *et al.*, 2020; Sari *et al.*, 2021; Suhirman *et al.*, 2020; Suryanti & Nurhuda, 2021). Then, the TBL model can also enhance students' deep understanding, critical thinking, and creativity because they will gain additional time by learning via blending learning, investigating the problem by collecting information, and presenting the result of the solution who has gained.

CONCLUSION

The research finding showed that students have positive perceptions of the usage PBL model via blended learning in EFL academic reading courses in the motivational variable, learning process variable, learning impact variable, and accompaniment impact variable. The PBL model through blended learning can improve motivation, curiosity, EFL vocabulary mastery, and critical EFL reading because students are the center of learning and education as facilitators. The PBL model can also develop collaborative skills, problem-solving, critical thinking, creativity, and leadership by conducting investigations to find solutions to the problems to be solved. Whereas, the PBL can increase self-confidence, tolerance, and communication skills by presenting the results of an investigation. Furthermore, students will be able to utilize technology because the learning process is blended via a learning management system, namely Zoom Meeting, WhatsApp groups, and Google Classroom. PBL models through blended learning can be implemented in learning EFL academic reading courses and other subjects that aim to improve learning outcomes.

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