PERCEPTION OF ONLINE MACHINE TRANSLATORS BY NON-NATIVE STUDENTS OF ENGLISH PHILOLOGY AND FUTURE TEACHERS OF ENGLISH

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Abstract

For centuries, print dictionaries were the primary assisting tool for those who needed to find the meaning of an unknown word or translate something from or to a target language. These days, various technological solutions are available, many of them online and free of charge. Online machine translators (OMTs) are used as dictionaries to look up individual words or translate texts of various lengths. OMTs have changed the situation in foreign language education, too.

The paper aims to discover how OMTs are perceived and used by non-native speaking university students of English in teacher-training and philology programmes and identify possible differences. First, the paper summarizes the main directions in the ever-growing research on perceiving OMTs in foreign language education. Second, it presents partial results of the online survey conducted among future teachers of English and students of English philology (English language and culture). The results proved that both groups of respondents use a wide range of OMTs, with Google Translate being the most popular. In general, respondents showed positive attitudes towards OMTs and were satisfied with their outcomes; however, teacher trainees were more critical when the quality of translations was considered and they were more aware of the need for post-editing. Future teachers of English also showed more reserve for using OMTs as means of FL learning (learning new vocabulary, pronunciation, grammar, reading, writing, translating). Only a tiny part of respondents (all future teachers) saw OMTs as a threat to effective foreign language learning. The results proved a more "conservative" perception of OMTs by future teachers of English (which may explain why some practising teachers ban using OMTs in their classrooms, fearing that their students could become dependent on them). Students of English philology (English language and culture) manifested less critical attitudes towards OMT in all observed categories. They focused more on speed and comfort than the quality of translation. This result points to the need to instruct students on using OMTs properly (including post-editing) to get the best possible translating and learning outcomes.

The paper presents partial results of the research project KEGA 019TTU-04/2021 Integrating new digital tools into philological research and education sponsored by the Slovak Ministry of Education, Science, Research, and Sport.

Keywords: *Online machine translation, translating apps, foreign language learning, non-native speaking students of English.*

1. Introduction

The paper presents partial results of the project KEGA 019TTU-04/2021 Introduction of new digital tools into teaching and research within transdisciplinary philological study programmes sponsored by the Slovak Ministry of Education, Science, Research and Sport. It aims to test various possibilities of modernization and improvement of the quality of higher education of students of philological study programmes (both teaching and non-teaching) through the introduction of the latest digital technologies (corpora, chatbots, computer-assisted translation tools and intelligent and writing assistants) into philological (both linguistic and literary) research and education, as well as innovations in organizational forms of education (the use of intelligent tutoring systems and multimedia platforms for both full-time and external distance learning). In many aspects, the paper builds upon previously published project results (Godiš, 2021a, 2021b; Hitková, 2021; Hriňák, 2021; Liashuk, 2021a, 2021b; Pokrivčák, 2021; Pokrivčáková, 2022a; Vančová, 2021a, 2021b).

In the group of digital tools tested, special attention was paid to those tools that students are used to, as they use them routinely in their lives outside of education. Such tools undoubtedly include online machine translators (OMTs).

For centuries, print dictionaries were the primary assisting tool for those who needed to find the meaning of an unknown word or translate something from or to a target language. These days, numerous online machine translators have been developed and are offered for free and open use. Generally, they provide friendly-user interfaces and useful functions, for which they are usually well-received by both teachers and students of foreign languages in their daily lives. It means that both teachers and students would already have the necessary digital skills required to use these applications and would therefore be more motivated to use them in educational contexts. Effective use of OMTs could also soften formal and informal learning boundaries.

Online machine translators (OMTs) are used as dictionaries to look up individual words or translate texts of various lengths. OMTs have changed the situation in foreign language education, too.

The topic of integrating OMTs in foreign language education has inspired a growing number of researchers (Anderson, 2013; Case, 2015; Clifford, Merschel, & Munné, 2013; García, 2010; García & Pena, 2011; Jolley & Maimone Lee, 2019; Niño, 2009, 2020; Pokrivcakova, 2022b). A significant group of researchers focused on the possible benefits and drawbacks of using OMTs in the foreign language classroom. Based on a previously presented overview (Pokrivčáková, 2022a), these research studies proved that students of any age and study orientation use OMTs on a regular basis. OMTs are used either as a dictionary for looking up individual words or as translators for translating texts. Students usually reach for OMTs´ assistance when learning new vocabulary, completing reading comprehension exercises, and writing assignments. Language students typically have a positive attitude towards using OMTs in their classrooms, and they are equally aware of possible inaccurate translations and other OMTs´ limitations. Teachers are usually more sceptical about OMTs, and some of them ban using OMTs in their classrooms, seeing OMTs as tools of cheating or fearing that the students could become too dependent on them (Case, 2015; Gaspari & Somers, 2007; Groves, K. Mundt, 2015; Korošec, 2012; McCarthy, 2004; Somers, Gaspari, & Niño, 2006).

The aim of the paper is to present the partial results of the research study on how OMTs are perceived and used by non-native speaking university students of English in teacher-training and philology programmes. The results of the study will be used to design how to instruct students on using OMTs properly (including post-editing) to get the best possible translating and learning outcomes.

2. Objectives

The paper aims to discover how automatic translators (e.g. Google Translate) are perceived and used by non-native speaking university students of English in teacher-training and philology programmes and identify possible differences.

3. Methods

The paper publishes partial results of a researcher-conducted survey carried out between September and November 2021 (fall semester 2021/22) at four universities in V4 countries (Slovakia, the Czech Republic, Poland, and Hungary). For the purposes of this paper, only the data collected from bachelor students studying at the universities which provide both primary/secondary English teacher-training and English philology study programmes were selected. The basic sample included 197 University of Trnava students (Slovakia) and 204 students of Kazimierz Pulaski University of Technology and Humanities in Radom (Poland). The basic sample thus consisted of 397 responses in total, of which 267 responses were obtained from the students of Bachelor study programmes for future teachers of English (both primary and secondary) and 130 responses were provided by students of English philology.

All respondents were non-native speakers of English. Their participation was voluntary, and the researcher could not identify participants or track their contact data (e-mails). The structure of the sample is indicated in Tab. 1. In this paper, students at both universities were treated as a single sample. Differences were studied only between the responses given by future teachers and future philologists.

Table 1. Structure of the respondents' group.

Study programme / University	Teacher-training	Philology	N
University of Trnava, SK	141	52	193
Kazimierz Pulaski University of Technology and Humanities In Radom, PL	126	78	204
Total	267	130	397

The research instrument (a questionnaire) was anonymous and delivered online (GoogleForms application) in English. The questionnaire consisted of 18 items divided into three parts. The first part (4 items) collected identification data (country, level of study, study programme, when the respondent started learning English). The second part (6 items) intended to collect data about respondents' experiences and preferences using various dictionaries with a special focus on online translators and translating apps. The items in this part of the questionnaire were semi-closed (closed with an extra option giving the respondent the chance to add their personal responses). The third part of the questionnaire mapped the respondents´ opinions about the effects of using online translators and translating apps in their study of English via the block of 8 Likert-type statements using rating scales with 5 points (1 - strongly agree, 2 – agree, 3 - not sure, 4 – disagree, 5 - strongly disagree). The collected data were processed by basic statistical methods.

4. Results

First, the respondents were asked which types of dictionaries or translating tools they preferred during their university study. Nearly all students (96.47%) opted for online dictionaries or apps. Only seven students preferred print dictionaries. At present, none of the respondents uses CD-ROMS anymore—the data point to an unambiguous shift of students´ preferences toward online translating tools.

In the subsequent item, respondents were asked specifically about their experience with translation apps. Students could freely name apps they use for their studies. Nearly all students stated they usually seek the help of (96.06%) Google Translate. Far fewer respondents, but still more than a half of them (52.99%) use the online Oxford dictionary. 102 students (27.89%) mentioned Dictionary.com. More than a quarter of respondents preferred the "national" translators, designed specifically for translating from or to Slovak (slovnik.sk) or Polish (diti.pl). The list of other translating apps included 27 items, many of them mentioned by just one respondent.

Table 2. The scope of used machine translators.

Options		%
Google Translate	381	95.97
Oxford Learner´s Dictionary	182	45.59
Dictionary.com	87	21.91
Slovnik.sk / diki.pl	84	21.15
Dictionary Cambridge	41	10.33
Microsoft Translator	32	8.16

In the following item, respondents were asked to express how satisfied they were with translation apps. In the item with the structure of Likert-scale, students could express the level of their agreement on the 5-point scale: VS = very satisfied, RS = rather satisfied, N = neutral, US = unsatisfied, VFU = very unsatisfied. The absolute numbers of students´ responses are given in Tab.3. The respondents´ satisfaction with OMT´s services was weakening with the length of the translated texts. When considering the translation of longer texts (consisting of more-paragraph), only 12 students (3.02%) were very satisfied. In general, respondents showed positive attitudes towards OMTs and were more satisfied with their outcomes than not (index of satisfaction = 2.0, index of neutrality = 1.32; index of unsatisfaction = 1.42). When comparing students´ answers in teacher-training programs and philology, teacher trainees were more critical towards OMTs when the quality of translations was considered (index of satisfaction = 1.78, index of neutrality = 1.45; index of unsatisfaction = 1.48).

Table 3. Satisfaction with the results of machine translation (both groups).

Aspect of MT	VS	RS	N	US	VU
translation of single words	232	146	16	2	1
translation of phrases	136	111	132	15	3
translation of sentences	29	97	145	102	24
translation of paragraphs	21	63	109	145	59
translation of longer texts	12	47	123	153	62
total	430	364	525	417	149
Index of satisfaction	1.08	0.92	1.32	1.05	0.37

The last part of the questionnaire included 8 Likert-scale statements (1 - I can learn new vocabulary quickly when using machine translators. 2 - Using machine translators blocks my learning of new vocabulary because I do not need to remember anything. 3 - Machine translators help me when learning correct English pronunciation. 4 - I am usually too lazy to search for the correct pronunciation of English words when using machine translators. 5 - Machine translators are helpful when learning English grammar. 6 - When using machine translators, I do not need to learn English grammar. 7 - Translators help me learn how to translate. 8 - Anything translated by a machine translator needs to be post-edited.) Students could express the level of their agreement on the 5-point scale: SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree. Similarly to previously published results (Pokrivcakova, 2022a), the collected responses showed that both future teachers of English and students of English philology consider OMTs as useful tools for their foreign language study, especially when learning vocabulary, pronunciation and when training translating skills. Respondents disagreed with the statement that machine translators would block their learning of new vocabulary or grammar. The primarily neutral attitude was shown when asked about the need of post-editing. When comparing two respondent groups (future teachers versus students of philology), the former group were more critical, they were aware of the need for post-editing and they also manifested more reserve for using OMTs as means of FL learning. Only 7 respondents (all future teachers) saw OMTs as a threat to effective foreign language learning. (Due to the limited space, detailed results cannot be provided in this paper. They will be published in a final project publication.)

5. Discussion

The results of the presented comparison of responses provided by the students of teacher-training program and philology were not surprising. The general popularity of OMTs among students was observed in numerous studies (Anderson, 2013; Case, 2015; Clifford, Merschel, & Munné, 2013; García, 2010; García & Pena, 2011; Jolley & Maimone Lee, 2019; Niño, 2009, 2020; Pokrivcakova, 2022b). The fact that OMTs are used by most students and the dominance of Google Translate among other OMTs was also reported by Alhaisoni & Alhaysony (2017), Groves and Mundt (2015), Kumar (2012), Tsai (2019) and others. The new aspect discovered in this study was a more conservative attitude toward OMTs displayed by future teachers when compared to philology students. Students of English philology (English language and culture) manifested less critical attitudes towards OMTs in all observed categories. They focused more on speed and comfort than the quality of translation. This result points to the need to instruct students on using OMTs properly (including post-editing) to get the best possible translating and learning outcomes.

6. Conclusions

The purpose of the paper – to identify and compare the opinions and attitudes of university students in English teacher training and philology programs have been fulfilled. The results showed that students of both groups use the OMTs similarly, but their perspectives and attitudes differ. Future non-native teachers of English are more reserved toward using OMTs as tools of foreign language education aids. The matter calls for more research attention as well as the fact that most students feel the lack of any instruction how to work with OMTs effectively.

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