Behavioral and Problematic Issues Related to the Use of Google Translate: A Case Study of English Major Students at Phranakhon Si Ayutthaya Rajabhat University[*]

Piyatida Kumpipot[1] and Ekkarat Khanaporn[2]

[1-2]English Program, Faculty of Humanities and Social Sciences, Phranakhon Si Ayutthaya Rajabhat University

Corresponding author E-mail: ekkarat.kn@gmail.com

Abstract

The primary objective of this research was to study the behavioral and problematic issues in relation to the use of Google Translate, a universally popular translation program, by students majoring in English at Phranakhon Si Ayutthaya Rajabhat University. Selected by purposive sampling, the sample comprised 65 fourth-year English major students from the Faculty of Humanities and Social Sciences, Phranakhon Si Ayutthaya Rajabhat University. The research instruments consisted of a questionnaire and semi-structured interviews. Descriptive statistics, including frequency, percentage, mean, and standard deviation, as well as qualitative content analysis were implemented to analyze the data.

The results on the behavioral issues indicated that students used Google Translate the most frequently. Mobile phones and tablets were major devices on which they accessed the program. The two principal purposes for which they used Google Translate were to help them study and do their

---

homework and to translate entertainment media and social media messages. Moreover, the results on the problematic issues revealed that when translating texts via Google Translate, students regularly confronted certain problems; namely, the translation program could not translate texts with social and cultural terms effectively ($\bar{x}$ = 4.41), there were several errors in the tense translation ($\bar{x}$ = 4.20), and some words or sentences were omitted quite often when translating at the paragraph or discourse level, resulting in a distortion of the overall meaning ($\bar{x}$ = 4.18).

Keywords: Google Translate, Behaviors in Translation Program Use, Problems with Translation Program Use, English Major Students

Introduction

English is currently a language that is used by people all over the world in their daily lives. Huge numbers of them study and use English as a foreign language, particularly those who are compelled to use it for education or communication. In other words, individuals who speak and understand English can easily access a limitless amount of information (Khamngoen et al., 2022).

In Thailand, the Ministry of Education has announced that English will be one of the subjects required of students beginning in grade one, making English an increasingly important communication tool in all aspects. As a result, the government has planned and implemented policies to improve Thai citizens' English language skills (Tejarajanya, 2018) Furthermore, the Ministry of Education has issued an announcement to develop digital skills for learners of all ages in order to support the transition to a digital society in the modern world and to facilitate the organization of learning based on each student's individual interests via various digital platforms (Ministry of Education, 2022). As a result, both teachers and students are encouraged to incorporate information

technology into their teaching both inside and outside of the classroom. Translation programs are one of today's most important and well-known information technologies.

Translation programs are among the most popular and widely used technologies for studying languages or cross-cultural communication, replacing traditional dictionaries, which can be quite heavy. Translation programs, however, are accessible and usable on mobile devices, tablets, and computers. They can also translate texts into multiple languages, making translation programs, especially Google Translate, more convenient and efficient options. As a result, instead of carrying a hard-copy dictionary, people now prefer to use translation programs. According to Zengin and Kaçar (2011), the majority of second language learners use translation programs or online dictionaries to improve the style and structure of their language. As a result, translation tools have become extremely useful for second language learners.

However, the translation programs are still unable to translate the given text correctly and completely. For example, Aiken (2019) provides additional improvement statistics in these language combinations of Google Translate, one of the world's most popular translation programs, as follows: English to Spanish (87%), English to French (64%), English to Chinese (58%), Spanish to English (63%), French to English (83%), and Chinese to English (60%).

Moreover, Tuptim (2021) studied the contextual meaning translation capability of Google Translate from Japanese to Thai using a neural machine translation system. The findings showed that the neural machine translation system's translation capacity from Japanese to Thai was at an unacceptable level of 73.39 percent, while its acceptability was at 26.61 percent. The language package that was organized in descending order of collocations, compound nouns, compound verbs, sentences, and idioms was the one for which the translation capability of Google Translate in the form of a neural machine translation system was deemed acceptable.

When it comes to the challenges and inaccuracy of using translation programs, especially by students, Mohammad (2022) looked into the difficulties students had when utilizing machine translation to translate from Dari into English. He discovered that the students in his sample encountered a variety of issues, including syntactic and semantic issues, when attempting to complete the tasks assigned to them. The machine translator's translation of the target language is not precise. Furthermore, some particular cultural terms were translated incorrectly by a machine translation.

As previously mentioned, translation programs are widely used translation tools, but they are still unable to translate a text accurately and fully, particularly when it comes to issues with syntactic, semantic, and cultural nuances. The research team therefore recognized the significance of the issue and set out to investigate the behavior and issues related to the use of Google Translate by Phranakhon Si Ayutthaya Rajabhat University's fourth-year English major students.

Objectives

1. To study the behaviors of using Google Translate by English major students at Phranakhon Si Ayutthaya Rajabhat University.

2. To study the problems of using Google Translate encountered by English major students at Phranakhon Si Ayutthaya Rajabhat University.

Population and Sample

The population in this research was students majoring in English from the Faculty of Humanities and Social Sciences, Phranakhon Si Ayutthaya Rajabhat University. The sample consisted of 65 fourth-year English major students, selected through purposive sampling.

Research Instruments

This research was conducted using a mixed-methods approach. The following instruments were implemented to collect the data:

1. Questionnaire

The questionnaire is divided into 3 parts as follows:

Part 1 General information, which is a query concerning the respondents' general information. It consists of multiple-choice, closed-ended questions (check list).

Part 2 Exploring behaviors and problems using the translation program. They are closed-end questions with multiple-choice answers (check list), with each question having 5 levels of answers to choose from.

Part 3 Additional comments and suggestions from respondents

2. Semi-structured Interview

Five interview respondents were selected at random from among those who had provided their consent to be interviewed in order to conduct an individual interview, whose answers could be used to support information on various issues covered in greater detail by the questionnaire.

Data Collection Procedure

The steps listed below were followed in order to gather research data.

1. Studied concepts, theories, and various research studies related to the behaviors and problems of using translation programs in order to provide principles of thought and guidelines to create a questionnaire and interviews for data collection to survey behaviors and explore problems in using the translation program.

2. Studied how to create a questionnaire and interviews by perusing academic articles, books, and manuals on the subject. A questionnaire outline

was then created, consisting of five major topics, twenty-eight subtopics, and five interview questions.

3. Had three experts checked the questionnaire and interview questions using the questionnaire's reliability criteria, or the Index of Item Objective Congruence (IOC), to ensure that they were complete and consistent with the objectives established in the most appropriate manner.

4. Took the questionnaire that had been reviewed by experts, amended it based on suggestions to make it more accurate and complete, and then used it to collect data from the sample.

5. Contacted and scheduled an appointment with the target group to inform them of the objectives and explain the procedures for filling out the questionnaire and answering the interview.

6. Sent a link to the online questionnaire to the sample, after which a sample of five students was interviewed.

7. Recorded an audio clip of an interview with the sample of five students to support the discussion and data analysis.

8. Verified the completeness and correctness of the questionnaire and interview responses in order to prepare for the data analysis.

Data Analysis

The data received from the questionnaire were analyzed to investigate students' behaviors and problems with Google Translate by calculating frequencies, percentages, averages, and standard deviations using ready-made computer programs. The data from the interviews were gathered by recording audio clips, taking detailed notes, compiling, and categorizing the information systematically. They were then interpreted, related, and drew conclusions so as to support the data obtained from the questionnaire and answer the main questions in accordance with the research objectives.

Results

According to the collection of respondents' general information, it was found that the majority of students were 75.4 percent female, 16.9 percent male, and 7.7 percent LGBTQA+.

Besides, the information regarding the behaviors of using Google Translate by English major students at Phranakhon Si Ayutthaya Rajabhat University, comprising 1) frequency and access choices, 2) objectives, and 3) usage patterns, is demonstrated in Tables 1, 2, and 3 respectively.

Table 1 The Frequency of Using Google Translate and Access Choices

Question Number	The Frequency of Using Google Translate and Access Choices	$\bar{x}$	S.D.	Value
1	Students use Google Translate.	4.50	0.68	Very frequently
2	Students use Google Translate on computer and/or laptop	3.41	1.24	Frequently
3	Students use Google Translate on mobile phone and/or tablet	4.53	0.68	Very frequently
Overview		4.15	0.87	Frequently

Table 1 indicates that overall, the students frequently used Google Translate ($\bar{x}$ = 4.15, SD= 0.87). Most of them used the program very frequently ($\bar{x}$ = 4.50, SD= 0.68). They used Google Translate on mobile phones and/or tablets the most ($\bar{x}$ = 4.53, SD= 0.68), followed by computers and/or laptops ($\bar{x}$ = 3.41, SD= 1.24).

Table 2 The Objectives of Using Google Translate

Question Number	The objective of using Google Translate	$\bar{x}$	S.D.	Value
1	Students use Google Translate to study and complete homework.	4.46	0.68	Very frequently
2	Students use Google Translate while traveling or sightseeing.	3.53	1.02	Frequently
3	Students use Google Translate to translate text for reading and writing on social media platforms.	3.78	0.89	Frequently
4	Students use Google Translate to translate entertainment media (such as music, movies, and television series).	3.83	1.08	Frequently
5	Students use Google Translate to translate the news.	3.58	0.96	Frequently
6	Students use Google Translate to communicate with each other.	3.64	1.09	Frequently
Overview		3.80	0.95	Frequently

Table 2 reveals that, in the overall picture, the students frequently used Google Translate for various objectives ($\bar{x}$ = 3.80, SD= 0.95). They used the translation program to study and complete their homework the most ($\bar{x}$ = 4.46, SD= 0.68), followed by translating such entertainment media as music, movies, and television series ($\bar{x}$ = 3.83, SD= 1.08), translating texts for reading and writing on social media platforms ($\bar{x}$ = 3.78, SD= 0.89), communicating with each other ($\bar{x}$ = 3.64, SD= 1.09), translating the news ($\bar{x}$ = 3.58, SD= 0.96), and translating while traveling or sightseeing ($\bar{x}$ = 3.53, SD= 1.02) respectively.

Table 3 Google Translate Usage Patterns

Question Number	Google Translate Usage Patterns	$\bar{x}$	S.D.	Value
1	Students use Google Translate to determine the meaning of unfamiliar words.	4.50	0.86	Very frequently
2	Students use Google Translate to determine the functions of words.	3.72	1.06	Frequently
3	Students use Google Translate to learn proper pronunciation.	4.03	1.01	Frequently
4	Students use Google Translate to check their grammar.	3.29	1.22	Occasionally
5	Students use Google Translate to translate English articles.	4.10	0.86	Frequently
6	Students use Google Translate to translate at the sentence level.	4.06	0.98	Frequently
7	Students use Google Translate to translate at the phrasal level.	3.72	1.02	Frequently
8	Students use Google Translate to translate at the paragraphs level.	3.63	1.08	Frequently
9	Students use Google Translate to translate at the text level.	3.81	1.10	Frequently
Overview		3.90	1.02	Frequently

As is shown in Table 3, the overall usage patterns of Google Translate by the students were found to be frequent ($\bar{x}$ = 3.90, SD= 1.02). When separately considered, most of them frequently used the program to determine the meaning of unfamiliar words ($\bar{x}$ = 4.50, SD= 0.86), to translate English articles ($\bar{x}$ = 4.10, SD= 0.86), to translate at the sentence level ($\bar{x}$ = 4.06, SD= 0.98), to learn proper pronunciation ($\bar{x}$ = 4.03, SD= 1.01), to translate at the text level ($\bar{x}$ = 3.81, SD= 1.10), to determine the functions of words ($\bar{x}$ = 3.72, SD= 1.06), to

translate at the phrasal level ($\bar{x}$ = 3.72, SD= 1.02), and to translate at the paragraphs level ($\bar{x}$ = 3.63, SD= 1.08); however, they occasionally used Google Translate to check their grammar ($\bar{x}$ = 3.29, SD= 1.22).

In addition to the behaviors aforementioned, the information concerning the problems found from using Google Translate by the fourth-year English major students at Phranakhon Si Ayutthaya Rajabhat University is illustrated in Table 4 below.

Table 4 Problems Found from Using Google Translate

Question Number	Problems Found from Using Google Translate	$\bar{x}$	S.D.	Value
1	Google Translate translates verbs incorrectly.	3.98	0.85	Agree
2	Google Translate translates homonyms incorrectly.	4.10	0.85	Agree
3	Google Translate translates tenses incorrectly.	4.20	0.85	Agree
4	Google Translate translates cultural terms incorrectly	4.41	0.72	Strongly agree
5	Google Translate often cuts off words or sentences when translating at a paragraph or text level.	4.18	0.78	Agree
6	Google Translate is still ineffective.	4.46	0.97	Strongly agree
7	It is necessary to double-check the accuracy of the translation provided by Google Translate before using it.	4.20	0.92	Agree
Overview		4.21	0.84	Strongly agree

As can be seen from the table, overall, English major students encountered problems while using Google Translate at the highest level ($\bar{x}$ =

4.21, SD= 0.84). When individually considered, they believe Google Translate is problematic on certain issues; firstly, it is still ineffective ($\bar{x}$ = 4.46, SD= 0.97); secondly, it translates cultural terms incorrectly ($\bar{x}$ = 4.41, SD= 0.72); thirdly, it is necessary to double-check the accuracy of the translation provided by Google Translate before using it ($\bar{x}$ = 4.20, SD= 0.92); fourthly, it translates tenses incorrectly ($\bar{x}$ = 4.20, SD= 0.85); fifthly, it often cuts off words or sentences when translating at a paragraph or text level ($\bar{x}$ = 4.18, SD= 0.78); sixthly, it translates homonyms incorrectly ($\bar{x}$ = 4.10, SD= 0.85); finally, it translates verbs incorrectly ($\bar{x}$ = 3.98, SD= 0.85).

Discussion

1. The behaviors of using Google Translate by English major students at Phranakhon Si Ayutthaya Rajabhat University

The findings on the behaviors of English major students using Google Translate revealed that overall, they used the translation program frequently ($\bar{x}$ = 4.15). This is because nowadays translation programs play a crucial role in people's daily lives, both in learning and communication, which also result in different behaviors when using translation programs. The results show a coincidence with those pointed out by Kaewnarin (2016) that currently, there were translation tools that have become widely popular among language learners following the rapid changes in technology, and many students frequently used Google Translate to solve problems arising from learning a second language.

Furthermore, the results indicated that they used Google Translate to study and complete their homework the most frequently ($\bar{x}$ = 4.46) since they did not know the meanings of English words, especially the academic ones. This point is consistent with the findings reported by Srinarach and Jumpaphaeng (2021), who studied the use of applications for translation skill

learning of English major students at Chiang Rai Rajabhat University. That is, in their study, students primarily used Google Translate to find the meanings of English words because this program was easily accessible and convenient to search.

Additionally, the result pointing out that the students used Google Translate to find the meanings of unknown words at the highest level ($\bar{x}$ = 4.50) could be explained that a single word may have many different meanings in translation according to each context, such as technical terms, jargon, homonyms, or new words; therefore, it is necessary to enhance vocabulary in order to develop their English skills. This is compatible with the results presented by Puwong and Lieungnapar (2019) that the use of applications in developing English vocabulary is beneficial to learning and improving English vocabulary skills in terms of translating the meaning of words, reducing the time it takes to find vocabulary, and improving spelling skills. The result also conforms to that of Kanitthasen (2017), indicating that the majority of students almost always used a translation program to translate the meanings of unknown words.

2. The problems of using Google Translate encountered by English major students at Phranakhon Si Ayutthaya Rajabhat University

The findings on the problems English major students encountered while using Google Translate revealed that they believed the translation program still could not translate texts effectively ($\bar{x}$ = 4.46), particularly those with cultural terms ($\bar{x}$ = 4.41), because most of the translated texts were word-for-word translations, and the program could not understand cultural differences. The results show a coincidence with those pointed out by Kanitthasen (2017) that translation programs were unable to recognize contextual and cultural differences; each country has a different way of life and language, resulting in different cultural and linguistic structures. Since one word in a language might

have a variety of meanings, both general and specific, it is crucial to take its context into account while translating such a word. These are also consistent with the findings of Wongprom and Thitthongkam (2018), insisting that a single word could have various meanings; thus, selecting the best meaning from the several meanings accessible was necessary for a complete translation. Many words could not be translated literally and must take their parts of speech, underlying emotions, or feelings into account simultaneously, whereas Google Translate still has limitations in this regard.

Besides, the findings indicated that the translation program translated tenses incorrectly ($\bar{x}$ = 4.20), causing the students to double-check the accuracy of the translation provided by Google Translate before using it. These are compatible with the results presented by Kate-Phan and Sripetpun (2016) that, as Google Translate employs a literal translation, the translated texts are unable to accurately and totally convey the meaning. Not only are the translated sentence structures not beautiful, but there are also certain grammatical errors, particularly with the usage of tenses; namely, translated sentences are frequently in the present tense although the source ones are in the past tense. This forces users to solve difficulties by accurately reformulating sentences based on their own background knowledge.

Recommendations

1. Instructors should encourage students to use Google Translate or other translation programs to aid their studies so that they can access a wide range of information sources.

2. Instructors should teach or provide guidelines for using Google Translate or other translation programs, allowing students to use them effectively and efficiently.

References

Aiken, M. (2019). An Updated Evaluation of Google Translate Accuracy. Studies in Linguistics and Literature, 3(3), pp. 253-260.

Buğra, Z. and Işıl, K. (2011). Turkish EFL Academicians' Problems concerning Translation Activities and Practices, Attitudes towards the Use of Online and Printed Translation Tools, and Suggestions for Quality Translation Practice. 10. 274-286.

Kaewnarin, C. (2016). The Results of Using Google Translate with English Learning to Enhance Listening and Pronunciation Skills for Pratomsuksa 6. Academic Journal Uttaradit Rajabhat University, 11(1). pp. 62-70.

Kanitthasen, P. (2017). The Creation of the Sentences Structures Exercises for the Students Who Use the Translation Applications on the Webpages for Their Self-studies. https://doi.org/10.14416/c.fte.2017.11.035

Kate-Phan, K. and Sripetpun, W. (2016). Attitudes, Behaviors and Problems of English Major Students in Using "Google Translate." Journal of Liberal Arts Prince of Songkla University, 8(1), 79–96.

Khamngoen, S., Seehamat, L., Rittikoop, W., and Jantawat, P. (2022). English Oral Communication Needs of Upper Secondary School Students. Journal of Social Science, Law and Politics, 6(2), pp. 78-100.

Ministry of Education, Thailand (2022). Ministry of Education. Announcement of the Ministry of Education on the Policy and Focus of Ministry of Education, Fiscal Year 2023. https://www.moe.go.th/360policy-and-focus-moe-2023.

Mohammad, S. (2022). Discovering the Challenges of Machine Translation from Dari Language into English Language. Randwick International of Education and Linguistics Science Journal, 3. pp. 183-193.

Puwong, N. and Lieungnapar, A. (2019). The Management of Learning English Vocabulary by Using the Duolingo Application to Teach Students Grade

4, Ban Na Si School, Chiang Khan District, Loei. Journal of Education Loei Rajabhat University, 15(2). pp. 9-17.

Srinarach, W. and Jumpaphaeng, M. (2021). A Study of the Use of Applications for Translation Skill Learning of English Major Students, Faculty of Humanities, Chiang Rai Rajabhat University. Faculty of Humanities and Social Sciences Thepsatri Rajabhat University Journal, 12(3), pp. 53–64.

Tejarajanya, B. (2018). The Development of the Role of English in Thailand's Language Education Policies. Journal of Humanities and Social Sciences, 10(3), pp. 121-139.

Tuptim, N. (2021). The Capacity of Contextual Meaning Translation of Google Translate in the Form of Neural Machine Translation System from Japanese to Thai. Journal of Liberal Arts, Thammasat University, 21(1), pp. 90-113.

Wongprom, B. and Thitthongkam, T. (2018). Translation in the New Era and an Adjustment of Learners, Instructors, and Translators, Proceedings of the 13th National and International Sripatum University Online Conference (SPUCON2018), 20 December 2018, Bangkok.