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Artificial intelligence in supporting students' descriptive writing through PjBL learning model: The pedagogical design and its practice

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Abstract

Artificial intelligence (AI) tools that support teaching have been widely practiced by teachers in the education world. Yet, the steps to practice it or its teaching design are still limited to previous studies. Therefore, the study focuses on the design and implementation aspects of teaching descriptive writing through project-based learning and integrating artificial intelligence (AI) tools. The research location is at a junior high school in Soppeng, Indonesia, and the research subject was seventh-grade students. The result of the teaching design covers steps, activities, materials, Artificial Intelligence tools, media, and evaluation. The steps and activities in the teaching design consist of opening, main teaching, and closing. In the teaching material part, the contents describe animals, people, and places. In the AI tools part, the tools used in teaching are Gencraft, chat GPT, and Padlet. In the media part, the tools used are LCD, smartphone, and laptop. Students' writing documents were evaluated using a writing rubric in the evaluation part. The study has identified the steps in designing a teaching model for descriptive writing through Pjbl learning by integrating AI tools. This study contributes to our knowledge of the various procedures in teaching design. Yet, future studies on the current topics are still recommended to enrich the research areas on pedagogical design.

Keywords: Artificial Intelligence; chat GPT; gencraft; padlet; project based learning

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INTRODUCTION

In the ever-evolving digital era, technology has become an integral part of many aspects of life, including education. One technological innovation that is currently gaining widespread attention is artificial intelligence (AI). AI has shown its potential in improving various fields, including education, by offering tools and solutions that can support the learning process. One area that can benefit from the application of AI is writing, an important skill for students to master.

In the current learning process of descriptive writing, a phenomenon exists where teachers often overwhelm students with excessive theoretical knowledge, thereby limiting their opportunities to express their thoughts through writing. Consequently, students' enthusiasm for writing diminishes, and they feel pressured, leading to difficulties in generating ideas and composing descriptive texts. However, it is vital to recognize that writing descriptive texts should be an enjoyable learning activity that enables students to apply their thoughts effectively in written form. Addressing this issue promptly becomes crucial to prevent its negative impact on future generations. Therefore, teachers must adapt their teaching approaches to establish a classroom environment that fosters a sense of calmness and engagement among students. The teaching and learning process should incorporate specific tactics, strategies, and media to effectively facilitate students' development of descriptive writing skills.

Descriptive writing is a part of the language curriculum, where students are required to develop the ability to describe objects, people, places, or events in a clear and detailed manner. However, many students have difficulty in expressing their ideas effectively in written form. This is where AI can play an important role, by providing tools that can help students develop their writing skills.

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One approach that can be used is the use of appropriate learning media to help students improve their enthusiasm and proficiency in writing descriptive texts. The implementation of effective learning models can also be a solution to address these issues. It will have a positive impact, increase students' motivation, and help them develop better writing skills in descriptive texts. In this study, the author proposes AI tools as supporting media for writing descriptive texts with the PBL learning model. This approach involves the use of the PBL model, integrating Gencraft, ChatGPT, and Padlet to provide a comprehensive solution.

The use of artificial intelligence (AI) tools such as Gencraft, ChatGPT, and Padlet has had a very positive impact in supporting students to develop skills in writing descriptive text more effectively (Khalala, 2019). Through the integration of AI, learning becomes more personalized because these tools are able to provide feedback that is appropriate to the level of understanding and needs of each student instantly (Flores-Vivar & García-Peñalvo, 2023; Kartal & Yeşilyurt, 2024; Zhang, 2022). This means each student can progress at their own pace, minimizing the potential for confusion or overload. Additionally, AI stimulates students' creativity by providing additional ideas and varied writing guides, helping them to develop unique writing styles and hone critical thinking skills (Bhutoria, 2022). Then, seamless accessibility allows students to practice and improve their writing skills on an ongoing basis outside of the classroom environment, bridging the gap between study time and independent time. The ongoing interaction between students and AI tools also builds technology-based skills that are invaluable in today's digital age, preparing them for the demands of an increasingly connected future job. In addition, positive experiences with AI tools increase students' confidence in exploring language and constructing better and more convincing descriptive texts. By incorporating the potential of AI in a learning approach, students are better prepared to face the demands of a competitive world with superior strategies, while forming themselves into writers who are more skilled, creative and adaptive in conveying descriptions effectively (Yilmaz and Karaoglan Yilmaz, 2023).

Gencraft is a virtual world-building platform that immerses users in visually inspiring environments, stimulating their imagination and providing ideas for descriptive writing. By exploring virtual settings and engaging with captivating landscapes and objects, students can enhance their observational skills and incorporate vibrant descriptions into their writing. This promotes creativity and active engagement in descriptive writing tasks. To further support students, they can make use of ChatGPT, an AI language model developed by OpenAI, which serves as a virtual assistant. ChatGPT offers suggestions and feedback, assisting students in refining their sensory details, figurative language usage, and sentence structure. Students can engage in discussions and request example sentences to improve their descriptive writing skills.

Additionally, Padlet can be utilized as an online collaborative platform for students to share their writing with classmates and teachers. Through Padlet, students can receive valuable feedback and comments to enhance their descriptive abilities. Once students complete their descriptive writing tasks, Padlet can showcase their work, allowing for audience engagement and feedback. It also serves as an online gallery where students can upload their writings, providing an opportunity for the entire class to read and appreciate their work. The act of showcasing their work fosters a sense of achievement and pride, further fueling students' enthusiasm for descriptive writing.

Through the integration of Gencraft, ChatGPT, and Padlet, students can benefit from immersive visual experiences, personalized stimuli, collaborative writing processes, and opportunities to showcase their work. These AI tools complement traditional teaching methods and provide additional support and resources for students to enhance their descriptive writing skills. By leveraging AI technology and integrating AI tools into the classroom, educators can create a dynamic and engaging learning environment that nurtures students' creativity, critical thinking, and communication skills. Ultimately, the integration of AI tools empowers students to become proficient writers and effective communicators.

One learning approach that can be integrated with AI to support descriptive writing is the project-based learning (PjBL) model. PjBL is a student-centered learning method, where they learn through active engagement in meaningful and relevant projects. The integration of AI in the PjBL model can

provide various benefits, such as real-time feedback, customized learning resources, and support in the writing process.

While the integration of technology in education has been widely discussed in the literature, there are some important gaps that remain unexplored, especially in the context of using artificial intelligence (AI) tools to support descriptive writing through a project-based learning (PjBL) model. Limitations of empirical studies on the combination of AI and PjBL is one the research gaps. Most of the existing research focuses more on the general application of AI technologies in education or on the application of PjBL models without regard to specific integration with AI tools. Empirical studies exploring the combination of the two-how AI can specifically support descriptive writing in the context of PjBL-are still very limited. Other research gap remain unexplored is lack of understanding of effective pedagogical design. While there are several studies that suggest the potential of AI in learning, few explore the optimal pedagogical design for AI integration in PjBL. How AI can be pedagogically designed and implemented to support students' descriptive writing requires further research.

In addition, adaptability and personalization of learning still need to explore. AI has great potential in customizing learning according to students' individual needs. However, research on how AI can be adapted to meet students' personalized needs in the context of descriptive writing and PjBL is limited. Studies that examine the most effective AI features for personalizing learning in this context are needed.

By considering previous issue. this article aims to explore the pedagogical design and practical use of AI tools in supporting students' descriptive writing through a project-based learning model. It is hoped to provide deeper insights into how technology can be effectively integrated in education to improve student learning outcomes. Filling these research gaps will make important contributions to educational literature and practice, as well as help to optimally utilize the potential of AI to support descriptive writing through the PjBL model. In-depth and comprehensive research in this area will provide valuable insights for educators, researchers and policy makers in developing innovative and effective learning strategies.

Artificial Intelligence (AI)

The Artificial Intelligence (AI) is a popular and constantly evolving topic that raises questions about its future applications. While AI will not replace the role of humans, those who do not embrace and learn about AI risk being left behind in a rapidly changing world. AI refers to machine intelligence, where machines possess the ability to comprehend their surroundings and perform tasks without relying on human physical power. In education, AI is seen as a smart agent capable of mimicking human activities to achieve specific goals, making it a valuable tool for problem-solving in various fields (Yilmaz & Karaoglan Yilmaz, 2023).

The use of AI technologies in language classrooms has garnered mixed responses from researchers and teachers. While many studies extol the benefits of AI in personalized language learning, others present contradictory results (Zhang, 2022). Early studies focused on grammar and feedback provision, but recent advancements have shown AI's potential in various aspects of language learning. These benefits include facilitating meaningful communication, supporting collaborative roles, improving speaking performance, increasing motivation, and enhancing reading comprehension. However, some studies caution against overestimating the impact of AI on language learning and teaching, pointing out issues such as non-natural and decontextualized language produced by AI, limited pedagogical design of AI apps, and teachers' limited pedagogical knowledge in utilizing AI effectively (Ng, 2022).

Despite these debates, AI tools continue to play a significant role in language learning. ChatGPT, GenCraft, and Padlet are three AI tools that can be utilized within a Project-based Learning (PBL) model to support the writing process, particularly for descriptive text. ChatGPT facilitates interactive conversations and provides feedback, making it valuable for practicing descriptive writing (Yilmaz & Karaoglan Yilmaz, 2023). GenCraft, an AI-powered narrative-building tool, aids in constructing compelling storylines and developing descriptive text. Padlet, a collaborative web-based platform,

enables users to gather and organize information for writing descriptive text by creating virtual boards and inviting contributions from peers(Gryz & Technologiczno-humanistyczny, 2021).

By combining these AI tools within a PBL framework, an interactive learning environment can be created, supporting the writing process for descriptive text. Collaborating with AI and peers allows for the production of high-quality texts and the acquisition of valuable feedback.

Project Based Learning

It revolves around the idea of using projects and activities as the central focus of learning. In this approach, students are actively involved in exploring, analyzing, synthesizing, and applying information to create various forms of learning outcomes, such as presentations, demonstrations, exhibitions, or products(Yilmaz & Karaoglan Yilmaz, 2023). Project Based Learning places emphasis on real-world, authentic tasks that require critical thinking, problem-solving, collaboration, and creativity. By engaging students in meaningful projects that align with their interests and abilities, this model promotes active participation, independent inquiry, and the development of essential 21st-century skills. It empowers students to take ownership of their learning journey, encourages self-directed learning, and nurtures a deeper understanding of the subject matter that can be transferred to real-life situations. Ultimately, Project Based Learning cultivates a student's holistic growth and equips them with the necessary skills to thrive in an ever-evolving world (El-Maghraby, 2022).

The Project Based Learning (PBL) model offers numerous advantages and is highly beneficial for students. However, it is not commonly used by teachers due to the significant preparation and time it requires. According to Mulyasa (2014), PBL is an instructional approach that directs students' attention towards complex problems, encouraging them to engage in investigations and gain understanding through inquiry. This model also aims to facilitate collaborative projects that integrate multiple subjects from the curriculum, providing students with opportunities to explore content in meaningful ways and conduct experiments collaboratively and independently(El-Maghraby, 2022).

In PBL, students work on projects that are aligned with predetermined themes or subjects. These projects require students to apply their knowledge, skills, and creativity to develop a real product or solution. By working on authentic projects, students are able to connect their learning to real-life situations and make it more meaningful.

PBL encourages students to develop problem-solving skills, critical thinking abilities, collaboration, and self-directed learning. It also provides an opportunity for students to apply the concepts and principles they have learned in a practical and meaningful context. By actively participating in the project, students gain a deeper understanding of the subject matter and develop important skills that can be transferred to future endeavors.

Based on the expert opinion mentioned earlier, it can be concluded that Project-Based Learning offers several benefits. These include increased student engagement in problem-solving, acquisition of new knowledge and skills, opportunities for collaboration and group work, and the chance for students to take ownership of project organization. In this approach, students create a framework to address predetermined problems and then design the workflow, including information gathering, project implementation, and evaluation of the final results

METHODS

The teaching design was inspired by ASSURE (Analyze learners, State objectives, Select Methods, Media, and materials, Utilize media and materials, Require learners participation, Evaluate and Revise) instructional design model and developed based on research need. The learner needs were investigated from class observation, and teacher's interview. After the learner needs analyzed, the objectives were stated and teaching methods, media and learning materials were selected. The next step is learners participation by implementing the method, media and materials. Evaluating the process is the next step, and doing the revision if it is needed.

The research location is MTs Negeri Soppeng and the research subject was seventh grade students. The result of teaching design covers steps, activities, materials, Artificial Intelligence tools, media, and evaluation. The steps and activities in the teaching design consist of opening, main

teaching, and closing. In teaching material part, the contents are describing animal, describing people, and describing place. In the AI tools part, types of tools used in teaching is Gencraft, chat GPT, and Padlet. In the media part, the tools used are LCD, smartphone, and laptop. In the evaluation part, students' writing documents were evaluated using writing rubric.

The steps involved in teaching descriptive writing through the PjBL learning model with the integration of Artificial Intelligence (AI) tools is assessed through dimensions such as writing proficiency, structure and organization, use of AI Tools, and self-reflection and improvement. These dimensions help evaluate students' ability to produce high-quality writing, create well-structured compositions, effectively use AI tools, and engage in self-reflection and revision. By considering these dimensions, we can understand the impact of this instructional approach on students' descriptive writing skills.

In the context of this research, the population consists of seventh-grade students who are attending MTs Negeri Soppeng in the academic year 2023/2024. The population is divided into two classes: VII.a as the experimental group and VII.b as the control group. Class VII.a has 28 students, and class VII.b also has 28 students, making a total of 55 students. However, during the data collection, the number of students in both the experimental and control classes decreased. Class VII.a, which participated in the pre-test and post-test, only consisted of 25 students, and similarly, class VII.b which originally had a sample size of 28, also had only 25 students participating in the pre-test and post-test. Therefore, the total number of students who participated was 50 students.

The study involved seventh-grade students from MTs Negeri Soppeng who were randomly selected as the sample. A subset of those students participated in the study using the experimental method, with the aim of investigating the effects of AI tools on teaching descriptive text within the PjBL learning model. The selected sample was divided into two groups: the experimental group, which received instruction utilizing AI tools during the PjBL activities, and the control group, which did not utilize the AI tools approach within the PjBL learning model.

RESULTS

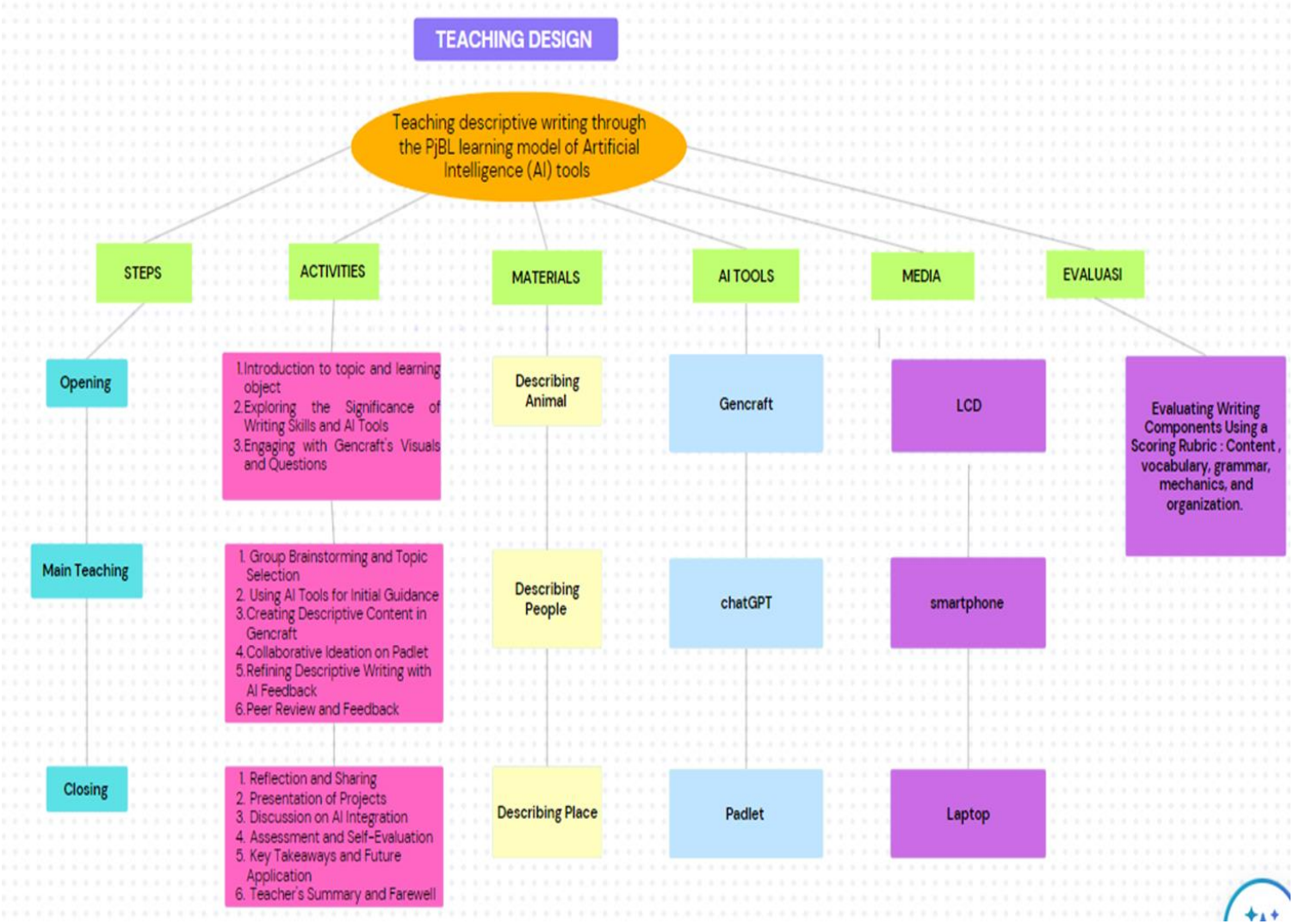
The pedagogical design

A teaching design serves as a comprehensive roadmap outlining the plans and strategies employed to effectively impart a particular topic or skill to students. In the context of the current research, which focuses on teaching descriptive writing through the PjBL model with the integration of AI tools, the teaching design assumes a pivotal role in structuring the instructional process. By leveraging the synergistic approach of Project-Based Learning (PjBL) and AI tools, this teaching design not only enhances students' writing skills but also cultivates their critical thinking, collaborative abilities, and adaptability to technological advancements. It ensures a dynamic and engaging educational environment that aligns with the ever-evolving landscape of modern education (Ramadhan et al., 2020); (Lafitri et al., 2023).

The teaching design using Gencraft, chat GPT, and Padlet through projet-based learning was arranged by considering steps, activities, artificial intelligence tools, media and evaluation. The pedagogical design in step part cover opening, main, and closing. In activities part, it was suited to the steps of teaching. The materials part is describing animals, describing people, and describing place . In the AI tools, Gencraft, chat GPT, and padlet are the tools chosen for supporting the learning of descriptive text. Thee media part covers LCD, smartphone, and laptop. In the evaluating part, the writing rubric covers content, vocabulary, grammar, mechanics ,and organisation.

The learning process begins with an introduction aimed at acquainting students with the topic and learning objectives. At this stage, the teacher provides an overview of the importance of descriptive writing skills in communication. Additionally, the teacher introduces the concept of using AI tools such as Gencraft, ChatGPT, and Padlet (Yilmaz and Karaoglan Yilmaz, 2023). Students are encouraged to interact with visual elements from Gencraft and respond through open-ended questions, intending to spark their curiosity before entering the main phase. Learning design refers to a systematic and structural planning of how a learning process will unfold. This process involves arranging steps, methods, strategies, and resources necessary to achieve specific learning goals. In learning design, educators craft effective and efficient learning experiences for learners. Components

Figure 1
Teaching Design



of learning design encompass various aspects, including learning objectives, teaching methods, learning tools and resources, assessment, and evaluation of the learning process.

Learning design is the process of structuring and planning organized and effective learning experiences for learners. Its goal is to create a learning environment that supports the achievement of learning objectives and the development of students' competencies (Syukur NC, 2008). Learning design involves arranging various learning components, such as learning objectives, teaching strategies, evaluation methods, learning content, and the tools and resources to be utilized. The learning design process usually involves the following steps:

The teaching practice

The data analysis technique in this case involves several steps which involve making teaching designs and validating instruments by experts. In this study, a comprehensive instructional design was developed, integrating the Project-Based Learning (PjBL) model with Artificial Intelligence (AI) tools to effectively teach seventh-grade students descriptive writing. The instruments created for data collection underwent a validation process by experts, and their input was utilized to refine the instruments. The primary objective was to ensure the quality of these tools in collecting essential data to gauge teaching effectiveness. After undergoing validation, these instruments were employed in the learning process for the seventh-grade students. These sequential steps form the foundation of the research, facilitating a robust exploration of the impact of AI tools in the PjBL context on enhancing students' descriptive writing skills.

This learning model consists of three main stages: Opening (Opening), Main Learning Process (Main Teaching), and Closing (Closing). Each stage is designed to optimize the learning experience of students.

a. *Opening:* The opening stage aims to familiarize students with the learning objectives, pique their interest, and activate their relevant prior knowledge. The teacher will begin by providing an overview of the topic of descriptive writing and explaining the significance of this skill in effective communication. They will also introduce the concept of utilizing AI tools such as Gencraft, ChatGPT, and Padlet in the learning process. This step is intended to ignite students' curiosity.

b. *Main Teaching Process*: At this stage, students will participate in core learning activities. The teacher will instruct students to collaborate in groups, where they will plan and design their descriptive writing projects. Additional guidance on the use of AI tools will be provided to students. They will then begin implementing their projects within the Gencraft environment, generating descriptive content based on their selected topics. Throughout this process, ChatGPT will offer supportive feedback and assist in guiding their writing. Furthermore, students will utilize Padlet for interaction, idea exchange, and providing feedback to their classmates.

c. *Closing*: The closing stage is designed to summarize the learning process and confirm the attainment of learning objectives. The teacher will prompt students to reflect on their acquired knowledge and experiences throughout the journey. Students will engage in discussions regarding the challenges they faced, the accomplishments they achieved, and their experiences utilizing AI tools for their learning. Together, teachers and students will evaluate the project's outcomes and identify lessons that can be applied to future learning endeavors. This step will provide a meaningful conclusion to the learning experience, ensuring that students understand the connections between their learning experiences and the enhancement of their descriptive writing skills.

DISCUSSION

The use of AI tools in learning has shown great potential for improving student learning outcomes (Kemelbekova et al., 2024). In the context of descriptive writing, AI can serve as a tool that provides

automatic and real-time feedback, which is invaluable for students who are developing their writing skills (Alshumaimeri & Alshememry, 2024). AI-based writing apps, such as Grammarly or Quill, can help students correct grammar, spelling, and sentence structure, as well as provide suggestions for improving the richness of vocabulary and clarity of their descriptions. With this quick and specific feedback, students can more quickly understand and correct their mistakes, which in turn can improve the quality of their writing.

The project-based learning (PjBL) model emphasizes active and collaborative learning, where students work in groups to complete meaningful projects. In the context of descriptive writing, PjBL allows students to develop their writing skills through practical and real-life experiences (Boss & Larmer, 2018; Sugiyanto et al., 2020) . The collaborative process in groups provides opportunities for students to discuss, exchange ideas, and provide feedback to each other, which can enrich their learning process (Artini et al., 2018; Lafitri et al., 2023). By combining PjBL and AI tools, students not only benefit from collaboration but also from the personalized feedback provided by AI, which can further facilitate the development of their writing skills.

The ASSURE model-based instructional design ensures that technology is optimally used to achieve learning objectives. By analyzing learner characteristics, setting clear objectives, selecting appropriate strategies and tools, and engaging students in the learning process, the ASSURE model provides a comprehensive framework for AI integration in PjBL (Heinich et al., 2012; Rahman, 2017; Smaldino et al., 2012). An evaluation of the implementation of this design shows that the use of AI in descriptive writing can increase student engagement, improve the quality of their writing, and increase overall learning outcomes (Nazari et al., 2021; Shidiq, 2023).

The evaluation of the implementation of this teaching design showed that students who used the AI tool in the descriptive writing process showed significant improvement in the quality of their writing. They were better able to produce descriptions that were clear, detailed, and rich in vocabulary. In addition, students also showed improvement in the revision and editing skills of their writing, as indicated by improvements in aspects of grammar, spelling, and sentence structure.

In addition, feedback from students indicated that they felt more motivated and confident in writing with the help of the AI tool. They appreciated the real-time feedback provided by the AI, which allowed them to immediately correct their mistakes and see improvements in their writing. Teachers also reported that the use of AI in PjBL made teaching and assessment easier and allowed them to provide more personalized support to each student.

While the results are promising, there are some challenges that need to be considered in implementing AI tools in learning. One of the main challenges is limited access and technological infrastructure, especially in less developed regions. In addition, there are also concerns regarding students' dependence on AI tools, which may reduce their ability to think critically and independently in writing. Therefore, it is important to ensure that the use of AI is done in a balanced way, where students are still encouraged to develop their writing skills independently.

CONCLUSION

Integration of AI tools in learning descriptive writing through PjBL model shows great potential to improve students' learning outcomes. The ASSURE model-based instructional design provides an effective framework for implementing this technology in the classroom. The evaluation results showed a significant improvement in the quality of students' writing and their motivation in writing. However, it is important to consider the challenges and limitations and ensure that the use of AI is done in a balanced way and well-integrated in the curriculum. Further research is needed to explore more deeply the long-term impact of using AI in learning and the best ways to overcome the challenges.

REFERENCES

Alshumaimeri, Y. A., & Alshememry, A. K. (2024). The extent of AI applications in EFL learning and teaching. *IEEE Transactions on Learning Technologies*, *17*, 653–663.

https://doi.org/10.1109/TLT.2023.3322128
Artini, L. P., Ratminingsih, N. M., & Padmadewi, N. N. (2018). Project based learning in EFL classes. *Dutch Journal of Applied Linguistics*, *7*(1), 26–44. https://doi.org/10.1075/dujal.17014.art
Bhutoria, A. (2022). Personalized education and Artificial Intelligence in the United States, China, and India: A systematic review using a Human-In-The-Loop model. *Computers and Education: Artificial Intelligence*, *3*. https://doi.org/10.1016/j.caeai.2022.100068
Boss, S., & Larmer, J. (2018). Project based teaching how to create rigorous and engaging learning experiences. In *Buck Institute for Education*.
El-Maghraby, A.-S. A. (2022). The effect of a problem based learning approach (PBL) on EFL students descriptive writing performance. *22*(254), 0–0. https://doi.org/10.21608/mrk.2022.278538
Flores-Vivar, J. M., & García-Peñalvo, F. J. (2023). Reflections on the ethics, potential, and challenges of artificial intelligence in the framework of quality education (SDG4). *Comunicar*, *30*(74). https://doi.org/10.3916/C74-2023-03
Gryz, I., & Technologiczno-humanistyczny, U. (2021). *Write or tell the story ? – linguistic application of the online tools in developing writing Tytuł : Napisa ć czy opowiedzie ć histori ę – j ę zykowe zastosowanie narz ę dzi multimedialnych w rozwijaniu umiej ę tno ś ci pisania i czytania*.
Heinich, R., Molenda, M., Russell, J., & Smaldino, S. (2012). Instructional media and technology for learning. *International Journal of Distributed and Parallel Systems*. https://doi.org/10.1016/J.ARABJC.2011.11.008
Kartal, G., & Yeşilyurt, Y. E. (2024). A bibliometric analysis of artificial intelligence in L2 teaching and applied linguistics between 1995 and 2022. *ReCALL*. https://doi.org/10.1017/S0958344024000077
Kemelbekova, Z., Degtyareva, X., Yessenaman, S., Ismailova, D., & Seidaliyeva, G. (2024). AI in teaching English as a foreign language: Effectiveness and prospects in Kazakh higher education. *XLinguae*, *17*(1), 69–83. https://doi.org/10.18355/XL.2024.17.01.05
Khalala, R. A. (2019). *Improving students' achievement of descriptive text writing by using realia (A Classroom Action Research at the Seventh Grade of MTs Sabilul Ulum Mayong, Jepara in the Academic Year of 2015-2016)*.
Lafitri, W. S., Suryatmoko, A., & Suharto, V. T. (2023). Improving student recent writing skills using the project based learning (PJBL) model for class XI MIPA 3 SMA Negeri 6 Madiun. *International Journal Corner of Educational Research*, *1*(3), 138–143. https://doi.org/10.54012/ijcer.v1i3.167
Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. *Heliyon*, *7*(5). https://doi.org/10.1016/j.heliyon.2021.e07014
Ng, T. K. D. (2022). *An examination on primary students' development in artificial intelligence literacy through digital story writing*. *February*. https://doi.org/10.3102/1896981
Rahman, H. (2017). Authentic tasks for vocational EFL learners in suburb: ASSURE model using computer-assisted audio-visual. In *International Seminer on Language, Education and …*. sastra.um.ac.id. http://sastra.um.ac.id/wp-content/uploads/2017/11/62-72-Hairudin-Rahman-edited_layouted.doc.pdf
Shidiq, M. (2023). The use of artificial intelligence-based Chat-GPT and its challenges for the world of education. *Proceeding of International Conference on Education, Society and Humanity*, *01*(01).
Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2012). The ASSURE Model. In *Instructional Technology and Media for Learning*.
Sugiyanto, S., Setiawan, A., Hamidah, I., & ... (2020). Integration of mobile learning and project-based learning in improving vocational school competence. *Journal of Technical …*. https://penerbit.uthm.edu.my/ojs/index.php/JTET/article/view/5470
Yilmaz, R., & Karaoglan Yilmaz, F. G. (2023). The effect of generative artificial intelligence (AI)-

based tool use on students' computational thinking skills, programming self-efficacy and motivation. *Computers and Education: Artificial Intelligence*, *4*(June), 100147. https://doi.org/10.1016/j.caeai.2023.100147

Zhang, Y. (2022). Development and application of artificial intelligence multimedia technology based on big data. *Mobile Information Systems*, *2022*. https://doi.org/10.1155/2022/2073091