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ASSESSING THE PEDAGOGICAL LIMITATIONS OF DUOLINGO IN ENGLISH LANGUAGE INSTRUCTION: IMPLICATIONS FOR CURRICULUM DEVELOPMENT

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ABSTRACT

The limits of Duolingo as a language learning tool in formal classroom environments are investigated in this paper together with teachers' strategies for including the app into their courses. English language teachers were asked to share their Duolingo experiences by means of a qualitative case study method. The results show that although the app is useful for vocabulary acquisition, grammar practice, and pronunciation improvement, it has several pedagogical constraints including limited teacher control, limited content for advanced learners, lack of curriculum alignment, and insufficient attention on speaking skills. Teachers used interactive classroom activities, individualized comments, and other resources to meet these difficulties and improve the learning process. The study emphasizes the value of a mixed learning strategy in which applications for language acquisition enhance rather than replace more conventional teaching strategies. The study also emphasizes the need of more customizing tools in language instruction programs to more fit demands of formal education. Future studies should look at strategies to improve app interactivity and real-world language application as well as the long-term benefits of mobile-assisted language learning (MALL) on student competency and involvement. This paper adds useful advice for teachers and app developers, therefore augmenting the continuing debate on technology integration in language instruction.

1.0 INTRODUCTION

The integration of technology into language instruction has resulted in transformative changes that have made language learning more accessible and participatory than ever. As a result of the growing prevalence of mobile devices such as smartphones and tablets, students can use flexible and convenient language learning applications (Golonka et al., 2013; Stockwell & Hubbard, 2013). Among them, Duolingo has become well-known because to its gamified methodology, which enables users to autonomously practice their language skills. Nevertheless, despite its advantages, questions have been raised about the app's pedagogical efficacy and compatibility with traditional language training (Blake, 2016; Kabilan et al., 2023).

With Web 3.0 technologies facilitating remote, self-directed, and asynchronous learning, education has transcended the confines of the traditional classroom in the twenty-first century (Garcia & Guzmán, 2021; Lei & Liu, 2020). The COVID-19 pandemic has expedited the

transition to technology-driven education, impacting student preferences, especially among Generation Z, who typically choose flexible and autonomous learning over traditional face-to-face instruction (Yin & Chik, 2021). Asynchronous learning presents drawbacks like as distractions, reduced interaction, and the digital divide, which can negatively impact student engagement and overall learning outcomes, notwithstanding its benefits of autonomy and accessibility (Chen & Huang, 2018; Crompton & Burke, 2018).

Mobile-Assisted Language Learning (MALL) has come a long way, fueled by the growing affordability and accessibility of mobile devices like smartphones. Early studies (Chinnery, 2006) identified the potential of mobile technology to foster increased access and social inclusion in language learning based on its portability and relative affordability compared to computer-based learning. In the beginning, mobile learning initiatives resulted from partnerships among teachers and developers of software who utilized specialized technology that was not readily available to the public at large (Kukulska-Hulme & Shield, 2008).

As mobile technology advances, students are increasingly accountable for shaping their own language learning experiences and engaging with applications that align with their specific requirements and educational contexts (Kukulska-Hulme, Traxler, & Pettit, 2007). MALL courses primarily facilitate vocabulary acquisition, grammar exercises, pronunciation practice, and reading abilities through repetition-based drills and interactive questions to enhance learning (Bahrani, 2011). The adaptability and user-friendliness of MALL have made it a highly desired resource for language learners, particularly as a supplementary tool beyond traditional classroom environments.

Duolingo, a popular language acquisition application, has been acknowledged for its creative methodology, integrating gamified components to enhance engagement and personalization in the learning process. Since its inception in 2009, Duolingo has provided an array of language courses and functionalities, encompassing written lessons, dictation, and an interactive dictionary, serving over 300 million users globally (Huynh & Iida, 2017; Rachels & Rockinson-Szapkiw, 2018). The application's gamified skill tree and vocabulary practice components enable users to advance at their own pace, rendering it an attractive resource for language acquisition. Nonetheless, despite its widespread acclaim, Duolingo has shortcomings, particularly in its emphasis on novice learners and the absence of thorough grammatical elucidations and syntactic regulations (Leão & Amorim, 2016). Although Duolingo offers an alternative to conventional language acquisition techniques, research indicates that the involvement of an instructor is essential to direct learners, promote interaction, and facilitate the enhancement of production skills, particularly for advanced language students (Joy, 2021; Todorov, 2021).

Whereas MALL has been extensively investigated, previous work has mostly touched on its benefits in terms of motivation, convenience, and student autonomy (Burston, 2015; Viberg & Grönlund, 2017). Fewer research studies have dealt with how the language learning application Duolingo operates in its application within mainstream classroom environments with respect to curricular alignment as well as pedagogical limitation. Though others have investigated MALL as a complementary tool, fewer studies have critically analyzed if these applications prove to be complementary to structured language instruction or demand extensive teacher involvement to be pedagogically valuable (Kukulska-Hulme & Viberg, 2018; Ziegler, 2016).

Literature on mobile language learning application usage has in most cases shown positive impacts on language proficiency development, motivation, and engagement. Numerous research (Castaneda & Cho, 2016; Gafurova, 2021; Morgana, 2015) have demonstrated significant enhancement in vocabulary acquisition, grammatical proficiency, and linguistic competency among learners utilizing mobile-assisted language learning (MALL) applications. The research suggests the capacity of such applications to enhance educational results, particularly in autonomous learning environments.

Nonetheless, Rosell-Aguilar (2018) warns that many of the empirical studies are built on small-scale studies with apps pre-selected by researchers and strictly controlled user samples, which detract from external validity. Despite language learning platforms (LLPs) like Duolingo demonstrating comparable learning achievement to conventional face-to-face pedagogy with learners at all CEFR proficiency levels (Rachels & Rockinson-Szapkiw, 2017), just how effective these are is subject to controversy. Although these apps can be useful as extra tools, Psychogyiou and Karasimos (2019) argue that they might not be able to replace the systematic direction, feedback, and contextual richness of conventional classroom education.

Though LLPs are becoming more and more popular, little studies looking at their pedagogical limitations in educational environments exist. Evaluating their congruence with school curriculum standards, teacher intervention possibilities, and capacities to enable a whole spectrum of language development has received little thought. This research aims to cover this gap by investigating English language instructors' views of Duolingo's shortcomings in classroom teaching, the strategies they utilize to try and overcome these issues. Specifically, the research aimed to answer the following questions:

1. What are the pedagogical limitations of teaching English using the Duolingo app?
2. What methods do English language teachers use to include or enhance Duolingo into their curriculum?

This research delves into the intersection of autonomous learning and mobile-assisted language learning (MALL) through a consideration of the pedagogical implications of the incorporation of Duolingo in formal instruction in English as a second language, with special emphasis on benefits, constraints, and the techniques adopted by instructors in balancing self-learning with institutional guidance.

Emphasizing learner autonomy, the Autonomy Theory of Language Learning holds that students have control of their learning by means of goals, strategy choice, and independent monitoring of their learning process (Holec, 1981; Little, 1991; Benson, 2001). Since students may use language resources at their own leisure, Duolingo's gamified and self-directed approach naturally promotes autonomy. This great degree of autonomy, however, might be difficult in formal classroom environments because the effective acquisition of knowledge depends mostly on curricular integration and teacher support. While autonomous learning encourages drive and curiosity, not all students have the necessary self-regulation skills to benefit most from independent mobile learning.

Supplementing this view, MALL Theory emphasizes the revolutionary function of mobile technology in extending learning outside the conventional classroom environment (Kukulska-Hulme, 2009; Chinnery, 2006; Kukulska-Hulme & Shield, 2008). Duolingo provides

flexibility, accessibility, and interactive learning options that fit informal language learning, therefore highlighting the main ideas of MALL. MALL facilitates anytime, anyplace learning, yet its success in formal education depends on its congruence with pedagogical goals. One of the restrictions of mobile-assisted learning is the possibility of fragmented learning experiences, limited interaction, and too strong reliance on decontextualized exercises instead of communicative practice.

These two ideas highlight possible challenges in combining autonomous mobile learning tools into conventional classroom pedagogy even when their emphasis on student-centered approaches overlaps. Examining whether the autonomy-based Duolingo learning paradigm enhances or reduces language acquisition in a classroom environment, this study will look at how teachers manage this overlap. Second, the study will investigate how teaching moderates learning, so balancing the planned scaffolding and student-teacher interaction of classroom teaching with the autonomy and convenience of autonomous mobile learning.

By synthesizing the Theory of Autonomy in Language Learning and the MALL Theory, the present study presents an overarching model for testing Duolingo's function within English language education. It will highlight the possibilities and challenges of utilizing Duolingo as a supplement inside controlled learning contexts, therefore assessing the interaction between learner autonomy and the ideas of mobile learning inside formal education.

2.0 METHODOLOGY

2.1 Research Design

By use of a case study and a qualitative approach, this study examined the limits of Duolingo in English language instruction. By means of an analysis of faculty members who included Duolingo into their courses, the study sought to provide valuable material on their experiences, difficulties, and approaches. By means of thematic analysis, recurrent trends and themes were found, therefore providing a methodical knowledge of the pedagogical consequences of utilizing Duolingo in formal classroom environment.

2.2 Research Instrument

Semi-structured interviews were the main tool used for data collecting since they allowed the in-depth analysis of faculty members' Duolingo experiences. The approach ensured that key areas of research—such as the limits of the app, pedagogical issues, and instructional strategies—were covered holistically while nevertheless allowing participants to offer freely comments. Semi-structured interviews were flexible in that follow-up questions enabled more investigation of forthcoming concerns and themes.

2.3 Data Gathering

Open-ended questions phrased to extract faculty members' experiences, knowledge, and worries about the integration of Duolingo in the classroom were included into a semi-structured interview schedule. Prearranged periods were used for interviews to guarantee least disturbance of their academic responsibilities. Participants gave informed permission; the interviews were audio recorded. Later, the tapes were exactly transcribed for analysis's correctness.

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2.4 Data Analysis

Using thematic analysis, the study found methodically important themes and patterns regarding Duolingo's limitations and their ramifications for classroom instruction. Following the goals of the research, the transcribed data were categorized and arranged based on developing themes. This study helped to pinpoint some pedagogical challenges, instructional gaps, and possible ways to improve Duolingo's participation in official language education. This approach allowed the studies to provide important results that shaped the more general discussion on mobile-assisted language learning in structured academic environments.

3.0 RESULTS AND DISCUSSION

3.1 Pedagogical limitations of teaching English using the Duolingo app

The research highlighted a number of significant pedagogical shortcomings of applying Duolingo as a language learning resource to formal classroom teaching. Perhaps the most commonly cited issue was the lack of content for advanced learners. Though the app effectively presented basic vocabulary, grammatical rules, and pronunciation practice, 33.3% of the participants said that the information was not sufficient for advanced learners, hence being less useful for students who already possessed basic English skills. This flaw suggests that Duolingo is best suited for intermediate and beginning students, hence advanced students need additional resources.

Limited teacher control over the app's content and arrangement presented yet another major restriction. 66.7% of the participants expressed dissatisfaction with the lack of customizing tools, which prevented them from selecting specific vocabulary, grammatical topics, or activities fit for their course of study. Teachers battled to include Duolingo into structured instruction without the option of modifying courses to fit students' needs. As yet another respondent noted, “Allowing teachers to customize content to align with their specific curriculum would make these apps more effective in the classroom.”

Curriculum alignment was still another important concern. Thirty-three percent of the teachers said that the pre-determined lesson plans of Duolingo did not always coincide with the subjects and learning objectives addressed in their syllabus. This alignment caused gaps in teaching, where students learned new vocabulary and grammar patterns in the app prior to their formal introduction in class. Lacking a well-organized sequence that aligned with the course syllabus, use of the app in the classroom became more disconnected than smoothly incorporated into language learning.

Yet another pedagogical concern highlighted was the inadequacy of attention given to speaking skills and application of language in real contexts. Just 16.7% of educators considered Duolingo effective in covering speaking skills, many indicating that its stress on translation and written lessons failed to adequately prepare students for oral communication or spontaneous dialogue. One of them underscored this point by saying, “The contents tend to become one-sided and not entirely interactive, so students who have weaknesses in auditory learning may struggle.”

Finally, even if Duolingo's gamification is intriguing, it was sometimes felt to take away from real learning. Some teachers complained that students were too concentrated on building streaks and getting rewards in comparison to retaining language concepts fully. This emphasis on gamification too much, as well as minimal direct intervention from teachers, created a difficulty in ensuring students treated the app as a learning resource seriously, and not just as a game.

3.2 Methods English language teachers use to include or enhance Duolingo into their curriculum

Teachers used many strategies to increase Duolingo's classroom efficiency so that they might overcome these obstacles. Including more study materials outside of the app proved to be among the most often used techniques. To augment the app's lack of content, half of the participants said they provided additional readings, writing projects, and grammar corrections. This assured students—especially those at higher levels—of richer and more exacting language instruction.

The second major strategy was offering personalized feedback, which 50% of the teachers found to be critical in guiding students through Duolingo's limitations. As the app's automated feedback only allowed for right or wrong responses, teachers took over to explain mistakes, correct grammar rules, and provide pronunciation advice. This filled the gap between autonomous mobile learning and systematic classroom teaching.

Also, increasing more communicative and interactive tasks was a principal way of countering Duolingo's deficiency of speaking and listening activities. 66.7% of educators said that they incorporated role-playing exercises, group discussions, and speech drills into the lesson to practice the vocabulary and grammar presented in the app. One of the participants stressed this aspect by saying, “Combining app activities with traditional classroom instruction is key to holistic language development.”

A hybrid learning strategy was also widely followed, so Duolingo was employed as an additional teaching device instead of as a first recourse. 83.3% of the teachers reported that they only employed the app to support homework, independent practice, or as supplementary classroom work, instead of as a direct teaching tool. This guaranteed learners were able to take advantage of the engagement and adaptability of mobile-assisted learning while still being provided with organized direction by their instructors.

In addition, a number of respondents supported higher levels of tailoring in language learning applications for better integration within formal schooling. The most frequently proposed suggestion was to enable educators to personalize tasks and choose definite topics in compliance with their school curriculum, to ensure the application content aligns with learning targets in the classroom. Furthermore underlined by participants the need of extra real-life language use scenarios, which would help students to develop practical communication skills outside of assigned drills and translation practice. Another big recommendation was to include interactive components supporting different learning styles so the app will be more fun and efficient for a range of users. Through the implementation of these enhancements, language learning applications may be made more suitable for formal educational environments while remaining accessible and flexible.

Generally, the conclusions indicate that whereas Duolingo is a satisfactory ancillary program for learning words and practicing grammar, its limited pedagogies bar it as an independent instructor tool. It was found that teachers perceived a lack of extensive content in the app, curbed control over content, and insufficient practice on speaking, for which more educational assistance and smart incorporation were deemed necessary.

Teachers maximized Duolingo's strengths and overcame its shortcomings by adding other tools, providing individualized feedback, and including communicative classroom exercises. As one respondent encapsulated, “When used thoughtfully, these apps can enhance traditional methods, but they should not replace the need for teacher guidance and interaction.”

These results support the necessity of hybrid learning methods in combining technology and language instruction. Instead of displacing conventional classroom methods, apps like Duolingo for learning a language ought to supplement rigorous classroom teaching. Further development in mobile-assisted language learning could center on higher customization, interactional elements, and wider curriculum coverage, such that these devices are more suitable for formal classroom contexts.

4.0 CONCLUSION

This study looked at Duolingo's shortcomings as a teaching tool for formal classes and investigated the strategies teachers use to more closely include it into their courses. Although Duolingo effectively promotes vocabulary development, grammar exercise, and pronunciation enhancement, its absence of high-level content, limited degree of customizing, and lack of sufficient emphasis on speaking skills make it unsuitable as a single instructional tool, the results showed. Instructors mitigated these shortcomings by adding supplemental materials to courses, offering one-on-one feedback, and using interactive classroom exercises to make learning more complete.

Findings call attention to the need for blended learning by implementing language-learning applications along with conventional learning patterns instead of usurping their space. Findings also highlight calls for mobile-assisted language-learning apps with greater personalization elements that would help teachers connect content from applications to curricula so as to develop more engaging, realistic, and interactive learning outcomes.

More research would be required going forward to look at the long-term consequences of including language learning applications into formal education, particularly on improving students' communicative competency as well as language aptitude overall. To guarantee complete language education, app developers should also investigate enhancing the interactive features of these applications. Language learning applications can become more effective and responsive instruments in formal learning environments by enhancing their pedagogical framework, therefore providing students with interesting but scholarly-sound learning opportunities.

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