

Does the End Justify the Means?

Google Translate use in translation classrooms

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Abstract— To use or not to use Google Translate to perform translation assignments can be a grey area among teachers and students in some translation classrooms. This study attempted to explore EFL students' purposes, patterns, and perceptions of Google Translate use. The study sample was a total of 90 Thai undergraduate students completing two translation courses offered in a Thai university. The students were asked to answer the questionnaire on their Google Translate use and perceptions. The quantitative data were analyzed using frequency, percentage, mean, standard deviation, and one-way ANOVA. The qualitative data from the open-ended questions were analyzed using content analysis. The results showed that the most frequent purpose of Google Translate use for English-Thai and Thai-English translation was at the word level, to find meanings of English words and to translate Thai words into English. When high and low achievers were compared, the low achievers used Google Translate to help with their translation at the sentence and paragraph levels more often. With regards to their perceptions, the students valued the benefits of Google Translate due to its two features, ease of use and accessibility. Nevertheless, most of them disapproved of Google Translate products because of its quality. The students' reasons to justify and to reject classroom policies of allowing them to use Google Translate and using it as a learning tool, as well as their intention to use Google Translate in their future work, were discussed.

Keywords— translation training; Google Translate; translation machine; acquisition of translation competence, translation process

I. INTRODUCTION

Google Translate is now one of the most well-known and well-accessible machine translation technologies available. Google Translate use has become more and more popular among those of all ages who want to understand or write a text in a foreign language. With its capability to get a text translated just in one click, young learners in the digital era who are familiar with the ways many things can be done in a short time have been reported using it as a tool both for their study and for other purposes [1]-[6].

In the context of translation classrooms, Google Translate use has become one of the steps in a translation process, from finding meanings of unfamiliar words like a function of an electronic dictionary, to getting a whole text translated into a

target language without any human skills or knowledge required. In the latter case, there is no doubt that such a short cut does not promote the acquisition of translation competence for EFL learners or translation students who need to be competent in translation for their future work.

To our best knowledge, previous research has not taken into account investigating EFL students' purposes, patterns, and perceptions of Google Translate use in translation classrooms where an ultimate goal is to train students to perform quality translation tasks in their future work.

This study is expected to deepen the knowledge of translation training in the context of translation classrooms for EFL learners at the undergraduate level. It aimed to investigate how and why Thai EFL students used Google Translate when they performed their translation assignments in their translation courses. The implication of this study, hopefully, can be a guideline for EFL teachers to design appropriate, yet realistic, teaching approaches to be in line with their students' preferences and the current conditions of learning.

The research questions of this study were

1. What were the purposes of Google Translate use among English majors in translation classrooms?
2. What were the patterns of Google Translate use among English majors in translation classrooms?
3. What were English majors' perceptions of Google Translate use in translation classrooms?

II. LITERATURE REVIEW

A. Translation and acquisition of translation competence

It is unarguable that translation is a process. One of the renowned scholars in translation studies, Nida [7], proposed a model of translation process, explaining that translation is a process where a translator carefully reads the source text in order to analyze or interpret the meanings of the messages in the source language (SL) and then transfers the messages into the target language (TL) before restructuring or editing the messages so as to produce a piece of translation in the target language. The model is shown as Figure 1 below.

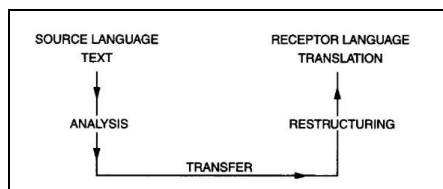


Fig. 1. Nida's Model of Translation Process (1969)

Therefore, being competent at the two languages concerned is not enough for a proficient translator. Different sets of knowledge and skills are required. According to PACTE Group [8], translation competence is made up of five sub-competencies and a set of psycho-physiological components. The five sub-competencies include *bilingual sub-competence*, or abilities to use the two languages; *extra-linguistic sub-competence*, or knowledge about the world, *knowledge about translation sub-competence*, or knowledge about how translation functions; *instrumental sub-competence*, or abilities to use sources of information that can be applied to translation; and *strategic sub-competence*, or abilities to plan, to carry out, and to evaluate translation process, as well as abilities to identify translation problems and to apply procedures to solve them. Additionally, it requires *cognitive components*, *attitudinal components*, and *psychomotor mechanisms*, such as memory, perception, attention, critical spirit, motivation, creativity, and logical reasoning. Some sub-competencies are acquired by exposing to information, such as knowing about translation problems occurred from differences between the language pair, but some are acquired through practice, such as researching skills [9]-[10].

In the context of EFL learners, two approaches of translation can be implemented in classroom learning, pedagogical and vocational approaches [11]. The first approach is to use translation as a tool for language learning whereas the second one is to train students to become translators or to be able to perform translation tasks as assigned in their future workplace, through different teaching approaches that promote learner autonomy and engage students [12]-[13].

In sum, the goal of translation training is to encourage the students to acquire their translation competence through the process of learning. It is interesting to explore how machine translation can be well integrated into the process of translation training, not only a tool for getting a source text translated fast and easy and, some of the time, not getting a satisfying quality.

B. Google Translate: a desirable learning tool in the digital era?

1) Google Translate as a machine translation

Google Translate, a free translation service by Google LLC, is automated software that can translate source content, both texts and speech, into different target languages. Google Translate provides its services with approximately 100 languages in forms of a mobile application, online and off-line, and a website. Google Translate has an attempt to improve their translation quality by establishing Google Translate Community for its users to help validate, matching, rating and supplying translation. Apart from Google Translate, there are more than 100 machine translation providers, such as

Bing Microsoft Translator, Yandex Translate, Naver Papago, and Amazon Translate [14]-[15].

2) Google Translate use in classroom contexts

Digital competencies are among competencies students in the digital era need to acquire [16], and Google Translate as one of the most popular digital resources has been extensively investigated in various learning contexts, learners' disciplines, and language pairs [17],[18],[1],[2],[19],[5]. Regarding Google Translate use and perceptions among EFL learners majoring in English, students in Indonesia reported that most of them used Google Translate during their English learning although they realized that there were some problems [2]. Similarly, English major students in Thailand reported that they used Google Translate for their study and the problems they encountered included insufficient lexical data for translation, and cultural and syntactic differences between English and Thai, as well as lexical problems such as word-for-word translation [1]. A group of Saudi students majoring in English also stated that they used Google Translate in almost all the subjects in order to get the meanings of unknown words, writing assignments, and reading an English textbook [17]. To enhance translation skills of intermediate and advanced foreign-language students, students can critically analyze texts in TL translated by machine translation and compared them with their own translations in order to learn differences between the ways machine and human process language [19]. For a lower proficiency group of non-English majors who were assigned to complete English-Thai and Thai-English translation tasks, most of them used Google Translate for translating a whole sentence and refined the translated texts later [5].

In terms of benefits of Google Translate for foreign language learning of non-English majors, Sukhwan [5] also explained that a group of First-year Thai students used Google Translate for language learning for various purposes: to find word meanings, to help with their writing assignments, to understand English texts, and to translate English words and expressions. Although this group of students realized that there were some disadvantages, they had positive attitudes towards the use of Google Translate [5]. In a group of younger learners, Giannetti [20] did an experimental study with Seventh Grade Spanish students and reported that Google Translate could be used as a resource for writing; additionally, the students produced writing with fewer syntactic and semantic errors, and found value in Google Translate. However, it is suggested that the current instruction was not sufficient for this group of learners to acquire strategies necessary for using digital tools [20]. When specific proficiency levels were taken into consideration, English speaking students at the beginner and early intermediate level a Spanish writing class where machine translation use as a form of scaffolding could communicate in their L2 better, yet they seemed to put more efforts when they performed their writing tasks without its help [18].

3) Analysis of Google Translate products

Some EFL researchers have also made attempts to explore Google Translate products. O'Neill [3] evaluated French compositions written with the use of Google Translate in six features: overall quality, comprehensibility, content, spelling, syntax, remaining grammar, and vocabulary, and suggested

that Google Translate may help improve students' translation if they used it as a guideline, not as an online translator that translates the whole paragraph or the whole text. In terms of text types, Rensburg, Snyman & Lotz [21] explained that types of source texts affect the quality of Google Translate products, comparing six text types translated by Google Translate from Afrikaans into English and vice versa.

A study to evaluate the accuracy of Google Translate from data extraction of 8 non-English language articles found out that different language pairs affect the quality of translation, and accurate extraction was possible for some texts in most languages, except Chinese, with Portuguese and German articles yielding the most accurate ones [22]. In English-Thai language pair, a study of English-Thai translations of terms and conditions in airline business produced by Google Translate suggested that they have a number of major and minor errors [6].

It is conclusive that writing or translating a text with the help of Google Translate requires an editing process so that the translated texts can meet their functions [23], and the teacher who wants to use Google Translate needs to carefully plan how to incorporate Google Translate use into classroom activities to suit each individual learning contexts [20], [24], [3]. It is also necessary to set up an appropriate code of practice [3] and consider the issues of fair assessment for students who follow and do not follow the regulations [19].

4) Dictionary use in classroom contexts

EFL students as language learners and users were examined in terms of their language resource selection. In case of dictionary use for reading texts, Panplum [25] found out that intermediate and low proficiency groups preferred to use bilingual dictionaries at a higher degree and use monolingual dictionaries at a lower degree. Rungrattanukul [26] studied English majors in their translation classrooms and reported that bilingual dictionaries yielded better results than monolingual ones since bilingual dictionaries provide words meanings in their L1 but monolingual dictionaries explain the meanings in their L2. These two types of resources have different features and information types; monolingual dictionaries contain not only word meanings but also information about how words can be used, such as collocations, lexical phrases, and grammatical contexts, whereas bilingual dictionaries provide translation, rather than definitions [27]. Therefore, bilingual dictionaries may not be able to fully support students much in their language learning, particularly in vocabulary learning, reading comprehension, and writing.

III. RESEARCH METHODOLOGY

The participants were 90 English major students in their third and fourth year in a private university in Thailand who completed two translation courses, Introduction to Translation (EN 321) and Intermediate Translation (EN 328). The first translation course has objectives to enhance students' abilities to analyze communication situations of the source text, to interpret communication purposes, to use translation resources, and to apply appropriate translation methods for translation from English to Thai (E-T) and Thai to English (T-E). The objectives of EN 328 are to develop students' abilities to

analyze the source text of various types, to use translation methods to fit the text types and translation purposes, to analyze problems in translation and solve them, to use appropriate translation resources, as well as to practice translating documents between English and Thai.

Data were collected by using a rating scale questionnaire to investigate the students' use and perceptions of Google Translate in EN328. The questionnaire consisted of 6 parts: General information about computer/mobile phone/ tablet use and the internet access; Purposes of Google Translate use in E-T translation; Purposes of Google Translate use in T-E translation; Patterns of Google Translate use; General perceptions of Google Translate use in EN 328; and Perceptions of Google Translate use in the future. The questionnaire was created in Google Form and distributed online to 118 English major students and 90 students responded. In some parts of the questionnaire, the participants were divided into three groups, namely high, moderate, and low achiever groups, according to the total scores from EN328. Data were analyzed quantitatively using percentages, means, standard deviation, and one-way ANOVA while qualitative data were analyzed from open-ended questions using content analysis.

IV. FINDINGS

A. Background Information

In Part 1 of the questionnaire, among 90 respondents, the students reported that 100% of them had the internet access at home and at the university. Also, all of them used computers, mobile phones, or tablets to search for information for translation assignments in EN 328.

B. Students' Use of Google Translate

In Part 2 and Part 3, all the participants were asked about purposes of Google Translate use for their translation assignments in EN 328. Part 2 is the use for E-T translation and Part 3 is for T-E translation. Data regarding Google Translate use for E-T translation were presented in Table 1-4.

TABLE I. PURPOSES OF GOOGLE TRANSLATE USE FOR E-T TRANSLATION

No	Items	Means	SD	Interpretation
1	To find the meaning(s) of an English word	2.91	1.13	Sometimes
2	To find the meaning(s) of an English phrase or clause	2.57	1.03	Sometimes
3	To find the meaning(s) of a whole English sentence	2.37	1.01	Seldom
4	To find the meaning(s) of a whole English paragraph	1.81	.94	Seldom
5	To find the meanings of the whole English text	1.71	.95	Seldom

Data from Table 1 indicates that when the students were assigned to perform E-T translation tasks, they used Google Translate to find the meaning(s) of an English word, phrase,

fragment, or clause more frequent than to find the meaning(s) of a whole sentence, a whole paragraph, and a whole text. The most frequent use of Google Translate was at the word level ($M = 2.91$).

A closer look at the data reveals that Google Translate use of the high achiever group and the low achiever group was significantly different. A one-way ANOVA was introduced. As shown in Tables 2-4, there were significant differences between the Google Translate use of the high and the low achiever groups regarding their use to find the meaning(s) of a whole sentence ($(F 2, 87) = 4.986, p = .011$), and the use to find the meaning(s) of a whole paragraph ($(F 2, 87) = 3.893, p = .030$). The results can be explained that the low achievers used Google Translate to find meaning(s) of whole English sentences and paragraphs more frequent than the high achievers did.

TABLE II. COMPARISONS OF THE MEANS OF HIGH AND LOW ACHIEVER GROUPS

Items	Difference of Means	Sig.
To find the meaning(s) of a whole English sentence <i>High achievers and Low achievers</i>	0.74*	.011
To find the meaning(s) of a whole English paragraph <i>High achievers and Low achievers</i>	0.61*	.030

TABLE III. COMPARISON OF PAIR-WISE DIFFERENCE ON GOOGLE TRANSLATE USE FOR FINDING THE MEANING(S) OF A WHOLE ENGLISH SENTENCE

	Levels	High	Moderate	Low
	Mean			
To find the meaning(s) of a whole English sentence.	High	1.94	-	-0.74*
	Moderate	2.48	0.55	-0.20
	Low	2.68	0.74*	0.20

TABLE IV. COMPARISON OF PAIR-WISE DIFFERENCE ON GOOGLE TRANSLATE USE FOR FINDING THE MEANING(S) OF A WHOLE ENGLISH PARAGRAPH

	Levels	High	Moderate	Low
	Mean			
To find the meaning(s) of a whole English paragraph	High	1.45	-	-0.61*
	Moderate	1.92	0.47	-0.14
	Low	2.06	0.61*	0.14

Part 3 of the questionnaire presents purposes of Google Translate use for T-E translation. The most frequent use was also at the word level ($M = 2.49$) while the use to translate Thai phrases, fragments, or clauses into English was the second most frequent one ($M = 2.33$) as illustrated in Table 5 that follows.

TABLE V. PURPOSES OF GOOGLE TRANSLATE USE FOR T-E TRANSLATION

No	Items	Means	SD	Interpretation
1	To translate a Thai word into English	2.49	1.17	Sometimes
2	To translate a Thai phrase, fragment, or clause into English	2.33	.96	Sometimes
3	To translate a whole Thai sentence into English	2.14	.91	Seldom
4	To translate a whole Thai paragraph into English	1.88	.93	Seldom
5	To translate a whole Thai text into English	1.71	.95	Seldom

In Part 4 of the questionnaire, the students were asked about the patterns of Google Translate use in EN328. The results are illustrated below in Table 6.

TABLE VI. PATTERNS OF GOOGLE TRANSLATE USE

No	Items	Means	SD	Interpretation
1	I used only Google Translate without using any resources.	1.41	.65	Never
2	I used Google Translate first before I used other resources to supplement it.	2.12	1.20	Seldom
3	I used Google Translate only when I could not find information from other resources.	2.73	1.05	Seldom

According to Table 6, data reveals that the mean score of the pattern in item 1 which is the use of Google Translate without any resources to supplement it was at the lowest level ($M = 1.41$) whereas the use of Google Translate with other resources, whether before or only when other resources were not satisfying, was higher.

Additional data from the open-ended questions at the end of these two parts also show the resources the students used with Google Translate. The resources mentioned most were bilingual dictionaries (40.24%), and the second ones were monolingual dictionaries (31.10%). The results are shown in Table 7 below.

TABLE VII. OTHER RESOURCES TO SUPPLEMENT GOOGLE TRANSLATE USE

Types of resources	Frequency	Percentage
Monolingual dictionaries	51	31.10
Bilingual dictionaries	66	40.24
Other machine translation	19	11.59
Others	28	17.07
Total	164	100

C. Students' Perceptions of Google Translate Use

The last two parts of the questionnaires, Part 5 and Part 6, illustrate the students' perceptions of Google Translate use for translation. Table 8 shows the perceptions from their past experience and Tables 9-11 their suggestions for future use as a classroom policy and a learning tool, as well as their intention for continued use in their jobs.

The last two parts of the questionnaires, Part 5 and Part 6, illustrate the students' perceptions of Google Translate use for translation. Table 8 shows the perceptions from their past experience.

TABLE VIII. PERCEPTIONS OF GOOGLE TRANSLATE USE

No	Items	Mean	SD	Interpretation	Ranking
1	Google Translate helped me understand meanings of English words/phrases/sentences.	2.90	.91	Not sure	5
2	Google Translate helped me translate English words/ phrases/sentences into Thai.	2.87	1.02	Not sure	6
3	Google Translate helped me translate Thai words/ phrases/sentences into English.	2.78	.98	Not sure	7
4	Google Translate helped me get some ideas when I translated English source texts into Thai.	2.91	1.09	Not sure	4
5	Google Translate helped me get some ideas when I translated Thai source texts into English.	2.71	1.15	Not sure	8
6	Google Translate is easy to use.	4.00	.92	Agree	2
7	Google Translate is easy to access.	4.30	.88	Agree	1
8	I am familiar with Google Translate use.	3.61	1.15	Agree	3
9	Texts translated by Google Translate have good quality.	2.08	.96	Disagree	12
10	I usually got results that I wanted from Google Translate.	2.31	.92	Disagree	9
11	The results I got from Google Translate are satisfactory.	2.29	.92	Disagree	10
12	Google Translate helped me improve my translation skills.	2.18	1.04	Disagree	11

As shown in Table 8, the students agreed that Google Translate was easy to access and easy to use and they were also familiar with its functions. The highest mean score was at the accessibility (M= 4.30) and the second highest one was at the ease of use (M=4.00). However, they were not sure if Google Translate could help them understand the source texts, translate them, or even provide them with some ideas for their own translation. The findings highlighted the fact that the students disagreed that they got the results they wanted and the results were satisfactory. More importantly, the two lowest mean scores were about quality of the translation (M= 2.08) and translation skill enhancement (M= 2.18). That is to say, the students disagreed that the translation from Google Translate has good quality and Google Translate use could improve their translation skills.

Additionally, Figure 2 and Figure 3 demonstrate the students' views towards Google Translate use for classroom

learning. As shown in Figure 2, they were asked if they should be allowed to use Google Translate in their translation classrooms, and the majority of the students (44.40%) responded that they were not sure.

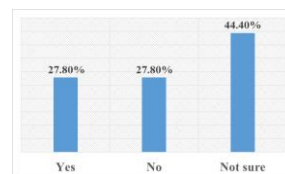


Fig. 2. Classroom Policy for Google Translate Use

Data from the open-ended question of this part provide reasons for and against the idea of allowing the students to use Google Translate in their translation classrooms. All the reasons were categorized into three dimensions. (1) *Preference* refers to students' personal preferences to use or not to use it. (2) *Process* refers to students' views on Google Translate as a tool and the ways it can be used. (3) *Product* refers to students' perceptions of the translated texts as a product of Google Translate. Table 9 presents the three dimensions of reasons that support and oppose this idea.

TABLE IX. REASONS FOR AND AGAINST CLASSROOM POLICY FOR GOOGLE TRANSLATE USE

No	For			Against		
	Items	Freq.	%	Items	Freq.	%
1	-	-	-	Students use it even though it is not allowed.	2	5.71
2	It is easy to use.	9	30	It is too easy and does not promote acquisition of translation.	9	25.71
	It can be used for translation of words.	6	20	Other resources are better.	3	8.57
	It can be used with other translation resources.	6	20	-	-	-
	It can be used as a guideline.	9	30	-	-	-
3	-	-	-	Translated texts do not always have good quality.	21	60
Total		30	100		35	100

Here are underlying reasons for and against a policy of allowing students to use Google Translate.

(1) *Preference*: 5.71% of the responses that were against the ideas of allowing Google Translate to be used in classrooms stated that even though the use of Google Translate was not allowed, some students would use it anyway. Thus, there is no need to set a rule to prohibit its use.

(2) *Process*: 30 % of the responses that agreed with this classroom policy stated that Google Translate is easy to use

and the other 30% said that Google Translate can be useful when it is used as a guideline during the translation process. 20% supported this idea, stating that Google Translate can also be useful to find meanings of individual words, and the other 20% said it can be effectively used in accompany with other translation resources. On the contrary, 25.71% of the responses that were against this policy stated that using Google Translate is too easy and does not promote the acquisition of translation.

(3) *Product*: 21% of the responses that disagreed with the idea of using Google Translate as a classroom policy mentioned that Google Translate products are not always accurate, complete, smooth, or clear.

When the students were asked if the teacher should use of Google Translate as a learning tool in their translation classrooms, the majority (44.40%) believed that Google Translate should not be used as a learning tool in translation classrooms, and only 20% of them agreed, as illustrated in Figure 3 below.

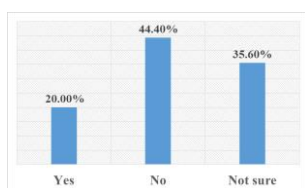


Fig. 3. Use of Google Translate as a Learning Tool

Data from the open-ended question in this part were in line with the one about whether it should be allowed to use as a classroom policy. All the reasons that approve and disapprove of the idea of using it as a learning tool are illustrated in Table 10 below.

TABLE X. REASONS FOR AND AGAINST GOOGLE TRANSLATE USE AS A LEARNING TOOL

No	For			Against		
	Items	Freq.	%	Items	Freq.	%
1	It is personal preferences.	1	4.17	-	-	-
2	It is easy to use.	1	4.17	It is too easy and does not promote acquisition of translation.	6	23.08
	It is commonly used.	4	16.67	Other resources are better.	6	23.08
	It can be used for translation of words.	3	12.50	-	-	-
	It can be used with other translation resources.	2	8.33	-	-	-
	It can be used as a guideline.	4	16.67	-	-	-
	Students will be able to use it effectively.	9	37.50	-	-	-
	Total					

3	-	-	-	Translated texts do not always have good quality.	14	53.84
Total		24	100		26	100

(1) *Preference*: 4.17% of the responses that agreed with the use of Google Translate as a learning tool stated that it depends on individuals' preferences.

(2) *Process*: Most of the reasons are similar to the ones for the classroom policy. The highest percentage of the pros (37.50%) believed that using Google Translate will help them use it more effectively because when they clearly understand its pros and cons, Google Translate can be used as a guideline during their translation process.

(3) *Product*: The majority of the responses that disapproved of its use (53.84%) expressed concerns that the products are not always accurate, complete, smooth, or clear.

The students were also asked if they would use Google Translate to complete translation tasks in the contexts of their workplace in the future. Figure 4 demonstrates the students' intention for continued use. The majority of 90 students replied that they were not sure (44.40%).

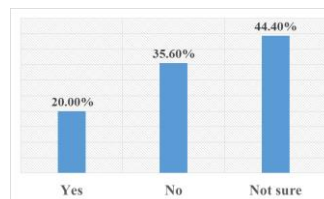


Fig. 4. Intention for further use

Additionally, the students were asked in an open-ended question about their intention for further use. Their reasons are elaborated in Table 11 below.

TABLE XI. REASONS FOR AND AGAINST THE INTENTION FOR FURTHER USE

No	For			Against		
	Items	Freq.	%	Items	Freq.	%
1	-	-	-	-	-	-
2	It is easy to use.	9	26.47	Other resources are better.	1	5.26
	It tends to be improved.	1	2.94	-	-	-
	It can be used for translation of words.	8	23.53	-	-	-
	It can be used with other resources.	7	20.59	-	-	-
	It can be used as a guideline.	9	26.47	-	-	-
3	-	-	-	Translated texts do not always have good quality.	18	94.73
Total		34	100		19	100

(1) *Preference*: No reasons were mentioned.

(2) *Process*: 26.47% of the responses that justified the use of Google Translate stated that it is easy to use, and 26.47% of the responses also mentioned that it can be used as a guideline. One response in this category (2.94%), though, expressed their hope that Google Translate would improve its capability in the near future.

(3) *Product*: 94.73% of the responses that disapproved of using Google Translate as part of the future work stated that they had concern about the quality in terms of accuracy, completeness, smoothness, and clarity of their translations.

V. DISCUSSION

The present study focuses on the use of Google Translate in the context of translation classrooms, with objectives to explore purposes and patterns of Google Translate use and perceptions towards the use of Google Translate among Thai EFL learners majoring English.

A. Purposes and Patterns of Google Translate Use

Although Google Translate, as one of the most commonly used machine translation among EFL learners, can be used for E-T and T-E translation of a whole sentence, a whole paragraph, or even a whole text, the most frequent use among EFL learners majoring English in this study was to find meanings of an individual English word or to translate a Thai word into English, and the least frequent use was to find meanings of a whole text or to translate a whole text from Thai to English. The results concur with the study conducted by Alhaisoni and Alhaysony [17], revealing that English Majors in Saudi Arabia often used Google Translate to get the meanings of unknown words. Thai students in other disciplines were also reported using Google Translate to find word meanings as well [5].

With regards to differences between translation proficiency of English majors in the context of translation classrooms, data obtained in this study revealed that the low achiever group used Google Translate to find the meanings of the whole sentences and the whole paragraphs in English when they were assigned to perform translations tasks more often than the high achiever group did, which are similar to what a group of non-English major students did [5]. Moreover, students in other learning contexts, such as reading or writing ones, also benefited from the integration of Google Translate [18], [20], [5].

Google Translate has been used in different patterns. Most of the participants in this study used other resources together with Google Translate, either to supplement it after they tried other resources or to replace them when they could not find sought information from those resources. Regarding the use of other resources, when they wanted to find word meanings, most students used bilingual dictionaries more often than monolingual dictionaries. The data in this study were in line with the one obtained from the study of another group of Thai students majoring in English in the context of language learning, stating that intermediate and low English proficiency

groups, preferred to use bilingual dictionaries at a higher degree than monolingual dictionaries when they read English texts [25]. Harmer [27] explains that bilingual dictionaries may not be able to promote language learning as much as monolingual dictionaries do because bilingual dictionaries provide translations of words, not their definitions. Also, most bilingual dictionaries do not provide lexical phrases, grammatical contexts, or collocations [27].

It is noticeable that a function of Google Translate is similar to the one of bilingual dictionaries, yet a tremendous advantage of Google Translate is that all the problems found in bilingual or monolingual dictionaries, such as words sought not found, meanings of words sought not found, difficulties in understanding word arrangement in bilingual dictionaries, or in the case of monolingual dictionary, understanding the given definition [26], can be easily solved by Google Translate because it can translate everything into the desired target language. Therefore, it is no surprise that a number of EFL students used it for their reading and writing assignments [17], [20], [5].

In sum, it can be concluded that EFL students who do not master in their L2 tend to rely on resources that provide them information sought in the desired languages, namely bilingual dictionaries. Google Translate, however, has a great capability of providing them not only translations of words but also translations of phrases, fragments, sentences, or even the whole paragraphs in any languages, from using just one easy-to-use resource.

B. Perceptions of Google Translate Use

Positive views on Google Translate among English majors in this study are related to its three features, accessibility, ease of use, and familiarity, which speeded up the process of translation; however, the students disapproved of its products since the texts translated did not meet the basic requirements of translation, regarding their accuracy, smoothness, completeness, and tailoring, all the key criteria for translation evaluation by Mossop [23]. The findings of the present study were in congruence with those conducted in contexts of EFL classrooms, reporting that the students valued Google Translate as a digital resource that facilitated them in their language use when they performed reading or writing tasks; nevertheless, they realized that its products still contained errors in several dimensions, from lexical to syntactic, semantic and pragmatic problems [17], [18], [20], [1], [2], [5].

In the context of translation classrooms, apart from questioning the quality of Google Translate products, English majors in this study did not believe that Google Translate could help them improve their translation skills. As Garcia [18] mentioned, students seemed to put less effort when using such technology. To be more specific, the majority of the students in this study were not sure if the teacher should set up a classroom policy to allow the use of Google Translate due to the fact that Google Translate does not promote the acquisition of translation and the products from Google Translate have low quality. On the other hand, another group who welcomed this idea stated that it is easy for them to use Google Translate;

nonetheless, they confirmed that Google Translate can be used only as a guideline for translation. When being asked if Google Translate should be used as a learning tool in classroom learning, most of them disagreed with the similar reason as previous one, the quality of its products, while some suggested that it is probably a good idea as the students will be guided how to use Google Translate more effectively. These ideas are in agreement with some studies by researchers who tried to integrate Google Translate into their language and translation classes [20], [18]. With regards to their intention for continued use in their future work, English majors in this study were still not sure. The reasons are related to its ease of use and accessibility. Additionally, they added that using Google Translate is convenient to get a source text with any length translated, but it has to be used with other resources owing to the low quality of the translated texts.

In conclusion, although Google Translate is an easy option for EFL learners to learn a language or practice translation, they are well-aware of its drawbacks and try to find solutions to make the most of it, such as using it only as a guideline with some other reliable resources and trying to revise the translated texts to meet the functions of their use.

C. Implications for teaching

As explained by Nida [7], translation is a process of interpreting the messages in the SL and transferring the messages into the TL before editing the target-language messages to meet its use and functions. If students use Google Translate to translate the whole sentences or whole paragraphs into the TL for getting their translation assignments done for the sake of convenience, instead of putting an effort researching and translating a source text by themselves, the traditional process of interpreting the source text and transferring the messages into the TL would be excluded. What remains is probably the editing process after the students get the source texts translated by the machine. However, with or without the teacher's permission, the students in this digital era seem to more and more embrace such technology as part of their life. The teacher, therefore, needs to weigh up the pros and the cons of Google Translate, and select the most effective ways to introduce it as one of the translation instruments for the pedagogical methods that also promote learner autonomy and make sure that all the five translation sub-competencies, bilingual, extra-linguistic, knowledge about translation instrumental, and strategic sub-competence [8] can be developed as well. Learning when to use or not to use translation machine and how to use it effectively can also help promote critical thinking and enhance lifelong learning.

VI. SUMMARY AND CONCLUSION

This paper reports purposes and patterns of Google Translate use among EFL learners in translation classrooms, together with their perceptions towards the use of it. From the research that has been undertaken, it is possible to conclude that students used Google Translate mostly for translating words between English and Thai. The majority of the students used Google Translate with other resources and preferred to use bilingual over monolingual dictionaries. Regarding the levels of proficiency, the low achievers, compared to the high

achievers, were more likely to use Google Translate for translating the whole sentences and paragraphs. In terms of perceptions, the students viewed Google Translate as a convenient tool to help them work faster, but they were also aware that the products, in some cases, are of low quality so Google Translate has to be used with other resources. In the context of translation training, the students believed that using Google Translate cannot enhance their translation competence.

In sum, it is vital that the teacher consider integrating Google Translate into one or more stages in translation practice so that the students learn how to use such digital tools to assist them with their work in the age of technology. It is recommended that further research in this area may explore in more detail how students with different proficiency levels use or perceive benefits and drawbacks of Google Translate. Such details can shed light on how the teacher can design teaching techniques to suit the current use and preferences of individual students.

REFERENCES

- [1] K. Kate-Phan and W. Sripetpun, "Attitudes, Behaviors and Problems of English major students in using "Google Translate," *Journal of Liberal Arts, Prince of Songkla University, Hat Yai Campus*, vol.8 (1), pp. 79-96, January – June 2016. กมล เกตุพันธ์ และวราภรณ์ ศรีเพชรพันธ์, "ทัศนคติและพฤติกรรมการใช้ผู้แปลภาษาสากล (Google Translate) ของนักศึกษาวิชาเอกภาษาอังกฤษ," *วารสารศึกษาศาสตร์ มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่*, ปีที่ 8 ฉบับที่ 1, หน้า 79-96, เดือนมกราคม-มิถุนายน 2559.
- [2] F. Maulidiyah, "To use or not to use Google Translate in English language learning," 2018. [Online] Available from: <https://jlt-polinema.org/?p=996> [Accessed May 17 2019].
- [3] E. O'Neill, (2012), "The effect of online translators on L2 writing in French." Ph. D. dissertation, University of Illinois at Urbana-Champaign, USA, 2012.
- [4] L. Rebeca and P. Stiegelbauer, "Automatic translations versus human translations in nowadays world," *Social and Behavioral Sciences*, vol. 70, pp. 1768-1777, January 2013.
- [5] A. Sukkhan, "Students' attitudes and behaviors towards the use of Google translate," Ph. D. dissertation, Prince of Songkla University, 2014.
- [6] T. Vidhayasai, S. Keyuravong and T. Bunsom, "Investigating the use of Google Translate in "Terms and Conditions" in an airline's official website: errors and implications," *PASAA*, vol. 49, pp. 137-170, January – June 2015.
- [7] E. Nida, "Toward a science of translating: With special reference to principles and procedures involved in Bible translating," Leiden: Brill, Netherlands, 1964.
- [8] PACTE Group, "Building a Translation Competence Model," in *Triangulating Translation: Perspectives in Process Oriented research*, F. Alves, Ed. Philadelphia, PA: John Benjamins Publishing Company, vol. 45, pp. 43-68, 2003.
- [9] R. Bell, "Psycholinguistic/cognitive approaches," in M. Baker & K. Malmkjaer (Eds.), *Routledge encyclopedia of translation studies*, New York: Routledge Taylor & Francis Group, 1998.
- [10] W. Wilss, "Cognitive aspects of the translation process." *Language and Communication*, vol.10 (1), pp. 19-36, 1990.
- [11] D. Stewart, "Vocational translation training into a foreign language." in *TRALinea*, vol. 10, 2008. [Online] Available from: <http://www.intralinea.org/specials/article/1646>. [Accessed 23 May 2019].
- [12] S. Insai and T. Poonlarp, "More Heads Are Better than One: Peer Editing in a Translation Classroom of EFL Learners," *PASAA*, vol. 54, pp. 82-107, July – December 2017.

- [13] D. Kiraly et al, *Towards Authentic Experiential Learning in Translator Education*. V&R Unipress, Göttingen, 2015.
- [14] GALA, "Machine Translation," *Globalization and Localization Association*, 2019. [Online] Available from: <https://www.gala-global.org/what-machine-translation> [Accessed 1 June 2019].
- [15] Google LLC, "Language Technology: Machine Translation," *Google Translate*, 2019. [Online] Available from: https://translate.google.com/intl/en_ALL/about/languages/index.html [Accessed 1 June 2019].
- [16] E. Rolf, O. Knutsson and R. Ramberg, "An analysis of digital competence as expressed in design patterns for technology use in teaching," *British Journal of Educational Technology*, January 2019. [Online] Available from: <https://doi.org/10.1111/bjet.12739> [Accessed 1 June 2019].
- [17] E. Alhaisoni and M. Alhaysony, "An investigation of Saudi EFL University students' attitudes towards the use of Google Translate," *International Journal of English Language Education*, vol. 5, pp. 72-82, 2017.
- [18] I. Garcia, "Can Machine Translation Help the Language Learner?," *ICT for Language Learning*, 3rd Edition, Florence, Italy, 2019.
- [19] B. McCarthy, "Does online machine translation spell the end of take-home translation assignments?," *CALL-EJ Online*, vol.6 (1), June 2004.
- [20] T. Giannetti, "Google Translate as a resource for writing: A study of error production in seventh grade Spanish," M.S. Literacy Education Thesis, St. John Fisher College, 2016.
- [21] A. Rensburg, C. Snyman and S. Lotz, "Applying Google Translate in a higher education environment: Translation products assessed," *Southern African Linguistics and Applied Language Studies*, vol. 30(4), pp. 511-524, December 2012.
- [22] MD Rockville, "Accuracy of Data Extraction of Non-English Language Trials with Google Translate," *Agency for Healthcare Research and Quality*, April 2012.
- [23] B. Mossop, *Revising and editing for translator*. St. Jerome Publishing, Manchester, 2007.
- [24] K. Mundt and M. Groves, "A double-edged sword: the merits and the policy implications of Google Translate in higher education," *European Journal of Higher Education*, vol. 6, pp. 387-401, 2016.
- [25] S. Panplum, "The use of dictionaries of Thai EFL learners in English reading texts." *The European Journal of Education Studies*, vol. 5 (1), pp. 152-161, 2018.
- [26] D. Rungrattanakul, "A study of dictionary use and problems in using dictionaries in an introduction to translation class of third-year English majors at Naresuan University," *Journal of Humanities Naresuan University*, vol. 3, pp. 1-16, September-December 2013. คุมณี รุ่งรัตนกุล, "การศึกษาดการใช้พจนานุกรมในวิชาการแปลเบื้องต้นของนิสิตวิชาเอกภาษาอังกฤษ ชั้นปีที่ 3 มหาวิทยาลัยนเรศวร," *วารสารมนุษยศาสตร์ มหาวิทยาลัยนเรศวร*, ปีที่ 10 ฉบับที่ 3, หน้า 1-16, เดือนกันยายน - ธันวาคม 2556.
- [27] J. Harmer, *The Practice of English Language Teaching*, Essex, England: Longman, 2001.