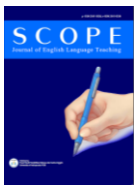
SCOPE
Journal of English Language Teaching
| p-ISSN 2541-0326 | e-ISSN 2541-0334 |
https://journal.lppmunindra.ac.id/index.php/SCOPE/



Research Article

Enhancing Reading Abilities: Analysis of Blended Project Based Learning by Integrating Instagram and Google Classroom

Rendhi Fatrisna Yuniar[1], Muhammad Khatami[2], Shofwatut Tarbiyah[3], Yumnaa Taqiyatul Nabillah[4]

[1,2,3,4] *UIN Maulana Malik Ibrahim Malang, Indonesia*

KEYWORDS

Reading;
Blended Learning;
Project-Based Learning;
Instagram;
Google Classroom

CORRESPONDING AUTHOR(S):

E-mail: rendhyfatrisna@tbi.uin-malang.ac.id*

A B S T R A C T

In this era, education in Indonesia tends to be low compared to other countries. One of the causes of the lack of advancement of education in our country is the need for more interest in reading or literacy in students both from elementary school level to university students. This study investigates the effectiveness of Blended Project-Based Learning through the integration of Instagram and Google Classroom, employing a quasi-experimental design. The primary objective was to assess whether the Blended PBL approach leads to greater improvements in students' reading skills compared to traditional instructional methods. The research was conducted with 50 second-semester English Education Department students at UIN Malang. This study involved two groups: an experimental group that engaged in Blended PBL and a control group that followed conventional teaching practices. Reading proficiency was measured using pre-test and post-test assessments. The data analysis conducted was normality test, homogeneity, and independent sample t-test. The findings indicate a significant improvement in the reading skills of students in the experimental group, as opposed to those in the control group. These results suggest that integrating social media platforms, such as Instagram, alongside digital learning environments like Google Classroom, within a Blended Project-Based Learning framework, can substantially enhance reading comprehension in higher education contexts.

INTRODUCTION

In this era, education in Indonesia can be considered low compared to other countries. One of the causes of the lack of advancement of education in our country is the lack of interest in reading or literacy in students from elementary school to university students. According to Kesuma et al. (2022), reading is the main foundation in all aspects of learning activities in education. As Harianto (2020) states, reading is a thinking process that includes understanding, telling, and interpreting the meaning of written symbols, involving vision, eye movements, inner speech, and memory. Reading skills have many significant benefits for students' academic and personal development. Good reading skills can improve text comprehension, expand vocabulary, and improve analytical skills, according to Anderson (2003). This is in line with research made by Grabe & Stoller (2019), which states that reading skills help students gain new knowledge and understand complex

DOI: http://dx.doi.org/10.30998/scope.v9i2.25997
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concepts. In addition, research conducted by Snow (2002) found that students who have good reading skills tend to achieve better academic results because they have easier access to and understanding of subject matter.

In the realm of reading skills, it is necessary to filter information so that readers are not easily deceived by information. This is called critical thinking. In accordance with the statement of Anisa et al., (2021), one of the challenges in the realm of education in our country is faced with the low level of students' critical thinking skills in reading and learning activities at school. Critical thinking is a skill that can be honed by solving problems that need to be faced, one example being making decisions. In education, it can be honed by doing tasks that are based on reasoning and answering questions that are based on problem-solving. Such tasks are often found in project-based learning (PjBL). Anazifa and Djukri (2017) stated that PjBL instruction can influence students' innovative learning activities and skills.

PjBL is a teaching method that engages students in interdisciplinary projects that require real-world problem solving (Krajcik & Shin, 2014). (Almulla, 2020) define PjBL as an educational approach in which project-based activities require students to spend significant time designing, solving difficulties, making decisions, or conducting investigative work that results in a final product or presentation. PjBL can help students be more creative in working on their projects while improving their critical thinking and problem-solving skills. Brundiers & Wiek (2013) found that PjBL can help students develop important skills such as critical thinking, problem solving, communication, and collaboration. However, they also noted that PjBL can be challenging for both students and lecturers, as it requires a significant investment of time and effort.

The projects given are technology-based because the current generation is well-known for technology development and has smartphones. According to Puspitarini (2022), almost all activities can be done by students using technology-based media. It starts with reading, digging up information, listening to music, looking for answers to assignments, and presenting their creativity through smartphone devices. This also makes teachers have to innovate when giving assignments and carrying out the learning process. This is commonly referred to as blended learning. Blended learning is a learning model that suits the characteristics of 21st-century learners (Puspitarini, 2022). According to Nugraha (2020) blended learning is a modern learning method that utilizes electronic technology and the internet as the main source of learning. Although face-to-face learning is still the best education method, online learning also helps both students and teachers in terms of easy access to materials and time flexibility.

Blended learning combined with PjBL can also increase students' activeness in learning independently and develop creative thinking. Referring to the research of Wu and Wu (2020), PjBL combined with blended learning can improve critical and creative thinking skills. The benefits of blended learning integrated with various learning models such as PjBL, should continue to be explored using critical thinking skills, creativity, and learning motivation characteristics (Rahardjanto et al., 2019).

Nowadays, teachers must seek innovative learning strategies and media to continuously develop the potential effectiveness of the learning process so as to increase students' interest in learning. Budianto (2023) stated that learning models that require students to take responsibility for their activities, learn actively and independently, and communicate well with classmates should be integrated to maximize blended learning. Apart from the learning methods in blended learning that can be integrated with PjBL, the media and tasks in learning are also very influential in the success of producing an effective learning model.

According to Winasih et al. (2019), students can learn to use technology meaningfully and successfully when they can express their ideas and thoughts clearly and effectively across multiple contexts and purposes. By using intuitive media, such as Instagram and Google Classroom, blended learning integrated with PjBL can produce more effective, efficient, and interesting learning patterns for students.

Instagram as a social media platform that is popular among students, can be utilized as an interesting and interactive learning media. Various features and educational accounts on Instagram can be used as learning references and information sources for learning activities. According to Nurhakiki et al. (2024), Instagram is indicated as a very promising tool to be used in language learning. Wijaya & Rismawati (2023) stated that Instagram can increase student involvement in the learning process. Integrating Instagram through trusted news accounts such as CNN (instagram.com/cnn) and BBC (instagram.com/bbcnews) offer a variety of readings that can be used as sources of reading learning in the classroom. This will increase students' interest in reading and learning along with the integration of blended learning methods and media with PjBL.

Meanwhile, Google Classroom offers various features that support digital classroom management and facilitate collaboration and interaction between students and teachers. Google Classroom is very helpful for students in

 DOI: http://dx.doi.org/10.30998/scope.v9i2.25997

doing assignments with flexible access time (Susanti et al, 2021; Yulia, 2022) because of its features and benefits such as active participation in online class activities, ease in submitting assignments online, ease in accessing reference materials, and improved student performance due to online activities and discussions.

The integration of these two platforms in PjBL learning can provide opportunities to improve students' reading skills through the interpretation of news headlines, which is an important part of information literacy. This helps students to better remember theoretical materials and overcome problems they may face in learning. Thinking critically, creatively and innovatively by applying Blended Project Based Learning is a way to solve complex problems. It starts with a real problem and involves multiple answers from a variety of potential answers which is often referred to as divergent thinking.

Previous studies show that the use of PjBL can help students in improving students' creative thinking and critical thinking (Anazifa & Djukri, 2017; Bertoncelli et al., 2016; Diana et al., 2021). However, not much research has been done on how blended project-based learning can affect students' reading ability. Based on previous research, the current study fills the gap by using blended project-based learning to address different levels of creative thinking in reading instruction.

METHOD

Design

This study adopted a quantitative approach using a quasi-experimental research design to test the effect of independent variables on the dependent variable. This design allows researchers to test the effect of treatment by controlling several variables, although it does not completely eliminate the potential influence of external variables that can affect experimental results (Sugiyono, 2013). Campbell et al., (1963) explain that quasi-experimental designs often involve the use of control groups, but not with full randomization, which allows researchers to choose a design that suits the research objectives and characteristics of the subject. The use of experimental design makes it possible to establish an experimental group that receives learning using the Blended Project-Based Learning method, while the control group receives conventional reading learning. These two groups will be measured using a pre-test before treatment and a post-test after treatment to assess the difference in their reading ability (Creswell, 2014).

Subject

This study was conducted on English Education Department students in semester 2 of the 2023/2024 academic year at UIN Maulana Malik Ibrahim Malang. In this study, researchers collaborated with lecturers to provide assistance in providing treatment to students in the experimental class. The sample in this study was 50 students of which 25 students came from Ak class and 25 students from Bk class. In an effort to take the population, the researcher conducted a detailed study of all second semester students and found that Ak and BK classes had the average Reading scores that were closest to each other. Therefore, these two classes were chosen as the population representation in this study.

Data Collection Technique

The data collection techniques in this study were pre-test and post-test. This pre-test is a written test that aims to measure students' ability to express ideas clearly and define a thesis. The post-test was given on the sixth meeting after the lecturer conducted the treatment. The purpose of the post-test is to assess whether the treatment is effective or not in improving students' reading skills. Therefore, the tests used for the pre-test and post-test were the same.

In addition, project assignments were also given to collect data in this study. The assignments were carried out in stages, starting from news headline analysis and presentation, news headline analysis task, collaboration and feedback task, integration and presentation task, and reflection task. The assignment of this task aims to collect data after the pre-test and determine the effectiveness of the treatment in the experimental group when compared to the control group who did not get treatment.

Data Analysis Technique

In this study, the data analysis carried out was normality test, homogeneity, and independent sample t-test. Normality test aims to ensure that the data used in statistical analysis meets the assumptions of normal distribution. The homogeneity test is used to determine whether there is a significant difference in the variance of skill data between the experimental class and the control class. Furthermore, independent sample t-test analysis was used to test the hypothesis, by comparing the means of two independent sample groups. If the p-value is greater than 0.05, the null hypothesis is accepted, but if the p-value is smaller than 0.05, the null hypothesis is rejected, indicating that there is a significant difference between the means of the two populations. Determine whether there is a significant difference between the means of two populations by comparing the means of their respective samples. The assessment process in this study was conducted using IBM SPSS 25.

RESULTS AND DISCUSSION

This section presents results from a quasi-experimental study on the effectiveness of Blended Project Based Learning integrated with Instagram in improving students' reading skills. The study involved second semester students majoring in English Education Department and examined how the combination of blended project-based learning and social media platforms, particularly Instagram, can affect students' engagement and learning outcomes. Data was analyzed through comparison of pre-test and post-test results, along with observation of student participation during the learning process. The following discussion highlights the main results obtained from this study, its implications, and how it relates to previous research in the field.

1. Pre-test and Post-test

The pre-test results revealed an average score of 81.00, reflecting the general performance of students, with the lowest score being 73.00 and the highest 89.00. A standard deviation of 3.354 indicated low variability, suggesting good data quality and consistency in student performance. Following the pre-test, conventional teaching methods were applied for four sessions, and a post-test was administered to assess the impact of this intervention on the experimental class. This analysis aimed to evaluate whether the teaching method effectively improved student performance.

In the experimental class, consisting of 25 students, the pre-test scores ranged from a minimum of 68 to a maximum of 84, with an average score of 76.00, lower than the total average of 81.00. After the treatment, the post-test results in the control class showed scores ranging from 78 to 90, with a total score of 2135 and an average of 85.40, accompanied by a lower standard deviation of 3.136. This lower standard deviation indicated that the data were more representative and accurate. In contrast, the experimental class had a pre-test average of 87.72 with scores ranging from 81 to 92, reflecting relatively consistent performance before the treatment, as indicated by a standard deviation of 9.127.

Table 1 Pre-test and Post-test statistic

Group	Test	Mean	N	Std. Deviation
Control	Pre-test	81.00	25	3.354
Control	Post-test	85.40	25	3.136
Experimental	Pre-test	76.00	25	3.354
Experimental	Post-test	87.72	25	9.127

2. Independent Sample T-Test

In this section, the 2-tailed significance value is reported as 0.010. When the significance value of the independent t-test is less than 0.05, it indicates that the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. In the results presented, the 2-tailed significance value is indeed 0.010. Therefore, it can be concluded that the null hypothesis is rejected, and the alternative hypothesis is accepted. This indicates that the use of the Blended Project-Based Learning method is effective in improving the reading skills of second-semester students in the English Education Department.

Table 2 The result of independent sample t-test

Mean	Std. Deviation	Std. error mean	t	df	Sig. (2-tailed)
2.320			2.664	48	0.010

This research was conducted using a quantitative method with a quasi-experimental approach using pre-test and post-test instruments as the main assessment tools. The two samples selected consisted of different classes, namely class Ak as the experimental group and class Bk as the control group. The two classes each consisted of 25 students who participated in a series of research activities which included pretest, treatment, and post-test. The selection of these two classes aims to determine the effectiveness of the application of the combination of blended learning and project-based learning (BPjBL) method in improving reading skills in the experimental class. In contrast, the control class followed conventional learning. This approach allowed the researcher to observe and analyze the difference in results between the two classes.

In the implementation of this study, there were significant differences in the results of the pre-test and post-test scores of the two classes used as samples. Based on the data previously presented, it can be concluded that the value of class Ak as an experimental class with a combination method treatment is higher than the control class with conventional learning. The pre-test was given before applying the combination learning method, followed by the treatment process, and ended with a post-test assessment. To analyze the difference in pre-test and post-test scores in each class, data analysis was carried out using IBM SPSS Statistic 25 and Microsoft Excel. The average pre-test score of the experimental group was 76, then rose significantly to 87.72 in the post-test results. This finding indicates an increase from the pre-test, which was conducted before applying the BPjBL method to the final achievement of the post-test score conducted after the treatment.

In the control group, the BPjBL method was not used as a treatment. Instead, the researcher applied conventional learning. Specifically, the lecturer presented the subject matter to the students, discussed the subject matter in class, and gave assignments as guided by the English lecturer's handbook, focusing on the topic of news texts. On the day

DOI: http://dx.doi.org/10.30998/scope.v9i2.25997

of the first meeting, the researcher gave a pre-test which was then continued with conventional teaching and learning activities. After completing the material, the researcher conducted post-test activities as the final stage of the meeting. The control class showed an average pre-test score of 81, increasing to 85.40 in the post-test.

The findings of this study indicate a significant improvement in students reading skills in the experimental group who are treated by using Blended Project-Based Learning (BPjBL) method compared to the control group, which used conventional learning methods. This aligns with previous theoretical and empirical insights regarding the effectiveness of combining Project-Based Learning (PjBL) and blended learning in fostering critical thinking, creativity, and deeper engagement in learning activities (Krajcik & Shin, 2014; Rahardjanto et al., 2019).

The improvement in the experimental group's post-test scores (an average increase from 76 to 87.72) indicates the potential of BPjBL method to overcome issues in English learning, especially for students reading skills and critical thinking skills as written by Anisa et al. (2021). Critical thinking in reading involves comprehending, analyzing, and interpreting textual information, all of which were targeted through the BPjBL framework in this study. According to Grabe and Stoller's (2019) that advanced reading skills equip students with the ability to understand complex concepts and apply them in various contexts.

By leveraging Instagram and Google Classroom, this study illustrates the significance of integrating digital platforms into PjBL, as ilustrated by by Winasih et al. (2019). The interactive features in Instagram and the advance facilities provided by Google Classroom facilitate real-world problem-solving, a core feature of PjBL, enabling students to engage actively with their learning process. Specifically, Instagram allowed students to access diverse, authentic reading materials (e.g., news accounts like CNN or BBC), fostering engagement and relevance, as supported by Wijaya and Rismawati (2023).

The experimental group's significant enhancement in post-test scores highlights the role of BPjBL in students' skills to explore multiple solutions to complex problems. This is in line with studies by Brundiers and Wiek (2013) and Wu and Wu (2020), who found that PjBL fosters critical and creative thinking. The higher increase in reading scores in the experimental group compared to the control group (11.72 points vs. 4.40 points) suggests that BPjBL not only enhances critical thinking but also ensures better retention and application of reading strategies through active participation and meaningful tasks.

On the other hand, the control group, which followed conventional teaching methods, showed a modest improvement from 81 to 85.40. This relatively smaller increase may be attributed to the limited engagement and passive learning inherent in traditional methods, as highlighted by Puspitarini (2022). The findings emphasize that while conventional methods can improve reading skills to some extent, they fail to provide the dynamic and interactive environment needed to foster higher-order thinking skills.

This study supports the notion that integrating innovative methods like BPjBLinto reading instruction. BPjBL can address Indonesia's low literacy levels, as emphasized by Kesuma et al. (2022). The study demonstrates that blending media in ELT with PjBL fosters not only reading comprehension but also critical and creative thinking, addressing the need for students to navigate and interpret information critically in the digital era.

The findings also align with Nugraha's (2020) perspective that blended learning complements face-to-face instruction by offering time flexibility and personalized learning experiences. Moreover, as Budianto (2023) suggested, the incorporation of collaborative and responsibility-based tasks in BPjBL encourages students to learn actively and independently, ultimately improving their reading proficiency and overall academic performance.

This study contributes to existing literature by highlighting the effectiveness of combining blended learning with PjBL in reading instruction. While previous research has extensively examined the benefits of PjBL for developing critical and creative thinking (Anazifa & Djukri, 2017; Diana et al., 2021), few have explored its impact on reading skills within a blended learning context. The results underscore the value of integrating digital platforms like Instagram and Google Classroom into BPjBL to create a more engaging and effective learning environment.

In integrating the two methods above, it was found that both are effective methods when applied properly and in accordance with their intended use. BPjBL plays a role in providing students with more innovative and explorative reading learning. Along with the research results from Agustina, et al., (2022), which states that learning with the BPjBL model helps students become independent learners online and offline in the global era. Students will make strong connections between concepts and facts learned so that students actively work to find information and produce learning, not just as passive learners who only receive information.

CONCLUSION

This study demonstrates that the use of a combination of blended learning and project-based learning (BPjBL) methods effectively enhances students' reading abilities, as evidenced by a significant increase in post-test scores among students using this method compared to those in conventional learning. The integration of online and offline learning, social media, and project-based approaches not only optimizes learning activities but also develops students' critical thinking, problem-solving, collaboration skills, and learning independence. BPjBL can serve as an innovative alternative for improving the quality of English language instruction. This study also provides an important contribution to curriculum development in the digital era. However, the limited sample size presents a challenge to the generalizability of the findings. Therefore, further research on a larger scale and in more diverse contexts is needed to strengthen these results, as well as to open up further opportunities for innovation across various educational levels and subjects.

REFERENCE

Agustina, W., Degeng, I. N. S., Praherdhiono, H., & Lestaric, S. R. (2022). The effect of blended project-based learning for enhancing student's scientific literacy skills: an experimental study in university. *Pegem Journal of Education and Instructional*, *13*(1), 223-233. 10.47750/pegegog.13.01.24

Almulla, M. A. (2020). The effectiveness of the project-based learning (PBL) approach as a way to engage students in learning. *SAGE Open*, *10*(3). https://doi.org/10.1177/2158244020938702

Anazifa, R. D., & Djukri, D. (2017). Project-based learning and problem-based learning: are they effective to improve student's thinking skills? *JPI (Indonesian Journal of science education)*, *6*(2). https://journal.unnes.ac.id/nju/index.php/jpii/article/view/11100

Anderson, N. J. (2003). *Teaching reading* (I. D. Nunan, Ed.). McGraw Hill Publisher.

Anisa, A. R., Ipungkarti, A. A., & Saffanah, K. N. (2021). Pengaruh kurangnya literasi serta kemampuan dalam berpikir kritis yang masih rendah dalam pendidikan di Indonesia. *Current Research in Education: Conference Series Journal*, *1*(1). https://ejournal.upi.edu/index.php/crecs/article/view/32685

Bertoncelli, T., Mayer, O., & Lynass, M. (2016). Creativity, learning techniques and TRIZ. *Procedia CIRP*, *39*, 191-196. https://doi.org/10.1016/j.procir.2016.01.187

Brundiers, K., & Wiek, A. (2013). Do we teach what we preach? an international comparison of problem and project-based learning courses in sustainability. *MDPI Journal*, *5*(4), 1754-1746. https://doi.org/10.3390/su5041725

Budianto, L., & Yuniar, R. F. (2023). The effect of Suggestopedia method on Indonesian EFL learners' reading achievement. Journal of English Language Teaching and Learning (JETLE), 4(2), 56-69.

Campbell, D. T., Stanley, J. C., & Gage, N. L. (1963). *Experimental and quasi-experimental design for research*. Mifflin Company.

Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

Diana, N., Yunita, W., & Harahap, A. (2021). Student' perception and problems in learning english using google classroom during the Covid-19 pandemic. *Linguists : Journal Of Linguistics and Language Teaching*, *7*(1), 10-22. http://dx.doi.org/10.29300/ling.v7i1.4274

Grabe, W., & Stoller, F. L. (2019). *Teaching and researching reading* (3rd ed.). Taylor & Francis Group.

Harianto, E. (2020, Februari). Keterampilan membaca dalam pembelajaran bahasa. *DIDAKTIKA*, *9*(1). https://doi.org/10.58230/27454312.2

Hidayah, N. (2020, Juli). Efektivitas blended learning dalam proses pembelajaran. *Pencerahan*, *14*(1), 10-24. https://www.jurnalpencerahan.org/index.php/jp/article/view/41

Indrayany, E. S., & Lestari, F. (2021). Penerapan pembelajaran blended learning untuk meningkatkan keaktifan belajar mandiri siswa kelas VII SMP pada materi perbandingan. *Diksi: Jurnal Kajian Pendidikan dan Sosial*, *2*(2), 68-76. https://doi.org/10.53299/diksi.v2i2.115

Kesuma, D. T., Yuliantini, N., & Supriatna, I. (2022). Hubungan antara kemampuan membaca pemahaman dengan hasil belajar siswa kelas IV SDN 71 kota Bengkulu. *Juridikdas: Jurnal Riset PendidikanDasar*, *5*(1). https://doi.org/10.33369/juridikdas.5.1.%25p

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: a review of the literature. *Improving Schools*, *19*(3), 267-277. https://doi.org/10.1177/1365480216659733

Krajcik, J. S., & Shin, N. (2014). *The cambridge handbook of the learning sciences. Cambridge handbooks in psychology*. (R. K. Sawyer, Ed.; 2nd ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781139519526.018

Nugraha, D. M. D. P. (2020). Integrasi pendidikan karakter dalam penerapan blended learning di sekolah dasar.

DOI: http://dx.doi.org/10.30998/scope.v9i2.25997

Cetta: Jurnal Pendidikan, *3*(3), 472-484. Retrieved Juli 22, 2024, from https://jayapanguspress.penerbit.org/index.php/cetta/article/view/544

Nurhakiki, S., Nurhayati, Y., Tri Amalia, P. S., & Tarihoran, N. (2024). Benefits of Instagram usage and its effectiveness in teaching English: a systematic review. *International Journal of Social and Education (INJOSEDU)*, *1*(1), 217-228. https://btqur.or.id/index.php/injosedu/article/view/137/157

Puspitarini, D. (2022). Blended learning sebagai model pembelajaran abad 21. *Ideguru: Jurnal Karya Ilmiah Guru*, *7*(1). https://doi.org/10.51169/ideguru.v7i1.307

Rahardjanto, A., Husamah, & Fauzi, A. (2019). Hybrid-PjBL: learning outcomes, creative thinking skills, and learning motivation of preservice teacher. *International Journal of Instruction*, *12*(2), 179-192. https://doi.org/10.29333/iji.2019.12212a

Sari, A. M., Suryana, D., Suryana, A., & Ridwan. (2023). Efektifitas model project based learning (PjBL) dalam implementasi kurikulum merdeka di taman kanak-kanak. *Jurnal Basicedu*, *7*(1), 432-440. https://doi.org/10.31004/basicedu.v7i1.4390

Snow, C. (2002). *Reading for understanding: toward an R&D program in reading comprehesion*. CA: RAND Corporation.

Sugiyono. (2013). *Metode penelitian kuantitatif, kualitatif dan R&D* (19th ed.). Alfabeta.

Susanti, L., Juinining, E., & Hamamah, H. (2021). Investigating the implementation of google classroom to improve reading comprehension: advantage and disadvantage. *Journal of Languages and Language Teaching*, *9*(2), 204. https://doi.org/10.33394/jollt.v9i2.3491

Wijaya, M., & Rismawati, R. S. Y. (2023). Pembelajaran Bahasa Arab berbantuan media Instagram untuk meningkatkan minat belajar siswa madrasah tsanawiyah. *Jurnal Educatio*, *9*(2), 817-825. https://doi.org/10.31949/educatio.v9i2.5080

Winasih, W. W., Cahyono, B. Y., & Prayogo, J. A. (2019). Effect of project-based learning using E-Poster on Indonesian EFL students' speaking ability across personality types. *Arab World English Journal (AWEJ)*, *10*(1), 73-83. https://dx.doi.org/10.24093/awej/vol10no1

Wu, T.-T., & Wu, Y.-T. (2020). Applying project-based learning and SCAMPER teaching strategies in engineering education to explore the influence of creativity on cognition, personal motivation, and personality traits. *Thinking Skills and Creativity*, *35*. https://doi.org/10.1016/j.tsc.2020.100631

Yulia, H. (2022). Students' perception of Google Classroom on online learning of English education study program at Baturaja University. *Journal of Language Education (JoLE)*, *6*(2). http://journal.unbara.ac.id/index.php/JoLE/article/view/1852/1194