## THE STUDENTS' ATTITUDE TOWARDS GOOGLE TRANSLATE

Martina Mulyani<sup>1</sup>, Fakhrunisa Afina<sup>2</sup>

1,2STKIP Pasundan, Indonesia
Email: martinamulyani@gmail.com<sup>2</sup>, ahdiatafina@gmail.com<sup>1</sup>

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## **ABSTRACT**

Google Translate (GT) is a tool commonly used by those who learn translation in higher education. While the research on GT mostly evaluated GT through experimental design, very few studies have focused on student perceptions of GT. Hence, this research intends to investigate their students' attitudes of GT performance. 24 students of higher education in Cimahi participated in the study. The data about students' attitude include behavior, cognitive, and affective attitude. They were gathered through questionnaire and interview. The result revealed that in behavioral attitude, the students' often use GT to check the meaning of unknown word and translating a sentence. Meanwhile, the cognitive attitude indicated that few students assume that GT is ethically acceptable regardless of how it is used because it is helpful in the language learning process. In the affective attitude, GT is positive because they felt like using GT in translation. Even, some of them felt helped by GT's assistance and the other reason was GT was easy to use. In short, student's regard GT as a useful tool in translation depending on the way how one uses the tool.

**Keywords**: Google translate, behavioral attitude, cognitive attitude, affective attitude

# INTRODUCTION

In the past, language learners used a dictionary to get meanings of unknown words in the target language. They consulted dictionary either for doing vocabulary exercise or for translation. Recently, students have a large collection of free online resources for translators including Google Translate (GT). It is a free multilingual machine translation service developed by Google to translate text, speech, images, sites or real-time video from one language into another. GT is a corpus-based and founded based statistical retrieval of text receiving the language data from huge web (Kirchhoff, Turner, Axelrod, & Saavedra, 2011).

GT is efficient and compatible with PC systems and smartphone systems (i.e., Android and IOS), and these features have made it very popular among users. The progress of GT is visible, and it translates over 100 languages. Hence, studies are needed to explore users' attitudes towards the use of GT in translation. Few researchers have carried out survey studies on GT ((Jolley, J. R., & Maimone, 2015);(Korošec, 2012)). The research on GT mostly evaluated GT through experimental design ((Ganjalikhani, 2014);(Hampshire, S., & Salvia, 2010)). On the other hand. Very few studies have focused on student perceptions of GT ((Jolley, J. R., & Maimone, 2015);(Korošec, 2012)). Hence, this research intends to investigate their students' attitudes, and perceptions of GT performance.

There are two kinds of translations; one is an art and the other one is a test, a method of explanation, a means to another end (Rouse, 1908). In this study, translation is a method of explanation that is used in teaching, activities in the class. Translating is making the substitution of the text in one language to another language (Nida, E. A., & Taber, 1974) who mention that a translator produces a text from the source language into the target language.

As technology develops, translation becomes easier as there are tools to help. It is Google Translate. It works by detecting patterns in documents that have already been translated by human translators. Google Translate has some strengths and weaknesses. One recent study ((Aiken, M., & Shilpa, 2011);(Balan, 2011)) showed that translations between European languages were "usually good", while those involving Asian languages often relatively lacked in quality – a facet closely tied to the (un)available of large and qualified corpora. The Aiken 2009 study established GT's usefulness in supporting large groups using up to 41 languages in a multilingual meeting while some earlier studies (Hutchins, W. J., & Somers, 1992) showed the effectiveness of GT for weather forecasts, or when working with simpler or standardized texts. "There are indications that for some language pairs (e.g., translation between closely-related languages) or in certain narrow subject domains (e.g. software manuals, development documentation).

Beside its strength, Google Translate also has some weaknesses. They are lacking of control over the translation input (the controversial issue of confidentially of data fed into the system) and output.

### **Google Translate and Students**

Language learners especially students must be the ones who usually use GT in their learning process. Based on (Munpru & Wuttikrikunlaya, 2011) survey, most of Thai EFL university students use GT for translation because of its famous. It is proven by the total number of GT user that reaches 500 million people (Turovksy, 2016). (Medvedev, 2016) mentioned that students often use GT because of its convenience that can be used everywhere – inside and outside the classroom.

In addition, (A., 2012) has surveyed 60 EFL students on their dependency on GT in learning English and the result is 75 percent of them comprehend the concepts taught in English Language Teaching classrooms by using GT. Similarly, Pena's (2011), as cited in (Baker, 2013) survey on the GT advantages in language learning indicated a similar result. As a result, students' positive experiences were revealed such as, "fast effective way to learn new vocabulary, give you a guide as to what to write" (p. 20). Pena's (2011), as cited in (Baker, 2013) survey also indicated a disadvantage of GT in language learning, which the students need to fix the translation made by GT because it is not always correct. In similar vein, (Medvedev, 2016) also found that GT often lost grammar and accuracy when it comes to long texts. (A., 2012) mentioned that sometimes GT can be not good for language learning because it produces incorrect translations. Harris (2010 as cited in (Baker, 2013)), an EFL teacher in Japan, also wrote that the result of the use of GT is the loss of a "valuable opportunity of learning how the language functions" (p. 19). (Bahri, H., & Mahadi, 2016) stated that GT does not have any advantages in reading. In (Baker, 2013) research also mentioned that GT does not helpful in writing. Additionally, using GT in learning language will lead both learners and teachers into plagiarism.

(Baker, 2013) wrote three viewpoints of students that revealed: "anxiety about ownership, anxiety about online translators" accuracy, and confidence in its permissibility". She observed that the student- participants agreed that it is unacceptable if students use GT for the whole essay because the result will be very messy and it will lead to plagiarism. It is also mentioned that GT is unacceptable if students use it without any teachers' permission.

#### Attitude

(Pickens, 2005) states that attitudes are a complex combination of things we tend to call personality, beliefs, values, behaviors, and motivations. For example, a person's attitude toward preventive medicine encompasses his or her point of view about the topic (e.g., thought); how he or she feels about this topic (e.g., emotion), as well as the actions (e.g., behaviors) he or she engages in as a result of attitude to preventing health problems. This is the tri-component model of attitudes.

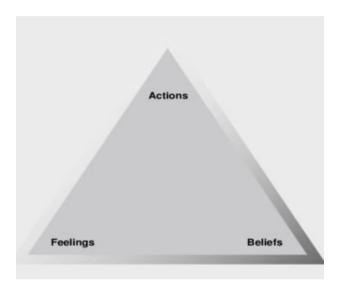


Figure 1. Tri-Component Models of an Attitude (Picken, 2005)

An attitude includes three components: an affect (a feeling), cognition (a thought or belief), and behavior (an action). Attitudes help us define how we see situations, as well as define how we behave toward the situation or object. As illustrated in the tricomponent model, attitudes include feelings, thoughts, and actions. Attitudes may simply be an enduring evaluation of a person or object (e.g., "I like John best of my coworkers"), or other emotional reactions to objects and to people (e.g., "I dislike bossy people" or "Jane makes me angry"). Attitudes also provide us with internal cognitions or beliefs and thoughts about people and objects (e.g., "Jane should work harder" or "Sam does not like working in this department"). Attitudes cause us to behave in a particular way toward an object or person (e.g., "I write clearly in patients' charts because it upsets me when I can't read someone else's handwriting"). Although the feeling and belief components of attitudes are internal to a person, we can view a person's attitude from his or her resulting behavior.

#### **METHOD**

The study is a case study. Case study is an in-depth exploration of a bounded system (e.g., activity, event, process, individual) based on extensive data collection (Cresswell, 2012). This research was conducted in two translation classes in STKIP Pasundan Cimahi. This university is chosen because it represents universities in general and this university happened to be accessible. The Participants of this study are English translation class students who have taken translation subject in which they have experienced using Google Translate in translation in their class or their assignment.

This study used two instruments: questionnaire and interview. The reason is to obtain qualitative data to get the answer to the study questions. The questionnaire contained four open-ended questions. The items were designed related to the students' behavioral aspects in the use of GT in checking and translating. The type of open-ended question used for this research is as attached below;

Table 1. Open-ended Question							
	Never	Rarely	Sometimes	Often	Very Often		
a) I use GT to check the meaning of unknown words.							
b) I use GT to check collocations. (For example, to find out which used for a person's height. "She is short" or "She is low".)							
c) I use GT to check synonyms.							
d) I use GT to translate a phrase. (For example, "a good boy", will go to school".)							

For the closed-ended questions, the researcher used 5 questions. It also consists of five points which are related to the students' behavioral aspects. The type of close-ended question used for this research is as attached below:

Table 2. Close-ended Question						
	Never	Rarely	Sometimes	Often	Very Often	
e) I use GT to translate a sentence.						
f) I use GT to translate a clause.						

	Never	Rarely	Sometimes	Often	Very Often
g) I use GT to translate a paragraph.					
h) I use GT to translate parts of an essay/article consisting of two paragraphs or more.					
i) I use GT to translate a whole essay/article.					

The interview allowed the researcher to obtain more data and clarify some of the data which already existed from the questionnaire. Thus, the researcher could clarify the students' answers in the questionnaire and got clearer answers through an interview.

The interview consisted of a set of questions that were related to cognition and affective attitude of students. There are 4 points of interview, questions number 1-3 are to know the cognition attitude of students toward the use of GT in translation. Below are the questions used in the interview; cognition attitude;

1. Please tick ( $\sqrt{\ }$ ) one statement which you think is the most appropriate! A. The use of GT is ethically acceptable regardless of how it is used.	
B The use of GT is considered as cheating depending on how it is used.	
C The use of GT is considered as cheating regardless of how it is used.	
Please explain your reason(s)! (Required)	
<b>2.</b> Do you think that GT gives advantages in terms of learning English as a Forei Language (EFL)? If so, what are they?	gn
<b>3.</b> Do you think that GT gives disadvantages in terms of learning English as a Foreign Language (EFL)? If so, what are they?	

Moreover, last question from the interview (number 4) is to find out the affective attitude. To know what they feel when they use GT in translation. Below is the question used to do the interview in affective attitude;

4.	How do	you feel when	using Google	Translate?	Please tick	x() and yo	u can tic	k
	more tha	n one answer.						
	~	Enjoy						

g	Enjoy
h	Confident
i	Shameful
j	Dependent
k.	So so

	I Others. Please, specify:	_
В.	Explain why you feel the way(s) you mentioned above! (Required)	

The answers were recorded in which the interviewer was free to modify the sequence of questions, change the wording, explain them or add to them to the completely informal interview. In terms of data gathering, the study carried out two steps.

The first step was the researcher distributed the questionnaire to the students. The researcher distributed the questionnaires to the students who already used Google Translate to help them during translation class or doing their assignments.

The sample selection technique used in this study was random because based on a preliminary study almost all students of the English study program were accustomed to using Google translate in their translation class. Data analysis is carried out by classifying the questionnaire into 3 parts before processing the data: behavior aspects, belief aspects and feeling aspects. Then, the researcher read the answer in the questionnaire one by one carefully. When all data in the questionnaire have been processed, the researcher made some tables and explanations based on the data.

#### FINDINGS AND DISCUSSION

# Students' attitudes Towards the Use of Google Translate

The researcher presents and discusses the result obtained from the questionnaire and the interview to answer the research problem. Students' attitude is divided into three parts, namely behavior attitude (action), cognitive attitude (a thought or belief) and affective attitude (feeling) which the results of the study will be explained below.

#### Behavioral Attitude

Based on students' behavior, it was found that students' have used Google Translate to check and translate. The students' use Google Translate for checking the meaning of the unknown words, synonyms, collocations, and translating a phrase, a clause, a sentence, a paragraph, a part of an essay/article consisting two paragraph or more, and also to translate a whole essay/article. All the data can be found in table 1.

		,	Table 3. S	Students' Beha	avioral Att	titude		
Questions	Mean	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Very Often (%)	Have used the featured (%)	Frequent used (%)
		N	R	S	O	VO	R + S + O + VO	O + VO
I use GT to check the meaning of an unknown word.	24	0%	23%	23%	64%	10%	89%	74%

Questions	Mean	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Very Often (%)	Have used the featured (%)	Frequent used (%)
		N	R	S	О	VO	R + S + O + VO	O + VO
I use GT to check synonyms.	20	8%	18%	51%	20%	3%	90%	23%
I use GT to check collocations.	20	13%	36%	36%	15%	0%	100%	15%
I use GT to translate a phrase.	19,6	15%	20%	38%	20%	5%	84%	26%
I use GT to translate a clause.	19,8	15%	15%	41%	23%	5%	84%	28%
I use GT to translate a sentence.	20	8%	0%	41%	41%	10%	92%	51%
I use GT to translate a paragraph.	19,8	10%	15%	36%	33%	5%	89%	38%
I use GT to translate a part of an essay/article consisting of two paragraphs or more.	19,8	8%	15%	38%	33%	5%	91%	38%
I use GT to translate the whole essay/article.	20	3%	36%	30%	28%	3%	97%	31%

As it can be seen from Table 1, there was a high tendency of checking words while using Google Translate. 89% of the participants use GT to check the meaning of unknown words, 90% to check synonyms and 100% to check collocations. On higher levels, quite high tendency of the participants to use GT is indicated to translating phrase, clause and sentence. However, 92% of the participants had experience using GT

to translate a sentence, 84% to translate a clause and 84% to translate a phrase. The highest frequency of using those features is for translating sentences.

On discourse levels (paragraph, parts of an essay/article consisting of two paragraphs or more, and a whole essay/article)., there are 97% of the participants had experience using GT to translate a whole essay/article, 20, 91% parts of an essay/article consisting of two paragraphs and 82% a whole essay/article. In contrast, very high tendencies were indicated because of the participants used GT in translating a whole essay/article.

## Cognition Attitude

Considering to the issues of cognition attitude, the students' attitude was divided into 3 parts; they are students' attitude on the ethicality of GT, students' attitude on the use of GT considered as cheating depending on how it is used, and The use of GT is considered as cheating regardless of how it is used. Based on the interview, it was found that students' attitude toward the use of GT is ethically acceptable regardless of how it was used.

## Students' Attitude on the Ethicality of GT

The researcher discusses whether GT is ethically acceptable or not. In this section, the participants were to choose one of three options (see Table 4) and explain their reasons. Their reasons could be categorized into two or more categories (see Table 5 and 6). All data were presented in percentages.

Table 4. Students' Attitude toward the Ethicality of GT

Table 4. Students	Attitude toward the Ethicanty of G1
OPTION	PERCENTAGE (%)
The Use of GT is ethically acceptable	72%
regardless of how it is used.	
The Use of GT is considered cheating	28%
depending on how it is used.	
The Use of GT is considered as cheating	ng 0%
regardless of how it is used.	

As it can be seen in table 4, on the ethicality of GT, participants think that GT is ethically acceptable depending on how it is used. Furthermore, it was stated that 72% of the participants agreed that the use of GT is ethically acceptable depending on how it is used and only 28% agreed that the use of GT is considered cheating depending on how it is used.

Table 5. Students' attitude toward the use of GT is considered as cheating depending on how it is used

PERCENTAGE (%)
48%
12%

REASON	PERCENTAGE (%)
The use of GT is seen as cheating when it is used to translate above word level.	12%
The use of GT is seen as cheating when students are not allowed to use it.	24%

Depending on how it was used, those who agreed with this statement were asked the reason why and most of them (48%) believed that its use was considered as unethically acceptable or cheating if used for tests and graded assignments and it was placed in the most popular reasons (see Table 5). Moreover, 12% believed that its use was seen as unethically acceptable or cheating when the translations produced were used without proper editing and claimed as their works (plagiarism). This finding supported the research conducted by Baker (2013) who stated that the use of GT will lead students to plagiarism. Then, 12% of them indicated that its use was acceptable when used to translate word level, but not above. Besides, 24% believed that the use of GT is considered cheating when teachers or lecturers do not allow the students to use it during classroom activities. A similar finding also found in Baker's (2013) research that GT is unacceptable if students use it without any teacher's permission.

Table 6. Students' attitude toward the use of GT is ethically acceptable regardless of how it is used

REASON	PERCENTAGE (%)
The use of GT is acceptable because GT is helpful in the language learning process.	68%
The use of GT is acceptable because GT is a Translation tool.	32%

Regardless of how it was used, those who agreed with this statement were asked the reason why and 68% of them agreed that the use of GT was always acceptable because it helped them in their language learning process, while 32% agreed that the use of GT was only for translation tool (see Table 4). This finding was also in line with research by Kumar (2012) which participants also agreed that GT could be helpful for their EFL learning.

# Students' Attitude toward the Advantages and Disadvantages of Using Google Translate

Students' attitude toward the advantages and disadvantages of using GT is helpful. 91 % of the students' argued that GT can help them in translating while, only 9% of them said that GT was unhelpful. They were allowed to mention more than one advantage to explain why GT was helpful (see Table 7).

Table 7. Students' attitude toward the advantages of using GT		
OPTION	PERCENTAGE (%)	
GT is helpful	91%	
GT is unhelpful	9%	

As seen in Table 7, GT is helpful because of some reasons such as GT enriches vocabulary, GT gives convenience, GT helps pronoun words, GT helps to know the meaning of the word, and GT helps them to determine words.

Table 8. Students' reasons why GT is helpful	
REASON(S)	PERCENTAGE (%)
GT enriches vocabulary	21%
GT gives convenience	30%
GT helps pronounce words	3%
GT helps to know the meaning of the word	45%
GT helps to determine words	6%

In addition, those who thought that GT is helpful came up with several reasons (see Table 8). 21% of them believed that GT enriched their vocabulary knowledge. Then, it was followed by GT gives convenience (30%). However, in this finding, 3% of the participants believed that GT was helpful in pronounce words like native speakers. This finding supported in (Kharbach, 2016) that students can also use GT for knowing the pronunciation of a word. Interestingly, the result that 45% of students use GT to help them to know the meaning of the word. GT gives students a guide on what to understand the second language.

Table 9. Students' attitude on the disadvantages of using GT	
OPTION	PERCENTAGE (%)
GT is unhelpful	9%
GT is helpful	91%

As seen in table 7, 9% of the participants believe that GT was unhelpful in their learning process while the rest (91%) believe that it was helpful. There are some reasons why GT is unhelpful such as GT does not provide good models, GT causes laziness, GT leads to dependence, and also GT gives chance to cheat.

Table 10. Students' reasons why GT is unhelpful	
REASON(S)	PERCENTAGE (%)
GT does not provide good models	45%
GT causes laziness	37%
GT leads to dependence	35%
GT gives chances to cheat	7%

Besides, those who thought that GT is unhelpful came up with several reasons (see Table 10). The most popular reason was that GT does not provide good models (45%). Since GT did not provide good models and not always correct, they thought that using it would bring negative effects to their language learning processes. They think that GT still had lots of grammar mistakes, so they might follow the wrong ones. This finding supported Harris's research (2010), as cited in (Baker, 2013) that the result of the use of

online translators is the loss of a "valuable opportunity of learning how the language functions" (p.19). The next most popular reason was that GT causes laziness (37%). They believed that if they used GT often, they would be lazy to think and recall their knowledge even in the easiest thing. The next was that GT leads to dependence (35%). They thought that if they excessively used GT, they could not learn a language independently, in this case, English; because they would always need GT's assistance. Afterward, only 7% thought that GT gave chances to cheat since it could be accessed everywhere and every time, even in tests.

## Affective Attitude

Regarding to students' affective attitude, as it relates to students' feeling. So, they felt so-so, dependent, enjoy, shameful, confident, and other feelings. The participants were allowed to choose more than one suggested option and write down their feelings. Based on the interview, it was found that students enjoy using GT in translation. As shown in the table below that there are 74% of students who enjoy using GT to translate.

Table 11. Students' feelings toward GT

PERCENTAGE (%)
31%%
10%
74%
15%
23%
3%

As shown in Table 11, students' feelings towards GT. They generally ticked more than one suggested choice. 74% of the participants enjoyed when they use GT for translating. They felt that the GT function is very helpful for them to translate and the other reason was that GT is easy to use. The next was "so-so" (12%). They felt that GT functions only as a translating tool, so it neither very good nor very bad. Afterward, 23% of the participants felt "confident" using GT because it was convenient. Few participants felt confident because they thought that they could use English well with GT. The feeling was "shameful" (15%). They felt so because they were English majoring students who were expected to learn English independently. The next feeling was "dependent" (10%). They believed that their English proficiencies were limited and GT brought convenience, so they felt dependent on GT. This finding supported by research from Clifford et al. (2013), as cited in Case (2015) that the use of GT only brings students' dependency. Then, 3% of the participants came up with other feelings that felt worried by GT's assistance, unsure about the translations made by GT because there are still a lot of ambiguous words if we use GT and it made them confuse because they need to rethink about the translation.

To sum up, the analysis of students' attitudes toward the use of Google Translate using Tri-Component Modals of Attitude found out that: in behavioral attitude, it was found out that students' very often using GT to checking and translating, they often use GT for checking the meaning of unknown words and this finding supported in the study

undertaken by (Kharbach, 2016) that students can also use GT for knowing the meaning of a word. This result was still interesting since the participants were students majoring in English who were expected to translate discourse levels without any help. Moreover, (Medvedev, 2016) also found that GT translations are not accurate when it comes to long texts.

Furthermore, in cognitive attitude was found that students' attitude toward the use of GT is ethically acceptable regardless of how it is used because GT help the language learning process and GT is a translation tool. A similar finding also found in research by (Baker, 2013) that GT is unacceptable if students use it without any teacher's permission. Meanwhile, students' attitude toward the use of GT is considered cheating depending on how it used because the use of GT is seen as cheating when it is used for tests and graded assignments.

In order than that, GT has some advantages and disadvantages. GT helps the students to enrich vocabulary, pronounce words, know the meaning of unknown words, and determine words. They believed that it was easy and free to use GT so they could access it anytime anywhere. This finding also supported the survey by (Groves, M., & Mundt, 2015) which stated that GT is a free web-based machine translation and easy to use. Then, (Medvedev, 2016) also mentioned that GT can be used everywhere – inside and outside the classroom. On the other hand, GT does not provide the good models, GT causes laziness, GT leads to dependence, and GT gives chance to students to cheat so some students' also said GT is unhelpful. This finding supported by Pena (2011, as cited in (Baker, 2013)) that GT does not provide good models, the students need to fix the translation made by GT because it is not always correct.

In affective attitude, it was found that students felt like using GT in translating because They felt that the GT function is very helpful for them to translate and the other reason was that GT is easy to use. This finding was in line with research by (Medvedev, 2016). It was said GT is convenience and it can be used everywhere.

## **CONCLUSION**

Based on research findings, it can be concluded students' use GT for checking and translating, the students' often use GT to check the meaning of unknown word and translating a sentence. Meanwhile, the cognitive attitude indicated that few students assume that GT is ethically acceptable regardless of how it is used because it is helpful in the language learning process. So, they use GT quite often to assist them in translating, and some of them assume that GT can be a tool right depends on how we use the tool. In the affective attitude GT is positive because they enjoyed when they using GT in translation. Few of them feel helped by GT's assistance and the other reason was GT was easy to use.

#### REFERENCES

A., K. (2012). Machine translation in Arabic-speaking ELT classrooms: Applications and implications. *International Journal of Social Science and Humanity*, 2(6), 442–445.

Aiken, M., & Shilpa, B. (2011). An Analysis of Google Accuracy. *Translation Journal*. Bahri, H., & Mahadi, T. S. T. (2016). Google Translate as a supplementary tool for learning Malay: A case study at Universiti Sains Malay. *Advances in Language and Literary Studies*, 7(3), 161–167.

- Baker, C. L. (2013). Student and instructor perceptions of the use of online translation in English composition. Mississippi State University.
- Balan. (2011). The Internet, Google Translate and Google Translator Toolkit. *Translation American Journal*.
- Cresswell, J. W. (2012). No TitleEducational Research; Planning, Conducting, and Evaluating Quantitative and Qualitative Research. USA: Phoenix Color Corp.
- Ganjalikhani, M. K. (2014). An investigation of Google translate machine in rendering English sentence structures into Persian. *Proceeding of the Global Conference On Language Practice & Information Technology*. Kinabalu.
- Groves, M., & Mundt, K. (2015). Friend or foe? Google Translate in language for academic purposes. *English for Specific Purposes*, 37, 112–121.
- Hampshire, S., & Salvia, C. P. (2010). Translation and the internet: Evaluating the quality of free online machine translators. *Quaderns*, 17, 197–209.
- Hutchins, W. J., & Somers, H. L. (1992). *An introduction to the machine translation*. London: Academic Press.
- Jolley, J. R., & Maimone, L. (2015). Free online machine translation: use and perceptions by Spanish students and instructors. *Learn Language, Explore Cultures, Transform Lives*, 181-200.
- Kharbach, M. (2016). Excellent Google Translate features every (language) teacher should know about.
- Kirchhoff, K., Turner, A. M., Axelrod, A., & Saavedra, F. (2011). Application of statistical machine translation to public health information: a feasibility study. *Journal of the American Medical Informatics Association*, 1–6.
- Korošec, M. K. (2012). Applicability and challenges of using machine translation in translator training. *Elope Language*, 7–18.
- Medvedev, G. (2016). Google Translate in teaching English. *The Journal of Teaching English for Specific and Academic Purposes*, 4(1), 181–193.
- Munpru, S., & Wuttikrikunlaya, P. (2011). A Survey of Online Tools Used in English-Thai and Thai-English Translation by Thai Students. 69–86.
- Nida, E. A., & Taber, C. R. (1974). *The theory and practice of translation*. Leiden: United Biblie Societies.
- Pickens, J. (2005). Attitudes and perceptions. In *Organizational Behavior in Health Care* (pp. 43–75). Sudbury: Jones and Bartlett Publishers,.
- Turovksy, B. (2016). Ten years of Google Translate.