

# Improving Speaking Skills Using Quizizz Media And Project Based Learning Model For 9th Graders

Misbahun Haidir Firmansyah, S.Pd

Dra. Siti Azizah, M. Pd

Dr. Lusy Tunik Muharlisiani, M. Pd

Pendidikan Profesi Guru, Universitas Wijaya Kusuma Surabaya

Jalan Dukuh Kupang XX/54 60225 Dukuh Pakis East Java

mizbahun@gmail.com + lusytm\_fbs@uwks.ac.id

Received: September 29, 2023

Accepted: October 25, 2023

Published: December 09, 2023

## Abstract

This study investigates the effectiveness of Quizizz media and project-based learning model in improving English speaking skills. The research, executed at SMPN 3 Surabaya, encompassed a cohort of 33 students in the ninth grade and utilized a classroom action research methodology. The structure of the investigation was delineated into three segments: a pre-intervention stage, Cycle I, and Cycle II. Preliminary observations indicated the students' speaking proficiencies to be sub-optimal. Noticeable advancements in proficiency were recorded during Cycle I; however, certain inaccuracies remained consistent across evaluative dimensions. In Cycle II, significant enhancements were evident, with a predominant fraction of the student population achieving the stipulated Minimum Completion Criteria (KKM) score. Feedback solicited from students predominantly underscored the superiority of the integrated approach in comparison to conventional pedagogical techniques. The findings underscore the potential of combining Quizizz media with a project-based learning framework as an instrumental mechanism for ameliorating students' speaking abilities. However, this study recognizes inherent constraints, notably the limited sample dimension and an exclusive emphasis on speaking proficiencies. Subsequent investigations are recommended to discern the versatility of the combined Quizizz media and Project Based learning approach in varied linguistic competencies and pedagogical environments.

**Keywords:** *Quizizz one; project based two; english learning three; speaking skills four; classroom action research five.*

## 1. Introduction

In today's interconnected society, English serves as a bridge across diverse divides. Despite its importance, English proficiency remains a challenge for many, including Indonesian students (Alvina Indana Zulfa, 2022). Technological advancements offer pedagogical methods designed to enhance the learning experience, especially in developing speaking skills (Angélica M. M. et al, 2019), (Fadhilawati, 2021). However, there's a paucity of empirical data on the effectiveness of combining digital tools with PJBL, a gap this research aims to fill. The "Pendidikan Profesi Guru Bahasa Inggris" (PPG-BI) program seeks to improve the proficiency of English educators in Indonesia (Humairoh, S., Chotimah, U., & Waluyati, 2019). This program ensures that educators achieve standardized competencies after their formal education.

Technologies, like Quizizz, gamify the learning process, enhancing student engagement (Ahmar et al., 2018; Alvina Indana Zulfa, 2022; Amalia, 2020). Similarly, PJBL encourages students to engage in real-world projects, promoting critical thinking and collaboration (Han, 2017; Ika Dhamayanti, 2021). Their combined impact on enhancing speaking skills forms the crux of this study. Despite their significance, speaking skills remain a challenge for students at SMPN 3 Surabaya. While traditional methods provide foundational skills, the dynamic needs of modern learners necessitate innovative solutions like digital tools and PJBL. To formulate a research question that addresses the identified problem, the following questions are proposed: a) How does digital Quizizz media and Project-Based Learning impact students' speaking skills? and b) What are the best practices for implementing digital Quizizz media and Project-Based Learning in a classroom setting to improve students' speaking skills?

### ***A. The Landscape of English Language Education in Indonesia***

Global prominence has positioned English as a universal medium of communication, and this has influenced Indonesia to place considerable emphasis on its educational delivery. Throughout the years, English has been integrated into Indonesia's national curriculum, signaling its educational significance (Homayouni, 2022). The blend of globalization and digital progression has influenced Indonesian educators to fuse technology into English language instruction. Digital platforms like Quizizz present adaptive exercises, proving advantageous for areas such as grammar and vocabulary enrichment (Asiksoy, G., & Ozdamli, 2017; Rahmawati, 2021). Indonesia's dedication to English education is noteworthy. However, the task is not devoid of challenges. The country's unique geography, cultural heterogeneity, and resource constraints sometimes pose barriers to uniform English education delivery (W. Sumarni, S. Wardani, S. Sudarmin, 2016). Additionally, cultural distinctions may lead to complications when directly employing pedagogies stemming from the West (Chamberlain, L., & Mendoza, 2017; Ika Dhamayanti, 2021).

### ***B. LaboyRush's STEM Integrated PJBL Model***

PJBL is a recognized method to enhance student learning through exploration of real-world problems over an extended period. While PJBL has proven effective in many areas, limited research has been done on its use for improving Speaking skills in recount text for ninth-grade students. PJBL Includes the need for extensive preparation by educators, misalignment with traditional assessment methods, and resource demands. It has shown to enhance student engagement, interdisciplinary learning, and life skills. LaboyRush's PJBL model integrates STEM disciplines within the project-based learning process. The model comprises five stages that guide students through a comprehensive STEM learning experience (Chia-Mei Lu, Kang-Wei Chen, Hui-Ju Wu, 2018; Khoiri N, Ristanto S, 2023). The first stage, Reflection, immerses students in the problem context and bridges prior knowledge with new concepts to be explored. It sparks curiosity and sets the stage for investigation; In the second stage, Research, students engage in in-depth research guided by the teacher. They gather relevant information and develop a concrete understanding of the problem. Discussions and interactions with peers enable conceptual growth; The third stage, Discovery, focuses on independent learning and identifying gaps in understanding. Students work collaboratively, present possible solutions, and build cooperation within their groups. This stage promotes critical thinking and nurtures a habit of mind for design; The application stage aims to test and refine the product or solution developed in solving the problem. Students may iterate and improve their prototypes based on predefined criteria. Furthermore, this stage encourages students to connect their learning with broader real-world contexts beyond STEM; and the final stage, Communication, emphasizes the presentation and communication of the project outcomes to peers and the class. This fosters collaboration, communication skills, and the ability to receive and apply constructive feedback. Assessment often incorporates the completion of this phase as an essential component.

### ***C. Digital Media QUIZZZ***

Quizizz serves as a transformative digital tool in the educational sector, promoting a myriad of benefits for teachers and learners alike (Degirmenci, 2021). Research emphasizes its potent role in fostering student engagement through gamified learning experiences.

Quizizz is lauded for its integration of gamification elements, such as leaderboards, timers, and power-ups, all designed to foster a competitive and engaging learning atmosphere (Degirmenci, 2021; Homayouni, 2022). The platform seeks to enhance the learning experience, encouraging students to be more engaged and thereby facilitating more robust learning outcomes. Teachers find a significant ally in Quizizz when it comes to content delivery. The platform offers an expansive library of quizzes besides the option to create personalized quizzes to meet individual learning needs (Degirmenci, 2021; Wang, 2015). The option to facilitate learning through various devices broadens the scope of learning, positioning Quizizz as a preferred tool in both online and blended learning environments (Condliffe, B., Quint, J., Visher, M. G., Bangser, M. R., Drohojowska, S., Saco, L., & Nelson, 2017). Quizizz stands tall with its provision of instantaneous feedback and detailed analytical reports. Teachers can leverage this feature to closely monitor student progress and alter instructional methods for optimized learning outcomes (Chopade, Pravin, Pu, Shi, LaMar M. Kurzum, 2023; Degirmenci, 2021).

Despite its remarkable benefits, Quizizz is not devoid of limitations. The platform's substantial reliance on technology can sometimes be a double-edged sword, potentially leading to distractions (Basjaruddin, N. C., & Rakhman, 2016). Moreover, a pronounced focus on multiple-choice questions somewhat narrows its application spectrum, especially in subjects necessitating deeper analysis and critical thinking skills (Rahman, 2018). its provision of instantaneous feedback and detailed analytical reports. Teachers can leverage this feature to closely monitor student progress and alter instructional methods for optimized learning outcomes (L, 2017).

In light of these studies, our current investigation focuses on harnessing the potential of the Quizizz platform combined with the Project-Based Learning model to improve speaking skills for 9th graders at SMPN 3 Surabaya. The evidence from previous research underscores the efficacy and popularity of Quizizz in educational settings, and our study aims to explore its application in enhancing speaking competencies among students.

Table 1. Overview of similarities and differences between previous and current research

Researcher and Title	Research Result	Similarity	Difference
(Amalia, 2020) "Quizizz Website as an online assessment for English Teaching and Learning: Students Perspective"	Positive student perceptions of Quizizz, emphasizing its engagement and fostering a competitive classroom atmosphere.	Both involve the use of Quizizz.	The previous study focuses on student perceptions of Quizizz in general, while the current research combines Quizizz with Project-Based Learning for speaking skills improvement.
(Nur Halimatusyadiyah, Salsabella Wawa Anasya, 2022). The Effectiveness of The Project Based Learning Model in The Independent Learning Curriculum”	Improved grammar proficiency using Quizizz.	Both involve the use of Quizizz.	The previous study focuses on grammar instruction, while the current research focuses on speaking skills improvement.
(Rodríguez-Peñarroja, 2022) " Integrating Project-Based Learning, Task-Based Language Teaching Approach and Youtube in The Esp Class: A Study onstudents’motivation	Quizizz as a motivating e-learning tool in online English classrooms.	Both involve the use of Quizizz.	The previous study focuses on student motivation in general, while the current research focuses on motivation for speaking skills improvement.
(Ahmar et al., 2018). "Students’ Perceptions Toward Quizizz as an Online Learning Media"	Quizizz enhances student motivation and engagement in the learning process.	Both involve the use of Quizizz.	The previous study focuses on motivation and engagement in general, while the current research focuses on motivation and engagement for speaking skills improvement.
(Siregar, Y. A., & Oktavia, 2022). “The EFL Students’ Perceptions in Doing Online English Exercises by Using Quizizz at Universitas Negeri Padang”	Quizizz is a user-friendly and engaging tool for online English exercises.	Both involve the use of Quizizz.	The previous study focuses on student perceptions of Quizizz for online English exercises in general, while the current research focuses on its use for speaking skills improvement.

Source: (Amalia, 2020; Nur Halimatusyadiyah (2022); Rodríguez-Peñarroja 2022; Rahmawati, 2021; Siregar & Oktavia, 2022).

While existing literature acknowledges the role of Quizizz in English teaching, its direct impact on 9th graders' speaking skills is underexplored. Additionally, the combined efficacy of Quizizz and the Project-Based Learning model is yet to be rigorously examined. Notably, there is a significant gap in understanding these methodologies' implications specifically within the educational context of SMPN 3 Surabaya. Furthermore, while students' perceptions of Quizizz are well-documented, a comprehensive evaluation of broader, long-term speaking outcomes, such as fluency and confidence, remains sparse (Rehman, N, Zhang, W, Mahmood, A, Fareed, M.Z, Batool, 2023). This research seeks to address these gaps, aiming to illuminate the synergistic potential of Quizizz and Project-Based Learning in enhancing speaking competencies for 9th graders at SMPN 3 Surabaya.

**2. Method**

The study anchors in the Classroom Action Research methodology, a dynamic and iterative process designed to bring about meaningful change within a specific context. This research approach centers on the identification and resolution of specific issues, ensuring stakeholder participation (Han, 2017; L, 2017; Sunyoung Han, R. Capraro, 2015). The structure of this AR adopts the framework provided by (Kemmis, S., McTaggart, R., & Nixon, 2014), which consists of four recursive phases:



Figure 1. Cycle of Action Research

1. Planning: The researchers identified the current limitations in the students' English speaking skills and developed an action plan to address these issues. The plan included using the Quizizz media and PJBL.
2. Action: The action plan was implemented, and the students participated in Quizizz media activities. The classroom setting was adjusted to ensure the effective use of this methodology.
3. Observation: The researchers observed the students' reactions to the intervention and monitored their progress in English speaking skills. They also used pre- and post-test measures to gather data on the effectiveness of the intervention.
4. Reflection: The researchers analyzed the collected data and reflected on the findings. If the desired improvement in English speaking skills was observed, the research concluded. Otherwise, the researchers adapted the action plan for further improvement.

The study is situated within the school environment of SMPN 3 Surabaya, which becomes both the research setting and the context for the AR intervention. The chosen environment is a direct reflection of the AR approach, where research is rooted in practical contexts and is geared towards resolving specific issues in those contexts (Han, 2017). The research was carried out in from July - September 2020.

The participants primarily include 9th graders, selected for their direct involvement in the speaking skills enhancement initiative. The research subjects were 33 students in class 9C in the 2022/2023 academic year, consisting of 21 female students and 12 male students. These students, who form the main stakeholder group, play a pivotal role as they provide real-time feedback on the interventions and engage actively in the AR process. Including students in the AR process is essential as it fosters a sense of collaboration and ensures that solutions are contextually relevant (Válková, S., & Kořínková, 2023).

Both pre- and post-test speaking assessments are administered and graded using speaking rubric (Larmer, J., Mergendoller, J., & Boss, 2015). The pre-test sets the baseline for the students' current speaking skills, while the post-test measures the effectiveness of the implemented interventions using Quizizz media and Project Based Learning. The AR approach underscores the significance of collecting data and using it to initiate informative changes (Han, 2017; L, 2017). Consistent with the AR's emphasis on stakeholder participation, students fill out feedback forms after each intervention session. These forms garner insights into their experiences, challenges, and suggestions, thereby ensuring the iterative nature of AR is maintained. Teachers document their observations throughout the AR process, noting the reactions of students to the interventions, any noticeable improvements in speaking, and any challenges encountered. The Following is the specific instructional materials, students' work sample, and the class documentations utilized during each phase, further enhancing the clarity and replicability of the study: [https://drive.google.com/drive/folders/15W36wFHvmMY3WlavxlwwoWIHuwhbliuC?usp=drive\\_link](https://drive.google.com/drive/folders/15W36wFHvmMY3WlavxlwwoWIHuwhbliuC?usp=drive_link)

The research process begins with administering pre-test speaking assessments to 9th graders, which serves as an essential initial data source to establish their current speaking skills baseline. This aligns with the AR principle of identifying the problem or area needing improvement. Next, post-test speaking assessments are administered after the interventions, and teacher observations, feedback forms, and qualitative observations are collected during the intervention phase. These data sources provide insights into students' experiences, challenges, and suggestions for improvement, and help evaluate the effectiveness of the interventions.

The initial analysis of pre-test results using a speaking rubric (Lou, 2017) helps understand the baseline proficiency of the participants and pinpoints specific areas of improvement. Qualitative observations and thematic analysis of feedback forms provide insights into real-time classroom dynamics, students' responsiveness to interventions, and common challenges. Comparative analysis of pre and post-test results quantifies improvements, if any, and evaluates the effectiveness of the interventions, aligning with the AR process of evaluating results to conclude or iterate further (Kemmis, S., McTaggart, R., & Nixon, 2014, 2019a, 2019b).

Privacy, participant consent, and adherence to guidelines from Universitas Wijaya Kusuma Surabaya were prioritized. The research methodology enabled an in-depth analysis of the impact of digital Quizizz media and PJBL on students' speaking abilities, harnessing both quantitative and qualitative data.

**3. Findings and Discussion**

The goal of this investigation was to analyze the efficacy of utilizing Quizizz media in tandem with the Project-Based Learning (PBL) method to augment English speaking proficiency among Class IX C students at SMPN 3 Surabaya. Conducted in pre-treatment and two cycles, each comprising three sessions, the study generated the following outcomes:

Table 2. Summary of quantitative finding in each stage

Stage		Pre Cycle	Cycle 1	Cycle 2
Average Score per aspect criteria	Pronunciation	13.30	13.3	18
	Grammar	17.45	18	18.06
	Vocabulary	14.64	15.42	17.79
	Fluency	14.48	14.48	18.73
	Expression	20.00	20	20
Student's average Score		67.67	79.88	92.58
Number of students that pass the minimum score		4	25	33
Passing students percentage		12.12%	75.76%	100%

The goal of this investigation was to analyze the efficacy of utilizing Quizizz media in tandem with the Project-Based Learning (PBL) method to augment English speaking proficiency among Class IX C students at SMPN 3 Surabaya. Conducted in pre-treatment and two cycles, each comprising three sessions, the study generated the following outcomes:

The preliminary phase of the study involved a comprehensive assessment of the baseline speaking abilities of 33 ninth-grade students in Class IX C using structured interviews and spontaneous speaking tasks. The quantitative findings revealed limited student engagement, possibly due to inadequate teacher stimuli. Only 12.12% of the students achieved the minimum score threshold of 80, highlighting a pressing need for improvement, especially in the fluency aspect, which scored a low average of 12.24. The qualitative observations revealed that students displayed evident signs of nervousness, suggesting potential fear of peer judgment. A notable lack of engagement was also observed, possibly as a consequence of the monotonous traditional teaching approach. However, students demonstrated better comfort levels while interacting in smaller groups, hinting at the necessity of more personalized interaction sessions.

Cycle I aimed to address the shortcomings identified in the pre-cycle phase by integrating Quizizz media and Project-Based Learning (PBL) methods to enhance several aspects of student speaking, including fluency and pronunciation. The quantitative findings illustrated a significant progression, with 75.76% of students meeting the *Kriteria Ketuntasan Minimal* (KKM) score, a benchmark for minimum proficiency. However, a small fraction of students still lagged in achieving this benchmark. The qualitative observations revealed that the amalgamation of Quizizz with PBL seemingly boosted student confidence levels, as noted in their increased participative tendencies. Enhanced engagement levels were also recorded, particularly during interactive sessions. The cycle facilitated smoother peer interactions, fostering an environment conducive to constructive feedback and collaborative learning. The reflection phase underscored the effectiveness of the Quizizz and PBL integration, while also pinpointing areas for potential improvement, laying the groundwork for the upcoming cycle.

Cycle II concentrated on fine-tuning the implementation strategies based on feedback and observations from Cycle I. The quantitative findings showcased an even more positive outcome, with all students successfully achieving the KKM score, reflecting a marked improvement in the learning outcomes compared to the pre-cycle phase. The qualitative observations revealed that students exhibited heightened confidence, volunteering more frequently during interactive sessions. A noticeable escalation in student engagement was also observed, attributed to the introduction of richer and more detailed project activities. The cycle nurtured a constructive criticism culture, aiding students in honing their speaking skills further. Post the interventions, students articulated a perceptible improvement, although a desire for more personalized sessions to tackle individual challenges was expressed.

The research aimed to scrutinize the impact of the integration of digital Quizizz media and Project-Based Learning (PBL) on students' speaking skills and to delineate the best practices for these methods' implementation. The success in utilizing Quizizz and PBL aligns with other studies that underline the potential of technology-aided methods in facilitating improved speaking skills, thereby fostering a more productive learning environment.

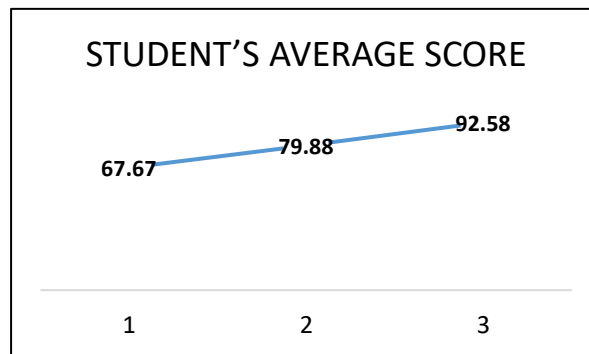


Figure 2. The Summary of the students' class average score in all treatment

The integration presents a potent pedagogical strategy, nurturing critical thinking and fostering collaboration, thereby enhancing speaking skills, a critical component in overall communication proficiency. The results bear significant theoretical implications, proposing a new paradigm in English language teaching that encompasses digital tools and project-based learning, offering a more enriched, student-centric approach that can potentially revolutionize the teaching-learning process.

#### 4. Conclusion

The integration of Quizizz digital media and Project-Based Learning (PJBL) has been found to significantly improve the speaking abilities of students at SMPN 3 Surabaya, according to this research. The study aligns with established pedagogical principles and is supported by existing literature on the topic, showing a marked improvement in learning outcomes and student scores. A related study emphasizes the role of technology, specifically animation videos, in enhancing speaking abilities, highlighting the efficacy of digital interventions in language learning. The integration of Quizizz and PJBL in this research also emphasizes the importance of engagement, immersion, and real-world relevance.

Multiple research endeavors have advocated for the integration of digital platforms like Quizizz in the learning environment, supporting the notion that when combined with progressive pedagogical strategies like PJBL, these platforms foster a more engaging learning atmosphere and equip students with essential skills for the 21st century. The findings of this research, along with other studies, underscore the importance and effectiveness of integrating technology in classroom instruction. Educators and stakeholders in the education sector are encouraged to utilize these insights to create an enriched, immersive, and dynamic learning environment for students.

#### 5. References

- Ahmar, A. S., Kurniasih, N., Irawan, D. E., Sutiksno, D. U., Napitupulu, D., Hafid, H., Setiawan, M. I., Simarmata, J., Wibowo, A., Sururi, A., Iskandar, A., Saleky, A. P., Kurniawan, C., Sagala, D., Novitasari, D., Indriani, D. E., Kismawadi, E. R., Ende, Souisa, F., ... Abraham, J. (2018). Lecturers' Understanding on Indexing Databases of SINTA, DOAJ, Google Scholar, SCOPUS, and Web of Science: A Study of Indonesians. *Journal of Physics: Conference Series*, 954, 012026. <https://doi.org/10.1088/1742-6596/954/1/012026>
- Alvina Indana Zulfa, D. P. R. (2022). EFL Students' Perceptions Toward Quizizz As An Assessment Tool During Online Learning. *The Journal of English Literacy Education*, 09(1).
- Amalia, D. . (2020). Quizizz Website as an Online Assessment for English Teaching and Learning: Students' Perspectives. *Jo-ELT (Journal of English Language Teaching)*, 7(1), 1. <https://doi.org/https://doi.org/10.33394/jo-elt.v7i1.2638>.
- Angélica M. M. Freitas, Bianca C. Rossi, Sandra G. Pereira, Marcos Roberto Dos Santos, C. (2019). Project-Based Learning as a Tool for Sounding Perception and Developing Socio-Emotional Skills in 4th-Grade Students. *Creative Education*, 10(7). <https://doi.org/10.4236/ce.2019.107106>.
- Asiksoy, G., & Ozdamli, F. (2017). An Overview to Research on Education Technology Based on Constructivist Learning Approach. *Cypriot Journal of Educational Sciences*, 12(3), 133–147. <https://doi.org/https://www.semanticscholar.org/paper/An-Overview-to-Research-on-Education-Technology-on-Asiksoy-Ozdamli/7c746b0fa01a4cdcd6008609690f68535bc7b375>
- Basjaruddin, N. C., & Rakhman, E. (2016). Implementation of Project Based Learning in Mechatronic Lab Course at Bandung State Polytechnic. *International Journal of Evaluation and Research in Education*, 4(4), 284–291. <https://doi.org/https://ijere.iaescore.com/index.php/IJERE/article/view/5955>
- Chamberlain, L., & Mendoza, S. (2017). Design Thinking as Research Pedagogy for Undergraduates: Project-Based Learning with Impact. *Council on Undergraduate Research Quarterly*, 37(4), 18–22. [https://doi.org/https://www.researchgate.net/publication/327757694\\_Design\\_Thinking\\_as\\_Research\\_Pedagogy\\_for\\_Undergraduates\\_Project-Based\\_Learning\\_with\\_Impact](https://doi.org/https://www.researchgate.net/publication/327757694_Design_Thinking_as_Research_Pedagogy_for_Undergraduates_Project-Based_Learning_with_Impact)

- Chia-Mei Lu, Kang-Wei Chen, Hui-Ju Wu, S.-J. Lou. (2018). Retracted: A Study on Bionic Design Approach to Sustainability of Product Design STEM Project-Based Learning. *Creative Education*, 9(16). <https://doi.org/10.4236/ce.2018.916206>
- Chopade, Pravin, Pu, Shi, LaMar M. Kurzum, C. (2023). Task-Based Workplace English: An Adaptive Multimodal Tutoring System. *Communications in Computer and Information Science*, 1831, 378–383.
- Condliffe, B., Quint, J., Visher, M. G., Bangser, M. R., Drohojowska, S., Saco, L., & Nelson, E. (2017). Project-Based Learning: A Literature Review. *MDCR*. <https://doi.org/https://eric.ed.gov/?id=ED578933>; <https://www.semanticscholar.org/paper/Project-Based-Learning%3A-A-Literature-Review.-Paper.-Condliffe/bf8ffb27f742af21340c5d26e312ff185b44bb8e>
- Degirmenci, R. (2021). The use of Quizizz in language learning and teaching from the teachers' and students' perspectives: A literature review. *Language Education and Technology*, 1(1), 1–11. <https://langedutech.com/letjournal/index.php/let/article/view/12>
- Fadhilawati, D. (2021). Using Quizizz application for learning and evaluating grammar material. *JOSAR (Journal of Students Academic Research)*, 6(1), 85. <https://doi.org/https://ejournal.unisbablitar.ac.id/index.php/josar/article/view/1448>.
- Han, S. (2017). Korean Students' Attitudes toward STEM Project-Based Learning and Major Selection. *Educational Sciences: Theory And Practice*, 17(2), 529–548. <https://doi.org/https://doi.org/10.12738/estp.2017.2.0264> <https://www.scirp.org/%28S%28czeh2tfqyw2orz553k1w0r45%29%29/reference/referencespapers.aspx?referenceid=2449799>
- Homayouni, M. (2022). Peer assessment in group-oriented classroom contexts: On the effectiveness of peer assessment coupled with scaffolding and group work on speaking skills and vocabulary learning. *Language Testing in Asia*, 12(1), 61.
- Humairoh, S., Chotimah, U., & Waluyati, S. A. (2019). *Efektivitas Pelaksanaan Kegiatan Pendidikan Profesi Guru (Ppg) Di Fkip Unsri Dalam Menghasilkan Guru Profesional*. [https://www.mendeley.com/catalogue/12e89f4f-2f7d-3214-8d27-229c76495335/?utm\\_source=desktop&utm\\_medium=1.19.8&utm\\_campaign=open\\_catalog&userDocumentId=%7Bb12377a3-a7fb-4c3a-989f-c2f3c3b2f7ed%7D](https://www.mendeley.com/catalogue/12e89f4f-2f7d-3214-8d27-229c76495335/?utm_source=desktop&utm_medium=1.19.8&utm_campaign=open_catalog&userDocumentId=%7Bb12377a3-a7fb-4c3a-989f-c2f3c3b2f7ed%7D)
- Ika Dhamayanti, F. (2021). EFL Students' Perception and Motivation Toward Quizizz as E-Learning Media in English E-Classroom. *Education of English as Foreign Language*, 4(2), 78. <https://doi.org/https://doi.org/10.21776/ub.educafl.2021.004.02.03>.
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). The action research planner: Doing critical participatory action research. . . *Springer Science & Business Media*.
- Kemmis, S., McTaggart, R., & Nixon, R. (2019a). Chapter 12: Critical participatory action research. In *Action learning and action research: Genres and approaches* (pp. 179-192). *Emerald Inside*, 12, 179–192.
- Kemmis, S., McTaggart, R., & Nixon, R. (2019b). Critical participatory action research. In *Action learning and action research: Genres and approach*. *Emerald Publishing Limited*, 179–192.
- Khoiri N, Ristanto S, K. A. (2023). Project-Based Learning Via Traditional Game In Physics Learning: Its Impact On Critical Thinking, Creative Thinking, And Collaborative Skills. *Jurnal Pendidikan IPA Indonesia Open Access. Jurnal Pendidikan IPA Indonesia Open Access*, 12(2), 286–292. <https://doi.org/10.15294/jpii.v12i2.43198>.
- L, H. (2017). Analysis of the problems in language teachers' action research. *Int Educ Stud*, 10(11), 123–128. <https://www.semanticscholar.org/paper/Analysis-of-the-Problems-in-Language-Teachers%27-Han/0dc5dabd186af47687de504c1644fb2404dca48f>
- Larmer, J., Mergendoller, J., & Boss, S. (2015). *Setting the standard for project based learning*. ASCD.
- Lou, S.-J. et al. (2017). A Study of Creativity in CaC2 Steamship-Derived STEM Project-Based Learning. *Eurasia Journal of Mathematics, Science and Technology Education*, 13, 2387–2404. <https://doi.org/https://www.ejmste.com/article/a-study-of-creativity-in-cac2-steamship-derived-stem-project-based-learning-4776>
- Nur Halimatusyadiyah, Salsabella Wawa Anasya, A. P. (2022). The Effectiveness of The Project Based Learning Model in The Independent Learning Curriculum. *Jurnal Kewarganegaraan*, 6(2). <https://doi.org/https://journal.upy.ac.id/index.php/pkn/article/view/4021>
- Rahman, C. H. and M. A. (2018). Project Based Learning: A Review of Literature on Its Outcomes and Implementation Issues. *LET Linguistics Literature and English Teaching Journal*, 8(2), 110–129. <https://doi.org/https://jurnal.uin-antasari.ac.id/index.php/let/article/view/2394>
- Rahmawati, S. (2021). '62 Students' Perceptions Toward Quizizz as an Online Learning Media'. *Panyonara: Journal of English Education*, 3(1). <https://doi.org/https://doi.org/10.19105/panyonara.v1i3.4282>
- Rehman, N, Zhang, W, Mahmood, A, Fareed, M.Z, Batool, S. (2023). Fostering twenty-first century skills among primary school students through math project-based learning. *Humanities and Social Sciences Communications*, 10(1), 424.
- Rodríguez-Peñarroja, M. (2022). Integrating Project-Based Learning, Task-Based Language Teaching Approach And Youtube In The Esp Class: A Study On Students' motivation. *Teaching English with Technology*, 22(1), 62–81. <http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-issn-1642-1027-year-2022-volume-22-issue-1-article->

c1466950-2bc5-3fe2-8dbf-44f92b8efceb

- Siregar, Y. A., & Oktavia, W. (2022). The EFL Students' Perceptions in Doing Online English Exercises by Using Quizizz at Universitas Negeri Padang. *Journal of English Language Teaching*, 11(1), 105–113.
- Sunyoung Han, R. Capraro, M. M. C. (2015). How Science, Technology, Engineering, And Mathematics (Stem) Project-Based Learning Affects High, Middle, And Low Achievers Differently: The Impact of Student Factors On Achievement. *International Journal of Science and Mathematics Education*, 13, 1089–1113. <https://doi.org/https://link.springer.com/article/10.1007/s10763-014-9526-0>
- Válková, S., & Kořínková, J. (2023). Approaches to Teaching Agreement and Disagreement in Selected Coursebook Series. *Theory and Practice of Second Language Acquisition*, 9(1), 1–20.
- W. Sumarni, S. Wardani, S. Sudarmin, D. N. G. (2016). Project Based Learning (Pbl) To Improve Psychomotoric Skills: A Classroom Action Research. *Jurnal Pendidikan IPA Indonesia (Indonesian Journal of Science Education)*, 5(2). <https://doi.org/https://doi.org/10.15294/jpii.v5i2.4402>
- Wang, A. I. (2015). The wear out effect of a game-based student response system. *Computers & Education*, 82(1), 217–227. <https://www.sciencedirect.com/science/article/abs/pii/S0360131514002516>