

SECONDARY SCHOOLS STUDENTS' PERCEPTIONS OF USING THE DUOLINGO APP TO LEARN ENGLISH IN AN EFL CONTEXT

Larasati Sekar Arum Sugianto¹, Aryati Prasetyarini²

 ¹ Faculty of English Education, Universitas Muhammadiyah Surakarta (UMS), Surakarta, Indonesia
² Faculty of English Education, Universitas Muhammadiyah Surakarta (UMS), Surakarta, Indonesia
a320210049@student.ums.ac.id, ap156@ums.ac.id

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Abstract

This study aims to find out how high school students perceive the Duolingo app as a medium for learning English in the classroom. It also aims to analyze the impact of the app on students' English proficiency and evaluate how students respond to learning using the app. The methodology used in this high school research is semistructured interview and school observation using qualitative research approach to collect data. The results of the data obtained by the researcher, showed that using the Duolingo application as an English learning media succeeded in increasing the percentage of students' interest in learning English as a foreign language, so that students can easily learn English and explore various skills by practicing questions that have been provided in the application. Applying the media in the learning process also supports students to learn English independently.

Keywords: Secondary School, Duolingo, Language Learning Apps

Introduction

The use of English in this era of globalization is very important. Basically, English is an international language that is used as a means of communication in all aspects of life, ranging from education, business, technology, to culture. Especially now that we are facing a digital era where all aspects of digital technology use English. According to Byslina (2016), English is an international lingua franca. The language used in official meetings of the United Nations, as well as being the standard language of international aviation. Siregar et al., (2023) also said that for several centuries English has been a unifying language or lingua franca which has been used by around 20 percent of the world's population. Thus, it is very important that this English language learning is given to students until they really understand because the English language skills possessed by students will provide enormous opportunities for their future.



English language learning has an excellent impact on students' affective aspects such as self-confidence and motivation to learn. Students who feel competent in English tend to be more active in learning and more confident in facing academic challenges (Estremera 2025). Because mastery of a foreign language is often associated with higher critical and analytical thinking skills, students feel better prepared to face academic challenges. English is also used in many learning resources, such as scientific journals, articles, educational videos and digital learning platforms. Students who master English are able to understand the material more broadly and deeply, so they will feel better prepared to participate in discussions or assignments. This is also closely related to the direction of their future goals. They will have greater courage in making decisions because they feel that they have great opportunities with their English skills.

Not only in the educational aspect, English is also a communication tool that is recognized as the language of the world economy which has an important role in international trade, diplomacy, and multinational corporate communication. Students with a good command of English have a greater chance of accessing a more competitive global labor market. Mastery of English increases the marketability of labor, increases access to high-paying jobs, and opens up opportunities for digital-based entrepreneurship and international collaboration (Khramchenko 2025). Examples of opportunities in digital entrepreneurship include international content creators, global freelancers, online consultants, or building businesses targeting global markets. Entrepreneurs who have a good command of English also have the advantage of reaching international markets and establishing cross-country collaborations.

Although learners are aware that English is important, in reality, there are still many students who experience difficulties in the English learning process. Both in mastering the material, understanding vocabulary, and how to read each word that still has many mistakes. This also happens to students at SMA Muhammadiyah Imam Syuhodo which is located in Polokarto District, Sukoharjo Regency. This of course cannot be underestimated. Because at the upper secondary level, they should have mastered English vocabulary well. Juliani, et. al (2024) shared the results of their research, that students who still experience difficulties in learning English are caused by differences in aspects that play a role in improving foreign language skills. These aspects include internal and external aspects. Internal aspects are influenced by the surrounding environment.

There are some common challenges in learning English. The most common is the difficulty in pronunciation. English has phonemes that don't exist in many other languages, as well as inconsistent spelling. For example, the words "cough", "though", "through", and "bough" have different pronunciations, despite having similar letter structures (Abdalla et al., 2020). In addition to difficulties in pronunciation, English also has complex grammatical structures such as tenses, auxiliary verbs, and modals that are not the same as what we learned with our mother tongue (Alefesha & Al-Jamal, 2019). An environment that does not provide



support in practicing English also affects what we have learned. Many learners do not have the opportunity to use English outside the classroom, so speaking and listening skills are not optimally developed. Without regular interaction using English both orally and in writing, students' ability to understand vocabulary, sentence structure, and correct pronunciation is hindered because it reduces confidence and motivation in speaking.

Doubts and lack of confidence can cause anxiety in speaking. Many students feel embarrassed and afraid of being ridiculed if they make mistakes in pronunciation, grammar, or word choice. This of course further inhibits their development and communicative skills (Sutarsyah 2017). There are several other influencing factors such as pressure from teachers, unfavorable classroom atmosphere, or lack of exposure to native speakers also make students feel unprepared or uncomfortable speaking in English. all of these things contribute to the emergence of "foreign language anxiety". Foreign Language Anxiety (FLA) is a specific form of anxiety that individuals experience when they learn or use a foreign language. It is not the same as generalized anxiety, but rather a combination of fear of communicating, embarrassment of mistakes, as well as social pressure in academic situations or reallife interactions. FLA significantly affects a person's performance, motivation and even their decision to continue learning a foreign language (Fattahi Marnani & Cuocci, 2022).

Not only does it affect learning outcomes in English subjects, the number of difficulties they get during the English learning process also affects their motivation in learning English more deeply. Of course, if this is left unchecked, it will have a bad impact on their future. Mujiono (2023) solved similar problems by designing community service activities by utilizing digital media technology in the form of the Kahoot application which is known for its interactivity and interesting learning methods. From the survey results involving students, it was found that 85% of the respondents stated that their learning motivation increased significantly after using the Kahoot application. In addition, there was a significant change in class dynamics, where students were actively involved in the learning process.

In learning English, of course, we must know what motivates students in order to promote the goals of the learning process. After the teacher explains the benefits of learning English, students must also explore the motivation that exists within themselves so that learning outcomes can be achieved well. Student motivation is multidimensional, including intrinsic, extrinsic, and socio-cultural factors. Intrinsic motivation is in the form of a desire from within oneself and the desire to succeed so that it drives the need to learn, and has great expectations with future goals. Extrinsic motivation must also be given to learners so that they feel supported by those around them. Extrinsic motivation can be in the form of rewards and a conducive learning environment so that there is always an interesting desire to learn (Yogi Fernando et al., 2024).

The advancement of digital technology has brought about a major transformation in the way students learn, including in foreign language learning. In recent years,



the Mobile-Assisted Language Learning (MALL) approach has grown rapidly as an alternative learning medium. Apps such as Duolingo have become popular for providing adaptive, interactive and easily accessible learning materials through mobile devices. Duolingo also allows students to learn independently outside of school hours with an engaging gamification approach (Kazu & Kuvvetli, 2025). Duolingo uses an artificial intelligence-based approach that provides immediate feedback and customization of material according to the user's ability. These features create a personalized and efficient learning experience, and increase EFL students' motivation to learn (Fathi et al., 2024).

In the 21st century, the teaching and learning process is closely related to the use of gamification. Many English teachers use gamification as a medium to help them in teaching. For teachers, the use of gamification in the process of teaching and learning can make students have fun and interesting learning. For some students, gamification may be beneficial for them in learning English (Jaelani & Sutari, 2020). Educational technology, including mobile apps like Duolingo, offers a new way to learn languages. These apps are designed to make language learning more engaging and interactive. With various features such as gamification, students can feel more motivated to learn. Previous research shows that the use of language learning apps can improve student engagement and learning outcomes.

Several studies have shown that secondary school students have a positive perception of using Duolingo in English language learning. For example, research by Alfuhaid (2021) in Saudi Arabia showed that Duolingo integration significantly improved students' speaking skills. Students felt that the use of the app provided freedom of learning and increased confidence in using English. Aulia et al., (2020) research in Indonesia also confirmed that Duolingo in vocabulary learning gave better results than the conventional approach. Furthermore, Irzawati & Unamo, (2023) found that students showed a positive attitude towards using Duolingo, especially in the context of flexible online learning. The app allows repetition of material, interactive exercises, and a reward system (points and badges) that motivates students to continue learning.

Erlin, et.al (2021) conducted research using the Duolingo application to improve speaking skills in students. Some of the difficulties faced by students in learning English are caused by inappropriate learning methods provided, as well as a lack of mastery of English vocabulary. Thus, making students have difficulty in conveying their ideas orally. Based on the observations that have been made, the author concludes that in the learning process using the Duolingo application can improve speaking skills in students. Students showed a very good response to this media. They easily understand the material, provide opportunities for all students to get a fair turn in practicing the material, and eliminate boredom in learning English.

According to Al Irsyadi et al., (2019) the Duolingo application can provide solutions to various problems of low vocabulary mastery in students. The vocabulary ability possessed by students is influenced by several things including



the suggestion that English vocabulary is difficult to pronounce and the low desire of students to learn English. There are 4 reasons why the Duolingo application can improve students vocabulary mastery, including the ability analysis at the beginning, an attractive appearance that builds students' interest in learning, the repetition feature and the exercise feature complete with discussion if they are wrong in answering. This research is limited to the factors that can make the Duolingo application improve students' mastery of English vocabulary. For this reason, further research is needed that discusses other English skills such as reading, listening, and writing by using the Duolingo application as a learning medium.

The background of this research shows the gap between previous research and the latest research. Previous research used the Duolingo application to increase learning motivation in students who did not explain specifically how it affected basic English language skills. Other studies only focus on vocabulary and speaking improvement. Almeina Loebis & Ramadhani, (2023) found that the Duolingo application can help vocational students improve English skills interactively and independently. This is related to the curriculum in SMK so that students can gain the language skills needed to prepare for their future careers. However, no research was conducted to explore the implementation of Duolingo in teaching writing skills, grammar mastery, and the effectiveness of the Duolingo application as an auxiliary media in the English learning process according to students' perceptions. This study was conducted with the aim of assisting English learning activities for students of SMA Muhammadiyah Imam Syuhodo, as well as utilizing digital technology to increase interest, motivation, and facilitate students in learning English which includes various basic skills that must be mastered

Learning English using digital technology media has a good impact on students. Learning media has become an important component in the education system especially in this digital era. Fun learning methods are very beneficial to facilitate teaching and learning activities by offering innovative and effective methods to improve student understanding. In this article, the researcher only focuses on the utilization of existing applications by disseminating information about the Duolingo application as an interactive and fun English learning media, and knowing how students perceive the use of the application. According to Agus Ruchliyadi & Sufyadi, n.d.(2024) in their research stated that the application of English learning using the Duolingo application through the stages of innovation diffusion can increase students' independence to learn English by covering several skills at once such as listening, speaking, writing, and increasing their vocabulary.

The Duolingo application is considered very effective and varied in providing learning materials needed by most students. (Muliati, n.d.) explains that, for beginner level students, the Duolingo application is a powerful tool for teaching and learning vocabulary. For students, this media is very interesting because they show a very good response to this media. They find it easy to understand the content, it reduces learning frustration and also inspires them to learn new concepts. Herlina et al., n.d (2021) also concluded in her research that in the learning process



using the Duolingo application can improve students' speaking skills. They feel more confident in pronouncing vocabulary in English because in the Duolingo application there is a pronunciation feature on each material or question given. So that students not only read the text on each vocabulary displayed but can also listen to how to read it. This can minimize pronunciation errors when communicating in public.

The Duolingo application received a very positive response from various groups. Both from teachers, junior and senior high school students, and children who are still beginners in learning English. The reason that makes the application favored by many students is because of its game-like features. Such as levels, points, streaks, crowns, and can also connect with other user friends. With these features, students become challenged and motivated to work on each session because they feel they have to be superior to other friends. Widyastuti & Kusumadewi (2018) in their research showed the response of the interviewees who explained that the Duolingo application can be used as one of the effective supporting media in learning activities because the application does not only present questions in online form and users only answer that way, but are always given direct feedback from the questions they do. So that if there is an error, the application immediately tells the correct answer and the level of difficulty given is dynamic. If a user makes a mistake many times, the system automatically makes the problem setting easier than before. This can also support students to learn independently.

The author uses the term perception in this study because the main focus is to find out how high school students perceive, respond, and assess the use of Duolingo application in the context of learning English as a foreign language (EFL). Perceptions include students' subjective views regarding the comfort of using the application, ease of access, interface appearance, and the effectiveness of Duolingo features in improving language skills such as vocabulary, reading, and listening. In the context of technology-based learning, every student has different experiences depending on their learning preferences, motivations, and backgrounds. By exploring students' perceptions, this research can provide a more holistic picture of the benefits and limitations of using Duolingo, as well as a basis for consideration for teachers and schools in designing app-based learning strategies.

Based on the systematic review of Duolingo in language learning, there are a number of research gaps that have yet to be explored by researchers. One of them is the lack of longitudinal research. Most studies evaluate learning outcomes in the short term over a few weeks or months. The long-term impact of using Duolingo on vocabulary retention, grammar structure, and fluency is still very limited. Research conducted by Munday (2016) shows that Duolingo application is more successful as a complementary tool than the main tool in learning. Duolingo application is considered effective as an additional learning tool especially for building learning habits, initial vocabulary, and strengthening motivation. However, for long-term learning, its effectiveness is reduced if there is no real interaction in the practice of using active language such as speaking and writing.



Another research gap also exists in the use of the Duolingo application in the age group of children and the elderly. Research conducted by Sukarnih Putri (2021)shows that the Duolingo application is used as part of the parent's strategy in introducing English early in the age range of 4-6 years. The purpose of this research is to teach children about adaptation to the progress of the times and formal/traditional education patterns. And to date, specific research on Duolingo apps for the elderly is still very limited. This is due to digital literacy and visual limitations, but the voice and light gamification features are thought to improve memory and train cognition. Most older adults prefer traditional learning methods that do not require adapting to modern technology. On the other hand, the elderly is also not motivated enough to learn English, which reduces their interest in learning a language that can be quite difficult.

There are several theoretical benefits regarding this research. This study contributes to the theory of technology-based language learning, especially by examining how secondary school students perceive the use of the Duolingo application as a learning medium in the classroom. Students' perceptions are important because they can lead to an educational technology adoption model that focuses more on young users in the EFL context. The gamification method in Duolingo also affects school students' engagement and motivation in learning a foreign language. Therefore, this research will further enrich our understanding of gamification elements such as points, challenges, and streaks in the context of language learning and can be theoretically integrated in task-based learning curriculum. By focusing on the perceptions of secondary school students, this research provides a theoretical basis for assessing the effectiveness of Duolingo apps on the overall development of listening, speaking, reading, and writing skills in the medium to long term.

Some practical benefits that we can take from this research include providing a basis for teachers and curriculum developers to integrate applications such as Duolingo in English language learning. Learning using digital technology with gamification method also increases students' motivation because they are more directly involved in the interactive learning process. This research also indicates that Duolingo can be an effective language learning solution in areas with a shortage of English teachers as students can learn independently. With a variety of materials, Duolingo application is considered very effective in helping students remember and practice new vocabulary, practice listening, speaking, and hone grammar skills. In addition, the automatic feedback feature helps students correct their mistakes in real-time which is very helpful for the self-learning process.

In conclusion, learning English using the Duolingo app is very helpful because of its effective and interactive method. Students can learn various English skills at once in one game. Not only that, learning using digital technology such as the Duolingo application is also very accessible. With various features that help in doing questions such as auto correct; students can do learning activities independently without having to involve teachers in the classroom. Some of the



articles mentioned focus on the use of the Duolingo app to improve English vocabulary and speaking skills. However, no one has examined the effectiveness of long-term learning, and there is minimal research on the age group of children or the elderly.

Theoretical Framework

The use of the term perception allows the author to explore the affective and cognitive dimensions of students interacting with the Duolingo app. Perception comes from the Latin perception, perception which means receiving, collecting, taking action, attention to something based on a thought process and preceded by a stimulus. Perception is also a form of self-expression (Dania & Novziransyah, 2021). Perception is a cognitive process affecting individuals to interpret and understand information from their environment, which is influenced by experience, motivation, emotion, and individual background. Students' perceptions of digital learning media reflect how they rate the ease of use, usefulness, and overall learning experience. in an EFL environment, students' perceptions of apps such as Duolingo are very important as they can influence learning motivation.

Experts such as Bimo Walgito (2001) and Jalaluddin Rakhmat (2004) state that perception is the result of the interaction between an external stimulus and an individual's internal processes, where the stimulus is organized and interpreted to produce meaning. In understanding perception, several theories have been developed. James J. Gibson's direct perception theory emphasizes that environmental information is sufficient to generate perception without the need for additional cognitive processes. In contrast, bottom-up and top-down theories explain that perception is a combination of sensory information (bottom-up) and interpretation based on prior knowledge (top-down). Gestalt theory highlights the importance of overall perceptual organization through principles such as proximity and similarity, while Anne Treisman's feature integration theory underlines that object perception involves the gradual incorporation of visual features.

As mentioned in the background about the importance of learning English as a foreign language. There are so many benefits that we can get if we pursue learning English and apply it in our daily lives. However, students still experience many difficulties in the learning process, both from intrinsic factors such as lack of motivation within themselves and extrinsic factors related to the learning methods provided by the teacher. Digital technology such as the Duolingo application is considered to be able to provide changes in the way students learn languages, especially in the EFL context. Digital technology is considered an effective approach in increasing students' motivation and learning independence in the 21st century (Munday 2015). Many students feel more interested in the use of digital technology as a learning medium compared to traditional methods, which are often considered monotonous and boring.



There are 2 foreign language theories that the author focuses on in this study, namely behaviorism and constructivism theories. Behaviorism is a view that states that a behavior must be explained through experiences that can be observed, measured, and assessed. In the learning process, activities that can be observed are the stimulus and response of children; therefore, what is given by the educator (stimulus) and what is received by students (response) must be observable and measurable (Saufiqi 2021). This approach was developed by John B. Watson, Ivan Pavlov, and B.F. Skinner. In the context of education, behaviorism views learning as a process of habit formation through reinforcement and punishment. An example of its application in schools is giving praise or rewards to students who get good exam scores and giving reprimands or punishments to students who do not do their assignments on time. Another practice can also be to use drill and practice, which aims to form habits, such as memorizing vocabulary in English.

Meanwhile, constructivism theory is an approach in educational psychology that states that knowledge is actively constructed by individuals through their interaction with the environment and previous experiences. Constructivism is an approach to teaching and learning based on the premise that cognition (learning) is the result of mental construction. This school emphasizes more on how students learn, not how teachers teach (Mulyadi 2022). This approach was developed by Jean Piaget and Lev Vygotsky. The main principles of constructivism theory are contextual learning, active social collaboration, and the teacher as a facilitator. Examples of its application in the educational environment can be giving students complex projects to find solutions to real problems, group discussions, and researching the surrounding environment independently.

The Duolingo app falls into the MALL category, which allows flexibility and personalization in language learning. MALL stands for Mobile-Assisted Language Learning, which is a language learning approach that utilizes mobile devices such as smartphones, tablets, or other digital devices to support flexible and interactive language learning (Kukulska-hulme, 2016). Behaviorism theory emphasizes that learning occurs through stimulus-response and reinforcement. In the context of Duolingo, many features reflect behavioristic principles such as structured exercises that repeat sentence patterns, autocorrect that provides immediate feedback, and points and streaks as rewards for completing tasks. In the Duolingo application, there are also some elements of constructivism by applying learning by doing, where students actively work on tasks independently, not only receiving theory from the teacher in class.

Duolingo is a mobile and web-based language learning application that uses a gamification approach to make learning more interesting and interactive. In the EFL context, Duolingo is used by learners studying English in countries where English is not the primary language, such as Indonesia, Japan, or Brazil. The role of the Duolingo app in the EFL context is to help learners understand and use English in academic and everyday contexts outside the native speaker environment. Duolingo also offers flexible learning and can be used anytime, anywhere. The skill focus



emphasized in the Duolingo app is to improve vocabulary, grammar, listening, reading, and a little bit of speaking through basic introduction.

Method

This study uses a qualitative research method with a focus on senior high school students' perceptions of the Duolingo application as a medium for learning English in the classroom. This research uses a descriptive approach with the aim of understanding and explaining social phenomena, behavior, and experiences of individuals or groups in a natural context. According to John W. Crwell (2013) in the book Research Design, qualitative research methods are methods to describe, understand, and develop meaning by several individuals or groups whose sources are social or humanitarian problems. Qualitative research efforts in the process involve efforts such as asking questions and procedures, collecting data from specific participants, themes from specific to general that are analyzed inductively and interpreting the meaning of the data. Through this design, the researcher will focus on a specific location, namely the school, then the participants who will be involved are grade 2 high school students, and the data collection methods that will be carried out by researchers are observation and interviews.

The reason for using the Duolingo application as a digital learning media is because Duolingo is one of the foreign language learning applications that is very familiar and widely used by various groups. With very interesting features, this application is considered to be able to help students learn independently with a fun interactive method. The objects in this study are the perceptions of secondary school students, the use of Duolingo application, and English Language Learning in the EFL context. These objects help researchers in finding data to be sought according to the topic and context. By using these research objects, this research seeks to analyze students' perceptions regarding the effectiveness and usability of the Duolingo application as a tool for learning English as a foreign language in one Muhammadiyah secondary school in Sukoharjo, Indonesia. The participant in this study is class 11 IPA 1 which consists of 24 students with male gender. Students who are in this class have an average age range of 16 - 17 years.

Finally, this methodology discusses data collection techniques through observation and interviews. According to Sugiyono (2018) observation is a data collection technique that has specific characteristics when compared to other techniques. Observation is also not limited to people, but also other objects such as the learning process, student attitudes and behavior, and interactions between students and other students. Observation in this study is by making direct observations in the field to find out the actual conditions. In this study, researchers went directly to the school to see how learning using the Duolingo application was carried out in the classroom. In the process of collecting data, interviews are also needed to help complete information related to the research. The researcher used a semi-structured interview technique by preparing a list of questions to informants. With flexibility, the interviewer can add new questions based on the respondents' answers, so that the information collected is richer and more comprehensive. This



interview technique aims to find out how high school students perceive the Duolingo app as a medium for learning English in the classroom. It also aims to analyze the impact of the app on students' English proficiency and evaluate how students respond to learning using the app.

Findings and Discussion

This research chapter outlines a framework for investigating how secondary students in Sukoharjo, Indonesia perceive the Duolingo app as a medium for learning English in the classroom. Further research and analysis will contribute to the growing body of knowledge and scholarly literature on the use of technology, particularly learning applications such as Duolingo, in improving motivation and English language skills. By outlining the themes that emerged from the data obtained through the interview approach with students, observation, and document analysis, the validity of the data in this study was tested using the triangulation technique, which means comparing and rechecking between one data collection method and other methods.

Based on the theme taken, one of which is the use of the Duolingo application as a medium for learning English in the classroom, it needs to be emphasized that the Duolingo application is an interactive learning media based on games that can improve English skills for students which includes various components at once in one game, such as vocabulary improvement, listening, speaking, grammar, and writing. In addition, the features provided also encourage students to be able to learn independently using digital technology. Then, students who are actively involved in learning using this application tend to have good motivation in learning English because the method is fun and not boring. The purpose of using Duolingo in the classroom is to introduce students to technology-based learning and provide an alternative interactive exercise that is more interesting than traditional learning methods.

In modern times like today, the use of English almost dominates all aspects, in terms of education, technology, economy, and even tourism. However, there are still many people who are not familiar with the use of English, without exception for students in schools. Therefore, learning using digital technology is expected to be an effective solution to increase students' motivation and ability to learn English. The researcher will explore 2 problem formulations, namely how teachers apply the Duolingo application in the classroom, and how students perceive the use of the Duolingo application in the classroom. The first step was to observe the school for 3 days. The fourth day the researcher conducted interviews with students and took documents to be re-analyzed. The participants in this study consisted of male students of grade 11 IPA 1 SMA Muhammadiyah Sukoharjo, Indonesia, totaling 24 students with an age range of 16-17 years. However, the author only took 3 children who were most active in practicing the Duolingo application to be used as interview informants.



Procedures Used by English Teachers in Implementing Duolingo App as English Learning Media in the Classroom

From the results of the researcher's observations while at school, teachers use applications as auxiliary media in the learning process to make it easier for students to improve their English skills. The applications that have been used also vary, can be in the form of video, audio, and flashcards. The use of additional media as a companion to textbooks is an initiative from English teachers in order to increase students' motivation and understanding in learning English.

The school environment is a Muhammadiyah high school with a boarding school system where learning activities in schools using digital technology are very limited. Students are also prohibited from bringing electronic devices from home such as smartphones or laptops in order to maintain students' focus on learning in the dormitory and at school. In addition, it is also to maintain security and avoid loss of valuables. Some of these factors make digital technology-based student learning activities limited because students can only access learning applications through the computer lab and must take turns with other students.

Because of the limited use of the computer lab, students cannot access the Duolingo application every day. English teachers also cannot provide opportunities to practice with the application every meeting because teachers also have to pursue the achievement of the material in the textbook considering that each class only gets 2 hours of meeting for English subjects. So that learning using the Duolingo application is only limited to additional material as well as to provide a break for students from the traditional learning system which is considered boring. However, this activity is consistently carried out at least once a month even though it is still somewhat less than optimal.

Second Year Students' Perceptions of the Duolingo App as an English Language Learning Media in the Classroom

Duolingo App is Very Easy to Use

Researchers produced interview data with 3 students from grade 2 senior high school regarding the ease of using the Duolingo application. It can be concluded that the application is very easy to access by utilizing a stable internet network and a supporting device. This application presents a game-like appearance where there are various features such as levels, missions, points, rewards, and badges that can make students more motivated to learn using this application. Hidayati & Diana (2019) in their research, mentioned that most students felt comfortable and at ease because of the flexibility and practicality offered by this mobile application.

"Alhamdulillah, while using the Duolingo application as a learning media, I have never experienced any difficulties. This application is easy to access, easy to use, and its features are easy to understand. The display in this application resembles a game where there are many levels, many missions,



and points are given for each question, so it makes me more diligent and motivated to use this application every day." said student, grade 11.

"In my opinion, the Duolingo app is very easy to use. It's simple, not complicated, and there are lots of colorful pictures that make us more interested and not bored while learning. In addition, the way of learning is also like playing a game, so it doesn't feel heavy. There is also a reminder feature that will help us to be consistent in learning." said student, grade 11.

"When downloading the Duolingo application on my computer, I have experienced difficulties because the Microsoft store has an error. But outside of that I never found any difficulties because the internet network is now easily accessible everywhere so the exercise can run smoothly." said student, grade 11.

Based on the observations that have been made in the classroom and in accordance with the data obtained, it can be concluded that the use of the Duolingo application as an English learning media is very helpful for students in learning with various interesting and interactive features. In addition, the reminder feature also helps students to remain disciplined in learning. From the various features available, it would be better if students can utilize other features such as discussion forums or additional exercises to improve their understanding of English in more depth.

According to Psychogyiou & Karasimos (2019) There were some conflicting opinions about its effectiveness and suggestions that the grammar of the Duolingo app needs to be improved. In more detail, almost half of the participants were unsure about the development of receptive and productive language skills. The other half were confident about the results. The reason for dissatisfaction with the app arose from the need for more practice. More specifically, some participants stated that they needed different tasks to develop these skills. For example, there should be text or dialogue to interact with. The participants' goal of using the Duolingo app was to communicate successfully with someone in a real-life situation.

Duolingo App is Very Effective as a Learning Media

The Duolingo app presents many exercises covering various skills in English such as vocabulary, listening, speaking, writing, and grammar. The 'Match the Pairs' feature allows users to match English words with their translations. Words that are often answered incorrectly will appear more often to make users more familiar. According to Nadwa (2024) Duolingo also provides a listening exercise in which you listen to the audio carefully and choose the word you hear correctly. With features such as games on the Duolingo application to practice listening, students agree that Duolingo makes them feel more enthusiastic about learning and listening. They have a positive response to the effectiveness of using the Duolingo application to learn to listen because of the learning motivation, understanding, and benefits of using the Duolingo application.



Duolingo also provides speaking exercises where users are asked to say a sentence and the application will assess their pronunciation. For writing exercises, users are asked to translate sentences from English to Indonesian or vice versa. There are also exercises to complete the empty points in the sentence so that it has the correct meaning. And for grammar and sentence structure exercises, it is taught indirectly through translation and sentence construction exercises. The grammar material presented is very complete and varied but given in stages.

"While using the Duolingo app, I feel that there has been an increase in the amount of vocabulary I have memorized. This application is very responsive, so when we do the questions and there are mistakes, the system corrects them immediately, so we can know where our mistakes are, and can immediately correct them at that time." said student, grade 11.

"I find the Duolingo app very helpful for my fluency in speaking English. Because there is a pronunciation feature on each question, so it can guide me to pronounce the vocabulary correctly. In addition, there is a speaking exercise section, we are asked to say the sentence that has been written in the question, then our voice will be detected by the application and corrected right or wrong. There are also questions to learn to listen. We are given audio and asked to detect the meaning of the spoken word, or asked to rewrite the sentence played in the audio." said student, grade 11.

"I got a lot of grammar material here. Such as to be, present simple, the use of do/does, have/has, and many more. In addition, the grammar material I get is also directly applied in the sentence, so I can know how to use the right grammar in the context of the sentence." said student, grade 11.

Based on the observations made in class and in accordance with the data obtained, it can be concluded that the Duolingo application is very helpful in improving English language skills, especially in terms of vocabulary, speaking fluency, and grammar understanding. The app's quick response in correcting mistakes allows users to immediately understand and correct their mistakes. The pronunciation and speaking practice feature also provide an interactive learning experience and assist in correct pronunciation. The grammar material presented in sentence form provides a more contextualized and applicable understanding. Students are advised to evaluate their learning outcomes, for example by recording achievements or trying additional exercises outside the app to ensure better understanding.

Duolingo App Improves Learning Motivation in Students

In a study conducted by Zeng & Fisher, (2024) it was explained that the use of Duolingo can increase students' intrinsic motivation in learning English. Most participants felt increased interest and focus in class after using the app. Duolingo also provides a positive learning experience by fostering students' sense of control (autonomy) and confidence (competence) in learning English. The flexible features and content relevant to everyday life help students understand that English has a



compelling practical function. In addition, the app allows students to choose materials according to their interests, which further strengthens the sense of autonomy in learning.

"Duolingo app increases my motivation in learning English. Compared to other apps like Kahoot, or Quizizz, Duolingo is better because it has more features. Kahoot and Quizizz are only for practice questions, not interactive." said student, grade 11.

"The points and levels feature in the Duolingo app can motivate me to continue practicing every day, because it can measure the extent of my abilities and can compete with other friends." said student, grade 11.

"I used to find learning English very difficult, but after getting to know the Duolingo app and practicing regularly, learning English has become much easier. I will try to be consistent in practicing using this app when at home. Because I have more free time at home." said student, grade 11.

Based on observations made in the classroom and in accordance with the data obtained, it can be concluded that Duolingo is proven to increase students' motivation in learning English. Compared to other apps, Duolingo is more interactive as it offers various features that support learning. The points and levels feature in the app also provide encouragement for students to keep practicing, while creating healthy competition among them. In addition, regular use of Duolingo makes students feel that learning English has become easier and more fun. To optimize learning outcomes, combining the use of Duolingo with live speaking practice can help improve understanding more thoroughly.

Students Show a Preference for the Duolingo App and Report Having a Positive Learning Experience

In the learning process in the classroom, students feel a significant difference regarding the methods used in delivering the material. In learning English as a foreign language, teachers combine traditional learning methods with digital technology to give a more varied and less boring impression. Traditional learning offers direct interaction and strong emotional bonds between teachers and students, while digital learning opens access to various learning resources and greater time flexibility. Integration between the two through hybrid learning models can be an effective solution to optimize the education process in the modern era.

"I find the Duolingo app more interesting and fun than traditional learning methods. Because traditional learning only focuses on the material in the book and makes students feel bored quickly. In traditional learning the teacher also cannot focus on correcting students' mistakes one by one, if learning using the application the mistakes made by students can be immediately detected and corrected." said student, grade 11.



"In my opinion, learning using apps is more fun than using traditional learning methods. Because today's students prefer digital learning. Although the interaction between teachers and students is active, but learning using digital technology can make students more specific in practicing English skills, and actively hone their thinking skills." said student, grade 11.

"I prefer learning English using the Duolingo app rather than using books with traditional learning methods. Because in traditional learning, I feel that the teacher is more active in explaining and students are less likely to practice. The material given in the application is also little by little, making it easier for students to understand. Even so, traditional learning is still important because it contains material in accordance with the education curriculum." said student, grade 11.

Based on observations made in the classroom and in accordance with the data obtained, it can be concluded that students are more interested in learning English using the Duolingo application than traditional learning methods. They feel that traditional methods that focus on books tend to be boring and provide less opportunity for students to practice independently. Duolingo is considered more interesting because it can immediately detect and correct students' mistakes, as well as provide learning in stages so that it is easier to understand. In addition, the use of digital technology in learning is considered more in line with the preferences of today's students. Nevertheless, traditional learning is still considered important as it contains materials that are in line with the education curriculum.

Conclusion

This study examines the implementation of using the Duolingo application and the students' perception toward the application for learning English in the classroom. Based on the results of research and interviews, this digital application has successfully helped students of Muhammadiyah High School in Sukoharjo, Indonesia in learning English with an effective, interactive, and fun method. The app offers interactive features such as levels, points, rewards, and exercises that cover various language skills, including vocabulary, listening, speaking, writing, and grammar. Another advantage of the Duolingo app is its ability to instantly correct user errors, thus helping students improve their understanding quickly.

Students also show a greater preference for digital learning over traditional methods, as conventional methods often feel boring and lack opportunities for independent practice. Nonetheless, traditional learning still plays an important role, especially in presenting curriculum-compliant materials. Therefore, the integration of digital and traditional methods through a hybrid learning approach can be an effective solution to improve the quality of learning.

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References

- 1808-Article Text-4827-1-10-20231108. (n.d.). Jurnal Pengabdian Kepada Masyarakat, Vol.3 No. 207-400-1-SM. (n.d.).
- Abdalla, M., Mohammed, A., Ali, S., & Idris, M. (2020). Challenges of Pronunciation to EFL Learners in Spoken English. *Multicultural Education*, 6(5), 2020. https://doi.org/10.5281/zenodo.4408549
- Ruchliyadi, Agus, D., & Sufyadi, S. (n.d.). *PEMANFAATAN APLIKASI* DUOLINGO SEBAGAI MEDIA PEMBELAJARAN MANDIRI BAHASA INGGRIS.
- Al Irsyadi, F. Y., Annas, R., & Kurniawan, Y. I. (2019). Game Edukasi Pembelajaran Bahasa Inggris untuk Pengenalan Benda-Benda di Rumah bagi Siswa Kelas 4 Sekolah Dasar. *Jurnal Teknologi Dan Informasi*, 9(2), 78–92. https://doi.org/10.34010/jati.v9i2.1844
- Alefesha, H. M. N., & Al-Jamal, D. A. H. (2019). Syrian refugees' challenges and problems of learning and teaching English as a foreign language (EFL): Jordan as an example. *Journal of Ethnic and Cultural Studies*, 6(1), 117–129. https://doi.org/10.29333/ejecs/235
- Alfuhaid, S. R. (2021). The Utilisation of Duolingo to Enhance the Speaking Proficiency of EFL Secondary School Students in Saudi Arabia. *English Language Teaching*, 14(11), 9. https://doi.org/10.5539/elt.v14n11p9
- Almeina, Loebis, I., & Ramadhani, A. (2023). PELATIHAN APLIKASI DUOLINGO UNTUK MENINGKATKAN KEMAMPUAN BAHASA



INGGRIS PADA SISWA SMK KARYA UTAMA TANJUNG BALAI. In *Jurnal Pemberdayaan Sosial dan Teknologi Masyarakat* (Vol. 3, Issue 2). http://jurnal.goretanpena.com/index.php/JPSTM

- Aulia, H. R., Wahjuningsih, E., & Andayani, R. (2020). Effect of Duolingo Application on Students' English Vocabulary Mastery. *ELTR Journal*, 4(2), 131–139. https://doi.org/10.37147/eltr.v4i2.71
- Walgito, Bimo. (2001). *PENGANTAR PSIKOLOGI UMUM* (B. Walgito (Ed.)). Andi.
- Dania, I. A., & Novziransyah, N. (2021). Sensasi, Persepsi, Kognitif. Ibnu Sina: Jurnal Kedokteran Dan Kesehatan - Fakultas Kedokteran Universitas Islam Sumatera Utara, 20(1), 14–21. https://doi.org/10.30743/ibnusina.v20i1.59
- Fathi, J., Ahmadnejad, M., & Nosrati, S. (2024). Investigating the Impact of Duolingo on Second Language Learning Achievement and Self-Regulated Learning among French as a Foreign Language Learners. *Call-Ej*, 25(4), 379– 413.
- Fattahi, Marnani., P., & Cuocci, S. (2022). Foreign Language Anxiety: A Review on Theories, Causes, Consequences and Implications for Educators. *Journal of English Learner Education*, 14(14), 2.
- Herlina, E., Yundayani, A., & Astuti, S. (n.d.). Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara III Penggunaan Duolingo sebagai Media Pembelajaran Berbasis Teknologi dalam Meningkatkan Keterampilan Berbicara Siswa.
- Irzawati, I., & Unamo, A. F. (2023). Students' Perceptions and Attitudes towards the Utilization of Duolingo in EFL Learning. *J-SHMIC : Journal of English for Academic*, *10*(2), 123–138. https://doi.org/10.25299/jshmic.2023.vol10(2).13649
- Jaelani, A., & Sutari, D. R. (2020). Students' Perception of Using Duolingo Application as A Media in Learning Vocabulary. *In: Bogor English Student and Teacher (BEST) Conference*, 2, 40–47.
- Rakhmat, Jalaluddin. (2004). *Psikologi Komunikasi* (J. Rakhmat (Ed.); Revisi). Remaja Rosdakarya.
- Kazu, İ. Y., & Kuvvetli, M. (2025). Digital language learning with Duolingo: assessing its impact on listening, speaking, reading, and writing skills. *Journal* of Computers in Education, March. https://doi.org/10.1007/s40692-025-00355-0



- Khramchenko, D. S. (2025). Englishization of Education: A Critical Look at Africa and Asia. *Integration of Education*, 29(1), 49–67. https://doi.org/10.15507/1991-9468.029.202501.049-067
- Kukulska-hulme, A. (2016). Mobile Assistance in Language Learning : A critical appraisal Open Research Online The Open University 's repository of research publications Mobile Assistance in Language Learning : A critical appraisal Book Chapter. *The International Handbook of Mobile-Assisted Language Learning.*, *October*, 138–160.
- Sukarnih, Putri., M. (2021). Lingkungan Pembelajaran Berbasis Literasi Digital pada anak usia dini. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 9(3), 408–415. https://ejournal.undiksha.ac.id/index.php/JJPAUD/index
- Muliati, A. (n.d.). Penerapan Aplikasi Duolingo sebagai Media untuk Meningkatkan Pengetahuan Kosakata Siswa The Implementation of Duolingo Application as Media to Improve Students' Vocabulary Knowledge.
- Mulyadi, M. (2022). Teori Belajar Konstruktivisme Dengan Model Pembelajaran (Inquiry). *Al Yasini : Jurnal Keislaman, Sosial, Hukum Dan Pendidikan*, 7(2), 174. https://doi.org/10.55102/alyasini.v7i2.4482
- Munday, P. (2015). the Case for Using Duolingo As Part of the Language Classroom Experience. *RIED. Revista Iberoamericana de Educación a Distancia*, 19(1), 83–101. https://doi.org/10.5944/ried.19.1.14581
- Psychogyiou, A., & Karasimos, A. (2019). The effectiveness of learning a foreign language via a distance learning tool: Testing the Duolingo application. Selected Papers on Theoretical and Applied Linguistics from 23rd ISTAL, Thessaloniki 31 March - 2 April 2017, 23(2019), 364–380. http://155.207.122.146/thal/article/view/7354/7103
- Saufiqi, A. (2021). Penerapan Teori Behaviorisme Ivan Pavlov Dalam Membentuk Perilaku Islami Siswa Di Kelas X Sekolah Menengah Kejuruan Nusantara 4 Bengkulu Tengah. In *Angewandte Chemie International Edition*, 6(11), 951– 952.
- Siregar, R., Hutagaol, D., & Ramadhan, A. (2023). An Overview of Mix Approaches in Translation Teaching for Indonesian Students. *International Journal of Scientific and Research Publications*, 13(4), 95–100. https://doi.org/10.29322/ijsrp.13.04.2023.p13615
- Sutarsyah, C. (2017). An Analysis of Student's Speaking Anxiety and its Effect on Speaking Performance. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 1(2), 143.



https://doi.org/10.21093/ijeltal.v1i2.14

- Widyastuti, M., & Kusumadewi, H. (2018). Penggunaan Aplikasi Duolingo Dalam Meningkatkan Kamampuan Kosakata Bahasa Inggris Pada Tenaga Pengajar Bimbingan Belajar Omega Sains Institut. Jurnal Pengabdian Kepada Masyarakat, 1(2). http://ejournal.bsi.ac.id/ejurnal/index.php/abdimas
- Fernando, Yogi., Andriani, Popi., & Syam, Hidayani. (2024). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar Siswa. *ALFIHRIS: Jurnal Inspirasi Pendidikan*, 2(3), 61–68. https://doi.org/10.59246/alfihris.v2i3.843
- Zeng, C., & Fisher, L. (2024). Opening the "Black Box": How Out-of-Class Use of Duolingo Impacts Chinese Junior High School Students' Intrinsic Motivation for English. *ECNU Review of Education*, 7(2), 283–307. https://doi.org/10.1177/20965311231171606