

## DUOLINGO FOR GRAMMAR LEARNING

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### Abstract

Grammar is a basic knowledge of English that helps ESL / EFL learners to read , write, speak and understand English effectively. However, it is a dynamic variable of language that makes it difficult to teach and learn. Teaching grammar, therefore, should be enjoyable to support learners with better achievement. This must be accomplished by understanding that today's learners are digital natives who have grown up with technological advances. As a result, technology plays a very important role in teaching English. In the same way as the English learning environment at Universitas Ibn Khaldun-Bogor, technology is used in English classrooms to make students more excited and inspired. This relates to the existing educational paradigms and phenomena that provide the basis for the implementation of novel methods and techniques to implement an active learning process. Gamification of education is such a phenomenon. Particular games can illustrate the motivational dimensions of a game's involvement and enhance the enthusiasm for a game of grammar learning. Previous studies have shown that one gamification media that can be used to enhance students' grammar is Duolingo. This article is one of some results of the research financed by Kemenristek / BRIN. The goals of this article are to offer a technology-based English teaching model using Duolingo, especially in the COVID-19 pandemic, and to give teachers and learners a good alternative for improving students' English grammar in order to support new technology-based teaching and learning process.

**Key words:** *gamification, Duolingo, grammar*

### Introduction

The participation of technology in English learning activities in digital era is not new anymore. It is applied to make students more excited and motivated as well. Similar with the English learning environment in English Education

Program of Teacher Training Faculty of Universitas Ibn Khaldun – Bogor, technology is used in English classrooms to help students successfully master English as a foreign language. This is related to the vision of the university that technology constitutes the basis for all

academic activities.

English grammar, one of the courses taught in the English Education Program is a basic knowledge of English that helps ESL / EFL learners to read, write, speak and understand English effectively. However, it is a dynamic variable of language that makes it difficult to teach and learn. Teaching grammar, therefore, should be enjoyable to support learners with better achievement. Teachers should value literacy and is willing to adjust to more efficient methods as the effort of producing the best results in grammar learning activities. This must be accomplished by understanding that today's learners are digital natives who have grown up with technological advances.

The most obvious reason for using technology in the language classes is to make students more excited and motivated as well. Besides, teachers face new challenges and need to discuss critical matters related to settling the learning process to the needs, interests and passions of students.

They need to practice various teaching strategies and techniques that embolden students to be active participants with a strong motivation and dedication to their learning.

Current educational paradigms and phenomena in education present the framework for the application of innovative methods and strategies to incorporate an active learning process. Gamification in education is one of these phenomena that can encourage and motivate students to accomplish the goals of their English learning since it exhibits an innovative and captivating learning activity. It also enables students to play an active role in the learning process, thereby fostering constructive learning, skill development and problem-based learning (Martí-Parreño et al., 2016).

One of gamification that can be used to improve students' grammar skills is Duolingo. This is supported by Syahputra (2019) which examined the effectiveness of Duolingo in reducing student grammatical errors in writing the text of the paper. The study was attended by 25 second-grade students at Methodist Senior High School in Banda Aceh, Indonesia. The results suggested that the use of the Duolingo Gamification platform was adequate to minimize

student grammatical errors in the text.

In more depth, Munday (2015) stated that her students seemed to find Duolingo an easy-to-use, helpful, and enjoyable app to practice Spanish. They appeared to like it more than regular, book based homework because of the ease it offered. They liked the fact that it can be accessed in a variety of formats, especially through smartphones. They also appreciated its gamification elements, eventually. Munday argued that this app was also successful because of the way the lessons were delivered, with brief, varied prompts and different skills interlinked.

Considering the importance of facilitating students with innovative and captivating English grammar learning activities, the research on exploring gamification of Duolingo in EFL classroom was conducted to support English teaching and learning in 21<sup>st</sup> century. One of the results of the research is presented in this article offering a technology-based English learning model using

Duolingo in grammar class. The purpose of this article is to share knowledge and information on new technology-based learning to teachers and learners. It is particularly hoped that the technology-based English learning model using Duolingo is able to be used as a good alternative for improving students' English grammar.

## **The Nature of Grammar**

Learning a language has to be supported by the components of the language such as vocabulary, grammar or structure, pronunciation and spelling. Meanwhile, learning a foreign language, in more detail, can be defined not only as learning language to understand and be understood, but also as learning to use the structural units and patterns of the foreign language in valid situation. Thus, grammar is very important in the formations of words and sentences with regard to the writing and speaking skills for communicative competence.

According to Greenbaum (1996), studies of the English language can help students develop their ability to adjust their language appropriately to different context. They should be aware of the expectations that standard English is the norm for public writing, and they will

need to learn to adopt the conventions for public writing in grammar, vocabulary, spelling and punctuation. Grammar in the sense of 'syntax' is generally regarded as central to linguistics, and it should therefore be included in a linguistic curriculum on its own terms.

Due to the explanation above, it is clearly understood that grammar is one of some important factors that can help us understand a language and use the language more effectively. Therefore, all English users should seriously learn and study grammar in order they can apply the current standard of usage in their communication life.

### ***Reasons of Studying Grammar***

The reasons of studying grammar have been explained by the experts. Greenbaum and Nelson (2002) explain that grammar occupies a central position in the study of language, but there is also a practical reason to emphasize the study of grammar. It is easy to learn to use dictionaries to find the

pronunciation, spelling or meanings of words, but it is difficult to consult grammar books without a considerable knowledge of grammar.

There are several applications of grammatical study: (1) A recognition of grammatical structures is often essential for punctuation; (2) A study of one's native grammar is helpful when one studies the grammar of a foreign language; (3) A knowledge of grammar is a help in the interpretation of literary as well as non-literary texts, since the interpretation of a passage sometimes depends crucially on grammatical analysis; (4) A study of grammatical resources of English is useful in composition: in particular, it can help you to evaluate the choices available to you when you come to revise an earlier written draft.

Due to the explanation above, it is clearly understood that grammar is one of some important factors that can help us understand a language and use the language more effectively. Therefore, all English users should seriously learn and study grammar in order they can apply the current standard of usage in their communication life.

### ***Students' Perceptions on the English***

### ***Grammar***

Grammar is regarded to have great roles in speaking and especially in writing, but it is unfortunately well-known difficult to learn for both native and second-language speakers. There are so many specifics, blur and confusing rules and exclusions that make different generations of teachers have used various methods in teaching. Therefore, grammar is determined as one of the difficult subjects to learn (Marlina, Sri and Pujasari, 2016). This is in line with the research of Hossain and Phil (2018) who also found that students are weak in English grammar, vocabulary and speaking skill, although they believe that formal study of grammar is important to language learning. They also tend to believe that studying and practising grammar in the classroom help to improve their communicative ability very quickly.

Slightly different from the above perceptions, Greenbaum (1996) has fair, open, and balanced considerations: many educationists have denied that a

study of grammar can improve the ability to write English correctly and effectively, but (as with all subjects) it depends on what is taught and how it is taught. Thus, it would seem reasonable to suppose that written style can be improved through learning grammatical structures, word order and the devices for connecting sentences and paragraphs. Certainly, that kind of knowledge would be helpful at the editing stages to improve the style of earlier drafts and to correct grammatical errors.

The difficulties and problems faced by students in learning the rules of English grammar should not be ignored. Arab students face many problems in reading and writing in English; therefore, identifying and pointing them out will help teachers to find easier and better solutions to these difficulties and problems, and they can provide better education for students (Mahdi, 2018).

Based on the discussions above, it can be concluded that grammar is very important to learn, but many English learners still find it difficult or very difficult. Grammar is the basic for the skills of writing, speaking and reading, but it depends on what is taught and how it is taught. Memorization-based techniques from the past that relied on

repetition slowly need to move to more creative methods and approaches. So, English teachers should be able to provide innovative and captivating grammar learning activities that can make their students more excited and motivated to achieve the goals of the learning activities.

### ***Methodology of Grammar Teaching***

Today, we live in a society that appreciate literacy and is willing to adapt to more effective methods as the effort of achieving the best results in grammar learning activities. Therefore, today's language classrooms are highly different from that of the mid - to late- 20th century. The focus on language education in the 21<sup>st</sup> century is no longer on grammar, memorization, and learning from rote, but rather using language and cultural knowledge as a means to communicate and connect to others around the globe (Eaton, 2010) in Parvin and Salam (2015). Traditional notions of education are giving way to newer, more

innovative ways of thinking about how we learn, teach, and acquire knowledge. The American Council on the Teaching of Foreign Language (ACTFL, 2013) in Parvin and Salam (2015) noted that technology has been used to both assist and enhance language learning. It is now rare to find a language class that does not use some form of technology.

It can be summed up here that the subject of grammar has to be taught with more effective, creative and innovative methods and approaches to make students more excited and motivated in achieving the goals of their learning process.

### **The Nature of Gamification**

Su and Cheng (2015) in Marti-Parreno et al. (2016) define that gamification as the use of game design elements and game mechanics in non-game contexts in order to engage people and solve problems. The use of gamification in the education field that can increase students' interest is recommended as a means to improve students' participation and learning outcomes (Clark et al., 2011). Along with the nature of games themselves, the elements that make games fun are

intrinsic motivation, so students' intrinsic motivation to learn can be increased by applying games mechanics to the classroom (McGonigal, 2011; Hanus & Fox, 2015). A visual display of progress, for example: badges, is offered by the games mechanic to give students the freedom to fail without fear when learning (Kapp, 2012; Lee & Hamer, 2011).

Bicen and Kocakoyun wrote in their research (2018) that in October 2010, an innovative new approach came up in the mobile application that aimed at improving the participation of students in classroom activities and promoting particular behaviours. This approach is called gamification. It can make the learning process more attractive, so students can be more excited and motivated as well in achieving the learning goals. Motivation is an important element that can make students success in most learning process. Thus, gamification that can improve students' motivation in learning process can produce a more effective learning process.

Referring to the discussions above, the use of gamification can be suggested as one of the efforts to motivate students, increase their engagement and participation, and achieve the goals of their learning process.

## **The Nature of Duolingo Gamification**

To get the right explanation on Duolingo, the following detail information from “What is Duolingo?” until “How do you get the most out of Duolingo?” was taken from the website of

Duolingo(<https://www.onlinecoursepor.t.com/duolingo-the-most-popular-language-learning-app/> retrieved on October 5, 2020).

### ***What is Duolingo?***

Duolingo is a free application created by Luis Von Ahn and Severin Hacker in November 2011 with a slogan of “Free language education for the world.” It is the most common way to learn online, with more than 200 million users worldwide. The program provides in-depth online courses in more than 30 languages and ranks as one of the most downloaded applications on iOS and Android smartphones. It offers several

languages for English speakers as well as others for non-English speakers. In countries like Brazil and Ukraine, 5% of all smartphone owners are *using Duolingo*

### ***Why Do People Use Duolingo?***

The Duolingo courses are free of charge because it is online. A premium plan is available without advertisements, but all users have access to the same features and contents. Duolingo's design is simple and engaging. Of all the available language learning apps, it is hard to find a cleaner, more intuitive user interface than Duolingo. Duolingo is the most comprehensive online language learning platform. For the size, variety and accessibility of its course content, Duolingo simply beats the competition.

Duolingo offers over 30 online courses for English speakers, the most of any language learning app. The most popular include (in order): Latin American Spanish, French, German, Italian, Brazilian Portuguese. Other languages offered include Russian, Japanese, Dutch, Turkish, Korean,

Greek, Mandarin Chinese, and even a few fantasy languages. Duolingo also offers dozens of courses for non-English speaking students, and users can suggest new language courses they want Duolingo to develop.

### ***How Does Duolingo Work?***

Duolingo combines machine learning, psychology (or psycholinguistics), and innovative education tools to help users learn a new language. Once they create an account, Duolingo asks which language they would like to learn and their skill level. For its purposes, for example, when users want to learn French and have zero previous experience, next they will see the landing page and the skill tree, which lays out the course curriculum.

Each icon represents a language unit and consists of a series of lessons. In short, user's goal is to complete each lesson in the skill tree until you reach the end. Of course, there is more to it, because Duolingo allows learners to dive as deep into their target language as they want. Each unit has multiple levels, and users must complete unit blocks, or checkpoints, in order to unlock advanced lessons.

Lessons have three types of



questions, each of which are designed to develop a specific language skill: fill-in-the-blank multiple choice, translation (in either direction), and write what you hear

Generally speaking, Duolingo is designed as a learn-as-you-go app. Vocab lessons prompt users to match words with images, and built-in tools like hover text and optional word banks serve as helpful reminders (Duolingo's algorithms determine which words you need to practice, and when). Incorrect answers in any lesson prompt an explanation as well as a crowd sourced discussion thread for every question on the app. If you prefer an organized "textbook" approach, each unit also includes a cheat sheet that features grammar tips, conjugation tables, example sentences, common mistakes, and other helpful notes.

### ***What Are the Drawbacks to Duolingo?***

Even as the most popular language learning app, Duolingo has some drawbacks.

#### **1. Mobile is subpar**

Duolingo's mobile app is far inferior to the web version. Many features simply aren't available: grammar tips and notes, Duolingo Stories, and discussion threads are the biggest absences. At the same time, gamification is increased to the point that it's ineffective. A "health" component (the equivalent a video game "life") penalizes users for each incorrect answer; five incorrect answers and the lesson stops. There's nothing like this on the web version, and for good reason: it discourages users to quit the app. You can regain health credits through practice sessions, but it's still not clear why the feature exists in the first place.

#### **2. Computer-generated voices are inconsistent**

It's great that Duolingo emphasizes listening comprehension, but the app's computer-generated voices leave a lot to be desired. (This is primarily a criticism of voice audio on lessons; Duolingo Stories seem to use real recordings.) To be clear, every language learning app with a voice component uses computer voices to some degree. The problem is that Duolingo's voices often sound

unnatural. For instance, pronunciation is critical in a language like French, which is full of liaisons, irregular verb conjugations, and words that sound one way but are different on paper. If voicing are garbled or unclear, the lesson is unhelpful at best and misleading at worst.

3. **Some sentences are unnatural**

A common criticism of Duolingo is that many lessons feature strange or impractical sentences. Vocabulary limits are part of the problem, but repeat offenses make you wonder if you're wasting your time. For consistently practical skill development, you'll need to rely on Duolingo Stories.

4. **Explanations need improvement**

No language learning app has the kind of comprehensive explanations you'd get in a physical classroom or from a textbook. Still, given its reach and resources, Duolingo should have a much better

system. The notes and tips sheet is a useful guide, but lesson explanations need improvement. In most cases, students have to visit the discussion thread to find in-depth explanations, which may or may not help. Crowdsourcing answers can yield a consensus, but there's no way to verify if the explanation is actually correct unless a volunteer moderator steps in (even then, you'll often be referred to an outside source). To become a truly self-sufficient language learning app, Duolingo needs to create a better knowledge base or provide a verification system on lesson discussion threads.

***What's the Best Way to Use Duolingo?***

The fact is, language learning apps aren't a quicksilver solution to fluency. If users are serious about learning a new language, they need a multi-pronged approach: read newspapers and blogs in their target language, watch foreign TV series and YouTube videos, listen to podcasts and popular music, and use other online courses and language learning apps. Most important, they have to speak their target language as much as possible. (Duolingo's mobile app includes one speech tool, but takes

advantage of their event page if users can.) Duolingo helps users reach a certain level of competence — according to their scoring system, Duolingo can take them to 50-60% fluency — but even that (presumably) optimistic claim acknowledges a limit.

### *So how do you get the most out of Duolingo?*

#### **1. Don't try to cheat the system**

Let the app's algorithms do their job, and don't allow the instant gratification of badges and achievement bonuses be a distraction. For the most part, Duolingo has enough variables to prevent rote memorization, and the app is designed to recognize areas that users need to improve. But if they are not actively engaging in the course content, if they are missing questions and not attempting to learn why, they are not using Duolingo the right way.

#### **2. Take time**

Users can practice language skills at a natural pace —

timed practice sessions are a good tool — but don't rush. Language learning takes time.

#### **3. Set goals and keep a schedule**

Duolingo makes it easy to track users' daily learning routine. Choose from five daily learning goals (a points system to measure engagement), and a widget on the home screen shows your progress. Users can also set daily email reminders, and earn rewards for streaks. While other gamification elements carry a distraction risk, this is a useful, motivating feature. Routine practice is one of the best ways to learn a language and get the most out of their Duolingo courses.

#### **4. Take advantage of Duolingo's learning resources**

Go beyond the lessons. It has been mentioned several times, but Duolingo Stories is one of the app's best resources, combining engaging content with practical skill development in reading, listening, and conversation comprehension.

### **The Previous Research on Duolingo**

One of gamification that can be used to improve students' grammar skills is Duolingo. Preliminary findings indicate

that Duolingo is an easy-to-use app that is useful and has potential even if its key lesson is not focused on communicative competence. It is typically enjoyed by students because of a number of reasons, such as accessibility on a mobile device, its gamification aspect, and the variety of tasks involved (Vesselinov & Grego, 2012, Jašková, 2014, & Munday, 2015).

Duolingo has also differentiated advantages for other language learning software packages because users must register online and have a functioning email address. It grants the exact time of use or research by date Duolingo users must register online and apply a working e-mail address and time and by different activities: time applied for lessons, time applied for translation and time applied for other activities (Vesselinov & Grego, 2012).

In more depth, Munday (2015) stated in her research that her students seemed to find Duolingo an easy-to-use, helpful, and enjoyable app to practice

Spanish. They appeared to like it more than regular, book based homework because of the ease it offered. They liked the fact that it can be accessed in a variety of formats, especially through smartphones. They also appreciated its gamification elements, eventually. Munday argued that this app was also successful because of the way the lessons were delivered, with brief, varied prompts and different skills interlinked. As she has seen with Brown, Roediger and McDaniel research in 2014, methods that are combined with spaced repetition can make learning more efficient.

Another research, Syahputra (2019) examined the effectiveness of Duolingo in reducing student grammatical errors in writing the text of the paper. The study was attended by 25 second-grade students at Methodist Senior High School in Banda Aceh, Indonesia. The results suggested that the use of the Duolingo Gamification platform was adequate to minimize student grammatical errors in the text.

With regard to the aforementioned clarification, the gamification of Duolingo can be used as a complement or one of the efforts to support students in achieving the goals of their grammar learning process. It is constructed very

similarly to a computer game where the participants have to pass certain levels. A student passes the tree level of the language. The following lessons are unlocked after a learner has mastered the previous material. Users can complete a variety of exercises types including multiple choices, writing and speaking through a microphone as well (Jaskova, 2014). Duolingo has distinct advantages to other software packages of language learning. Duolingo users have to register online and provide a working email address. Duolingo also allows extracting the exact time of use or study by date and time and by different activities: time used for lessons, time used for translation and time used for other activities (Vesselinov & Grego, 2012).

### **Technology-based English Learning Model Using Duolingo**

This article offers a technology-based English learning model using Duolingo; the basis of this learning model is results of

the study on exploring gamification in EFL classroom. Therefore, knowing the results of the study can make the learning model easier to be understood and applied.

### ***Results of The Current Study on Exploring Gamification in EFL Classroom***

One of gamification media investigated by the authors in this current study is Duolingo. Using an action research with the respondents of 15 second-semester students from grammar class of FKIP PBI UIKA Bogor, the results are quite similar to the information from Duolingo's websites and the previous research mentioned above.

After 4 days of using Duolingo online, the authors found some important things about Duolingo. All the students enjoyed learning English with Duolingo as it was fun, quite interesting, simple, modern, and easy to use (user-friendly) as long as they have an internet quota and a good internet connection. They only need to have an email or Facebook account to install the application. It is also suitable to all levels, so everyone can learn English even from basic. They admitted that they were satisfied with

Duolingo because Duolingo can increase their interest in learning English. As a result, the students confessed that Duolingo could improve students' English in general as it provides varied exercises related to the general topics around our life such as food, animals, clothes, job, colors, and so forth. They could get some experiences of practicing English skills such as writing, reading, listening, translating, and speaking skills through pronunciation practices. Duolingo could also improve their grammar knowledge since its exercises were a lot about grammar. When they made a mistake in answering a question given, the application gave them a correct answer and repeated the question until they could answer it correctly. This kind of repetition helps students understand the material given better and improve their English grammar.

Some of the results show the advantages and disadvantages of Duolingo. Most students agree that Duolingo is a free, easy-to-use, simple, interesting, innovative, non-advertising

application. Its features can inspire students to continue to play for learning. It is also versatile; they can use it whenever and wherever they want. Duolingo can help students develop their English (or other languages) in general since its exercises range from vocabulary, speaking, pronunciation, listening to grammar. Specifically, it can help them increase grammar knowledge, such as word classes, tenses, words, phrases, clauses and sentences with several general topics. In enhancing English learning, Duolingo provides the repetition of questions that students do wrong, so they can gain comprehension about the lesson material appears on its exercises.

Since Duolingo is an online program, there may be several disadvantages around the internet connection. If the connection is not secure, the loading process is going to take a very long time. The use of gadgets is a must. Using Duolingo needs to be online with a high degree of battery usage. If it is used for a long time, it makes mobile phones hot and wasteful of the battery. The next weaknesses refer to the features related to the learning process, in this case the learning process of English grammar. Duolingo does not provide explanations

for grammatical exercises. If a student's answer is incorrect, the application only shows the correct answer without specifying the reasons. The score system also looks less straightforward since it just displays a percentage of the score.

Knowing the advantages and drawbacks of Duolingo will help the researchers and other language teachers can determine if it is the right language learning app for their students. If it is, they can create an appropriate learning activity using Duolingo in order to get an effective and successful learning process. Additionally, language learners are able to optimize the use of Duolingo to produce better performance.

## **Preparations Before Using Duolingo**

Before using Duolingo to play and learn a language, in this case English language, users have to sign-up and login. They can follow some information from <https://support.duolingo.com/hc/en-us/articles/204829870-How-do-I-sign-up-and-login-> (retrieved

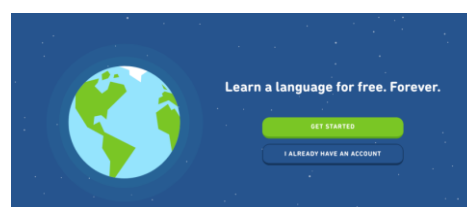
on October 10, 2020).

To sign-up and login, users can sign up by creating a new Duolingo account using their email address or by using their existing Google or Facebook account. Look at the instruction below:

### **On Web:**

*To create a new account*, click on the green "Get Started" button on [www.duolingo.com](http://www.duolingo.com) and follow the instructions to create your Duolingo profile and start learning.

*If you already have a Duolingo account*, you can click the "I Already Have an Account" button on [www.duolingo.com](http://www.duolingo.com) to enter your email/username and password. In case you don't remember your password, simply click on "Forgot password" and provide your email address.

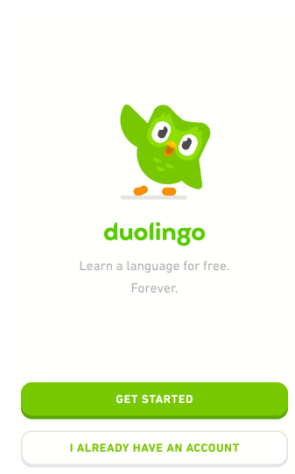


### **On Android app and iOS app:**

*To create a new account*, click "Get Started" and follow the instructions to create your Duolingo Profile. This

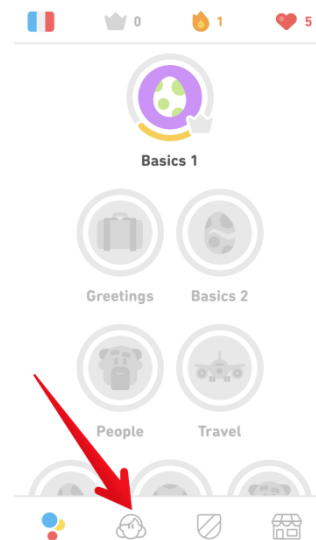
includes: choosing a learning language, selecting a daily goal, starting with basics or a placement test, and building your Profile with a username and email address.

***\*If you already have a Duolingo account,*** please click "I already have an Account" and enter your email/username and password to log in.

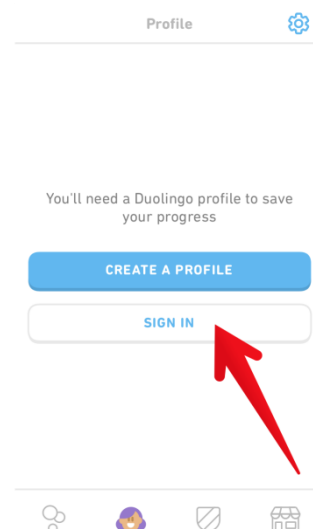


***\*If you're not at the login page, on iOS and Android devices***

1) Go to "Profile" icon.



2) Click "Sign in" and enter your email/username and password. You would only need to click "Create a Profile" if you need to create a Duolingo account.

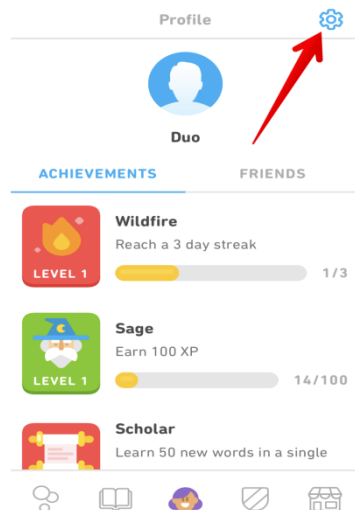


***\*If you accidentally created a new account,*** you can log out of it by following below instruction.

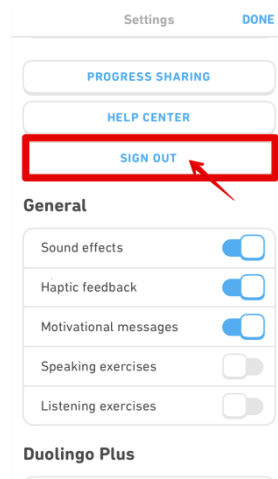
1) Go to "Profile".

2) Go to "Settings"/gear icon





3) Scroll and click "Sign Out". This will bring you to the login page where you can click "I Already Have an Account", and enter your correct email/username and password to log in.



## Duolingo for Online Grammar Learning Activity

The students joined a Whatsapp group formed by the

authors to follow online learning activities of grammar subject instead of face-to-face (offline) learning related to the COVID-19 pandemic. They were asked to follow the initial procedure of using duolingo as shown in the following pictures. (It is necessary to know that the language used in the application adapts to the region where the students or users live.)



duolingo

Belajar bahasa secara gratis. Selamanya.

AYO MULAI

SAYA SUDAH PUNYA AKUN

**FIGURE 1 | The first feature of Duolingo (The symbol of Duolingo)**

Figure 1 is the first feature of Duolingo after the students install the application. There are two options: click the first one to start it directly without making an account, or click the second one to make an account first.

Mengapa kamu belajar bahasa?

	Budaya
	Latihan Otak
	Perjalanan
	Keluarga & Teman
	Lowongan Kerja
	Pelajar
	Lain-lain

**FIGURE 2 | The second feature of Duolingo (Reason)**

The second feature asks the students what the reason of using Duolingo is. There are 7 options on this feature: *culture, brain exercise, traveling, family and friends, job vacancy, students, and so forth*, but the option to be chosen was determined by the authors. They were asked to choose “students” on this feature.

Pilih target

Santai	5 menit sehari
Biasa	10 menit sehari
<b>Serius</b>	<b>15 menit sehari</b>
Gila	20 menit sehari



Kamu bisa ubah target ini kapan pun

LANJUT

**FIGURE 3 | The third display**

**of Duolingo (Target)**

There are 4 options on the third feature. The options are 5 minutes per day, 10 minutes per day, 15 minutes per day and 20 minutes per day. The target can be changed anytime. All the students were asked to choose “15 minutes per day” as their target of time in playing Duolingo every day, but they can add the duration if they want to explore more about Duolingo relating to the development of their motivation and self-directed learning.

Pilih jalur mulai

	Baru pertama kali belajar Bahasa Inggris? Mulai dari awal!
	Sudah mengerti sedikit Bahasa Inggris? Cari tahu levelmu di sini!

**FIGURE 4 | The fourth feature of Duolingo (the starting path)**

On the feature of starting path option, there are only 2 options to be chosen: learning English for the first time (start from beginning) or already understood a little English (find out your level here). The 15 students as the respondents were

the fourth semester students, so they chose the second choice. This was also determined by the researchers.



**FIGURE 5 | The fifth feature of Duolingo (Start the test)**

When the students came to the fifth feature, they should have been ready for the test. It is a kind of preliminary test to be taken as a consideration on the topics from which Duolingo will give to the students. In other words, the student's preliminary test result will determine the number and the kind of topics given by Duolingo. To start the test, the students clicked the first option. The test just needed 5 minutes and its questions would be easier or more difficult in accordance with the

student's proficiency level based on the student's answers themselves.



**FIGURE 6 | The sixth feature of Duolingo (The test is finished)**

Having finished doing the test, each student got the result as it is seen on the sixth feature above. It is an example of the student's preliminary test result. This would be a consideration for the researchers in giving the topics for the students which were same and relevant to the grammar materials they were learning.



**FIGURE 7 | The seventh feature of Duolingo (The given topics)**

Figure 7 is the display of topics given by Duolingo based on the students' lowest test result which is same or less than 60%. The list of the topics are: *Basic 1*, *Basic 2*, *Phrases*, *Food*, *Animals*, *Plurals*, *Clothes*, *Present Verbs 1*, *Colors*, *Questions*, *Conjunctions*,

*Occupations, Adjectives 1, Present Verbs 2, Adverbs, Past Verbs 1, Infinitives, Past Verbs 2, Abstract Nouns 1, and Comparative Adjectives.* The number of the given topics will increase if the students regularly add the exercises every day.

After the preliminary procedure carried out by all the students at home, each of them personally shared information or questions to one of the researchers (via Whatsapp) about what they found and felt during the preliminary test. The researcher then gave responses towards the students' information and give explanations for the questions they could not answer correctly since Duolingo does not provide explanations. By doing so, a successful learning could be accomplished.

From the discussion in the group, both the students and authors discovered three important aspects in using Duolingo: *reason, target and topics*. These aspects will help them to familiarize themselves into the application of Duolingo as they know their reason, target, and topics of its

usage. Therefore, they know what they have to do to implement the application appropriately and effectively in improving their grammar knowledge.

The reason of using Duolingo determines the difficulty level of the exercises given by the application. This could be a consideration to anticipate the emergence possibility of boredom or uncomfortable situation during the learning process with Duolingo. The optional time targets per day provided by Duolingo (5, 10, 15 or 20 minutes) could be taken as a basis to evaluate whether the students are willing to elevate their daily exercise gradually as indication of self-directed learning improvement. The topics must be the same to all the students and relevant to the grammar materials they were learning so that the implementation of Duolingo is utilized as a support in grammar class. Therefore, the three important aspects were determined before the students started learning with Duolingo. They were asked to use Duolingo online from home for 4 days with the predetermined topics: Present Verbs (2 days) and Past Verbs (2 days).

Teachers can form their own learning activities using Duolingo based on the needs of their students related to the

curriculum or syllabus they use. The main target of using Duolingo is to motivate students and to build their self-directed learning so that they are still excited to learn grammar online instead of offline (face-to-face). Even though the learning activity uses online platform, it would be better for teachers to prepare lesson plan before conducting learning activities with Duolingo to get a better result. Below is the example of lesson plan using Duolingo in online grammar learning activity.

### Lesson Plan Example

Subject : Grammar in Written Discourse  
Semester : 2  
Day : 1 (July 8, 2020)  
Topic : Present Verbs (part 1)  
Duration : 100 minutes  
Platform : Online learning using WA group and Duolingo

#### 1. Opening

- ✓ Teacher greets and motivates students in WA group using WA texts or voice note.
- ✓ Teacher explains the objectives of the online learning activity using Duolingo.
- ✓ Teacher explains how to use Duolingo.
- ✓ Teacher shares Duolingo's websites to get more information about Duolingo.

- ✓ Teacher asks students to install Duolingo in their mobile phone and follow the preliminary steps before learning with Duolingo.

#### 2. Main activity

- ✓ Students install Duolingo and follow the preliminary steps until they get the topics from Duolingo.
- ✓ Teacher and students have discussion for some minutes after students finish the preliminary steps.
- ✓ Students use Duolingo on the basis of the 3 important aspects of Duolingo:
  - Reason : student
  - Target : 15 minutes (students can add to the allotted time)
  - Topic : present verbs (part 1)
- ✓ Teacher and Students have discussion to overcome problems faced by the students.
- ✓ Teacher gives explanations for the questions that students cannot answer correctly.

#### 3. Closing

- ✓ Teacher gives summary and conclusion from the problems faced by the students.
- ✓ Teacher gives motivation to students to keep up their hard-work.
- ✓ Teacher gives information to students about the next meeting's activity.
- ✓ Teacher closes the WA group by asking students to read *Hamdalah*.

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