EXPLORING PERCEPTIONS OF MACHINE TRANSLATION AS A TOOL FOR EFL LEARNING

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Abstract

This study aspires to make a significant contribution to the world of foreign language learning by exploring the role of MT within the learning process. The Translator Machine is famous among the language learner. Even though many negative attitudes are drawn in accepting the existence of the translator machine, the benefits do prove to exist. The current study will elaborate the actual use based on students' perception of the tool. As surveyed, the current use of Machine Translation for Academic Purposes and Leisure Purposes differs in terms of frequency and purposes. The study reveals the fact that in the classroom students feels to benefit from MT for understanding text given by the lecturer, achieving better scores in English classroom, and learning specific language skills such as vocabulary skill and grammar skill. As contrast, the language learning carried out in leisure settings is for understanding favorite movies, songs, novels, and communicating in their social media.

Keywords: machine translation, efl learning, technology enhanced language learning.

Abstrak

Penelitian ini bertujuan untuk memberikan kontribusi yang signifikan terhadap dunia pembelajaran bahasa Inggris dengan mengeksplorasi peran MT dalam proses pembelajaran. Mesin Penerjemah terkenal di kalangan pembelajar bahasa. Meski banyak sikap negatif yang diambil dalam menerima keberadaan mesin penerjemah, namun manfaatnya terbukti ada. Penelitian ini akan menguraikan penggunaan sebenarnya berdasarkan persepsi siswa terhadap alat tersebut. Seperti yang disurvei, penggunaan Terjemahan Mesin untuk Keperluan Akademik dan Keperluan Hiburan saat ini berbeda-beda dalam hal frekuensi dan tujuannya. Penelitian ini mengungkapkan fakta bahwa di kelas siswa merasakan manfaat dari MT untuk memahami teks yang diberikan oleh dosen, mencapai nilai yang lebih baik di kelas bahasa Inggris, dan mempelajari keterampilan bahasa tertentu seperti keterampilan kosa kata dan keterampilan tata bahasa. Sebaliknya, pembelajaran bahasa yang dilakukan di waktu senggang adalah untuk memahami film, lagu, novel favorit, dan berkomunikasi di media sosial.

Kata Kunci: mesin penerjemah, pembelajaran bahasa inggris, pembelajaran bahasa yang ditingkatkan teknologi.

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INTRODUCTION

The benefits of technological advancements for language learning are undeniable. While challenges exist (Utimadini, 2021, Garret, 1991), the positive impact arguably outweighs the drawbacks(Celik, 2023; Sukmawati et al., 2022; Yang & Chen, 2007). One of the most discussed technologies amongst educator is Translation Machine. The traditional translation requires human ability to comprehend the source language and the target language, and then mediate the understanding by producing a translation that is understandable to both language users. The practicality of this service to machine is remarkable as it can quickly produce translation anywhere anytime. Translation Machine allow the user to translate texts or text from e-ISSN: 2089-2810

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speech from one language to another language (Lee, 2023). Fully Automated Machine Translation is also called Machine Translation or MT that allows language to be translated without involving human intervention (Kastberg, 2012).

Currently, there is a growing interest on the use of Machine Translation for language learning. Thus, it reveals that not only text, but camera instant translator is benefitting the language learner (Kongcharoen et al., 2017). The most utilized translation machine tools are Google Translate, DeepL, Microsoft Translator, SDL Trados, and MemoQ. Google Translate for instance, has decoded material from more than 90 dialects existed. Similar to numerous other efficacious online translation tools, Google Translate employs a statistical translation model that takes the targeted translated word by exploring the stored bilingual text corpus (Giannetti, 2016).

Language learners also perceive that Machine Translation is a practical and realistic tool as a media to enhance language skills (Kelly & Hou, 2022). In the classroom, teacher used to give many translations task or even integrate the translator machine for language learning. The language learners also incorporate the Machine Translation to their communication daily (Kelly & Hou, 2022). Additionally, Clifford et al., (2013) claimed that learners use Machine Translation frequently for both purposes academic setting and everyday life. The use of translation machine is also proven to help language learner to upgrade their all-language skills (speaking, reading, listening and writing)(Niño, 2020).

Clifford et al., (2013) survey the utilization patterns and perspective of the gained benefits of Machine Translation amongst Spain Higher Education Students. Thus, the language learner is observed as frequent user of Machine Translation and there is a great variation on perception of MT benefits (ibid.) It is important pin point that Spain is developed country whose students are growing up with advanced technology. It is important to see how developing country students utilize the Machine Translation. This research will answer the following questions; (1) what are the perceptions of MT among language learner? (2) To what extent can translation machines help students learn language in both leisure and academic setting?

By answering the question, this paper will reveal the actual use of Machine Translation perceived by language learners. The result of this study can answer the call in the integrations of technology especially Machine Translation to the language teaching and learning. Theoretically, this research aimed to contribute in the deepening the Machine Translation as language learning tool theory. Thus, it will lead for innovations in completing the best pedagogy to direct students in using Machine Translation effectively.



LITERATURE REVIEW

Translation Machine in Education

Machine Translation tools is easy to access. By one finger click with the access to WiFi, anyone can use the technology. Jolley & Maimone (2022) elaborates the 3 main development of the current Machine Translation which are; (1) early phase uses lexical substitutions that works similar to how dictionary works with additional morphosyntactic rules in processing the automated translation. As it developed, (2) this ability is upgraded with predictions by analyzing the elements that stored in Machine Learning called online bilingual corpora and Neural Machine Translation (NMT). The Machine Learning ability in translating language is often similar to bilingual human ability (Wu et al., 2016). In 2016 (3) Google Translate implemented GNMT which is claimed that the translations accuracy is improved.

The advancement technology makes it plausible for language learner to engage well with Machine Translation Tools. Even though there is a great skepticism amongst Educator is the use of MT (Baker, 2013, Mundt & Groves, 2016). The integration of MT in classroom and education in general is inevitable. The utilization of Machine Translation tools is to understand the target language

Along with the advancement of this technology, language learner as the most frequent user is engaged well with their phone acting as global citizen, making the utilization of MT greater. In general, most of the students use those tools to aid them in understanding the second languages (Gaspari et al., 2014.). This activity is generally be carried out for activity in Academic Setting and Leisure Setting.

The Effectiveness of Translator Machines for EFL Learning

It is mentioned earlier that ideally, Translation Machine can reduce the language learning barriers. Coler & Homola (2014) extend the claim by elaborating the effectiveness of the technology for offering greater opportunity for interlanguage communication. In short, many researchers (Coler & Homola, 2014, Rahit et al., 2019, Franceschini et al., 2020) has successfully proven the fact that Translator Machine does solve the language barriers problem. Additionally, Niño (2020) claimed that Machine Translation tools improve students' communication skill. Based on this general benefit, the language learner can reap the benefit in both setting of Academic and Leisure setting.

The integration of MT in the classroom does happens. It is proven by the recent rise of online translators' research that address the advantages and disadvantages on the integration of MT in educational setting (Niño, 2009; Benda, 2013; Ducar and Schocket, 2018). Clifford et al.,(2013) studied Learners perception of MT and concluded that most of students (63%) e-ISSN: 2089-2810 p-ISSN: 2407-151X



thought MT was "sometimes" useful for learning language and another 31% students believed it to be "always" useful. Along with this result, Jolley & Maimone (2022) reported that students believed MT had given a benefit impact in their language learning process. Thus, Niño (2009) defined MT as Computer Assisted Language Learner tool that has been claimed as the technology that can have a positive impact in language learning. Levy (1997) emphasized CALL speciality in which it distinct in the field of the application of technology specifically for teaching and learning language. This definition is aligned with Somers (2001) who elaborated that translation is a part of foreign language learning and further urge for its integration in the curriculum. To conclude the benefit of the tools can increase students metalinguistics awareness by the features that allow learners to get direct feedback from their productive L2 output.

The Use Of Machine Translation (MT) In Both Academic Settings And Leisure Settings

As the use transcend from its basic function for translating word-for-word to a transformative tool for learning and exploration. Machine Translation is a technology that has become increasingly prevalent in both academic and leisure settings. In academic settings, machine translation is often used by students and researchers to translate documents, articles, and research papers from one language to another. This allows for easier access to information and collaboration across different linguistic barriers (Dwivedi & Sukhadeve, 2010).

In leisure settings, machine translation is commonly used for translating online content such as websites, social media posts, and online articles. This enables individuals to consume and engage with content in languages that they may not understand. Additionally, machine translation can be used for language learning and communication purposes in leisure settings. In summary, machine translation plays a significant role in both academic and leisure settings. It became a facilitator for user who are learner for having access to information, experiencing collaboration, and communication in academic settings, while also enhancing language learning, inclusive interactions, and gaming experiences in leisure settings.

Review Empirical Studies On The Effectiveness Of Translator Machines For EFL Learning In Both Leisure And Academic Settings

A range of studies have explored the use of machine translation (MT) in the EFL classroom. Moore (2019) and Sujarwo (2020) both found that EFL students perceive MT as a useful tool, with the latter noting that it can serve as a dictionary and provide inspiration. Uehara (2023) further supports this, finding that EFL writing instructors are generally supportive of MT use in the classroom. Sabtan (2020) takes this a step further, demonstrating the benefits of teaching Arabic MT to EFL student translators, which can improve their training e-ISSN: 2089-2810 p-ISSN: 2407-151X 487



and EFL learning. These studies collectively suggest that MT can be a valuable resource in the EFL classroom, providing support for students and enhancing their language learning experience. Lastly, Jolley & Maimone (2022) that Spanish students use MT as an aid to finish assigned writing task. The frequent use is on the use MT to write rather than to translate (Jolley & Maimone, 2022).

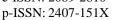
While some educators express concerns about the potential for misuse of online translators (OTs) leading to dishonesty (Clifford et al., 2013), numerous studies highlight their valuable contributions to language learning. Aikawa (2018) claimed that the benefit of using the MT is that it can increase the metalinguistic awareness of language learners, as it can increase learners' awareness of language structure and mechanics, fostering deeper understanding. The use MT is also increase the cognitive sill as Kanal and Pereira (2015) report their study that the use of MT does improve students strategy in reading such as paraphrasing and supervising. Another researcher, Garcia and Pena (2011) study on the real use of MT as assisted language learning for in writing skill found that MT helps the beginner learner to communicate more and also help the learner to write better. These studies potrayed the fact that MT can help both language learner who are beginner or intermediate to gain skill better in writing. To emphasize, research conducted by Niño (2009) claimed that "MT helping the beginner learner to communicate more in the L2, to be able to write more words relevant to a situation, and this help seems grater the less the learner knows".

METHOD

This research is conducted a descriptive research design in qualitative approach. Descriptive research aimed to give real report the occurrence as the way it is (Creswell, J.W., Clark, 2017). Qualitative research is the collection, analysis, and interpretation of comprehensive narrative and visual (i.e., no numerical) data to gain insights into particular phenomenon of the interest. The reason why the researcher selected students at beginner level of proficiency is because advanced proficiency students would already be able to read academic article without a support for understanding.

Participant

The participants of this research were the University Student of Islamic State Institute of Pontianak who has finished one year comprises 2 semester of English subjects. Because the term of this a descriptive qualitative research, the researcher deploy purposeful sampling. The sample of this research were set on the criteria of 1. The participants has passed English Subject course. 2. The participants have experience in using Machine Translation. Based on the criterion of participants, the researcher selected 94 participants. e-ISSN: 2089-2810





Instrument of the Research

The instrument of this research is questionnaire that has two section of; Identity section and open. Open ended questions is used in order to obtain longer and depth answer (Creswell, J.W., Clark, 2017). An open-ended question allows participants to respond without limit. **FINDINGS AND DISCUSSION**

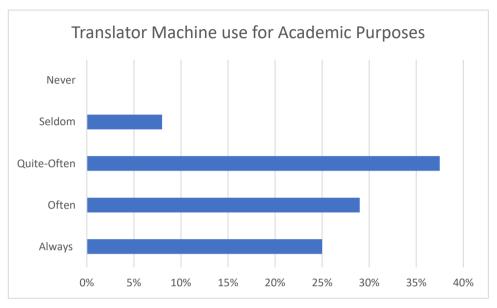
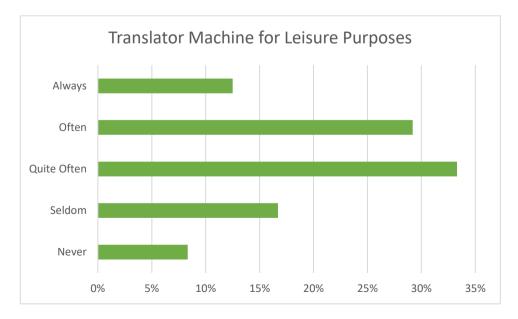


Figure 1. Translator Machine use for Academic Purposes

The chart clearly shows that EAP all student utilized the translation machine and use it for Academic purposes. The chart shows for as many as; 25% of students use a translator machine for leisure activities always (regularly); 29% of people use a translator machine for leisure activities often; 37,50% of people use a translator machine for leisure activities quite often; and 8% of people use a translator machine for leisure activities seldom.



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Figure 2. Translator Machine use for Leisure Purposes

In contrast, the use of translation machine for leisure activity reveals the fact that 8% students have never use the machine. However, the percentage shows for as many as; 12.50% of students use a translator machine for leisure activities always (regularly); 29.20% of people use a translator machine for leisure activities always or often; 33,30% of people use a translator machine for leisure activities quite often; and 16% of people use a translator machine for leisure activities seldom. This means that the translator machine has not been widely used for leisure activity. Although the percentage shows a slightly under the use for Academic purposes, the Translator Machine does have potential in the use for leisure activity.

There are variety of translation machines used, but these EAP students agreed that Google Translate is the most popular one as it is easy to use and it is available on various platforms such as smartphone and tablets. Other popular translation machine used by the EAP Students are Bing translator, U- Dictionary, Oxford Dictionary, Quillbot, DeepL, Yandex, KamusKu, and ChatGPT.

Translation Machine for Language Learning in Academic Purposes

1. To Understand Text given by Lecturer

"I used it a lot to understand English Materials" S1

"I need it to help me understand the English Journal given by my lecturer" S3

Translation machines can help students to understand text given by their lecturers in a second language. This can be especially helpful for students who are still in the early stages of learning a new language. By translating the text into their native language, students can better understand the content of the lecture and participate more fully in class discussions. As its initial function described by Warschauer & Healey (1998), the translation machines can bridge the language gap between lecturers and students, especially for those in the early stages of language learning. The translation of the text helps the students to comprehend the text better which can positively impact to better participation in the classroom (Li & Chen, 2019).

2. To Achieve Better Score in English Classroom

"only use it in English tasks to get better score." S56

"I think I use it because it can help me get higher score" S87

Translation machines can also help students to achieve better scores in their English classes. The supervising, correction, and instant feedback allow language learner to do revising and editing (Warschauer & Healey, 1998). Besides, the MT also gives more option of vocabulary use, which enable language learner to express themselves more effectively in English (Levy & Steel, 2015). To emphasizes (Li & Chen, 2019) reported that translation e-ISSN: 2089-2810 p-ISSN: 2407-151X



machines assist students in organizing their thoughts and structuring their written work in English, improving overall writing quality (Li & Chen, 2019).

3. To Learn Grammar

Translation machines can also be used to learn grammar. By comparing the translated text to the original text, students can identify patterns and rules in the second language. This can help them to improve their grammar skills and become more fluent speakers and writers. Warschauer & Healey (1998) claimed that by comparing translated text to the original, students can identify patterns and rules in the second language, enhancing their understanding of grammar. Levy & Steel (2015) added that by analyzing error students can recognize and correct their grammatical mistakes, promoting grammar acquisition. Lastly, translation machines can be used to generate practice exercises, allowing students to apply grammar rules in a contextualized setting (Li & Chen, 2019).

4. To Learn Vocabulary

Translation machines can also be used to learn vocabulary. By looking up the translation of unfamiliar words, students can expand their vocabulary and improve their comprehension of the second language (Warschauer & Healey, 1998). Translation can reinforce vocabulary retention by engaging multiple cognitive processes, such as reading, comprehending, and translating (Li & Chen, 2019). Having the better reading and grammar learning students could improbe their speaking ability (Edy Suseno & O. Purwati 2020).

Translation Machine for Language Learning in Leisure Activity

1. To Understand Favorite Movie, Song, Novel

"It does help me understand my favorite movie and songs" S51

Translation machines can also be used to understand favorite movies, songs, and novels in a second language. This can help students to enjoy their favorite media which leads them to enrich their cultural experiences (Levy, 2009) as well as enhancing their comprehension and fluency in the second language (Li & Chen, 2019). Exposure and students' willingness to interact with the target language can greater students comprehension and fluency in the second language (Li & Chen, 2019; Sukmawati et al., 2022)

2. To Communicate In Social Media

"Use it mainly to communicate with my friend in social media. I like to comment foreigner picture, my idol, I hope he will notice me one day or talk with my game community." S46

Translation machines can also be used to communicate in social media in a second language. This can help students to connect with people from other countries and cultures. It e-ISSN: 2089-2810 p-ISSN: 2407-151X 491



can also help them to practice their writing and speaking skills in the second language. Warschauer & Healey, (1998) stated that the students engage in meaningful conversations in the target language. Not only communication, their writing skill will also improve as they practice their writing (Saito et al., 2015; Sukmawati et al., 2022). The existence of google translation attracts language learner to express themselves in English and greater the chance of practicing the target language.

CONCLUSION

This research dives into the exciting world of machine translation (MT) as a tool for learning English as a foreign language (EFL). Its mission is twofold: to enrich the theoretical understanding of MT in applied linguistics and, more importantly, to provide practical guidance on integrating it into the EFL classroom. It goes beyond simply analyzing the potential of MT within classroom and beyond; it aims to deliver tangible benefits for both teachers and learners alike.

This research empowers teachers with valuable information to make informed decisions on how to integrate MT into their teaching. For learners, it offers a roadmap to maximize the effectiveness of MT in their personal language acquisition journey. Ultimately, this study aspires to make a significant contribution to the world of foreign language learning by exploring the role of MT within the learning process. Its goal is to equip both L2 educators and students with the knowledge and skills they need to thrive in this evolving landscape.

REFFERENCES

- Aikawa, T. (2018). The use of machine translation for japanese language education 日本語教 育への機械翻訳の利用. Proceedings of the 2018 CAJLE Annual Conference, 11–20. https://tatoeba.org/eng
- Celik, B. (2023). Technology-Enhanced Language Learning: A Review of its Benefits. *International Journal of Social Sciences & Educational Studies*, 10(1). https://doi.org/10.23918/ijsses.v10i1p383
- Clifford, J., Merschel, L., & Munné, J. (2013). Surveying the Landscape: What is the Role of Machine Translation in Language Learning? @*tic. Revista d'innovació Educativa*, 0(10). https://doi.org/10.7203/attic.10.2228
- Coler, M., & Homola, P. (2014). *Rule-based machine translation for Aymara*. https://api.semanticscholar.org/CorpusID:64400219
- Creswell, J.W., Clark, V. L. P. (2017). Designing & conducting mixed methods research + the mixed methods reader. *Designing & Conducting Mixed Methods Research* + *the Mixed Methods Reader*, 1(2), 24–27.
- Dwivedi, S. K., & Sukhadeve, P. P. (2010). Machine Translation System in Indian Perspectives. Journal of Computer Science, 6(10), 1111–1116. https://doi.org/10.3844/JCSSP.2010.1111.1116
- Franceschini, D., Canton, C., Simonini, I., Schweinfurth, A., Glott, A., Stüker, S., Nguyen, T. S., Schneider, F., Ha, T.-L., Waibel, A. H., Haddow, B., Williams, P., Sennrich, R., Bojar, O., Sagar, S., Machácek, D., & Smrz, O. (2020). Removing European Language Barriers

e-ISSN: 2089-2810 p-ISSN: 2407-151X



with Innovative Machine Translation Technology. *IWLTP*. https://api.semanticscholar.org/CorpusID:218974259

- GARRETT, N. (1991). Technology in the Service of Language Learning: Trends and Issues. *The Modern Language Journal*, 75(1), 74–101. https://doi.org/10.1111/j.1540-4781.1991.tb01085.x
- Gaspari, F., Toral, A., Naskar, S. K., Groves, D., & Way, A. (2014). Perception vs Reality: Measuring Machine Translation Post-Editing Productivity. *Proceedings of the 11th Conference of the Association for Machine Translation in the Americas*, 60–72. www.computing.dcu.ie/~atoral/resources/questionnaire_post-
- Giannetti, T. R. (2016). *Google Translate as a Resource for Writing*. http://libguides.sjfc.edu/citations.
- Jolley, J. R., & Maimone, L. (2022). Thirty Years of Machine Translation in Language Teaching and Learning: A Review of the Literature. *L2 Journal*, *14*(1). https://doi.org/10.5070/l214151760
- Kastberg, P. (2012). Machine Translation Tools 34. In *C ommunication & Language at Work Issue* (Issue 1).
- Kelly, R., & Hou, H. (2022). Empowering learners of English as an additional language: translanguaging with machine translation. *Language and Education*, *36*(6), 544–559. https://doi.org/10.1080/09500782.2021.1958834
- Kongcharoen, C., Prasunpaengsri, S., & Wongmeekaew, T. (2017). Investigating applications of mobile translator for assisting english vocabulary learning. 2017 10th International Conference on Ubi-Media Computing and Workshops (Ubi-Media), 1–5. https://doi.org/10.1109/UMEDIA.2017.8074120
- Lee, S.-M. (2023). The effectiveness of machine translation in foreign language education: a systematic review and meta-analysis. *Computer Assisted Language Learning*, *36*(1–2), 103–125. https://doi.org/10.1080/09588221.2021.1901745
- Levy, M. (2009). Technologies in Use for Second Language Learning. *The Modern Language Journal*, *93*, 769–782. https://doi.org/10.1111/j.1540-4781.2009.00972.x
- Levy, M., & Steel, C. (2015). Language learner perspectives on the functionality and use of electronic language dictionaries. *ReCALL*, 27(2), 177–196. https://doi.org/DOI: 10.1017/S095834401400038X
- Li, H., & Chen, H. (2019). Human vs. AI: An Assessment of the Translation Quality Between Translators and Machine Translation. *International Journal of Translation, Interpretation, and Applied Linguistics, 1*(1), 1–124. https://doi.org/10.4018/IJTIAL.2019010104
- Mundt, K., & Groves, M. (2016). A double-edged sword: the merits and the policy implications of Google Translate in higher education. *European Journal of Higher Education*, *6*, 1–15. https://doi.org/10.1080/21568235.2016.1172248
- Niño, A. (2020). Exploring the use of online machine translation for independent language learning. *Research in Learning Technology*, 28, 1–32. https://doi.org/10.25304/rlt.v28.2402
- Rahit, K. M. T. H., Nabil, R. H., & Huq, M. H. (2019). Machine Translation from Natural Language to Code using Long-Short Term Memory. *ArXiv*, *abs/1910.11471*. https://api.semanticscholar.org/CorpusID:204915825
- Saito, K., Trofimovich, P., & Isaacs, T. (2015). Second language speech production: Investigating linguistic correlates of comprehensibility and accentedness for learners at different ability levels. *Applied Psycholinguistics*, 37(2), 217–240. https://doi.org/10.1017/S0142716414000502



- Sukmawati, F., Amalia, K., Juwita Utimadini, N., & Nur Hakim, F. (2022). Investigating EFLs' Student Motivation to Speak in Online Environment. In *Borneo International Journal eISSN* (Vol. 5, Issue 2). www.majmuah.com
- Utimadini, N. J. (2021). EFL students' challenges to read online. *Jurnal Pendidikan Bahasa*, *10*(2). https://doi.org/10.31571/bahasa.v10i1.3415
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. Language Teaching, 31(2), 57–71. https://doi.org/10.1017/S0261444800012970
- Yang, S. C., & Chen, Y. J. (2007). Technology-enhanced language learning: A case study. *Computers in Human Behavior*, 23(1), 860–879. https://doi.org/10.1016/J.CHB.2006.02.015

