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| RESEARCH ARTICLE

The Role of Machine Translation in Language Learning and Teaching

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| ABSTRACT

Online machine translation tools have the potential to revolutionize the teaching of foreign languages. The efficiency and accuracy of translation are approaching human capabilities. Apart from translating letters and sentences, there are also machines that can translate speech, and they come in different varieties. Speed, multilingual compatibility, and mobility are some of this technology's benefits, but it also has drawbacks and affects users. Despite its numerous accuracy issues, machine translation is currently unable to fully replace humans. It is easy to apply machine translation once we are aware of its benefits and drawbacks. After all, users can comprehend and use the words correctly without the need for machine translation if they increase their language proficiency. This study was based on the most recent journals. The process of converting written content from one language to another is termed translation. Oral translation likely originated when humans first sought to communicate, while written translation can be traced to the earliest documented texts. Although various factors contributed, the 18th century, coinciding with the Industrial Revolution, represents a significant advancement in the field of translation.

| KEYWORDS

Machine Translation, MT Translation, Teaching and Learning

| ARTICLE INFORMATION

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1. Intruduction

In translation studies that focus on the socio-cultural functions and effects of translation (Cronin 2003, 2013) as well as the tangible material conditions of translating (Olohan 2011; Pym 2011; also Littau 2011), the relationship between translation and technology has recently attracted increasing theoretical attention. These efforts can all be interpreted as initial attempts to confront changes in the field of translation studies—changes deemed significant and profound enough to refer to a "translation revolution" (Cronin 2013), despite differences in perspective, empirical scope, and conceptual abstraction level.

For language learners adding to the professional foreign language teaching community, the spread of solemnly accurate consumer-oriented free online machine translation tools—in particular Google Translate— offers possibilities and difficulties.

Machine translation is related to the use of computer software to mechanically translate text or speech from one language into different language.

In this day of information technology, it is now the major instrument available. MT is extensively employed on a global scale considering the growing demand for applying various sorts of translation (Almutawa & Izwaini, 2015).

Many EFL learners nowadays use MT technology as a fundamental tool that helps them to learn. Clearly, almost all students with varying degrees of difficulty now use MT to support their activities in learning a foreign language, including translating.

Numerous researchers have focused their investigations on ascertaining the attitudes of EFL learners towards and their utilization of MT in foreign language acquisition (Bin Dahmash, 2020; Alharbi, 2023), encompassing diverse EFL activities such as reading, writing, and vocabulary development (Niño, 2009; Omar, 2021).

This study will concentrate opinions of MT tools among teachers and language learners.

Most likely, translation began when people from different countries first came into contact with one another. However, it was not until the first written texts were created that it began to be written. Since then, it has evolved, and various professional associations and schools have even been established for it. However, these days, online translations brought about by globalization (the internet) and machine translations come to mind whenever the word translation is mentioned.

2. Literature Review

2.1 Overview of MT

There has been much discussion about how the traditional translation model is impacted by digitization and the numerous advancements in translation technology, including tools, techniques, and content. It has already been suggested that the idea of text itself is problematic (Pym, 2011). The discussion of the traditional competence model in the higher education translation curriculum has logically led to these reflections on the role of technology in translator education. not at all the long-standing, multi-layered models of translation competence (see, for example, PACTE 2003 and NAATI 2015), which are both based on the idea that technology is a crucial component of practical knowledge. Instead, there is a tendency toward "minimalist approaches" in the field of technology. According to Austermühl (2013), "is a skill that can be developed in three basic competencies (Pym): 1) Learn to learn; 2) Learn to trust or distrust data; and 3) Learn to review translations as texts even if they are phrases segmented by a memory for translation.". Rule-based MT and corpus-based or statistical MT are the two main categories into which machine translation (MT) falls (Sabtan, 2020). Bilingual dictionaries and manually constructed grammatical rules are the foundation of rule-based machine translation (MT) systems (Hutchins and Somers, 1992; Somers, 2003). Somers and Diaz (2004) point out that corpus-based or statistical MT, on the other hand, uses a data-driven methodology that makes use of a paragraph Almuselhy(2024)..

In contrast to students, most teachers do not see the educational benefits of using online translators in language classes, and many view their use as academic dishonesty (Clifford et al. (2013).

2.2 Integrate MT technologies into learning environments

Recent works regarding online translators in contemporary language teaching (Niño, 2009; Benda, 2013; Ducar and Schocket, 2018) examine in further detail the benefits and drawbacks of their use in academic settings. A subset of these research specifically examines educational environments that emphasize the acquisition of second language writing as an advantageous context for the incorporation of machine translation into traditional language instruction.
While numerous studies indicate that instructing students in the use of online translators enhances their motivation and L2 writing proficiency, insufficient data exists to determine whether the utilization of online translators in educational settings hinders students' ability to independently compose in the target language without such tools. Numerous educational linguists have examined how the utilization of online translators might enhance language learners by providing immediate feedback on their spoken and written language, thereby increasing their metalinguistic awareness (Correa, 2014; Enkin and Mejias-Bikandi, 2016; Aikawa, 2018). The findings indicate that utilizing technology to obtain feedback on their spoken and written language enables students to employ online translators to enhance their language awareness .

3. *The advantages and disadvantage*

3.1 The advantages

The following are some advantages of using MTE(Saba, 2015). :

1. The fact that it's free is a business advantage that everyone values. A small fee is necessary, though, if . is being used via an API.

2. It is simple and quick to translate pages and texts of any length and format, including emails, documents, web pages, and more.

3. Because it is instantaneous and online, translations are accessible at any time and from any location, making it convenient.

4. There are several languages available and prepared for translation.

3.2 The disadvantages

When using MTE, there are several disadvantage (Saba, 2015):

1. Because it doesn't offer a fully comprehensive translation, it is limited, which restricts what could be translated

2. Many languages are still excluded despite the fact that these services provide a wide variety of languages3. Expecting natural, fluid translations is not feasible because the services are mechanical and only offer direct, mechanical word translation. Because context is ignored, MTE will translate the text exactly as it is, disregarding the content's context. It ignores the text's purpose and target readership.

4. Methodology of the study

Any English language department of any Iraqi university conducted a questionnaire study to find out how machine translating affected language learners. Comprising five questions on machine translation dependency, quality evaluation, and frequency of use, the survey consists of fifty students. This study has made use of questions found here.

1. Do you regularly employ automatic or machine translating tools?
2. Regarding the accuracy of automatic and machine translation, what are your impressions?
3. In what way do you assess the machine translation's translating capability?
4. How do educators and their students see and apply machine translation?
5. In what effective ways do language teachers include MT technologies into their classrooms?

5. Results of study

According to the survey results, machine translation is highly favored by language learners. The overall percentage of people who "use it often," "sometimes use it," or 75 percent are shown in Fig 1.

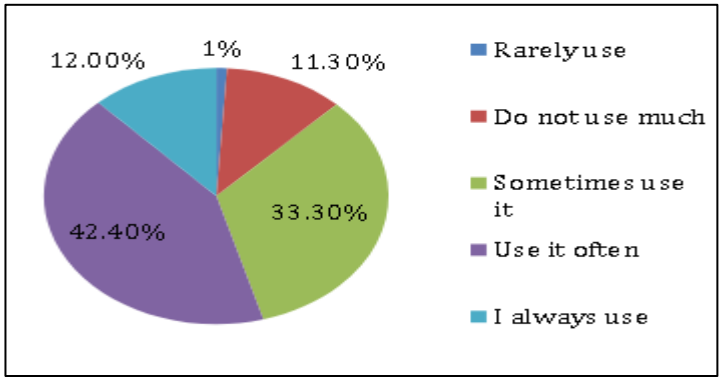

Fig. 1. The frequency with which machine translation is used.

In response to the second query, "How do you feel about the quality of automatic and machine translation?". It can be argued that machine translation is still less accurate than human translation, and there are differing views on what constitutes "normal" quality.

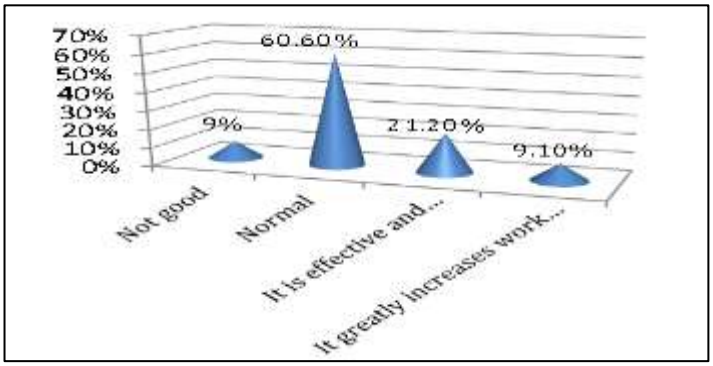

Fig. 2. The frequency with which machine translation is used.

Although word translation is very accurate, it is not very accurate when it comes to sentences. Machine translation is unquestionably a tool that boosts productivity, though (Koponen,2010).

Furthermore, in response to the third question, which asks, "How do you evaluate the translation function of the machine translation? Translation tools?" many language learners express interest in using machine translation tools to help them study and work as effectively as possible (Fig 3).

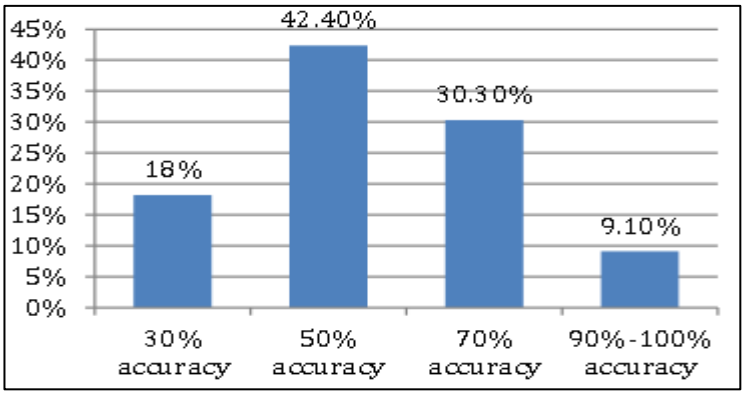

Fig. 3. The frequency with which machine translation is used.

In response to the fourth query, How are machine translation applications used and viewed by teachers and their students?

Despite widespread belief among educators that students benefit little from and frequently engage in academic dishonesty when utilizing machine translation apps, extensive research has shown that students actually love using these tools. In this regard, we would like to draw attention to a widely-cited survey research that surveyed over 900 undergraduates at Duke University. Statistical evidence suggests that students frequently use online translators for both academic and professional purposes (Clifford et al. 2013).

What about the fifth question? How effective are language teachers when it comes to incorporating MT technologies into their lessons?

At the turn of the century, educational linguists and instructional technologists started to consider how to integrate online translators into their lessons. Using online translators effectively in educational settings was initially the focus of this study, which aimed to educate professional translators (Somers, 2003).

Since professional translators started using translation software in the 1990s, this is hardly surprising (Austermuehl, 2014).

In actuality, students can effortlessly translate lectures, texts, and written sentences into English without spending money or time thanks to automatic translation. However, the learner suffers as a result. It is the user, not automatic translation, that is the issue. If we keep doing this, users will depend more and more on automatic translation, and our proficiency in English will gradually deteriorate. The translated version of Google Translate might be more comprehensive than our own. To put it another way, automatic translation isn't always a good idea. Furthermore, the direct interview responses also demonstrate that an unclean sentence cannot be transformed into a beautiful one by automatic translation. Long paragraphs still cannot be accurately translated because automatic translation is essentially configured to translate sentences one at a time. As a result, if we use it carelessly, there's a chance that the translation will be incorrect or inappropriate for the context. Additionally, some people believe that automatic translation will help us find new words and comprehend English sentences more quickly than in the past. When learning English doesn't take too long, the learner becomes more motivated. For others, however, automatic translation means they no longer need to study. Eventually, that person's motivation will fade (Antony,2013).

6. MT-related risks in language instruction

There are currently no compelling reasons for applied linguists and language educators to be particularly concerned about the morpho-syntactic and semantic accuracy of machine translators. We also think that when online translators are incorporated into the learning process in a meaningful way, learning won't be significantly hampered. However, there is a real risk that students, teachers, and the general public may develop reductionist views of language as a result of the technology.

When skill is merely considered as a tool, language is reduced to a basic message exchange ignoring the sociocultural embeddedness of the speaker and the message. The large majority of teachers and applied linguists find this instrumentalist definition of language competency unacceptable since it minimizes the depth and complexity of human interaction, identity, and culture. Applied linguists and language teachers describe as competency the capacity to encode and decode meaning in a sophisticated and context-sensitive manner that is simultaneously a reflection and an expression of being and belonging. Teachers have to help students at all levels who are using machine translators in understanding the limits of present technology in addition to appreciating them. Students have to be given chances to see the limits of machine translating in a language classroom equipped with these instruments.

7. Recommendations for future developments

Once more, human intervention is required to mitigate the adverse effects of machine translation. The first step is to lessen reliance on machine translation. We must first improve our language proficiency, particularly in foreign languages, before we can accomplish this. Because we can identify errors in machine translation and prevent misunderstandings more quickly when we speak and translate ourselves more fluently in a foreign language. But not using machine translation at all is a waste.

Apart from offering users astonishingly accurate translations, publicly available internet translating tools also help language learners reach independent fluency in a second language, therefore fulfilling their main purpose. But without offering substitutes, the user has to mindlessly believe the output is accurate in its present form. Such fixed systems rob students of the opportunity to engage in meaningful negotiation, a cognitive process thought to be essential for learning a second language. Psycholinguists Two or more interlocutors can find and resolve communication breakdowns and misunderstandings by means of this technique. These interactional patterns are generally considered as quite successful for language learners since this repair-oriented procedure directs students toward meaning-based repair solutions instead of grammar-based ones (Ellis, 2003).

8. Conclusion

In this paper, two topics have been discussed. First, although machine translation is developing and may eventually become more accurate, humans cannot be fully replaced. Since most languages, including English, have a large number of homophones, we will make mistakes if we don't grasp the context of a conversation. Second, the user determines the extent of machine translation's influence.

A user's language skills deteriorate and they become unable to communicate effectively without a translator if they only learn basic things without improving them. It is true that machine translation is a very helpful tool nowadays, and it will be beneficial if used properly.

We contend that the aforementioned advancements will accelerate the adoption of machine translation technology in language education by converting a static technology into an interactive system that facilitates genuine human-machine collaboration. More significantly, these enhanced systems will enable language educators to recognize the substantial potential and beneficial role that MT tools can play in their classrooms. Although these developments necessitate only minor user interface modifications, we acknowledge that they would implicitly acknowledge the processing limitations of MT technologies.

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