



The Use of Duolingo Application to Enhance Junior High School Students' Speaking ability

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Abstract

The study explored the use of the Duolingo application in junior high school language education to improve speaking ability. The research used a quasi-experimental design, dividing students into two groups: one receiving traditional instruction and the other using Duolingo as a supplementary tool. Data was collected through speaking assessments, student surveys, and classroom observations. The results showed a significant improvement in speaking ability among the Duolingo group compared to the traditional instruction group. The application's interactive features, gamified elements, and accessibility make it an engaging and effective learning experience. Student feedback also indicated increased motivation and interest in language learning. The study highlighted the potential of integrating Duolingo into language education and its implications for curriculum design, technology role in language learning, and addressing diverse learning styles. It provides valuable insights into the effectiveness of using Duolingo as a supplementary tool for enhancing speaking ability in junior high school language education. Further research is recommended to explore the long-term impact and scalability of Duolingo in diverse educational settings.

Kata Kunci: *duolingo application, speaking ability*

Abstrak

Penelitian ini mengeksplorasi penggunaan aplikasi Duolingo dalam pendidikan bahasa di sekolah menengah pertama untuk meningkatkan kemampuan berbicara. Penelitian ini menggunakan desain kuasi-eksperimental, membagi siswa menjadi dua kelompok: satu menerima instruksi tradisional dan yang lainnya menggunakan Duolingo sebagai media pengajaran. Data dikumpulkan melalui tes berbicara penilaian berbicara, survei siswa, dan observasi kelas. Hasil penelitian menunjukkan peningkatan yang signifikan dalam kemampuan berbicara di antara kelas yang menggunakan aplikasi Duolingo dibandingkan dengan kelas tradisional yang menggunakan media pengajaran guru. Fitur interaktif aplikasi, elemen gamifikasi, dan aksesibilitas menjadikannya pengalaman belajar yang menarik dan

efektif. Umpan balik siswa umpan balik siswa juga menunjukkan peningkatan motivasi dan minat dalam pembelajaran bahasa. Studi ini menyoroti potensi mengintegrasikan Duolingo ke dalam pendidikan bahasa dan implikasinya terhadap desain kurikulum, peran teknologi dalam pembelajaran bahasa, dan menangani gaya belajar yang beragam. Penelitian ini memberikan wawasan berharga tentang efektivitas penggunaan Duolingo sebagai media pembelajaran untuk meningkatkan kemampuan berbicara di sekolah menengah pertama pendidikan bahasa. Penelitian lebih lanjut direkomendasikan untuk mengeksplorasi penggunaan aplikasi duolingo dalam pengajaran Bahasa Inggris dalam meningkatkan keahlian Bahasa lainnya.

Keywords: *aplikasi duolingo, kemampuan berbicara*

Introduction

The prominence of English as an international language has been extensively studied, often within the framework of theories and models that aim to explain its global dominance and multifaceted impact on societies worldwide. One prominent theoretical concept frequently referenced in contemporary discussions is "linguistic imperialism," initially proposed by linguist Robert Phillipson in the 1990s and further expounded upon in subsequent works. This theory posits that the widespread use and imposition of English across various domains—education, media, business, etc.—have contributed to the marginalization and decline of indigenous languages and cultures (Juliana, 2019). It emphasizes the role of historical, political, and economic factors in reinforcing the dominance of English, raising concerns about cultural homogenization and the erosion of linguistic diversity.

Building upon this theoretical foundation, recent studies from 2020 onwards have delved deeper into the concept of English as a lingua franca (ELF). Scholars like Jennifer Jenkins and Barbara Seidlhofer have contributed significantly to this field. ELF theory examines how English serves as a communication tool among individuals from diverse linguistic backgrounds, emphasizing the adaptability and flexibility of language in facilitating mutual understanding. These studies

explore the strategies employed by non-native speakers to navigate intercultural communication using English as a common medium, shedding light on the dynamic nature of language in global interactions (Juliana, 2016).

In parallel, research within the realm of English language learning and pedagogy has garnered considerable attention. Studies drawing from sociocultural theory, such as the works of James Lantolf and Merrill Swain, have highlighted the importance of considering socio-cultural contexts in language learning. They advocate for pedagogical approaches that recognize learners' diverse linguistic and cultural backgrounds, aiming to create inclusive and effective learning environments. Additionally, scholars have scrutinized the implications of language policies on English education, acknowledging the socio-economic disparities that can arise due to unequal access to quality language learning resources (Juliana & Army, 2021).

Moreover, within the contemporary academic landscape, critical discourse analysis (CDA) has been instrumental in examining the power dynamics inherent in the spread of English. Scholars employing CDA, like Norman Fairclough and Teun A. van Dijk, analyze how language, including the dominance of English, shapes social relations, constructs ideologies, and perpetuates inequalities. They explore how

language use and discourse contribute to reinforcing or challenging existing power structures, shedding light on issues of privilege, access, and representation in global contexts (Radinal, 2020).

The Duolingo application has become a popular tool for language learning, and its impact on junior high school students is worth exploring. This article will discuss the effect of using the Duolingo application on learning for junior high school students (Lubis, 2021).

Firstly, the Duolingo application provides an interactive and engaging platform for students to learn a new language. The application offers a variety of exercises, quizzes, and games that help students improve their vocabulary, grammar, and pronunciation. This interactive approach to learning can make the process more enjoyable for junior high school students, which in turn can lead to increased motivation and engagement.

Furthermore, the Duolingo application allows students to learn at their own pace. This flexibility can be especially beneficial for junior high school students who may have varying levels of proficiency in the language they are learning. Students can progress through the lessons at a pace that is comfortable for them, allowing them to build a strong foundation in the language.

Additionally, the Duolingo application provides instant feedback to students, allowing them to track their progress and identify areas for improvement. This real-time feedback can help junior high school students stay motivated and focused on their language learning goals (Mayekti et al., 2022).

Research has also shown that using the Duolingo application can have a positive impact on language learning outcomes. A study conducted by the City University of New York found that students who used Duolingo for 34 hours improved their language skills to the equivalent of one

college semester of language study. This suggests that using the Duolingo application can be an effective supplement to traditional language learning methods for junior high school students.

The Duolingo application can have a positive effect on learning for junior high school students. Its interactive and engaging platform, flexibility, instant feedback, and positive impact on language learning outcomes make it a valuable tool for language education. Junior high school students can benefit from using the Duolingo application as a supplement to their language learning curriculum.

On the other hand, in general speaking may mean the performance of an oration at some meeting or ceremony, or the mere giving of speeches and talks. Speech may also imply capacity for speech or speaking. Also, one may use an adjective which denotes something very expressive or realistic. Speaking can be referred to the uttering a of speech and is also combined with other words such as "English-speaking countries" and "public speaking".

The speaking function is a term used to describe how people utilize speaking to achieve different aims. This paper offers an in-depth analysis of why the market economy in the world developed differently and why most countries experienced variations in their levels of development.

According to Brown and Yule, there are three main functions of speaking: three types of 'talk' — talk as interaction, talk as transaction, and talk as performance. (a). Talk as interaction: This includes daily life communication with the main goal of socialization. It incorporates saying hello, chatting about little things, and retelling past events to make one feel relaxed when interacting with others. (b). Talk as transaction: This facilitates communication, which includes explaining to other people what is being communicated adequately.

(c). Talk as performance: The monologue aspect of this function features speech-making, public addresses, etc.

The various roles of talking call for diverse techniques of teaching and function differently in human communication. Studies have shown that the Duolingo app is useful for developing students' speaking abilities in language training and education.

Many of these studies show a great number of learners believe that Duolingo can be helpful in developing their English-speaking capabilities. For instance, survey on 27 students of IX grade that almost all students are familiar with using duolingo and the result of the questionnaire showed that the majority of students consider that duolingo increases English skills. In another study involving thirty-one eighth-graders, it was determined that students' speaking ability can be optimized through the use of Duolingo application that features both written and audio learning techniques and a built-in microphone for instant speech practice.

Furthermore, a study on the speaking aspect of Duolingo app found out that it does help in improving student's speaking ability. Hence, this indicates that Duolingo may prove to be critical medium in language education towards acquisition of speaking. A language learning application called Duolingo provides a game-based method of teaching a new language. It offers short lessons that include topics such as speaking, listening, reading, and writing, hence applicable in either primaries or adults redoing their secondary languages. It can be used by iOS and Android devices and includes different languages for learning reallife communication abilities. Duolingo provides a language certification called, "Duolingo English Certification" which has been accepted globally by over 4,000 institutions. It is a fun and functional app that can be accessed on various devices. Another characteristic includes, that this

platform is free to use. The game-based points approach makes it more immersive and motivating. There are multiple ways of enhancing learners' engagement in language learning. One of them is through Duolingo which is a popular language-learning website.

Some of its key features include: (a) Daily Tasks: Daily tasks at Duolingo that help the user practice and master a foreign language. (b) Leaderboards: Leaderboards are also part of this platform meant to push every player to compete against each other to get ranked in the highest positions in these leaderboards. (c) Progress Reports: The progress report on the platform helps users keep track of their learning. (d). Gamification: Gamification is used at Duolingo to ensure learners enjoy their learning experience. (e). Multimedia: Multimedia functions have been included in the platform to improve the learning environment. (f). Certificates: Upon finishing their language courses, Duolingo gives them certifications. (g). Live Tutoring (available in some courses): Live tutoring is offered by Duolingo for some of these languages in order to provide extra assistance to learners. (h). Ad-Free Experience (available with Duolingo Plus and Duolingo Max).

The platform allows subscribers to enjoy an ad-free experience. (a). Unlimited Hearts such subscribers get an unrestricted number of hearts, therefore they can take lessons continuously. (b). Progress and Mastery Quizzes. The subscriber completes progress and mastery quizzes to test their language proficiency. (c). Unlimited Skill Test-Outs. Language skills can be tested by subscribers irrespective of which level they are in. (d). Explain My Answer and Roleplay.

Duolingo has introduced new exercises in its revamped version called Duolingo Max that incorporate artificial intelligence-driven tools like Explain My Answer and roleplay. Duolingo's features

address different groups of language learners providing educational curriculum, gamification, and an individualized approach to language acquisition making its use possible for learners of different capacities and types. Therefore, from the background explanation above the research was to use Duolingo Application to Enhance Junior High School Students' Speaking ability

Method

The research methodology adopted a quasi-experimental design to investigate the impact of integrating Duolingo, a language learning application, on enhancing speaking ability among junior high school students. This design facilitated the comparison between two distinct groups: an experimental group utilizing Duolingo for language learning and a control group not utilizing the application (Creswell, J. W., & Poth, 2007).

The study was conducted over a predetermined timeframe, typically structured around a semester or a specific number of months. This duration allowed for a comprehensive assessment of the effectiveness of Duolingo in improving speaking ability among the students.

Key instruments utilized in this research included pre-test and post-test assessments specifically tailored to measure the students' speaking ability. The pre-test served as a baseline evaluation of the participants' initial speaking abilities before any intervention, while the post-test was administered after a defined period of using or not using Duolingo.

These assessments were designed to gauge various aspects of speaking ability, encompassing vocabulary, grammar, pronunciation, and overall communication abilities. By employing a standardized testing format, the study aimed to objectively measure and compare the

progress made by students in both the experimental and control groups.

The pre-test and post-test assessments formed the crux of the evaluation process, enabling a thorough examination of the impact of Duolingo on speaking ability. By collecting data before and after the intervention, the study aimed to capture and analyze the specific improvements or differences in speaking abilities between the two groups.

The research population encompasses all junior high school students within the selected schools, constituting the primary pool from which participants were drawn for the study. This inclusive population represents a diverse spectrum of students across varying linguistic, cultural, and proficiency levels. Their collective inclusion ensures a comprehensive representation of the junior high school student body, allowing for a broader understanding of how Duolingo's integration for language learning might impact speaking ability across different segments of the student population (Creswell et al., 2007).

The selection of this population offers a holistic view, enabling the research to capture a nuanced understanding of the potential implications and effectiveness of Duolingo within the context of junior high school language education. In order to create a representative sample, a random selection process was employed to ensure the inclusion of students across diverse proficiency levels within the junior high school.

This sampling method aimed to mitigate bias and accurately reflect the wider population's characteristics. Students were randomly chosen from different classes or grades, encompassing various proficiency levels in language skills. This deliberate approach in sample selection ensured a balanced representation, allowing for a comprehensive analysis of the

impact of Duolingo on speaking ability across different skill levels.

The research divided students into two distinct groups: the experimental class, consisting of junior high school students utilizing Duolingo for speaking learning, and the control class, comprising students receiving traditional instruction without Duolingo. This allocation allowed for a comparative analysis of speaking ability between these groups. Here are the tables detailing the class allocation and individual student scores for both experimental and control groups:

Table 1. *Research Population*

No.	Class	Population
1.	7A	30
2.	7B	30
3.	7C	30
4.	7D	30
5.	7E	30
6.	7F	30
7.	7G	30

Result dan Discussion

The comprehensive analysis of the data comparing the impact of Duolingo application usage against traditional instructional methods on the speaking ability of junior high school students revealed compelling and noteworthy findings.

The study distinctly showcased that the group utilizing Duolingo (Class 7B) experienced a markedly higher enhancement in their speaking abilities compared to the control group (Class 7A) undergoing traditional instruction. The initial proficiency levels, as evidenced by the pre-test scores, revealed a substantial disparity, with the Duolingo group starting at an average proficiency of 96.1 compared to the control group's 76.23.

However, the most pivotal revelation arose from the gained scores, where the Duolingo-using cohort exhibited an average gained score of 10, whereas the control group showed a much lower average gained score of 4. This stark contrast strongly indicates that Duolingo had a significantly more pronounced impact on improving the speaking ability of these junior high school students compared to conventional instructional methods. The study's findings resonate with existing research advocating for the efficacy of interactive and technology-driven language learning platforms.

Duolingo's approach, offering a dynamic learning environment with personalized pacing and instant feedback mechanisms, seemed to have facilitated substantial progress in speaking ability. The higher gained scores in the Duolingo group suggest that its engaging exercises, adaptable learning pace, and immediate feedback substantially contributed to the observed improvements in speaking abilities among the students.

Moreover, the initial higher proficiency level of the Duolingo group implies that the platform might be more beneficial for students already exposed to language learning, enabling them to further polish their speaking ability effectively. Nevertheless, acknowledging the study's limitations is crucial.

Factors such as individual student motivation, prior exposure to language learning, and external usage of Duolingo beyond the study's scope might have influenced the outcomes. Additionally, the study's duration could have impacted the observed gains, prompting the need for more extensive exploration into the long-term effects of Duolingo on sustained speaking ability development among junior high school students.

The data robustly supports the hypothesis that Duolingo positively impacts the speaking ability of junior high school students. Its interactive nature, adaptability, and provision of instant feedback evidently contribute to more significant improvements in speaking ability compared to traditional instructional methods.

Nonetheless, a deeper investigation into the complexities of student engagement, diverse proficiency levels, and the platform's long-term effectiveness is essential for a comprehensive understanding of Duolingo's role in nurturing speaking abilities among junior high school students.

The research divided students into two distinct groups: the experimental class, consisting of junior high school students utilizing Duolingo for speaking learning, and the control class, comprising students receiving traditional instruction without Duolingo. This allocation allowed for a comparative analysis of speaking ability between these groups. Here are the tables detailing the class allocation and individual student scores for both experimental and control groups:

Table 2. Scores of Students' Pre-Test and Post Test in Control Class

No	Students' Initials	Pre	Post	Gained
1.	AH	65	70	5
2.	AZM	60	65	5
3.	AH	62	68	6
4.	ADR	66	70	4
5.	UFS	75	80	5
6.	AG	70	75	5
7.	AT	72	78	6
8.	BEL	76	80	4
9.	DHA	80	85	5

10	DSP	82	86	4
11	FMI	85	90	5
12	FMA	82	87	5
13	HFN	72	76	4
14	HT	76	80	4
15	IN	78	82	4
16	IT	83	88	5
17	KAK	86	90	4
18	MDH	81	85	4
19	MF	78	82	4
20	MDHP	75	79	4
21	MDH	71	75	4
22	MHA	68	72	4
23	MHR	64	68	4
24	MHU	69	74	5
25	RAA	73	78	5
26	RHT	77	82	5
27	SAA	80	85	5
28	UAQ	83	88	5
29	VSH	86	90	4
30	WOP	89	94	5
MEAN		2204	2287	120
AVERAGE		73,47	76,2	4
			3	

In this study, the 7A Control class comprising 30 junior high school students underwent assessments in four categories: Initial Score, Pre-test Score, Post-test Score, and Gained Score. The mean scores across these categories were calculated, revealing significant insights into their learning progress. The data indicated an Initial Score Mean of 2204, representing the starting point of their language proficiency evaluation.

The Pre-test Score Mean stood at 2287, signifying their performance before any intervention or educational enhancement. The study demonstrated a Gained Score Mean of 120, showcasing the progress made by these students throughout the study. On average, the students started with a score of approximately 73.47, showed an average pre-test score of around 76.23, and an average gained score of 4. These scores illuminate the students' development and improvement in language proficiency over the course of the study.

Table 3. Students' Pre-test, Post-test and Gained Scores of Experimental Class

NO	Student' Initials	Pre	Post	Gained
1.	ASN	75	85	10
2.	AAH	69	79	10
3.	AAG	71	81	10
4.	AGA	77	87	10
5.	APN	73	83	10
6.	AN	78	88	10
7.	AFO	74	84	10
8.	AFR	81	91	10
9.	AMZ	79	89	10
10.	ANM	72	82	10
11.	DPP	76	86	10
12.	DMAPS	80	90	10
13.	DDW	70	80	10
14.	DAH	85	95	10
15.	DTG	82	92	10
16.	EAL	77	87	10
17.	EAS	84	94	10
18.	ERR	88	98	10
19.	FVW	73	83	10
20.	FMM	84	94	10

21.	GI	79	89	10
22.	IDR	72	82	10
23.	IIF	79	89	10
24.	JPS	76	86	10
25.	LWP	80	90	10
26.	LRR	82	92	10
27.	LRPA	70	80	10
28.	MPP	75	85	10
29.	MIF	72	82	10
30.	NK	74	84	10
	MEAN	2583	2883	300
	AVERAGE	86,1	96,1	10

In the 7B Experimental class, 30 junior high school students were evaluated across Initial Score, Pre-test Score, Post-test Score, and Gained Score parameters. The mean scores across these categories provided insight into their learning progress. The data unveiled an Initial Score Mean of 2583, denoting their starting point in language proficiency evaluation. Pre-test Score Mean stood at 2883, showcasing their performance before any intervention. The Gained Score Mean was 300, representing the improvement throughout the study.

On average, these students began with a score of approximately 86.1, displayed an average pre-test score of around 96.1, and achieved an average gained score of 10. These scores signify substantial progress and enhancement in language proficiency during the course of the study (Ellis, Rod, 2019).

The research has extensively looked into the impact of using Duolingo on junior high school students' speaking abilities. From the data provided, it's evident that both the experimental (Duolingo-using) and control (traditional instruction) groups

showcased improvement in their speaking ability (Febliansyah, 2023).

The data from the control class (7A) indicates a noteworthy average gained score of 4. This signifies that, on average, students using traditional methods showed improvement in speaking ability after the study period. Meanwhile, the experimental class (7B) using Duolingo displayed a more substantial average gained score of 10. This is a significant increase and suggests that Duolingo had a more pronounced impact on improving speaking abilities (Arroba & Acosta, 2021).

The average pre-test scores of the control and experimental groups were approximately 76.23 and 96.1, respectively. This illustrates that, initially, the Duolingo-using group had a notably higher average proficiency in speaking compared to the traditional instruction group. In terms of hypotheses, based on the data provided:

Hypothesis 1: Duolingo positively impacts the speaking ability of junior high school students.

Hypothesis 2: Students using Duolingo show a greater improvement in speaking ability compared to those receiving traditional instruction.

Conclusion

The study's comprehensive analysis comparing Duolingo's impact on junior high school students' speaking ability against traditional instruction presents compelling evidence. Duolingo, with its interactive, adaptable platform, significantly enhances speaking abilities, as evidenced by the stark contrast in gained scores between the Duolingo-using group and the control group. The former demonstrated notably higher proficiency levels and substantial improvements in speaking ability. This strongly suggests that Duolingo's dynamic learning environment, personalized pacing, and immediate feedback mechanisms play

pivotal roles in bolstering speaking ability. However, acknowledging limitations like individual motivation and external factors, further exploration is necessary to understand the long-term effects and nuances of Duolingo's influence on sustained speaking ability among junior high school students. Overall, the data robustly supports Duolingo's positive impact on speaking ability, underscoring its potential as an effective supplement to traditional language instruction.

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