Motivating Japanese University EFL Learners to Produce Longer Speaking Turns with Web Based Machine Translation: A Pilot Study

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Abstract

Learner use of web-based Machine Translation (WBMT) is now the ubiquitous reality of second language courses. As AI deep learning technology continues to underpin the accuracy of such online tools, it is now becoming apparent in the literature that rather than try to prohibit the unavoidable use of such devices it is worthwhile for educators to embrace their affective motivational language–learning potential. The forced shift to online lessons during the 2020 COVID-19 pandemic resulted in Japanese students at the university in question engaging in L2 English-speaking practice in an asynchronous online environment. As a way of preparing for tasks, students had autonomously relied on Google Translate (GT) to prepare monologic responses to speaking tasks. Although the results were at times lexically out of context, learners had been empowered to participate through the technology. The coincidental discovery and subsequent application of the highly accurate WBMT DeepL meant that learners were able to produce longer, more accurate, and therefore more meaningful L2 utterances. A pilot study was carried out which indicated that, as a result of the positive experience with WBMT, the usually-reticent lower-level learners were more motivated to participate in L2 speaking tasks. Furthermore, a large percentage of learners felt that due to increased exposure to the L2, WBMT was a language learning tool rather than simply a means to an end (cheating). It is proposed that a fuller investigation is conducted with the sole-use of DeepL to provide language prompts rather than complete sentences.

Introduction

In April 2020, Japanese university EFL lessons shifted online due to the COVID-19 pandemic. In the university in question, the asynchronous platform FLIPGRID had been chosen as a way to manage online oral communication lessons due to the longer time it afforded lower-level learners to complete speaking tasks (Rushton, 2021[1]). It had become necessary to provide bilingual speaking task instructions for these learners and the web-based machine translator (WBMT) DeepL, with its AI neural networks, had been implemented to achieve this. The accuracy of DeepL meant that precise speaking task instructions in L1 (Japanese) could be quickly and easily conveyed to students. This researcher's experimentation with DeepL in professional and personal communication proved that it was not only a highly accurate and natural translator but also a valid language learning tool. Students had already been open about using Google Translate (GT) to complete asynchronous speaking task preparation. In the sudden online environment, it had been impossible to monitor and therefore unavoidable in the circumstances. The speaking task results, although longer than usual face-to-face classroom interactions, contained WBMT generated English that was at times lexically not very natural or just plain inaccurate. After the extremely positive experience regarding accuracy of this researcher's use of the more accurate WBMT DeepL, it was decided to try and implement it as a language learning tool in oral communication classes, from the Fall semester of 2020 and on into and the end of Spring 2021.

This short paper will examine the results of a pilot study into the attitudes and opinions of Japanese university-age learners on the use of WBMT, namely DeepL, on their preparation and production of long-turn speaking tasks. A brief review of the literature surrounding WBMT will be followed by the results of a short questionnaire given to three university oral communication classes.

The Conflicting Views Surrounding WBMT

There are two fundamentally conflicting stances regarding the use of web-based machine translation (WBMT) for language learning, (Briggs, 2018[2]; Case, 2015[3]; Clifford, et al, 2013[4]; DeWaelsche, [5] 2015; Ducar et al, [6] 2018; and Stannard, [7] 2018). The first position, and unsurprisingly the one endorsed by many educators, believes that the use of WBMT is problematic because: it is an obstacle to language learning; promotes laziness; and ultimately, at the university level, constitutes cheating. Furthermore, there exists the potential threat to language learning programs i.e. teaching jobs. The second viewpoint sees

WBMT as being a language learning tool influencing learners' L2 engagement at both the linguistic and affective levels. Furthermore, it predicts that there will, in the future, be complete acceptance of WBMT as a language learning tool by the educational establishment.

Against the Use of WBMT

The taboo surrounding the use of WBMT exists mainly because it is viewed as cheating by both teachers and students (Case, [3] 2015). Many university courses have an "Honor Code" that clearly prohibits WBMT for use on graded coursework. However, students under the usual time pressures of participating in a second language course, turn to WBMT to provide a quick copy-paste fix. This L2, according to teachers, is rarely analyzed or acquired by the learner. Also, it is argued that learners do not have the necessary language awareness in the L2 to correctly monitor their own output when it is wrong, or learn from it when correct, (Clifford, et al, [4] 2013). In this case, output refers to L2 produced by WBMT which at the time of writing would, if not directed by teachers otherwise, primarily rely on learners' sole use of the application Google Translate. Ducar et al, [6] (2018) refer to GT as the "inescapable reality" of the second language (L2) classroom. Certainly, from anecdotal L2 learning experiences, GT does produce a mixed range of translations in terms of quality ranging from the acceptable to the contextually inappropriate and at worst the absurd. Can nothing good come from WBMT? Is it only to be relegated to the realm of cheating? Stannard, [7] (2018) states that while he understands the viewpoint of educators being averse to translation in L2 learning, he has changed his stance on GT from the perspective of being an L2 learner of Polish.

In Favor of the Use of WBMT

It is fruitless, according to Clifford, et al, [4] (2013) pretending that the "inescapable reality" of WBMT does not exist because it is generally acknowledged that practically all students possess a smartphone. Add in the acknowledged potential of WBMT as a language learning tool by educators themselves, (Stannard, [7] 2018), and it is perhaps necessary to enquire as to what other reasons the inclusion of WBMT in the arsenal of already available language learning tools, should be considered. Raising language awareness, developing intercultural competence and learner autonomy, along with increasing electronic literacy and critical thinking ability, according to Ducar et al, [6] (2018) are all possibilities. Clifford, et al, [4] (2013) see "great potential" in WBMT assisting learning by providing language in two languages (L1 and L2) which highlights a focus on form and language awareness. Case, [3] (2015) acknowledges that students are guaranteed to utilize it and consequently suggests that teachers, supplying the appropriate tasks, teach skills to assist students to assess machine translation. Briggs, [2] (2018), concurs that training students to use WBMT constructively and critically to benefit their L2 progression is the way forward. Such tasks might fall into two categories: post-editing and contrastive analysis. Post-editing requires the translation of a text into the L2 using WBMT followed by the learner locating, analyzing, and reformulating any errors; and contrastive analysis utilizes student-generated L2 translated with WBMT into the student's native language to highlight both grammatical and lexical errors.

Motivation and classroom dynamics

Communication apprehension resulting in silence among Japanese University EFL students due to their fear of making mistakes in public is a reality of both L1 and L2 interactions, (McGroskey, et al, [8] 1985). The perfectionist attitude of Japanese EFL learners with regard to L2 grammatical accuracy exemplifies this (Rushton, [9] 2019). Following extensive research into the concept of "expectancy of success" in motivational psychology, it is now a recognized fact that we do better if we believe we can succeed (Dörnyei, Z. [10] 2001). As a teacher, it is, therefore, possible to set task conditions to bring about individual positive learner expectancy. Such a positive condition could be the inclusion of WBMT in language learning activities. Garcia and Pena [11] (2011) found that beginner and low-intermediate learners of Spanish had increased levels of satisfaction when producing L2 texts with WBMT. It helped learners write longer texts and initiated greater interaction with the L2. WBMT acted as a scaffold enabling learners to write more authentic and meaningful texts in the relaxed learning environment harnessing technology as the "facilitator and stimulator of communication." Briggs, [2] (2018) stresses that it is important that teachers do not regard WBMT as a shortcut that damages the language learning

process. To be able to produce language in L2 via WBMT, which is beyond the current ability of the learner, is a potentially motivating force. Students are able to produce meaningful L2 which reflects what they want to really communicate in a way that exposes them to language that they previously did not know. Case, [3] (2015) concurs, stating that WBMT allows students to conceptualize language as a communication tool rather than just meaningless lexis.

Equality

As well as the aforementioned cultural reticence in communicative language learning contexts, there is also a discrepancy between the engagement in classroom tasks of students from privileged backgrounds and those from disadvantaged backgrounds. Ideally, students should be assigned to classes populated by learners from similar learning backgrounds and linguistic abilities enabling them to engage in level-appropriate content (Vygotsky, 1978). However, in a university environment, students from less privileged backgrounds with fewer prior communicative learning opportunities may quickly become demotivated by the sheer overwhelming nature of the need to produce L2 either orally or in writing. This can result in nonparticipation or at best minimal interaction. By means of WBMT, the latter group can at least have a chance of keeping up in a competitive learning environment such as a university EFL program. Furthermore, they could be motivated through initiating their own L2 utterances or texts and learn from analyzing their own production and teacher-directed negative feedback on attempted L2 utterances. (DeWaelsche, [5] 2015).

The Changing Face of Education

WBMT can upset traditional language learning approaches (Case, [3] 2015). As educators, language program policies need to be “proactive and forward-thinking” to develop new effective learning environments (Clifford, et al. [4] 2013). Furthermore, teachers should question whether their current methods of teaching are still viable with students whose experience of the world is primarily viewed through online interactions and the numerous implications they have for communication, and ultimately education.

WBMT has the potential to undermine traditional learning, with the old rules, e.g. the use of WBMT as a form of cheating, being seen as an impediment to advanced new methods and instruments. With WBMT, translation exercises become outmoded, giving rise to newer innovative exercises and activities. Using digital tools, it is possible more than ever before to tap into authentic language opportunities existing outside a university context.

The Research Methodology

Overall Research Aims

To investigate the attitudes and opinions of Japanese University EFL learners on the effect of WBMT on motivation towards the preparation and production of L2 longer speaking turns in oral communication classes.

Research Questions

1. What are the overall attitudes and opinions of Japanese university EFL learners towards using WBMT to improve their preparation for a longer speaking turn, in both face-to-face and asynchronous online learning contexts, for oral communication classes?
2. Do the learners view WBMT as useful as a learning tool or is it considered to be cheating and of little or no pedagogical value?
3. What was the impact of WBMT on motivation to participate in the oral communication class?

The Participants

A total of 36 students, in three small classes, participated in the compulsory two-year Oral Communication program at a women’s university in Hyogo Prefecture, in the west of Japan. The CEFR level range was from A1-B1. There were two second-year classes with 13 and 16 students respectively, and one third-year class, with 7 students. The classes had begun in April 2021 and after two weeks (two lessons) moved online due to the COVID-19 pandemic. Lessons then resumed on campus from week 10 and continued until the end of the course (Week 15). When online, the classes mixed both synchronous and asynchronous interactions practicing listening, L2 conversations, and a long turn speaking task being

completed asynchronously via the video discussion platform, Flipgrid. During face-to-face classes in accordance with the adopted social distancing policy of the university, the lessons continued to focus on listening practice and longer speaking turns. Speaking tasks were completed as before on Flipgrid although speaking practice was carried out by controlled pairwork activities coordinated to maintain social distancing and reduce the risk of COVID-19 infection.

The Speaking Task

The speaking task was modeled on an IELTS Part 2 (long turn) speaking test to meet the asynchronous online lesson environment as outlined in Rushton, [1](2021). This had initially been as a reaction to the impact of the 2020 COVID-19 pandemic in moving lessons online and the decision to make the oral communication lesson speaking practice segment, asynchronous. Asynchronicity was chosen to allow students more practice time thus achieving greater grammatical and lexical complexity. The video discussion platform Flipgrid was used for students to upload their video recordings in response to the speaking task. It was noted that many of these oral recordings were read from a prepared script and had been obviously translated with WBMT. Anecdotally, this was shown to be Google Translate (GT), although no explicit instruction had been given regarding its use in speaking tasks. The result was that even the most reticent and unmotivated students had been able to participate and produce a fuller L2 oral response than they had previously in face-to-face classes. These utterances were at times lacking appropriate use of lexis due to the inaccuracy of WBMT (GT), and this issue was dealt with in feedback provided by the teacher.

Selecting a better WBMT - DeepL

As mentioned, the free WBMT service DeepL had been used with remarkable accuracy. DeepL is a cutting-edge, free WBMT that uses artificial intelligence (AI) techniques based on deep learning, a branch of AI that tries to replicate the learning models of the human brain. As DeepL is more technologically advanced than GT or other WBMTs, its translations are very natural, as if produced by a human translator (Language Solutions [12]). When explaining speaking tasks to students, DeepL was explicitly recommended with links provided in the task materials supplied on Google Documents. Students were specifically advised to translate with DeepL rather than other WBMTs due to the more accurate translations it produced. There were, however, no restrictions regarding the use of other applications, and other WBMTs were certainly used (GT, LINE messaging translation, Papago etc.). Despite this, DeepL was the most prevalent WBMT application used during face-to-face classes.

Applying the WBMT

Students were required to speak upwards of 30 seconds to a maximum time limit of approximately two minutes with most learners averaging one minute. In the online environment, a preparation/upload deadline was given for 23:59 on the day of the lesson. For face-to-face lessons, this was the end of the 90-minute lesson with some exceptions when uploading was hampered by poor internet connectivity. The aim was to produce sufficient text on a specific topic to constitute a longer speaking turn. Students, therefore, translated from L1 to L2 with WBMT sentence by sentence. They produced highly personalized and detailed L2 as a result. In many instances, the L2 that was produced was unknown to them prior to engaging with the speaking task and hence provided an opportunity for L2 exposure.

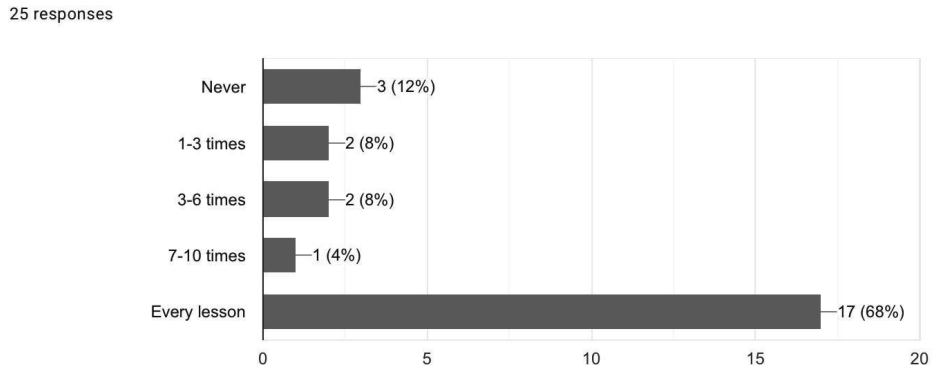
Research design

At the end of the penultimate lesson, a six-question survey was administered on Google Forms. Students accessed the survey by scanning the QR code and completing it on their smartphones. Five questions were multiple choice and covered aspects of the research questions relating to DeepL being a learning tool vs cheating; its efficacy at producing results to complete the task; and its effect on motivation towards participation in the oral communication classes. The sixth question was an open prompt for respondents to say anything else they wished to about DeepL and indicated that responses in L1 were acceptable. A total of 26 students from the three classes participated in the survey.

Results

Although 26 participants completed the questionnaire, one was excluded for checking more than one response for each question. The results of the six questions are as follows:

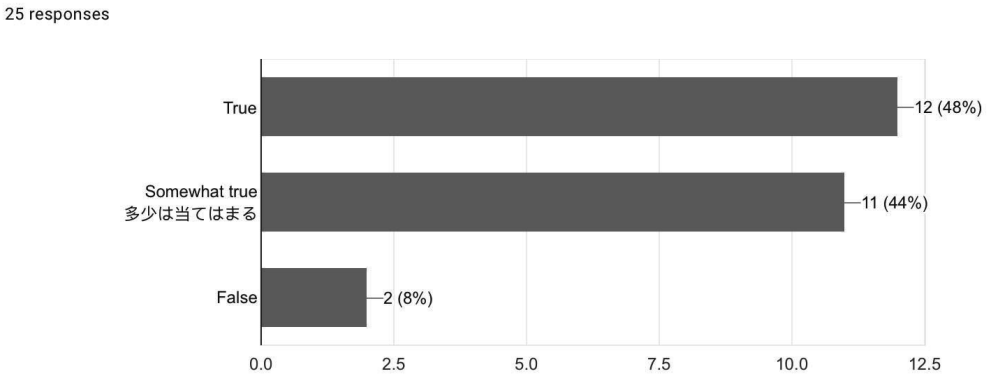
1. How often did you use DeepL in your oral communication classes this semester? (Fig.1) Out of the 25, 17 (68%) reported that they had used DeepL every lesson and one person (4%) used DeepL 7-10 times. At any given point in the course, at least 68% of students were using WBMT rising to a maximum of 88%. Using DeepL 3-6 times and 1-3 times both had two responses each (8%), and Never was reported by three respondents (12%). It can be seen that the majority of students used DeepL on a regular basis. It should be noted that despite being repeatedly advised to use DeepL due to its superior quality of translations, some students ignored this recommendation and routinely used GT or the translation feature in LINE messaging application on their smartphones. There were no firm directives in place to limit their agency regarding the selection of which WBMT they used.



(Fig. 1)

2. Because of DeepL I could make my English more interesting. (Fig. 2)

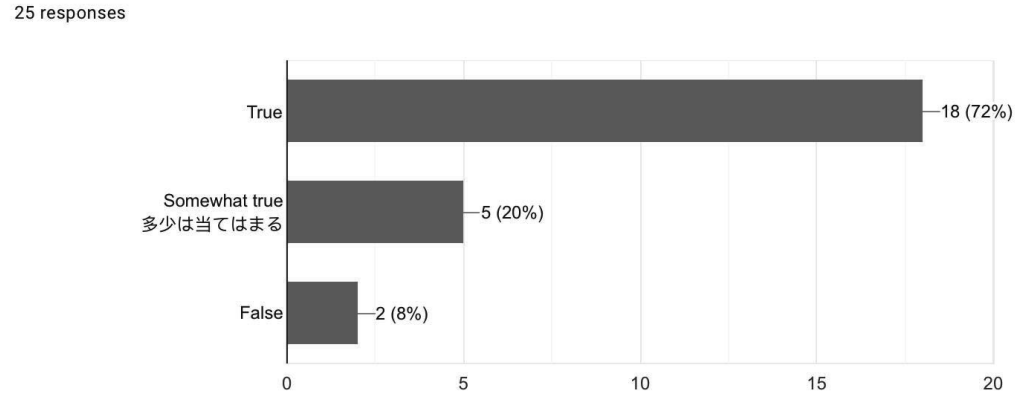
12 (48%) claimed this was True; 11 (44%) Somewhat true; and 2 (8%) that it was False. The vast majority of students acknowledged that the use of DeepL was able to make their utterances more interesting to some degree.



(Fig. 2)

3. I could learn new words and expressions because of DeepL. (Fig. 3)

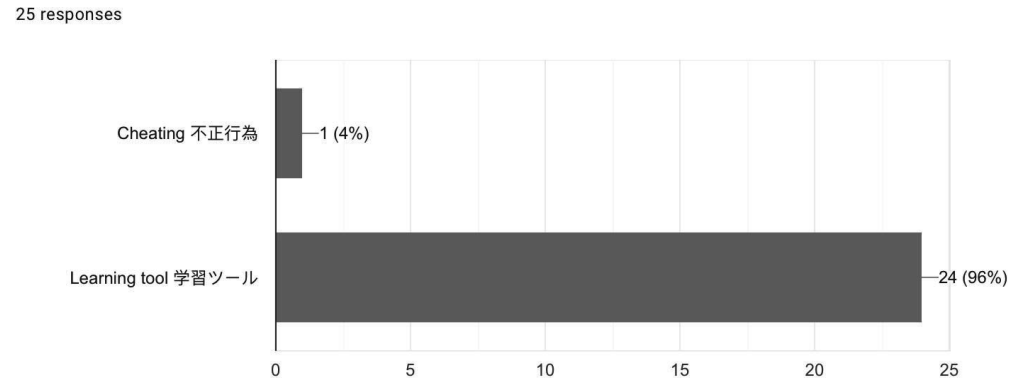
18 (72%) stated that this was True; 5 (20%) Somewhat true and 2 (8%) that it was False. Almost all the students said that they could "learn" new words and expressions. This should, however, be interpreted solely as exposure to new lexis as no formal method was employed to measure actual L2 acquisition of such items.



(Fig. 3)

4. What do you think about using DeepL in oral communication classes? Is it cheating or is it a learning tool? (Fig. 4)

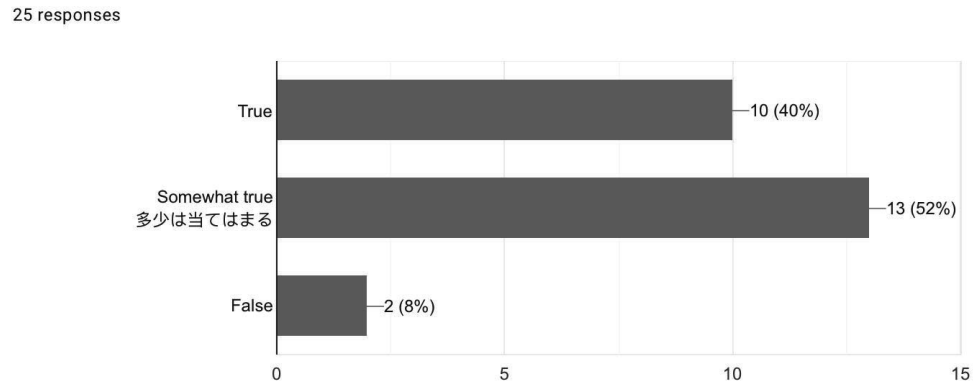
24 (96%) said that it was a learning tool and one (4%) that it was cheating. Overwhelmingly, all students, bar one, could recognize the benefits of using WBMT as a learning tool in their study of the L2. This would seem to concur with the result of Question 3 above.



(Fig. 4)

5. My motivation to participate in oral communication class increased because of DeepL. (Fig. 5)

10 (40%) said it was True; 13 (52%) reported that it was somewhat true; and 2 (8%) that it was False. Interestingly, 24 out of 26 students admitted to some measure of increased motivation due to using the WBMT DeepL in their oral communication classes.



(Fig. 5)

6. If you have anything else you want to say about using DeepL in oral communication classes, please write it below you may write in Japanese.

There were a total of three answers. Two were in English and agreed that DeepL was "a great educational tool" Another, in Japanese, was translated as, "It was very easy to use as it translated exactly what I wanted to say."

Discussion, Implications, and Recommendations

The aim of this pilot study was to investigate the attitudes and opinions of Japanese University EFL learners on the effect of WBMT on motivation towards the preparation and production of L2 longer speaking turns in oral communication classes. There were three research questions (RQ) to consider.

RQ 1. What are the overall learners' attitudes and opinions towards using WBMT to improve their preparation for a longer speaking turn, in both face-to-face and asynchronous online learning contexts, for oral communication classes?

There was a positive overall feeling from learners towards WBMT for the preparation for longer turn speaking tasks in oral communication classes (Briggs, [2] 2018; Case, [3] 2015; Clifford, et al, [4] 2013; DeWaelsche, [5] 2015; Ducar et al, [6] 2018). The majority of students used WBMT in many if not all classes. Most learners felt their utterances were more interesting. This was most likely due to the scaffolding provided by WBMT, allowing them the freedom to be specific and detailed about what they wanted to say.

RQ 2. Do the learners view WBMT as useful as a learning tool or is it considered to be cheating and of little or no pedagogical value?

All learners, except one, viewed WBMT as a learning tool rather than a means of cheating. This is probably because students could discover a lot of new lexis and expressions to complete the speaking task. As a result, most of them felt their spoken output was also more interesting no doubt because of a greater range of vocabulary and expressions that were at their disposal to compose longer and more interesting speaking turns (Briggs, [2] 2018; Case, [3] 2015; Clifford, et al, [4] 2013; DeWaelsche, [5] 2015; Ducar et al, [6] 2018; and Stannard, [7] 2018).

RQ 3. What was the impact of WBMT on motivation to participate in the oral communication class?

The majority of learners reported frequent use of WBMT in almost every class correlating with a similar amount who felt their motivation to participate had increased in oral communication classes. This increase in motivation may well be attributable to the increased "expectancy of success" (Dörnyei, Z. [10] 2001) students could expect through the use of WBMT, notably DeepL when preparing their speaking tasks.

Conclusion

Summary of findings

It can be seen that WBMT, through its motivating effect, has an overall positive influence on the participation of Japanese EFL learners in oral communication classes. Furthermore, as students engaged in language production, discovering L2 lexis, lexical chunks, expressions, and phrasing that were previously unknown to them, the pedagogical value of WBMT as a potential learning tool cannot be ignored.

Limitations of the study and recommendations for further research

While an overall positive effect of WBMT on the motivational participatory aspect of an oral communication class has been noted in the study, the quality and consistency of the output were not scientifically monitored. The disparity between GT and DeepL in terms of accuracy and quality of translation is not only noted on popular media (Language Solutions [13]) but anecdotally as a teacher listening to students' speaking tasks and providing feedback. GT, while satisfactory at the word level, usually provides only literal translations which affect the accuracy, intended meaning, and appropriacy of the spoken text. In the future, it would be more beneficial to be absolute regarding the choice of WBMT i.e. limiting the students to DeepL only rather than the assumed default option of GT.

The L2 produced by learners in the pilot study was essentially just read aloud. It is proposed that learners should be taught how to highlight key information words from translated texts and practice producing longer speaking turns by using such notes as prompts. .

Furthermore, language is more than just a grammatical or lexical entity, and the area of pronunciation in this study was not focused on. It is suggested that in the future the area of pronunciation should be more fully explored. This may be possible by reducing the length of the speaking turn to make such a focus more manageable.

Finally, this pilot study focused on engaging generally lower motivated learners to prepare and produce L2 English to satisfy a specific classroom speaking task. The long-term effects on language acquisition are as yet untested and can currently only be acknowledged anecdotally by WBMT users such as Stannard, [7] (2018), and this researcher who are invested in the need to use the L2 for real communicative purposes and not as part of a university oral communication program.

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