Analyzing Methods of Studies on Google Translate for English Language Learners

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Introduction

Researchers continue to argue that English language learners are struggling to stay afloat when entering English-only classrooms. Mainstream classroom teachers often do not have enough understanding and training in servicing transitional bilinguals. Studies have found that the implementation of digital translation tools helps accommodate the needs of transitional English language learners. According to Song (2022), digital translation tools allow teachers to reframe their classroom into a more inclusive and engaging classroom experience when they take a stance in translanguaging and supporting their students linguistically and culturally.

Digital translation tools facilitate learning and motivates students to finish their task. Pham et al. (2022) state that "the implementation of digital translation tools allow transitional ELLs to embrace their multilingualism while also saving time, completing second language tasks with ease and aids in pronunciation improvement." "Google translate is an effective digital tool for learning vocabulary, reading and writing and encourages students to study independently, shaping their own strategies for solving language learning challenges" (Bahri & Mahadi, 2016)

Study 1: Pham et al. (2021)

The study "University students' perceptions on the use of Google Translate: Problems and solutions," Pham et al. (2021) aimed to analyze Vietnamese student perception on the possible challenges they faced when using Google Translate (GT) and solutions to those problems. The research questions of this study were: "To what extent do university students perceive the use of Google Translate as an aid for their language learning?", "What problems do university students encounter while using Google Translate?, "What are their solutions when university students face those problems?

To determine frequency and perceptions of GT, researchers collected data using 5-point Likert scale questionnaires and semi-structured interviews. The reliability of the questionnaire was measured by using International Business Machines Corporation Statistical Package for social Sciences (IBM SPSS). After receiving responses from 30 students, researchers chose 15 students who achieved a high mean value.

Through the data analysis, the overall mean score of the participant's perception of the use of GT was 3.56 (M=3.56, SD=0.60). The researchers found that thirty students' perceptions of GT were above average. Moreover, question 22 of the interview: "poor students depend more on GT in learning English rather than average and good students (M=2.34, SD 0.903) showing a lower score than other items resulted in the indication that poor students do not depend on GT and it did not make students lazy to think. The analysis on the problems of Google Translate demonstrated (M=3.94, SD=0.70) showing the problems that participants faced as an usual frequency. The perceptions on the solutions of GT demonstrated (M=3.89, SD=0.74) showing an average level. The results indicated that lower achieving students were less reliant on GT in their learning than higher achieving students. The overall findings indicated that these Vietnamese students had a positive outlook on the use of GT and the problems they encountered were at an average level.

Study 2: Kai & Hua (2021)

The following study was "Enhancing English language vocabulary learning among indigenous learners through Google Translate," Kahi and Hua (2021) analyzed the impact of GT in improving English language learners (ELLs) vocabulary. This action research consisted of fifteen Malaysian students in year 4. The eight females and seven males students were chosen through purposive sampling and the homogeneity of their level of English proficiency. The range

in their summative tests were between 20%-40% which demonstrated passing but yet a low proficiency. The findings demonstrated that all participants improved their score by a minimum of 10 points and only one participant obtained a lower score. When researchers compared the positive mean score of the pre and post tests the data showed the significant improvement of GT enhancing participants' vocabulary learning.

Study 3:Tuzcu (2021)

The third study, “The impact of Google Translate on creativity in writing activities,” by Ayşe Tuzcu, shed light on the effects of GT when it comes to writing and creativity. The implementation of GT tools in writing activities as a pre-editing tool increases student productivity in writing for low proficient English as a Foreign language learners (Tuzcu, 2021). The study was composed by a one group quasi-experimental design that lasted about ten weeks. The quantitative data gathered were pre and post tests. The participants were from a high school in Turkey in the first semester of their 9th grade. Thirty five beginners as EFL learners were selected.

“Several ways of assessment in creativity studies have been suggested by many researchers as simply adding the scores of getting a proportional score or scoring only fluency and originality using median weights” (Runco & Acar, 2012). The flexibility socares were based on each participant's physical appearance, personality, daily routines and abilities. Dichotomous scoring was used for originality and elaboration. For each elaboration element, students received 1 point. To find the fluency values of each participant were tested through the Shapiro-Wilk test which found that “homogeneity of the variance was not normally distributed” (Tuzco, 2021). The findings showed that the median value for the pre-test was 10 (4-29) and 15 (7-28) for the post test. The Wilcoxon test was applied to see the different levels between the two tests and results

showed that there was a statistical difference with the fluency score of the pre and post tests. The mean value of the pre test was (M=5.88, SD= 1.95) with an increase in the post test (M=8.82, SD=1.79). The results proved that Google Translate is an effective tool in providing EFL learners with more creativity in their writing as low proficient language learners.

Study 4: Laiche and Nemouchi (2021)

The fourth study, "The impact of Google Translate on EFL learner's writing performance" by Laiche and Nemouchi (2021) aided to analyze the impact of digital tools on language learners writing performance. This experimental study was composed by 32 second year students in Badji, Mokhtar- Annaba University. The main objective of the study was to analyze the following: "Do second year students of English at Badji Mokhtar-Annaba University use Google Translate in their writing tasks?, "To what extent does the introduction of Google Translate to the EFL classroom affect learners' writing achievements?, "How do second year students at Badji-Annaba University perceive using Google Translate to accomplish writing tasks after its use?

Researchers Laiche and Nemouchi conducted this experimental study using two questionnaires and pre and post questionnaires to document participants' usage of GT with their writing in English. 9.37% of students stated they were excellent writers and 31.25% stated they were good in English writing. The majority of the participants, 37.5%said that their writing skills were okay while 18.75% said they had poor writing skills. The minority 3.12% indicated that their writing skills were feeble. The majority of the participants 59.37% said they did not use GT frequently to help them with any arising challenges whereas 40.62% said they use GT to help them accomplish writing assignments (M=2.982, SD=0.763). The results of the study demonstrated that 65.62% had difficulties with vocabulary and 59.37% made spelling mistakes

with written verb agreements, use of adjectives and adverb articles, prepositions, making transitions and creating sentence patterns. 65.62% of students expressed they could not create coherent writing. The overall finding of the study indicated that the participants were not frequent users of GT (M=1.362) and did not use GT to translate sentences (M=1.028). Participants did not perceive GT to help them save time (1.507%). Lastly, (M=1.813) stated they were not entirely confident in their writing.

Study 5: Lieshout and Cardoso (2022)

The fifth selected study "Google Translate as a tool for self-directed language learning" by Lieshout and Cardoso (2021) states, helps language learners in self-directing their learning. Neri et al., 2002 argues " it is important for researchers, teachers, and students to be aware of the affordance of popular language learning tools as it can help learners self-directed language learning context and become more efficient with time and their learning endeavors." Researchers Lieshout and Cardoso aimed to investigate: "To what extent can learners acquire Dutch phrases and their pronunciations after using Google Translate in a Self-Directed language learning (SDLL) environment and "How do learners interact with Google Translate to learn a second language?" Thirty adult participants were selected in the study; 9 males and 21 females ranging from ages 18-35. The participants came from an array of language backgrounds ranging from 13 different languages but with no previous knowledge of Dutch and were not familiar with German or Scandinavian languages.

The study demonstrated that the participant's use of GT before the study was an average of 3.8 out of 6 (6 being the highest level of use) with a standard deviation of 1.4. The average demonstrated that they enjoyed working with technology M=4.6, SD= 1.0 and M= 5.0, SD= 1.0 showed interest in learning new languages. Eight out of thirty participants also expressed they

had tried to learn a language on their women without the use of digital tools such as Duolingo or grammar books. The instruments for this study were questionnaire, pronunciation and vocabulary tests, and video recording of participants' experiences. The findings showed that language learners can successfully learn vocabulary and some related pronunciation when using GT. The Dutch-learning students became orally comprehensible 4.2, with little foreign accent 5.0 out of 6.

Similarities & Differences

Out of the five research studies, four out of five showed a significant impact of Google Translate on the academic success of English language learners. Moreover, most studies had about 30-35 participants where the Kai and Hua (2021) study had half of the participants with only 15. All five studies took place in different parts of the world; Vietnam (Pham et al., 2021), Malaysia (Kai & Hua, 2021), Turkey (Tuzcu, 2021), Alegria (Laiche and Nemouchi, 2021), and Canada (Lieshout and Cardoso, 2022).

Furthermore, three out of the five studies consisted of two researchers and one consisted of six participants while one consisted of just one participant. However, I did not find a correlation between the number of researchers to the amount of participants in their studies. Some studies used questionnaires and interviews while others used pre and post tests. Two out of the five studies focused on writing performance, while one focused solely on vocabulary learning and two focused on self-directed learning and saving time. The similarity of these studies was that all studies focused on language learners and all focused on the effects of the use of Google Translate in language learning settings.

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