

Edusaintek: Jurnal Pendidikan, Sains dan Teknologi

Volume 11 Issue 3 2024 Pages 1147 - 1171

p-ISSN: 1858-005X e-ISSN: 2655-3392 DOI: https://doi.org/10.47668/edusaintek.v11i3.1264

website: https://journalstkippgrisitubondo.ac.id/index.php/EDUSAINTEK

COMPARING TRANSLATION QUALITY: GOOGLE TRANSLATE VS DEEPL FOR FOREIGN LANGUAGE TO ENGLISH

Elsaty Lam Marya Bunga^{1*}, Caroline Victorine Katemba²

^{1,2} Universitas Advent Indonesia, Indonesia

E-mail: ctobing@unai.edu

Abstract: Google Translate and Deeple are now very well known and have been used by students in Indonesia. This research examines how students from the English Education Department and Philosophy Department at Indonesian Adventist University evaluate the use of Deepl and Google Translate and the resulting translations. This research uses a quantitative approach by collecting data through closed-ended Likert-type questionnaires. A total of 85 students from two existing study programs, namely students majoring in English Education and also Philosophy students at Indonesian Adventist University, have used Deepl and Google Translate in this research. The research results show that the majority of respondents have a perception opinion that Deepl is superior with percentage (73%) while Google Translate (48%) for translation results that are easy to understand, accurate, and have no translation errors even though both are in English. the same category that was rated as excellent. Meanwhile, for the features that Deepl and Google Translate have, the average results say that Deepl is superior by a percentage (79%) while Google Translate for its features gets (49%). Meanwhile, for speed and ability to maintain context and nuance, the results show that Deepl is superior with a percentage (78%) while Google Translate gets a percentage (44%). for the results of parsing complex words produced by Deepl and Google Translate, it is stated that Deepl is superior with a percentage (80%) for speed and being able to maintain context and nuance while Google Translate gets a percentage (40%). It can be concluded that using Deepl as an option for language translation from Indonesian to English or vice versa can be the right choice to improve students' translation skills and make students more confident.

Keywords: Language Translation, Accurate, Deepl, Google Translate, Latest Features.

Abstrak. Google Translate dan Deeple saat ini sudah sangat dikenal dan telah digunakan oleh mahasiswa di Indonesia. Penelitian ini meneliti bagaimana mahasiswa Jurusan Pendidikan Bahasa Inggris dan Jurusan Filsafat di Universitas Advent Indonesia mengevaluasi penggunaan Deepl dan Google Translate serta terjemahan yang dihasilkan. Penelitian ini menggunakan pendekatan kuantitatif dengan pengumpulan data melalui kuesioner tertutup tipe Likert. Sebanyak 85 mahasiswa dari dua program studi yang ada, yaitu mahasiswa jurusan Pendidikan Bahasa Inggris dan juga mahasiswa Filsafat Universitas Advent Indonesia telah menggunakan Deepl dan Google Translate dalam penelitian ini. Hasil penelitian menunjukkan bahwa mayoritas responden memiliki pendapat persepsi bahwa Deepl lebih unggul dengan persentase (73%) sedangkan Google Translate (48%) untuk hasil terjemahan yang mudah dipahami, akurat, dan tidak ada kesalahan terjemahan meskipun keduanya sama-sama dalam bahasa Inggris. kategori yang sama yang dinilai sangat baik. Sedangkan untuk fitur yang dimiliki Deepl dan Google Translate, hasil rata-rata menyebutkan Deepl lebih unggul dengan persentase (79%) sedangkan Google Translate untuk fiturnya mendapat (49%). Sedangkan untuk kecepatan dan kemampuan menjaga konteks dan nuansa, hasilnya menunjukkan Deepl lebih

Edusaintek: Jurnal Pendidikan, Sains dan Teknologi Vol. 11 (3) 2024 | 1147

unggul dengan persentase (78%) sedangkan Google Translate mendapat persentase (44%). untuk hasil penguraian kata kompleks yang dihasilkan oleh Deepl dan Google Translate menyatakan bahwa Deepl lebih unggul dengan persentase (80%) untuk kecepatan serta mampu menjaga konteks dan nuansa sedangkan Google Translate mendapat persentase (40%). Dapat disimpulkan bahwa menggunakan Deepl sebagai pilihan untuk penerjemahan bahasa dari bahasa Indonesia ke bahasa Inggris atau sebaliknya dapat menjadi pilihan yang tepat untuk meningkatkan kemampuan penerjemahan siswa dan membuat siswa menjadi lebih percaya diri

Kata Kunci: Terjemahan Bahasa, Akurat, Deepl, Google Translate, Fitur.

Copyright (c) 2024 The Authors. This is an open access article under the CC BY-SA 4.0 license (https://creativecommons.org/licenses/by-sa/4.0/)

INTRODUCTION

Although so many people around the world use only their mother tongue as the basis of their daily language, no government today has the authority to restrict how they communicate (Hall, 2006). The language indicates each of its nations, a parable once says so. If its meaning is pondered deeper, may make us wiser in understanding and addressing all cases that are linked between language and the attitude or behavior of groups of speakers of the languages (Hasan, 2004). In the current era of globalization and the fifth industrial revolution, technology is unavoidable since it has become ingrained in both our daily lives and the educational system (Katemba, 2021).

The development of information systems is now running very fast (Surur et al., 2023). Along with the development of information technology, the need to obtain information effectively and efficiently is needed (Gufroni, Yuliana, & Munawwir, 2022). Various interconnected technological tools provide additional opportunities to sharpen and develop their linguistic abilities. It is also an important part of education, especially when learning a new language. As a result of breakthroughs in artificial intelligence, big data, and neurology, machine translation has morphed into a new type known as machine translation (Petra Polakova, 2023).

Translation is a way of transferring a message from one language to another, both in terms of meaning and language form. By translating a language, we also learn the language, both the source language and the target language (Wuryantoro, 2015). It is done by a machine with a formula or formulas that have been put into the program to help with translation. This is the translation that is completely done by the machine after providing

input in the form of text from the source language which is then translated by the machine to be transferred to the target language (Mitkov, 2012).

In addition, English has the power to connect several languages. Several studies on the accuracy of machine translation systems have been conducted as a result of the development of this technology, with DeepL and Google Translate receiving the most attention (Lavie & Clark, 2011). However, DeepL and Google Translate have the disadvantage of lowering the quality of translation results and being costly (Huck M, 2012) as they require multiple correct translations of a single source text. Google Translate is an online translation service provided by Google. This service utilizes artificial intelligence technology to translate text from one language to another quickly and easily.

Google Translate supports a wide range of languages from around the world and has become one of the most widely used translation tools on the internet (Constantine, 2019). While Google Translate has advantages in terms of ease of use and language availability, its translation results are not always perfect. Because the Google Translate translation algorithm may not always fully understand the context or nuances of the text, translation results can sometimes be inaccurate or confusing (Jooste W, 2021). Therefore, Google Translate users are advised to use translation results carefully, especially in contexts that require high accuracy and precision (Menezes, 2019).

Until a few years ago, the use of machine translation (MT) was considered inadequate for professional translation. Moreover, students used to be systematically warned that they should not use these tools in their assignments or exams and would be penalized (Paterson, 2023). The reason behind this reluctance may be that MT gives poor results unless it is used on a controlled language in a pre-edited text in a particular area of specialization and the target text is then re-edited with an appropriate tool later proved that Google Translate is a useful tool for comparative researchers when using MT for thorough translation (De Vries, 2018). The conclusion is that there is less and less loss of translation often with the development of the use of Google Translate (Ferré, 2019).

Then one difficulty decreases in terms of understanding and learning another language. Indeed, machine translation cannot be taken for granted. Machine translation is not fully trusted to do human work, especially translating languages that involve a lot of

things in the brain, heart and social sense of fellow humans. (García-Carbonell A, 2014). For this reason, the results of Google Translate, DeepL or other machine translation results still need to be edited by humans (Stockwell G, 2019). Tries to answer the concern that humans or in this case interpreters will lose their jobs due to the presence of machines such as Google Translate (Kirov V, 2022). He tried to study MT (machine translation) which is similar to human work. The results show that in general, capabilities are needed that give better performance to the machine on the challenges of variation (Fitria, 2021). Machines on the challenges of phraseological variation and discontinuity. This means that the human role is still needed and dominant to get a good translation (Denkowski & Lavie, 2012).

The involvement of machine translation that is given to help translate language from Indonesian to English becomes part of this research. Furthermore, that English is considered a foreign language in Indonesia but is a mandatory part of the school curriculum (Katemba C., Tobing J., & Putri A., 2022) and that is the reason why students are using Google Translate or Deepl to be able to understand the English language they are learning at schools or universities. It is therefore. Questions that arise in the study then need to be answered including (1) Students' perception of the ability of the MT in its translation results, accuracy, and no translation errors on the material. (2) Which MT (machine translation) according to students has complete features to help support the translation results of Deepl & Google Translate? (3) Are Deepl and Google Translate reliable and fast translators that consistently produce accurate translations? (4) How complex are the translation results obtained using Google Translate and Deepl? as reported by the Universitas Advent Indonesia philosophy and English education students?

METHOD

The method used in this research is a survey by giving questionnaires to English Education Students and Philosophy Students of Universitas Advent Indonesia who have used Deepl and Google Translate to translate the tasks they have from the language they want to translate into English or vice versa. The questionnaire was completed online through a Google form given to the students. The questionnaire is a method of collecting

data through statement factors that are filled in by respondents. (Eckerdal & Hagstrom, 2017).

The sampling technique in this study used the Purposive Sampling technique, which is a sampling technique with certain criteria and aims to produce a sample that can logically be considered representative of the population (Tongco, 2007).

Therefore, the samples in this study were taken from English education students and philosophy students with the criteria of having used Deepl and Google translate. The users of respondents in this study were 85 students. The data analysis technique used is quantitative descriptive analysis technique by looking at the interpretation of the percentage category of the tendency of the answers chosen by students.

The Likert scale is a measurement scale developed by Likert, this scale has four or more items that are combined to form a score or value that describes the nature, knowledge, and responses of individuals (H & D, 2012) The following is a scoring rubric from the Likert scale as follows:

Symbol Score Category Strongly Disagree SD 1 Disagree D 3 Neutral N 4 Agree Α 5 Strongly Agree SA

Table 1. Likert Scale Rating Rubric

The sample is the result of the population to be studied and can represent the entire population so that the number is less than the population. The 85 respondents then gave answers to each indicator to get results regarding the results of Deepl translation and Google Translate. In two study programs with 85 respondents gave the following answers:

Table 2. Research Sample

User Gender	Total Students	Majors	Total Students
Women	36 Students	English Education	42 Student
Male	49 Students	Philosophy	43 Student

RESULTS AND DISCUSSION

Results

The results of the questionnaire obtained online in the form of responses to the perceptions of UNAI English Education Study Program students and UNAI Philosophy Study Program students towards the use of Deepl and Google Translate during the data collection by researchers in the even semester of the 2023/2024 academic year. The grouping of the questionnaire results is based on 4 aspects, that is (1) students' perceptions of understanding, accuracy, no translation errors about the results of Google Translate and deepl translation, (2) students' perceptions of the features of deepl and google translate, (3) students' perceptions of the speed & originality of Google Translate and Deepl translation words, and (4) the parsing of complex words translated by Deepl and google translate.

Research question 1: "Students' perception of the ability of the MT in its translation results, accuracy, and no translation errors on the material"

There are 6 parameters to answer this research question, namely 1) Deepl really helps me translate foreign languages into English by producing translations that are easy to understand and comprehend. 2) I felt that Deepl did not make errors in producing the translation. 3) I feel that Deepl is inaccurate in translating the text, confusing. 4) I feel that Google Translate does not make fatal errors in producing translations. 5) I understand that translating English text using Deepl is very effective because I can change words at any time. 6) I feel that Google Translate is accurate in translating texts, making it easier for me to translate. Each question has a score value from 1- 5 which has been explained on a Likert scale. From these research questions, the results obtained from the questions are in Table 1.

Table 3. Ability to understand translation results, accuracy, translation errors Deepl

	Likert Scale						
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
1	Deepl helps me translate foreign languages into English by producing	0	5	18	31	30	

	translations that are easy to understand					
2	I feel that Deepl does not make errors in producing translations	0	5	16	44	20
3	I feel that Deepl is accurate in translating the text, causing confusion	0	7	18	31	29

P	ercer	ıtage
P	ercer	πage

No	Question	Poor	Bad	Good	Very Good	Excellent
1	Deepl helps me translate foreign languages into English by producing translations that are easy to understand	0%	6%	21%	36%	35%
2	I feel that Deepl does not make errors in producing translations	0%	6%	19%	52%	24%
3	I feel that Deepl is accurate in translating the text, causing confusion	0%	8%	21%	36%	34%
-	Total	0%	6%	21%	45%	31%

From the table above, it can be concluded that students who use Deepl have 4 results, namely disagree, neutral, agree, and strongly agree for the ability to understand translation results, accuracy, and no translation errors. This is supported by the response to each question given. For the first question, there are 4 responses given by respondents, namely disagree, neutral, agree, and strongly agree. For those who disagree with the question Deepl helps me translate foreign languages into English by producing translations that are easy to understand there are 6 out of 85 people reporting disagree responses (7%). Those who expressed neutral in the question Deepl helps me translate foreign languages into English by producing translations that are easy to understand where 18 out of 85 people reported a neutral response (21%). Those who agree with the question Deepl helps me translate foreign languages into English by producing translations that are easy to understand are 31 out of 85 people reporting an agree response (36%). Who stated strongly agree in the question Deepl helps me

translate foreign languages into English by producing translations that are easy to understand there were 30 out of 85 people reporting strongly agree responses (35%).

For the second question, there are 4 responses given by respondents, namely disagree, neutral, agree, and strongly agree. Those who disagree on the question Deepl really helps me translate foreign languages into English by producing translations that are easy to understand are 5 people out of 85 people who expressed disagree responses (6%). Those who expressed neutral on the question Deepl really helps me translate foreign languages into English with no fatal errors were 16 out of 85 people who expressed a neutral response (19%). Those who agreed on the question Deepl really helped me translate a foreign language into English with no translation errors were 44 out of 85 people expressed an agreed response (52%). Those who strongly agree on the question Deepl really helps me translate foreign languages into English by producing translations that are easy to understand are 20 people out of 85 people who stated neutral (24%).

For the third question, there are 4 responses given by respondents, namely disagree, neutral, agree, and strongly agree. Those who disagreed with Deepl's question that it is very accurate in translating foreign languages into English were 7 out of 85 people who expressed disagree responses (8%). Those who expressed neutral on Deepl's question stating that it is very accurate in translating foreign languages into English were 18 out of 85 people who expressed a neutral response (21%). Those who disagreed on Deepl's question stating that it is very accurate in translating foreign languages into English were 31 out of 85 people who expressed an agreed response (36%). Those who disagreed with Deepl's question stating that it is very accurate in translating foreign languages into English were 29 people out of 85 people who stated neutral answers (34%).

Research by (Moisieieva, Dzykovych, & Shtanko, 2023) that DeepL makes fewer mistakes in general. For the overall respondent average Deepl said that Deepl Poor stated with a result of (0%), for the overall respondent average for Deepl said that Deepl Bad stated with a result of (7%) for the overall respondent average for Deepl said that Deepl Good stated with a result of (21%) for the overall respondent average for Deepl said that Deepl Very Good stated with a result of (45%) for the overall respondent average for Deepl said

that Deepl stated with a result of (31%). However, the results of respondents who said Google Translate can be seen in Table 2.

Table 4. Ability to understand translation results, accuracy, and translation errors Google Translate

		Liker	t Scale			
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I feel that Google Translate does not make errors in producing translations.	17	27	10	28	18
2	I understand that translating English text using Google Translate is very effective because I can change words at any time.	39	28	2	17	14
3	I feel that Google Translate is accurate in translating text so that it makes it easier for me to translate.	44	16	30	3	7
		Perce	entage			
No	Question	Poor	Bad	Good	Very Good	Excellent
1	I feel that Google Translate does not make errors in producing translations.	16%	42%	9%	21%	12%
2	I understand that translating English text using Google Translate is very effective because I can change words at any time.	24%	55%	3%	7%	27%
3	I feel that Google Translate is accurate in translating text so that it makes it easier for me to translate.	43%	15%	29%	2%	11%
	Total	38%	47%	14%	10%	16%

From the table above, it can be concluded that students who use Google Translate have 4 results, namely strongly disagree, disagree, neutral, agree, and strongly agree for the ability to understand the translation results, accuracy, no translation errors. This is

supported by the responses from each question given. For the first question, there are 5 responses given by respondents, namely strongly disagree, disagree, neutral, agree, and strongly agree. Those who strongly disagree on the first question that Google Translate does not make translation errors are 11 out of 85 people (13%) while those who disagree on the question Google Translate does not make translation errors from foreign languages into English are 7 people out of 85 people who expressed disagree responses (8%). Those who expressed neutral on the question Google Translate really helps me translate foreign languages into English cause no make fatal errors translating there are 13 out of 85 people expressed a neutral response (15%). Those who agreed to the question Google Translate really helps me translate foreign languages into English cause no make fatal errors were 36 out of 85 people who agreed (42%). Those who strongly agree on the question Google Translate really helps me translate foreign languages into English by producing translations that are easy to understand are 18 people out of 85 people who strongly agree (21%).

For the second question, there are 3 responses given by respondents, namely neutral, agree, and strongly agree. Those who expressed neutral on the question Google Translate really helps me translate foreign languages into English cause no make fatal errors translating there are 21 out of 85 people expressed a neutral response (25%). Those who agreed to the question Google Translate really helps me translate foreign languages into English cause no make fatal errors were 41 out of 85 people who agreed (48%). Those who strongly agree on the question Google Translate really helps me translate foreign languages into English by producing translations that are easy to understand are 13 people out of 85 people who strongly agree (27%).

For the third question, there are 4 responses given by respondents, namely disagree, neutral, agree, and strongly agree. Those who agree on the third question that Google Translate inaccurate in translating the text 47 out of 85 people (55%) while those who disagree on the question Google Translate inaccurate in translating the text from foreign languages into English are 2 people out of 85 people who expressed disagree responses (2%). Those who expressed neutral on the question Google Translate really helps me translate foreign languages into English inaccurate in translating the text there are 23 out

of 85 people expressed a neutral response (27%). Those who strongly agree on the question Google Translate really helps me translate foreign languages into English by producing translations that are easy to understand are 13 people out of 85 people who strongly agree (15%). For the overall respondent average for Google Translate said that Google Translate Poor stated with a result of (38%), for the overall respondent average for Google Translate said that Google Translate Bad stated with a result of (47%) for the overall respondent average for Google Translate said that Google Translate Good stated with a result of (14%) for the overall respondent average for Google Translate Very Good stated with a result of (10%) for the overall respondent average for Google Translate Said that Google Translate Said that Google Translate Very Good stated with a result of (10%) for the overall respondent average for Google Translate Said that Google Translate Said tha

As well as responses from respondents there are those who say the translation results from Deepl are better than the translation results from Google Translate which are difficult to understand, inaccurate and often occur translation errors that can be called bad. Research by (Moisieieva, Dzykovych, & Shtanko, 2023) shows that DeepL makes fewer errors in general than Google Translate. Therefore, the translation from DeepL is considered to be of higher quality than the translation from Google Translate on the basis that the posteditor takes more time to process and edit the translation than Google Translate. However, if used well and wisely, Google Translate can also be a tool that is easy to understand because it also allows its users to learn pronunciation (Hidya, 2017). Deepl and Google Translate's ability to translate accurately assists students in understanding and perfecting their language ideas both spoken and written. However, despite the obvious benefits, it is important to recognize and address the potential negative effects associated with relying on machine translation for more confidence in communication. One significant concern is the risk of dependency, where students may become overly reliant on Deepl & Google Translate or similar machine translation (MT) to produce translations. This over-reliance can hinder important language development, such as communicating appropriately, proper word usage, and word organization.

Research Question 2: "Which MT (machine translation) according to students has complete features to help support the translation results of Deepl & Google Translate?"

In answering this research question, it is important to consider four main parameters that contribute to the evaluation of Deepl and Google Translate. (1) Deepl is superior in translating sentences or texts because I can change words that I do not understand. (2) I like the features that Deepl has because it is complete with the Deepl Write feature that other translation engines do not have that can help me translate instantly (3) I like Google Translate with the voice feature because I understand the pronunciation of the translation better (4) I have experienced significant translation errors when using Google Translate because of its features. This encourages users to customize their translations according to the translation needs. These parameters collectively underline the significance and effectiveness of the features in meeting various translation needs, emphasizing appropriate language in the realm of machine translation of the research questions, the results obtained from the questionnaire can be presented in tabel 3 and tabel 4.

Table 5. Deepl Features

		Lik	ert Scale			
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I think Deepl is superior in translating sentences or texts because I can change words that I don't understand.	0	2	19	41	23
2	I like the features that Deepl has because it is complete with the Deepl Write feature that other translation engines do not have, it can help me translate instantly	0	0	12	45	28
		Perc	entage			
No	Question	Poor	Bad	Good	Very Good	Excellent
1	I think Deepl is superior in translating sentences or texts because I	0%	2%	22%	48%	27%

	can change words that I don't understand.					
2	I like the features that Deepl has because it is complete with the Deepl Write feature that other translation engines do not have, it can help me translate instantly.	0%	0%	14%	53%	33%
·	Total	0%	1%	18%	51%	30%

Table 4. Google Translate Features

Likert Scale							
Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
I like Google Translate with voice feature because I can understand the pronunciation of the translation better.	30	18	28	16	8		
I have experienced significant translation errors when using Google Translate because of the features it has	43	32	13	12	0		
	I like Google Translate with voice feature because I can understand the pronunciation of the translation better. I have experienced significant translation errors when using Google Translate because of	Questions I like Google Translate with voice feature because I can understand the pronunciation of the translation better. I have experienced significant translation errors when using Google Translate because of	Questions Strongly Disagree I like Google Translate with voice feature because I can understand the pronunciation of the translation better. I have experienced significant translation errors when using Google Translate because of	Questions Strongly Disagree I like Google Translate with voice feature because I can understand the pronunciation of the translation better. I have experienced significant translation errors when using Google Translate because of	I like Google Translate with voice feature because I can understand the pronunciation of the translation better. I have experienced significant translation errors when using Google Translate because of		

Percentage

No	Question	Poor	Bad	Good	Very Good	Excellent
1	I think Google Translate is superior in translating sentences or texts because I can change words that I don't understand.	40%	16%	26%	13%	5%
2	I have experienced significant translation errors when using Google Translate because of the features it has	47%	29%	14%	10%	0%

Total	52%	45%	17%	12%	2%

Based on these results on the table 3 and for the first question, it can be concluded that Deepl has many respondents who agree that Deepl provides complete features and helps in its use because it can change words that are not understood. This is evidenced by the average results of 41 out of 85 respondents (48%). Those who said disagree were only 2 out of 85 people (2%). However, those who said they were neutral towards Deepl were 19 out of 85 people (22%). Likewise on the other hand, respondents said that the features provided by Google Translate are very good there are 23 out of 85 people (27%). As for the results of the second question, it can be concluded that the Deepl Write feature is very helpful because users can choose the right words they want to use and can be directly translated in the form only in photos. Respondents gave 3 responses including neutral, agree and disagree on this question. This is evidenced by the average results of respondents who said they agreed 45 out of 85 people (48%). Those who said neutral were only 12 out of 85 people (14%). Meanwhile, those who said strongly agree were 28 out of 85 people (33%).

Based on the results of table 4 in the first question, it can be concluded that Google Translate has a voice feature that can help pronunciation is very helpful. This is evidenced by the results of the respondents there are 14 out of 85 people who say strongly agree (16%). But there are also those who give bad there are 8 out of 85 people (9%). For responses agreeing there are 40 out of 85 people who like the features of Google Voice. In the second question, respondents responded that when using Google Translate users often experience translation errors. This can be proven from the 5 results that are strongly agree, agree, neutral, disagree and strongly disagree. Those who say they have experience of experiencing translation errors when using Google Translate because of its features are 40 out of 85 people (47%), who have no experience of experiencing translation errors when using Google Translate because of its features are 8 out of 85 people (9%), for respondents who strongly agree because they often experience experiences of experiencing translation errors when using Google Translate because of its features are 15 out of 85 people (18%), for respondents who strongly disagree because they never experience the experience of experiencing translation errors when using Google Translate because of its features are 15 out of 85 people (18%),

are 3 out of 85 people (4%), while for respondents who are neutral in experiencing the experience of experiencing translation errors when using Google Translate because of its features there are 19 out of 85 people (2%). This can be a motivation for Google Translate to improve its features (Varlas, 2010).

For the overall respondent average for Deepl said that Deepl Poor stated with a result of (0%), for the overall respondent average for Deepl said that Deepl Bad stated with a result of (1%) for the overall respondent average for Deepl said that Deepl Good stated with a result of (18%) for the overall respondent average for Deepl said that Deepl Very Good stated with a result of (51%) for the overall respondent average for Deepl said that Deepl stated with a result of (30%). For the overall respondent average for Google Translate said that Google Translate Poor stated with a result of (52%), for the overall respondent average for Google Translate said that Google Translate Bad stated with a result of (45%) for the overall respondent average for Google Translate Said that Google Translate Said t

However, amidst the undeniable benefits, it is imperative to recognize the potential negative impacts of developing machine translation in education. One significant concern is the risk of over-reliance on technology, leading to a decline in critical thinking and creativity. As students become accustomed to using AI-powered tools like Deepl to generate ideas and translate text, users may become less reliant on their cognitive processes, reducing their ability to think independently and innovate.

Research Question 3: "Are Deepl and Google Translate reliable and fast translators that consistently produce accurate translations?"

To answer this research question, it is important to consider four main parameters that contribute to the evaluation of Translation Nuance and Speed & Context Authenticity in translation. (1) Deepl has the ability to maintain the authentic context or feel of the translated text. (2) Deepl has fast translation results and adapts the desired word usage without changing the existing meaning and grammar. (3) Google Translate has good speed

in providing translation results. (4) Using Google Translate because it provides translation results that do not change the existing grammar and can maintain the context and meaning of the text. From these research questions, the results obtained from the questionnaire questions can be presented in Table 5 and table 6.

Table 6. Translation speed and authenticity Deepl nuance and context

		Liker	t Scale			
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	In my opinion, Deepl has the ability to maintain the authentic context or feel of the translated text	0	6	12	50	17
2	I am comfortable with Deepl having fast translation results and adjusting the use of the desired word without changing the existing meaning and grammar	0	0	14	53	18
	5 5	Perce	entage			
No	Question	Poor	Bad	Good	Very Good	Excellent
1	In my opinion, Deepl has the ability to maintain the authentic context or feel of the translated text	0%	7%	14%	59%	20%
2	I am comfortable with Deepl having fast translation results and adjusting the use of the desired word without changing the existing meaning and grammar	0%	0%	16%	62%	21%
	Total	0%	3%	15%	61%	21%

Table 7. Translation speed and authenticity Deepl nuance and context

Likert Scale						
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1	I feel that Google Translate has good speed in providing translation results	41	3	25	22	9
2	I think it is appropriate when using Google Translate because it provides translations that do not change the existing grammar and are able to maintain the context and meaning of the writing.	34	17	13	17	19

	Percentage							
No	Question	Poor	Bad	Good	Very Good	Excellent		
1	I feel that Google Translate has good speed in providing translation results	46%	2%	26%	19%	7%		
2	I think it is appropriate when using Google Translate because it provides translations that do not change the existing grammar and can maintain the context and meaning of the writing.	40%	16%	12%	15%	17%		
	Total	34%	9%	19%	17%	12%		

From the third research question, it was found that students were happy with Deepl and Google Translate being able to maintain the authenticity of context and nuance as well as the speed of translation. This is evidenced by the questions in Deepl in the first question there are 4 answer results namely Disagree, Neutral, Agree, and Strongly agree. Most of the average score of respondents who said good 50 out of 85 people for Deepl in maintaining context authenticity (59%). Of the results that say disagree is not good for Deepl in maintaining the authenticity of the context there are 6 out of 85 people (7%), while for neutral there are 12 out of 85 people (14%), and for those who say strongly agree for Deepl to maintain the authenticity of the context there are 17 out of 85 people (20%). In the second question, there are 3 answer results, namely Neutral, Agree and Strongly agree. Most of the average score of respondents who said good 53 out of 85 people for

Deepl in the speed of translating text and not changing the existing grammar (62%). Of the results that said strongly agree with Deepl in the speed of translating text and not changing the existing grammar 18 out of 85 people (21%), and for respondents who stated neutral there were 14 out of 85 people (16%).

Agustian Rahmadi (2022) states that Google Translate is an outstanding language translation machine model with great potential that maintains the authenticity of context and translation speed. Likewise, Deepl provides a variety of amazingly different capabilities, especially in Deepl has a feature to change words so that Deepl can maintain the context and nuances of words.

With the questions in Google Translate, the first question has 4 answers, namely Disagree, Neutral, Agree, and Strongly agree. Most of the average value of respondents who say good 45 out of 85 people for Google Translate translation speed (53%). From these results who strongly disagree to Google Translate in translation speed, there is 1 out of 85 people (1%), while for neutral there are 22 out of 85 people (26%), and those who strongly agree with Google Translate translation speed there are 17 out of 85 people (20%).

In the second question, there are 5 answer results, namely Neutral, Agree, and Strongly agree. Most of the average value of respondents who said agree as many as 35 out of 85 people for Google Translate in maintaining the context of the text and not changing the existing grammar (41%). From these results who stated strongly agree to Google Translate in the speed of translating text and not changing existing grammar as many as 19 people out of 85 people (22%), and for respondents who stated neutral as many as 13 people out of 85 people (15%), from these results who stated strongly agree to Deepl in the speed of translating text and not changing existing grammar as many as 19 people out of 85 people (22%).

For the overall respondent average Deepl said that Deepl Poor stated with a result of (0%), for the overall respondent average for Deepl said that Deepl Bad stated with a result of (3%) for the overall respondent average for Deepl said that Deepl Good stated with a result of (15%) for the overall respondent average for Deepl said that Deepl Very Good stated with a result of (61%) for the overall respondent average for Deepl said that Deepl said that Deepl stated with a result of (21%).

For the overall respondent average for Google Translate said that Google Translate Poor stated with a result of (34%), for the overall respondent average for Google Translate said that Google Translate Bad stated with a result of (9%) for the overall respondent average for Google Translate said that Google Translate Good stated with a result of (19%) for the overall respondent average for Google Translate said that Google Translate Very Good stated with a result of (17%) for the overall respondent average for Google Translate said that Google Translate stated with a result of (12%).

Research Question 4: "How complex are the translation results obtained using Google Translate and Deepl as reported by the Universitas Advent Indonesia philosophy and English education students?"

To answer this research question, it is imperative to consider four main parameters that contribute to the evaluation of the impact of Deepl and Google Translate in parsing translated complex words. (1) How do I assess Deepl's ability to parse words or phrases that have complex meanings in foreign languages? (2) Deepl is effective in parsing complex words or phrases in foreign languages? (3) Google Translate can parse complex words or phrases with high accuracy (4) Google Translate can overcome difficulties in parsing words or phrases that have complex meanings when translating.

Deepl serves as a valuable translation engine (MT) to parse complex words and provide the necessary guidance for users to perfect their ability to communicate with the given grammar. By analyzing this, Google Translate refines the text to be translated. These parameters collectively underscore the parsing of complex words translated by Deepl and Google Translate as developing one's communication ability and confidence when using Deepl and Google Translate. From these research questions, the results obtained from the questionnaire questions can be seen in Table 7.

Table 8. The parsing of complex words translate with Deepl

	Likert Scale							
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
1	How would I rate Deepl's ability to decipher words or phrases that have	0	0	19	52	14		

	complex meanings in a foreign language?					
2	Do I think Deepl is effective in parsing complex words or phrases in foreign languages?	0	3	10	42	30

n		en	4 -		
Ρ	erc	en	Гa	α	9
	$\mathbf{c}_{\mathbf{l}}$	\sim 11	ш	≃'	L

No	Question	Poor	Bad	Good	Very Good	Excellen t
1	How would I rate Deepl's ability to decipher words or phrases that have complex meanings in a foreign language?	0%	0%	22%	61%	16%
2	Do I think Deepl is effective in parsing complex words or phrases in foreign languages?	0%	4%	12%	49%	35%
	Total	0%	2%	17%	55%	26%

Table 9. The parsing of complex words translate with Google Translate

	Likert Scale							
No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
1	It seems to me that Google Translate is able to decipher complex words or phrases with high accuracy	34	27	10	8	6		
2	I believe that Google Translate can overcome difficulties in parsing words or phrases that have complex meanings when translating?	32	31	8	6	8		

Percentage

No	Question	Poor	Bad	Good	Very Good	Excellent
1	It seems to me that Google Translate is able to decipher complex words or phrases with high accuracy	44%	32%	12%	7%	5%

I believe that Google Translate can overco difficulties in parsing words or phrases tha have complex meani when translating?	me g t 45%	35%	7%	6%	7%
Total	44%	36%	9%	8%	6%

Discussion

From the results of these questions, it can be concluded that in the first question, the average respondent said that Deepl can parsing of complex words was good, as evidenced by the average respondent score of (61%) in parsing words or phrases that have complex meanings in foreign languages there were 52 out of 85 people. However, respondents also said that in parsing words or phrases that have complex meanings in foreign languages they neutral, as evidenced by the average score of respondents of (22%) there are 19 out of 85 people. Of respondents who say that Deepl in deciphering words or phrases that have complex meanings in foreign languages is very good, there are 14 out of 85 people (16%).

In the second question there are 4 answers, namely disagree, neutral, agree, and strongly agree. The average respondent said that Deepl was effective in parsing complex words well there were 42 out of 85 people (49%), the average who answered badly was 3 out of 85 (4%) while for neutral there were 10 out of 85 people (12%), but there was also an average of answers for respondents who said that Deepl was effective in parsing complex words very well there were 30 out of 85 people (35%).

From the results of these questions, it can be concluded that in the first question, the average respondent said that Google Translate of complex words was good, as evidenced by the average respondent score of (40%) in parsing words or phrases that have complex meanings there were 34 out of 85 people. However, respondents also said that in parsing words or phrases that have complex meanings by Google Translate is neutral, as evidenced by the average respondent score of (38%) there are 28 out of 85 people. For respondents who say that Google Translate in deciphering words or phrases that have complex meanings is very good there are 14 people out of 85 people (16%). But some average respondents say that 7 out of 85 people say bad (8%). In the second question, there were 4 answers, namely disagree, neutral, agree, and strongly agree. The average respondent said

that Google Translate was able to translate complex words into simpler words well there were 32 out of 85 people (38%), the average who answered not well there were 7 out of 85 (8%) while for neutral there were 32 out of 85 people (38%), but there were also average respondents who said that Deepl was effective in parsing complex words very well there were 14 out of 86 people (16%).

For the overall respondent average Deepl said that Deepl Poor stated with a result of (0%), for the overall respondent average for Deepl said that Deepl Bad stated with a result of (2%) for the overall respondent average for Deepl said that Deepl Good stated with a result of (17%) for the overall respondent average for Deepl said that Deepl Very Good stated with a result of (55%) for the overall respondent average for Deepl said that Deepl said that Deepl stated with a result of (26%).

The overall respondent average for Google Translate said that Google Translate was Poor with a result of (44%), the overall respondent average for Google Translate said Google Translate was bad with a result of (36%) the overall respondent average for Google Translate said that Google Translate Good stated with a result of (9%) for the overall respondent average for Google Translate said that Google Translate Very Good stated with a result of (8%) for the overall respondent average for Google Translate said that Google Translate

CONCLUSION

The findings of this study show positive perceptions of Google Translate and Deepl, proving that respondents gave answers regarding the usefulness of Deepl and Google Translate for translating texts with advantages in terms of increased understanding of the meaning being translated, diversity of features to support translation, and the ability to decipher complex words.

Respondents said that both Deepl and Google Translate were helpful in terms of translating language from a foreign language to English or vice versa, but the overall sentiment tended to be that Deepl was superior to Google Translate as a translation engine that was helpful in translating written and spoken tasks. According to the results of the responses of 85 students combined from 2 departments, namely the English language education faculty and the faculty of philosophy, Deepl is more qualified and superior

compared to Google Translate. Why is Deepl superior to Google Translate? This is evidenced by the research results which say that Deepl is superior excellent with a percentage of (45%) while Google Translate poor (48%) for translation results that are easy to understand, accurate, and no translation errors, although both are in the same category which is rated very good.

The features owned by Deepl and Google Translate, the average result says that Deepl is superior very good with a percentage of (51%) while Google Translate poor for its features gets (52%). Speed and the ability to maintain context and nuance, the results show that Deepl is superior and very good with a percentage of (61%) while Google Translate gets a poor percentage (31%). For the parsing complex words produced by Deepl and Google Translate states that Deepl is very good with a percentage of (55%) for speed and can maintain context and nuance while Google Translate gets a poor percentage (44%).

So it can be seen that the perceptions of English education students and philosophy students say that Deepl is better to use for translating because it produces translation results that are easy to understand, has superior features, can maintain nuance and context, and good parsing of complex words.

REFERENCES

- Constantine. (2019). Google Translate Gets Voltaire: Literary Translation and the Age of Artificial Intelligence. *Contemporary French and Francophone Studies*, 471-479.
- De Vries, R. A. (2018). Google Translate and the Post-Editing of Informatives. *Machine Translation*, 75-95.
- Denkowski, & Lavie. (2012). Challenges in predicting machine translation utility for human post-editors. *Proceedings of the 10th Conference of the Association for Machine Translation in the Americas*. America: AMTA.
- Eckerdal, & Hagstrom. (2017). Qualitative questionnaires as a method for information studies research. *Information research*.
- Ferré, J. M. (2019). An Empirical Study of the Reliability of Google Translate in the Translation of Texts from the Humanities. *Machine Translation*, 49-71.

- Fitria, T. (2021). A Review of Machine Translation Tools: The Translation's Ability. Language Circle: Journal of Language and Literature, 162-176.
- García-Carbonell A, A.-A. M. (2014). Simulation and Gaming as the future's language of language learning and acquisition of professional competences. *Back to the Future of Gaming*, 214-227.
- Gufroni, M., Yuliana, D., & Munawwir, Z. (2022). PEMANFAATAN GOOGLE FORMSEBAGAI PENDAFTARAN ONLINESISWA BARU di MA SABILAL MUHTADIN TAHUN PELAJARAN 2021/2022. Edusaintek: Jurnal Pendidikan, Sains dan Teknologi, 1.
- H, B., & D, B. (2012). Analyzing Likert data. Journal of Extension, 50(2).
- Hall, B. '. (2006). Theories of Culture and Communication. *Communication Theory*, 50–70.
- Hasan, A. (2004). Menabur Benih Menuai Kasih. Persembahan Karya Bahasa, Sosial.
- Hidya. (2017). PERSEPSI MAHASISWA TERHADAP PENGGUNAAN GOOGLE TRANSLATE. SEBAGAI MEDIA MENERJEMAHKAN MATERI, 60.
- Huck M, N. H. (2012). Insertion and deletion models for statistical machine translation. Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Proceedings of the Conference, 347-351.
- Jooste W, H. R. (2021). Philipp Koehn: Neural Machine Translation. *Machine Translation*, 289-299.
- Katemba C., V. T. (n.d.).
- Katemba C., V., Tobing J., H., & Putri A., T. (2022). Do Kahoot! Games Enhance Vocabulary Learning? *Journal of Elementary Education*, 393-408.
- Katemba, C. V. (2021). Enhancing Vocabulary Performance Through Mobile Assisted Language Learning at a Rural School in Indonesia. *Acuity: Journal of English Language*, 6(1), 1-11.
- Kirov V, M. B. (2022). Are Translators Afraid of Artificial Intelligence? Societies, 12.
- Lavie, & Clark. (2011). Better hypothesis testing for statistical machine translation: Controlling for optimizer instability. *Proceedings of the 49th Annual Meeting of the*

- Association for Computational Linguistics: Human Language Technologies, 176-181.
- Menezes, A. (2019). The Importance of Human Post-Editing in Machine Translation Quality Assessment. *In Proceedings of the 6th Brazilian Conference on Intelligent Systems*, 401-412.
- Mitkov. (2012). The Oxford Handbook of Computational Linguistics.
- Moisieieva, Dzykovych, & Shtanko. (2023). MACHINE TRANSLATION: COMPARISON OF WORKS AND ANALYSIS OF ERRORS MADE BY DEEPL AND GOOGLE TRANSLATE. *Advanced Linguistics*, 78-82.
- Muslihah, S. (2020). PENERAPAN METODE PEMBELAJARAN MODELING DALAM MENINGKATKAN KEMAMPUAN MENULIS KARANGAN SISWA V SEKOLAH DASAR. Educreative: Jurnal Pendidikan Kreativitas Anak, 374-380.
- Ndoricimpa, & Nduwimana. (2023). The Use of ICT Tools in Learning English Autonomously. *Journal of Languages and Language Teaching*, 696.
- Paterson. (2023). Machine translation in higher education. *Perceptions, policy, and pedagogy*, 14.
- Petra Polakova, B. K. (2023). Using DeepL translator in learning English as an applied foreign language. *An empirical pilot study*.
- Stockwell G, R. H. (2019). Technology, Motivation and Autonomy, and Teacher Psychology in Language Learning. *Annual Review of Applied Linguistics*, 40 51.
- Surur, M., Ridhwan, M., Azis, A. A., & Noervadila, I. (2023). Improving Creative Thinking Skills of Early Childhood by Utilizing Robotic Activities in Learning Process. *Journal of Childhood Development*, *3*(1), 79-83. https://doi.org/10.25217/jcd.v1i2.1833
- Tongco. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research* and *Applications*, 147-158.
- Varlas. (2010). The Thoughtful Classroom Program. ASCD Learn.
- Wuryantoro, A. (2015). Analisis Hasil Terjemahan dalam Pengajaran Penerjemahan. *E-Journal IKIP PGRI Madiun*, 13-14.