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English Beyond Textbooks: Using Apps to Increase Vocabulary and Overall Proficiency

ABSTRACT

On entering university, most Japanese students have had approximately 1,000 hours of exposure to English, a good way short of the 2,500 hours that are thought to be necessary for reaching high proficiency (Inagaki, 2010). Unfortunately, at the university where I work, many students struggle with English, holding TOEIC scores below 400 and vocabulary proficiency at the 300-frequency level of the National General Service List (NGSL). This highlights the need for them to learn a considerable number of words to improve their English fluency. Relying solely on classroom textbooks does not provide enough vocabulary support, as vocabulary should be encountered multiple times. As a result, students often do not retain the phrases after their unit tests. Moreover, students at this university often lack the motivation to study outside of class. To address these challenges, language learning apps which offer timed spaced repetition were introduced. These apps enhance word retention and may function as motivational tools to continue learning. These apps also empower students by demonstrating their ability to reach goals independently.

Keywords: learner autonomy, vocabulary acquisition, language-learning apps

Over the past six years, I have taught mandatory freshman English courses across five universities, where I have observed notable variations in English proficiency among students. One recurrent challenge has been the students' lack of vocabulary, which has affected their language proficiency. In the past academic year, I conducted an assessment at Nihon University of vocabulary levels using the Vocabulary Levels test created by Raine and McLean (2019). This involved administering the National General Service List (NGSL) flemma test for productive typing form recall in Spring 2023 and a parallel evaluation for receptive reading recall in Fall 2023. For the productive recall test, students see a sentence with one word in Japanese (e.g., He is an 面白い student). The student would then have to type in the word "interesting". For the receptive recall test, students see a sentence that is completely in English with one word underlined. Students have to type in the Japanese translation of the word while paying attention to grammar. For example, students may see the sentence "This is a free pen." The student would have to type 「無料の」 in the text box.

The initial evaluation resulted in an average placement within the first 500 words of the NGSL, prompting a reconsideration of my teaching strategies, as the level of vocabulary knowledge was lower than expected. The majority of the Spring semester classes centered around textbook use, with the addition of Quizlet study sets, and in-class gaming activities. Based on the results of the vocabulary tests and classroom observations, in the Fall 2023 semester, I changed my approach

dedicating entire class sessions to playing instructional games such as Bamboozle, Quizlet Live, Wordwall, and tailored board games crafted from the material covered in the textbook. Noticing occasional gaps in students' ability to recall phrases and words from the textbook during games, I introduced educational apps as a supplementary measure, aiming to diversify learning experiences while retaining a connection to traditional methodologies (e.g., relying solely on textbooks or students only reading aloud from textbooks in the class).

Subsequently, for the Fall 2023 evaluation, I decided to shift the emphasis towards meaning recall - where students could identify the meaning of the words shown. This decision stemmed from a dual curiosity: firstly, whether there would be a change in scores (i.e., the meaning recall test would be easier for students), and secondly, an exploration of the impact of prevalent instructional tools such as Quizlet, which primarily facilitate meaning recall through flashcard-based study. I begin with a discussion about the difficulty of becoming proficient in English, followed by an account of my attempts to build students' vocabulary, and their attitudes to those methods.

DIFFICULTY OF BECOMING PROFICIENT IN ENGLISH FOR JAPANESE UNIVERSITY STUDENTS

The predominant instructional focus of English at school often revolves around exam-oriented teaching. This led me to wonder why my students tested into the vocabulary level bands that they did on both the meaning recall and productive recall tests and how what they learned aligned with established vocabulary lists such as the NGSL as it is a frequency-based vocabulary list. If students had mastered the most frequent words of English, their vocabulary levels should be higher. I also started to wonder how much time students would need to increase their overall proficiency. Inagaki (2005) posits an estimated requirement of 2,500 study hours for attaining a high level of English proficiency for Japanese students, with a range of 2,500 to 7,500 hours to achieve a native-like level. Consequently, cultivating self-directed learning habits and enhancing intrinsic motivation becomes crucial if learners wish to become proficient. Initial surveys conducted in class at the beginning of the semester indicated that students lack the motivation to study English outside of class, contrasting with a higher motivation to participate in class activities, which is possibly influenced by grade considerations.

I then began to wonder what sort of materials could be used to inspire students to study more outside of the classroom. While textbooks serve as valuable study resources, they do not offer enough chances for students to recall the meaning of the words that they have encountered. When I used Fifty-fifty Book One, I noticed that although there were some review units, there needed to be more recycling of vocabulary. For example, "uncle" appears two times after its initial introduction in Unit 9. However, some of my students had trouble remembering what uncle meant. Recent efforts by Browne et al. (2023), evident in their textbook "Fast Forward to Fluency", based on the NGSL, strive to address this issue by incorporating a recycling approach to reinforce vocabulary retention. However, textbooks fail to provide students with motivation to study English more outside of class, as I am quite doubtful that any of my students would refer to their textbooks after the class has finished. This thought is supported by students doing their homework before class or writing down their classmates' answers to the self-study sections of their textbook when they feel that I am not looking.

Additionally, I did not think that their vocabulary levels had improved as a result of the methods I had used, which was mostly using textbooks and playing some games such as Bamboozle on occasion as well as using Quizlet during the semester. This is because in some games that were played in class, students were not able to use the vocabulary correctly. For example, in class I play a modified version of tic-tac-toe, where students can only put an X or an O if they can make a sentence with the word in the square. Many students asked me what the words meant even though these words were part of their Quizlet study sets.

Therefore, it was clear that my methods were not very effective in helping students retain vocabulary which makes them more proficient speakers. Thus, I thought it was necessary to think beyond only using the textbook and my methods to expand students' vocabulary knowledge. As students often use their phones, I decided to introduce apps as they might get students to practice English outside of class more effectively to increase their overall vocabulary levels.

EFFECTIVENESS OF APPS FOR VOCABULARY BUILDING

Webb and Nation (2017) stated that spaced-time repetition, presenting words in both isolation and context, and fostering a sense of deliberate learning, contribute significantly to vocabulary acquisition. Apps possess these features, which may be why researchers have found success in increasing learners' language proficiency. Ahmed et al. (2022) reported increased vocabulary and grammar development among students using Duolingo, concurrently noting a positive impact on motivation and reducing learners' anxiety. Similarly, Nuralisah and Kareviati (2020) observed success with Memrise in enhancing students' mastery of vocabulary. The comprehensive study by Alvarado et al. (2016) further affirmed the efficacy of apps in addressing all language skills while providing a practical and engaging rehearsal environment.

Apps also offer motivational incentives such as badges and level progression, framing language learning as a gamified experience. This gamification aspect not only enhances motivation but can also transform perceived "dead time", such as commuting, into productive learning opportunities. The timed space repetition embedded in these apps aids in recall, and the autonomy they afford to students helps to compensate for limited class time.

STUDENTS' ATTITUDES TO THE APPS

In the Fall semester, students were introduced to different apps twice. In lesson 5 students were shown how to use four popular apps Memrise, LingoClip, Duolingo, and Busuu. These apps were chosen as they are free, easily accessible, and familiar to me. I chose apps I have used before in case troubleshooting was needed. I demonstrated how to play the 4 apps in front of the class. I also talked about how to create accounts and where to download the apps. Students were then placed into groups where they chose an app to try and help each other if they were having any problems. Students used the apps for 20 minutes or less and were then given a survey. The students who chose Duolingo played for a shorter time because Duolingo relies on students keeping enough hearts to continue playing. In the survey, Memrise and Duolingo were the top picks among the majority of students. Those who opted for Memrise tended to recommend it to their peers and used it for longer than those who chose Duolingo. This divergence in usage patterns might be attributed to Duolingo's heart system, where users need to either purchase more hearts or wait for their "health" to recover once depleted, leading to some students not recommending the app. Feedback from students revealed that Busuu, Duolingo, and Memrise often begin at a level considered too easy for some, prompting a desire to test out of the initial levels. Additionally, some students preferred sticking to a single app due to concerns about storage space on their phones. However, the overall sentiment towards the apps remained positive.

In Lesson 14, students were introduced to four additional apps: Innovative Language Learning, BBC Learning English, Poe-Fast AI Chat, and AWABE. These selections were made based on their accessibility and cost-free nature. Notably, BBC English and Poe offer the advantage of starting at more challenging proficiency levels. Students were also given the option to continue using the four apps introduced earlier: LingoClip, Memrise, Duolingo, and Busuu. Following a demonstration on app usage, students were instructed to use the app for 10 minutes and subsequently complete a survey. Among the choices, 5 students opted for Busuu but stated that they did not like it, indicating they would not recommend it to their peers. Two students chose LingoClip but they did not like it. This outcome was somewhat unexpected, considering students can choose to listen to songs

they enjoy; however, students did not seem to use earphones which might have influenced their experience. On the contrary, 4 students selected Memrise and expressed satisfaction, recommending it to their classmates. A lone student chose BBC English but did not enjoy it and would not recommend it. Duolingo was the preferred choice for 7 students, with the majority enjoying it and endorsing it to their peers, although some perceived it as too easy. One student faced constraints in loading any apps due to insufficient phone space.

In the Lesson 14 survey, students were also questioned about their continued app usage since Lesson 5. Of the 20 surveyed students, only 3 reported continued use of the app. These students favored Duolingo, engaging with it approximately twice a week. Their motivation for studying outside of class was reported as somewhat moderate, aligning with the broader trend among students who expressed being only moderately motivated or lacking motivation for English study beyond class hours.

CONCLUSION

While textbooks play a pivotal role in establishing a foundational understanding for learners striving for English proficiency, relying solely on textbooks proves inadequate for vocabulary acquisition. Textbooks are usually used by instructors during class sessions, which fall short of providing students with a sufficient time frame to cultivate English proficiency. Consequently, students must actively seek motivation to learn outside of the classroom, to compensate for the time constraints of in-class instruction.

Therefore, educational apps may be a solution to help with the time deficit and might be able to help increase proficiency. Moreover, these apps contribute to enhanced retention through the implementation of time-spaced learning strategies. However, if students are going to remain motivated enough to use them, they need to be part of a student's grade as this survey shows that most students are not very motivated to study English outside of class.

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