# Libyan Students' Attitudes on the Use of Machine Translation in EFL Writing: A Case Study in Faculty of Languages and Translation/ Misurata University

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#### Abstract

Machine Translation (henceforth MT) is the use of a computer to convert a text from one language to another. In recent years, machine translation started to emerge as a tool in second language teaching and learning classes in order to facilitate the process of learning English as a second/foreign language. Teaching writing has been considered as one of the challenges that English Foreign Language (henceforth EFL) teachers and students face in EFL classes. Recently, EFL students around the world started to employ machine translation in their writing process. Therefore, this paper aims to investigate Libyan EFL students' attitudes towards the use of machine translation in EFL writing. In addition, this paper aims to highlight the obstacles that face Libyan students when using machine translation in EFL writing. The sample of the study consists of 32 Libyan EFL university students from the Department of English and the Department of Translation, Faculty of Languages and Translation, Misurata University, Misurata, Libya. In order to achieve this aim, data collection of this study is based on distributing questionnaires to Libyan EFL university students to investigate students' attitudes of MT in EFL writing. The numerical data collected from students' questionnaires is analysed through Excel program to present a detailed quantitative analysis. Whereas, the descriptive data collected from the questionnaires is analysed qualitatively. The results showed Libyan university students hold positive favourable attitudes towards applying machine translation in EFL writing. Libyan EFL university students believe that MT is a helpful tool that encourages EFL students to do more EFL writings. Regarding the obstacles of applying MT in EFL writing, the results revealed that the Libyan EFL students face a number of difficulties, including; the need for an Internet access while using MT, MT may have an unsatisfactory equivalent vocabulary, and MT is not sufficient with longer sentences.

## ملخص البحث:

الترجمة الألية هي واحدة من وسائل التكنولوجيا والتي تعرف على انها استخدام الكمبيوتر لتحويل في الظهور كوسيلة مساعدة من النص من لغة إلى أخرى. بدأت الترجمة الآلية في السنوات الأخيرة أجل تسهيل عملية تعلم اللغة الإنجليزية. حيث بدأ طلاب اللغة الإنجليزية كلغة أجنبية حول العالم في استخدام الترجمة الآلية في تطوير مهارة الكتابة. اذ يعتبر تدريس الكتابة أحد التحديات التي يواجها

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#### **Keywords:**

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معلمو وطلاب تخصص اللغة الإنجليزية. لذلك تهدف هذه الدراسة الى معرفة أراء الطلاب في جامعة مصراتة نحو استخدام الترجمة الألية في تطوير مهارة الكتابة باللغة الإنجليزية. بالإضافة إلى معرفة 28 المعوقات والصعوبات التي يواجها الطلاب عند استخدام الترجمة الآلية. تتكون عينة الدراسة من وقسم الترجمة، بكلية اللغات والترجمة، جامعة مصراتة، طالبة وطالبًا من طلاب قسم اللغة الإنجليزية ليبيا. ارتكز تجميع البيانات من خلال توزيع استبيانات للطلاب المشاركين في البحث. وتم تحليل ، بالإضافة الي EXCEL البيانات الرقمية المجمعة من الاستبيانات من خلال برنامج الاحصائي التحليل الكيفي والنوعي للبيانات التعبيرية المجمعة أيضا من الاستبيانات. أظهرت النتائج أن الطلاب الليبيين لديهم نظرة إيجابية نحو استخدام برامج الترجمة الألية عند الكتابة باللغة الإنجليزية كلغة أجنبية، أجنبية. وفيما يتعلق بمعوقات استخدام برامج الترجمة الألية في كتابة اللغة الإنجليزية كلغة أجنبية، كشفت النتائج أن المشاركين الليبيين يواجهون عداً من الصعوبات، منها، الحاجة إلى توفر الإنترنت كشفت النتائج أن المشاركين الليبين أيضا قد تعطي الترجمة الآلية مفردات غير مرضية، بالإضافة أثناء استخدام برامج الترجمة الآلية غير كافية عند التعامل مع الجمل الطويلة.

#### 1. Introduction

Learning English as a second or foreign language is becoming more and more important. Previously, various teaching techniques were developed in order to suit Language learners' needs in language classrooms. However, advanced technologies started to be used in all educational levels of teaching and learning. Recently, these technologies started to emerge in EFL teaching and learning classes.

Machine translation tools have significantly evolved over the years and considered as an important computational technology that aim at automatically converting text from one language to another without human intervention. These translation tools rely on a combination of linguistic rules, probabilistic models, and machine learning to achieve an equivalent translation.

Historically, efforts in the field of machine translation began in the early 1950s and primarily relied on linguistic rules and dictionaries. However, machine translation during that time was often incomplete and frequently inaccurate. With advancements in technology and increased computational capabilities, new developments in machine translation emerged. It became possible to utilize probabilistic models and machine learning to improve program performance and increase translation accuracy. Techniques such as deep neural networks and deep learning have emerged, allowing for better language understanding, context analysis, and better accurate translation.

Various updated machine translation programs started to emerge and to be used in different fields. To mention some, Google Translate is an online machine translation tool that translates texts, documents, and websites from one language to another. It contains more than 109 languages from many globally recognized languages. Google Translate is able to translate moving pictures and handwritten texts as well. Moreover, Chatbot Generative Pre-trained Transformer (henceforth Chatbot GPT) is an artificial intelligence program based on deep neural network technology. Chatbot GPT is able to create a language model that can interact with users in a natural and understandable way. It is trained on a large dataset of natural language, enabling it to understand questions and queries and generate logical and appropriate responses. Chatbot GPT is characterized by its ability to generate consistent and highly accurate responses, comprehend dialogue context, and provide a natural and human-like interaction. Reverso is translation software that supports translations in 18 languages. Reverso

is used by typing texts or simply by speaking out the words to get desired translations. Reverso is used to assist users in improving their linguistic skills and expanding their vocabulary knowledge. Translated texts are provided with related examples and explanations to help users further master writing, speaking, and reading skills. Additionally, Dict Plus is a translation program that is used instead of handling dictionaries. It is free and highly accessible. Furthermore, DeepL is an impressive machine translation software that is used for accurate and nuanced translations. DeepL only offers translation of 26 languages.

Therefore, with the availability of these advanced technologies, applying machine translation programs in EFL learning have been an important issue to investigate, including the investigation of the benefits of using machine translation in EFL education (Garcia & Pena, 2011). Various studies have investigated the most frequent machine translation tools that have been utilized by EFL learners in EFL classes (Ducar & Schocket, 2018). In addition, a number of studies have investigated the effect of using machine translation on improving learners' vocabulary knowledge (Siowai, 2023), and students' EFL writing (Lee, 2020). However, there is lack of studies that have conducted on the same area in the context of Libya.

#### 2. Statement of the Problem

In recent years, machine translation started to be used in EFL classes to develop different skills of language learning (O'Neill, 2019; Çakır & Bayhan, 2021; Ismail Omar, 2021; Siowai, 2023). However, in some countries such as Libya, the use of educational technology in general is still improving. Therefore, the starting point to make a beneficial usage of machine translation is by investigating students' attitudes towards using machine translation in EFL writing, since, there is a few studies have been conducted in this area in Libya. Therefore, it is worth investigating Libyan students' attitudes towards applying machine translation in EFL writing. The reason behind focusing on EFL writing is that writing is one of the challenging skills that EFL teachers and learners aim to improve in EFL university classes.

## 3. Purpose of the Study

The main objective of the current study is to investigate Libyan students' attitudes towards applying machine translation in their EFL writing. Writing is considered as one of the important skills that EFL instructors aim to develop in EFL university classes. In addition, this study aims to investigate the obstacles and challenges that face these students when using machine translation as a helping tool to have much adequate writing products.

## 4. Significance of the Study

This study signifies from the importance of applying advanced technologies in Libyan EFL teaching and learning classes. Libyan EFL teachers and learners should be encouraged to apply different forms of the widespread technologies. To illustrate, utilizing machine translation on EFL classes has positive impacts on improving the quality of EFL students' writings (O'Neill, 2019; Lee, 2020; Lee & Briggs, 2021; Permatasari & Agustine, 2022; Tsai, 2022). Therefore, this study is significant, especially, for Libyan EFL learners. It investigates the use of machine translation tools in order to improve an important skill in second language

teaching and learning in the context of Libya. This study is intended to explore Libyan students' attitudes towards using machine translation in EFL writing. In addition, the second objective of the current study is to highlight the difficulties that Libyan EFL students face when applying machine translation tools in EFL writing.

#### 5. Research Questions

The study addresses some vital questions such as: What are the attitudes of Libyan students towards applying machine translation in EFL writing? What are the obstacles that Libyan students face when using machine translation in EFL writing?

#### 6. Literature Review

Machine translation is a tool that is used to save effort and time in situations where there is cross-language communication (Hutchins, 2005). Hutchins describes how machine translation works. He writes that;

Clifford, J., Merschel, L., & Munné, J. (2013). Surveying the landscape: What is the role of machine translation

in language learning? Research in Education and Learning Innovation Archives, 10, 108-121. https://doi.org/10.7203/attic.10.2228

There is a MT engine (functioning as a 'black box'), into which text is put at one end and from which text is received at the other. The input can be either unedited ('raw') or it can be 'controlled' in some way, which means that either it can be 'pre-edited' by inserting various markers in the text to indicate how ambiguities or difficulties can be overcome, or it can be composed in a 'controlled language', a language designed to be regular and compatible in some way with a specific MT system. (P.4)

In 2012, Lawrence Summers, the former president of Harvard University, said that "English's emergence as the global language, along with the rapid progress in machine translation make it less clear that the substantial investment necessary to speak a foreign tongue is universally worthwhile". However, machine translation is considered as a helping tool that can assist students in the process of learning a language, particularly, English language (Ardila, 2021).

Nowadays, applying advanced technologies such as machine translation tools in various educational fields has become increasingly widespread around the world. Thus, researchers tried to explore the implication of machine translation tools in EFL classes by EFL educators and instructors and their effectiveness on improving EFL students' skills. To start with, in 2018, Ducar and Schocket investigated the strengths and limitations of using different programs of machine translation, particularly, Google Translate in EFL classrooms. Ducar and Schocket designed pedagogical solutions to control the usage of machine translation and the various alternative technologies. Furthermore, the findings recommended future research to be conducted to ensure learners' academic growth for Intercultural Communication (Ducar & Schocket, 2018).

EFL learners commonly use machine translation tools like Google Translate app in their EFL learning. Additionally, it was recommended that EFL instructors should encourage EFL learners to use Google Translate as a dictionary in order to check spelling and

pronunciation (Bin Dahmash, 2020). Similarly, it was found that using machine translation in EFL classes facilitate the process of learning a language. It was proved that machine translation is a useful pedagogical tool that EFL learners can apply as a digital resource in EFL classes (Çakır & Bayhan, 2021). Moreover, it was proved that Google Translate is an effective tool that effects positively on students' performance in EFL writing (Tsai, 2022).

Recent studies have proved independently that MT has positive impact on students writing in EFL classes. To start with, O'Neill (2019) conducted a study that aimed to investigate the impact of using online translation and dictionaries in writing. The study was designed to compare between using online translation after training and without training and using online dictionaries after training and without training, in addition to utilizing one of these techniques in writing. The findings concluded that students who used Google Translate after training achieved the highest scores in writing tasks, while the second highest scores were recorded by the students who used online dictionaries. However, the lowest scores were recorded for the students who used neither tools (O'Neill, 2019).

Previous research found that students hold positive perspectives of the impact of applying machine translation on the micro and macro levels, particularly, on the spelling and on conveying ideas, respectively. Additionally, it was suggested that the impact of using MT depends heavily on how the activities are designed. For instance, the guided use of machine translation model activities that are adapted from O'Neill (2016, 2019b), effected significantly on Korean university students' academic writing (Lee & Briggs, 2021).

Lee (2020) investigated the impact of machine translation on EFL writing. Data collection of the study was based on conducting questionnaires, interviews, and screen recordings, whereas, data analysis was based on automatic text analyzer Coh-Metrix and human ratings. The findings revealed that MT has positive effect on students' writing. Additionally, the findings reveals that MT is an effective tool that can be used to improve students' writing by decreasing lexico-grammatical errors and encouraging students' revisions. However, Lee insists that teachers should guide students while using it in order not to succeed its limitations. The findings concluded that EFL students have positive attitudes towards applying machine translation in EFL writing classes. Additionally, machine translation helps EFL learners in improving their EFL writing proficiency in EFL classes, suggesting more instructions about the suitable strategies of using it and involving it in the curriculum for language students (Lee, 2020).

Ismail Omar (2021) investigated that impact of using machine translation on students' vocabulary acquisition. The participants of the study were Arabic-speaking L2 learners. The findings showed that machine translation needs higher metacognitive skills such as critical thinking and using words in context. Additionally, the findings revealed that optimal solution is not provided by online translators to overcome the obstacles of using machine translation to improve vocabulary knowledge.

Çakır and Bayhan (2021) conducted a study to investigate the role of machine translation in translation classes. The participants consisted of 49 students specialized in an English Language and Literature, department of a state university in Turkey. Data collection was based on open-ended questionnaires and semi-structured interviews. The findings revealed that utilizing machine translation assisted students when doing translation tasks. The findings suggested that machine translation tools should be developed to meet the needs of learners while translating some certain cultural expressions (Cakır & Bayhan, 2021).

Lee and Briggs (2021) conducted a study that aimed to examine the effectiveness of using machine translation on Korean university students' academic writing. The participants are 58 Korean university students. The study was conducted by doing a comparison between students' original L2 texts to and machine translation texts. The results proved that using machine translation decreased the number of errors committed in students' writings. Additionally, it was concluded that applying machine translation in EFL classes depends on the pedagogical implications of EFL teachers inside EFL writing classes (Lee & Briggs, 2021).

Lee (2021) investigated the effect of utilizing machine translation on lower proficiency level writers. Four steps were investigated, namely: planning, drafting with MT, revising MT output, and individual writing with MT. The findings illustrated that EFL students can gain confidence and motivation and develop self-autonomy and self-directed. The findings of the study suggested that applying machine translation in EFL writing classes needs peer and teacher feedback in order to have the significant effect of machine translation usage, particularly for low-level EFL students (Lee, 2021).

A recent study have investigated the impact of utilizing Google Translate as a tool in English foreign language writing. The participants were Chinese English major university students and less-proficient non-English major students. Participants were asked to watch a passage from a movie and then to write a reflective essay. Students wrote the passage in their first language and then used Google Translate to translate the written passage into English to review and revise it with their self-written English passage. Additionally, questionnaires were distributed to investigate students' perceptions towards the strategy they used. Students' writings were assessed by using online computational assessments. The findings showed that utilizing Google Translate affects positively on the performance of writing concerning the content, the vocabulary, the spelling, and the grammar. The passages that were revised by the students after applying Google Translate were noticeably improved than the passages that were written without using Google Translate, especially for the non-English majors. Therefore, using machine translation in EFL writing have favorable effects on students' EFL writing (Tsai, 2022).

Another study conducted in 2022, by Permatasari and Agustine, aimed to examine and determine the effect of MT on Japanese writing skills. Researchers of the study used an experimental design. 60 Japanese students participated in the study who are already receiving a writing course. The results showed that using MT had significantly affected on completing writing assignments. However, the study recommended that students should review their final works and go through the editing stage properly (Permatasari & Agustine, 2022).

Moreover, another research entitled 'Neural machine translation in EFL classrooms: learners' vocabulary improvement, immediate vocabulary retention and delayed vocabulary retention, Computer Assisted Language Learning', proved that applying machine translation in EFL classes improves students' vocabulary knowledge. The researcher of the study conducted a quasi-experimental design to measure the extent to which utilizing machine translation when doing the editing process. The findings showed that the benefits of applying machine translation depends on the level of the students. To illustrate, low-level students recorded higher vocabulary improvement and immediate vocabulary retention than high-level students (Siowai, 2023).

McMurtrie (2023) held a study titled 'Exploring the Ethical Dimensions of Using ChatGPT in Language Learning and Beyond'. McMurtrie found that utilizing ChatGPT requires three ethical considerations, namely, accessibility, authenticity, and academic integrity. McMurtrie wrote that users of translation tools can benefit significantly and overcome the obstacles by providing much consideration to the ethical issues and structuring the students on the correct strategy of using these different translation tools.

#### 7. Related Studies

Recent studies have focused on investigating students' attitudes and use of machine translation in EFL writing. To start with, Alhaisoni & Alhaysony (2017) conducted a study to investigate Saudi EFL students' attitudes towards applying Google Translate. The participants consisted in the study were 92 Saudi EFL university students. Data collection was carried out through distributing questionnaires to university English major students. The findings showed that the majority of the participants use Google Translate to improve their vocabulary, writing and reading skills. Additionally, it was revealed that the most frequent purpose of using Google Translate is to check unknown words, to do their writing assignments, and to read an English textbook.

Furthermore, Ardila (2021) holds a study in Indonesia to investigate the perception of students in Islamic Education Department in using machine translation in learning English subject. Open-ended and close-ended questionnaires were distributed to 138 students of Islamic Education Department. The findings showed that students' perception of using MT is positive. Students stated that machine translation is a beneficial tool that can help them translate difficult words, sentences, and paragraphs from English to Bahasa or Bahasa to English. The findings illustrated that the participated students have various problems and difficulties concerning the use of machine translation. However, students assumed these problems can be solved effectively. Therefore, the study concluded that the positive impacts of using machine translation is greater than the negative impacts.

To end up with, Ryu, et al. (2022) investigated students' perceptions of the guided use of machine translation model and their perceptions of its impact on their foreign language writing. The study was designed to give students an instructional session on how to use machine translation effectively. Then, students were asked to use machine translation when doing writing assignments, in addition to providing students with regular feedback on their usage of machine translation. Additionally, pre- and post-surveys were conducted to the students to examine their perception of using the provided model of machine translation. The results of the study concluded that students hold positive impact towards this model of machine translation. Additionally, it was concluded that using machine translation helps students to improve their confidence and self-perceptions of their fluency in foreign language writing.

Therefore, as it is presented above, recent previous studies have shed the light on investigating EFL students' attitudes as a starting point towards the implementation of this advanced educational technology. However, all the studies that are founded have conducted in various countries where English is a foreign language. Nevertheless, there is a few studies have conducted in the Libyan context. Thus, it is important to shed the light on investigating Libyan EFL students' attitudes and views about the implementation of MT in EFL learning.

## 8. Methodology

The current paper follows an embedded Design. It is a type of mixed methods design. Ivankova and Creswell defines embedded design as "one type of data collection and analysis (quantitative or qualitative) is embedded or nested within a predominant quantitative or qualitative design to answer a secondary research question" (2009, P. 157). This study is based on collecting quantitative and qualitative data. It involves collecting, analyzing, and mixing both quantitative and qualitative data in a single study to investigate a particular research problem. According to Creswell (2008), collecting research data quantitatively and qualitatively provide a better understanding of the research problem. Roopa and Rani (2012) writes that questionnaire is a valuable method that enables researchers to get statistical information from a large number of individuals. Questionnaires are used to reflect the views, perceptions, and attitudes of the participants. Therefore, this study is based on collecting quantitative and qualitative data through structured and open-ended questionnaires. Quantitative and qualitative data is collected and analyzed sequentially or concurrently.

#### 9. Participants and Setting

Participants of this study are 32 Libyan EFL university students, 22 of the participants are females and 10 of the participants are males. The participated students are from the Faculty of Languages and Translation, Misurata University. Students are from two departments, namely; Department of English and Department of Translation. The participants have been chosen randomly among those who have already done four writing courses. Namely; writing I, writing II, writing III, and academic writing.

Concerning the setting of the study, the current study is conducted in Misurata city in Libya. It is mainly conducted in the Faculty of Languages and Translation, University of Misurata.

## 10. Data Collection and Analysis Instruments

This paper is designed to investigate Libyan students' attitudes towards using machine translation when writing in English. In addition, this study aims to highlight the obstacles that Libyan students face when applying this technology in EFL writing. Therefore, data collection of this paper is based mainly on distributing questionnaires to students of the Faculty of Languages and Translation, Misurata University.

Student's questionnaires are designed by an online-questionnaire (Google form). The questionnaire is divided into two sections; the first section of the questionnaire consists of five open-ended questions. The questions aim to ask the participants about their usage of machine translation in EFL writing and the most frequent machine translation tools that these participated students use in EFL writing. The last question of the first section of the questionnaire consists of fifteen statements with five likert scale responses; 'strongly agree', 'agree', 'undecided', 'strongly disagree', 'disagree'. All the statement are in favour of using machine translation in EFL writing. The second section of the questionnaire consists of three open-ended questions. The questions are designed to highlight the obstacles that Libyan students face when they apply machine translation in EFL writing.

The collected data from students' questionnaires is analysed statistically and descriptively. The results of students' attitudes are analysed statistically by utilizing Excel program. Thus, students' attitudes are presented in the form of graphs and tables. Whereas, a descriptive analysis is used to present the obstacles that Libyan EFL university students face in the application of MT in EFL writing.

## 11. Validity and reliability

To ensure that the data collection of this study is reliable and valid, a pilot study has been conducted to examine the validity and reliability of the questionnaires that are used as a main data collection method.

#### 12. Results and Discussion

This section provides the results of students' responses to the questionnaires. It represents the results of students' attitudes towards applying MT in EFL writing. In addition to the results concerning the obstacles that EFL students face when applying machine translation tools in EFL writing.

To begin with, the following graph represents the percentages of the male and female students, (31% and 69%, respectively). It is obvious that the majority of the participated students are females (22 female students). This is because the overall number of females in the Faculty of Languages and Translation exceeds the number of male students.

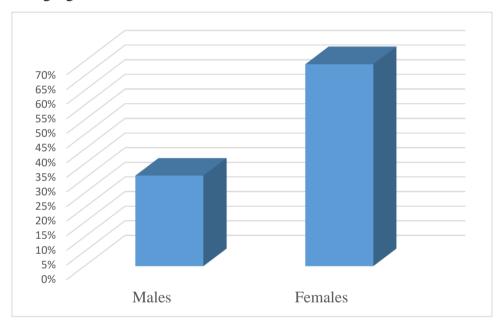


Figure 1: The gender of the participated students

The graph below shows students' age. It can be noticed that the highest number of students are between 21 to 25 years old, about 72%. Whereas, the lowest number of the participated students are between 18 to 20 and between 26 to 30 years old, 16% and 12%, respectively.

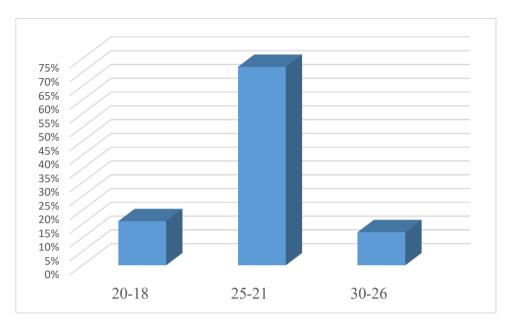


Figure 2: Distribution of students' age

After collecting students' responses to the questionnaire, participants' responses for the questions can be described as follows:

# Q1: Do you use machine translation in EFL writing? If yes, Why?

This graph represents students' response to whether they use MT in EFL writing or not. 84% of the students chose "Yes" while 16% of the students chose "No". It means that 27 of the overall number of the participants use MT while only five of them do not use MT in EFL writing. This illustrates that the majority of the faculty students use MT in EFL writing.

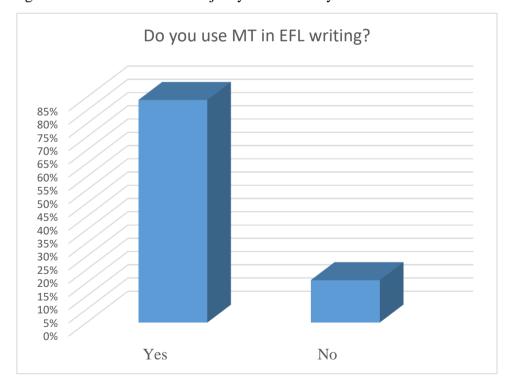


Figure 3: Students' usage of MT

The following are students' responses to the reasons why they use MT in EFL writing;

- 1. To check the spelling.
- 2. Search for appropriate vocabulary.
- 3. To write grammatically well-structured sentences.
- 4. To be able to express the ideas.
- 5. To use suitable cohesive device, thus, to achieve textual coherence.
- 6. Search for academic words.
- 7. To check the written text.
- 8. To search for equivalent vocabulary.

# Q2: What are the MT programs have you used to help you in EFL writing?

According to students' responses to this question (presented in figure 4), *Google Translation* is the most frequency used app. 50% of the participated students use *Google Translate* as a main helping tool in EFL writing. *Dict Plus* is the second frequency used app in EFL writing. Other used machine translation tools are; *Reverso*, *Chat GPT*, *Deeple*, only 10% for each one. This could be due to some difficulty in accessing these apps.

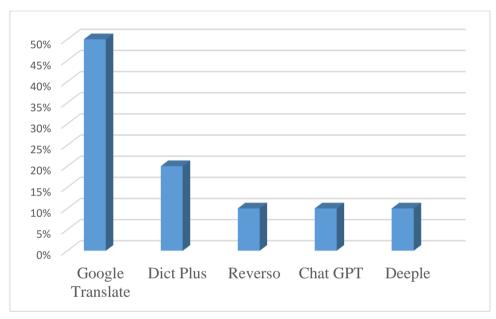


Figure 4: Frequency usage of MT apps

# Q3: Based on your experience with machine translation, when is it most useful to use it in EFL writing?

The following graph presents students' responses of the use of machine translation in various writing process, namely; pre-writing, while-writing, editing, revising, and as a dictionary. As the diagram shows (Figure 5), the highest bars are concerened for participants' use of MT in the editing and while-writing stages, 81% and 75% respectively. The third highest bar indicates that 72% of the participants use MT as a dictionary to help them in EFL writing. The lowest bars are concerned with the use of MT in revising and pre-writing stages. 63% of the participants use MT to revise their writing, while only 59% of them use MT in the pre-writing stage. This indicates that the majority of the participants use MT in order to write the content, do the editing, and check the vocabulary. However, the participants neglect the use of MT in the pre-writing and revising stages.

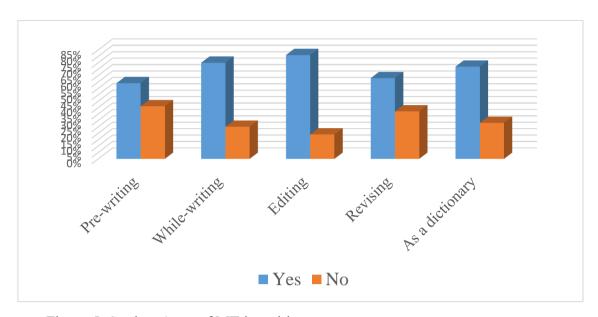


Figure 5: Students' use of MT in writing processes

# Q4: According to your usage of machine translation, put the following purposes in order from the most effective to the least effective.

Checking spelling; checking grammar, clarifying meaning, checking vocabulary, writing short phrases, writing sentences, and writing paragraphs.

Figure 6 presents participants' purposes of applying MT in EFL writing. It can be noticed that most of the participated students believe that checking spelling is the most effective purpose of using machine translation concerning EFL writing. The second important purpose is checking vocabulary. The third important purposes are clarifying meaning and writing sentences. The fourth purpose is writing paragraphs. However, the participated students believe that writing short phrases and checking grammar are the least effective purposes for using MT in EFL writing.

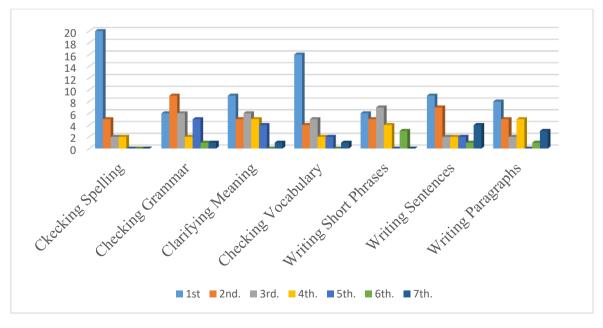


Figure 6: The purpose of using MT in EFL writing

The following diagram shows students' responses to the statements concerning the fifth question in the questionnaire. In other words, it represents students' responses to the statements that are in favour of using machine translation in EFL writing. The highest agreement columns are concerned with statement 3, statement 5, statement 7, statement 12, and statement 14. The statements are; 'MT helps me in writing the contents of an essay', 'MT helps me in correcting my errors when writing in English', 'MT helps me in choosing appropriate vocabularies in writing', 'MT is helpful in EFL writing' and 'MT helps me to improve my writing skill'.

It can be seen from figure 7 that the 'agree' columns are the highest columns in each statement. Whereas, the lowest columns are' disagree' columns. This indicates that the participated students believe that using machine translation helps them in EFL writing.

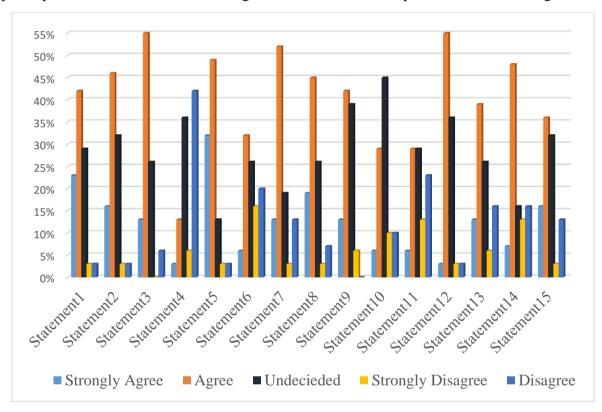


Figure 7: Students' responses to the statements

Additionally, it can be noticed that students disagree with the fourth statement, which states that "I use MT in every EFL writing". This indicates that they believe that MT should not be used in each writing assignment. Thus, students disagreed that they should depend heavily on MT programs concerning the writing assignments. Moreover, it can be seen that the 'undecided' column for statement number 10, which states that 'MT helps me in choosing academic linking words' is much higher than the other responses. This may indicate that students are not sure about the effectiveness of MT on choosing suitable academic linking words.

Generally, it can be concluded that students believe that using MT helps in writing the contents of an essay. In addition, the majority of the participated students believe that MT is a helpful tool that helps them in EFL writing.

The following table illustrates a detailed analysis of students' responses to the statements.

	Statements	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1	MT is a beneficial tool in EFL writing.	23 %	42%	29%	3%	3%
2	MT helps me to express my thoughts more freely in writing.	16%	46%	32%	3%	3%
3	MT helps me in writing the contents of an essay.	13%	55%	26%	0%	6%
4	I use MT in every EFL writing.	3%	13%	36%	6%	42%
5	MT helps me in correcting my errors when writing in English.	32%	49%	13%	3%	3%
6	MT helps me in organizing the ideas of the paragraphs.	6%	32%	26%	16%	20%
7	MT helps me in choosing appropriate vocabularies in writing.	13%	52%	19%	3%	13%
8	I use MT to find an equivalent in the target language.	19%	45%	26%	3%	7%
9	MT helps me to use correct and suitable structures for the sentences.	13%	42%	39%	6%	0%
10	MT helps me in choosing academic linking words.	6%	29%	45%	10%	10%
11	MT helps me to write in an academic way.	6%	29%	29%	13%	23%
12	MT is helpful in EFL writing.	3%	55%	36%	3%	3%
13	MT encourages me to do more writing practices.	13%	39%	26%	6%	16%
14	MT helps me to improve my writing skill.	7%	48%	16%	13%	16%
15	I would you use MT in future EFL writing	16%	36%	32%	3%	13%
L		<u>l</u>	l			1

As it can be seen from the table above, the highest percentage of each column are located in the "agree" response. In other words, the highest percentages of the participated students agreed with the statements that are in favour of applying MT in EFL writing. The participated students believe that MT is a beneficial tool that is used in EFL writing. Students revealed that MT helps them to express their thoughts more freely in writing. MT helps these students in writing the contents of an essay. Additionally, students agreed that MT helps them in correcting the errors committed in writing, in organizing the ideas of the paragraphs, and in choosing appropriate vocabulary in writing. Moreover, Libyan EFL students believe that MT helps in using correct and suitable structures for the sentences, in finding an equivalent in the

target language, and in writing in an academic way. It is worth mentioning that the majority of the participants do not know how to use MT in choosing appropriate academic linking words. This suggests that students need some guidance concerning the use of MT in choosing academic linking words.

Finally, the last statements suggest that applying MT in EFL writing helps and thus encourages EFL students to do more writing practices. Participants revealed that they would you use MT in future EFL writing, since, MT helps these students to improve their writing skill.

Concerning the second section of the questionnaire, the main aim of this section is to ask the participated students about the difficulties that they face when using machine translation in EFL writing. According to students' answers, the difficulties of using machine translation are as follows:

- 1. The need for an Internet access when using MT programs.
- 2. Having an inaccurate translation in some cases.
- 3. Students should recheck the meaning after using MT.
- 4. When using MT for longer sentences, meaning can be lost.
- 5. Problems with lexical equivalence.
- 6. Difficulty in expressing an accurate meaning.

These are the obstacles that Libyan students at Faculty of Languages and Translation in Misurata University mentioned. It can be concluded that these difficulties can be solved by the help of the instructors and by providing students with Guided Usages and appropriate techniques in order to get desirable achievements concerning using MT in EFL writing.

# 13. Conclusion and Recommendations

Recently, machine translation has rapidly become an essential tool that is used by almost all EFL students all around the world to assist them in developing various language skills; including; vocabulary acquisition, translation and writing skill. Various recent studies have repeatedly investigated the application of machine translation in EFL teaching and learning classes, including; students' perceptions of using MT in EFL classes, the impact of applying MT in improving students' language skills. Therefore, it is worth investigating the application of MT in the context of Libya. Thus, the main objective of the current study is to examine the attitudes of Libyan EFL students at Misurata University on applying machine translation tools in EFL writing. The participants of this study consist of 32 Libyan students from the Department of English and the Department of Translation, Faculty of Languages and Translation, Misurata University, Libya.

Data collection method of this study is based on distributing questionnaires to the participated students. Quantitative and qualitative analyses are used to analyse the numerical and the descriptive data from students' questionnaires. The findings revealed that Libyan EFL students in the Department of English and the Department of Translation, at Faculty of Languages and Translation, Misurata University believe that using MT in EFL writing helps students in the process of writing. In other words, Libyan students at Faculty of Languages and Translation, Misurata University, have positive and favourable attitudes towards applying MT tools in EFL writing. Students revealed that MT tools encourage them to do more writing tasks. Concerning the difficulties that Libyan EFL students at Faculty of Languages and Translation face when using machine translation tools in EFL writing, the findings showed that there are few difficulties such as, most of MT programs do not work without Internet access like Google Translate, having an inaccurate translation in some cases, problems with lexical equivalence. In addition to the difficulties of expressing an accurate meaning because of cultural differences between the translated languages. However, these difficulties

mentioned by Libyan EFL students can be solved with much effort from student' side and instructors help as well in order to get satisfied benefits of this modern technology.

To sum up, MT programs have various usages despite their usage for translation. The findings of this study recommend EFL university instructors to implement machine translation programs as a modern educational technology in order to improve students' writing skill. Students' hold positive attitudes towards the application of MT programs in EFL writing. Therefore, much effort from EFL instructors and EFL university students should be put and investigated in depth to make a significant use of MT in EFL writing. The focus should be on searching for suitable techniques to implement MT in EFL writing classes to improve students' writing skill.

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