

THE USE OF DUOLINGO APP ON IMPROVING STUDENTS' SPEAKING FLUENCY

SKRIPSI



Presented to

IKIP PGRI Bojonegoro

In partial fulfilment of the requirements
for the degree of Sarjana in English Education

By:

Kamilatul Hidayah

NIM 22120011

**ENGLISH EDUCATION DEPARTMENT
FACULTY OF LANGUAGES AND ARTS EDUCATION
IKIP PGRI BOJONEGORO
2026**

THE USE OF DUOLINGO APP ON IMPROVING STUDENTS' SPEAKING FLUENCY

SKRIPSI

Presented to

IKIP PGRI Bojonegoro

In partial fulfilment of the requirements
for the degree of Sarjana in English Education

By:

Kamilatul Hidayah

NIM 22120011

**ENGLISH EDUCATION DEPARTMENT
FACULTY OF LANGUAGES AND ARTS EDUCATION
IKIP PGRI BOJONEGORO**

2026

APPROVAL SHEETS

The skripsi entitled "THE USE OF DUOLINGO APP ON IMPROVING STUDENTS' SPEAKING FLUENCY" is compiled by:

Name : Kamilatul Hidayah

Nim : 22120011

Department : English Education

Has been approved by the advisor.

Bojonegoro, 10 July 2026

Advisor I,



Ayu Fitrianiingsih, M.Pd.

NIDN 0720049101

Advisor II,



Oktha Ika Rahmawati, M.Pd.

NIDN 0701108602

LEGITIMATION

The skripsi entitled "**THE USE OF DUOLINGO APP ON IMPROVING STUDENTS' SPEAKING FLUENCY**" is compiled by:

Name : Kamilatul Hidayah

Nim : 22120011

Department : English Education

This is to certify that this skripsi has been approved by the Board of Examiners as the requirement for the degree of Sarjana in English Education Department, Faculty of Languages and Arts Education, IKIP PGRI Bojonegoro on July 2026.

Bojonegoro, 27 July 2026

Chairman,



Dr. Cahyo Hasanudin, M.Pd.

NIDN 0706058801

Secretary,



Ayu Pitrianingsih, M.Pd.

NIDN 0720049101

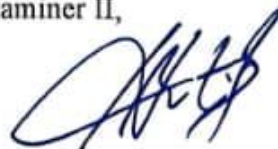
Examiner I,



Dr. Moh. Fuadul Matin, S.S., M.Pd.

NIDN 0727028703

Examiner II,



Chyntia Heru Woro Prastiwi, M.Pd.

NIDN 0728017903

Rector,

Dr Junarti, M.Pd.

NIDN 0014016501

STATEMENT OF AUTHENTICITY

I, the undersigned below:

Name : Kamilatul Hidayah

Nim : 22120011

Department : English Education

Faculty : Languages and Arts Education

In order to uphold academic integrity, sincerely and without coercion from any parties,
I hereby declare that the thesis entitled:

The use of Duolingo App on Improving Students' Speaking Fluency

Is the result of my own original work, and all sources of information used have been clearly cited in the reference list according to the scientific and academic code of ethics. I am aware that if any violations of scholarly ethics regarding to the authenticity of this work are found, I personally accept the consequences in accordance with the applicable regulations and am prepared to bear legal sanctions.

Bojonegoro, 16 July 2026

A red rectangular stamp with the text "1000" in large numbers, "Rp" in the center, and "METERAI TEMPEL" below it. At the bottom of the stamp is the number "1257AOX122839064". A handwritten signature in black ink is written over the stamp.

Kamilatul Hidayah

NIM 22120011

MOTTO

“Whatever has happened in your life, don't say, "If only." Instead, say, "Qadarullah," because everything that happens is by Allah's decree, and Allah's decree is always good, for Allah is the Most Kind God.”

(Ustadz Hanan Attaki)

“My heart finds peace in knowing that what has missed me was never destined for me, and what Allah has destined for me will never miss me.”

(Umar bin Khattab)

ACKNOELEDGEMENT

With sincere gratitude, I would like to express my deepest appreciation to everyone who has supported, encouraged, and prayed for me throughout the completion of this thesis. My special thanks are dedicated to:

1. Allah SWT, the Most Gracious and the Most Merciful, for His endless blessings, guidance, strength, and mercy. By His will and grace, I have been able to complete this thesis.
2. Mrs. Ayu Fitrianingsih, M.Pd., as my First Advisor, and Mrs. Oktha Ika Rahmawati, M.Pd., as my Second Advisor, for their patience, guidance, valuable advice, and continuous support throughout the completion of this thesis. I am truly grateful for all the knowledge and encouragement they have shared with me.
3. My beloved parents, Mr. Ghozali and Mrs. Miftahul Jannah, and my beloved younger sister, Nailul Hikmah, for their unconditional love, endless prayers, sacrifices, encouragement, and unwavering support. I would not have reached this milestone without them.
4. My dear friends, both at university and at the Islamic boarding school, for their friendship, support, and unforgettable memories throughout my academic journey. My special thanks go to Risma, my childhood best friend, for always being there to encourage and support me in every situation.

5. Myself, Kamilatul Hidayah, for staying strong, believing in my dreams, and never giving up despite all the challenges and endless revisions. This achievement reminds me that every effort will always lead to a meaningful result.

Finally, I realize that this thesis is not perfect. Therefore, I sincerely welcome constructive criticism and suggestions for future improvement. I hope this thesis will be beneficial to readers and contribute to the development of English language education.

Bojonegoro, 7 July 2026

The Researcher

A handwritten signature in black ink, appearing to be 'Kamilatul Hidayah', written over a horizontal line.

Kamilatul Hidayah

NIM 22120011

ABSTRAK

Kamilatul Hidayah. 2026. *The Use of Duolingo App on Improving Students' Speaking Fluency*. Skripsi. Program Studi Pendidikan Bahasa Inggris, Fakultas Pendidikan Bahasa dan Seni, IKIP PGRI Bojonegoro. Pembimbing (I) Ayu Fitrianingsih, M.Pd., (II) Oktha Ika Rahmawati, M.Pd.

Kelancaran berbicara (speaking fluency) merupakan salah satu aspek penting dalam pembelajaran bahasa Inggris. Namun, siswa kelas VIII SMP Plus Al-Hidayah Sugihwaras Tuban masih mengalami kesulitan dalam berbicara secara lancar yang ditandai dengan rendahnya speech rate, oral flow, dan pronunciation, serta masih seringnya terjadi jeda (pause length) saat berbicara. Penelitian ini bertujuan untuk menganalisis efektivitas penggunaan aplikasi Duolingo dalam meningkatkan speaking fluency siswa, mengidentifikasi faktor-faktor yang mendukung penggunaan aplikasi Duolingo, serta mendeskripsikan peningkatan speaking fluency siswa setelah penerapan aplikasi tersebut. Penelitian ini menggunakan metode Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus, dengan setiap siklus meliputi tahap perencanaan, tindakan, observasi, dan refleksi. Subjek penelitian adalah 28 siswa kelas VIII SMP Plus Al-Hidayah Sugihwaras Tuban Tahun Ajaran 2025/2026. Data dikumpulkan melalui tes berbicara, lembar observasi, angket, dan dokumentasi. Data kuantitatif dianalisis menggunakan nilai rata-rata, sedangkan data kualitatif dianalisis secara deskriptif. Hasil penelitian menunjukkan bahwa penggunaan aplikasi Duolingo efektif dalam meningkatkan speaking fluency siswa. Nilai rata-rata speaking fluency meningkat dari 1.15 pada pre-test menjadi 2.99 pada post-test dengan peningkatan sebesar 1.84. Peningkatan juga terjadi pada seluruh aspek speaking fluency, yaitu speech rate dari 1.14 menjadi 2.93, pause length dari 1.29 menjadi 3.29, oral flow dari 1.07 menjadi 2.93, dan pronunciation dari 1.11 menjadi 2.82. Hasil observasi dan angket juga menunjukkan bahwa penggunaan aplikasi Duolingo meningkatkan motivasi belajar, partisipasi aktif, dan kepercayaan diri siswa selama proses pembelajaran. Dengan demikian, dapat disimpulkan bahwa aplikasi Duolingo efektif digunakan untuk meningkatkan speaking fluency siswa kelas VIII SMP Plus Al-Hidayah Sugihwaras Tuban.

Kata Kunci: Duolingo, Kelancaran Berbicara, Penelitian Tindakan Kelas, Pembelajaran Bahasa Berbantuan Perangkat Seluler, Pembelajaran Bahasa Inggris.

ABSTRACT

Kamilatul Hidayah. 2026. *The Use of Duolingo App on Improving Students' Speaking Fluency*, Skripsi, English Education Department, Faculty of Languages and Arts Education, IKIP PGRI Bojonegoro, Advisor (I) Ayu Fitriarningsih, M.Pd., (II) Oktha Ika Rahmawati, M.Pd.

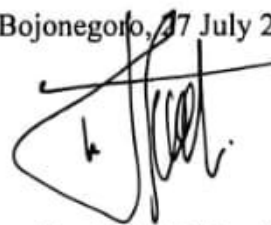
Speaking fluency is one of the essential aspects of English language learning. However, the eighth-grade students of SMP Plus Al-Hidayah Sugihwaras Tuban experienced difficulties in speaking fluently, as indicated by their low speech rate, oral flow, and pronunciation, as well as frequent pauses during speaking. This study aimed to analyze the effectiveness of the Duolingo application in improving students' speaking fluency, identify the factors supporting the use of the application, and describe the improvement in students' speaking fluency after its implementation. This study employed Classroom Action Research (CAR), which was conducted in two cycles consisting of planning, acting, observing, and reflecting. The participants were 28 eighth-grade students of SMP Plus Al-Hidayah Sugihwaras Tuban in the 2025/2026 academic year. The data were collected through speaking tests, observation sheets, questionnaires, and documentation. Quantitative data were analyzed using mean scores, while qualitative data were analyzed descriptively. The findings revealed that the use of the Duolingo application effectively improved students' speaking fluency. The average speaking fluency score increased from 1.15 in the pre-test to 2.99 in the post-test, with an improvement of 1.84. Improvements were also found in all speaking fluency aspects, namely speech rate from 1.14 to 2.93, pause length from 1.29 to 3.29, oral flow from 1.07 to 2.93, and pronunciation from 1.11 to 2.82. The observation and questionnaire result also indicated that the use of Duolingo enhanced students' learning motivation, active participation, and self-confidence during the learning process. Therefore, it can be concluded that the Duolingo application is effective in improving the speaking fluency of the eighth-grade students at SMP Plus Al-Hidayah Sugihwaras Tuban.

Keywords: Duolingo, Speaking Fluency, Classroom Action Research, Mobile-Assisted Language Learning, English learning

PREFACE

All praise is due to Allah SWT for His blessings and guidance, which have enabled the writer to complete this thesis entitled “The Use of Duolingo App on Improving Students’ Speaking Fluency”. This thesis is prepared as one of the requirements to obtain a Bachelor’s Degree in English Education at the Faculty of Teacher Training and Education. Throughout the process of writing this thesis, the writer realizes that it would not have been possible to accomplish without the assistance, guidance, and support from many parties. Therefore, the writer would like to express sincere gratitude to the thesis advisor for the patience, guidance, and motivation given during the preparation of this work, to all lecturers of the English Education Program who have provided valuable knowledge and insights, to the beloved family for their endless prayers and encouragement, and to fellow students and friends for their support and companionship. The writer is fully aware that this thesis is still far from perfect, thus constructive criticism and suggestions are highly welcomed for future improvement. It is hoped that this thesis will be beneficial for readers, especially in the field of English language education and the development of speaking skills through the use of technology.

Bojonegoro, 27 July 2026



Kamilatul Hidayah

NIM 22120011

TABLE OF CONTENTS

TITLE.....	ii
MOTTO.....	vi
ACKNOELEDGEMENT.....	vii
ABSTRAK.....	ix
ABSTRACT.....	x
TABLE OF CONTENTS	xii
LIST OF TABLE.....	xiv
LIST OF FIGURES.....	xv
LIST OF APPENDICES	xvi
CHAPTER I	1
INTRODUCTION.....	1
A. Background of the Study.....	1
B. Formulation of the Problems.....	5
C. Objectives of the Study	6
D. Significance of the Study	6
E. Definition of Terminologies.....	9
CHAPTER II.....	10
REVIEW OF RELATED LITERATURE	10
A. Review of Previeous Studies.....	10
B. Theoretical Review	15
C. Theoretical Framework	21
CHAPTER III.....	27
RESEARCH METHODOLOGY	27
A. Research Design.....	27
B. Research Procedure.....	29
C. Research Settings	32
D. Research Subjects.....	34

E. Data and Data Sources	36
F. Data Collection Techniques	39
G. Data Analysis Techniques	39
H. Data Validation Techniques.....	40
I. Criteria of Success.....	42
CHAPTER IV	44
RESEARCH FINDINGS AND DISCUSSION	44
A. Research Findings	44
B. Discussion	64
CHAPTER V	84
CONCLUSION AND SUGGESTION	84
A. Conclusion.....	84
B. Suggestion	85
REFERENCES.....	88
APPENDICES.....	92

LIST OF TABLE

Table 3.1 Data Collection Techniques	37
Table 3.2 Data Analysis Techniques.....	38
Table 4.1 Pre-test and post-test average score	60
Table 4.2 Students' Motivation questionnaire	61

LIST OF FIGURES

Figure 2.1. Theoretical Framework of the Study	21
Figure 10.1 The Documentation of the Research.....	106
Figure 10.2 The Duolingo App interface	107

LIST OF APPENDICES

Appendix 1. List of Research Respondents	90
Appendix 2. Lesson Plan Cycle I.....	91
Appendix 3. Speaking Lesson Plan Cycle II.....	94
Appendix 4. Pre-test and Post-test sheet.....	98
Appendix 5. Pre-test Results	99
Appendix 6. Post-test Results	100
Appendix 7. Speaking test Result	101
Appendix 8. Observation Sheet.....	103
Appendix 9. Observation Results.....	104
Appendix 10. Student's Motivation Questionnaire Sheet (Likert Scale).....	105
Appendix 11. Documentation	106
SURAT IZIN PENCARIAN DATA	107
SURAT KETERANGAN SELESAI PENELITIAN	108
SURAT KETERANGAN SELESAI BIMBINGAN SKRIPSI.....	109
KARTU BIMBINGAN SKRIPSI	110

CHAPTER I

INTRODUCTION

A. Background of the Study

Advancements in information technology and the increasing intensity of international mobility have strengthened the position of English as a global means of communication, widely used in education, scientific research, professional settings, and various forms of intercultural interaction. As one of the four essential language skills, speaking plays a crucial role because it enables learners to communicate ideas, opinions, and information effectively in real-life situations. However, for many Indonesian junior high school students, developing speaking proficiency remains a significant challenge due to limited vocabulary, insufficient opportunities for meaningful oral interaction, inaccurate pronunciation, and anxiety about speaking in front of others. At SMP Plus Al-Hidayah Sugihwaras Tuban, eighth-grade students demonstrate similar difficulties, including hesitation during pair and group discussions, frequent long pauses while speaking, and reluctance to participate in oral activities. These classroom conditions indicate the need for an instructional innovation that provides students with meaningful and engaging opportunities to practice speaking.

Speaking fluency is widely recognized as one of the key components of speaking competence because it reflects a speaker's ability to communicate

ideas smoothly, naturally, and continuously with minimal hesitation. According to Segalowitz (2010), speaking fluency refers to the ability to produce spoken language efficiently and automatically while maintaining effective communication. Similarly, Nation and Newton (2009) explain that fluency is characterized by an appropriate speech rate, limited unnecessary pauses, smooth oral delivery, and intelligible pronunciation. Therefore, improving speaking fluency requires not only linguistic knowledge but also continuous speaking practice supported by appropriate instructional strategies. In this study, speaking fluency is measured through four indicators: speech rate, pause length, oral flow, and pronunciation, which represent students' ability to communicate effectively and confidently.

One instructional approach that has gained considerable attention in English language learning is Mobile-Assisted Language Learning (MALL). MALL enables students to access learning materials anytime and anywhere through mobile devices, thereby extending learning opportunities beyond the classroom. Previous studies have reported that MALL contributes positively to students' vocabulary acquisition, listening comprehension, speaking performance, and learning motivation (Ahmed et al., 2022; Irzawati, 2023). Among various MALL applications, Duolingo has become one of the most widely used language-learning platforms because it combines gamification features, immediate feedback, speech recognition technology, and short interactive lessons. These features encourage students to practice English

regularly in an enjoyable learning environment while reducing anxiety and increasing learning engagement (Jiang et al., 2024).

SMP Plus Al-Hidayah Sugihwaras Tuban provides an appropriate setting for implementing Mobile-Assisted Language Learning because most students already own smartphones but rarely use them as learning tools for improving their English-speaking ability. Preliminary classroom observations, interviews with two English teachers, and an initial speaking assessment involving 28 eighth-grade students revealed several recurring problems. The students tended to speak slowly, produced frequent pauses, experienced pronunciation difficulties, and lacked confidence when expressing their ideas orally. These findings are consistent with previous studies reporting that many Indonesian junior high school students continue to experience difficulties in developing speaking fluency despite having access to digital technology (Fakhrudin et al., 2023; Kiwan et al., 2024).

Duolingo offers learning activities that are relevant to the development of speaking fluency through vocabulary practice, sentence construction, listening exercises, pronunciation tasks, and speech recognition activities accompanied by immediate feedback. Each lesson is relatively short, allowing students to practice English consistently without experiencing cognitive overload. Furthermore, Duolingo can easily be integrated into classroom instruction as a warm-up activity, independent practice, homework assignment, or blended learning component. The application's gamification system, including points, streaks, badges, and leaderboards, is expected to encourage students to

practice more frequently and improve both their motivation and speaking performance.

Although numerous previous studies have demonstrated the effectiveness of Duolingo and other MALL applications in improving vocabulary mastery, grammar achievement, and learning motivation, studies specifically investigating speaking fluency among junior high school students remain limited. Most previous research has been conducted in vocational schools or higher education settings, while relatively few studies have examined younger learners in Indonesian secondary schools. Moreover, previous studies have generally emphasized speaking accuracy or students' perceptions rather than systematically evaluating fluency indicators such as speech rate, pause length, oral flow, and pronunciation.

Another limitation identified in previous studies is the limited application of Classroom Action Research (CAR) in investigating the integration of mobile learning applications for improving speaking fluency. Most studies have employed experimental or quasi-experimental research designs that primarily focus on learning outcomes without describing the continuous improvement process occurring during classroom implementation. Consequently, there is still limited evidence regarding how Duolingo can be integrated into iterative teaching cycles while combining quantitative measures of speaking fluency with qualitative data obtained from classroom observations, interviews, and students' learning motivation.

Based on these considerations, this study aims to investigate the effectiveness of the Duolingo application in improving the speaking fluency of eighth-grade students at SMP Plus Al-Hidayah Sugihwaras Tuban through Classroom Action Research. In addition, the study seeks to identify the factors supporting the implementation of Duolingo in speaking instruction and to describe students' improvement in speaking fluency throughout the action research cycles. It is expected that the findings of this study will contribute both theoretically to the growing body of research on Mobile-Assisted Language Learning and practically by providing English teachers with an alternative instructional strategy for improving students' speaking fluency through technology-assisted learning.

B. Formulation of the Problems

1. How does the use of the Duolingo application improve eighth-grade students' speaking fluency at SMP Plus Al-Hidayah?
2. What factors support the use of Duolingo application in improving students' speaking fluency?
3. To what extent does speaking fluency of eighth-grade students change after using Duolingo application?

C. Objectives of the Study

1. Investigate the improvement of eighth-grade students' speaking fluency through the use of the Duolingo application at SMP Plus Al-Hidayah.
2. Identify supporting factors that contribute to the use of Duolingo application in improving students' speaking fluency.
3. Describe the changes in speaking fluency of the eighth-grade students after using Duolingo application.

D. Significance of the Study

1. Theoretical Significance

By asking about how Duolingo, a gamified language learning app, interacts with educational processes to enhance oral fluency, this study contributes to the developing literature of study on Mobile-Assisted Language Learning (MALL). The Duolingo Method is based on learning study and is designed around five pedagogical pillars, according to Freeman et al. (2023): learn by doing, individualized learning, focus on what matters, stay motivated, and feel the delight. This study develops the study of how mobile applications can be integrated into education with measurable improvements in speaking ability through implementing the above concepts into a junior high school EFL classroom.

Fluency measurement integration This study improves methodological methods to evaluating speaking interventions by combining quantitative fluency indicators with qualitative classroom data. Ahmed et al. (2022)

emphasize that when used as part of MALL, Duolingo improve accuracy and fluency, but it's important to combine app-based results with original communicative practice. Building on this, the present study combined acoustic metric (speech rate, pause frequency, and duration) with teacher and student attention, improving methodological rigor in assessing speaking skill development in EFL applications.

The use of a three-cycle Classroom Action Research (CAR) design generates theoretical insights into iterative instructional change. Kiwan, Pudjiati, and Mukaddamah (2024) demonstrated that successive CAR cycles with Duolingo integration led to progressive gains in communicative competence, self-confidence, and effectiveness among Indonesian vocational high school students. Dearestiani et al. (2023) found that iterative cycles of Duolingo-based instruction improved

Additionally, the study improves on theoretical claims around gamified micro-practice through positioning Duolingo in the Indonesian junior high school context. Irzawati (2023) argues that when Duolingo integrates into EFL classrooms, it improves vocabulary, grammar, and motivation, but he points out obstacles related to access and teacher mediation. By creating these boundary demands, this current study provides contextualized evidence for the transferability of Duolingo's gamified learning model to contexts in infrastructural and pedagogical impacts on the results.

2. Practical Significance

This study aims to deliver practical advantages for teachers, students, and the school.

- a. For teacher, it presents an alternative teaching method by incorporating Duolingo into the instruction of speaking skills, with a particular emphasis on enhancing speaking fluency. Additionally, it aids teachers in systematically designing classroom action research through the cycles of planning, acting, observing, and reflecting. Moreover, it acts as a tangible reference for the incorporation of digital media into English language instruction at the junior high school level.
- b. For students, this study is anticipated to improve their speaking fluency through engaging and repetitive practice, allowing them to utilize the language more naturally and fluidly in everyday conversations. Furthermore, students may broaden their vocabulary and refine their pronunciation through the features offered by Duolingo, which enhances both accuracy and fluency. The study also creates opportunities for self-directed learning outside the classroom, enabling students to organize their study time according to their personal needs and pace. As a result, students not only enhance their speaking fluency but also cultivate sustainable learning habits that foster 21st-century skills.
- c. For the school, this study bolsters institutional initiatives to incorporate technology into the teaching and learning framework. It provides evidence that innovative teaching methodologies can enhance students' learning outcomes, especially in speaking fluency. Additionally, it

contributes to the formulation of a practice-oriented curriculum that meets students' needs and aligns with modern educational requirements.

E. Definition of Terminologies

The objective of the technology-based language learning application Duolingo is to provide everyone free, personalized instruction. The Duolingo Method focuses on learning science and developed through continuous research and iterative testing, according to Freeman et al. (2023). The application is built on five pedagogical pillars: learn by doing (interactive practice that enables students to acquire knowledge through direct engagement); learn in a personalized way (adaptive learning supported by the Birdbrain artificial intelligence system); stay motivated (gamification features such as points, streaks, and leaderboards to sustain student engagement); and feel the delight (creating enjoyable learning experiences that foster persistence). Through employing this method, Duolingo provides that students learn language skills important for daily interactions while providing short, game-like lessons. In addition, Ahmed et al. (2022) emphasize that Duolingo improves students' speaking proficiency when integrated with Mobile-Assisted Language Learning (MALL), particularly in terms of accuracy and fluency. According to their study, Duolingo's gamified and adaptive design supports consistent practice and habit development, enhancing oral performance. They point to the fact that the application is effective well when used as another instrument along to application communicative practice, ensuring that students achieve greater ability to speak English.