

Depth Assignment - Formative Study Section Write-up

Daniel Kao Hubert Tang
Kaiwen Xue Hanger Yang

Research Questions

In our study, we are interested in solving two key questions:

1. How would factors like social environment and resources availability influence people's language skills in different modalities?
2. What could cause a learner to quit learning a language, and what would help them resume learning?

Data Collection and Analysis

We used two methods to gather information about secondary language learning: a survey for qualitative and quantitative data and an interview for in-depth qualitative data. Both methods had questions about the user's language proficiencies, challenges they faced, tools or resources used, and their ideal tools for language learning.

The survey was expected to be completed in 10 minutes, with a mix of checkbox-style and short answer questions, and was used to collect a wide array of user information. It was distributed to friends, family, and classmates of our research group, which we then encouraged to pass the survey along to their own friends and associates.

We also extended an option to conduct an interview with users as well in place of the

survey, should they choose to, meant to gain more in-depth knowledge about language learning. Interviews spanned from 30 to 1 hour. Audio and video were recorded based on the consent of the participants. All interviews involved note-taking of the given answers.

Participants

Our study included 45 participants. 10 of them are interview participants, and 35 of them are survey participants. We select our participants via convenience sampling, targeting individuals with diverse language learning experiences. Our recruitment strategy focused on friends, family members, and classmates who have learned a second, third, or more languages. There are no restrictions on what languages they have learned.

Analysis

We summarize our findings below:

Memorization of Vocabulary: One of the most significant challenges reported in our user research was vocabulary acquisition, particularly among heritage speakers, who learned languages informally with family but lacked formal training in reading and writing. While 70% of heritage speakers report that they have strong listening and speaking skills, 81% of them struggled with reading and writing. This was especially common among Chinese and Japanese heritage speakers, who faced difficulty in recognizing written characters due to the complexity of the language.

Casual Learners and Lack of Exposure: For learners motivated by fun, travel, culture, and media consumption, their proficiency levels in different modalities are more evenly distributed. Specifically, 60% of them reported to be moderate or higher in speaking and listening, 57% for reading, and 40% for writing. This group primarily used self-guided tools like Duolingo, which emphasizes reading and writing over real-time conversation practice. One of their biggest challenges reported is limited exposure to real-world conversations. Among all the participants, 41% of them report this as their top challenge.

Paper Choice and Reasoning

The model paper we have chosen is included in our reference section below. Our main reason for choosing this paper was due to its similarities in our project, both in its involvement within the language learning domain and in its user research methods involving a mix of interviews and surveys.

Reference

Álvarez, I., Montoro, C., De Medeiros, A., Kelly, D., & Hazard, A. (2020). Language learning experiences of postgraduate research students in the UK. *Language Learning Journal*, 48(5), 672–684.
<https://doi.org/10.1080/09571736.2020.1724186>