

# SELF-DIRECTED LANGUAGE LEARNING USING DUOLINGO

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## Abstract

This study explores the effectiveness of Duolingo as a self-directed language learning tool, with a qualitative focus on the experiences of a single participant. Duolingo, offering a wide array of languages and user-friendly features, aligns with Knowles' stages of optimal learning. The participant's motivations, successful learning strategies, challenges, and overall experiences with Duolingo are examined to provide insights into the platform's impact on language acquisition. Motivation is identified as stemming from Duolingo's engaging features and visual simplicity. Learning strategies center around effective time management, with bedtime sessions proving particularly successful. Challenges, such as potential monotony, are addressed through feedback interpretation and practical application with native speakers. The findings resonate with broader research on self-directed language learning, highlighting Duolingo's role in resource management, self-monitoring, and technology dependence. In conclusion, the study underscores Duolingo's efficacy as a self-directed language learning tool, emphasizing its adaptability, engaging features, and capacity to accommodate diverse learning preferences. This research contributes valuable insights to the ongoing discourse on language learning methodologies, offering a nuanced understanding of the dynamic interplay between technology and individual motivation in the evolving landscape of self-directed language learning.

**Keywords:** Duolingo; Self-Directed Learning; Language Acquisition

## INTRODUCTION

Duolingo is one of many applications that allow us to learn English effectively and flexibly. About 95 languages are available for learning on Duolingo as of the time of the current systematic review, and users can also study languages besides English (Duolingo About us: Approach, 2021; Viberg & Grönlund, 2012). The Duolingo program, which is available for free download on mobile devices and the internet, simplifies the process for teachers to teach their students the four language skills of reading, writing, speaking, and listening in English. Duolingo learning tasks include questions, short text to read aloud, and transcribed text that incorporates all four skills. To assess their speaking proficiency, students must also record their pronunciation. With the self-directed language learning tool Duolingo, students may learn a language on their own schedule and at their own pace. The objectives of Duolingo are to facilitate and encourage students in their language learning. The following are some of the main characteristics of Duolingo which make it a useful resource for independent language learning: Bite-sized lessons, adaptive learning, gamification, and out-of-class learning. According to Putri and Islamiati (2018), the method used to deliver educational content is enjoyable because the Duolingo application's system includes a number of features, like a game that makes learning seem like fun, an eye-catching visual display accompanied by sound, and more. Despite its popularity, there is still some debate about the effectiveness of Duolingo for language learning. Nonetheless, studies have looked into the advantages, difficulties, and self-directed language learning experiences of online language learners using resources like

Duolingo outside of the classroom. The 2022 and 2021 Duolingo Language Reports showcase language trends, learner habits, and insights from Duolingo learners all around the globe. These reports highlight that Duolingo continued to offer learners a broad range of languages that includes understudied, under-resourced, and underrepresented languages from around the world. In addition, Duolingo introduced new courses teaching English to speakers of Bengali and Tagalog, and two new courses to highlight languages of the Black diaspora: Haitian Creole and Zulu. The sources also state that since its 2011 introduction, Duolingo has expanded to become the world's largest language learning platform and one of the most downloaded educational apps. Nearly every language that is widely spoken is covered by the platform, including but not restricted to Hindi, English, German, French, Russian, Spanish, Chinese, Korean, and Japanese. Several research studies have been conducted on the effectiveness of Duolingo for self-directed language learning. One study found that Duolingo was effective in improving learners' reading and listening skills in Spanish (Li & Bonk, 2023). Another study found that Duolingo was effective in improving learners' motivation and self-efficacy in learning English, Isbell et al. (2017). The results of the other earlier study indicate a positive, modest correlation between learning success and the amount of time spent on Duolingo. At the end of the study, the participants improved on L2 evaluations. In terms of how they perceived their experiences, participants viewed Duolingo's flexibility and gamification components favorably, but they also showed various degrees of motivation to study and irritation with the course material (Loewen, et al., 2019). Other study entitled "Duolingo efficacy study: Beginning-level courses equivalent to four university semester" conducted by Jiang, et al., (2020) indicate that Duolingo is successful and efficient, in addition to being accessible and free. The purpose of this study is to determine the learning strategies for self-directed language learning using Duolingo, using a qualitative method. To find the results of the research question; "What are the learning strategies for self-directed language learning using Duolingo?" The study used in-depth interviews to collect data on learners' experiences with Duolingo, including their learning strategies, motivations, and challenges. The findings of this study may shed light on the best methods for independent language learning with Duolingo, which may help shape the creation of new materials and tools for language learning in the future.

As stated by Knowles (1975), active students who participate in their education learn more effectively than passive learners. Self-directed learning, in general, deals with both the educational setting that encourages self-directed learning abilities and students' capacity and motivation to study independently (Loyens et al., 2008). Self-directed learning is discussed using the following three main conceptualizations: 1) Independent learning, also known as solitary learning, is best represented by the "lone" student who sets all of the goals, the topic, the quantity of work, the schedule, the assessment, etc. The learner regularly chooses to accept or reject assistance from others according to their own standards and preferences. 2) Distance learning, which describes a student who is somewhat constrained by a curriculum developed by others but is physically removed from a teacher or other agency. However, some of the behaviors listed in the other two conceptualizations may also be present in learner behavior. 3) Psychological control, which is the definition's necessary feature, is found in the learner's psychological independence (control) rather than in social or curriculum factors (Sagitova, & Plakhova, 2020).

Malcolm Knowles made a substantial contribution to the field of adult education with his notion of self-directed learning. It highlights how crucial it is for adult learners to assume accountability for their own education. Knowles (1975) defined self-directed learning as the capacity of adult learners to take charge of their own learning expectations, establish goals, locate resources, choose and apply the best learning procedures, and assess their own progress toward learning objectives. Self-directed learning helps people become more self-assured,

independent, motivated, and capable of lifelong learning. It motivates students to become deep learners and makes them active participants in the learning process.

Knowles (1975) recorded eight processes that lead to optimal learning, which can also be referred to as stages. These stages include identifying needs, learning objectives, resources and strategies, engaging in learning activities, receiving feedback, evaluating learning outcomes, revising learning strategies, and continuing the cycle. These stages are essential for learners to achieve their learning goals and become self-directed learners.

Knowles' eight stages of optimal learning provide a comprehensive framework for individuals seeking to become self-directed learners and achieve their educational goals. The process begins with the identification of learning needs, requiring learners to reflect on what they need to learn and understand the significance of the knowledge or skills they aim to acquire. Subsequently, learners move on to setting specific and measurable learning objectives, ensuring clarity and focus in their educational pursuits. The third stage involves the identification of resources and strategies, empowering learners to choose the most effective means to achieve their objectives.

As learners progress, they actively engage in learning activities aligned with their set objectives, promoting hands-on and experiential learning. The receipt of feedback becomes crucial at the midpoint, offering insights into their progress and areas that may need improvement. The sixth stage involves evaluating learning outcomes, where learners assess whether they have successfully met their objectives. Based on this evaluation, they enter the seventh stage, revising their learning strategies to enhance future outcomes.

The cycle concludes with the eighth stage, where learners seamlessly transition to identifying new learning needs and setting new objectives, perpetuating a continuous process of growth and development. This iterative approach underscores the importance of self-directed learning and empowers individuals to take control of their educational journeys, fostering a lifelong commitment to learning and improvement. Knowles' theory of self-directed learning is still relevant today, and it has been used to design effective learning experiences for adult learners. It is crucial to remember that adult learning preferences can be influenced by cultural variations and that the theory's dependence on self-directedness can present some challenges. Consequently, it may be detrimental to merely rely on the notion that adults are self-directed learners. When creating learning experiences, it is crucial to take the learners' cultural background and preferred methods of learning into account.

Informal learning is one type of self-directed learning. Informal learning is a significant aspect of self-directed learning, and it involves learning that occurs outside of formal learning environments. Informal learning can take place through various means, such as reading, watching videos, attending workshops, and engaging in online discussions.

Finally, Knowles' self-directed learning theory makes a significant addition to the subject of adult education. The statement highlights the significance of adult learners accepting accountability for their own education and engaging in the process as active participants. Individuals can enhance their self-assurance, independence, drive, and capacity for lifelong learning through self-directed learning. However, it is important to consider the learners' cultural background and learning preferences when designing learning experiences. Informal learning is also a significant aspect of self-directed learning, and it can occur through various means.

Duolingo uses gamification to make language learning more engaging and fun. The app uses a point system, rewards, and progress tracking to motivate learners to continue studying. The app also includes a social component that allows learners to compete with friends and connect with other learners.

Duolingo's lessons are designed to be short and focused, making it easy for learners to fit language learning into their busy schedules. Each lesson covers a specific topic, such as vocabulary, grammar, or pronunciation, and includes a mix of reading, writing, listening, and speaking exercises.

Duolingo uses adaptive learning technology to personalize the learning experience for each learner. The app tracks learners' progress and adjusts the difficulty of the lessons based on their performance. This ensures that learners are challenged but not overwhelmed.

Duolingo is designed to be used outside of the classroom, making it an ideal tool for self-directed language learning. Learners can study anytime, anywhere, and on any device. This flexibility allows learners to fit language learning into their daily routines and study at their own pace.

## **METHOD**

Qualitative research is a method of inquiry that focuses on understanding and interpreting the meaning of social phenomena with the goal of generating new insights and theories. Qualitative research is particularly suited to explore the nuances and complexities of individual experiences and perceptions, making it well-suited to our research question. Qualitative research is appropriate for investigating self-directed language learning using Duolingo because it allows researchers to understand the subjective experiences of participants and to explore how and why such behaviors take place (Sutton & Austin, 2015). In this context, qualitative research allows for a rich and context-specific understanding of the phenomenon under investigation (Creswell, 2013; Denzin & Lincoln, 2018).

The design for this study is exploratory and interpretative in nature. The primary data collection method involves semi-structured and in-depth interviews. The main data collection methods include semi-structured interviews and in-depth interviews. These methods were chosen because they provided a flexible framework for participants to share their personal experiences, insights, and perceptions of self-directed language learning using Duolingo (Patton, 2015).

A single participant has been chosen for this study, and the rationale for this decision is that it allows for an in-depth exploration of one individual's experiences and strategies. A purposive sampling method was used to select the participant based on their extensive experience and proficiency in language learning through Duolingo. The chosen participant is a highly motivated, self-directed learner, making them an ideal candidate for this study (Creswell, 2013). In this qualitative study, data collection involved a combination of semi-structured and in-depth interviews. Semi-structured interviews were employed to strike a balance between structure and flexibility. Participants engaged in conversations guided by a set of open-ended questions, exploring various facets such as motivations, challenges, and effective learning strategies related to self-directed language learning with Duolingo. These carefully crafted questions were designed to elicit detailed and nuanced responses, enabling participants to share their unique experiences (Patton, 2015).

Complementing this approach, in-depth interviews were conducted to encourage participants to share their language learning journeys in a more narrative format. The use of probing questions facilitated an exploration of specific incidents, successes, and challenges, contributing to a comprehensive understanding of the participants' experiences with Duolingo. The interviews were audio-recorded with the explicit consent of the participants. Subsequently, verbatim transcriptions of the recordings were generated, capturing not only the verbal content but also non-verbal cues and pauses. This comprehensive transcription approach aimed to provide a holistic view of the participants' communication (Smith & Firth, 2019).

The thematic analysis, a key component of the data analysis process, began with initial coding. Transcripts were systematically reviewed to identify recurring themes, patterns, and significant phrases. This initial phase involved breaking down the data into manageable segments, with codes assigned to capture the essence of the content (Braun & Clarke, 2006).

The codes were then organized into broader themes, highlighting key concepts related to effective learning strategies in self-directed language learning using Duolingo. This thematic development occurred iteratively, with the significance of each theme assessed in relation to the overarching research question.

Throughout the analysis, a constant comparative approach was employed, ensuring that emerging themes were consistently compared within and across interviews. This iterative process enhanced the reliability and validity of the findings, allowing for a nuanced understanding of the data (Charmaz, 2006).

Data triangulation was a crucial aspect of the analysis, involving the comparison of information from different sources or methods. This included cross-referencing interview data with relevant artifacts, notes, or additional sources related to the participants' language learning experiences. Additionally, member checking was implemented, allowing participants to review and confirm the accuracy of the researcher's interpretations, thereby enhancing the credibility and trustworthiness of the findings (Denzin & Lincoln, 2018).

## RESULTS AND DISCUSSION

### Results

The participant's responses in the interview shed light on various aspects of their experience with Duolingo for independent language learning. The following excerpts from the interview are quoted and discussed to derive key insights.

#### *Motivation and Platform Choice:*

The participant expressed their motivation for using Duolingo, highlighting the platform's appeal:

Participant (01:37): "Because firstly, I think Duolingo has succeeded in attracting my interest in learning there. In terms of images and simplicity of features shared."

#### *Learning Strategies and Techniques:*

The participant discussed their learning strategy, emphasizing the flexibility and versatility of Duolingo:

Participant (03:12): "So when talking about the strategy, for me in using the Duolingo application, it's about how we manage the time used for language learning."

#### *Successful Learning Strategy:*

The participant shared a successful learning strategy involving bedtime sessions:

Participant (05:52): "When I take the time before going to bed to open Duolingo. I set aside about half an hour to an hour. Sometimes even more because it's fun to learn on Duolingo."

#### *Challenges and Overcoming Strategies:*

The participant acknowledged potential monotony in Duolingo's feedback system and shared their strategy for overcoming it:

Participant (07:30): "Feedback is in the form of rewards. So every time we learn, we can see how many mistakes we made. Because the feedback is only that, I feel that learning is monotonous."

***Progress Measurement:***

The participant measured progress through practical application, engaging with native speakers: Participant (09:07): "Once I played a platform or social media that can meet with foreigners. So I can speak directly. They use their native language."

***Additional Resources and Methods:***

The participant discussed supplementing Duolingo with social connections:

Participant (10:20): "So Duolingo is a great app for self-study. But in the process, most people, including me, my personal experience is constrained by boredom."

***Advice to Others:***

The participant offered advice, stressing sustained motivation and incorporating additional learning tools:

Participant (11:24): "So, the most important advice is not to lose motivation to learn."

The participant's insights underscore the significance of Duolingo's engaging features, flexibility, and adaptability to learners' schedules. Strategies such as spaced repetition, social connection, and practical application contribute to a well-rounded language learning experience.

**Discussion**

The insights gained from the interview align with contemporary research on self-directed language learning (SDLL) using technology, particularly the findings of Li and Bonk (2023). The participant's experiences with Duolingo reflect the broader trends observed in the study by Li and Bonk.

***Resource Management:***

Li and Bonk (2023) noted that learners manage various human and material learning resources in complementary ways to achieve language learning goals. The participant's flexible strategy of utilizing spare time for Duolingo aligns with this finding. The participant's emphasis on time management reflects a conscious effort to optimize their human resource (time) for language learning, a theme echoed in the broader SDLL literature (Benson, 2011).

***Self-Monitoring:***

Li and Bonk's (2023) study highlighted learners' self-monitoring through feelings of knowing, content evaluation, and judgments of resource adequacy. Similarly, the participant discussed their strategy of learning before bedtime, indicating a self-monitoring process where they deliberately allocate time for Duolingo to enhance retention. This reflects a metacognitive approach to language learning, reinforcing the idea that SDLL involves learners actively monitoring and adjusting their learning strategies (Flavell, 1979).

***Technology Dependence:***

Li and Bonk's (2023) findings underscore the significance of technology features for learners in SDLL. The participant's description of Duolingo's provided features for translation, spelling, pronunciation, and assessments resonates with the reliance on technology features observed in the broader study. This emphasizes the pivotal role technology plays in facilitating and reinforcing language learning activities (Chapelle & Sauro, 2017).

***Intrinsic Motivation:***

Both Li and Bonk's (2023) research and the participant's interview highlight the predominance of intrinsic needs and interests driving language learning. The participant's motivation, rooted

in a love for speaking and a desire for enjoyable learning experiences, aligns with the broader trend observed in SDLL. This contrasts with the conventional focus on certificates, scores, or grades, emphasizing the importance of personal goals in SDLL (Deci & Ryan, 1985).

#### Informal Learning Context:

Li and Bonk (2023) pointed out that most existing studies on SDLL with technology have been conducted in a formal learning context. The participant's experiences with Duolingo provide valuable insights into SDLL independent of formal school contexts. The participant's informal, self-directed learning aligns with the evolving landscape of language learning, where technology enables learners to pursue language proficiency outside traditional educational settings (Benson, 2011).

While the participant's experiences corroborate several findings from Li and Bonk's study, it's crucial to note the nuanced differences. The participant's emphasis on social connections as a supplement to Duolingo aligns with Li and Bonk's observation of learners leveraging various human resources. However, the participant's mention of overcoming monotony through social interaction offers a nuanced perspective that adds depth to the understanding of motivational factors in SDLL. Thus, the participant's experiences with Duolingo resonate with the broader trends observed in Li and Bonk (2023) research, providing a valuable individual perspective on the dynamics of SDLL with technology. In line with current views on learner motivation, the study supports the significance of intrinsic motivation in propelling language learners (Dörnyei, 2001).

## CONCLUSION

As it wraps up, this study has shed important light on the experiences of self-directed language learners who use the Duolingo program. The varied viewpoints of the participants shed light on the complexity of language acquisition, highlighting the importance of motivation, adaptable approaches, and the fusion of technology and social resources. The results demonstrate how successful Duolingo is as a self-directed language learning tool since it has interesting features, can accommodate different learning preferences, and is flexible enough to fit into learners' schedules. The dynamic aspect of Duolingo-based language learning is highlighted by the participant's success using a bedtime learning technique and the integration of practical applications for progress monitoring.

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