

Vietnamese EFL Learners' Perceptions of the Use of Google Translate in Learning English

Nguyen Huynh Trang,

School of Foreign Languages, University of Economics Ho Chi Minh City (UEH)

Citation: Nguyen Huynh Trang (2022) Vietnamese EFL Learners' Perceptions of the Use of Google Translate in Learning English, *International Journal of Education, Learning and Development*, Vol. 10, No.6, pp.41-53

ABSTRACT: *When people of different languages have more opportunities to work with one another, foreign languages are in high demand. However, not all people have an aptitude of learning foreign languages, so they tend to rely heavily on Google Translate (GT). Therefore, this study aims to explore how a group of thirty English-majored students responded to GT in terms of their habit of using GT, their satisfaction with GT, and their perceptions of the pros and cons of GT. Besides, using the percentages to calculate the frequency of their habit of using GT and satisfaction with GT, the researcher designed a five-point Likert Scale to measure their degree of agreement with the benefits and drawbacks that the participants when using it in learning English. The results uncovered that more than half of the participants often use GT and showed their satisfaction with GT. Then, the majority of the participants were highly aware of the advantages and disadvantages that GT brings to its users. Some future recommendations about the same topic were also included.*

KEYWORDS: Vietnamese EFL learners, Google Translate, perception, benefits and drawbacks

INTRODUCTION

In the current industrial and technological era, the English language has become more and more popular for various purposes of people around the world. For instance, some people learn English for communication; some study it to get more job opportunities: to become language teachers, translators, or interpreters. Some just want to know it for fun, and some learn for their traveling aims. Previously, most language learners used to own a paper dictionary to check up meanings of the words from the target language to their native language and vice versa. However, in the age of the fourth industrial revolution, more electronic dictionaries were born to replace the old ones with many limitations.

Among various translation machines or applications, Google Translate (GT) has become one of the most common tools. Indeed, millions of people worldwide use it for daily translation, and a huge number of language learners are using it for language learning purposes. GT is one of the products provided by Google and has been widely used among language learners (Bahri & Mahadi, 2016). It is an easily available free online machine translation tool for 80 languages worldwide.

However, machines are unable to accurately convey or understand all the nuances involved with a localization project. When students rely on this type of machine translation, the shortcuts become painfully apparent in language acquisition. Despite this reality, GT is now being used by many students of various languages as a supported tool. Apparently, free services from GT assist students to accomplish many tasks with high speed and convenience. Since more users exploited the advantages and potentials of this new technology for language learning, many researchers have started to investigate its usefulness (Ghasemi & Hashemian, 2016; Groves & Mundt, 2015; Jin & Deifell, 2013). The results in Tsai (2019)'s study indicate that GT improved the quality of writing texts, such as presenting more vocabulary, showing better spellings, and applying more accurate grammatical structures. Similarly, Chandra & Yuyun (2018) also found that GT has been employed as a dictionary for students of English, and three aspects of the students' essays: vocabulary, grammar, and spelling were assisted with GT. What is more, word-level is found the highest use among the students. The effectiveness of GT has been proven in numerous works in recent years. It is widely used by students who study English as a Foreign Language (EFL), so research into EFL students' attitudes towards the practice of GT seems necessary, especially in the context of Vietnam, where such studies are still rare. Hence, the present study aims at finding out how the EFL students think about the shortcomings and the usefulness of this online translation tool.

LITERATURE REVIEW

Usefulness of GT in language learning

Jin & Deifell (2013) find that GT is widely used as an online dictionary by many language learners due to its convenience. They confirmed that these learners mostly employ GT as a supplementary tool in their learning process. Garcia and Pena (2011) also indicate that learners of language used GT to check up meanings of a foreign word or to understand a reading text. In reality, GT also helps language learners improve their reading and writing skills. In their research, Jin and Deifell (2013) explore that language learners can understand reading texts faster with the support of GT. This free online machine tool also helps them write emails and essays more easily. In the same vein, Stapleton and Kin (2019) discover that GT can assist learners' essays to be more formal and sophisticated. Similarly, Lee (2020) analyzes the text of students' writing outcomes and found that GT helped to decrease lexical-grammatical errors and improve student revisions. Cancino and Panes (2021) also examine the usefulness of GT. The results of their study revealed that GT assisted EFL high school learners in L2 writing. Students who use GT surpassed their counterparts without receiving GT. The authors concluded that the students' writing pieces have more lexical sources and more syntactic complexity.

It is apparent that GT is beneficial to language learners in improving their language skills, especially in reading and writing. Unfortunately, it is undeniable that GT also supports beginner learners of English in enhancing speaking skills. Their communicative competence has been enhanced thanks to the support of GT (Garcia & Pena, 2011).

Another usefulness of GT that should be mentioned is to support language learners in translating the texts from their mother tongue to the target language and vice versa. For instance, Josefsson (2011) conducted a study and concluded that the students in his study believed that GT could give a more accurate translation of collocation, phrases, and technical terms. The implications of using GT have been found in another study by Grove & Mundt (2015). The researchers examined the impact of GT on the teaching and learning of languages for Academic purposes and found that the participants in their study were much dependent on GT in their learning process. The effectiveness of GT was examined in the study of Tsai (2020). The findings of this study revealed that the translation approach by using GT in English writing could improve the EFL learners' writing performance. It was explored that the content and word choice of their writing pieces were highly improved as well as fewer spelling and grammar errors were found. The results also indicated that GT would be more useful for students with a lower level of English.

Problems of using GT

While it is undeniable that GT offers certain advantages for language learners and vocational subjects, it also has some drawbacks. The author of the current study gathers a wide variety of reliable research involving translations from English to other languages and vice versa, with an aim to detect several typical and common issues that GT may bring. One of the problems is that it tends to restore more European languages than other languages from other parts of the world. As Nida (1964) puts it, "translation is to transmit the meaning of a text written in one language to that in another language without changing the original meaning in the source language" (as cited in Trang & Anh, 2021, p. 174).

According to Komeili & Rahimi (2011) and Niño (2009), GT or machine translation has two main weaknesses: lexical-semantic errors and syntactical-morphological errors. About the former issue, due to GT's tendency to utilize word-by-word and literal translation, its output may contain nonsensical phrases, confusing sentences, and improper sense selection of a single word. For instance, in Figure 1 below, the sentence "if they didn't wear their teeth down on trees, their front *gnashers* would grow too long for them to eat properly" has been incorrectly translated into Vietnamese (target language). The phrase "front gnashers" should be interpreted as "front teeth" (răng trước) instead of "front rodents" (những con gặm nhấm phía trước) like GT does. One more instance, Figure 2 below is the GT translation of a well-known English idiom: "to have butterflies in one's stomach" is an expression that describes a feeling of being very nervous or frightened about something (Cambridge Dictionary). However, the meaning of that idiom is not properly conveyed in Vietnamese output. "Butterflies" is still translated as an animal by GT, so the meaning of the translation to the target language (Vietnamese) is: *My stomach had terrible butterflies before I gave a talk to the public.* What a ridiculous translation is! Hence, semantic communication is a complicated phenomenon in which machine translation has not yet attained the level of comprehending that intricacy (cited by Raza and Nor, 2018). About syntactical-morphological errors, Niño (2009) states that the students with a stronger grasp of the language were aware of its many grammatical inaccuracies in machine translations, including errors with prepositions,

determiners, agreement, pronouns, verb form, verb tense, verb mode, number, and sentence structure; thus, they were not preferred for syntax references. The conclusion is reinforced by Josefsson (2011)'s study, which found that GT is not a useful technique for learning grammar, which is shown in Figures 2.1 and 2.2 below.

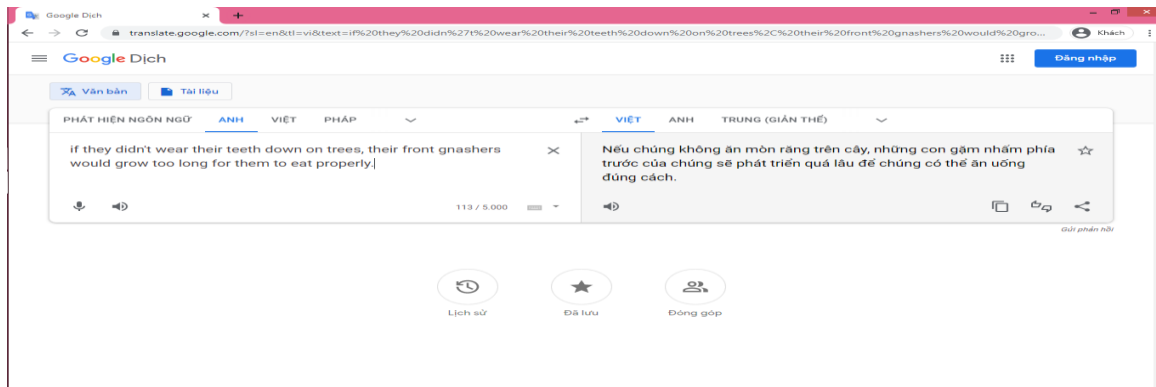


Figure 1. The capture of GT translation of an English sentence to Vietnamese (source of the sentence: <https://www.learnsomethingeveryday.co.uk/#/17-april-2019/>)

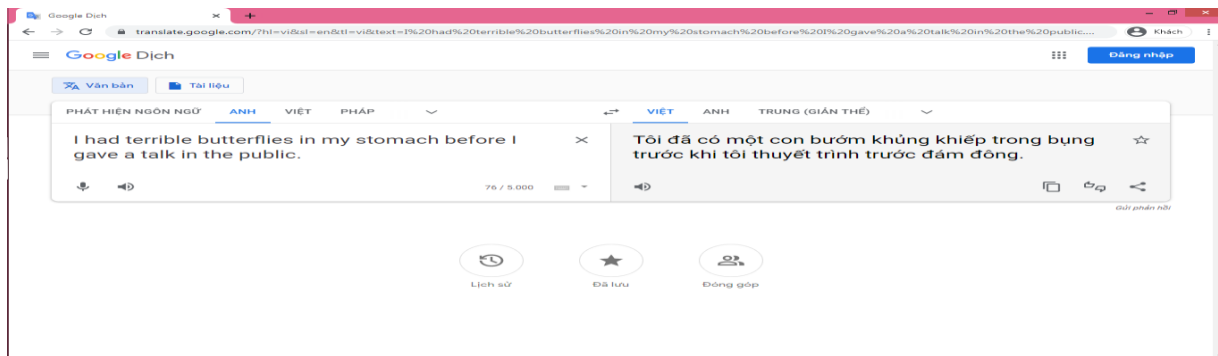


Figure 2. The capture of GT translation of an English idiom into Vietnamese

Ghasemi & Hashemian (2016) conducted a study to analyze the quality of GT when translating English to Persian and Persian to English. The study's results revealed that lexicosemantic and active/passive voice errors were the most and least frequent errors, respectively. Apart from semantic and structural problems, GT has been shown to have a negative impact on students' language acquisition. Some researchers agree with this conclusion, suggesting that learners' language-thinking abilities can be degraded when they use GT improperly. Particularly, students in Habeeba & Muhammedb's (2020) research said that using GT hampered their ability to read and write English and made vocabulary retention harder. The research of Kumar (2012) also supported that argument, while the participants found GT to be useful, it hindered their ability to acquire English better since it impaired their ability to think in English. As a result, GT seems to

be useful for translating words or writing sentences, but not for speaking practice (cited in Bahri & Mahadi, 2016).

Other problems that GT may bring to its users have been explored by different researchers. For instance, Suhono et al. (2020) identified that this online translation tool gave low quality and ineffectiveness in translating Indonesian sentences into English. It was also found that it could give the highest probability of 16.2% accuracy and only simple sentences which had similar grammar and word-level could be well translated. Jabak (2019) explored that GT made lexical and syntactic errors for Arabic-English translation. He claimed that the errors could affect the translation's quality and meaning. The translations were believed to be unintelligible and could not be used as a valid translation tool for Arabic-English translation. Today millions of words are being translated into different languages by people using computers every day, and this number is anticipated to rise exponentially in the near future (Kumar, 2012).

EFL learners' perceptions or attitudes towards the use of GT

The investigation into the EFL learners' perceptions or attitudes towards the use of GT has been received some concerns by researchers in different countries. Interestingly, most of the studies share similar results. For instance, Alhaisoni & Alhaysony (2017) conducted a study to investigate Saudi EFL university English major students 'attitudes toward the use of GT. It was revealed that these learners had positive attitudes toward GT and found it useful for them to get the meaning of unknown words for their writing, reading, and translating assignments. Similarly, in Tsai (2020)'s study, the perceptions of two groups of participants including English majors (EM) and non-English majors (NEM) towards the application of GT in learning English writing were examined. The results showed that the group of NEM students perceived more positively and significantly satisfied with the application of GT in their English writing learning process than their counterparts. In the same vein, the findings of the study conducted by Pratiwi (2021) on senior high school students regarding the role of GT used as a learning English tool exposed that these students held positive attitudes. The sample admitted that GT was beneficial for them to translate texts from English into Indonesian and that they were willing to use GT in a long term for their studying purposes.

METHODOLOGY

The study is guided by the two following questions:

1. How often do the EFL students use Google Translate?
2. How do EFL students perceive the use of GT?

Participants

Thirty EFL students from two classes of English at a public university in Ho Chi Minh City were recruited for the study. They are third-year students whose major is English. They are around twenty-one years old and most of them have learned English for more than ten years. In particular,

the participants included twenty females and ten males who had experience in using GT and voluntarily responded to the questionnaire.

Research instruments

This is a descriptive study that employed only one instrument to collect the data which is a questionnaire. The questionnaire is adapted from the study of Habeeba & Muhammedb (2020) including two main sections. The first section seeks demographic information of the participants. The second section centered on the survey content which was divided into two subsections: The first subsection had a set of questions asking the participants about their frequency of using GT during their study. The percentage was used to calculate their frequency of using GT. Then, the subsection of the survey contained a second set of questions eliciting the students to perceive both sides of GT (pros and cons). More specifically, this section asked the students to think about possible benefits and difficulties when using GT. The first group of the question in this subsection was about their satisfaction with using GT. Calculation of the percentage of the participants' satisfaction was employed. Then, a set of eleven questions was used to ask the students about the benefits that they have when using GT. Finally, a set of eight questions was applied to elicit the students' ideas on the downsides of GT. A five-point Likert Scale ranging from Strongly Disagree (1) to Strongly Agree (5) was designed for the questions about the benefits and drawbacks of GT.

Research procedures

Firstly, the researcher reviewed related studies to build the questionnaire of the study. Next, she found a paper investigating a similar issue and adapted the questionnaire from this paper. After modifying the questionnaire, she got it proofread by two colleagues of hers. After that, she did a pilot with some students to know whether the questionnaire was appropriate or not. Then, the complete questionnaire was delivered to the participants via Google Form for convenience. Finally, the researcher collected and computed all the answers.

Data analysis

Due to the simple tasks required, the researcher only used the statistics tool available in excel to calculate the mean scores and the standard deviation values. The data, then, were transferred to a word document presented in this study. As mentioned earlier, the researcher calculated the percentage of the participants' frequency of and satisfaction with using GT. For the questions about benefits and drawbacks, the researcher designed a five-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree) to have the mean score of the individual statement and the overall score.

FINDINGS AND DISCUSSIONS

Findings

The reliability of the questionnaire

Table 1: *The reliability of all the items in the questionnaire*

Cronbach's Alpha	N of Items
.816	11
.881	8

To measure the reliability level of the questionnaire items, the reliability coefficient test was done. As can be seen from Table 1, the value of Cronbach Alpha for the questions about benefits was 0.816 and for the drawbacks was 0.881 which shows acceptable consistency of reliability. This means all the questionnaire items can measure the research goals effectively.

The results for the first research question

The respondents' responses to the first question of the study are presented in Figure 3 below. The respondents were asked about their frequency of using GT.

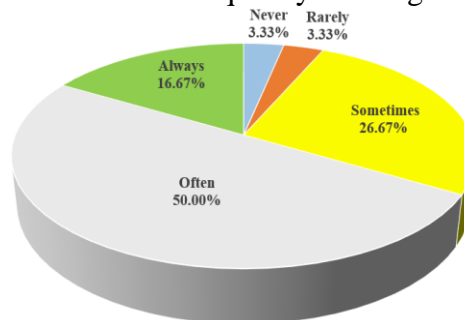


Figure 3. The respondents' frequency of using GT

As can be seen in Figure 3, half of the respondents admitted that they "often" use GT in learning English. 16.67% of them said they "always" use GT. From these two degrees, it can be said that more than half of them use GT in their learning process while a small amount of the participants seemed not to use GT so often.

The results for the second research question

For the second question, the perception data were collected, which were divided into three different categories: The students' satisfaction with using GT, the benefits that GT brings for them, and the drawbacks they experienced when using GT. Next, take a look at the participants' satisfaction degree with using GT. Figure 4 below has shown this data.

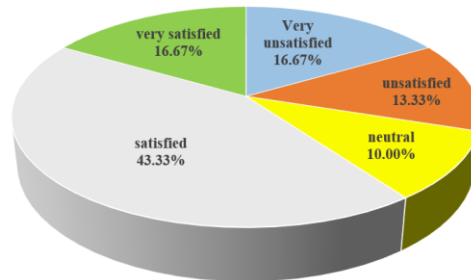


Figure 4. Respondents' satisfaction with GT

Figure 4 uncovered that nearly half of the participants was satisfied with GT's translation (43.33%). Then, 16.67% of them were very pleased with the translated texts provided by GT. Other smaller percentages are shared with Very unsatisfied at 16.67%, Unsatisfied at 13.33%, and Neutral at 10.00%, respectively. In short, more than half of the participants' responses show satisfaction with lending help from GT. For the benefits of GT, the data were presented in Table 2, which illustrates the participants' ideas on the positive sides that GT can bring to them and eleven questions were used to elicit their ideas which are depicted in the following table.

Table 2. Respondents' benefits when using GT in learning English

No	Items	Mean	SD
1	I frequently use GT because it is free and easy to access.	4.13	0.73
2	GT helps me understand English while reading texts quickly.	4.20	0.61
3	The quality of texts translated by GT is better than my translation.	3.00	0.83
4	GT helps me write English essays/other writing pieces better.	3.70	0.65
5	I gain a lot of vocabulary knowledge when I use GT.	2.93	0.94
6	I feel more confident when using GT for English writing.	3.43	0.73
7	I can rely on the accuracy of texts translated by GT (English to Vietnamese translation).	3.87	0.63
8	I can rely on the accuracy of texts translated by GT (Vietnamese to English translation).	2.53	0.51
9	I gain translation skills from using GT.	3.23	0.97
10	GT can help me solve most of my problems with vocabulary.	3.63	0.72
11	GT can help me check the pronunciation of words.	3.97	0.81
Overall mean		3.51	0.54

At the first glance, most of the participants agree that GT can benefit their study. However, when looking more specifically at each item, the results show that the second item “GT helps me understand English while reading texts quickly” and the first “I frequently use GT because it is free and easy to access” received the highest degree of agreement which is $M=4.20$ and $M=4.13$ respectively. Other items such as 6,4,7, 10, and 11 all received the agreement scores from $M=3.43$ to $M=3.97$. It can be revealed that the participants highly appreciate using GT when learning English. Unfortunately, the results from Table 2 also indicate the low support for items 8 and 5 which received scores that are lower than 3.0.

For the shortcomings that GT can cause to its users, eight questions were deployed to elicit the participants’ opinions on this negative side and these perspectives are demonstrated in Table 3 below.

Table 3. Respondents’ difficulties when using GT in learning English

No	Items	Mean	SD
1.	GT makes me lazy to think and to use my effort in reading.	4.10	0.76
2.	GT makes me lazy to think and to use my effort in writing.	4.03	0.67
3.	Using GT, I am lazy to remember new vocabulary or guess the meanings of words.	3.70	0.65
4.	GT cannot help me learn to speak English better.	3.83	0.70
5.	To use GT, I need to have access to the Internet, which is sometimes difficult.	2.83	1.02
6.	GT translations are not always reliable.	3.97	0.76
7.	GT cannot help me improve my speaking skills.	3.77	0.77
8.	I found no grammatical explanations in GT.	3.93	0.83
Overall mean		3.77	0.40

As can be seen in Table 3, the ranges fall within the mean scores from $M= 2.83$ to $M=4.10$, showing that the participants recognized the downsides of GT which makes them dependent on GT. The mean scores of many individual responses reached almost $M=4.0$, meaning that GT is negatively reflected by this group of students.

DISCUSSION

Throughout this statistic report, it can be figured out the deep significance of GT in supporting the students in their learning foreign languages, especially helping in translating texts. More than half of the participants chose GT as their tool to look for translation. Then, more than half of them showed their satisfaction with this useful tool. It can be seen that there is no reason for us not to choose a free app with flash speed and function. Everyone considered GT a free-of-charge application, and it can deliver upshot faster than other methods such as looking up a dictionary or reading the relevant materials, even professional interpreters. One study (Ablanado, et al., 2007) found that a free Web-based MT system was 195 times faster than humans. Thanks to GT, they could extract new words and bring them into their essay. More than half of the respondents admitted that GT helped them remember learned words incisively. Additionally, it can provide complete sentences with no grammar false. This tool can recommend idioms and proverbs that you hardly know how they are written exactly. Its users can download the translation application for their smartphone, computer, iOS, or Android devices. Once you have this application on your devices, it is always ready to serve you even at offline status. A wonderful function of GT is image translation. When you click on the camera icon on the left, you can receive a translation by taking a photo of your books or any documents.

Besides the advantages mentioned above, GT simultaneously experiences its downsides. According to the participants' responses, GT usually supplies silly responses which include wrong word choices and grammatical errors. The reason why this situation appears with high frequency might be a misunderstanding between GT and its user. Your background or literature style is one of the facets that easily cause the problem. For example, the statement "If they did not wear their teeth down on trees, their front gnashers would grow too long for them to eat properly" did not receive the proper translation. Immediately, GT released a result as "Nếu chúng không ăn mòn răng trên cây, những con gặm nhấm trước chúng sẽ phát triển quá lâu để chúng có thể ăn uống đúng cách." In this example, we can see that GT output is quite strange and ambiguous, and readers would not be thoroughly savvy about the writer's idea. It misread three points: "gnashers" could be "loài gặm nhấm" and "răng của loài gặm nhấm". In this background, the right translation must be "răng của loài gặm nhấm". From this wrong word, the adjective "front" is a mistake, too. It can be recognized as "(răng) cửa" despite "phía trước". Secondly, "too long" in this sentence is not "quá lâu" but "quá dài". The last weird translated word is "properly", "đúng cách" in this situation seems a little confusing; it can be seen as "dễ dàng", instead. By some additional questions, I received more suggestions that GT let them rely on it too much. Because of its convenience, they do not need to think logically about what they have just looked up. This case has become a bad habit, so every time students have trouble, they tend to lose their deduced capacity. Implicit effects are hard to find out as it is not exhibited in the study result. This situation has existed for a long time, and it may lead to slipping in translation skills and influence their work in the future.

GT is being used extremely popularly since it can translate many languages, two-way translation as it has a terrible vocabulary system. Nonetheless, when using GT, we should also be aware of grammatical mistakes or inappropriate style as mentioned in Item 8 about the drawback of GT and as a consequence, it can produce silly translations. Besides, the use of GT can lead to students' dependence, leading to a gradual loss of thinking ability and habit of learning new words as in Items 1, 2, 3 in the drawback section.

CONCLUSION

The current study is investigating a group of thirty students to see frequently they use GT and how satisfied they feel when using GT. Then, it also attempts to explore their perceptions of the pros and cons of GT. Although the results from the two research questions are not very high when looking at the mean scores, over half of the participants provided positive attitudes toward GT. More than half of them prefer to use GT to help with translation and half of them were satisfied with GT. The mean score of 3.51 has hinted us to think this way. Finally, simultaneously over half of them agreed that GT still has existing shortcomings which need to be improved in the future. The mean score of 3.77 for the drawback section has suggested we think so. In short, this study has shed light on the students' awareness of GT. On the one hand, they agreed that GT has them a lot in their study. On the other hand, they were aware that GT cannot help them perfectly especially when it deals with grammatical structures and some cultural-bond contexts. For future research, after taking into consideration, the researcher thought it can be done with word-in-context translation – that means we should have GT translate the same word in different situations to see if GT can do its best.

REFERENCES

- Alhaisoni, E., & Alhaysony, M. (2017). An investigation of Saudi EFL university students' attitudes towards the use of Google Translate. *International Journal of English Language Education*, 5(1), 72-82.
- Bahri, H., & Mahadi, T. S. T. (2016). Google translate as a supplementary tool for learning Malay: A case study at Universiti Sains Malaysia. *Advances in Language and Literary Studies*, 7(3), 161-167.
- Cancino, M., & Panes, J. (2021). The impact of Google Translate on L2 writing quality measures: Evidence from Chilean EFL high school learners. *System*, 98, 102464.
- Chandra, S. O., & Yuyun, I. (2018). The use of google translate in EFL essay writing. *LLT Journal: A Journal on Language and Language Teaching*, 21(2), 228-238.
- BinDahmash, N. (2020). 'I Can't Live Without Google Translate': A Close Look at the Use of Google Translate App by Second Language Learners in Saudi Arabia. *Arab World English Journal (AWEJ) Volume*, 11.
- Dolamic, L., & Savoy, J. (2010). When stopword lists make the difference. *Journal of the American Society for Information Science and Technology*, 61(1), 200-203.

-
- Garcia, I., & Pena, M. I. (2011). Machine translation-assisted language learning: writing for beginners. *Computer Assisted Language Learning*, 24(5), 471-487.
- Jin, L., & Deifell, E. (2013). Foreign language learners' use and perception of online dictionaries: A survey study. *Journal of Online Learning and Teaching*, 9(4), 515.
- Ghasemi, H., & Hashemian, M. (2016). A Comparative Study of “Google Translate” Translations: An Error Analysis of English-to-Persian and Persian-to-English Translations. *English Language Teaching*, 9(3), 13-17.
- Groves, M., & Mundt, K. (2015). Friend or foe? Google Translate in language for academic purposes. *English for Specific Purposes*, 37, 112-121.
- Habeeba, L. S., & Muhammedb, M. R. (2020). Investigating the Effectiveness of Google Translate Among Iraqi Students. *International Journal of English Linguistics*, 12(12), 1-13.
- Hampshire, S., & Salvia, C. P. (2010). Translation and the Internet: evaluating the quality of free online machine translators. *Quaderns: revista de traducció*, 197-209.
- Josefsson, E. (2011). Contemporary Approaches to Translation in the Classroom: A study of students' Attitudes and Strategies.
- Juniu, S. (2006). Use of technology for constructivist learning in a performance assessment class. *Measurement in physical education and exercise science*, 10(1), 67-79.
- Koehn, P. (2009). *Statistical machine translation*. Cambridge University Press.
- Komeili, Z., & Rahimi, A. (2011). An investigation of the translation problems incurred by English-to-Persian machine translations: “Padideh, Pars, and Google Softwares”. *Procedia-Social and Behavioral Sciences*, 28, 1079-1082.
- Kushinka, M. (2012). Pros and Cons of Google Translate. *Redline Language Services*.
- Jabak, O. (2019). Assessment of Arabic-English translation produced by Google translate. *International Journal of Linguistics, Literature and Translation (IJLLT) ISSN*, 2617-0299.
- Lee, S. M. (2020). The impact of using machine translation on EFL students' writing. *Computer Assisted Language Learning*, 33(3), 157-175.
- Niño, A. (2009). Machine translation in foreign language learning: Language learners' and tutors' perceptions of its advantages and disadvantages. *ReCALL*, 21(2), 241-258.
- Roche, J. (2010). Mutual Impact - On the Relationship of Technology and Language Learning and Teaching. In C. Ward (Ed.) *The Impact of Technology on Language Learning and Teaching: What, How and Why*.
- Stapleton, P., & Kin, B. L. K. (2019). Assessing the accuracy and teachers' impressions of Google Translate: A study of primary L2 writers in Hong Kong. *English for Specific Purposes*, 56, 18-34.
- Suhono, S., Zuniati, M., Pratiwi, W., & Hasyim, U. A. A. (2020). Clarifying Google Translate Problems of Indonesia-English Translation of Abstract Scientific Writing. *EAI (24-25)*, 1-13.
- Tabatabaei, M., & Gui, Y. (2011). The impact of technology on teaching and learning languages. In A. Méndez-Vilas (Ed.) *Education in a technological world: communicating current and emerging research and technological efforts*.

- Trang, N. H., & Anh, K. H. (2021). Investigating Teachers' and Graduates' Remarks on the Translation of English Modals into Vietnamese Provided by Google Translate. *GEMA Online Journal of Language Studies*, 21(4).
- Sinhal, R. A., & Gupta, K. O. (2014). Machine translation approaches and design aspects. *IOSR Journal of Computer Engineering*, 16(1), 22-25.
- Tsai, S. C. (2019). Using google translate in EFL drafts: a preliminary investigation. *Computer Assisted Language Learning*, 32(5-6), 510-526.
- Benda, J. (2013). Google Translate in the EFL Classroom: Taboo or Teaching Tool?. *Writing and Pedagogy*, 5(2), 317-332.
- Kumar, A. (2012). Machine translation in Arabic-speaking ELT classrooms: Applications and implications. *International Journal of Social Science and Humanity*, 2(6), 442-445.
- Tsai, S. C. (2020). Chinese students' perceptions of using Google Translate as a translingual CALL tool in EFL writing. *Computer Assisted Language Learning*, 1-23. DOI: 10.1080/09588221.2020.1799412
- Pratiwi, Z. U. (2021). Senior High School Students 'perceptions on the role of Google Translate in English Learning aid. *Language-Edu*, 10(9).