

**THESIS**

**A COMPARATIVE STUDY ON THE IMPLEMENTATION BETWEEN  
DUOLINGO AND HELLO ENGLISH APPLICATIONS IN IMPROVING  
STUDENTS' LISTENING SKILLS AT THE NINTH GRADE OF  
MTS. GUPPI ULIDANG**



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## ABSTRAK

**ACHMAD FARCHAN M. JABIR:** Studi Komparatif pada Implementasi antara Aplikasi Duolingo dan Hello English dalam Meningkatkan Kemampuan Mendengarkan Siswa di Kelas Sembilan MTs. Guppi Ulidang. **Skripsi. Majene: Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sulawesi Barat, 2023.**

Tujuan penelitian ini adalah untuk mengetahui peningkatan kemampuan mendengarkan siswa yang diajar menggunakan aplikasi Duolingo dan Hello English, untuk mengetahui perbandingan efektivitas antara keduanya, dan untuk mengetahui adakah perbedaan yang signifikan antara keduanya dalam meningkatkan kemampuan mendengarkan siswa. Pendekatan yang digunakan dalam penelitian ini adalah kuantitatif. Partisipan penelitian diambil menggunakan teknik *systematic samlng* terdiri atas siswa kelas sembilan (IX-A dan IX-B) di MTs. Guppi Ulidang. Data penelitian dikumpulkan melalui tes (pra-tes dan pasca-tes). Data penelitian ini dianalisis menggunakan *pair samples test*, *n gain score test*, dan *independent samples test*. Penelitian ini menunjukkan bahwa implementasi aplikasi Duolingo dan Hello English sebagai media pembelajaran dapat meningkatkan kemampuan mendengarkan siswa, implementasi aplikasi Duolingo sebagai media pembelajaran dalam meningkatkan kemampuan mendengarkan siswa lebih efektif dibandingkan dengan aplikasi Hello English, dan tidak ada perbedaan yang signifikan antara implementasi aplikasi Duolingo dan Hello English sebagai media pembelajaran dalam meningkatkan kemampuan mendengarkan siswa.

**Kata kunci:** Kemampuan mendengarkan, aplikasi Duolingo, dan aplikasi Hello English

# CHAPTER I

## INTRODUCTION

### A. Background

In the current digitalization era, the ability to use technological devices is very important and very necessary in everyday life, especially in the field of education. In this field, it cannot be denied that the use of technological devices is no longer a necessity, but has become a demand. This causes everyone in the field of education, including teachers and students, are required to have the ability to use technology.

The use of technology is proven to help teachers and students, particularly in language teaching and learning. According to (Herlina, 2014, p. 20) learning is considered effective in assessing the improvement of English skills and proficiency and can also observe students' learning achievement when using technological devices, whereas learning is considered a failure to show students' performance when using conventional methods. Besides, the use of technological devices as a medium in learning English makes the students easier to understand English effectively and efficiently (Niah & Ismaniati, 2015, p. 130).

There are four basic communication skills, namely listening, reading, speaking, and writing. (Rank, in Purdy, 1991) stated that listening skills are the most widely used by adults in various forms of communication. Adults spend communication time by listening more than 42 to 60%, depending on whether they are students, managerial trainees, doctors, advisors, lawyers, or nurses. Also, (Barker et al., in Purdy, 1991) who researched college students found that students spent more their time listening as a way to learn than they do use any of the other communication abilities. Thus, listening is the most important and most widely used skill in communication in everyday life, including in language learning. But even so, listening is the least paid attention skill compared to other skills.

(Mianmahaleh & Rahimy, 2015, p. 255) defined listening as a skill that students must know to speak English fluently. However, it is difficult to master listening skills because it is a process of understanding grammar and vocabulary to understand what is spoken by the speaker. Therefore, many problems often arise in students in language learning especially in listening, including the difficulty in understanding what is spoken by the speaker. This is due to the lack of students' knowledge about vocabulary and grammar, making it difficult for them to understand what they have heard.

A way to overcome students' problems in listening as above is by using technology, for example, Duolingo and Hello English applications as teaching and learning media. This is in line with research conducted by (Harahap, 2018), who concluded that the use of Duolingo application as a learning medium is effective and can improve students' English vocabulary. Besides, the use of the application as a learning medium makes students more active and enthusiastic in the learning process. It has many positive effects in increasing students' vocabulary mastery, including students being more motivated in learning, students are easier to understand learning material, students are not bored in learning, and students can learn and practice vocabulary memorization anywhere every day (Muddin, 2018, pp. 44, 45).

Another English learning medium that can be implemented to overcome the students' problems above is Hello English application. A study conducted by (Liana et al., 2018, p. 127) showed that Hello English application can improve students' learning outcomes of English material on listening ability because there are 82.16% of student learning outcomes that reach a minimum completeness criteria (KKM) value of 70. The same result was also found by (Ginting, 2019, p. 59) that the implementation of Hello English as a new and creative medium in the teaching and learning process had a significant influence on students' vocabulary mastery at the Eight grade level of Junior High School students.

Aligned with the previous research, (Hidayati & Diana, 2019, pp. 208, 209) mentioned that Duolingo and Hello English applications are quite

potential in helping language learners to learn the target language. Students in the research demonstrate excellent involvement with the application and they enjoy some of the practicality and flexibility offered by the applications.

Based on several studies mentioned above and from the researcher's own experience when implementing teaching programs in school, the application of technology will make the learning process more effective. Therefore, Duolingo and Hello English applications are expected to help students understand vocabulary and grammar to improve their listening skills. This is because the applications can be used in the classroom with teacher direction and independently by students. For this reason, researchers decided to examine the differences between the implementation of Duolingo and Hello English applications as learning media in improving students' listening skills.

## **B. Problem Identification**

Listening is the most important and widely used skill in communication in everyday life, including language learning. However, it is hard to master listening skills because it is a process of understanding grammar and vocabulary to understand what the speaker said. This is due to the lack of students' knowledge about vocabulary and grammar, making it difficult for them to perceive what they have heard. It was the main problem that the researcher decided to study. The researcher also tried to solve those problems by implementing Duolingo and Hello English applications as media for teaching listening skills.

## **C. Problem Limitation and Formulation**

### **1. Problem limitation**

Duolingo and Hello English are language learning applications that include listening, reading, speaking, writing, vocabulary, pronunciation, and grammar. However, this research is only limited to know the comparison between the implementation of Duolingo and Hello English applications in

improving students' listening skills, especially at the ninth grade of MTs. Guppi Ulidang in the academic year 2023/2024.

## **2. Formulation**

Based on background of the research above, the formulations of this research are:

- a. Can the implementation of Duolingo application improve students' listening skills at the ninth grade of MTs. Guppi Ulidang?
- b. Can the implementation of Hello English application improve students' listening skills at the ninth grade of MTs. Guppi Ulidang?
- c. Which one is more effective between the implementation of Duolingo or Hello English applications in improving students' listening skills at the ninth grade of MTs. Guppi Ulidang?
- d. Is there any significant difference between the implementation of Duolingo and Hello English applications in improving students' listening skills at the ninth grade of MTs. Guppi Ulidang?

## **D. Research Objective**

Referring to the formulations of the research above, the objectives of this research are:

1. To know the improvement of students' listening skills who taught using Duolingo application at the ninth grade of MTs. Guppi Ulidang.
2. To know the improvement of students' listening skills who taught using Hello English application at the ninth grade of MTs. Guppi Ulidang.
3. To compare the effectiveness of the implementation of Duolingo and Hello English applications in improving students' listening skills at the ninth grade of MTs. Guppi Ulidang.
4. To find out the significant difference between the implementation of Duolingo and Hello English applications in improving students' listening skills at the ninth grade of MTs. Guppi Ulidang.

## **E. Research Benefits**

### **1. For teachers**

- a. This research is expected to be a new reference for teachers about the use of technology-based learning media in the form of Duolingo and Hello English applications in learning English, especially listening.
- b. This research is expected to be a stimulus for teachers to use Duolingo and Hello English applications in learning English, especially listening as attractive learning media for students.

### **2. For students**

- a. This research is expected to make students know and understand technology-based learning media such as Duolingo and Hello English applications.
- b. This research is expected to improve students' listening skills by using Duolingo and Hello English applications.

### **3. For readers**

This research is expected to be used as a reference by the reader for further research on the implementation of technology-based learning and teaching media in the form of Duolingo and Hello English applications in learning and teaching English especially listening in the future.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **A. Previous Related Studies**

Before conducting research, the researcher will conduct a literature review of the previous research findings related to this research topic. This will be done to assist the researcher in conducting research. Some of the previous research findings are as follows.

1. (Fathira & Utami, 2019) in their research, entitled, “Implementing an Android-based Learning Media Application to Improve Learners’ Ability in Pronouncing Ending –s”.

This research aimed to implement an Android-based application to improve students’ ability to pronounce ending -s and to find out the factors that influence their improvement. The method used in this research is qualitative, while the research design used is Classroom Action Research. This research was conducted at eight second-year-learners in the academic year 2018/2019 at Sekolah Tinggi Ilmu Bahasa Asing (STIBA) Persada Bunda Pekanbaru. The instruments used to collect data in this research were tests, field notes, observations, and interviews.

The results of the research indicated that the implementation of existing applications in android-based learning media to improve students’ ability to pronounce the ending -s had increased significantly. It could be seen in the improvement of students’ ability to pronounce the ending -s which were originally in the category of “fairly good” level with a score of 56.67 to the category of “good” level with a score of 73.75. In addition, the willingness of students to practice distinguishing the basic form of words given and the practice of continuous listening to applications that aim to obtain information during the teaching-learning process were two factors that influence the improvement of students’ ability to pronounce ending -s.



In short, students' ability to pronounce ending -s could be improved by implementing an Android-based application.

2. (Niah & Pahmi, 2019) in their research, entitled, "The Utilization of Duolingo to Improve the Speaking and Listening Skills of Junior High School Students in Pekanbaru".

The purpose of this research was to determine the effectiveness of using the Duolingo application to improve students' speaking and listening skills. This research was conducted at Al-Hafit Pekanbaru IT Middle School which involved 58 students in eighth grade as a research sample. This research used quantitative as method with the ASSURE model (Analyzing, Stating, Selecting, Utilizing, Requiring, and Evaluating). The results obtained from using Duolingo application in class VIII.1 on speaking and listening skills of the value of "t" with df 31 at a level of 0.05/ 5% was 2.042, while the results obtained from using Duolingo application in class VIII.2 for speaking and listening skills the value of "t" with df 27 at the 0.05/ 5% level is 2.052.

The results of this research indicated that the speaking ability of students in class VIII.1 is  $5.5 > 2,042$  and their listening ability is  $4.48 > 2,042$ . The speaking ability of students of class VIII.2 is  $5.17 > 2,052$ , while their listening ability is  $5.10 > 2,042$  (the "t" table is each greater than the value of "t"). This proved that the use of the Duolingo application is effective for improving speaking and listening skills in middle school students.

3. (Butarbutar & Simatupang, 2019) in their research, entitled, "The Impact of Technology Hello English Application in EFL Classroom".

An important objective of this research was the use of the Hello English Application which has a significant impact on understanding simple past tense. In this research, researchers applied an experimental research design using experimental and control classes with 46 participants.

The results of this research proved that 1) there are significant differences between the post-test between at experimental class; 95.6% and control class; 60.9% 2) Normality distribution figured out experimental group in post-test is  $0.200 > \alpha (0.05)$  and the significance value of control group in post-test is  $0.051 > \alpha (0.05)$ . The significance values of both groups are higher than  $\alpha (0.05)$ . It means that  $H_0$  is accepted and  $H_1$  is refused. So, the test distribution of both two groups is normal 3) Homogeneity test confirmed  $\rho$  value (significant value) is higher than  $\alpha$  value.  $P > \alpha, 0,955 > 0,05$ . Back to the hypothesis,  $H_0$  is accepted if  $\rho > \alpha$ . This means that the classes are homogeny 4) T-Test delighted  $0.000 < (0.05)$  for this reason  $H_0$  is rejected and  $H_1$  is accepted. This study conclude that the use of Hello English Application is an effective media in learning simple past tense; encouraging self-learning; changing towards gadget's better behaviour.

Based on some previous research findings above, there will be some similarities and differences with research that the researcher will conduct entitled "A Comparative Study on the Implementation between Duolingo and Hello English Applications in Improving Students' Listening Skills at the Ninth Grade of MTs. Guppi Ulidang". Firstly, this research will be similar to all the above studies in terms of the use of technology as a learning medium. Secondly, this research will be similar to the second, and third studies that use quantitative research methods. Thirdly, this research will be similar to the first, second, and third studies that use tests as research instruments. And lastly, this research will be different from the first studies that used qualitative research methods and used interviews as research instruments.

After reviewing some previous research findings above, it can be concluded that there have been many studies relating to the use of technology as learning media to improve students' English proficiency, especially listening skills. However, from all the previous studies above, there is no research compares the implementation of the two applications as learning media. For this reason, the researcher has considered that this is a novelty element of this research which is expected to be useful later.

## **B. Theoretical Framework**

### **1. Definition of listening**

(Brown & Yule, 1983) defined listening as a strict process attributable to the complexness of the process itself and the factors that characterize the listener, speaker, message content, and every visual support that accompanies the message. Another opinion said that listening is a process where listeners share reciprocally their beliefs. To interpret the meaning of language input from texts in their minds where communication takes place, listeners must understand vocabulary and grammatical structures because communication is not only related to the ability to speak, but also to the ability to listen and then be able to produce outputs (Mianmahaleh & Rahimy, 2015, p. 255). Meaning in discourse is formed by the listener inside a private knowledge base. The meaning is formed solely by active listening during which the linguistic forms trigger interpretation inside the listener's background and about the listener's purpose, instead of conveying information (Rost, 1990, p. 62). In addition, listening is a complex process that will make us interpret and understand what we hear (Carter & Nunan, 2001, p. 7).

From the opinions above, it can be concluded that listening is a process of compiling an oral language meaning in the mind. To interpret and understand the meaning, listeners must have the vocabulary and grammatical knowledge to be able to carry out the process and then be able to produce outputs.

### **2. Factors that influencing listening**

According to (Tarigan, in Kurniawati, 2019, pp. 30–32) there are eight factors affecting listening, namely:

#### **a. Physical factors**

The physical condition of a listener is an important factor that also determines the effectiveness and quality of its activity in listening.

For example, fatigue, suffering from an illness, maybe he is under a normal nutritional size. In addition, the physical environment is also very likely to be responsible for the ineffectiveness of listening to someone. The room may be too hot, humid, sound or noise.

b. Psychological factors

This factor involves the attitudes and personal qualities of the listener. These factors include the problems:

- 1) Prejudice and lack of sympathetic
- 2) Selfishness and preoccupation with personal interests and personal problems
- 3) Boredom that cause no attention at all to the subject
- 4) Sightedness and improper attitudes towards schools, teachers, or to speakers

c. The experience factors

There is no doubt that our attitudes are the result of our own growth, development and experience. Lack of interest is a result of lack of experience or no experience at all in the field to be listened to.

d. Attitude factors

Everyone will tend to listen carefully to topics or topics that he can agree with or that interest him. Basically, human life has two main attitudes about everything, namely the attitude of acceptance and attitude of rejection. People will be receptive to things that are interesting and beneficial to him, but to be resistant to things that are not interesting and not favorable to him.

e. Motivation factors

Motivation is one of the determinants of one's success. If someone has a strong motivation to do something, that person is expected to succeed in achieving the goal. The same is true with listening.

f. Gender factors

There are differences in listening styles between men and women due to psychological factors and other factors. Examples of psychological factors are men's listening style tends to be more objective, while women's listening style tends to be more subjective.

g. Environmental factors

1) Physical environment

In considering the physical environment, the classroom is an important factor in motivating listening activities.

2) Social environment

A teaching and learning environment that allows children to utilize classroom situations to improve their communication skills is appropriate and in line with overall curriculum planning.

h. The role factors in society

The willingness to listen can also be influenced by our role in society. As an educated (student) is expected to listen more carefully and attentively about new things about the development of science and technology than daily employees at a local company. Similarly, specialists, and experts from various professions, must be thirsty to look at things that have to do with them, with their professions and expertise, which can broaden their horizons of knowledge so that they do not miss the rapid developments contained in their fields of expertise.

(Brown & Yule, 1983) also suggested that there are four principal sets of things affecting the issue of listening as follow:

- a. Speaker factors: What percentage of speakers are there? How quickly do they speak? What kinds of accents do they have?
- b. Listener factors: What is the listener's role - eavesdropper or participant? What level of response is required? How interested is that the listener within the subject?

- c. The content: How complex is that the grammar, vocabulary, and knowledge structure? What background is assumed?
- d. Support: What quantity support is provided in terms of images, diagrams, or other visual aids?

While, (Anderson & Lynch, in Nunan & Miller, 1995, p. 58) in their research identified five factors determining the issue of listening tasks. These were as follows:

- a. The organization of information
- b. The familiarity of the topic
- c. The explicitness and sufficiency of the information
- d. The type of referring expressions used
- e. Whether the text describes a static or dynamic relationship

### **3. Listening strategies**

According to (Renukadevi, 2014, p. 61), listening strategies are techniques or activities that contribute to the recall of listening input. (Richards, 2008, p. 11) stated that successful listening can be seen in terms of the strategies the listener uses when listening. Strategies are believed because it can be a way for students to approach and manage assignments, and listeners are educated in an effective way when approaching and managing their listening. These activities actively involve the listener in the listening strategy.

(Buck, 2001, p. 104) mentioned two kinds of listening strategies:

- a. Cognitive strategies: Mental activities related to comprehending and storing input in memory for later retrieval.
  - 1) Comprehension processes. Associated with the method of linguistic and nonlinguistic input.
  - 2) Storing and memory processes. Associated with the storing of linguistic and nonlinguistic input in memory or memory.
  - 3) Using and retrieval processes. Associated with accessing memory, to be readied for output.

- b. Metacognitive strategies: Those acutely aware or unconscious mental activities that perform Associate in nursing government perform within the management of psychological feature strategies.
- 1) Assessing the situation: Taking stock of condition encompassing a language task by assessing one's data, one's obtainable internal and external resources, and thus the constraints of true before partaking during a task.
  - 2) Monitoring: deciding the effectiveness of one's own or another's performance whereas engaged during a task.
  - 3) Self-evaluating: deciding the effectiveness of one's own or another's the performance when partaking within the activity.
  - 4) Self-testing: Testing oneself to figure out the effectiveness of one's language use or the dearth therefrom.

#### **4. Assessing listening**

One of the important parts of learning and teaching is an assessment. Assessment involves a judgment of learner mastery of content and skills in relation to targeted course objectives or an established benchmark. The first goal of classroom assessment is to provide learners, teachers, and parents with feedback on learner progress in listening development. For more formal contexts, a second goal is to assign a mark or a level to learner listening performance for purposes of awarding credits, placement, or promotion. Finally, on a larger scale, assessment provides program administrators and school jurisdictions with information on the success of listening instruction in their language programs. (Vandergrift & Goh, 2012, pp. 240, 241).

##### **a. Criteria for selecting assessment tools**

In choosing an assessment tool, there are five criteria according to (Vandergrift & Goh, 2012, pp. 256–265), which are as follows.

- 1) Validity

Validity refers to the extent to which a test assesses what it proposes to assess. A test of listening should measure comprehension ability only. It should not, for example, be a test of hearing, prior knowledge about a topic, other variables such as spelling in dictation, or reading long multiple-choice questions. The aspects of validity most important for the assessment of listening comprehension are construct validity, content validity, and predictive validity.

## 2) Reliability

Reliability is concerned with the degree to which one can rely on an assessment instrument to provide consistent and dependable results. In other words, a reliable instrument will provide similar results with a similar population under similar conditions. Reliability is always important, but it becomes particularly critical for high-stakes tests where the results may have significant impact on a learner's future. The goal of reliability is to have all learners demonstrate their true level of comprehension ability. Teachers, instrument administration, and the instrument itself are all factors that contribute to the reliability of assessment.

According to (Nation & Newton, 2009, p. 167), there are several features of listening tests that affect their reliability and teachers can use them to guide the creation and use of their tests.

- a) The listening test will be more reliable if the material that students listen to is recorded. The tape recording ensures that each time the test is used, the speed of speech and the accent will be the same. This assumes that the quality of the tape recorder that plays the cassette and the room where the cassette is played provides consistent conditions. Note that recording listening input may render the test less valid.
- b) A test is more reliable if it has several scoring points. This means, for example, that a listening test consisting of 50 separate multiple-



choice or true-false items is likely to be more reliable than a test involving 12 questions based on a listening text.

- c) A test is more reliable if it can be marked in relation to a series of correct answers or if the assessment is based on clearly understood criteria. Sometimes it's a good idea to bookmark some training if some are involved. Marking dictation or scoring a role play, for example, requires a good understanding of the grading criteria plus some grading exercises and discussion. It is sometimes necessary to have two markers for assessing interviews or role playing (as well as making recordings for later reassessment if the two markers differ significantly).
- d) A test will be more reliable if all students are familiar with the test format. It's a good idea to give a little practice answering certain types of tests before using them for testing.

### 3) Authenticity

Authenticity in assessment refers to the degree to which real-life language use is reflected in the texts and tasks assessed. Listening passages that have the characteristics of unplanned speech are closer to the oral language used in everyday speech. The more an assessment uses dense, cognitively demanding texts intended for reading, the less it will reflect the principle of authenticity for listening.

### 4) Washback

The impact of assessment on classroom teaching is referred to as washback. The impact of washback often affects the curriculum, teacher, and learner actions and attitudes, resulting in behaviors that they would not do if it were not for the test. The more a test reflects classroom learning activities (i.e., real-life listening tasks), the more beneficial the washback effects and the potential for the test to shape learner attitudes toward the value of these listening tasks. The inverse is also true: for example, if the final examination in a course uses a dictation or a listening cloze activity to test listening comprehension,

the washback effects will be negative. If this is the case, learners may not consider authentic listening practice useful and teachers may choose not to develop real-life listening skills in class.

#### 5) Practicality

Practicality refers to the feasibility of using a particular assessment instrument in the context of a particular classroom and course of instruction. Time is likely the most important factor. In addition, administration-related factors, such as availability of equipment and time, affect the results of testing and need to be taken into consideration by the teacher in the choice or design of assessment instruments.

#### b. Test specifications: item and response format

(Fredericksen, in Rost, 1990, pp. 182–185) categorizes aspects of listening ability that may be tapped in specific testing formats. Ability to take a test involving spoken input is in part language ability and in part procedural ability. Language ability is probed in the interpretation of the input texts and test item stems, whereas procedural ability is reflected in interpreting and executing the test response options. The understanding that the listener is expected to achieve is then induced by the testing task: the test-taker must interpret the language in the test stem in relation to the response options. It is this induction that constitutes the test-taker's performance.

Stem types in any listening test will include spoken or taped presentation of the language data as:

- a) Series of words
- b) Isolated words and phrases
- c) Isolated utterances, usually a series of sentences spoken by one speaker
- d) Connected dialogue by two or more speakers
- e) Connected monologue.

The spoken data may be accompanied by visual input: (1) text illustrations or photographs (e.g. a picture of a room with people in it); (2) video tape (e.g. a video sequence in which people enter a room); (3) written text or written symbols (e.g. a printed sentence: There are some people in a room). These are the characteristics of the test input and test item stems. Response option types may be usefully categorized by the skill operation required of the test-taker. These include the following:

- a) Placement of marker on part of the written form of the utterance (e.g. reading and listening to the pronunciation of the word 'light' and circling this word rather than 'right'). This involves perception skills and a transcoding skill.
- b) Gap filling, completion of an utterance or set of utterances (e.g. providing the next likely part of a dialogue, as in:  
Test taker hears 'Why isn't Sue here?' (accompanied by a picture of a woman caught in a traffic jam.) Test taker writes: \_\_\_\_\_. This involves the skill of formulating a propositional sense for an utterance. (The item obviously involves other language skills as well, such as lexical retrieval and written expression).
- c) Multiple choice, selecting a visual representation (e.g. choosing a picture that represents what a speaker is describing, such as, a two-picture sequence of a person turning off a light vs. taking out a light bulb).
- d) Test taker hears: 'He's turning off the light'. This type of item involves identifying word forms.
- e) Information transfer, producing a verbal representation or response; e.g. repeating what is heard in whole, or filling in gapped parts, as in:  
She's turning on the \_\_\_\_\_. This kind of item requires the test-taker to transcode information.
- f) Answering questions or evaluating statements about what was heard (e.g. after hearing a short description of a person, the test-taker is

presented some statements and is asked to indicate ‘true’ or ‘false’.) This type of item involves the skills of utilizing representations of discourse to make appropriate responses.

- g) Directive response (e.g. the test-taker must perform actions indicated by the speaker; perhaps paper-and-pencil responses, such as drawing a continuous arrow to indicate a route on a map given by the speaker). This type of item involves formulating a propositional sense for a speaker’s utterance and formulating a conceptual framework that links utterances together.
- h) Controlled note-taking (for example, completing a table or chart while listening to a lecture). This type of item also involves the skills of utilizing representations of discourse to make appropriate responses (specifically, reducing and transcoding information).
- i) Form filling (for example, filling out a change-of-address form for someone while the person tells you the information to write down). This type of item involves formulating a propositional sense for a speaker's utterance and formulating a conceptual framework that links utterances together. Transcoding skills are also required.
- j) Labelling or completing diagrams, tables, charts, graphs, maps, or illustrations while listening to a passage. As with previous items, this type involves the skills of utilizing representations of discourse to make appropriate responses (specifically, reducing and transcoding information).
- k) Matching items, objects, and attributes. Providing selected information about the input (e.g. The test-taker hears a set of expressions and be asked to identify the setting - say, a bank, a post office, a department store - when and where these expressions might be heard). This type of item may involve interpreting plausible intentions for the speakers in making utterances, as well as formulating a conceptual framework that links utterances together.

- l) Sorting events, names, objects in order (e.g. the test-taker hears a narrative and is asked to place pictures depicting events in the story in correct order). This type of item involves utilizing representations of discourse to make appropriate responses.
- m) Summary writing (e.g. the test-taker hears a story or exposition and is asked to write down the main points). This type of item also involves utilizing representations of discourse to make appropriate responses.

## **5. Duolingo application**

### **a. Definition and the aims of using Duolingo application**

Duolingo is a free language learning application and website developed by Luis von Ahn and Severin Hacker and launched in November 2011. The application can be used on Android, iOS, and Windows devices. It can be used in a very simple and very useful way for users to learn English and several other languages, such as English, Spanish, Italian, German, and Turkish, etc. It teaches users about reading, writing, listening, and speaking in the language they want to learn (Castro, in Raihan, 2019, p. 28).

According to (Krashen, 2014, p. 13), Duolingo is an independent web-based language teaching program that guides users step by step through a series of tasks, based largely on translation. This is intended for conscious learning, although some mastery of subconscious language is unavoidable when users hear and read language samples. Also, (Rasyad, in Raihan, 2019, p. 28) stated that this application provides interesting learning services for various foreign languages that users want to learn because they can learn with pictures and also direct pronunciation. In addition, (Jaskova, in Wijaya et al., 2016, p. 3) mentioned that Duolingo as the future in language learning and global communication. Users work with this program and get the opportunity to explore all skills in English. Even though the software content is not

appropriate to the users' cultural background, it engages them in a very interesting way that can motivate them.

From the various expert opinions above, it can be concluded that Duolingo is an application and language learning website that can be accessed free of charge by users. It provides an interesting language learning service that guides users step by step through a series of tasks and is mostly based on translations into the users' native language. In addition, Duolingo also teaches users to read, write, listen, and speak according to the language they want to learn. It is in line with the aim of Duolingo itself, which is that users not only understand a language but also use it (Muddin, 2018, p. 16).

b. The advantages and disadvantages of Duolingo application

1) The advantages of Duolingo application

According to (Muddin, 2018, p. 17), there are several advantages of Duolingo that users can get when the application is used as a learning medium in the classroom. These advantages are as follows.

a) Duolingo can be used to increase the level of activity of students in the teaching and learning process. This happens because Duolingo combines several aspects of gamification in learning so that it can motivate and involve students in learning with Duolingo (Munday, 2015, p. 88). The material taught by using games is usually always remembered.

b) Besides learning in class, Duolingo can also support to make students practice improving their vocabulary with Duolingo in their home because Duolingo can do homework. The results of a study conducted by (Munday, 2015, pp. 93, 94) showed that if students A1 84.8% agreed that the type of Duolingo homework was better than other homework.

c) The teacher has no difficulty implementing Duolingo as a medium for learning inside or outside the classroom because this can be accessed anywhere and anytime as long as there is an internet connection.

2) The disadvantages of Duolingo application

Besides the advantages of Duolingo as a medium of learning that has been mentioned above, (Muddin, 2018, p. 18) also mentions some of the disadvantages of that are as follows.

a) Duolingo requires an internet connection, so it cannot be used in class or anywhere where there is no internet connection.

b) A projector is needed when the teacher wants to use Duolingo in the classroom.

c) If Duolingo is used in regular classrooms, teachers need a lot of time to prepare tools, such as time to set up projectors, speakers, and notebooks.

d) There is no explanation whatsoever about the use of grammar in Duolingo. There are no direct grammar lessons that should be combined with vocabulary lessons. Even though grammar is an important part of language learning for language learners.

e) The pronunciation in listening does not represent the native speaker of a language learned because the automatic machine will never really be able to give students great listening activities.

c. Features of Duolingo application

Duolingo application offers several unique and interesting features as a learning medium. According to (Fitriyani, 2018, pp. 20–27), the features are as follows:

1) Language

The languages available as core languages at Duolingo are English, Spanish, Portuguese, Italian, French, German, Russian, Hungarian, Dutch, Turkish. From Hungarian, French, Portuguese,

Russian, Italian, German, Spanish, Dutch, and Turkish is for learning English, and there are 37 language courses for English learner on Duolingo application and it is constantly being updated.



Figure 2.1 Language Features in Duolingo

## 2) Vocabulary learning

This feature is based on input for users, they can easily see the level and size of their vocabulary and the knowledge of each word. Duolingo provides several material topics such as Basics 1, Basics 2, Phrases, Foods, Animals, Plurals, Possession, Personal Pronouns, Clothes, Present Verbs 1, Color, Questions, Conjunctions, Prepositions, Dates and Times, Families, Jobs, Adjectives 1, Present Verbs 2, Adverbs, Places, Nouns, Societies, Travels, Determinants, Numbers, Present Verbs 3, Educations, Past Verbs 1, Infinitive Verbs, Past Verbs 2, Abstract Nouns 1, Comparative Adjectives, Present Perfect Verbs, Infinitive Verbs 2, Relative Pronouns, Past Perfect Verbs, Abstract Nouns 2, Reflexive Pronouns, Natures, Gerund Verbs, Sports, Arts, Communications, Health, Future Verbs, Politics, Phrasal Future Verbs, Science, Future Perfect Verbs, Business, Modal Verbs, Events, Verbs, and Attributes. Many material topics can be learned by Duolingo users. In each material, there is a complete feature of language learning activities using Duolingo.





Figure 2.2 Vocabulary Features in Duolingo

### 3) Four language skills

Duolingo includes four language skills including listening to questions provided by Duolingo application such as, reading questions, writing answers to existing questions, and speaking to answer questions during the English learning process with Duolingo application.

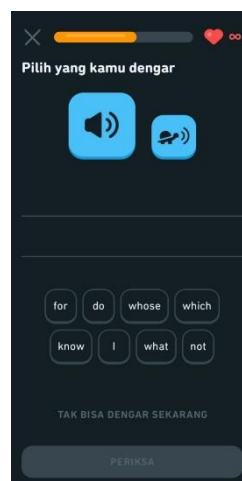


Figure 2.3 Listening Skill Features in Duolingo

### 4) Monitoring progress and skill

Duolingo records the learning process carried out by its users, and users can see the stages and also can monitor the results of the learning they do.



Figure 2.4 Monitoring Progress and Skill Features in Duolingo

### 5) Discussion forum and Duolingo Club

Discussion forums can be used by students and also for Duolingo beginners as discussing potential problems or dissent, making suggestions for improvement, or providing assistance to those who do not understand the questions that arise in Duolingo.

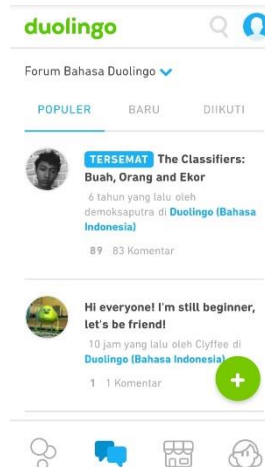


Figure 2.5 Discussion Forum Features in Duolingo

### 6) Motivation

Duolingo helps learners learn languages with motivation. Studying with Duolingo can enable participants to solve questions quickly. Duolingo can also share experiences and knowledge about learning with Duolingo with colleagues and friends through social networks such as Facebook and Twitter.



Figure 2.6 Motivation Features in Duolingo

### 7) Duolingo as a coach

Duolingo as a trainer in the visual form of an owl, like a virtual teacher reminds students to come back to Duolingo, to take part in learning, give praise or reprimand.



Figure 2.7 Virtual Coach Features in Duolingo

### 8) Learning reminder

An interesting feature in Duolingo application is the reminder of learning with Duolingo. Reminder feature will remind students to study with Duolingo every day by sending an email by email that was filled in at the time of registration. Users can set a time when they will receive daily reminder notifications.



Figure 2.8 Learning Reminder Features in Duolingo

Besides, (Nushi & Eqbali, 2017, pp. 91, 92) mention other features of the application:

- 1) Translation exercises, where students translate from the language they are familiar with the language they want to learn or vice versa.
- 2) Matching exercise, where students look at a photo and match it with the words given or vice versa.
- 3) Pairing exercises, where students are given the same number of words from both languages and are asked to pair them.
- 4) Listening exercises, where students listen to short phrases in what they want to learn and must type correctly.
- 5) Speaking exercises, in which students must say what they hear, in other words, repeat what words they hear.

## 6. Hello English application

### a. Definition and the aims of using Hello English application

According (Ginting, 2019, pp. 20, 21), Hello English is a free English learning application that was launched in October 2014. It was developed specifically in English for users who learn English as a second language. It also includes four basic skills in the language that includes reading, writing, listening, and speaking. This application offers learning with advanced voice recognition technology that allows users to record

their voices into applications, useful conversations, and teaching many new vocabulary words. Also, this application offers interactive learning by combining fun games and speaking exercises to create a complete learning experience. Besides, it offers learning tools that utilize news, sports, and entertainment to help users improve their English vocabulary so that it makes this application unique and interesting. Therefore, making users able to master English with their language is the main goal of Hello English application.

According to (Satriani et al., 2019), Hello English is an English learning application that allows its users to learn English through interactive modules. This is an interactive, personal, and contextual English learning application. This application aims to improve the English skills of people especially vocabulary.

Based on both opinions above, it can be concluded that Hello English is an English learning application that offers interactive, personal, and contextual learning for users who want to learn it as a second language. As a language learning application, it aims to improve the users' English skills, especially in terms of mastery of vocabulary.

b. The advantages and disadvantages of Hello English application

1) The advantages of Hello English application

Several advantages can be obtained when using the Hello English application. As mentioned by (Ginting, 2019, p. 21) that Hello English makes learning seamless and saves data expenditure for its users because most of the application's features work offline. Also, (Yuanita, 2019, p. 11) summarizes the advantages of implementing the Hello English application as a medium for learning English as follows.

- a) Easy to use and performs well.
- b) Quite helpful.
- c) Make users easier to practice speaking English.

- d) Add very detailed vocabulary and pronunciation.
  - e) Easy to find vocabulary.
  - f) Attractive appearance.
  - g) Users can learn step by step from the start.
  - h) The material presented is easy to understand.
- 2) The disadvantages of Hello English application

Along with the advantages that can be obtained above, there are also disadvantages in Hello English application. The disadvantages are stated by (Yuanita, 2019, pp. 11, 12) as follows.

- a) Users are required to have a strong internet connection.
- b) When users log out, they must repeat again.
- c) The pronunciation and vocabulary are unclear.
- d) When users play the game and they leave when it is not finished, it must be repeated again.
- e) Less updated learning material.

c. Features of Hello English application

According to (Vesselinov & Grego, 2017, p. 4), Hello English has the following features:

- 1) There are four language skills in the application, including Reading, Writing, Listening and Speaking.



Figure 2.9 Language Features in Hello English

- 2) Has advanced voice recognition technology that allows learners to talk and have real conversations into applications that help learners to learn languages.



Figure 2.10 Voice Recognition Features in Hello English

- 3) Pair interactive lessons with game-based fun for learners.



Figure 2.11 Pair Interactive Lessons Features in Hello English

- 4) Having speaking training for a complete learning experience for learners.



Figure 2.12 Speaking Training Features in Hello English

5) Having a unique and interesting contextual learning tool that utilizes news, sports, and entertainment to help learners improve their English vocabulary.

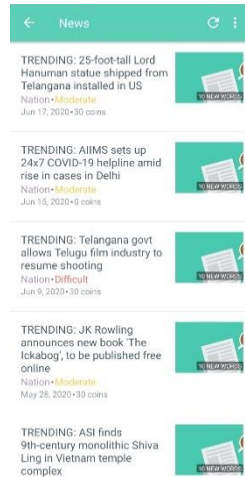


Figure 2.13 Contextual Learning Tool Features in Hello English

6) Most of the app's features work offline so that it makes learning activities seamless & saves data expenditure for learners.

### C. Conceptual Framework

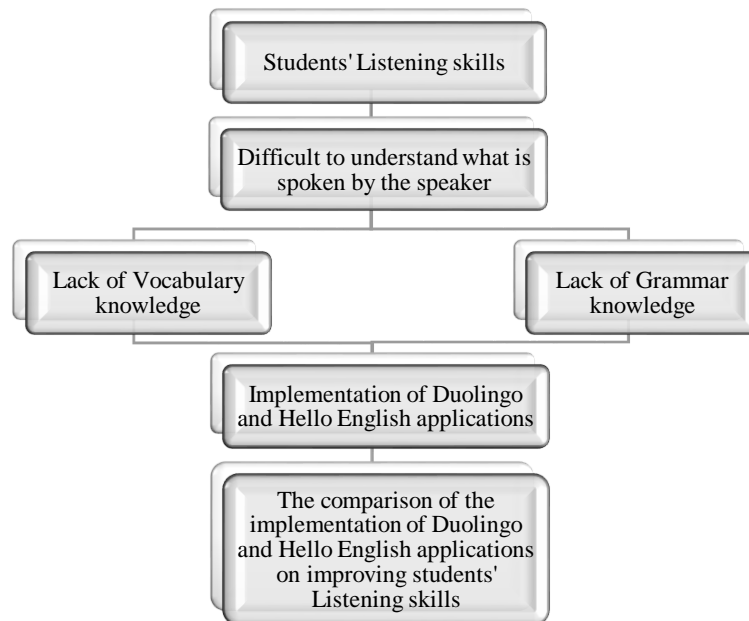


Figure 2.14 Conceptual Framework



Based on the conceptual framework above, the researcher mentioned that the topic of this research is students' Listening skills and the research problems are lack of vocabulary knowledge and grammar knowledge. To overcome these problems, the researcher will use Duolingo and Hello English application as a teaching and learning media and try to improve students' Listening skills.

#### **D. Hypothesis**

Based on the explanations of several theories and the objectives of the research, it can be stated that the hypothesis of this research as follow:

##### **1. Alternative hypothesis ( $H_a$ )**

There is a significant difference between the implementation of Duolingo and Hello English applications in improving students' listening skills at the ninth grade of MTs. Guppi Ulidang.

##### **2. Null hypothesis ( $H_0$ )**

There is no a significant difference between the implementation of Duolingo and Hello English applications in improving students' listening skills at the ninth grade of MTs. Guppi Ulidang.

## CHAPTER V

### CONCLUSION AND SUGGESTION

#### A. Conclusion

Based on the research findings in the previous chapter, the researcher could draw the following conclusions.

1. Implementing Duolingo application as a learning medium could improve students' listening skills at the ninth grade of MTs. Guppi Ulidang. This could be seen from the result of pair samples test of experimental group.
2. Implementing Hello English application as a learning medium could also improve students' listening skills at the ninth grade of MTs. Guppi Ulidang. This could be seen from the result of pair samples test of control group.
3. Based on the average of n gain scores in the experimental and control groups after being given treatment, there were differences between the two. Students who were taught using Hello English application had greater improvements than students who were taught using Hello English application. Thus, it could be concluded that the implementation of Duolingo application as a learning medium for improving listening skills was more effective than Hello English application, even though both were in the low category. The factors that cause the implementation of Duolingo application as a learning medium to be better than Hello English application in improving students' listening skills are Duolingo application has a feature to slow down the words or sentences spoken by the application, Duolingo application has a clearer pronunciation than on Hello English application, and students who were taught using Duolingo application were more active than students who were taught using Hello English application.
4. Based on the independent samples test result, it could be concluded that there was no significant difference between the implementation of Duolingo

and Hello English applications in improving students' listening skills at MTs. Guppi Ulidang and the implementation of Duolingo application as a learning medium was significantly better in improving students' listening skills than Hello English application at the ninth grade of MTs. Guppi Ulidang in the academic year 2023/2024. It means the two applications have similarities in their implementation to improve listening skills. The first similarity is both applications are mobile applications, the second is both applications are MALL (Mobile-Assisted Language Learning) projects, and the third is both applications are carrying gamification concept.

## **B. Suggestion**

Based on the research that has been carried out, the researcher provides the following suggestions.

1. Students are advised to maximize the use of technology to support their learning process. For example, the implementation of the Duolingo and Hello English applications to become learning media in an effort to improve English communication skills, especially listening. Thus, students can get used to learning independently.
2. Teachers are advised to be able to use a variety of media in the teaching and learning process in the classroom, especially in learning English. For example, the implementation of the Duolingo and Hello English applications as learning media. This will make students more enthusiastic, motivated and become independent learners.
3. The researcher suggests that other researchers focus on each application so that their research can be maximized, especially on Hello English application, considering that research on Hello English application is still limited compared to Duolingo application.

## BIBLIOGRAPHY

- Arikunto, S. (2006). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Rineka Cipta.
- Brown, G., & Yule, G. (1983). *Teaching the Spoken Language*. Cambridge University Press.
- Buck, G. (2001). *Assessing Listening*. Cambridge University Press.
- Bustillo, J., Rivera, C., Guzmán, J. G., & Ramos Acosta, L. (2017). Benefits of using a mobile application in learning a foreign language. *Sistemas & Telemática*, 15(40), 55–68. <https://doi.org/10.18046/syt.v15i40.2391>
- Butarbutar, R., & Simatupang, E. (2019). The Impact of Technology Hello English Application in EFL Classroom. *Lingual*, 8(2), 1–5.
- Carter, R., & Nunan, D. (2001). *The Cambridge Guide to Teaching English to Speakers of Other Languages*. Cambridge University Press.
- Cipani, E. (2009). *Practical Research Method for Educators: Becoming an Evidence-Based Practitioner*. Springer Publishing Company.
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (Fourth Edi). Pearson Education.
- Crowther, D., Kim, K. M., & Loewen, S. (2017). The Implementation of ISLA in MALL Technology: An Investigation into the Potential Effectiveness of Duolingo. *MSU Working Papers in SLS*, 8, 20–39.
- Dwigustini, R. (2014). *Peningkatan Penguasaan Kosakata Bahasa Inggris melalui Permainan Bahasa di Laboratorium Multimedia Town4kids (Studi Penelitian Tindakan di SD Model Insan Madani, Bekasi)*. Universitas Negeri Jakarta.
- Fadhli, M., Sukirman, S., Ulfa, S., Susanto, H., & Syam, A. R. (2019). *Gamifying Children's Linguistic Intelligence With the Duolingo App: A Case Study From Indonesia* (pp. 122–135). <https://doi.org/10.4018/978-1-7998-1486-3.ch007>
- Faradila, D. (2020). *Pengaruh Keaktifan Belajar Terhadap Hasil Belajar Matematika Siswa Kelas X di MAN 1 Jember Tahun Pelajaran 2019/2020*. Institut Agama Islam Negeri Jember.

- Fatah, C. A. (2019). *The Effect of Using Duolingo Application to Develop Students' Vocabulary Knowledge (A Quasi-Experimental Study at the Seventh Grade of SMP Islam Taman Quraniyah Jakarta Selatan in Academic Year 2018/2019)*.
- Fathira, V., & Utami, S. (2019). Implementing an Android-based Learning Media Application to Improve Learners' Ability in Pronouncing Ending –s. *J-SHMIC : Journal of English for Academic*, 6(2), 14–26.
- Fitriyani. (2018). *Analyzing Duolingo As Computer-Assisted Language Learning (Call) in Assisting Language Autonomous Learner*. 109.
- Ginting, R. S. B. R. (2019). *The Effect of Hello English Application on the Students' Vocabulary Mastery at the Eighth Department of English Education the State Islamic University of North Sumatera*.
- Haake, M., Hansson, K., Gulz, A., Schötz, S., & Sahlén, B. (2014). The slower the better? Does the speaker's speech rate influence children's performance on a language comprehension test? Haake, Magnus; Hansson, Kristina; Gulz, Agneta; Schötz, Susanne; Sahlén, Birgitta. *International Journal of Speech-Language Pathology*, 16(2), 181–190.  
<https://doi.org/10.3109/17549507.2013.845690>
- Hake, R. R. (1999). *Analyzing Change/ Gains Score*. AERA-D - American Educational Research Association's (Division D). <http://lists.asu.edu/cgi-bin/wa?A2=ind9903&L=aera-d&P=R6855>
- Harahap, I. (2018). *Improving Students' English Vocabulary Through Duolingo Application at Eeigh Grade of MTs Guppi Pangkatan*.
- Hartati, S. (2017). Peningkatan Kemampuan Membaca Permulaan dengan Menggunakan Media Kartu Kata Berwarna pada Siswa Kelas IA MIN 1 Kota Bengkulu. *Diksa : Pendidikan Bahasa Dan Sastra Indonesia*, 3(1).  
<https://doi.org/http://doi.org/10.33369/diksa.v3i1.11495>
- Hasan, I. (2006). *Analisis Data Penelitian dengan Statistik*. PT. Bumi Aksara.
- Hayati, A. (2010). *The Effect of Speech Rate on Listening Comprehension of EFL learners*. 2, 107–114. <https://doi.org/10.4236/ce.2010.12016>
- Herlina, A. (2014). The Utilization of Technology to Improve English Speaking Skills. *Journal for the Study of English Linguistics*, 2(2), 19.  
<https://doi.org/10.5296/jsel.v2i2.6665>
- Hidayati, T., & Diana, S. (2019). *Students' Motivation to Learn English Using Mobile Aapplicatins: The Case of Duolingo and Hello English*. 189–213.

- Johnson, R. B., & Christensen, L. (2017). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (Sixth Edit). SAGE Publications, Inc.
- Kétyi, A. (2013). *Using Smart Phones in Language Learning – A Pilot Study to Turn CALL into MALL*. 2013, 129–134.  
<https://doi.org/10.14705/rpnet.2013.000150>
- Khaghaninejad, M. S., & Maleki, A. (2015). The Effect of Explicit Pronunciation Instruction on Listening Comprehension : Evidence from Iranian English Learners. *Theory and Practice in Language Studies*, 5(6), 1249–1256.  
<https://doi.org/http://dx.doi.org/10.17507/tpls.0506.18>
- Krashen, S. (2014). Does Duolingo “Trump” University-Level Language Learning? *International Journal of Foreign Language Teaching*, 9(1), 13–15.
- Kurniawati, D. (2019). Factors affecting the learning listening English. *English Education: Jurnal Tadris Bahasa Inggris*, 12(2), 25–41.
- Liana, R. M. Y., Wahyudin, D., & Hanoum, R. N. (2018). *Pengaruh Penggunaan Aplikasi “Hello English” Berbasis Smartphone Android Terhadap Peningkatan Hasil Belajar Siswa Pada Mata Pelajaran Bahasa Inggris Di SMP ( Kuasi Eksperimen Pada Mata Pelajaran Bahasa Inggris Siswa Kelas VII Di Smp Negeri 1 Kadipaten)*. 2(2), 122–128.
- Marz, N. E. (2014). Pronunciation and Comprehension of Oral English in the English as a Foreign Language Class: Key Aspects, Students’ Perceptions and Proposals. *Journal of Language Teaching and Research*, 5(2), 262–273.  
<https://doi.org/10.4304/jltr.5.2.262-273>
- Mianmahaleh, S. A., & Rahimy, R. (2015). An investigation of the listening comprehension strategies used by Iranian EFL learners. *International Journal of Applied Linguistics and English Literature*, 4(1), 255–260.  
<https://doi.org/10.7575/aiac.ijalel.v.4n.1p.255>
- Muddin, A. (2018). *The Use of Duolingo To Improve Students’ Vocabulary* (Issue 231324418). <https://repository.ar-raniry.ac.id/4114/1/AddalMuddin.pdf>
- Muhammed, J. D., & Abduljabbar, S. B. (2023). The Impact of Pronunciation Practice on English Listening Comprehension: A case study of High School Students in Duhok. *Academic Journal of Nawroz University (AJNU)*, 12(4), 17–25. <https://doi.org/10.25007/ajnu.v12n4a1895>
- Munday, P. (2015). The Case for Using Duolingo As Part of the Language Classroom Experience. *RIED. Revista Iberoamericana de Educación a Distancia*, 19(1). <https://doi.org/10.5944/ried.19.1.14581>

- Nadiawati, N. (2018). *Gamification of Duolingo in Rising Children's Second Language Learning Motivation*.
- Nasruddin, K. (2018). Peningkatan dan Hasil Belajar Bahasa Inggris Siswa Menggunakan Model Pembelajaran Kooperatif Intergroup Relation di Kelas XII IPA2 SMAN 2 Kuok. *Jurnal Pendidikan Tambusai*, 2(5), 1304–1317.
- Nation, I. S. P., & Newton, J. M. (2009). Teaching ESL/EFL Listening and Speaking. In *Teaching ESL/EFL Listening and Speaking*. Routledge.
- Neto, A. F. da S. (2020). Classroom action research on the effects of pronunciation teaching on listening skills Literature review. *TESL Ontario*, 59–71.
- Niah, S., & Ismaniati, C. (2015). Pengembangan Multimedia Pembelajaran Bahasa Inggris Materi Functional Text Bagi Siswa SMPN 3 Kalasan. *Jurnal Inovasi Teknologi Pendidikan*, 2(2), 121–131. <https://doi.org/10.21831/tp.v2i2.7602>
- Niah, S., & Pahmi. (2019). *The Utilization of Duolingo to Improve the Speaking and Listening Skills of Junior High School Students in Pekanbaru*. 373, 54–59. <https://doi.org/10.2991/iccelst-ss-19.2019.12>
- Ningsih, A. (2018). Pengaruh Keaktifan Siswa Terhadap Hasil Belajar Ekonomi Kelas X di SMAN 2 Gunung Sahilan. *PeKA: Jurnal Pendidikan Ekonomi Akuntansi FKIP UIR*, 6(2), 157–163.
- Notoatmodjo, S. (2010). Metodologi Penelitian Kesehatan. In *Mengembangkan Instrumen Penelitian* (pp. 164–165). Rineka Cipta.
- Nunan, D., & Miller, L. (1995). New Ways in Teaching Listening. In *New Ways in Teaching Listening*. TESOL.
- Nushi, M., & Eqbali, M. H. (2017). Duolingo: A mobile application to assist second language learning. *Teaching English with Technology*, 17(1), 89–98.
- Purdy, M. (1991). What is listening? In D. Borisoff and M. Purdy (Eds.), *Listening in Everyday Life: A Personal and Professional Approach* (pp. 3–20). University Press of America.
- Puspitaloka, N., Hasanah, U., & Rahmawati, I. (2017). English Vocabularies Enrichment through “Hello English” Android Based Educational Game for Young Learners Classroom. *The 2nd TEYLIN International Conference Proceedings*, 140–148. <https://doi.org/10.24176/03.3201.17>

- Raihan, P. (2019). *Analisis Kemandirian Belajar Siswa Menggunakan Aplikasi Duolingo pada Mata Pelajaran Bahasa Inggris di Kelas VIII SMP Negeri 1 Sabang*.
- Renukadevi, D. (2014). The Role of Listening in Language Acquisition; the Challenges & Strategies in Teaching Listening. *International Journal of Education and Information Studies*, 4(1), 59–63.
- Rianto, Y. (2001). *Metodologi Penelitian Pendidikan*. SIC.
- Richards, J. C. (2008). Teaching Listening and Speaking From Theory to Practice. In *Richards-Teaching-Listening-Speaking*. pdf.
- Rifdinal, R. (2021). Keefektifan Penggunaan Duolingo dalam Pembelajaran Kosakata Bahasa Inggris. *Jurnal Manajemen Pendidikan Dan Ilmu Sosial (JMPIS)*, 2(2), 697–704.
- Rosell-Aguilar, F. (2018). Autonomous language learning through a mobile application: a user evaluation of the busuu app. *Computer Assisted Language Learning*, 31(8), 854–881. <https://doi.org/10.1080/09588221.2018.1456465>
- Rost, M. (1990). *Listening in Language Learning*. Routledge.
- Satriani, S., Jabu, B., & Salija, K. (2019). The Implementation of Hello English Application in Teaching Vocabulary. *Universitas Negeri Makassar*.
- Sugiyono. (2015). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Alfabeta.
- Suyoto, S., & Sodik, M. A. (2015). *Dasar Metodologi Penelitian* (First Edit). Literasi Media Publishing.
- Vandergrift, L., & Goh, C. C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.
- Vesselinov, R., & Grego, J. (2017). *Hello English Efficacy Study*.
- Widyastuti, M., & Kusumadewi, H. (2018). Penggunaan Aplikasi Duolingo Dalam Meningkatkan Kemampuan Kosakata Bahasa Inggris Pada Tenaga Pengajar Bimbingan Belajar Omega Sains Institut. *Jurnal Pengabdian Kepada Masyarakat*, 1(2), 237–244.
- Wijaya, R., Yufrizal, H., & Kadaryanto, B. (2016). Improving Vocabulary Through Duolingo Application in Call at the Seventh Grade of SMP. *UNILA Journal of English Teaching*, 5(1).



Yuanita, S. (2019). *The Implementation of Hello English Application As English Learning Media To Teach Speaking Skill in Tourism Major At the Tenth Grade Students At Smk Negeri 1 Karanganyar S.* 1–18.

Zhao, Y. (1997). The Effects of Listeners ' Control of Speech Rate on Second Language Comprehension. *Applied Linguistics*, 18(1), 49–68.