

## **Machine Translation in the Language Classroom: Turkish EFL Learners' and Instructors' Perceptions and Use**

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### Abstract

Online machine translation (OMT) tools are not exclusively designed for language learners; however, these tools are popular among them. This quantitative study investigated the perceptions and attitudes of Turkish speaking EFL learners and instructors in a university English program regarding the use of OMT tools. Two online questionnaires were administered to 462 Turkish-speaking learners and 34 instructors. The results revealed that 94% of the learner participants reported using OMT tools for their language learning studies. The learners predominantly used these tools for single-word or phrase translations. Reading and writing assignments were the main areas where the learners most frequently referenced to OMT tools. The learner participants thought the accuracy of the tools was not high, and the ethicality of using them depended on how they were used. Three-quarters of the instructor participants reported using OMT tools, and their judgements concerning the accuracy of these tools were more positive than the learners'. The results also revealed a mismatch between learners' and instructors' perceptions and attitudes regarding OMT tools in foreign language learning. Accordingly, the instructors often overestimated how much learners use OMT tools, while learners underestimated the instructors' interest in them. These findings suggest policies should be developed within language learning institutions to guide students' use of OMT tools, as well as improve the mutual understanding between students and teachers in terms of their ethicality.

*Keywords:* attitudes, EFL, language learning, Google Translate, machine translation, perceptions

In today's age, students and instructors easily and freely benefit from a variety of online tools. Machine translators are among the most frequently referred online tools by learners. Free online machine translation (OMT) tools such as Google Translate offer written, voice and other types of translations between many languages. Practicality, ease of use, and free access to such websites and apps have made these tools very popular, especially among language learners. Scholars and educators, on the other hand, have varying reflections regarding the use of these tools in language learning. While some institutions do not allow students to use these tools, and some educators have reservations about their use for classwork or assignments on academic integrity grounds (Correa, 2011; Harris, 2010), others have looked for effective ways to make use of OMT tools (Benda, 2014; Chandra & Yuyun, 2018; Garcia & Pena, 2011).

Despite increasing interest, many institutions have not produced clear-cut policies regarding the use of OMT tools by students, nor have they specified the possible beneficial applications of these tools to aid language learning and teaching (Glendinning, 2014). Language teachers have also been struggling with the appropriate ways to approach the issue of their students' increasing use of machine translation. Besides, empirical data regarding the use of OMT tools in foreign language (FL) and second language (SL) education is very limited. Some studies have tried to describe the use of these tools by learners and teachers (Briggs, 2018; Clifford et al., 2013; Jolley & Maimone, 2015; Niño, 2009; O'Neill, 2019). Some other researchers have looked into possible ways to make use of these tools as Computer Assisted Language Learning (CALL) tools (Benda, 2014; Chandra & Yuyun, 2018; Garcia & Pena, 2011; Knowles, 2016; Lee & Briggs, 2021; Tuzcu, 2021). Others have focused on the issue from the perspective of academic misconduct (Correa, 2011; Groves & Mundt, 2015; Harris, 2010). Only a handful of these studies were exclusive to the context of English as a foreign (EFL) or second language (ESL). This suggests a significant lack of literature regarding the use of OMT tools in EFL, especially in the Turkish context.

The aim of this study was to address the lack of literature regarding the use of OMT tools by learners of English in the Turkish context. Conducted in a Turkish university EFL context, the purpose of the study was three-fold. First, the study aimed to describe the attitudes and perceptions of English language learners regarding OMT tools in terms of frequency of use, effectiveness, and ethicality for learning English. Second, the study aimed to explore the same issues from the perspective of instructors. Finally, the study aimed to document the thoughts of learners and instructors about each other's perceptions of OMT tools. To accomplish these aims, the present study was designed to address the following research questions:

1. How often and for what purposes do EFL learners use machine translation tools, and what are their perceptions and attitudes regarding the effectiveness and ethicality of these tools in learning English?
2. How often and for what purposes do English instructors use machine translation tools, and what are their perceptions and attitudes regarding the effectiveness and ethicality of these tools in EFL education?
3. What are students' and instructor's beliefs regarding each other's views on OMT use?

The results of this study would help reveal how OMT tools are used and perceived by students and instructors. In turn, such information would be instrumental for language teachers and administrators in the process of making policy about OMT tool use in EFL education. Together, the results may also prove useful to material designers, test developers, and educational software designers.

## Literature Review

Translation has been one of the oldest means of language teaching. For centuries, language teachers have used the grammar-translation method, teaching their students how to analyse the grammatical structure of a target language and translate texts. The introduction of other teaching methods, such as the Direct Method and the Communicative Language Teaching, has emphasised communicative proficiency in foreign language learning. Thus, making use of students' first language has become a rather overlooked tool to present or explain new language, and it is commonly referred to as mother tongue facilitated teaching (Richards, 2015).

Printed dictionaries have always been a necessity for language learners, but they have started to lose their position as a primary resource of the target language. This is partially explained by continuous developments in the field of OMT and the introduction of smartphones with internet capabilities. Because of these developments, language learners have started to enjoy the practicality of online dictionaries and user-friendly software applications that support online OMT. Since the 1990s, the pedagogical implications of OMT were studied for FL education, especially in the area of computer-assisted language learning (CALL) (Benda, 2014; Chandra & Yuyun, 2018; Garcia & Pena, 2011) and their practical and ethical uses (Clifford et al., 2013; Correa, 2011; Groves & Mundt, 2015; Jolley & Maimone, 2015; Knowles, 2016; Lee & Briggs, 2021; McCarthy, 2004; Niño, 2009; Tuzcu, 2021).

### Previous Research on OMT Use in Language Education

Niño (2009) attempted to group previous research on machine translation (MT) use in FL teaching and learning into four areas: “1. Use of MT as a bad model, 2. Use of MT as a good model, 3. Vocational use: Translation quality assessment, pre-editing and post-editing, and 4. MT as a “CALL” tool” (p. 242). Niño stated the strengths of MT as a CALL tool by highlighting features such as “wide availability, immediacy, multilingualism, good lexical translation, and good simple structure translation” (p. 245). On the other hand, Niño (2009) listed “literal translations, grammatical inaccuracies, discursive inaccuracies, spelling errors, missing cultural references, and unnatural writing” (p. 245 - 246) as drawbacks of MT use in FL education. It is important to bear in mind at this point that with the advancing MT algorithms and especially with the introduction of neural machine translation (NMT) in current MT tools (Briggs, 2018; Ducar & Schocket, 2018), some of the weaknesses identified by Niño have been substantially improved since 2009. NMT eliminated major errors involving the translation of proper nouns, literal translations of idioms, archaic vocabulary suggestions, and discursive inaccuracies, which has led more students to use OMT in their language studies (Ducar & Schocket, 2018).

**Machine translation as a CALL tool.** OMT tools offer many features from speech recognition to pronunciation; however, the most widely used feature has been translation of written text between languages. In order to aid students with writing more efficiently, some educators and researchers have made attempts to employ OMT as a CALL tool. To this end, Benda (2014) explored the possible benefits of using Google Translate (GT) in his English writing classes. Working in a Taiwanese context, Benda (2014) concluded that his undergraduate university students, and language learners in general, are more “...motivated by the need to obtain some kind of credentialing or certification” (p. 323) rather than learning for communicative purposes. Therefore, the learners used OMT to achieve higher scores in their writing without properly checking for the accuracy of the results. Chandra and Yuyun (2018) investigated English learners' habits of using GT during essay writing in the Indonesian context. Findings suggested

that students used GT for three main purposes: vocabulary, grammar and spelling. Data on vocabulary use indicated that students used GT mostly for translating individual words. According to Chandra and Yuyun (2018), translating phrases and full sentences was less common. Because most previous research on OMT tool use in foreign language writing centred on students with a high level of proficiency, Garcia and Pena (2011) decided to investigate whether OMT can be considered a CALL tool for beginners and early intermediate level students. Their findings suggested that with the help of OMT, participants were able to produce a higher number of words in their paragraphs, proportional to their language proficiency level. Garcia and Pena (2011) stated that "... the lower their mastery, the greater the help provided by the MT draft..." (p. 478).

**Student and teacher attitudes and perceptions regarding machine translation.** Several scholars explored the attitudes and perceptions of FL students and instructors. Clifford et al. (2013) investigated the perceptions of language students and instructors regarding OMT use in FL in the United States. The results indicated that only a small proportion of the 905 participants *never* used OMT for language studies. In contrast, the majority of OMT users reported that they preferred Google Translate as their tool of choice, and they used OMT for individual words. For the next phase of the research, 43 instructors of Romance languages (Spanish, French, Italian, and Portuguese) were surveyed, and nearly half of them reported considering OMT use to be equal to cheating. More than half of the faculty regarded OMT as "*not useful*" or "*somewhat not useful*" for elementary and intermediate level students. In their conclusion, Clifford et al. (2013) recommended foreign language teaching policies evolve to be "proactive and pedagogically forward thinking to develop the best language learning experience possible" (p. 116).

Jolley and Maimone (2015) set out to explore the perceptions, attitudes, and beliefs of Spanish learners and instructors regarding OMT tools by evaluating their quality and ethicality. The results suggested that almost all of the students reported using OMT tools for their language studies but at varying frequencies. The study found that 65.08% of students reported using OMT tools for the purpose of translating individual words. The authors posited that many of the students considered Free Online Machine Translation (FOMT) as "...having a positive impact on their language learning and want instructors to cover strategies for effective use" (Jolley & Maimone, 2015, p. 192). A survey of instructors revealed the majority of them used OMT tools for teaching or personal needs. Like the students, the instructors judged individual words to be more suitable for accurate translation via OMT tools. In addition, over 60% of the instructors felt the accuracy of longer text translations to be ineffective. In terms of ethicality, instructors' perceptions deviated from that of their students. More than 85% of the instructors considered OMT use for texts longer than individual words to be "*unethical*" or "*equal to cheating*". Similarly, Baskin and Mumcu (2018) found that higher-level students used GT less for sentence translations as they considered these tools ineffective for effective writing.

**Academic misconduct and misuse issues of OMT in language learning.** The literature on OMT use in FL education reveals that while students regard OMT use as relatively ethical, it is common for language educators to be disapproving of their use on ethical grounds (Clifford et al., 2013; Correa, 2011; Groves & Mundt, 2015; Jolley & Maimone, 2015; Knowles, 2016; Niño, 2009). Niño (2009) found that nearly half of participating instructors considered OMT use as cheating, and more than two-thirds disapproved of their use in language learning. Similarly, Jolley and Maimone (2015) found that 85% of instructor participants thought OMT use for assignments with texts longer than individual words was cheating, while a much lower percentage of students considered such use as cheating. Correa (2011) surveyed SL instructors

to find out their opinion about academic dishonesty. One questionnaire item about the use of OMT (*Using an online translator for one or more sentences (if use of dictionaries is permitted)*) was marked as academic dishonesty by more than half of the instructors. Similarly, Knowles (2016) surveyed 20 Romance language instructors for their perception of OMT use. Their findings showed that nearly half of the participants agreed or strongly agreed that OMT use equated to cheating, while only a small proportion disagreed or strongly disagreed with the notion.

In light of previous research, the goal of the present study is to better understand the perceptions and attitudes of Turkish language learners and instructors regarding the use of OMT tools in EFL education.

## Method

The present study adopted a quantitative research design. Two separate online questionnaires (described below) were administered via Google Forms to collect data from student and instructor participants. The questionnaires were piloted first in four different universities with volunteering students and instructors. After the implementation of suggested modifications, the questionnaires were administered in the target setting.

### Participants

In the study, two groups of participants, namely student participants and instructor participants, were involved.

**Student participants.** The student participants were recruited from an English Preparatory Programme (EPP) at an English-medium university and were not proficient in English. Out of 631 eligible Turkish speaking students enrolled in the EPP during the data collection period, 462 students participated in this study. In terms of language proficiency level, 138 (29.8%) participants were repeating students, and they were placed in Repeat (A2+) and B1 groups. The remaining 324 (70.2%) first-year students were placed in one of four levels within the EPP (Beginner, Elementary, Pre-Intermediate, and Intermediate). Male students accounted for 267 participants, and 174 participants were female. Twenty-one participants did not specify their sex. Student participants ranged in age from 17 to 34, with a mean of 20.

**Instructor participants.** Thirty-six instructors were employed at the EPP. Three spoke English as their native language, and 33 were native speakers of Turkish. Thirteen instructors held a Master's degree, and two held a PhD. Out of the 36 eligible instructors, 34 (94.4%) took the online questionnaire. Twelve of the participating instructors were male, and the remaining 22 were female. The instructor participants ranged in age from 26 to 63, with a mean of 36.

### Online Questionnaires

The questionnaires used in the present study were modified versions of those employed by Jolley and Maimone (2015). Permission to use and modify the questionnaire items were kindly granted by the authors. Accordingly, items 7-22 and 30-33 were modified to suit EFL education in the Turkish context. This was necessary since the original questionnaires were designed for Spanish learners in the United States. One other reason for modifications was to gather more accurate frequency data. This was necessary because the frequency options used by previous studies (always – often – sometimes – rarely – never) were found to be misunderstood by participants. For example, the option “*sometimes*” for one participant may mean a unit of frequency that covers a day or, for another, a week. To address this issue and gather more

accurate overall usage data, the present study employed the following options: *Never - a couple of times a year - a couple of times a month - a couple of times a week - once a day - multiple times a day.*

The online questionnaire for student participants included 27 items across four sections. The first section addressed the participants' habits of OMT use and their expectations from these tools. The five items in the second section addressed student participants' perception of output quality of OMT tools and ethicality or appropriateness of using OMT tools for their English language studies. The multi-part items in this section focused on the perception of the participants regarding the length of the translated segments and the language activities for which they use OMT tools. The third section included items regarding student perception of the instructor views about OMT. The last section was designed to gather data about the demographic and background information.

The online questionnaire for instructor participants included 30 items in four sections. The first section was about their habits of OMT use and teaching practices involving OMT tools. The second section addressed the participants' perception of the output quality of OMT tools. The third section included items addressing the participants' perception of their students' use of OMT tools for different language activities in terms of the length of translated segments, output quality, and appropriateness. The fourth section was designed to gather demographic information.

### **Procedures**

In the present study, all of the participants were informed of the objectives of the study, and what they were expected to do, through online information forms. This information included the purpose of the study, a brief description, assurance of anonymity and confidentiality, and how their data would be used. It was also explained that they had the right to withdraw from the study at any stage or time. To maintain anonymity and confidentiality, names of the participants were not requested. In addition, the name of the university where the study was conducted was not provided in any part of this study to make the participants unidentifiable to persons from the same context and university.

Both the student and instructor questionnaires were administered at the end of the semester when students were taken to a computer lab to complete a course evaluation. The students stayed in the computer lab for an extra 15 to 20 minutes to respond to the online questionnaire. The students who needed more time to complete the questionnaire could do so by clicking on the link they received via email after pausing the questionnaire. The instructor participants received their online questionnaire through personalised emails. They were requested to complete the questionnaire within two weeks.

The Google Forms platform was used to create and administer the questionnaires. Each participant was presented with a consent form together with the questionnaire. Since the present study is descriptive in nature, the frequencies for the items were produced for descriptive analysis. Coded data provided by the survey platform were analysed in IBM SPSS Statistics 25 software.

### **Findings**

The following sections present and discuss the key findings obtained from analysing the data collected via the two questionnaires.

### **OMT Tools and Features Used by EFL Students**

The results indicated that the majority of student participants (94.4%) reported using OMT tools for language studies. Google Translate was found to be the most commonly used online OMT tool, used by 82.2% of participants. This tool was followed by Yandex Translate, which was selected by 51 (11.5%) participants, and Microsoft Translator, which was chosen by 17 (3.8%) participants. When asked about the features of OMT tools student participants used, 425 (95.7%) participants selected *written translation*, making this the most commonly used feature. Nearly 200 participants (44.1%) indicated that they used the *pronunciation* feature in these tools. The *voice translations* feature was selected by 142 participants (31.9%). Forty-three participants (9.6%) selected *visual/image translation*; 20 participants (4.5%) chose *handwriting translation*; 15 participants (3.4%) chose *translation of conversations*, and nine participants (2.2%) chose *translation of uploaded documents*.

**Frequency of EFL students' use of OMT tools.** Frequency of use is one of the most critical aspects of the presence of OMT tools in language learning. Determining how frequently and with what purposes these tools are used by learners provides language educators with some perspective as to how students use OMT tools. These findings are presented in the following sections.

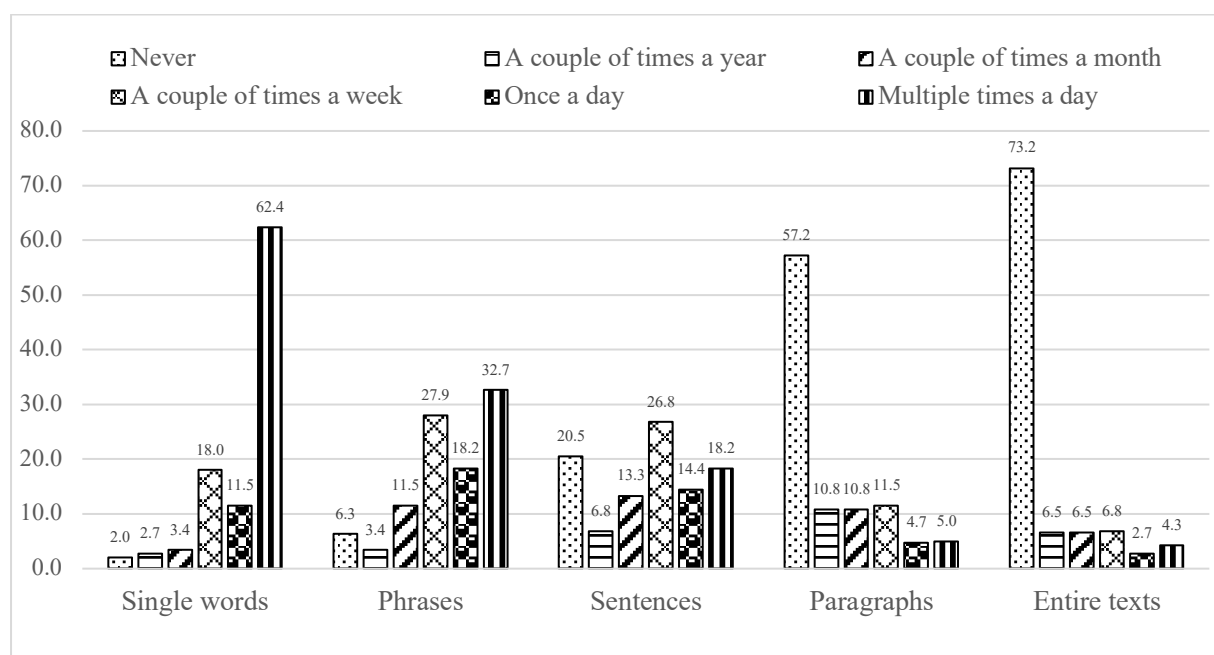
**Frequency of ELF students' overall use of OMT tools.** A vast majority of student participants (94.4%) reported using OMT tools. A breakdown of the overall frequency of use indicates that more than half of the students (52.4%) reported using them *multiple times a day*. In contrast, only 3.9% of students stated that they *never* used these tools. Additionally, when the responses were grouped as less frequent and more frequent, the results indicated a very high frequency of OMT tool use among participants (see Figure 4).

Responses indicated a decreasing trend in OMT tool use based on the length of translated segments. The majority of participants (91.9%) stated that they used these tools for *single words* a couple of times a week or more. For *phrases*, the percentage of frequent users was substantial at 78.8%. For *sentences*, more than half of the participants (59.4%) stated they used OMT tools a couple of times a week or more. When it came to translating *paragraphs*, the percentage of participants who *infrequently* or *never* used OMT tools accounted for 78.8%. For *entire texts*, only 13.7% of participants reported using OMT tools (see Figure 1).



**Figure 1**

*Frequency of EFL Student Participants' OMT Tool use by Segment Length, in Percentages*



**Frequency of EFL students' use of OMT tools for reading and writing assignments.** The responses by student participants revealed the frequency of their OMT tool use for different stages of reading (pre-reading, while reading, post-reading, reading assignments). A descriptive analysis of the frequencies showed that students were more inclined to use OMT tools for reading assignments rather than in-class reading activities (46.4% vs. 40.7%, respectively). *Never* was the most frequently chosen option for both situations. As for responses regarding the different stages of reading, students tended to use OMT tools most frequently during the post-reading stage (66.2%) and least frequently during the pre-reading stage (47.7%).

Comparable to the trend in reading activities, the use of OMT tools for writing assignments was higher than that of in-class writing activities (53.4% and 44.4%, respectively). More than half of the respondents (54.7%) reported using OMT tools for editing, and a similar percentage (54.1%) stated they used OMT tools for while-writing activities. Planning was the stage where students made use of the OMT tools the least (45.3%).

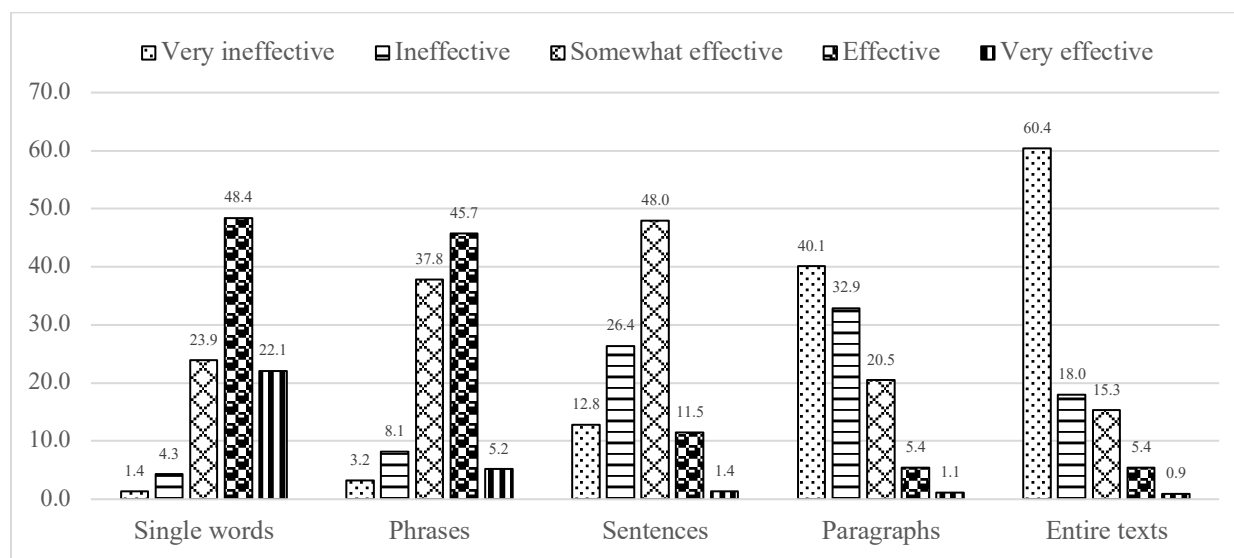
**EFL Students' overall perception of the effectiveness of OMT tools.** As for the students' perception of the effectiveness of OMT tools, 29.5% of the participants found OMT tools *effective* or *very effective* overall for English to Turkish translations, while 23.6% found them *ineffective* or *very ineffective*. A majority of the participants considered the results *somewhat effective*, with a percentage of 46.8. For Turkish to English overall translation effectiveness, the tendency shifted toward ineffective with 27.5% of participants choosing *ineffective* or *very ineffective* against 22.3% choosing *effective* or *very effective*.

These results suggest a decreasing trend in the perceived effectiveness of OMT tools as text segments get longer. For single words, 70.5% of participants found OMT tools *effective* or *very effective*. For phrases, 50.9% deemed OMT tools *effective* or *very effective*. For sentences, the percentage of participants who found OMT tool *effective* or *very effective* fell dramatically to

12.8%, while 39.2% of students thought they were *ineffective* or *very ineffective*. For paragraphs, 73% found them *ineffective* or *very ineffective*. For entire texts, the number of participants who found OMT tools *very effective* dropped below one percent. In total, 78.4% found them *ineffective* or *very ineffective* (see Figure 2).

**Figure 2**

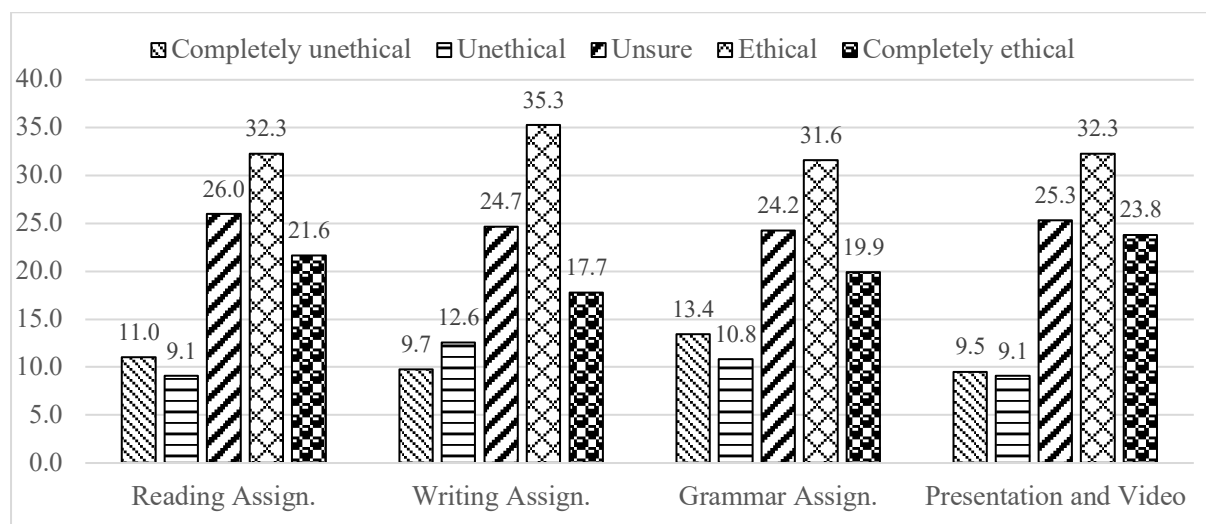
*EFL Student Participants' Perceptions of the Effectiveness of OMT Tools Based on Segment Length, in Percentages*



**EFL students' perceptions of the ethicality of using OMT tools for assignments.** Along with the frequency of use and the perceived effectiveness of OMT tools, the concept of ethicality for students was investigated. Accordingly, for reading and writing assignments, 53.9% and 53% of participants considered OMT use *ethical* or *completely ethical*. Around 20% of the participants deemed the use of these tools as *unethical* or *completely unethical* for both types of assignments. For grammar assignments, 51.5% thought OMT tool use was *ethical* or *completely ethical*, while 24% considered it *unethical* or *completely unethical*. For the presentation and video assignments, 56.1% considered OMT tool use *ethical* or *completely ethical*, while 18.6% considered it *unethical* or *completely unethical* (see Figure 3).

**Figure 3**

*Student Participants' Perception of the Ethicality of Using OMT Tools for Assignments in Percentages*



The student questionnaire included a section about student participants' perception of the ethicality of using OMT tools to translate language units of different lengths. Translating single words using OMT tools received the highest positive ethicality rating (81.6%). Phrase translations showed a similar trend, with 71.4% of participants considering OMT use *ethical* or *completely ethical*. However, as the segments got longer, the trend started to reverse. For sentence translations, 46.8% considered OMT use *ethical* or *completely ethical*, while 26.8% thought it was *unethical* or *completely unethical*. A more dramatic change in the perception of ethicality manifested itself for even longer segments. For paragraph translations, 45.9% of participants considered OMT use *unethical* or *completely unethical*. For entire text translations, 51.1% of participants deemed it *unethical* or *completely unethical*.

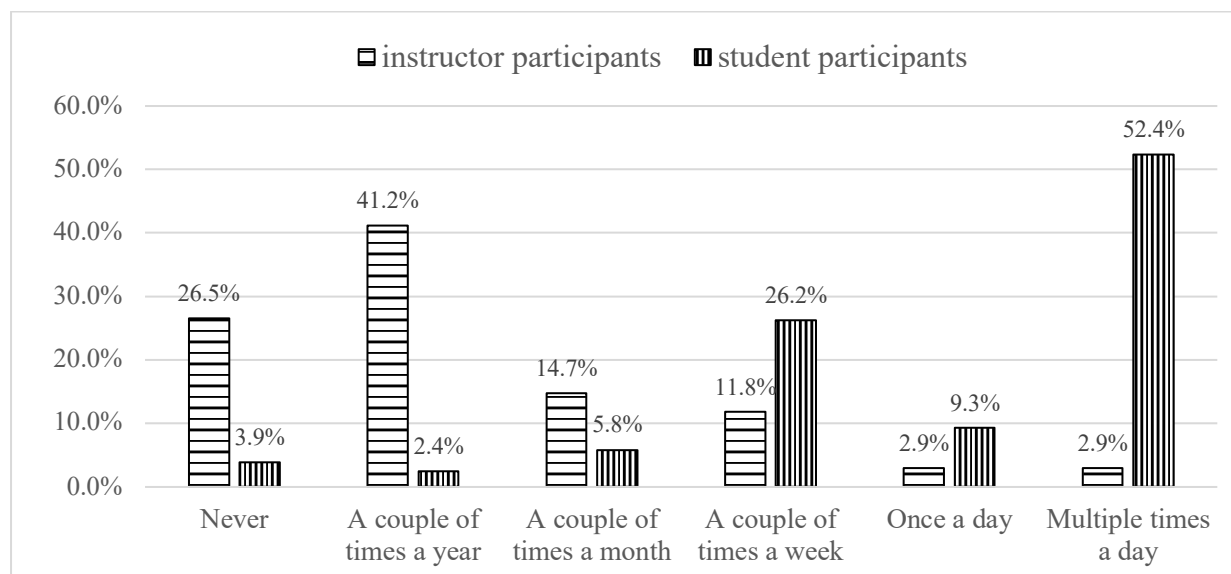
### OMT Tools and Features used by EFL Instructors

Written translation was the most frequently used feature of OMT tools, which was selected by all 25 participants. For ten participants (40%), pronunciation was the second most common feature. Five participants (20%) chose translation of uploaded documents; 4 (16%) participants chose voice translation, and 3 participants (12%) chose visual/image translation. One participant added "*translation of an entire web page*" which was not an option on the questionnaire.

**Frequency of EFL instructors' overall use of OMT tools.** About a quarter (26.5%) of the teacher participants indicated that they *never* used OMT tools for personal and teaching purposes. The majority (82.4%) of the remaining participants reported using OMT tools *a couple of times a month or less*. Only 5.9% reported using them *once a day* or *multiple times a day*. The results reveal that the instructors' use of OMT tools is not nearly as frequent as that of students (See Figure 4).

**Figure 4**

*Frequency of OMT Tool use by EFL Instructors and Students*



**Figure 4:** Frequency of OMT tool use by EFL instructors and students

**EFL instructors' perceptions of the effectiveness of OMT tools.** Participants refrained from reporting OMT tools as *very ineffective* or *very effective*. No participant considered translations produced by OMT tools for Turkish to English or English to Turkish as *very ineffective*, and only 2.9% of the participants deemed English to Turkish translations as *very effective*. For English to Turkish translations 56% of participants reported OMT tools as *effective* or *very effective* overall, while 16% found them *ineffective*. For Turkish to English translation, 36% of participants found OMT tools *effective* overall, while 28% found them *ineffective*. In total, around 30% of the participants rated OMT tool as *somewhat effective* for translating in both directions.

The results from the instructor questionnaire bear both similarities and differences to those of students. Like students, instructors found OMT translation results from English to Turkish more effective. However, while the majority of students chose the midpoint option (*somewhat effective*) for both translation directions, instructors had a more positive perspective regarding the quality of OMT translations by leaning more to the *effective* side.

The data gathered from the participants regarding their perceived effectiveness of OMT tools revealed that 60% of the participants considered the tools *effective* or *very effective* for single word translations. The perceived effectiveness of the OMT tools fell to 44% for phrases, and 12% thought the results were *ineffective* for phrases. For sentence translations, the participants on the *effective* or *very effective* side accounted for 48%, while those who considered them as *ineffective* accounted for 24%. For paragraph and entire text translations, 36% and 24% of the participants considered OMT as an *effective* tool, respectively.

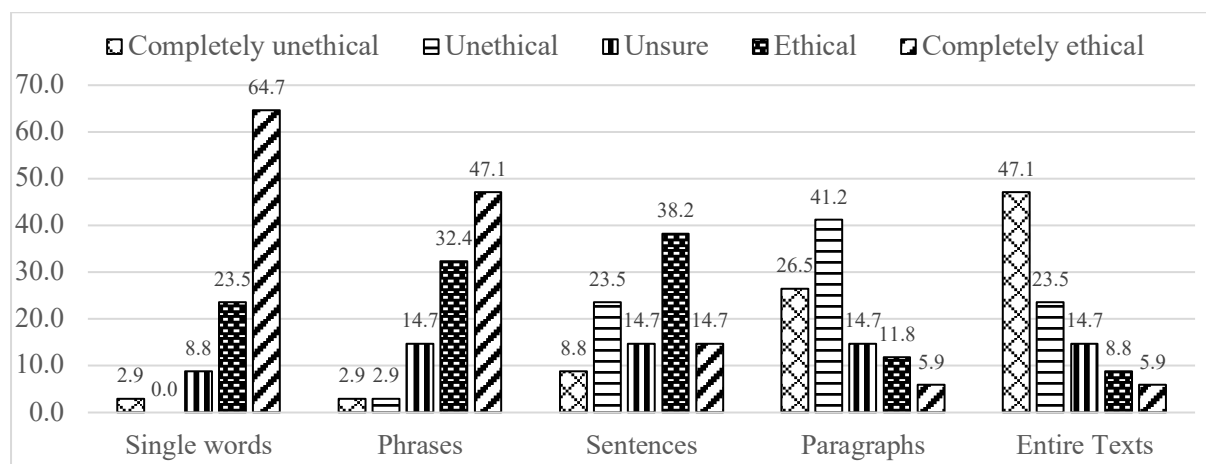
These findings were important as they displayed the only increasing trend when it came to the perceived effectiveness of segments of different lengths translated in OMT tools. That is, instructors rated the effectiveness of sentence translations as higher compared to phrase translations (48% vs. 44%). For longer segments, the perceived effectiveness fell again. This fluctuation was not observed in the student data.

**EFL instructors' perception of overall ethicality of students' use of OMT tools for English assignments.** With regard to the ethicality of students using of OMT tools for English assignments, 2.9% of the instructor participants reported considering it *ethical*, while no participants considered OMT use *unethical*. Seventy percent of the participants reported that it *depends on how MT tools are used for English assignments*, while 26.5% of the instructor participants were *not sure if MT use for assignments were ethical or not*. This finding suggests that more than a quarter of the instructor participants did not have enough experience or exposure to OMT tools to form a judgment concerning their ethicality. Considering the finding that 87.9% of students use these tools more than a couple of times a week, this lack of an ethicality judgement on the part of instructors was an important finding. While more than half of the students considered using OMT for their language assignments ethical, more than a quarter of the instructors had yet to form their judgment on the issue, probably due to their lack of interest in the subject. Similar to the student participants, instructors considered using OMT tools for reading assignments mostly ethical. Nearly 60% of the instructor participants considered OMT use *ethical* or *completely ethical*. In contrast, 70.6% of instructors thought using such tools for writing assignments as *unethical* or *completely unethical*. Only 11.8% of instructors considered the use of OMT tools for writing assignments *ethical* or *completely ethical*. For grammar assignments, the majority of instructors again leaned to the ethical side at 47.1%. However, the highest number of unsure participants regarding the ethicality of using OMT tools for assignments was found in this category with 23.5%. Regarding presentation assignments, 47.1% of the instructors considered OMT tool use as *unethical* or *completely unethical*. On the other hand, 38.2% considered this kind of use as *ethical* or *completely ethical*.

**EFL instructors' perception of the ethicality of students' use of OMT tools based on segments of different lengths.** Like the student participants, instructor participants thought that OMT use to translate single words was tolerable in terms of ethicality. Specifically, 88.2% considered OMT use *ethical* or *completely ethical*, while only 2.9% considered it *completely unethical*. For phrase translations, 47.1% considered OMT use *ethical* or *completely ethical*, while 5.9% considered it *unethical* or *completely unethical*. When it comes to translating sentences, more than half of the participants (52.9%) considered OMT use *ethical* or *completely ethical*, while 32.4% considered it *unethical* or *completely unethical*. Again, like the student participants, when it comes to longer segments, more instructors leaned towards the unethical side. For paragraph translations, 67.6% considered OMT use *unethical* or *completely unethical*. For entire text translations, 70.6% considered it *unethical* or *completely unethical*. For the entirety of this section, around 15% of the participants chose the option *unsure*. This may suggest that instructor participants need further clarification on the ethicality of OMT tool use for FL education (see Figure 5).

**Figure 5**

*EFL Instructor Participants' Perceptions of the Ethicality of Students Using OMT Tools Based on Segment Length*



### **EFL Student Instructor Beliefs Regarding Each Other's Views on OMT Use**

In order to reveal how accurately the two participant groups evaluated each other's perception of OMT use, they were presented with a series of statements. Accordingly, when asked about how often student participants believed their instructors used OMT tools, 25.5% chose *never*, and around 40% chose *a couple of times a month* or less. This suggests 65% of students thought their instructors used OMT tools infrequently. When compared to data from the instructor questionnaire, however, it is striking that students guessed the percentage of instructors who *never* used OMT tools quite accurately (25.5% vs. 26.5%). However, in terms of overall frequency, students overestimated the number of instructors who used OMT tools *a couple of times a week* or *more* (34.9% vs. 17.6%). On the other hand, instructors overestimated the daily use of OMT tools by students. Self-reported total use of OMT tools *once a day* or *multiple times a day* by students added up to 61.7%; however, the instructors' guessed 85.3%.

There was a considerable discrepancy between students' self-reported use of OMT tools for reading and writing assignments and the perception of their instructors. While 46.4% of the students reported using OMT tools frequently (*sometimes*, *often*, and *always*) for reading assignments and 53.4% for writing assignments, the instructors reported thinking 85.3% and 88.3% of students used them frequently, respectively.

The student questionnaire included the following statement for participants to indicate their level of agreement: *Our instructors consider these tools as helpful to the language learning process*. Nearly one-third (32.2%) of the participants reported they *agreed* or *completely agreed* with the statement, while 23.4% *disagreed* or *completely disagreed*, and 44.4% were *unsure*. According to self-reported instructor responses, 26.5% of the instructors indicated that they thought these tools were helpful in the language learning process. These similar results indicated that the students had a good grasp of their instructors' attitude about this issue.

The student questionnaire also included the following statement for participants to agree or disagree with: *I feel proficient in using these tools for language learning*. More than half (58.7%) of the students *agreed* or *completely agreed*, which was very close to the number of students who reported using these tools *once a day* or *more* (61.7%). The instructors thought

44.1% of the students felt that they were proficient in using these tools. Exactly half of the instructors were *unsure* about the statement.

The students were also asked to indicate their level of agreement for the following statement regarding their instructors' attitudes towards students' use of OMT tools: *Our instructors encourage us to learn to use these tools in appropriate ways*. More than one-third (34.4%) of the students *agreed* or *completely agreed* with the statement. On the other hand, 28.4% *disagreed* or *completely disagreed*, and 37.2% were *unsure*. The instructor questionnaire included the following statement regarding the issue: *I think students should be encouraged to learn to use these tools in appropriate ways*. More than half (53%) of the instructors *agreed* or *completely agreed* with the statement, while 8.8% *disagreed* or *completely disagreed*, and 38.2% of the participants were *unsure*. The small discrepancy between the percentage of the student and instructor participant groups with regard to the encouragement item might indicate that instructors thought that students should be encouraged, but they simply did not do so in the classroom themselves, or some students might be ignoring the encouragement provided by their instructors.

## Discussion

In this section, the study's findings are discussed with regard to the issues raised by the research questions, which included student and instructor perceptions and attitudes about OMT use and their perceptions of each other's perceptions and attitudes.

### Discussion of EFL Students' Perceptions and Attitudes

The results of the study revealed a large number of participants use OMT tools for features that go beyond simple translation tasks and are not available in traditional dictionaries. This is similar to existing findings in the literature (Briggs, 2018; Clifford et al., 2013; Jolley & Maimone, 2015; O'Neill, 2019). For example, many students prefer Google Translate as the main provider of OMT, and the most commonly preferred feature is written translation. Vocabulary was reported to be the area where students used OMT tools heavily in the previous literature (Clifford et al., 2013; Jolley & Maimone, 2015; O'Neill, 2019). The results of the present study are in line with the existing literature. In addition, the results concerning the frequency of use for text of different lengths bore similarities with the findings of Chandra and Yuyun (2018) and Jolley and Maimone's (2015), which indicated that the majority of students reported using OMT tools for single words and only a few students used them for longer texts (e.g., paragraphs or entire texts). This may be due to the language level of the students. Novice language learners in preparatory programs are often not exposed to complex language structures; therefore, there might be less need to translate longer segments of text. The need for longer text translation may emerge in more proficient stages of language learning, which should be investigated through future research.

In terms of the perceived effectiveness of OMT tools, the findings bear similarities with that of Jolley and Maimone (2015). Inversely proportional results can be observed where longer segments resulted in lower perceived effectiveness. A similar trend to frequency and effectiveness of OMT tool use for different lengths of text was observed in terms of ethicality. The shorter the text segments, the higher the positive ethicality attributions. As the length of the segments increased to sentences and paragraphs, the perceived ethicality of OMT use fell dramatically. When considered together with the frequency data, these trends can be considered further evidence that students do not approach OMT tools uncritically in terms of translation effectiveness and ethicality. Students' preference for refraining from OMT use for longer texts

may show that they do not use the tools for solely pragmatic reasons. Instead, the quality of the final text-based product and the appropriateness of their work is also important. Therefore, students avoid using OMT tools when they think the results are not of high quality or might violate ethical norms.

### **Discussion of EFL Instructors' Perceptions and Attitudes**

The findings suggest that compared to students, instructor participants referenced OMT tools much less frequently for teaching purposes or personal use. As for the quality and effectiveness of OMT results for English to Turkish and Turkish to English translations, instructors held a more positive view than students. The significance of these findings becomes more pronounced when analysed together with the overall frequency data. Accordingly, students used OMT tools much more frequently than instructors, although their overall ratings of the results were lower (nearly 30% considered the results effective or very effective). The convenience of OMT tools may be one reason why students keep referring to them despite doubting their quality. The results may also suggest that students are not very good at judging the quality of the translations produced by OMT tools, whereas instructors are more comfortable using the OMT output to express meaning in English and Turkish. This might be an opportunity for instructors to explain to students how they decide whether or not an OMT is effective.

In terms of ethicality, unlike Clifford et al.'s (2013) findings, the instructor participants in this study refrained from judging OMT use as cheating. Instead, a significant proportion thought the ethicality judgment depended on how the tools were used by students. For example, the student and instructor participants agreed that it was ethical to use OMT tools for shorter segments of written text (e.g., single words, phrases). The two groups also found OMT use ethical for reading tasks. In contrast, the majority of instructors felt OMT use was unethical for writing tasks, which was different from the student perspective. Since writing is a productive skill, usually requiring creative production from students, instructors may be less tolerant about OMT use for such tasks. To limit student use of OMT during writing assignments, instructors may need to introduce new rules restricting internet use. In this way, instructors can make sure the writing tasks are students' original work, and students can practise producing written work unaided by OMT.

### **Discussion of Participants' Perceptions of Each Other's OMT Use**

The findings revealed that the participants tended to overestimate each other's OMT tool use. In line with Jolley and Maimone's (2015) findings, instructors reported feeling that students rely on OMT tools for their language learning activities. In addition, the majority of the instructor participants did not think OMT tools were helpful for students. They also felt students were aware of this attitude. On the other hand, instructors overestimated students' attitudes about how helpful OMT tools are for language learning. It can be argued that the more teachers know their students' learning attitudes and habits, the better they can guide them in the learning process. In turn, this may suggest that if instructors know students' real usage and perception of OMT tools, they can address issues arising from OMT use more precisely and effectively. When instructors know their students do not refer to OMT tools, regardless of the learning activity and the length of text, and that they have some reservations regarding their quality and ethicality, instructors may be able to focus on making effective use of OMT for language teaching.



## Conclusions and Implications

This study provided notable insights into the use of OMT tools in EFL teaching and learning in the Turkish context. One important result was that the vast majority of the EFL learners made use of OMT tools in order to aid their learning. This was done on a frequent basis. Given the novelty of OMT tools and their swift adoption by language learners, these findings suggest that researchers, language policy makers, educators and educational technology developers need to look deeper into this topic.

Another valuable finding was that a substantial proportion of learners used OMT tools for reading and writing assignments. The amount of use for in-class activities was slightly lower. It is apparent that banning or discouraging OMT tools is of little use as they are easy to access and widely available as long as learners have devices and connectivity. Therefore, teachers and administrators should either find new ways to limit the use of OMT tools by students for graded or ungraded schoolwork or, better yet, teachers and school administration may team up to discover new ways to integrate such tools into learners' academic work. In a study with Turkish EFL students, Tuzcu (2021) found that using OMT during writing activities increased creativity and improved students' "fluency, flexibility, originality and elaboration" (p. 48). Similarly, in a study with EFL learners in the Korean context, Lee and Briggs (2021) found that after OMT revisions, student errors in writing decreased significantly. Such innovative efforts to utilise OMT for instructional purposes may yield valuable benefits beyond efforts to limit or ban their use.

Another noteworthy finding has to do with the perceived effectiveness of the translations produced by OMT tools. Accordingly, students rated the results of these translations as being less accurate than their instructors. This curious finding may signify a conflict within student thinking. On the one hand, they do not think OMT tools are totally accurate. On the other, however, they continue to use them frequently. The answer to this puzzle might be found in how they described these tools. In data from the open-ended sections of the questionnaire, the student participants described OMT tools most frequently with adjectives such as "easy to use" and "quick". It may be imperative to note that the participating students in this study were almost entirely millennials. Millennials are also considered to be digital natives, who are, according to Prensky (2001) "used to receiving information really fast. They like to parallel process and multi-task" (p. 4). Based on Prensky's description, it might be argued that the age and generational characteristics of the student participants could be a factor leading them to use OMT tools in their language studies. In other words, they value their convenience and speed. With this insight, educators, dictionary developers, and material designers should consider that, for millennials, speed and ease of access are vital aspects of engaging in learning activities.

More than a quarter of the instructor participants reported never having used OMT tools, and for several sections of the instructor questionnaire, between a quarter to half chose the *unsure* option. Considering how frequently OMT tools are used by students for classwork and assignments, the instructors' lack of exposure might be considered alarming in terms of ensuring a healthy FL learning environment. It is recommended that instructors familiarise themselves with OMT tools and find potential ways their students may benefit from using them in their studies.

Finally, the results related to the third research question suggested there is a significant mismatch between learners' and instructors' thoughts regarding each other's use of OMT tools

in FL learning. In order to overcome these discrepancies, language teachers, policymakers, and school administrators may define clear policies regarding the use of OMT tools in language classes. The instructors may be briefed through seminars and workshops regarding these policies, and they should inform their students regarding the established rules.

There are a number of limitations which must be noted in the present study. First, the setting for the study was one university. That is, both participant groups were from the same university. This limited the sample size and reduced the generalisability of the findings. Second, compared to the number of student participants (n=462), the number of instructor participants was much smaller (n=34). A larger sample size with more instructors from other universities may have yielded more generalisable results.

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