

THE ESSENCE OF STUDENTS' EXPERIENCES IN UTILIZING THE GEMINI APPLICATION AS ARTIFICIAL INTELLIGENCE (AI) IN ARABIC LANGUAGE LEARNING AT KH. MUKHTAR SYAFAAT UNIVERSITY

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ABSTRACT

This study aimed to describe students' lived experiences in utilising the Gemini application as Artificial Intelligence (AI) in Arabic language learning and to identify the essence of these experiences. This study employed a qualitative phenomenological approach involving five students selected purposively based on their experience using Gemini for Arabic language learning. Data were collected through in-depth interviews, observations, and documentation and analysed through data reduction, data display, and conclusion drawing. The findings show that students experienced Gemini as a supportive learning medium in translating Arabic texts, searching for vocabulary (mufradat), understanding nahwu and sharaf, constructing Arabic sentences, and completing academic assignments. Students experienced greater ease and perceived efficiency in learning due to quick access to explanations provided by Gemini. However, they also experienced limitations when some responses were inaccurate or did not correspond with the learning context. These experiences led students to verify Gemini's responses through lecturers, textbooks, dictionaries, classical Islamic texts and other academic sources. The essence of students' experiences was identified by examining recurring meanings emerging from the interview, observation, and documentation data, particularly the experiences of convenience and perceived learning efficiency, along with the need for critical verification of AI-generated content. Thus, Gemini is experienced as a supplementary learning medium rather than a primary source of knowledge, supporting students' learning while maintaining critical thinking, information verification, and academic responsibility skills.

Keywords: Artificial Intelligence, Gemini, student experience, Arabic language learning, phenomenology

المخلص

تهدف هذه الدراسة إلى وصف تجارب الطلبة في استخدام تطبيق جيميني بوصفه أحد تطبيقات الذكاء الاصطناعي في تعلم اللغة العربية بجامعة كياهي الحاج مختار شفاعات، والكشف عن جوهر تلك التجارب. اعتمدت هذه الدراسة على المنهج النوعي باستخدام المنهج الفينومينولوجي (الظاهراتي). وتكون المشاركون في الدراسة من خمسة طلبة تم اختيارهم بطريقة العينة القصدية، استنادًا إلى خبرتهم في استخدام تطبيق جيميني لأغراض التعلم. وجمعت البيانات من خلال المقابلات المتعمقة، والملاحظة، والتوثيق، ثم حُللت من خلال مراحل اختزال البيانات، وعرض البيانات، واستخلاص الاستنتاجات وأظهرت نتائج الدراسة أن تطبيق جيميني يُستخدم أداةً تعليمية لترجمة النصوص، وفهم قواعد النحو والصرف، والبحث عن المفردات، والمساعدة في إنجاز مهام الكتابة باللغة العربية. ويوفر استخدام جيميني تجربةً تعليميةً أسرع وأسهل وأكثر كفاءة. ومع ذلك، لا يزال الطلبة يتحققون من صحة الإجابات التي يولدها الذكاء الاصطناعي بالرجوع إلى المحاضرين، والكتب التراثية، والمصادر الأكاديمية الأخرى. ويكشف جوهر تجربة الطلبة أن جيميني يؤدي وظيفة وسيلة

تعليمية داعمة، وليس مصدرًا رئيسيًا للمعرفة. ومن ثم، يتحقق التوازن بين استخدام تكنولوجيا الذكاء الاصطناعي والقيم التقليدية للتعليم القائم على نظام المعاهد الإسلامية (البيسانتين). الكلمات المفتاحية: الذكاء الاصطناعي، جيميني، تجربة الطلبة، تعلم اللغة العربية، الفينومينولوجيا.

INTRODUCTION

The development of digital technology in the Society 5.0 era has brought significant changes to learning systems across various levels of education, including higher education (Torres-Rivera et al., 2025). One rapidly developing innovation is the use of Artificial Intelligence (AI) as a supporting medium in the learning process (Satav & Patil, 2026). AI is a computational system capable of imitating human cognitive abilities in understanding language, processing information, and providing responses based on users' needs (Kasneci et al., 2023). In the context of education, AI functions not only as a provider of information but also as a means of supporting independent learning, personalising learning materials, and improving learning efficiency (Dwivedi et al., 2023). One AI application widely utilised by university students is Gemini, a large language model capable of assisting with translation, explaining concepts, providing examples, and supporting the preparation of academic assignments (Kasneci et al., 2023).

In Arabic language learning, the presence of Gemini offers an alternative learning resource that can assist students in understanding mufradat (vocabulary), nahwu (Arabic grammar), sharaf (Arabic morphology), and other language skills (Amadi & Hikmah, 2025). Recent research synthesises advances in AI-based adaptive learning systems designed to personalise learning content according to learners' performance, behaviour, and individual learning needs (Bey, 2026). UNESCO (2023) emphasises that the use of AI in education should be implemented ethically and responsibly while remaining oriented toward the development of learners' competencies (Holmes et al., 2022).

Despite the various conveniences it offers, the use of AI in Arabic language learning is not without its challenges. Arabic is a field of study that emphasises mastery of linguistic aspects. It also requires an understanding of the context, culture, and scholarly traditions of Islam. Ananda and Salmiah (2024) examined students' perceptions of Gemini as a writing assistance tool and found that AI could function as an additional form of support in academic learning. The findings of Teo and Chow (2025) support the argument that the value of AI lies in how students understand and integrate it into their learning (Teo & Chow, 2025). Chugh et al. (2025) emphasised that students may exploit GenAI to gain an unfair advantage, bypass the learning process by relying on AI-generated solutions, and undermine academic integrity (Chugh et al., 2025).

From a phenomenological perspective, such experiences constitute lived experiences with subjective meanings that need to be explored in depth to understand how AI influences students' learning processes, particularly within pesantren-based higher education institutions that uphold the values of adab (proper conduct), honesty, and academic responsibility.

Various studies have examined the use of AI in education, including Arabic language learning. Most studies have focused on students' perceptions, the effectiveness of AI use, improvements in learning outcomes, and technology implementation in learning. Amadi and Hikmah (2025), Teo and Chow (2025), and Chugh et al. (2025) indicate that AI can assist students in understanding learning materials, improving learning efficiency, and expanding access to academic information. However, these studies have not sufficiently explored how students experience and interpret AI use as part of their learning experiences.

Based on this condition, In this regard, the present study offers novelty by examining the essence of students' experiences in utilizing the Gemini application through a phenomenological approach, thereby foregrounding the lived meanings, cognitive–emotional dynamics, and ethical nuances that quantitative surveys often overlook (Fawaz et al., 2025). This study does not focus on measuring the effectiveness of the technology but rather on revealing the subjective meanings that emerge from students' interactions with AI in Arabic language learning, particularly within a pesantren-based higher education environment whose characteristics differ from those of other educational institutions.

Based on the foregoing discussion, this study aims to describe students' experiences in utilising the Gemini application as Artificial Intelligence in Arabic language learning and to reveal the essence of the meaning derived from those experiences. The findings are expected to contribute to the development of technology-based Arabic language education, particularly from a phenomenological perspective, while also serving as a reference for lecturers, students, and educational institutions to integrate AI wisely, critically, and responsibly (Samin & Osman, 2024). Furthermore, this study is expected to enrich the literature on the utilisation of AI in education by placing students' experiences as the primary focus, so that the implementation of technology is understood not only from a functional perspective but also from pedagogical, reflective, and ethical dimensions (Bouakaz & Khalid, 2025).

RESEARCH METHODS

This study employed a qualitative approach using a phenomenological method to understand the lived experiences of students in utilising Gemini, an Artificial Intelligence (AI) application, in Arabic language learning. The phenomenological approach was selected because this study focuses on uncovering the meaning and essence of students' subjective experiences of the phenomenon they directly encounter, in line with phenomenology's commitment to understanding lived experience and the essential structures (eidos) of phenomena as they appear in consciousness (Stolz, 2023). This research was conducted at Universitas KH. Mukhtar Syafaat, with the research subjects consisting of students who had experience using the Gemini application in Arabic language learning. The informants were selected through purposive sampling based on the following criteria: active students enrolled in Arabic language learning, had previously used the Gemini application, and were willing to participate as research informants. This strategy aligns with phenomenological research conventions, wherein

participants are deliberately chosen for their direct lived experience of the phenomenon under investigation (Rahman et al., 2025).

The research data consisted of primary and secondary data collected from the field. Primary data were obtained through in-depth interviews and observations of students' experiences using Gemini, while secondary data were obtained from academic documents, scholarly journals, and literature relevant to the study. Data collection techniques included semi-structured interviews, observations, and documentation. Data analysis employed the Miles, Huberman, and Saldaña model, which consists of data reduction, data display, conclusion drawing, and verification. To ensure data validity, this study employed source, technique, and time triangulation, thereby ensuring that the data obtained had a level of credibility that could be academically justified (Rahman et al., 2025).

RESULTS AND DISCUSSION

Students' Experiences in Utilizing the Gemini Application in Arabic Language Learning Gemini as a Supporting Medium for Understanding Arabic Language Materials

The findings indicate that students utilise the Gemini application as a supporting medium in Arabic language learning. Based on interviews with five informants, Gemini was used to assist in translating Arabic texts, understanding *mufradat* (vocabulary), explaining *nahwu* and *sharaf* rules, constructing example sentences, and completing academic assignments. Students perceived that the application was capable of providing explanations quickly, thereby assisting them when they encountered difficulties in understanding the material presented in class. These findings show that the use of Gemini is directly related to students' learning needs, particularly when they require an initial explanation of Arabic language materials.

Nevertheless, all informants stated that Gemini was not their primary learning resource. Lecturers, textbooks, and lecture notes remained the main references in the learning process, while Gemini was utilised as a supplementary resource to obtain initial explanations before conducting a more in-depth study of the material. This finding demonstrates that students do not simply depend on AI-generated information but position Gemini as an additional learning resource. This finding is consistent with previous studies that describe AI as a supporting technology in the learning process rather than a complete replacement for established learning resources. In the context of Arabic language learning, this experience indicates that Gemini can support students in accessing explanations more quickly, while the role of lecturers and academically authoritative learning resources remains important. Thus, the pedagogical implication is that Gemini can be utilised as a supplementary learning medium to support students' understanding without replacing lecturers' guidance and independent learning.

Forms of Gemini Utilization in the Learning Process

The forms of Gemini utilisation identified in this study included translating Arabic texts into Indonesian and vice versa, searching for vocabulary, constructing example sentences,

explaining grammatical structures, and assisting with academic assignments. These findings were obtained from the experiences of the five informants who used Gemini according to the learning difficulties and academic tasks they encountered. Students used Gemini to obtain an initial understanding of the learning material before comparing its responses with explanations provided by lecturers, textbooks, or other scholarly sources.

In addition to facilitating access to information, Gemini also helped students save time when searching for learning references. However, students recognised that AI-generated responses were not always consistent with the context of Arabic-language learning in a pesantren-based higher-education environment. Therefore, the information obtained through Gemini still requires a verification process. This finding is consistent with previous studies highlighting the usefulness of generative AI as a learning assistant and the need to consider its limitations and potential inaccuracies. The experience of comparing Gemini's responses with lecturers' explanations and other learning sources indicates that students developed a selective approach toward AI-generated information. Pedagogically, this suggests that Gemini's use should be accompanied by guidance on how students evaluate, compare, and verify information obtained from AI.

The Essence of Students' Experiences in Using Gemini Ease of Access and Learning Efficiency

The phenomenological analysis indicated that the essence of students' experiences in using Gemini included ease of access and perceived learning efficiency. Based on interviews with the five informants, students used Gemini to assist with Arabic text translation, understanding mufradat (vocabulary), explaining nahwu and sharaf rules, constructing example sentences, and completing academic assignments. Quick access to explanations was helpful in obtaining an initial understanding of difficult materials. This experience reflects students' perception that Gemini makes certain learning activities easier and more efficient (Linur et al., 2025; Owoc et al., 2021).

However, the efficiency identified in this study refers to students' subjective experiences of the speed and convenience of accessing information rather than the objectively measured learning effectiveness. This study did not measure learning effectiveness through academic achievement, pre- and post-test scores, or other quantitative indicators. Therefore, the findings indicate that students perceived Gemini as facilitating their learning process, but they do not establish that Gemini improved learning outcomes. Thus, Gemini is experienced as a supporting medium that facilitates access to information without replacing independent and authoritative learning resources. and the efficiency it provides in the learning process. This experience shaped students' understanding of Gemini as a complementary learning resource, rather than a primary source of knowledge. This is reflected in their continued reliance on lecturers, textbooks, and lecture notes as the main learning references, while Gemini was used to obtain initial explanations when difficulties were encountered.

Awareness of AI Limitations and the Importance of Academic Verification

In addition to its benefits, students also recognised the various limitations of Gemini (Baskara, 2025). Several informants stated that AI-generated translations and explanations were sometimes inconsistent with the context of the material being studied and therefore required further verification through lecturers, textbooks, dictionaries, or discussions with peers. This experience demonstrates that students did not uncritically accept AI-generated responses but instead engaged in a verification process before using them in their academic activities (Anggraini et al., 2026). The verification process showed that students experienced the limitations of AI not only as a difficulty but also as a reason to compare and evaluate the information obtained from Gemini with other learning resources.

This finding is consistent with previous research emphasising the importance of evaluating AI-generated information (Anggraini et al., 2026). However, the present findings further indicate that verification became part of students' learning practices when Gemini's responses were perceived as inaccurate or contextually inappropriate. This may encourage students to engage more critically with AI-generated information by verifying its accuracy and relevance before accepting it. Thus, the experience identified in this study indicates that Gemini is positioned as a supporting medium for learning, while critical thinking, information validation, and academic responsibility remain essential components of Arabic-language learning at Universitas KH. Mukhtar Syafaat.

CONCLUSION

This study demonstrates that students at Universitas KH. Mukhtar Syafaat used the Gemini application as a supporting medium in Arabic language learning, particularly to assist in translating texts, understanding mufradat (vocabulary), explaining nahwu and sharaf rules, and obtaining preliminary references for completing academic assignments. The availability of Gemini provides convenience and efficiency in the learning process, particularly when students encounter difficulties in understanding learning materials. Nevertheless, students do not regard Gemini as their primary learning resource. Lecturers, kitab (Islamic classical texts), and other academic sources remain the main references, while Gemini is used as a supplementary tool that complements the learning process.

The essence of students' experiences in using Gemini demonstrates that the utilisation of Artificial Intelligence (AI) not only facilitates access to information but also fosters awareness of the importance of critical thinking and academic responsibility. Students recognise that the information generated by Gemini has certain limitations and therefore needs to be verified against more authoritative sources such as peer-reviewed journals. Accordingly, the use of Gemini in Arabic language learning is understood as a supporting medium that can facilitate the learning process without diminishing the importance of independent thinking, information validation, and the academic values that underpin learning in a pesantren-based higher education environment.

Based on the findings, the implication for students is that Gemini can be utilised as a supplementary resource for obtaining initial explanations of Arabic language materials, while its responses should be verified through lecturers, textbooks, dictionaries, and other academic sources. For lecturers, the findings indicate that their role remains important because students continue to rely on lecturers and established learning resources as their primary references. For educational institutions, this finding implies the need to maintain an academic learning environment in which AI functions as a supplementary learning medium rather than a replacement for established learning resources. These implications were directly derived from the experiences of the five informants in this study. Broader recommendations concerning AI policies or practices in other educational settings are beyond the scope of the present study and require further research.

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Declaration of AI Usage

The authors used ChatGPT to assist with language editing and grammar-checking. All generated content was reviewed, revised, and verified by the authors, who take full responsibility for the accuracy, originality, and integrity of the manuscript

Conflict of Interest

The authors declare no conflicts of interest.

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