Students' Perception of Using Machine Translation: A Survey of Indonesian EFL Undergraduate Students

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Abstract

The purpose of this study is to find out how students perception about using DeepL for machine translation during the translation process. The study used a qualitative survey method. Students in the fourth semester of the English Education Department at Sekolah Tinggi Keguruan dan Ilmu Pendidikan Syekh Manshur, Indonesia, are given a questionnaire via Google Form in order to collect information about their perception about the usage of machine translation. According to the range of students' perception scores, the usage of machine translation is classified as positive (high) by the results, which showed that the mean score of the questionnaire was 70%. Based on the result, students believe that machine translation is crucial for their English studies. This is because machine translation can improve students' vocabulary and grammar comprehension, so making it a useful tool for learning in translation classes. As a result, machine translation is regarded as a useful tool for supporting students' learning. According to the study's findings, students had a positive perception of the usage of machine translation in the translation process.

Keywords: DeepL, machine translation, students' perception

Introduction

Translation is one of the skills in language learning. The term translation refers to the transfer of written and spoken messages. The word translation implies the process of transferring a message, while the word translated means the result of a translation. Translation is a craft consisting in the attempt to replace a written message and statement in one language by the same message and statement in another language, (Nababan, 2016). Talking about translation, it means talk about the process of transferring messages from the source language to the target language. The translated texts which are read by TL readers are exactly the result of a translation practice; target readers are

generally unaware of the complex process undertaken by translators when replacing the source language (Baihaqi, 2017). Moreover, the translation methods and procedures related to how the translation process and result will be carried out (Baihaqi & Mulyana, 2021). Methods are used for translating the whole part of the texts; procedures are used for translating the specific problems (idiom, figurative languages, etc.) within the text.

In language learning, students translate words they do not understand so they can get a better understanding of the language. As beginner translator, the students might face lots of problems in learning the target language, such as the differences in

grammatical systems between the source and target languages, contextual problems that occur when students do not comprehend the text, and vocabulary mastery problems (Baihaqi, 2017). In the past, language learners would look up unfamiliar words in the target language using paper dictionary. Traditional dictionaries take time to look up, and learners may have trouble understanding some words. Machine Translation was used to translate word, phrase, sentence, and paragraph. It can also be used as a dictionary, making it easier to find words by using it rather than a paper dictionary (Marito & Ashari, 2017).

In recent years, the field of translation has undergone significant changes, particularly with the advent of technology and the rise of the internet. The development of machine translation tools and online translation platforms has made it easier for people to access and share information across languages. The need for translation has been driven by various factors such as globalization, technological advancements, and the increasing importance of international communication in various fields such as business, education, and diplomacy. With the rapid at which technology is developing, paper dictionaries are gradually being abandoned and replaced by various machine translation tools available. Meanwhile, digital dictionary will continue to grow and be used because it is considered more effective and efficient.

Machine translation, known as MT, is software that is currently customized to help the translation process. An example of an application that uses MT is Google Translate, which can translate text from one language to another by using a neural network to perform the translation process (Baihaqi & Mulyana, 2021). The research shows that even though machine translation can help the works' translator quickly, it has some weaknesses resulted by those MT. However, MT can serve as a pre-translation to help human translators work faster and better in producing more accurate, readable and understandable versions.

MT is also widely used by language learner in Indonesia. As well as in STKIP Syekh Manshur, with most students especially the fourth semester students of English Education Department having used MT tools, such as Google Translate, Deep-L, digital dictionaries, and other online tools. Because there are a lot of benefits using MT tools in the process of translation, it can provide a general description to the users, it gives an inspiration or consideration to the users to understand the meaning (Sujarwo, 2020).

Mostly, the previous researches investigate the student's perception toward Google Translate as the kind of the MT (Ardila, 2021; Khotimah et al., 2021; Sujarwo, 2020; and Zhang, 2023). This research, meanwhile, is aiming to find out how the Indonesian EFL undergraduate

students perceive DeepL as one of Machine Translation.

MT has become a significant tool in English as a Foreign Language (EFL) education, particularly with the widespread availability of tools like Google Translate, Bing Translator, IMTranslator, Yandex Translate, Quillbot, Deep-L, etc. However, there are some concerns about students' overreliance on MT tools, which can negatively impact their creativity and critical thinking. Students may rely too heavily on MT tools, leading to difficulties in understanding language nuances and grammar rules. Additionally, students may not fully understand the limitations and potential biases of MT tools, which can result in inaccurate or incomplete translations. Understanding students' perceptions of MT tools is crucial in designing effective teaching models (Gustini & Baihaqi, 2021). Finally, this also can optimize students' translation outcomes.

Based on the background of problem above, the researcher states the formulation of problem: what is students' perception toward the use of Machine Translation. This research aims to find out the students' perception toward the use of MT in translation process. Therefore, the researchers expect that this research may help the development of more effective language teaching strategies in translation field by considering students' perceptions on the use of MT.

Theoretical Review

Perception

Perception is the process of interpreting messages from our senses to make sense of the world. Perception is the oldest and traditional field of psychology related to view. Perception includes sensing (sensation) and involves processes such as receiving stimuli, selecting stimuli, and understanding or comprehending these stimuli, (Brennan, 2006). Moreover, perception refers to the experience of objects, events, or relationships obtained by inferring information and experiences (Rakhmat, 2013). Therefore, perception can be expressed differently from person to person. Everyone sees things differently. This is because of different factors, such as, experiences, events, and point of view.

There are three factors influence perception such as attention, functional and structural factor (Fitriah, 2020; Rakhmat, 2013). Meanwhile, students' perception categorized into three types: positive perception, negative perception and neutral perception. Positive perception refers to an individual's assessment of an object or information with a positive view, in accordance with what is expected from the object perceived or from the existing rules. Meanwhile, negative perception refers to an individual's perception of a particular object or information with a negative view, contrary to what is expected from the perceived object or from the existing rules. Neutral perception

refers to a neutral assessment of an object or information, neither agreeing nor disagreeing with what is expected from the object perceived or from the existing rules.

Machine translation

Talking about translation, it means talk about the process of transferring messages from the source language to the target language. The translated texts which are read by TL readers are exactly the result of a translation practice; target readers are generally unaware of the complex process undertaken by translators when replacing the source language (Baihaqi & Mulyana, 2021). In the process of transferring the message itself can be done manually by human and can be done automatically with the help of machine translation. Translation manually is a translation which is done by human without any help from machine translation (Nababan, 2016).

Machine translation or MT is influenced by advances in linguistics, computer science, and artificial intelligence. It is a sub-field of computational linguistics that uses software to translate text or speech from one natural language to another. It has linguistic computational capabilities that can identify, learn, and solve problems in the automatic translation process. MT refers to computerized systems responsible for producing translations with or without human assistance. It has been developed over several periods, including early development, use of computing technology, and the use of

artificial neural networks. Challenges and drawbacks of MT include language structure differences, rare vocabulary, and cultural context.

The relevance of students' perception towards MT is significant in the context of English education. Understanding students' attitudes and behaviors towards these tools can help educators design more effective teaching models, improve learning outcomes, and enhance students' translation skills (Fajrie et al., 2022; Marito & Ashari, 2017; and Sujarwo, 2020). Therefore, understanding students' perception towards machine translation is essential for educators to effectively integrate these tools into language learning. However, it is important to consider to balancing the use of MT with learning method, educators can help students use it while still improve deeper language skills.

Method

This research employed qualitative survey method. Qualitative survey aims to elicit detailed responses about opinion, experiences, and narratives from respondents. To obtain the data, the researcher used questionnaire included 17 closed-ended questions to solicit the participants' knowledge, experience, and perceptions of MT. The instrument used to investigate students' perception of using machine translation was questionnaire which was distributed by google form to students at the

fourth semester of English Education Department of Sekolah Tinggi Keguruan dan Ilmu Pendidikan (STKIP) Syekh Manshur, Indonesia.

There were 16 students as the samples of this research. They were selected as the samples since they had followed the translation course at the class. The questionnaire was designed through the likert scale. The last, expert validation from translation academics was used to check this data credibility.

Table 1. Likert Scale

Positive statement scores	Category	Negative statement score
5	Strongly agree	1
4	Agree	2
3	Undecided	3
2	Disagree	4
1	Strongly disagree	5

(Sakkir et al., 2020)

Table 2. Rating score of perception category

Score	Category
84 – 100	Strongly positive (very high)
68 – 83	Positive (high)
52 – 67	Moderate (average)
36 – 51	Negative (low)
0 – 35	Strongly negative (very low)

(Sakkir et al., 2020)

Result

The participant of this research was fourth semester English Education Department of Sekolah Tinggi Keguruan dan Ilmu Pendidikan Syekh Manshur. There were 16 students who were asked to fulfill the questionnaire which has been prepared. Based on questionnaires conducted by researchers, students answered the question well based on their experiences. They expressed various opinions about DeepL as one of MT. The data form questionnaire were showed and discussed as follows.

Table 1. MT is important in English studies

Likert Scale	f	%
Strongly Agree	6	37.5%
Agree	6	37.5%
Neutral	3	18.8%
Disagree	1	6.3%
Strongly Disagree	0	0%
Total	16	100%

Table 2. MT familiarizes new word and sentence structure

Likert Scale	f	%
Strongly Agree	8	50%
Agree	6	37.5%
Neutral	2	12.5%
Disagree	0	0%
Strongly Disagree	0	0%
Total	16	100%

Table 3. The language utilized in MT is simple and comprehensible

Likert Scale	f	%
Strongly Agree	8	50%
Agree	6	37.5%
Neutral	3	18.8%
Disagree	7	43.8%
Strongly Disagree	0	0%
Total	16	100%

Table 4. It is easy to use MT

Likert Scale	f	%
Strongly Agree	9	56.3%
Agree	6	37.5%
Neutral	0	0%
Disagree	1	6.3%
Strongly Disagree	0	0%
Total	16	100%

Table 5. MT helps at work and study quickly

Likert Scale	f	%
Strongly Agree	9	56.3%
Agree	5	31.3%
Neutral	1	6.3%
Disagree	1	6.3%
Strongly Disagree	0	0%
Total	16	100%

Table 6. MT is worthy for learning English

Likert Scale	f	%
Strongly Agree	7	43.8%
Agree	6	37.5%
Neutral	3	18.8%
Disagree	0	0%
Strongly Disagree	0	0%
Total	16	100%

Table 7. All new words can be found in MT

Likert Scale	f	%
Strongly Agree	4	25%
Agree	9	56.3%
Neutral	2	12.5%
Disagree	1	6.3%
Strongly Disagree	0	0%
Total	16	100%

Table 8. Using MT may shorten time when translating complex text

Likert Scale	f	%
Strongly Agree	11	68.8%
Agree	4	25%
Neutral	1	6.3%
Disagree	0	0%
Strongly Disagree	0	0%
Total	16	100%

Table 9. MT is helpful on translation class

Likert Scale	f	%
Strongly Agree	5	31.3%
Agree	11	68.8%
Neutral	0	0%
Disagree	0	0%
Strongly Disagree	0	0%
Total	16	100%

Table 10. MT can be used every time when it was needed

Likert Scale	f	%
Strongly Agree	5	31.3%
Agree	6	37.5%
Neutral	5	31.3%
Disagree	0	0%
Strongly Disagree	0	0%
Total	16	100%

Table 11. Translate English – Indonesian is easier than Indonesian – English

Likert Scale	f	%
Strongly Agree	4	25%
Agree	4	25%
Neutral	6	37.5%
Disagree	2	12.5%
Strongly Disagree	0	0%
Total	16	100%

Table 12. MT reduce the translation interest on learning English

Likert Scale	f	%
Strongly Agree	2	12.5%
Agree	3	18.8%
Neutral	4	25%
Disagree	4	25%
Strongly Disagree	3	18.8%
Total	16	100%

Table 13. MT makes dependent and lazy to open the dictionary

Likert Scale	f	%
Strongly Agree	3	18.8%
Agree	4	25%
Neutral	5	31.3%
Disagree	4	25%
Strongly Disagree	0	0%
Total	16	100%

Table 14. The result of MT sometimes irrelevant and produces incorrect grammar

Likert Scale	f	%
Strongly Agree	1	6.3%
Agree	8	50%
Neutral	5	31.3%
Disagree	2	12.5%
Strongly Disagree	0	0%
Total	16	100%

Table 15. It is difficult to use MT without internet

Likert Scale	f	%
Strongly Agree	6	37.5%
Agree	6	37.5%
Neutral	1	6.3%
Disagree	3	18.8%
Strongly Disagree	0	0%
Total	16	100%

Table 16. MT result sometimes makes confused

Likert Scale	f	%
Strongly Agree	4	25%
Agree	6	37.5%
Neutral	1	6.3%
Disagree	5	31.3%
Strongly Disagree	0	0%
Total	16	100%

Table 17. MT result sometimes incomplete

Likert Scale	f	%
Strongly Agree	3	18.8%
Agree	4	25%
Neutral	6	37.5%
Disagree	1	6.3%
Strongly Disagree	2	12.5%
Total	16	100%

Referring to the result of the data as presented above, most of students give positive perception of using MT. The students agree that MT is important on English studies. This is because MT plays a significant role in English studies. Furthermore, it is valuable tool and has a lot of advantages that offering several benefits and implication for students in their learning process.

Additionally, students give positive responses about statement that MT helps to know new word and make sentence in English. It refers to the result of the questionnaire that mostly students strongly agree about it. It is in a line with the statement that all of the words can be found on using MT. There are 9 students (56.3%) choose agree. It is because MT helps students to understand the meaning of unfamiliar word and facilitating their vocabulary acquisition process.

Furthermore, students give positive perception about MT. 9 students' (56.3%) state that MT is easy and simple to use. This is because MT makes it easier for students to access the word or sentence that they are looking for. It is also very flexible therefore students can be used every time and everywhere they needed. It can be seen the result at the table 5.10 that mostly students agree MT can be used every time it was needed.

The next statement is about MT helps at work and study quickly. From the result, it can be seen that more than half of students strongly agree about it. It is because MT can indeed be a valuable tool for both work and study, helping speed up the process of understanding and communicating in multiple languages. It is a line with the result that 11 students (68.8%) strongly agree that using MT to shorten time when translate long text. For students learning foreign language, they can quickly translate research paper, article from one language to other.

Additionally, other positive perception expressed by students is MT is helpful on translation class. It can be seen that there are 11 students (68.8%) choose agree, it is because MT can indeed be a valuable tool in a translation class and offering several benefits that can enhance the learning experience. It is a line with the result of statement that MT is good for learning English. This refers to the questionnaire that mostly students strongly agree about it.

However, MT also has challenged those students faced in this study, according to the result of questionnaire there are 8 students (50%) choose agree that the result of Machine Translation sometimes irrelevant and incorrect grammar. Besides that, it can be seen from the result at statement MT translates word by word and sometimes the result makes confused. 6 students (37.5%) choose agree about it. Therefore, it can be concluded that most of students agree that MT translate word by word and sometimes the result makes confused.

In addition, based on the questionnaire, more than half of students stated that difficult to use MT if there is no network. It is because MT is required a good network especially online translation platforms. Mostly, students have problem related to the internet connection. Bad signal and internet connection becomes one problem when using MT. Meanwhile, 6 students (37.5%) are neutral or lack of strong feeling or opinions that using MT sometimes could not found the meaning of word that want.

Furthermore, referring to the result about MT reduce the translation the interest on learning English, 4 students (25%) choose neutral, and 4 student (25%) choose disagree. Therefore, it can be concluded that most of students are disagree and neutral or lack of strong feelings or opinions about MT reduce the translation the interest on learning English. Besides, it can be seen that mostly students are neutral or lack of strong feelings or opinions that MT makes dependence and lazy to open dictionary.

Related to the result of the questionnaire above, this research is in line and has a relationship with previous studies from Ardila (2021); Khotimah et al. (2021); Sujarwo (2020); and Zhang, 2023). Their studies roved that MT is useful and helpful. Machine translation is another way to understand a foreign language. It can help users understand meaning. However, sometimes, MT does not have the right meaning or grammar. Students have to check

and rearrange words, phrases, and texts to make decent translations. They also have to think about how they see themselves as students and how they see their roles in the classroom and outside of it. MT can also be used to learn sounds or pronunciation. It is recommended to analyze the results of translations by MT conducted by students. This provides feedback and consideration of students' perception.

Also, this research confirms with the studies from Khotimah et al. (2021) and Septinaria et al. (2022) that students' attitude toward the use of MT in leaning process were in positive category. Although some students showed negative perception and neutral of using MT, mostly students give positive perception. The mean score of the questionnaire was 70% it means that the students are categorized positive (high) according to the range of students' perception score. Many students appreciate MT because they can quickly translate text, especially dealing with large volumes of materials. MT also provides students to overcome language barriers and access a wider range of resources. Last but not least, MT can serve as a supplementary tool for learning vocabulary and structure, and enable them to bridge the language gap and communicate effectively.

Conclusion

Based on the result of this research, it can be concluded that students' perception is positive. This research found that students

perceive that MT is important on English studies. It is because it valuable tool in learning process especially on translation class. It helps students know new word and make sentence in English, in addition, they use MT to shorten time when translate long text. With the benefits and implication of the MT, it can make it easier for students in their learning process. It was proven by the results of the students' perceptions. These results are categorized as good or positive perceptions when they are confirmed by using a Likert scale. the mean score of the questionnaire was 70% it means that the students is categorized positive (high) the use of Machine Translation according to the range of students' perception score.

Since the study was limited in investigating students' perception on MT, further study is recommended to discover the influence and impact of MT on students' translation performances. Experiment and action research can effectively investigate these issues.

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