

## Digital language learning strategies: University language learners and CALL

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How to cite: Wood, J. C. (2024). Digital language learning strategies: University language learners and CALL. In Y. Choubsaz, P. Díez-Arcón, A. Gimeno-Sanz, J. Hriňák, X. Liashuk, S. Pokrivčáková & H. Vančová (Eds.), *CALL for Humanity - EUROCALL 2024 Short Papers*. <https://doi.org/10.4995/EuroCALL2024.2024.19039>

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### Abstract

*The current case study examines the ways in which 31 university students learning English in central Japan use digital language learning strategies to become more autonomous learners outside the classroom. The study also examines how important students believe technology is for their own personal language learning and compares lower-tech language learning strategies to more modern ones, asking students to disclose which types of strategies they prefer to use and why (e.g., pencil and paper vs. apps and websites, etc.). The study looks closely at survey data as well as in-depth interviews that were held with a sample of the participants. The data found that students overwhelmingly use more high-tech strategies for language learning purposes and that they primarily use their smartphones to help them improve their English skills. Moreover, students reported to being conscious of how and when they use technology for language learning purposes.*

**Keywords:** *learning strategies; autonomous learning; apps; university learners.*

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## 1. Introduction

Language learning strategies (LLSs) have been of interest to both learners and teachers alike since the mid 1970s (Rubin, 1975). Essentially, LLSs are the various actions that language learners consciously and purposefully take on their own to help with their language learning. According to Oxford (1990) they are “steps taken by students to enhance their own learning” (p. 1). LLSs are traits of autonomous learners who want to take more control of their learning and can be as simple as making flashcards or keeping a journal in the target language. Importantly though, as technology advances, so do the various types of digital language learning strategies (DLLSs) that become available to learners. Learners can now easily make flashcards on their smartphones, practice their pronunciation using websites/apps, or even use AI to help with their language learning. Learners can also listen to podcasts for free for hours at a time in their target language or use the internet to find language exchange partners.

This case study will shed a light on the DLLSs that a sample of English learners in Japan have found to be the most useful as well as highlight their opinions regarding lower-tech related LLSs. It will add to what we have already learned from previous studies that have examined the various ways in which language learners use technology and their preferences for how and when they use it for studying purposes. For example, Wood (2020) found that 18 advanced-level English learners at a Japanese university were using technology for their language learning in conscious and deliberate ways and that for the students in his study, technology was a “useful tool for language learning” (p. 102). Son, Park, and Park (2017) examined the digital literacy of 170 university students

studying English in two different learning contexts. In Australia 100 students were questioned about their digital literacy and the types of digital tools they used for language learning while 70 were surveyed in Japan. According to Son, Park, and Park (2017) “The results of the two studies indicate that all participants were aware of digital technologies and were interested in using them” and that participants in both groups “found out new digital technologies mainly from websites, friends or social networks” (p. 93). Although previous research has brought to light many useful and important points regarding the types of digital tools and strategies language learners use, as technology continues to advance, so does the need for further research in order to keep up with it.

## **2. Method**

### **Context and participants**

Surveys were anonymously collected from 31 university students enrolled in two English courses at two private universities located in central Japan (see Table 1 for survey questions and answers). One course was an English oral communication course and the other was a course dedicated to language learning strategies and motivation. Surveys were followed up by in-depth interviews with a sample of 4 volunteers from the group. The interviews consisted of nine interview questions and lasted around 20 minutes per student. For privacy reasons, names of those who were interviewed have been changed to pseudonyms when discussed in this paper. Furthermore, students who were interviewed all signed consent forms allowing the researcher to use statements they made during their interviews for research purposes. On the surveys and in the interviews, students were asked about their use of DLLs, particularly in the case of any that involved the use of more recent technology. Students were also asked which types of strategies they found more useful, lower-tech learning strategies (e.g., making paper flashcards, making notes by hand in class, etc.) or more modern-tech learning strategies (e.g., making flashcards on their smartphone, listening to podcasts in the target language, etc.). Overall, the study aimed at exploring two research questions:

- (1) Which do university students in Japan use more, lower-tech or higher-tech language learning strategies?
- (2) How important do students feel technology is for their language-learning process?

## **3. Results and discussion**

The survey data show that the majority of students use more modern-tech related DLLs to help them improve their English skills and that they find it very important for their language learning overall. Furthermore, more than 90% of the students surveyed reported to having language learning apps installed on their smartphones which they use on a regular basis. When surveyed about how students find these types of language learning apps, the majority reported that they search for them by themselves. Taking this kind of initiative highlights the autonomous nature of these students' learning styles and attitudes regarding language learning. According to the survey data, one of the most useful DLLs for students was watching (and listening) to YouTube. Examples from the anonymous survey comments included things like “YouTube, unlimited sources that keep me entertained” and “I think YouTube is the most useful language learning strategy because there are many materials that are suitable for English learning.” Moreover, many students found language learning apps and podcasts in their target language useful, writing comments such as “Using apps to memorize vocabulary is more effective than traditional ways” and “With podcasts we can learn native pronunciation and new vocabulary” (see Table 1 for more examples of open-ended survey answers).

Students who were interviewed occasionally mentioned YouTube, but they also gave other examples of more diverse DLLs they used. According to Honoka, “I used apps, Duolingo and Hello Talk. I sometimes watch Netflix, so watching dramas. Also, I watch YouTube... Podcasts, I listen to 6 minutes in English. I listen to it every day because it's short.” Honoka continues in her interview by giving a more detailed description of how she uses the app Hello Talk. She says that “So, Hello Talk, we can talk with a lot of people, and then I text and send voice messages to foreign language speakers. I don't care about my English skills because it's um...it's very relaxed and the app helps me with, for example, I can talk to a lot of people and I can send voice messages.” Additionally, Honoka uses technology to improve her reading and writing skills. She reported that “I

often text in English with my friends and I sometimes post in English on Instagram or Twitter. And I can catch some phrases on Twitter.” Hide also describes how he uses technology for language learning purposes. In his words, “In many ways I use technology for my learning. The most important applications are smart news and podcasts. It’s easy to use and I can do it myself.” Risa currently uses apps to help her learn English as well as French. According to her, “I’m learning French now at this university and I use YouTube and Duolingo for that too. YouTube videos that teach us grammar.” She continues by saying that for Duolingo, she uses it every day because “Consistency is important.” Tomo discussed a website called Forvo that he uses to help improve his English pronunciation. “Forvo is pretty good for pronunciation, no matter the language. You usually have natives pronouncing words you’re looking for.” Tomo also mentioned using the live-streaming platform Twitch for language learning purposes. He reported that “...to be exposed to that English [natural/everyday English], I started watching Twitch TV and I would specifically watch IRL [In real life] streams where people go out and speak to people on the street. Specifically, I would watch Pokémon IRLs where people go out and talk about Pokémon to random people in English.”

Based on both the survey and interview data, we can see that students consciously and purposefully integrated the use of technology into their language learning routines. They took the initiative to seek out new websites or apps by themselves in order to help improve their English abilities in their own time. In short, these students took control of their own learning with the help of technology. Students improved their listening comprehension by listening to podcasts on their smartphones or watching things in their target language on YouTube or other streaming websites. Essentially, these students consciously used various DLLs to improve their language skills.

**Table 1.** Survey results.

<b>Digital Language Learning Strategies Survey</b>			
<b>1. With language learning strategies, do you use more low-tech strategies (writing notes by hand, handwritten flashcards, etc.) or hi-tech strategies (flashcards on your smartphone, listening to podcasts, etc.)?</b>			
Lo-tech: 10	Hi-tech: 20	N/A: 1	
<b>2. How often do you use the Internet or smartphone applications (apps) to study a language?</b>			
Every day: 14	2-3 times a week: 15	Once a week: 2	Never: 0
<b>3. How important is technology for your language learning?</b>			
Very important: 16	Important: 12	A little important: 3	Not important at all: 0
<b>4. For general language learning, which do you think is better, using modern technology (websites/apps) or traditional methods (pen/pencils, notebooks, paper books, etc.)?</b>			
Modern technology: 18	Traditional methods: 10	N/A: 3	
<b>5. Do you currently have any language learning apps on your smartphone?</b>			
YES: 28	NO: 3		
<i>If yes, what ones do you have?</i>			
- Quizlet - Native Camp - X Reading – WordHolic - BBC News app – Weblio - Deep L – Duolingo – Drops – Anki - Hello Talk			
<b>6. How do you learn about new language learning websites or applications?</b>			
From friends: 5	I search for them myself: 23	I don’t use any: 1	
Other: 2			
<b>7. For you, what has been the most useful language learning strategy that uses modern technology? Why?</b>			

*Some examples of student answers:*

- “YouTube, unlimited sources that keep me entertained.”
- “Duolingo. Not too difficult, but not too easy.”
- “Using apps to memorize vocabulary is more effective than traditional ways.”
- “Listening and watching a lot of content on YouTube and podcasts.”
- “Listening – I can listen to podcasts and watch Netflix or YouTube anytime and anywhere.”
- “With podcasts we can learn about natural conversation when you listen.”
- “YouTube – You can learn native pronunciation and new vocabulary.”

**8. What other digital language learning strategies do you use?** Please write a sentence or two.

*Some examples of student answers:*

- “Native Camp because we can practice to speak English whenever you want.”
  - “I use TED to listen some speech. I can watch subtitles.”
  - “YouTube. It’s fun and easy way.”
  - “I sometimes use Instagram to learn English.”
  - “Texting with native speaking friends.”
  - “Checking grammar by ChatGPT.”
  - “I often use Google Scholar for my English learning, in particular reading...we can learn academic English.”
  - “Chatting with a foreigner in direct message on Instagram.”
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## **4. Conclusion**

Between the surveys and interviews, we can conclude that the use of technology for language learning is seen as quite important to this current generation of language learners. Although some students reported to using more low-tech strategies (e.g., note-taking by hand or making paper flashcards), the majority of them reported that they use more modern-tech related DLLSs. The data show that the majority of these learners actively use technology outside of class to help improve their English language abilities. In short, they are taking control of their own learning after the class bell rings and using technology to help them become more autonomous learners. This self-directed learning outside of class relies heavily on websites and smartphone apps that the learners have either sought out themselves or learned of through friends and/or classmates. The findings from this case study are similar to those highlighted by Son, Park, and Park (2017) and Wood (2020) and show how language learners can use technology to become more autonomous learners in their own time. According to Benson (2011), “In the course of its evolution, the concept of autonomy has become part of the mainstream of research and practice within the field of language education” (p. 17) while Son, Park, and Park (2017) believe that by improving the digital literacy skills of language learners, they have the potential to become “effective and independent learners who can take advantage of the tools and resources for language learning in authentic contexts” (p. 95). Although the concept of autonomous learning is not new itself, the technological tools students now have at their disposal continue to either be improved or newly created. As technology continues to advance, so do the types of strategies our learners can take advantage of to become more autonomous learners outside the classroom.

## Acknowledgements

I would like to thank the students who took part in this study as well as the reviewers who provided valuable notes and suggestions for revisions.

## References

- Benson, P. (2011). *Teaching and Researching Autonomy*. (2nd ed.). Harlow, UK: Pearson Education.
- Li P, Lan Y-J (2022). Digital language learning (DLL): Insights from behavior, cognition, and the brain. *Bilingualism: Language and Cognition*, 25, 361–378. DOI: <https://doi.org/10.1017/S1366728921000353>
- Oxford, R. (1990). *Language learning strategies*. Boston: Heinle and Heinle Publishers.
- Rubin, J. (1975). What the ‘good language learner’ can teach us. *TESOL Quarterly*, 9(1), 41-51. <https://doi.org/10.2307/3586011>
- Son, T., Park, J., & Park, S. (2017). Digital literacy of language learners in two different contexts. *JALT CALL Journal*, Volume(13), No. 2, 77-96. <https://doi.org/10.29140/jaltcall.v13n2.213>
- Wood, J.C. (2020). A closer look at language learning strategies. In P. Clements, A. Krause, & R. Gentry (Eds.), *Teacher efficacy, learner agency*, 100 – 105. Tokyo: JALT. <https://doi.org/10.37546/JALTPCP2019-13>