

## Comparative Study: The Effectiveness of Learning Japanese Using Duolingo and YouTube

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**Abstract.** *This research looks into how well Duolingo and YouTube help people learn Japanese. A quantitative approach was taken, gathering information from 35 individuals through an online questionnaire. Participants were chosen based on whether they used Duolingo, YouTube, or both platforms. The questionnaire explored their past learning experiences, how they use these platforms, their preferences, how effective they think these tools are, and what challenges they encountered while learning. The findings reveal that most of the participants already had some background in Japanese and preferred online resources due to their accessibility, no cost, and fun features. Duolingo was liked for its organized, game-like approach, whereas YouTube was appreciated for its authentic, visual materials. A lot of people enjoyed learning at their own pace, finding listening and pronunciation to be useful strategies. Some individuals struggled with staying motivated and dealing with complicated grammar rules. To sum up, both Duolingo and YouTube are good resources for learning basic Japanese, especially for those studying on their own. However, they work best when used alongside other resources. It is suggested to combine digital tools with guidance from teachers for the best outcomes.*

**Keywords:** *Duolingo, Effectiveness, Japanese Language, Learning Media, YouTube.*

### 1. INTRODUCTION

The quick development of mobile language learning apps has changed the way people learn new languages. One of the most popular platforms among these is Duolingo, which provides organized, game-like lessons that focus on reading, listening, speaking, and writing abilities (X. Jiang et al., 2024; Kazu & Kuvvetli, 2025; Lo et al., 2025; Loewen et al., 2019; Shortt et al., 2023; Smith et al., n.d.; Windya et al., 2023). Research indicates that Duolingo can improve language skills in educational environments (Gajda, 2024) and assist various methods of learning a language (Neuschafer, 2025; Sataka & Rozenfeld, 2021).

Additionally, the importance of how users engage on Duolingo's forums, particularly the participation of moderators, has been pointed out as essential for keeping learners interested and fostering a sense of community (Neuschafer, 2024, 2025). The way the platform includes game-like features has gained a lot of focus from researchers because of how it encourages learners (Ali M & Deris, 2019; Shortt et al., 2023).

At the same time, YouTube is being seen more and more as a strong resource for learning languages because of its real content and engaging style (Alawadh et al., 2023; Dizon, 2022; Hendar & Amalia, 2024; S. Jiang & Zhao, 2025; Mannahali et al., 2024; Novawan et al.,

2021; Tahmina, 2023). Studies using Natural Language Processing tools to examine comments from YouTube users show that learners have a good view of how well the platform works (Alawadh et al., 2023; Fxyma, 2023; Irawan & Yolanda, 2023). Moreover, YouTube has shown to be useful in enhancing listening skills, particularly when it comes to learning Japanese (Kato, 2024; Zimmerman & McMeekin, 2019).

Other mobile apps, like Duolingo, have been examined for their role in helping with vocabulary growth (Huwari et al., 2023) and examination methods like the Duolingo English Test, with conversations concentrating on equity, encouragement, and understanding of writing evaluation (Yao, 2024; Yu & Xu, 2024).

## **2. RESEARCH METHODOLOGY**

This study utilized a quantitative descriptive approach, gathering data through an online questionnaire created with Google Forms. A total of 35 participants, all of whom had experience learning Japanese through either Duolingo or YouTube, took part in the research. The questionnaire was crafted with a mix of closed and open-ended questions, allowing for both structured analysis and a deeper understanding of the respondents' learning experiences.

The focus of the questionnaire encompassed several key areas, including the participants' background in learning Japanese, the platforms they chose, their motivations for selecting these platforms, and their preferences regarding self-directed versus classroom-based instruction. Additionally, the questionnaire delved into the participants' views on the most effective learning methods, the challenges they faced while using the selected platforms, and their overall perception of Duolingo and YouTube's effectiveness.

The content of the questions examined various aspects, such as respondents' previous experiences with learning Japanese, their use of Duolingo and YouTube as educational tools, their motivations for selecting these platforms, and their comfort levels with self-directed learning. Further inquiries explored the most beneficial learning techniques, such as watching videos, listening, or practicing pronunciation, along with the obstacles encountered and which platform they found easiest to navigate, most motivating, and overall most effective.

By designing the questionnaire to investigate these multiple facets, this study seeks to develop a comprehensive understanding of user perceptions and behaviors. The data collected from the 35 responses were analyzed using descriptive statistics, with percentages and visual aids, such as pie charts and bar graphs, employed to highlight trends and preferences among the participants.

The following table summarizes the main aspects and related indicators from the questionnaire:

**Table 1. Aspect Investigated**

No	Aspect Investigated
1	History of learning Japanese
2	Use of Duolingo and YouTube platforms
3	Reasons for choosing the learning platform
4	Preference for independent vs. classroom learning
5	Most helpful learning methods
6	Main challenges in using the platform
7	Ease of use of the platform
8	Understanding of Japanese sentence structure
9	Motivation for consistent learning
10	Perceived effectiveness of the platform in improving proficiency

The subsequent section will present the figures and diagrams based on the respondents' answers. These visualizations will enhance the quantitative data, offering clearer insights into the learning behaviors and preferences of users leveraging Duolingo and YouTube to master the Japanese language.

### 3. RESULT AND DISCUSSION

This research focuses on comparing how well Duolingo and YouTube help people learn Japanese. Information was gathered using surveys given to 35 respondents who had used either one or both of these platforms for their studies.

According to the survey, most of the participants (73.5%) indicated that they have some experience with learning Japanese, whether now or in the past. This shows that there is a strong interest in mastering Japanese, with many individuals aiming to learn it for personal, academic, or job-related reasons. Only 14.7% claimed they had never studied Japanese, and the remaining 11.8% had no experience at all. This implies that, even though Japanese isn't a widely spoken language in Indonesia, many people are eager to learn it, especially as online learning platforms are becoming more popular.

Around 67.6% of the respondents mentioned that they had used tools like Duolingo or YouTube to help them learn Japanese, while 32.4% had never used these resources. This notable figure indicates that many learners are shifting to digital platforms for studying foreign languages, including Japanese. Platforms such as Duolingo and YouTube provide convenient

access and flexible ways to learn, allowing students to study at their own times and locations. These resources are particularly relevant in today's digital age, where time limitations and the need for mobility present challenges to learners.

When it comes to why they chose Duolingo or YouTube, survey results show that the primary reasons are the platforms being free (73.5%) and easily reachable (67.6%). These aspects are important for learners wanting to access educational tools without financial stress. Additionally, interesting and interactive content is also a significant factor (35.3%) driving users to prefer these platforms. For example, YouTube offers a broad variety of detailed visual content that is easy to grasp, while Duolingo provides organized learning with engaging game-like elements. These advantages make both platforms effective in keeping learners interested.

When asked about how they preferred to learn, 67.6% of respondents said they felt more comfortable learning by themselves with platforms like Duolingo or YouTube instead of attending traditional classes. This indicates that many students like the flexibility and independence to set their own study schedules, according to their own pace and convenience. Conversely, 17.6% of respondents felt uneasy with self-study, possibly due to a lack of motivation or insufficient direct support from teachers. At the same time, 14.7% had no specific opinion or had not yet made a decision about which learning style worked best for them.

The survey showed that the best ways to understand the language included pronunciation (76.5%) and listening (73.5%). These techniques are very important when learning a new language, especially Japanese, which sounds quite different from Indonesian. Watching videos (70.6%) was also a favored approach since it helps learners hear and see how the language is used in different situations. On the other hand, practice exercises (61.8%) and reading (44.1%) were valued as well, but they were seen as less helpful than the other methods. This suggests that students usually like techniques that focus on listening and speaking, which are more connected to daily conversations.

In general, the survey results indicate that using platforms like Duolingo and YouTube for learning Japanese benefits many learners. These platforms make learning easy, affordable, flexible, and engaging. However, some learners struggle with keeping motivation to study alone and have trouble understanding more challenging sentences. Therefore, even though these platforms are good for teaching basic language skills, a more complete way of learning, like in-person classes or support from teachers, is still important for gaining a better understanding.

As more platforms continue to emerge for online language learning, the results from this survey can guide developers and teachers in improving the quality of educational experiences. In the future, a mix of self-study and traditional classroom learning could offer a better overall way to learn Japanese and other languages.

#### 4. CONCLUSION

This research focused on assessing and comparing how effective Duolingo and YouTube are as resources for learning Japanese. According to survey data collected from 35 participants, it is clear that both platforms significantly aid in the process of learning the language, particularly for those who study independently.

The results reveal that most participants are actively involved in learning Japanese, with a good number depending on online resources like Duolingo and YouTube. The main reasons for selecting these platforms are their easy access, no cost, and interactive elements, which match the desires of learners for flexibility and convenience.

Participants of the survey reported that the best ways to grasp the Japanese language include listening and practicing pronunciation. In this context, the audio-visual content available on YouTube and the organized, game-like lessons on Duolingo have proven to be very helpful. Nonetheless, the study also discovered some challenges, especially for those who find it hard to stay motivated or understand difficult sentences.

In summary, although Duolingo and YouTube are effective tools for introducing and reinforcing basic Japanese skills, they should be viewed as support resources rather than complete replacements for traditional learning methods. A combined learning strategy that brings together the advantages of digital tools and the support of teachers can provide a more thorough and effective language learning journey. These insights could help developers, educators, and learners in creating more adaptable and engaging educational settings, not just for Japanese but for other languages as well.

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