



Descriptive Analysis in Teachers' Perception in Teaching Reading With Problem-Based Learning

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ABSTRAK

Keterampilan membaca sangat penting untuk meningkatkan kebiasaan membaca siswa secara umum, terutama ketika membaca materi berbahasa Inggris. Namun siswa masih mengalami kesulitan dalam menguasai keterampilan membaca. Oleh karena itu, diperlukan metode pembelajaran yang tepat untuk meningkatkan kemampuan membaca siswa. Penelitian ini bertujuan untuk menganalisis persepsi guru dalam mengajar membaca dengan pembelajaran berbasis masalah dan tantangan yang dihadapi guru selama menerapkan pembelajaran berbasis masalah dalam pengajaran membaca di sekolah menengah pertama. Penelitian ini menggunakan penelitian deskriptif kualitatif dengan menggunakan dua metode: wawancara dan survei. Subyek penelitian ini adalah 3 orang guru SMP. Analisis data terdiri dari reduksi data, penyajian data, dan penarikan kesimpulan. Berdasarkan sesi survei dan wawancara, ditemukan bahwa persepsi guru terhadap penerapan pembelajaran berbasis masalah dalam pengajaran membaca memiliki tanda positif. Hal ini terlihat dari hasil kuisioner yang diberikan kepada ketiga guru bahasa Inggris. Dan tantangan-tantangan yang dihadapi guru selama penerapan pembelajaran berbasis masalah dalam pengajaran membaca antara lain terkait dengan topik yang tidak terlalu menarik bagi siswa, guru yang dominan dalam diskusi kelompok, dan kelompok yang disfungsiional.

ABSTRACT

Reading skills are essential to enhance students' reading habits generally, especially when reading English-language materials. However, students still have difficulties in mastering reading skills. Therefore, appropriate learning methods are needed to improve students' reading skills. This study intended to analyze the teachers' perception in teaching reading with problem-based learning and the challenges faced by the teacher during implementing of problem-based learning in teaching reading at junior high school. This research used qualitative descriptive research using two methods: interview and survey. The subjects of this study were 3 teachers in junior high school. Data analyze consist of data reduction, data display, and conclusion drawing. Based on survey and interview sessions, it was found that the teachers' perception of implementing of problem-based learning in teaching reading has positive sign. It is showed from the result of questionnaire given to the three English teacher. And for the challenges faced by the teacher during implementing of problem-based learning in teaching reading such as related to the topic that not too interesting for students, teacher who dominant the group discussion, and dysfunctional group.

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1. INTRODUCTION

Learning is an interaction between teachers and students. The learning process is a direct interaction between teachers and students to accomplish learning goals (Ibrahim-González & Noordin, 2012; Teppa et al., 2022). The achievement of English learning outcomes, which remain low at all levels of education, can be used to indicate students' low reading ability in English (Harris & Bacon, 2019; Susanto et al., 2020; Yuliana et al., 2022). In practice and during the learning process, there are still gaps in students' reading abilities that are far from perfect. Minimum expectations or limits for the KKM in English. The ability to read comprehension has been used as a competency that must be possessed from a higher level elementary to high school level (Colidiyah, 2018; Heru, 2018). Interaction and two-way learning between teachers and students are necessary to implement effective learning. A learning model that prioritizes or is oriented on students is where the evolution of the learning process in education is headed (Lampropoulos et al., 2019; Maamujav et al., 2019). This opinion states that teachers need to do something to increase student enthusiasm and willingness to learn. These steps include applying and utilizing learning methods that stimulate students' interest and encourage participation (Asria et al., 2021; Mee Mee et al., 2020). With the implementation of the 2013 curriculum, each academic unit affects applying a supportive learning model. As a result, teachers can utilize various learning strategies to assist in the implementation of the learning process in English-related courses (K. D. Pratiwi, 2016; Wibowo & Veronica, 2022).

The choice and use of appropriate and efficient learning techniques with the subject matter, such as reading material in teaching students English, will be a significant determinant of the quality of good learning. PBL, or problem-based learning, is one of the learning techniques that is frequently employed (Affandi & Sukyadi, 2016; Dawilai et al., 2021). Previous study state PBL techniques allow students to participate actively in their education and are student-centred (Setyorini et al., 2021). Teachers who want to control student-centred learning can use problem-based learning models. One of the activities to get students ready for the globalization era is the implementation of the 2013 curriculum. Because the scientific approach to learning, which encompasses problem-based, discovery, and project-based learning, is beneficial (Fatimah & Santiana, 2017; I. A. Pratiwi, 2018). These three approaches emphasize learning from one's experiences via observing, associating, inquiring, drawing conclusions, and communicating. English lessons and subjects are taught to fulfil learning goals from elementary school through college.

The four fundamental abilities that students need to acquire to learn English are (1) listening skills, (2) speaking skills, (3) writing skills, and (4) reading skills (Supina, 2018; Tanjung, 2018). Teachers must use suitable and efficient teaching strategies to an aspect that often experiences problems for students. Previous study shows from the program for international student assessment (PISA) data that the reading ability of Indonesian youth is ranked 64 with a score of 396 (Shanks et al., 2017). It indicates that reading skills are challenging relative to other skills. Having the capacity to read is a fundamental skill that might be challenging. Reading is a method of knowledge transfer or the act of knowledge transfer through reading. Therefore, it is essential to enhance students' reading habits generally, especially when reading English-language materials.

The same happened in the research target school, SMP Negeri 3 Negara. Based on preliminary observation, the researcher found cases in students reading skills. Based on several previous studies and cases found in target schools, researchers found things that could increase students reading skills. To fill this gap, the researcher conducting this study that intended to analyze teachers' perceptions of the implementation of problem-based learning in teaching reading.

2. METHOD

This research used descriptive qualitative as the design of this study, and it is because the researcher wanted to explore and describe the characteristics of a population or phenomenon based on a research question. Qualitative design as the study of a phenomenon and explicit knowledge of the phenomenon (Creswell, JW; Poth, 2017). This research design aimed to describe teachers' perception of implementing problem-based learning in teaching reading at SMP Negeri 3 Negara. The study was conducted in a junior high school which implemented problem-based learning. SMPN 3 Negara, located in Cendrawasih street, Pendem, Jembrana, was chosen because the teacher in SMPN3 Negara has experience implementing problem-based learning to teach reading. The subject of this research was the teacher in SMP Negeri 3 Negara. Three female teachers would be the subject of this research. One teacher has to experience teaching for about one year, and the others have experience in education for around eleven years. These three teachers have implemented problem-based learning to teach reading. The research object was the teachers' perception of implementing problem-based learning in teaching reading at SMP Negeri 3 Negara. The study was conducted in a junior high school which implemented problem-based learning. SMPN 3 Negara, located in Cendrawasih street, Pendem, Jembrana, was chosen because the teacher in SMPN3 Negara has experience implementing problem-based learning to teach reading.

The researcher uses two methods in this research and there are survey and interview. Data collection has done by survey and interviewing. Data reduction was made by summarizing, selecting the essential information, concentrating on what is most important, searching for themes and patterns. Data display was done by displaying the teachers' perception and challenges. Conclusion drawing was done by concluding the data (Miles et al., 2016).

3. RESULT AND DISCUSSION

Result

This research uses a data collection method in the form of a survey to obtain teacher perceptions regarding teaching reading with problem-based learning. The results of the survey are shown in Table 1.

Table 1. The Result of the Teachers' Perception

I can adapt my teaching method based on what students currently understand or do not understand by using problem-based learning in teaching reading				
No.	Alternative Answer	Frequency	Percentage	Result
1	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about "I can adapt my teaching based on what students currently understand or don't understand by using problem-based learning in reading learning"
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	
I used to understand students' misconceptions about problem-based learning in teaching reading				
No.	Alternative Answer	Frequency	Percentage	Result
2	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about "I am used to students' understanding and misconceptions about problem-based learning in reading learning"
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	
I know how to organize learning activities using problem-based learning especially in teaching reading				
No.	Alternative Answer	Frequency	Percentage	Result
3	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about "I know how to organize learning activities using problem-based learning especially in reading learning"
	Agree	2	66.70%	
	Doubt	-	-	
	Disagree	-	-	
	Strongly Disagree	-	-	
Total		N = 3	100%	
I know how to maintain management of reading learning with problem-based learning				
No.	Alternative Answer	Frequency	Percentage	Result
4	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about "I know how to maintain management of reading learning with problem-based learning."
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	
I can adapt my reading teaching style by using problem-based learning.				
No.	Alternative Answer	Frequency	Percentage	Result
5	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about "I can adapt my reading teaching style by using problem-based learning"
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	
I have sufficient knowledge of my subject matter when teaching reading with problem-based learning.				
No.	Alternative Answer	Frequency	Percentage	Result
6	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about "I have sufficient knowledge of my subject matter when teaching reading with problem-based learning"
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I have various ways and strategies to develop my understanding of teaching reading using problem-based learning

No.	Alternative Answer	Frequency	Percentage	Result
7	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I have various ways and strategies to develop my understanding of teaching reading using problem-based learning”.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I have sufficient knowledge about the structure of knowledge in teaching reading using problem-based learning

No.	Alternative Answer	Frequency	Percentage	Result
8	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I have sufficient knowledge about the structure of knowledge in teaching reading using problem-based learning”.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I know the concepts, facts, theories and procedures using problem-based learning in reading learning

No.	Alternative Answer	Frequency	Percentage	Result
9	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I know the concepts, facts, theories and procedures using problem-based learning in reading learning “.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I believe in the validity and reliability of problem-based learning in teaching reading.

No.	Alternative Answer	Frequency	Percentage	Result
10	Strongly Agree	2	66.70%	Based on the data above, it can be seen that the survey results show that two teachers or 66.70 % said strongly agree and one teacher or 33.30% said agree. This shows that all teachers agree with the statement about “I believe in the validity and reliability of problem-based learning in reading learning “.
	Agree	1	33.30%	
	Doubt	-	%	
	Disagree	-	%	
	Strongly Disagree	-	%	
Total		N = 3	100%	

I know how to choose an effective teaching approach to guide students' thinking and learning in teaching reading with problem-based learning

No.	Alternative Answer	Frequency	Percentage	Result
11	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I know how to choose an effective
	Agree	2	66.70%	
	Doubt	-	%	
	Disagree	-	%	
	Strongly Disagree	-	%	

Total	N = 3	100%	teaching approach to guide students' thinking and learning in reading learning with problem-based learning “
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I know the purpose and objectives of problem-based learning for reading learning.

No.	Alternative Answer	Frequency	Percentage	Result
12	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I know the purpose and objectives of problem-based learning for reading learning”
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I am able to manage my students' activities by using problem-based learning especially in reading learning

No.	Alternative Answer	Frequency	Percentage	Result
13	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I am able to manage my students' learning by using problem-based learning especially in reading learning”.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I have curricular knowledge (horizontal and vertical) in teaching reading using problem-based learning

No.	Alternative Answer	Frequency	Percentage	Result
14	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I have curricular knowledge (horizontal and vertical) in learning reading using problem-based learning”
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I know the appropriate learning strategy for learning reading using problem-based learning

No.	Alternative Answer	Frequency	Percentage	Result
15	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I know the appropriate learning strategy for learning reading using problem-based learning”.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I know students' prior knowledge about problem-based learning

No.	Alternative Answer	Frequency	Percentage	Result
16	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I know students' prior knowledge about problem-based learning”.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

I know how and what to assess in using problem-based learning for reading learning

No.	Alternative Answer	Frequency	Percentage	Result
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17	Strongly Agree	1	33.30%	Based on the data above, it can be seen that the survey results show that one teacher or 33.30 % said strongly agree and two teachers or 66.70% said agree. This shows that all teachers agree with the statement about “I know how and what to assess in using problem-based learning for reading learning”.
	Agree	2	66.70%	
	Doubt	-	-%	
	Disagree	-	-%	
	Strongly Disagree	-	-%	
Total		N = 3	100%	

After found the result of survey, this research also conducted interview to obtain teacher perceptions regarding teaching reading with problem-based learning. The results of the survey are shown in [Table 2](#).

Table 2. The Result of Interview

Question 1	Answer
How do you know the challenges of problem-based learning in teaching reading activities?	<p>Teacher 1: Basically, I know how to organize the reading activities using problem-based learning in classroom. But because pandemic and we have online class students become less interesting due to the connection problem and the phase of the learning activities. The students also feel less interactive because most of them feel it is hard to use the technology in teaching and learning activities.</p> <p>Teacher 2: Problem-based learning is a good teaching model for teaching reading. It helps students to increase their thinking skill by trying to answer the questions. But sometimes it is hard to choose the topic because in reality if students did not like the topic, they will lose their interest.</p> <p>Teacher 3: Problem-based learning give a good effect for the students but sometimes there are several classes which is passive during the learning process. And I as a teacher trying to warm up the atmosphere but turn into too dominant in the class.</p>
Question 2	Answer
How the teachers know the obstacles in adopting the theories and procedures for using problem-based learning in teaching reading?	<p>Teacher 1: In implementing the theories and procedures, I sometimes change during situation in the class. If students seem not interesting with the topic, so as a teacher I speak a lot at that time to attract the students in learning.</p> <p>Teacher 2: During the implementation, I found it is hard to design problem that makes students interesting.</p> <p>Teacher 3: In teaching reading with problem-based learning in a group it is quite hard. Students often bring new ideas that not suitable with the problem given by the teacher.</p>
Question 3	Answer
How the teachers know the obstacle in assessing reading using problem-based learning?	<p>Teacher 1: During group discussion it is quite hard because not all students active in discussion. That is become hard for the teacher in assessing students especially who work in a group.</p> <p>Teacher 2: We assess the way students solve the problem. But is quite hard because sometimes students are not focus with the problem given, their often talk different issue during discussion section.</p> <p>Teacher 3: Yes, but sometimes it is hard to assess because in a group there are students who not active and let their friend to solve the problem.</p>

Discussion

The first dimension in the questionnaire is Pedagogical Knowledge (PK). It is about the teacher's knowledge of teaching and learning processes. It involved practice and method in the teaching and learning process. This dimension included goals, values, objectives of education including understanding of students learning styles, management skills, class, lesson planning, and evaluation can be applied to a more specific field (Le & Pham, 2023; Tien, 2018). Therefore, this dimension is related to the teachers' strategy and style in the teaching and learning process. Base on previous study there were five statements stated in the first dimension. All reports indicated teachers' methods of applying problem-based learning in teaching reading (Taşçı & Turan, 2021). Based on the result of descriptive analysis means that from pedagogy knowledge of teachers in terms of implementation of problem-based learning in teaching reading indicates a positive sign.

The second dimension was content knowledge which is about teachers' understanding of the subject matter. It includes understanding concepts, theories, evidence, and organizational frameworks in a particular subject matter (Gondwe & Longnecker, 2015; Paidican & Arredondo, 2022). It also covers the best practices and

defined approach for communicating information to students. The decision of content knowledge on discipline and class level. The statements of this dimension were five were related to teacher's knowledge about concept and theory of subject matter. Based on the result of descriptive analysis it was found that teachers' perception toward content knowledge can be categorized as positive perception. It indicates a positive sign that teacher have understood the knowledge of subject matter. It also showed that the teachers have already known the theory as well in designing teaching and learning activity. As state by previous study that the most of teachers as respondents here have a good competency (Paidican & Arredondo, 2022).

The third dimension was Pedagogical Content Knowledge (PCK). According to previous study Pedagogical Content Knowledge (PCK) involves teachers' knowledge of the main areas of teaching and learning which includes curriculum development, student assessment, and outcome communication (Handini & Mustofa, 2022). And it focuses on between the relationship of pedagogy and supporting practices. In this dimension there are seven statements and based on the result of descriptive analysis it was found that teacher pedagogical content knowledge is high. It also indicates that teachers have understood about how to design and deliver language lesson and assess students' performance. It also can be said if teachers know how to design teaching and learning process as good as assessing students' performance during the learning process.

From that, the researcher can explain if this current study which explains teachers' perception of the implementation of problem-based learning in teaching reading, has a positive response from the teacher. The teacher agrees with using PBL in teaching reading based on their experience. These are related to previous study, which explains three factors that affect perception: the perceiver (Mamanazarov, 2021). The perceiver is a subject of study whose behavior can affect perception, and behavior can be seen from several aspects such as attitudes, motives, interests, experiences, and expectations.

From those results, the researcher can conclude that the challenges that faced by the teachers were related to the topic that not too interesting for students, teacher who dominant the group discussion, and dysfunctional group. These challenges are related to previous study who explained about the challenges faced by practical during implementation problem-based learning (Young et al., 2018). The first challenge that teacher faced by the result of interview is about the students who were not interesting with the topic related to the topic that are too well-structured, too close ended and too simple, so the students feel not really enthusiastic to the problem. To solve the problem, the teacher would need to build more challenging, realistic, open, and unstructured challenges that were in line with the students' past knowledge to encourage constructive and contextual learning. The students must also be exposed to a variety of challenges as they learn to recognize the important aspects of new information, analyse it critically, and modify their minds when appropriate (Afferbach & Turner, 2018; Badrinathan, 2015).

And for the last challenge which is about dysfunctional group, as explain with, how to solve this challenge is by teacher should examine the functioning of their tutorial groups on a regular basis in order to improve tutorial group functioning and encourage students to engage in collaborative learning. Teacher should also learn how to deal with issues related to group dynamics. If the tasks are more complicated and ill-structured, and there is constructive friction between student and tutor advice, there is a larger possibility that group interactions will improve student learning and the collaborative learning process. Furthermore, learning and assessment should be better integrated, which necessitates the use of assessment tools that are consistent with the above-mentioned learning principles. This means that more authentic evaluation, self-assessment, peer-assessment, group assessment, and professional behaviour assessment are required.

4. CONCLUSION

In conclusion, designing a learning environment that encourages students to engage in constructive, independent, collaborative, and contextual learning, as well as consistency or alignment between all aspects of the curriculum, such as the problems used, tutor guidance, and assessments used, are critical to successful PBL implementation. After the data was analysed based on the study results, it can be concluded that teachers' perception of implementing problem-based learning in teaching reading has a positive sign. Based on the interview result, there are three challenges teachers face during the implementation of problem-based learning in teaching reading. There are too well structured problems, too directive teachers, and dysfunctional groups.

5. REFERENCES

- Affandi, A., & Sukyadi, D. (2016). Project-Based Learning and Problem-Based Learning for EFL Students' Writing Achievement at the Tertiary Level. *Rangsit Journal of Educational Studies*, 3(1), 23–40. <https://doi.org/10.14456/rjes.2016.2>.
- Afferbach, P., & Turner, J. D. (2018). *The promise and challenge of language art assessments in twenty-first century classrooms*. NY: Routledge.

- Asria, L., Sari, D. R., Ngaini, S. A., Muyasaroh, U., & Rahmawati, F. (2021). Analisis Antusiasme Siswa Dalam Evaluasi Belajar Menggunakan Platform Quizizz. *Alifmatika: Jurnal Pendidikan Dan Pembelajaran Matematika*, 3(1), 1–17. <https://doi.org/10.35316/alifmatika.2021.v3i1.1-17>.
- Badrinathan, V. (2015). Self-assessment and Learner Autonomy: Challenges in Foreign Language Teaching in India. *Third 21st CAF Conference at Harvard*, 6(1), 66–73. https://www.21caf.org/uploads/1/3/5/2/13527682/6_badrinathan.pdf.
- Colidiyah, A. (2018). The Use of Pop-Up Book To Improve English Skill At Sd Negeri 2 Gading Kulon Dau. *A Journal of Culture English Language Teaching Literature & Linguistics*, 3(1), 94. <https://doi.org/10.22219/celticumm.vol3.no1.94-104>.
- Creswell, JW; Poth, C. (2017). *Qualitative Inquiry & Research Design: Choosing among Five Approaches* (4th ed.). Sage Publications.
- Dawilai, S., Kamyod, C., & Prasad, R. (2021). Effectiveness Comparison of the Traditional Problem-Based Learning and the Proposed Problem-Based Blended Learning in Creative Writing: A Case Study in Thailand. *Wireless Personal Communications*, 118(3), 1853–1867. <https://doi.org/10.1007/s11277-019-06638-x>.
- Fatimah, A. S., & Santiana, S. (2017). Teaching in 21St Century: Students-Teachers' Perceptions of Technology Use in the Classroom. *Script Journal: Journal of Linguistic and English Teaching*, 2(2), 125. <https://doi.org/10.24903/sj.v2i2.132>.
- Gondwe, M., & Longnecker, N. (2015). Scientific and Cultural Knowledge in Intercultural Science Education: Student Perceptions of Common Ground. *Research in Science Education*, 45(1), 117–147. <https://doi.org/10.1007/s11165-014-9416-z>.
- Handini, O., & Mustofa, M. (2022). Application of TPACK in 21st Century Learning. *International Journal of Community Service Learning*, 6(4), 530–537. <https://doi.org/10.23887/ijcsl.v6i4.54620>.
- Harris, N., & Bacon, C. E. W. (2019). Developing Cognitive Skills Through Active Learning: A Systematic Review of Health Care Professions. *Athletic Training Education Journal*, 14(2). <https://doi.org/10.4085/1402135>.
- Heru. (2018). Pengembangan Multimedia Game Pembelajaran Matematika SMP. *JMEN (Jurnal Math Educator Nusantara)*, 4(1), 1–14. <https://doi.org/10.29407/jmen.v4i01.12003>.
- Ibrahim-González, N., & Noordin, N. (2012). Learner Autonomy via Self-Assessment in Consecutive Interpreting for Novice Learners in a Non-Interpreting Environment. *Sino-US English Teaching*, 9(4), 1065–1073. <https://www.researchgate.net/profile/Noraini-Ibrahim-Gonzalez/publication/309193469>.
- Lampropoulos, G., Siakas, K., & Anastasiadis, T. (2019). Internet of Things in the Context of Industry 4.0: An Overview. *International Journal of Entrepreneurial Knowledge*, 7(1), 4–19. <https://doi.org/10.2478/ijek-2019-0001>.
- Le, T.-T., & Pham, T.-T. (2023). Uncovering the Expectations of English as a Foreign Language Students: Key to Improving Teacher Expertise and Technological Pedagogical Content Knowledge Mastery. *Journal of Contemporary Language Research*, 2(2), 84–92. <https://doi.org/10.58803/jclr.v2i2.70>.
- Maamuujav, U., Krishnan, J., & Collins, P. (2019). The utility of infographics in L2 writing classes: A practical strategy to scaffold writing development. *TESOL Journal*, September. <https://doi.org/10.1002/tesj.484>.
- Mamanazarov, A. (2021). Economic Culture of Students' Communication in Market Conditions. *SHS Web of Conferences*, 100, 02011. <https://doi.org/10.1051/shsconf/202110002011>.
- Mee Mee, R. W., Shahdan, T. S. T., Ismail, M. R., Abd Ghani, K., Pek, L. S., Von, W. Y., Woo, A., & Rao, Y. S. (2020). Role of gamification in classroom teaching: Pre-service teachers' view. *International Journal of Evaluation and Research in Education*, 9(3), 684–690. <https://doi.org/10.11591/ijere.v9i3.20622>.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2016). Qualitative Data Analysis A Methods Sourcebook Edition 3. In *SAGE Journal* (Vol. 30, Issue 25).
- Paidican, M. A., & Arredondo, P. A. (2022). The Technological-Pedagogical Knowledge for In-Service Teachers in Primary Education: A Systematic Literature Review. *Contemporary Educational Technology*, 14(3), 1–15. <https://doi.org/10.30935/cedtech/11813>.
- Pratiwi, I. A. (2018). The challenges faced by EFL teachers in integrating character education in English subject. *Lingua, Jurnal Bahasa & Sastra*, 19(1), 58–64. <https://ejournal.unsri.ac.id/index.php/lingua/article/view/11036>.
- Pratiwi, K. D. (2016). Students' difficulties in writing English : A study at the third semester students of English education program At University of Bengkulu. *E Journal Universitas Bengkulu*, 1(2), 1–13. <https://doi.org/10.29300/ling.v3i1.106>
- Setyorini, R. A., Permanasari, A., & Ardianto, D. (2021). Problem-Based Learning with Science, Technology, Engineering, and Mathematics (STEM) Approach to Improve Critical Thinking Skills and Conceptual Understanding of Junior High School Students. *Journal of Science Education and Practice*, 5(2), 54–78. <https://doi.org/10.33751/jsep.v5i2.5699>.

- Shanks, J. D., Izumi, B., Sun, C., Martin, A., & Shanks, C. B. (2017). Teaching undergraduate students to visualize and communicate Public Health data with infographics. *Frontiers in Public Health*, 5(NOV), 1–6. <https://doi.org/10.3389/fpubh.2017.00315>.
- Supina, S. (2018). Four Basic Skills Proficiency Based on Students' Perception in Hospitality & Tourism Study Program, Bunda Mulia University. *Journal of English Language and Culture*, 8(2). <https://doi.org/10.30813/jelc.v8i2.1097>.
- Susanto, A., Malik, A., & Mitrayati. (2020). The challenges of learning English as a foreign language among undergraduate students. *Inovish Journal*, 5(1), 1–11. <https://doi.org/10.35314/inovish.v5i1.1341>.
- Tanjung, F. Z. (2018). Language learning strategies in English as a foreign language classroom in Indonesian higher education context. *LLT Journal: A Journal on Language and Language Teaching*, 21(Suppl), 50–68. <https://doi.org/10.24071/lt.v21isuppl.966>.
- Taşçı, S., & Turan, Ü. D. (2021). The Contribution of Lexical Breadth, Lexical Depth, and Syntactic Knowledge to L2 Reading Comprehension Across Different L2 Reading Proficiency Groups. *English Teaching and Learning*, 45(2), 145–165. <https://doi.org/10.1007/s42321-020-00065-z>.
- Teppa, R., Rorimpandey, R., & Posumah, J. (2022). Improving students' listening skills by using songs' lyrics in a study conducted at SMAN 1 Melonguane. *JoTELL: Journal of Teaching English, Linguistics, and Literature*, 1(2), 244–260. <https://doi.org/10.2801/jotell.v1i2.3428>.
- Tien, C.-Y. (2018). English speaking anxiety in EFL university classrooms in Taiwan. *European Journal of English Language Teaching*, 4(2), 21–33. <https://doi.org/10.5281/zenodo.1473161>.
- Wibowo, T., & Veronica, J. (2022). IT Curriculum for Boot Camp : An Iterative Development In Applying OBE In Computer Science Education for Non-Formal. *Journal of Education Technology*, 6(4), 598–606. <https://ejournal.undiksha.ac.id/index.php/JET/article/download/51343/24581/155984>.
- Young, T., Hazarika, D., Poria, S., & Cambria, E. (2018). Recent trends in deep learning based natural language processing. *Ieee Computational Intelligence Magazine*, 13(3), 55–75. <https://doi.org/10.1109/MCI.2018.2840738>.
- Yuliana, N., Purwati, N., & Hanapi, H. (2022). Improving student's logical thinking abilities and learning outcomes through guided inquiry model. *Prisma Sains: Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 10(2), 345–351. <https://doi.org/10.33394/j-ps.v10i2.4822>.