

Arabic Language Education Students' Experience in Using DeepL for Indonesian to Arabic Text Translation

Kania Dewi¹, Diny Rismayanti², Alissya Putri Wahyuni³, Nazril Irham⁴

Universitas Pendidikan Indonesia^{1,2,3,4}

kaniadewi.27@upi.edu¹, dinyrismayanti@upi.edu², alissyaput97@upi.edu³,
nazrilirham@upi.edu⁴

Article Information

Article history:

Received 25-04-2026

Accepted 27-05-2026

Published 04-06-2024

Keywords:

DeepL,
Translation,
Arabic,
Information Technology,
Artificial Intelligence.

ABSTRACT

The development of information technology in the form of *Artificial Intelligence* based on *Neural Machine Translation (NMT)* has brought an influence in the world of education, including in Arabic translation activities. One of the technologies that is often used in the translation process is DeepL. This study aims to find out the experience of Arabic language education students in using DeepL to translate texts from Indonesian to Arabic. This study uses a descriptive qualitative method with in-depth interview data collection techniques. The research subjects consisted of four Arabic Language Education students of the class of 2024 who were selected using *purposive sampling* techniques with the criteria of having used DeepL in translation tasks. The results of the study show that DeepL helps students translate texts and sentences faster, increase vocabulary, and make it easier to compose Arabic sentences. However, there are also several obstacles, such as the absence of harakat, inconsistency of rules, and lack of context of meaning in the translation. In addition to providing benefits, DeepL users also have the potential to cause dependence. Therefore, it is necessary to have a critical attitude and evaluative ability in using DeepL as a tool in learning Arabic.



Copyright: © 2026 by Author

This is an open access article below

Lisensi Internasional Atribusi Creative Commons-NonKomersial-ShareAlike 4.0

Correspondence Author:

Kania Dewi

Email: kaniadewi.27@upi.edu

1. INTRODUCTION

The use of information technology has become an integral part of almost all human life activities in the era of the industrial revolution 4.0 [1]. Its development and ability to facilitate various aspects of human life encourage people to depend on information technology [2]. One of them is the rapid development in *big data* technology and artificial intelligence (AI) that has had a great influence on various fields of human life, such as economics, politics, science, and education [3].

In the field of education, the development of AI also affects the language learning process, including learning Arabic. The application of information technology in learning Arabic is now a necessity that cannot be ignored, especially in translation activities [4]. The use of AI-based translation technology in Arabic learning is considered to be able to help the process of translating texts, understanding languages, and providing learning resources quickly and practically [5].

One form of application of AI that is widely used in academic activities, especially in the translation of Arabic texts is *Neural Machine Translation (NMT)* technology [6]. *NMT* is an artificial intelligence-based automatic translation technology that uses artificial neural networks to translate text directly from the source language to the target language through one integrated model so that it is able to produce a more natural and coherent translation [7] especially in terms of fluency and readability [8]. This technology is used in a variety of automated translation platforms, one of the most well-known of which is DeepL [9]. DeepL is an online translation service known for its high-quality machine translation using artificial intelligence and neural network technology, as well as providing translation services for texts and documents in multiple languages [10].

In recent years, the study of technology-based translation has developed quite rapidly. Previous studies have generally focused on evaluating accuracy and comparing performance between machine translations. Nuha and Farkhan [11] explain that various translation engines, including ChatGPT, Gemini, DeepL, and Google Translate, have been extensively analyzed in terms of translation accuracy and quality in various language contexts. Ramadhan [12] found that DeepL has an advantage over Google Translate in understanding Arabic texts, especially in terms of accuracy of meaning and sentence structure. Meanwhile, Fitriah & Ardi [13] examined the use of DeepL in translation learning with an emphasis on student perception, but still focused on English texts and had not specifically discussed the pairing of Indonesian with Arabic.

Based on this review, although a lot of research has been done on DeepL, most of it still focuses on the accuracy and quality aspects of translations. In addition, research examining the experience of using DeepL by Arabic Language Education students in translation activities is still relatively limited, especially in translating Indonesian texts into Arabic texts. Thus, there is a research gap in the form of a lack of empirical studies that integrate the performance of DeepL with its usage pattern by Arabic Language Education students.

This research offers several aspects. First, this study focuses on the study of Indonesian to Arabic language pairs that are still rarely studied empirically. Second, this study analyzes the experience of Arabic Language Education students using DeepL in translating a text or sentence. Third, this study was used to determine the implications of the use of technology on the development of students' translation skills. Thus, this research is expected to enrich the study of technology-based translation and provide an overview of the use of DeepL in learning Arabic in universities.

2. METHODS

This study uses a qualitative approach with a descriptive type of research. According to Sukmadinata [14], qualitative descriptive research is shown to describe and describe existing phenomena, both natural and man-made that pay more attention to the characteristics, quality, and relationships between activities. The subjects of the

study are four Arabic Language Education students at the Indonesian Education University Class of 2024, with the initials KN, NH, HH, and NJ. The selection of subjects was carried out using *purposive sampling* techniques, which is based on certain criteria, such as students who have used DeepL in translating Indonesian texts into Arabic and have experience in working on technology-based translation tasks.

The data collection technique was carried out through *in-depth interviews*. Sugiyono [15] explained that interviews are a two-way communication process that aims to obtain information about a person's views, responses, and motivations towards certain objects. Interviews are conducted in a semi-structured manner to allow researchers to have flexibility in digging into information in depth. The interview process was conducted online according to the condition of the informant and documented through recordings to support the accuracy of the data.

The data obtained were analyzed through the stages of reduction, presentation, and conclusion drawn, as described by Miles and Huberman [15]. Through these stages, the collected data is simplified, systematically compiled, and then interpreted to obtain a valid and in-depth understanding of the phenomenon being studied.

3. RESULTS AND DISCUSSION

Based on the results of interviews with four Arabic Language Education students of the 2024 batch of the Indonesian Education University, several findings were found regarding students' experiences in using DeepL. These findings are classified into four main themes, namely the pattern of DeepL use by students, students' perception of the quality of DeepL translations, obstacles in the use of DeepL, and the influence of DeepL use on students' abilities.

3.1. Patterns of Use of DeepL by Students

The results of the interviews showed that three informants, namely KN, NH, and HH, had been using DeepL since their school days, while one informant, NJ, was using DeepL for the first time to do tasks that needed translation from Indonesian to Arabic. Then in terms of the intensity of use, two informants, namely KN and HH, admitted that they used DeepL quite often, especially in completing translation tasks. KN stated that DeepL is not only used to translate Indonesian texts or sentences into Arabic, but also to translate other languages as well. In addition, NH said that using DeepL in conjunction with other applications or sites such as google translate and ChatGPT as an additional tool to translate a sentence.

These findings show that Arabic Language Education students have become accustomed to using information technology, especially *Artificial Intelligence/AI-based* translation technology in the language learning process since before entering higher education. This is in line with the research of Akmir et al [16] who stated that technological developments have a great influence on Arabic language learning and encourage the use of more adaptive and interactive information technology products in academic activities.

3.2. Students' Perceptions of the Quality of DeepL Translations

Based on the results of the interviews, there are various views on the quality of DeepL's translations. KN thinks that the results of DeepL's translation are not fully in accordance with the rules of the Arabic language, based on his experience, DeepL is still

considered to often experience errors in grammatical aspects. Meanwhile, according to HH, the quality of DeepL's translation results is considered to be good and in accordance with Arabic rules. On the other hand, NH has not been able to assess the quality of DeepL's translations, because there is still limited understanding of Arabic rules. The same thing also happened to NJ who used DeepL in urgent conditions to do the task, so they could not assess the quality of the translation results from DeepL.

These differences in perception show that each student has a different view in assessing the quality of translation results due to differences in students' abilities in the level of mastery and understanding of Arabic rules. This is in line with the results of research from Erika et al. [17] who explained that the quality of translation and interpretation results is greatly influenced by the quality of Arabic language mastery, the accuracy of the methods used, and the clarity of the interpretation points of view used.

3.3. Obstacles in the Use of DeepL

Based on the findings of the interview results, there are several obstacles experienced by students while using DeepL. The most commonly mentioned obstacle is the absence of harakat in the results of Arabic translations. KN and HH feel that the absence of harakat causes difficulties in understanding the function of words in sentences and has the potential to cause errors when reading. Furthermore, KN and NH stated that sometimes there is a discrepancy between the rules and meanings in the sentences produced by DeepL and the original sentences.

In addition, another obstacle found is the limited features in the free version of DeepL, such as limiting the number of words or files that can be translated. As a result, students who use DeepL as a quick way to translate a sentence or text still have to do additional work, such as asking others who understand the rules of Arabic better, using other applications to provide meaning, and re-verifying the meaning and structure of the translated language.

These findings show that the use of DeepL in Arabic language learning has both opportunities and challenges. The presence of instant translation technology does help students in the translation process, but it has not been able to completely replace the linguistic understanding of users, especially in Arabic which has a complex morphological and syntactic structure. This is in line with Mas'udah research [18] which states that AI-based instant translation tools still have limitations in grammar, semantics, and cultural contexts so that human intervention is still needed to produce accurate and contextual translations.

3.4. The Effect of Using DeepL on Students' Abilities

The results of the study show that the use of DeepL has a diverse influence on students' translation skills. Some students consider that the use of DeepL can help improve accuracy and expand mastery of Arabic vocabulary. KN stated that the existence of alternative word features in DeepL made him encouraged to explore and understand the context of vocabulary use more deeply. In addition, NH also mentioned that the use of DeepL helps to increase understanding of some new vocabulary in Arabic texts. These findings show that the use of AI can make a positive contribution to the language learning process when used reflexively and accompanied by a re-evaluation process. This is in line with the research of Payung and Sukarno [19] who

stated that the use of DeepL can help improve writing skills and understanding of language structures because the technology provides more contextual translation and helps develop students' vocabulary. However, some informants also admitted that there was a negative impact in the form of dependence on translation technology. NJ mentioned that DeepL felt like a 'shortcut' in completing the translation task. The same thing was also expressed by HH who felt fixated on DeepL, so they lacked the ability to translate independently. These findings show that the use of AI in Arabic language learning can provide both benefits and risks. On the one hand, technology helps students understand texts and speeds up the translation process. But on the other hand, overly dependent use can reduce the process of linguistic exploration and independent translation practice. This is in line with the results of a study that explains that the use of DeepL reflectively can improve student efficiency, comprehension, and student confidence [20], but still requires linguistic awareness and academic responsibility so that students do not fully rely on AI in the translation process [21]. In addition, Mujahida and Nazeem's research [22] also explains that the use of DeepL in learning Arabic can improve efficiency and vocabulary comprehension, but it has the potential to cause dependency if not controlled pedagogically. Therefore, the use of DeepL in learning serves as a learning aid, not as a substitute for students' full language skills.

This research implies that the use of DeepL in learning Arabic can be a supporting medium in helping translate Indonesian texts into Arabic more effectively, quickly, and practically. The presence of *Artificial Intelligence (AI)*-based technology is able to help students understand new vocabulary, improve the efficiency of assignments and support the language learning process more flexibly. However, this study also shows that the use of DeepL has not been able to completely replace students' linguistic abilities, especially in understanding the complex aspects of *nahwu*, *sharaf*, the context of meaning, and the grammatical structure of Arabic.

In addition, the results of the study show that the use of DeepL needs to be accompanied by evaluative skills and critical attitudes from students so that the translation results are not used raw without a re-verification process. In this context, the role of lecturers is important in providing assistance, strengthening digital literacy, and direction on the proportional use of AI in Arabic language learning. Thus, AI technology such as DeepL can be used as a learning tool that supports the development of students' translation competencies without reducing their critical thinking skills and learning independence.

These findings also open up opportunities for further research to examine the use of DeepL in broader contexts, such as the analysis of translation accuracy in various types of Arabic texts, the influence of AI on Arabic productive skills, and the integration of AI technology in digital-based Arabic learning models.

4. CONCLUSION

Based on the results of research on the experience of Arabic Language Education students Class of 2024 at the University of Education Indonesia, it can be concluded that the use of DeepL in the Arabic language learning process has complex dynamics by presenting opportunities as well as challenges. The results of the study show that Arabic Language Education students have known and used DeepL since high school and are used quite intensively in translating Indonesian texts into Arabic, either

as the main tool or combined with other applications such as google translate and ChatGPT to *cross-check* translation. However, there are several main obstacles faced by students when translating an Indonesian text or sentence into Arabic, namely the absence of harakat in the translated text, the limitation of free features, and the existence of grammatical and meaning incompatibilities. Therefore, students' assessments of the quality of DeepL translations vary greatly according to the understanding and mastery of each individual's Arabic language rules. On the other hand, the use of DeepL has a diverse impact on students' ability to translate. Some consider DeepL to be helpful in enriching vocabulary and improving accuracy in understanding the context of word use with the availability of alternative word features. However, the use of DeepL can also pose a risk of dependency that has the potential to reduce students' learning independence in translating texts manually as well as hindering the process of linguistic exploration independently if it is not accompanied by the ability to have a critical attitude in its use.

REFERENCES

- [1] P. Limna, S. Jakwatanatham, S. Siripipattanakul, P. Kaewpuang, and P. Sriboonruang, "A Review of Artificial Intelligence (AI) in Education during the Digital Era," Jul. 01, 2022, *Social Science Research Network, Rochester, NY*: 4160798. Accessed: May 25, 2026. [Online]. Available: <https://papers.ssrn.com/abstract=4160798>
- [2] A. S. Rahmatullah, E. Mulyasa, S. Syahrani, F. Pongpalilu, and R. E. Putri, "Digital era 4.0: The contribution to education and student psychology," *Linguistics and Culture Review*, pp. 89–107, Jan. 2022, doi: 10.21744/lingcure.v6nS3.2064.
- [3] H. Luan *et al.*, "Challenges and Future Directions of Big Data and Artificial Intelligence in Education," *Front. Psychol.*, vol. 11, Oct. 2020, doi: 10.3389/fpsyg.2020.580820.
- [4] M. Afifullah and S. Masruchah, "Pembelajaran Tarjamah Fauriyah Berbasis Teknologi Informasi Di Prodi Pendidikan Bahasa Arab Universitas Islam Malang," *Konferensi Nasional Pendidikan Islam*, vol. 4, no. 1, Dec. 2025, Accessed: May 04, 2026. [Online]. Available: <https://new-conference.unisma.ac.id/index.php/KNPI/article/view/2072>
- [5] A. A. Yunda and S. Aliyah, "Kreatifitas Gen Z dan Reinterpretasi Bahasa Arab : Peran AI dalam Proses Pembelajaran," *Al-Tarbiyah : Jurnal Ilmu Pendidikan Islam*, vol. 3, no. 2, pp. 156–172, Apr. 2025, doi: 10.59059/al-tarbiyah.v3i2.2242.
- [6] R. A. A. Aziz, A. Sopian, and R. Supriadi, "Tren Penelitian Penerjemahan Teks Bahasa Arab Berbasis Artificial Intelligence: Kajian Bibliometrik," *Uktub: Journal of Arabic Studies*, vol. 5, no. 1, pp. 136–152, Jul. 2025, doi: 10.32678/uktub.v5i1.25.
- [7] F. Stahlberg, "Neural Machine Translation: A Review," *Journal of Artificial Intelligence Research*, vol. 69, pp. 343–418, Oct. 2020, doi: 10.1613/jair.1.12007.
- [8] S. A. A. Maaytah, "Evaluating Three Neural Machine Translation Platforms for English-Arabic Translation: A Comparative Study of Linguistic Accuracy and Cultural Fidelity," *World Journal of English Language*, vol. 16, no. 2, p. 1, Aug. 2025, doi: 10.5430/wjel.v16n2p1.
- [9] F. H. Firda, Zainuddin, and B. Hamdani, "Analysis of DeepL Application as an Alternative Media for Translating Academic Assignments | PROJECT (Professional

- Journal of English Education),” Apr. 2025, Accessed: May 25, 2026. [Online]. Available: <https://journal.ikipsiliwangi.ac.id/project/article/view/26880>
- [10] A. A. Jabbar and E. H. Hilman, “Evaluating The Quality Of Translations Produced By Machines As Opposed To Human | PROJECT (Professional Journal of English Education),” May 2024, Accessed: May 25, 2026. [Online]. Available: <https://journal.ikipsiliwangi.ac.id/project/article/view/22404>
- [11] M. S. Nuha and M. Farkhan, “Translation accuracy of computer terms by ChatGPT, Gemini, DeepL, and Google Translate from English to Indonesian,” *Lililacs Journal*, vol. 5, no. 2, pp. 36–47, Jan. 2026, doi: 10.21009/lililacs.052.03.
- [12] A. S. Ramadhan, “Bridging Language Learning and SDG 4 through AI: A Comparative Study of Google Translate and DeepL in Arabic Text Understanding,” *Proceeding of International Joint Conference on UNESA*, vol. 3, no. 1, pp. 1006–1016, Dec. 2025.
- [13] M. Fitriah and H. Ardi, “Students’ Accuracy and Perceptions in Translating Descriptive Text with The Assistance of DEEPL Translate | SPHOTA: Jurnal Linguistik dan Sastra.” Accessed: May 04, 2026. [Online]. Available: https://e-journal.unmas.ac.id/index.php/sphota/article/view/13610?utm_source=chatgpt.com
- [14] N. S. Sukmadinata, *Metode penelitian pendidikan*. Program Pascasarjana Universitas Pendidikan Indonesia dengan PT Remaja Rosdakarya, 2005.
- [15] Sugiyono, “Metode Penelitian Kuantitatif, Kualitatif, dan R&D.” Accessed: May 04, 2026. [Online]. Available: <https://opac.perpusnas.go.id/DetailOpac.aspx?id=1543971>
- [16] A. Akmir, F. Fauziah, M. Q. Sahib, A. Ayulista, A. Agustian, and F. Angraeny, “Peran Teknologi Digital dalam Pembelajaran Bahasa Arab,” *Invention: Journal Research and Education Studies*, pp. 1546–1552, 2025, doi: 10.51178/invention.v6i3.3195.
- [17] F. Erika, A. Anwar, N. Azmira, and E. D. Pangestu, “Tafsir, ta’wil, dan terjemahan al-qur’an: Analisis metodologis, keterkaitan, dan implikasi kontemporer,” *Al-Aulia: Jurnal Pendidikan dan Ilmu-Ilmu Keislaman*, vol. 11, no. 2, pp. 168–176, Dec. 2025, doi: 10.46963/aulia.v11i2.3376.
- [18] M. Mas’udah, “Efektivitas Penggunaan Alat Instan Dalam Penerjemahan Teks Bahasa Arab,” *Ilmuna: Jurnal Studi Pendidikan Agama Islam*, vol. 7, no. 1, pp. 363–372, Nov. 2025, doi: 10.54437/ilmuna.v7i1.2615.
- [19] N. F. Payung and S. Sukarno, “Enhancing EFL Students’ Writing Skills: The Impact of DeepL Translation,” *JOLLT Journal of Languages and Language Teaching*, vol. 13, no. 1, pp. 483–493, Jan. 2025, doi: 10.33394/joltt.v13i1.12301.
- [20] Z. W. Husaini, “Antara Ketergantungan Dan Kemandirian: Dampak Pemanfaatan AI Terhadap Proses Belajar Bahasa Arab Mahasiswa: Between Dependence and Independence: The Impact of AI Utilization on Students’ Arabic Language Learning Process,” *AL-MUARRIB JOURNAL OF ARABIC EDUCATION*, vol. 6, no. 1, Apr. 2026, doi: 10.32923/1f62ct59.
- [21] M. T. J. Hasyb, M. Hasanah, and F. Faisol, “Translating in the AI Era: A Phenomenological Study of Arabic Language Students’ Use of DeepL Translate,” *Al-Irfan : Journal of Arabic Literature and Islamic Studies*, vol. 8, no. 1, pp. 646–657, Nov. 2025, doi: 10.58223/al-irfan.v8i1.516.

- [22] A. Mujahida and M. Nazeem, "Rethinking AI in Arabic Translation Learning: The Role of DeepL and Teacher Mediation," *Alibbaa': Jurnal Pendidikan Bahasa Arab*, pp. 21–38, Apr. 2026, doi: 10.19105/ajpba.vi.24012.