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Students' Perception of Translation Software: A Case Study in the Bachelor and Master Programs of Arabic Education

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Abstract

This study investigates the perceptions of bachelor and master students of Arabic Language Education towards the use of translation software in higher education, focusing at State Islamic University of Maulana Malik Ibrahim Malang. The method used is a descriptive qualitative approach, with a questionnaire design and interviews to gain an in-depth understanding of students' views. The collected data underwent 4 stages of analysis: data collection, data reduction, data presentation and conclusion drawing. The findings show that almost all students use software in translating and doing assignments, with varying portions of use. This happens because they feel helped by the software in doing various assignments easily and quickly, even though also realize that various software is very prone to errors. Students realize that the software allows them to be lazy to translate manually as well as the potential for dependence in its use. Consequently, the translation results generated by the software must be readjusted to the context of the sentence or paragraph being translated. The implication is the need for a cautious approach to the use of translation software in higher education, with an awareness of the limitations of such software, as well as the importance of manual language skill development.

Keywords: *Student Perceptions, Arabic Language Education, Translation Software*

Abstrak

Penelitian ini bertujuan untuk menginvestigasi persepsi mahasiswa sarjana dan magister Pendidikan Bahasa Arab terhadap penggunaan perangkat lunak penerjemahan di perguruan tinggi, dengan fokus di Universitas Islam Negeri Maulana Malik Ibrahim Malang. Metode yang digunakan adalah pendekatan kualitatif deskriptif, dengan desain kuesioner dan wawancara untuk mendapatkan pemahaman yang mendalam tentang pandangan mahasiswa. Data yang terkumpul melalui 4 tahap analisis: pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa hampir semua mahasiswa menggunakan perangkat lunak dalam menerjemahkan dan mengerjakan tugas, dengan porsi penggunaan yang berbeda-beda. Hal ini terjadi dikarenakan mahasiswa merasa terbantu dengan adanya perangkat lunak dalam mengerjakan berbagai tugas perkuliahan dengan mudah dan cepat, meskipun mereka juga menyadari bahwa berbagai perangkat lunak tersebut sangat rentan terhadap kesalahan. Mahasiswa menyadari bahwa perangkat lunak memungkinkan mereka untuk malas menerjemahkan secara manual, serta adanya potensi ketergantungan dalam penggunaannya. Akibatnya, hasil terjemahan yang dihasilkan oleh perangkat lunak harus disesuaikan kembali dengan konteks kalimat atau paragraf yang diterjemahkan. Implikasinya adalah perlunya pendekatan yang hati-hati dalam penggunaan perangkat lunak penerjemahan di perguruan tinggi, dengan kesadaran akan keterbatasan perangkat lunak tersebut, serta pentingnya pengembangan keterampilan berbahasa secara manual.

Kata Kunci: *Persepsi Mahasiswa, Pendidikan Bahasa Arab, Perangkat Lunak Penerjemahan*

Introduction

A language that consists of a collection of words and sentences, initially only in the form of sounds and has not been codified or accommodated in the form of written language. Moreover, it is collected in a dictionary as a book or guide that functions to contain a collection of words and an explanation of their meaning. However, along with the development of human thought and civilization, as well as the need for language speakers to collect their vocabulary or language, efforts to collect vocabulary into a book that specifically discusses meaning, continue to be developed, so that a dictionary appears and written language is also growing rapidly¹.

¹ Taufiqurrochman, *Leksikologi Bahasa Arab*, Cetakan 1 (Malang: UIN-MALIKI PRESS, 2015).

A dictionary that was once only physical or printed, has now turned into a non-physical dictionary or electronic dictionary as an implication of the development of technology². This electronic dictionary, which can also be called translation software, can not only translate a word, but more than that. This software can translate several words directly, several paragraphs, or even several texts. The use of translation software in the 21st century has certainly brought significant changes in various aspects of life, including in language education³.

One group that has a special role in the use of this translation software is Arabic Language Education students. Arabic itself is a complex language with unique characteristics⁴⁵. Arabic Education students are often faced with challenges in learning grammar, vocabulary, and complicated sentence structures. In this context, the presence of translation software can certainly be a very useful and helpful tool for them, namely in understanding and analyzing complex Arabic texts.

With the translator software, the students can easily access translations of Arabic words and sentences into their own language⁶⁷. This allows them to understand difficult texts more efficiently and effectively. In addition, the translator software can also help students in checking the accuracy of grammar and sentence structure in their writing. With features such as spelling and grammar checking, the software can provide feedback

² Dewi Christa Kobis, "UPAYA PELESTARIAN BAHASA DAN BUDAYA MINAHASA MELALUI DIGITALISASI DAN PENERJEMAHAN NASKAH," *SABANA: Jurnal Sosiologi, Antropologi, Dan Budaya Nusantara* 2, no. 2 (2023): 66–77.

³ Rana Saeed Al-Marooof et al., "Understanding an Extension Technology Acceptance Model of Google Translation: A Multi-Cultural Study in United Arab Emirates," *International Journal of Interactive Mobile Technologies (IJIM)* 14, no. 03 (February 28, 2020): 157, <https://doi.org/10.3991/ijim.v14i03.11110>.

⁴ Nasrul Umam and Utami Budiyati, "Pembelajaran Bahasa Arab Anak Usia Dini Berbasis Nilai-Nilai Karakter," *Jurnal Warna* 4, no. 1 (2020): 46–64.

⁵ Marcelo O. R. Prates, Pedro H. Avelar, and Luís C. Lamb, "Assessing Gender Bias in Machine Translation: A Case Study with Google Translate," *Neural Computing and Applications* 32, no. 10 (May 2020): 6363–81, <https://doi.org/10.1007/s00521-019-04144-6>.

⁶ Kaamiliyah Fathanah et al., "Penggunaan Kamus Musa'id Lil Arabiyah Baina Yadaik Sebagai Media Pembelajaran Bahasa Arab Mahasiswi Semester Satu STAI AS-SUNNAH Medan Tahun Ajaran 2019," *Jurnal Shaut Al-Arabiyah* 9, no. 1 (2021): 61–68.

⁷ Shu-Chiao Tsai, "Chinese Students' Perceptions of Using Google Translate as a Translingual CALL Tool in EFL Writing," *Computer Assisted Language Learning* 35, no. 5–6 (July 4, 2022): 1250–72, <https://doi.org/10.1080/09588221.2020.1799412>.

on errors that may occur, helping students to improve the quality of their writing⁸.

As before, these various features are certainly not only felt by all students, teachers, lecturers, and other users, but also especially by Arabic language education students at various universities. However, it is important for Arabic Language Education students to use the various translator software wisely⁹. Although these software can be a very helpful tool, over-reliance on electronic translators can hinder the development of their Arabic language skills. Students should still strive to learn grammar, vocabulary, and sentence structure independently, and develop their ability to translate and analyze texts contextually. Translator software should be used as an additional tool, not as a substitute for actual language skills.

Various parallel studies have been conducted for this topic, however, this article conducts a more specific research with a focus on Arabic Language Education students, both bachelor and masters in order to cover more broadly as well as the implications of using translation software in that context. Various studies that have been conducted include the research conducted by Arifin & Mulyani with the title "Student Perceptions of the Use of Digital Arabic Dictionaries in the Era of Society 5.0"¹⁰, found that students' ability to translate a text is still low. On the other hand, students still find it difficult to translate texts and also have difficulty using printed dictionaries. This indicates that students who in fact have taken education to college are still unable to translate a text properly, coupled with a lack of understanding in using a printed dictionary.

Similar research was also conducted by Afifuddin & Nuha on "Hybrid Translation: A Review of Offline and Online-Based Indonesian-Arabic Translation Media from the Perspective of Arabic Language Education Students"¹¹, which obtained the results that offline translation

⁸ Marco Cancino and Jaime Panes, "The Impact of Google Translate on L2 Writing Quality Measures: Evidence from Chilean EFL High School Learners," *System* 98 (June 2021): 102464, <https://doi.org/10.1016/j.system.2021.102464>.

⁹ Universitas Kristen Satya Wacana, Indonesia et al., "Google Translate in Language Learning: Indonesian EFL Students' Attitudes," *The Journal of AsiaTEFL* 16, no. 3 (September 30, 2019): 978–86, <https://doi.org/10.18823/asiatefl.2019.16.3.14.978>.

¹⁰ Ahmad Arifin and Slamet Mulyani, "Persepsi Mahasiswa Terhadap Penggunaan Kamus Digital Bahasa Arab Di Era Society 5.0," *An Nabighoh* 23, no. 2 (December 31, 2021): 235, <https://doi.org/10.32332/an-nabighoh.v23i2.4478>.

¹¹ Muhammad Afifuddin and Muhammad Afthon Ulin Nuha, "HYBRID TRANSLATION: TINJAUAN MEDIA PENERJEMAHAN INDONESIA-ARAB

is considered useful for honing skills in Arabic, but it takes a long time. While online translation is able to translate quickly and is able to present a complete diversity of words but often does not comply with syntax rules. And referring to research conducted by Ayu Desrani et al. entitled "Student Perceptions in the Use of Arabic Learning Technology on Arabic Language Learning Technology in Limited Face-to-Face Meetings during COVID-19"¹², it is stated in conclusion that the need for technology that suits the needs of students so that learning can be carried out more effectively and efficiently.

For this reason, this study is more specifically to analyze the perceptions of Arabic language education students towards the effectiveness of translator software in translating Arabic texts into other languages and vice versa, to find out the extent to which students rely on translator software in Arabic language learning activities, to identify the advantages and disadvantages of translator software according to students' perceptions, explore students' views on the use of translator software in the context of Arabic language learning, and investigate the factors that influence students' preferences in using translator software. With the aim of providing a deeper understanding of Arabic language education students' perceptions of the use translator software and its implications for Arabic language learning and teaching.

Method

This research uses a descriptive qualitative approach to describe the perceptions of Bachelor and Master students of Arabic Language Education at UIN Maulana Malik Ibrahim Malang towards the use of translation software into Arabic or vice versa. Descriptive qualitative research is research used to analyze data or study a social phenomenon by describing or describing the data that has been collected as it is¹³.

Data collection was carried out by simple random sampling using a questionnaire design distributed to bachelor and master students of PBA

BERBASIS OFFLINE DAN ONLINE PERSPEKTIF MAHASISWA PENDIDIKAN BAHASA ARAB," *JALIE; Journal of Applied Linguistics and Islamic Education* 7, no. 02 (2023): 225–48.

¹² Ayu Desrani, Suci Ramadhanti Febriani, and Rosita Ilhami, "Persepsi Mahasiswa Dalam Penggunaan Teknologi Pembelajaran Bahasa Arab Pada Pertemuan Tatap Muka Terbatas Di Masa Pandemi COVID-19," *Alibbaa': Jurnal Pendidikan Bahasa Arab* 3, no. 1 (January 24, 2022): 1–19, <https://doi.org/10.19105/ajpba.v3i1.5664>.

¹³ Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*, Cetakan Ke-4 (Bandung: ALFABETA, 2022).

UIN Maulana Malik Ibrahim Malang. To validate the data, researchers also used the interview method in collecting data. Data analysis uses an interactive analysis model consisting of four streams of activities, namely data collection, data reduction, data presentation, and conclusion drawing.

First, the questionnaire method was used to collect data on a broader scale. The questionnaire was designed with structured questions addressed to the respondents, namely bachelor and master students of Arabic Language Education. The questionnaire included demographic questions, experience of using translation software, advantages and disadvantages of using translation software, as well as its impact on the development of Arabic language skills. Secondly, the interview method was used to gain a more in-depth and contextual understanding of students' experiences in using translation software regarding their perceptions, experiences, and views on the use of translation software. The large number of 85 respondents aims to cover a representative variety in exploring students' experiences and perceptions of the use of translation software.

Result and Discussion

In accordance with the explanation in the method section, this research analysis consists of four steps, namely data collection, data reduction, data presentation, and conclusion drawing. After the data was collected and reduced, the researcher presented the data consisting of four parts. First, data related to the background of respondents (students). This information is needed to understand the characteristics of the respondents and obtain a more comprehensive picture of the use of translation software in the context of Arabic language education.

These variables can help differentiate experiences and perceptions between different groups of students. Second, data on whether students use translation software. Third, data on how often the students use the translation software. This variable provides insight into how often students use translation software and how they use it in an educational context. Fourth, data on the quality of translation results according to students. This variable refers to the respondents' assessment of the accuracy and quality of the translation produced by the translation software. Fifth, data on the suitability of the translation results with the rules of the Arabic language, and finally data on what software is used by students.

Respondent Background

In this section the researcher will present data related to the background of the respondents. The 85 respondents all came from the Arabic Language Education study program, both Bachelor and Master programs at UIN Maulana Malik Ibrahim Malang. Of the total 85 students, 60 or 70.6% are bachelor students and 25 or 29.4% are master students. For more details, see the following figure:

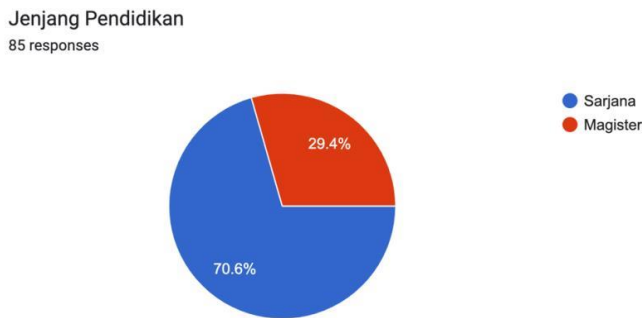


Figure 1: Data on Respondent Background

Use of Translation Software

The next data relates to the use of translation software in translating Arabic lecture assignments. Of the 85 respondents, 80 respondents or 94.1% stated that they used translator software to translate Arabic words, sentences, or paragraphs in assignments, and only 5 respondents or 5.9% did not use it. From these data, it can be said that almost all bachelor and master students of PBA UIN Maulana Malik Ibrahim Malang use various translator software as translation tools in order to do Arabic-language lecture assignments. One of the theories that can support the use of translator software in this context is the theory of Educational Technology. According to this theory, the use of technology, including translation software, can improve the efficiency and effectiveness of learning. Translator software can help students understand and translate Arabic texts more easily and quickly, thus speeding up the process of doing coursework and improving their understanding¹⁴¹⁵. For more details, see the following figure:

¹⁴ Valentino Reykli Moku et al., "Hubungan Teori Belajar Dengan Teknologi Pendidikan," *Edukatif: Jurnal Ilmu Pendidikan* 4, no. 1 (2022): 1475–86.

Apakah anda menggunakan software penerjemah dalam perkuliahan?

85 responses

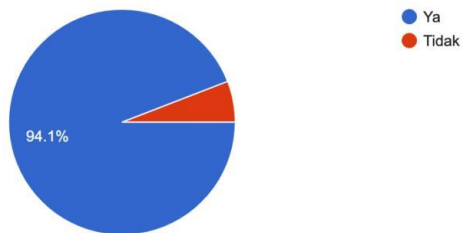


Figure 2: Data on whether respondents use translation software

Portion of Translator Software Usage

Although almost all bachelor and master students of Arabic Language Education at UIN Maulana Malik Ibrahim Malang use translator software to translate Arabic texts or vice versa, the percentage of use is varies. Of the 85 respondents, 5 or 5.9% of respondents only use less than 25%, then 20 or 23.5% use 26% to 50%, as many as 42 or 49.4% use between 51% to 75%, and the remaining 18 or 21.2% use as much as 76% to 100%. From the distribution of the data, it can be seen that the bachelor and master students as a whole do not only use translation software to write or translate Arabic texts or vice versa because there are portions in the range of 0% to 25%. This means that there are still translation processes that do not use software such as printed or manual dictionaries. This variation is consistent with the theory of Technology Behavior and Technology Use in Educational Contexts, which recognizes that technology use is influenced by individual perceptions, preferences, and context¹⁶¹⁷. The distribution of the data can be seen in the following figure:

¹⁵ Vickie E. Lake and Amber H. Beisly, "Translation Apps: Increasing Communication with Dual Language Learners," *Early Childhood Education Journal* 47, no. 4 (July 2019): 489–96, <https://doi.org/10.1007/s10643-019-00935-7>.

¹⁶ Miftah Ulfania Fajrin and Ermina Tiorida, "Faktor Yang Memengaruhi Minat Perilaku Penggunaan Teknologi (Studi: Pengguna Aplikasi Video Conference Selama Physical Distancing)," vol. 11, 2020, 977–84.

¹⁷ Ana Niño, "Exploring the Use of Online Machine Translation for Independent Language Learning," *Research in Learning Technology* 28, no. 0 (September 4, 2020), <https://doi.org/10.25304/rlt.v28.2402>.

Seberapa sering anda menggunakan software penerjemah tersebut dalam perkuliahan?

85 responses

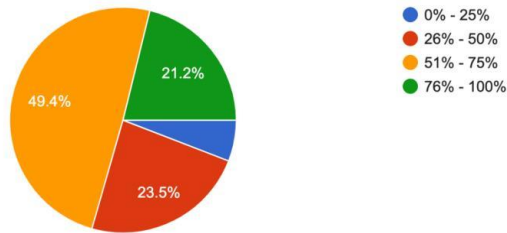


Figure 3: Data on the Portion of Translator Software Usage

Translation Software Result Quality

In this section, the researcher will present data related to the quality produced by the translation software from the students' perspective. That is, whether the translation results from the translator software used by students have good quality or not. Of the 85 respondents, 72 or 84.7% stated that the translation results were quite good, 4 or 4.7% stated that the results were very good, but 9 or 10.6% stated that the results were not good. From the data, it can be concluded that almost all students consider the quality of translation results from the translation software used to be quite good. However, on the other hand, there is still student dissatisfaction with the existing translation results because it indicates the existence of several translation errors. This is also reinforced by the fact that 10.6% of respondents felt that the results were not good enough. This can be understood by considering the limitations of translation software. Although it has undergone significant development, translation software still has limitations in perfectly capturing the nuances and context of the language. The resulting translation may contain errors or not meet the expectations of students who better understand the context and intent of the translated text¹⁸¹⁹. For more details, see the following figure:

¹⁸ Baharuddin Baharuddin et al., "Penerapan Teori Terjemahan Pada Editing Hasil Terjemahan Google Translate Pada Teks Akademik Oleh Mahasiswa Universitas Mataram," *Jurnal Ilmiah Profesi Pendidikan* 6, no. 4 (2021): 816–24.

¹⁹ Abdulfattah Omar and Yasser A. Gomaa, "The Machine Translation of Literature: Implications for Translation Pedagogy," *International Journal of Emerging*

Bagaimana tingkat kualitas dari software penerjemah tersebut?

85 responses

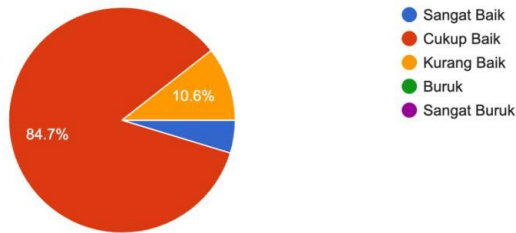


Figure 4: Data on Quality Results of Translator Software

Appropriateness of Translator Software Results

To strengthen the data above, the researcher asked a follow-up question whether the translation results from the translator software were in accordance with the rules of the Arabic language. The results were 4 or 4.7% of students answered that the translation results were very in accordance with the rules of Arabic, as many as 60 or 70.6% answered that it was quite appropriate, and as many as 21 or 24.7% considered that the existing translation results were less in accordance with the rules of Arabic. This means that the translation results from the translator software have been quite satisfying for students and the results produced are quite in accordance with the rules of Arabic such as Nahwu and Shorof²⁰. For more details see the following figure:

Technologies in Learning (iJET) 15, no. 11 (June 12, 2020): 228, <https://doi.org/10.3991/ijet.v15i11.13275>.

²⁰ Michele Tufano et al., "An Empirical Study on Learning Bug-Fixing Patches in the Wild via Neural Machine Translation," *ACM Transactions on Software Engineering and Methodology* 28, no. 4 (October 31, 2019): 1–29, <https://doi.org/10.1145/3340544>.

Bagaimana tingkat kesesuaian hasil terjemah dari software penerjemah tersebut?

85 responses

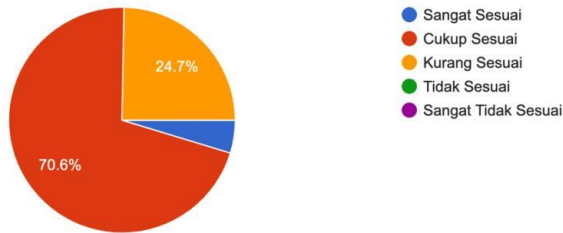


Figure 5: Data on Conformance Results of Translator Software

Translation software used by students

In line with the description above, the researcher then asked questions about what translation software is used by bachelor and master students to translate various Arabic texts into Indonesian or vice versa. The result is that out of 85 respondents, 65 respondents use Google Translate to translate texts, followed by Al-Maaniy software as many as 54 respondents, and others use Bing Translator software, DeepL, Microsoft Translator, QuillBot, as well as other software. This shows that the selection of translation software can be influenced by factors such as availability, accessibility, speed, ease of use, and previous user experience^{21,22}. For more details see the following figure:

²¹ Anak Agung Istri Yudhi Pramawati, "EFEKTIVITAS PENGGUNAAN ONLINE DICTIONARY SEBAGAI MEDIA PEMBELAJARAN PENERJEMAHAN," *Jurnal Santiaji Pendidikan (JSP)* 12, no. 1 (2022): 41–45.

²² Carlos Manuel Hidalgo-Ternerero, "Google Translate vs. DeepL: Analysing Neural Machine Translation Performance under the Challenge of Phraseological Variation," *MonTI. Monografías de Traducción e Interpretación*, January 13, 2021, 154–77, <https://doi.org/10.6035/MonTI.2020.ne6.5>.

Software penerjemah mana yang sering anda gunakan dalam perkuliahan?

85 responses

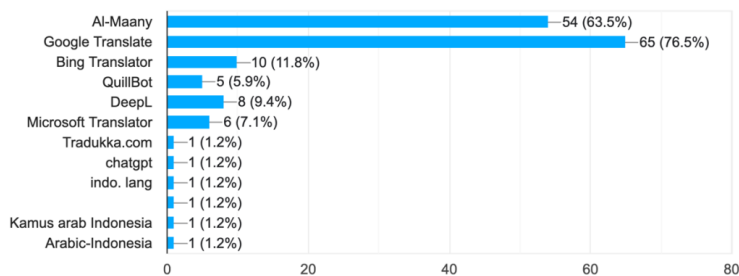


Figure 6: Data on Various Translation Software Used by Students

Impact of Using Translator Software

To support the previous data, the researcher asked follow-up questions with open-ended questions about the impact experienced by bachelor and master students in using translation software. From the data obtained, there are positive and negative impacts experienced by students. The positive impacts of using translation software are summarized as follows: 1) Making it easier for students to translate a text; 2) Accelerate students in doing lecture assignments; 3) Good for supporting foreign language learning; 4) Helps students in learning a new word (*mufrodat*). The negative impacts of using translation software experienced by students include: 1) Making students lazy to translate manually; 2) Making students dependent on using translation software; 3) There are still many translation results that are not in accordance with language rules; 4) Reducing the acquisition of new vocabulary for students; 5) Making students feel unsure of their own abilities in translating a text. 6) There is a mismatch in the meaning of a translated word.

Cognitive theory states that the use of translation software can affect students' cognitive processes in understanding and processing Arabic. The use of translation software can reduce the cognitive load of translation tasks, allowing students to focus more on understanding the content. However, this theory also suggests that over-reliance on translation software may hinder the development of independent Arabic language skills. In addition, social theory can also explain the role of social interaction in the use of translation software. Students can share experiences, strategies and knowledge related to the use of translation software, which can influence the perception and impact of using the software.

Conclusion

Based on this study, it can be concluded that the use of translator software has a significant impact on Arabic language learning among Arabic Language Education students. Most students use translation software as a tool in translating Arabic texts in lectures. The use of translation software is considered effective in accelerating the translation process and expanding students' understanding of Arabic. On the other hand, there are different perceptions among students. Some students see this translation software as a helpful tool in doing academic tasks more quickly and efficiently. However, there are also students who are concerned about over-reliance on the software and translation inaccuracies in more complex contexts.

This research can be developed for future research include long-term studies of the impact of using translation software on Arabic language proficiency; pedagogical strategies for integrating translation software in Arabic language education; training and support for translation software users; comparative analysis with traditional learning methods; and contextual factors such as language proficiency, cultural background, and user motivation.

REFERENCES

- Afifuddin, Muhammad, and Muhammad Afthon Ulin Nuha. "HYBRID TRANSLATION: TINJAUAN MEDIA PENERJEMAHAN INDONESIA-ARAB BERBASIS OFFLINE DAN ONLINE PERSPEKTIF MAHASISWA PENDIDIKAN BAHASA ARAB." *JALIE; Journal of Applied Linguistics and Islamic Education* 7, no. 02 (2023): 225–48.
- Al-Marroof, Rana Saeed, Said Abdelrahim Salloum, Ahmad Qasim AlHamadand, and Khaled A. Shaalan. "Understanding an Extension Technology Acceptance Model of Google Translation: A Multi-Cultural Study in United Arab Emirates." *International Journal of Interactive Mobile Technologies (ijIM)* 14, no. 03 (February 28, 2020): 157. <https://doi.org/10.3991/ijim.v14i03.11110>.
- Arifin, Ahmad, and Slamet Mulyani. "Persepsi Mahasiswa Terhadap Penggunaan Kamus Digital Bahasa Arab Di Era Society 5.0." *An Nabighob* 23, no. 2 (December 31, 2021): 235. <https://doi.org/10.32332/an-nabighoh.v23i2.4478>.
- Ayu Desrani, Suci Ramadhanti Febriani, and Rosita Ilhami. "Persepsi Mahasiswa Dalam Penggunaan Teknologi Pembelajaran Bahasa Arab Pada Pertemuan Tatap Muka Terbatas Di Masa Pandemi COVID-19." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 3, no. 1 (January 24, 2022): 1–19. <https://doi.org/10.19105/ajpba.v3i1.5664>.
- Baharuddin, Baharuddin, Muhammad Amin, Lalu Thohir, and Lalu Ali Wardana. "Penerapan Teori Terjemahan Pada Editing Hasil Terjemahan Google Translate Pada Teks Akademik Oleh Mahasiswa Universitas Mataram." *Jurnal Ilmiah Profesi Pendidikan* 6, no. 4 (2021): 816–24.
- Cancino, Marco, and Jaime Panes. "The Impact of Google Translate on L2 Writing Quality Measures: Evidence from Chilean EFL High School Learners." *System* 98 (June 2021): 102464. <https://doi.org/10.1016/j.system.2021.102464>.
- Fajrin, Miftah Ulfania, and Ermina Tiorida. "Faktor Yang Memengaruhi Minat Perilaku Penggunaan Teknologi (Studi: Pengguna Aplikasi Video Conference Selama Physical Distancing)," 11:977–84, 2020.
- Fathanah, Kaamiliah, Sulton Bigadaran, Nur Hasan, and Wildana Wargadinata. "Penggunaan Kamus Musa'id Lil Arabiyah Baina Yadaik Sebagai Media Pembelajaran Bahasa Arab Mahasiswi Semester Satu STAI AS-SUNNAH Medan Tahun Ajaran 2019." *Jurnal Shaut Al-Arabiyah* 9, no. 1 (2021): 61–68.

- Habib Maulana Maslahul Adi, & Nur Romdlon Maslahul Adi. (2022). Pembelajaran Nahwu-Şarf di Pesantren dengan Pendekatan Interpretatif: Implikasi Teori Interpretasi Jorge JE Gracia dalam Pembelajaran Kitab Alfiyyah Ibn Mālik. *Alibbaa': Jurnal Pendidikan Bahasa Arab*, 3(1), 20-37. <https://doi.org/10.19105/ajpba.v3i1.5474>
- Hidalgo-Ternero, Carlos Manuel. "Google Translate vs. DeepL: Analysing Neural Machine Translation Performance under the Challenge of Phraseological Variation." *MonTI. Monografías de Traducción e Interpretación*, January 13, 2021, 154-77. <https://doi.org/10.6035/MonTI.2020.ne6.5>.
- Kobis, Dewi Christa. "UPAYA PELESTARIAN BAHASA DAN BUDAYA MINAHASA MELALUI DIGITALISASI DAN PENERJEMAHAN NASKAH." *SABANA: Jurnal Sosiologi, Antropologi, Dan Budaya Nusantara* 2, no. 2 (2023): 66-77.
- Lake, Vickie E., and Amber H. Beisly. "Translation Apps: Increasing Communication with Dual Language Learners." *Early Childhood Education Journal* 47, no. 4 (July 2019): 489-96. <https://doi.org/10.1007/s10643-019-00935-7>.
- Muhammad Afthon Ulin Nuha, Miftahul Mufid, Mas Tajuddin Ahmad, & Nurul Musyafaah. (2023). Synectic Learning Model to Improving Santri's Cognitive Ability in Balaghah Learning. *Alibbaa': Jurnal Pendidikan Bahasa Arab*, 4(2), 148-176. <https://doi.org/10.19105/ajpba.v4i2.8496>
- Mokalu, Valentino Reykli, Johanes Kornelius Panjaitan, Noh Ibrahim Boiliu, and Djoys Anneke Rantung. "Hubungan Teori Belajar Dengan Teknologi Pendidikan." *Edukatif: Jurnal Ilmu Pendidikan* 4, no. 1 (2022): 1475-86.
- Niño, Ana. "Exploring the Use of Online Machine Translation for Independent Language Learning." *Research in Learning Technology* 28, no. 0 (September 4, 2020). <https://doi.org/10.25304/rlt.v28.2402>.
- Omar, Abdulfattah, and Yasser A. Gomaa. "The Machine Translation of Literature: Implications for Translation Pedagogy." *International Journal of Emerging Technologies in Learning (IJET)* 15, no. 11 (June 12, 2020): 228. <https://doi.org/10.3991/ijet.v15i11.13275>.
- Pramawati, Anak Agung Istri Yudhi. "EFEKTIVITAS PENGGUNAAN ONLINE DICTIONARY SEBAGAI MEDIA PEMBELAJARAN PENERJEMAHAN." *Jurnal Santiaji Pendidikan (JSP)* 12, no. 1 (2022): 41-45.

- Prates, Marcelo O. R., Pedro H. Avelar, and Luís C. Lamb. "Assessing Gender Bias in Machine Translation: A Case Study with Google Translate." *Neural Computing and Applications* 32, no. 10 (May 2020): 6363–81. <https://doi.org/10.1007/s00521-019-04144-6>.
- Sugiyono. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Cetakan Ke-4. Bandung: ALFABETA, 2022.
- Taufiqurrochman. *Leksikologi Bahasa Arab*. Cetakan 1. Malang: UIN-MALIKI PRESS, 2015.
- Tsai, Shu-Chiao. "Chinese Students' Perceptions of Using Google Translate as a Translingual CALL Tool in EFL Writing." *Computer Assisted Language Learning* 35, no. 5–6 (July 4, 2022): 1250–72. <https://doi.org/10.1080/09588221.2020.1799412>.
- Tufano, Michele, Cody Watson, Gabriele Bavota, Massimiliano Di Penta, Martin White, and Denys Poshyvanyk. "An Empirical Study on Learning Bug-Fixing Patches in the Wild via Neural Machine Translation." *ACM Transactions on Software Engineering and Methodology* 28, no. 4 (October 31, 2019): 1–29. <https://doi.org/10.1145/3340544>.
- Umam, Nasrul, and Utami Budiyati. "Pembelajaran Bahasa Arab Anak Usia Dini Berbasis Nilai-Nilai Karakter." *Jurnal Warna* 4, no. 1 (2020): 46–64.
- Universitas Kristen Satya Wacana, Indonesia, Elisabet Titik Murtisari, Rindang Widiningrum, Joshua Branata, and Riana Devi Susanto. "Google Translate in Language Learning: Indonesian EFL Students' Attitudes." *The Journal of AsiaTEFL* 16, no. 3 (September 30, 2019): 978–86. <https://doi.org/10.18823/asiatefl.2019.16.3.14.978>.