Analyzing Students' Perception about the Use of Duolingo Application Towards Vocabulary Mastery at UIN Prof K.H Saifuddin Zuhri Purwokerto

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Abstract

In this 4.0 industrial revolution, technology has many important roles in many aspects of life, such as in language education. If the students want mastering the four skills of English, the students have to master the English vocabulary. Unluckily, there are so many students who lack of vocabulary. It could be happened because the teacher used uninteresting media in teaching vocabulary. Now, the technology can solve that problem in order to help the students in mastering English vocabulary. One of the technologies that can help in the students to enrich the vocabulary is Duolingo Application. This research aim is to investigating the students’ of UIN Prof. K.H Saifuddin Zuhri Purwokerto perception toward the use of Duolingo application to enrich the students’ vocabulary. This research is using quantitative method. The data were collected using questionnaire that distributed to 30 students at UIN Prof. K.H Saifuddin Zuhri Purwokerto. In collecting the data, the researchers used 10 question in questionnaire, which were used to collect the data. Based on the data, the results shows that most of the students have good perception towards Duolingo application and they believe that this application can enrich their English vocabulary. So, it can be one of the effective media to enrich the students’ vocabulary mastery.

Keywords: Students’ Perception; Duolingo Application; Vocabulary Mastery

INTRODUCTION
Teaching and learning of English vocabulary has a very essential role in assisting Indonesian students to master English as their foreign language. Vocabulary is one of the English parts that must be mastered. In fact, vocabulary mastery has become a big problem for Indonesian students. If the students do not have adequate number of vocabulary, they will not be able to do the communication. Therefore, it will be impossible to learn a language without learning and mastering its vocabulary.

English vocabulary is one of the main supports for English language component skills such as writing, listening, speaking, and reading. It is in line with Aisyah (2017) stated that vocabulary is a relation among the four language skills elements, including listening, speaking, reading, and writing in a foreign language. Harmer (2007) argued that vocabulary is needed for students to see how they are used. Because of that, through vocabulary mastery, the student can express their idea, and emotion each other and form communication.

McCarthy (1990) has stated that no matter how great the student’s grammar or how successful the sounds of the language are mastered, without the words, the communication can’t happen. So, learning English language means that the students must learn its vocabulary because it is the first step of English language mastery. However, there were many students who had limited vocabulary. It make the students feel difficult to understand the teacher’s explanation. Language with incorrect language structure still comprehensible, but without vocabulary, there is no something that can be expressed both in spoken and written (Thornbury, 2002). Aisyah (2017) stated that the effective strategies need to be applied in learning or teaching vocabulary. The teacher must select suitable method and media that can encourage students to develop their vocabulary.

Nowadays, technology is taking part in education. Technology also has been used as a technique to improve education and teaching methods (Ahmed, 2016; Al-Mashaadani & Al-Rawe, 2018; Nami, 2020). Mobile devices have been gradually integrated into learning. As we know, that Learning English as a foreign language has several challenges for Indonesian students’ such as lack of motivation to practice English outside of the classroom and it is happened in university level. The widespread the development of the technology made many applications arise and it made the students available to download the learning application. One of those application is Duolingo.

Duolingo is one of the most popular writing learning media. Wilbert et al (2016) defines Duolingo as the future of language learning and global communication. Duolingo is also available to be used in Android, Ios and Windows Phone. This app provides different language courses and there are some languages. Then the lessons provided in both written, audible form, and speaking practice. As a learning application, the use of the Duolingo application is expected can make the students more enthusiastic during the learning process. So the students will be happy in the teaching learning process, because the joyful environment will make students enjoy and feel pleasurable
and they will enjoy their time in the learning process (AlTameemy, 2017). Therefore, the presence of media has very important meaning.

The advantages of Duolingo application according to Putri & Islamiati (2018) are the learning materials attractively packaged with a system such as a games. So, the students feel learning with playing. Then Duolingo application also has wonderful visual display that is supported by the audio. Then there is also an alarm feature that will remind you of the study schedule that you have set. This application also has some weakness, those are lack of available language material for Asian learners and this application also requires an internet connection to access it, so it is quite difficult for the students in desolate area (Kenny, 2014).

In this research, the goal was to find out the students’ perception toward the use of the Duolingo as an application in learning English especially towards vocabulary mastery. The researcher is using quantitative method and questionnaires to get the data. This study has found that students positively perceive that Duolingo is a useful and helpful application. According to Vesselinov and Grego (2012) found that 34 hours of studying using Duolingo application similar with studying one semester in university language class. Inspired by this argument, the researcher feel interested to analyze the students’ perception at UIN Prof. K.H Saifuddin Zuhri Purwokerto towards Duolingo as an English learning media towards vocabulary mastery.

LITERATURE REVIEW

A. Students’ Perception

1. Definition of Perception

The word perception in the dictionary can be interpreted as the ability to see, hear, or understand something (A. S. Hornby, 1995). Therefore, perception is a personal judgment or in other words, how a person sees and understands something in a certain way. Positive perceptions come from individual satisfaction about certain objects that are the source of their perceptions, individual knowledge, and individual experiences of the perceived object (S. Robbin, 2004). Otherwise, negative perceptions come from individual dissatisfaction about the particular object that is the source of his perception and lack of experience with the perceived object.

Elliot (1996) state that perception is the ability to recognize people, objects, or events with known meanings and expectations. This definition shows that perception is a form of cognitive process in the human mind. It does not happen by accident, but it takes a long time to see certain events and experiences. Students must experience something so that perception can be involved. If students perceive certain situations in their lives, it means that they remember what has happened in a certain period in the form of objects or events from their experiences.

Another point is by Vernon (1977), he shows that three dimensions of perception namely understanding of objects, views and actions towards objects. These three dimensions are added by Khalish (1973) namely hope which means thinking and demanding, which also means hope. Another idea added by Khalish is that perception
is not only to have an opinion or belief about something, or to think that something is true or real but also hopes and demands to expect good things in the future.

B. Duolingo Application

Nowadays, the development of technology is increasing significantly. It is also effect all aspect in our life, including education world. In education, the tradition of teaching is changing drastically because of the entry of technology. Duolingo is one of the most famous writing applications of learning media because it is free language app. Wilbert et al. (2016) explain that Duolingo as the future of language and global learning communications. Then according to Duolingo for school guide book (2016) Duolingo is the largest online language learning platform in the world. Teacher can used language learning experience more enjoyable and effective. Duolingo application facilitates the learning of English through facilitating the translation from the language of the learner. The translations help the learner in learning the vocabulary of the language that they need to learn.

In the future, the purpose of Duolingo application are it can make the user understand a language and they can use it easily. Duolingo can be a medium for students to improve their vocabulary and teachers used it in classroom in teaching to help their students in mastering vocabulary without bored activity in teaching learning process. Duolingo’s application has some of its advantages, which include some of the activities that are not possible on smartphones and PC, the lack of language materials available to Asian students and it also requires Internet connections to access them, so it is difficult for remote village students (Kenny, 2014).

Some positive feedback also has been given by many experts who use Duolingo to teach and learn English. According to Krashen (2014) explained that the Duolingo application is a web-based guide students step by step through the order of duty, particularly by translation. The activity in the application is based largely on its translation, dictation, and pronunciation. The law also uses several doctrinal elements to motivate and involve students (Handrianto & Rahman, 2018; Munday, 2016). In addition, White (2014) also states that Duoingo is an online learning program that allows people to take free language courses.

C. Definition of Vocabulary

Learning a new language means learning its vocabulary. Vocabulary can be defined in various ways. Vocabulary is one of the aspects of language that must be learned. Learning vocabulary is very important because people can speak, write, and listen, moreover first of all people need to know the vocabulary. There are many linguist experts have proposed the definition of vocabulary.

According to Richards and Renandya (2002) vocabulary is an essential part of language fluency and provides much of the basis for how learners speak, listen, read, and write. According to Thornbury (2002), vocabularies are the fundamental aspect of language learning as language is based on words. It means that teaching vocabulary is the first activity that teachers should do before they teach students. If students know
more vocabulary, they will learn English easily. Without learning vocabulary, the students will be impossible to communicate effectively. In line with, Thanh Huyen and Thi Thu Nga in Rouhani and Purgharib (2013) stated that vocabulary is a relation between the elements of four language skills, including listening, speaking, reading and writing in foreign languages.

D. Vocabulary Mastery

According to Anderson, vocabulary mastery involves knowing the meanings of the words, whether the students can match the word they get with a synonym, a dictionary-type definition or an equivalent word in their own language. In here, he underlined that vocabulary mastery deals with the ability of the students on understanding the English word. How far the students know about the meaning of the English word, and how far can they relate it to their first language. On the other hand, Richard in Meara (1996) has an assumption about the vocabulary mastery:

1. Knowing a word means knowing the degree of probability of encountering that word in speech or print. For many words, we also know the sort of words most likely to be found associated with the word. It means students know whether they got a high frequency word or not, because if it is a high frequency words they are strongly advised to master the words, since they often find the words in the future.
2. Knowing a word implies knowing the limitations imposed on the use of the word according to variations of function and situation. After getting a new word, it is better for the students to know the limitation of the word and how to use it depends on the different situation.
3. Knowing a word entails knowledge of the underlying form of word and the derivatives that can be made from it. Students are recommended to know the different form of the word, for example norm, normal, normally, normalness, and normality, abnormal.
4. Knowing a word means knowing many of the different meanings associated with the word. Students are suggested to know the synonym and antonym of the word.

RESEARCH METHODOLOGY
A. Research Design

The methodology used in this research is the collaboration between quantitative and qualitative method. According to Aliaga and Gunderson (2002), quantitative research explains and investigates the phenomenon of social problems by collecting numerical data which is analyzed using mathematically based methods such as statistics in particular. Matthews and Ros (2010) state that quantitative research methods are basically using data sets that are organized and can be displayed numerically. Therefore, this study will use quantitative research that aims to determine the percentage of students’ perceptions of the use of Duolingo an application for
vocabulary mastery and the Qualitative method is the method that intends to understand phenomena about what is experienced by research subject such as behavior, perceptions, motivations, actions, etc.

**B. Method of Data Collection**

The data of this study were collected using a questionnaire as instrument. A questionnaire is a way to collect data from respondents and usually consists of several written questions related to the topic. Babbie (2010), explains that a questionnaire is defined as a set of questions and other types of question items designed to collect information suitable for analysis. Based on Arikunto (2010), there are two types of questionnaires, open and closed a list of questions. In an open questionnaire, respondents can answer questions given by the researcher in his own words while the closed questionnaire allows Respondents just choose the available options.

**C. Participant**

To get the data, the researcher are make a questions in Google form in order to know English students’ perception about the use of Duolingo Application towards vocabulary mastery. The participants of this research are 30 Students of UIN Prof. K.H Saifuddin Zuhri Purwokerto.

**FINDING AND DISCUSSION**

Duolingo is one of the applications that believe can help the students increase their vocabulary mastery. However vocabulary is one of the fundamental aspects in English communication. If students did not have vocabulary, they automatically cannot speak English. Because of that, one of the aims of this application is to help students increase their vocabulary mastery. Because of this aim, the researcher want to know students’ perception about the use of Duolingo application towards students' vocabulary mastery at UIN Prof. K.H Saifuddin Zuhri Purwokerto by collected the data by questioner bellow.

**Table1. Students’ Perception about Duolingo Application.**

| Statement                                                                 | Agree  | Strongly Agree | Disagree | Strongly Disagree |
|---------------------------------------------------------------------------|--------|----------------|----------|-------------------|
| 1. Duolingo application is very easy to use in English learning process.   | 73,3%  | 23,3%          | 0%       | 3,3%              |
|   |   |   |   |   |
|---|---|---|---|---|
| 2. | Duolingo application can help me master English vocabulary. | 73.3% | 26.7% | 0% | 0% |
| 3. | Duolingo application allows me to learn vocabulary anytime and anywhere. | 66.7% | 26.7% | 6.7% | 0% |
| 4. | The Duolingo application can motivate me to remember the new English vocabulary because in this application I can determine the targets that I must achieve. | 90% | 10% | 0% | 0% |
| 5. | I like the Duolingo application because I can adjust the level of questions to my abilities. I can choose beginner or advanced features. | 73.3% | 23.3% | 3.3% | 0% |
| 6. | I believe by using the Duolingo application, I can increase my English vocabulary. | 76.7% | 16.7% | 3.3% | 3.3% |
| 7. | Duolingo application provides some simple sentences related to our life. So, the vocabulary can be reminded and can be applied in our life. | 76.7% | 16.7% | 3.3% | 3.3% |
| 8. | Duolingo application has interesting learning concept that is look like when I was playing game and it make me feel exciting, enjoy, and motivated to increase my English vocabulary. | 73.3% | 26.7% | 0% | 0% |
| 9. | I like using Duolingo application because if I choose wrong answer, Duolingo give me the correct answer. So, I can get new vocabulary. | 76.7% | 20% | 3.3% | 0% |
| 10. | Duolingo application is the correct application that can be used by teacher as medium to increase students' vocabulary. | 70% | 26.7% | 3.3% | 0% |
Based on the table above, the first indicator in this research is the statement about "Duolingo application is very easy to use in the process of learning English". A total of 23.3% of respondents answered strongly agree with the ease of use of the Duolingo Application, 73.3% agree, and 0% to disagree and strongly disagree. We can know, that most of the respondents feel easy to use the Duolingo application in their English learning process. They have positive statement when they were using Duolingo application, because they can learn English vocabulary using application easily, so it give them better understanding in comprehend the material.

The second statement is "The Duolingo application can help me master English vocabulary". A total of 26.7% of respondents answered strongly agree with this statement. Then as many as 73.3% of respondents answered agree, and 0% answered disagree and strongly disagree. So, it can be concluded that the Duolingo application can help students master their English vocabulary. This is supported by the Duolingo application feature that combines several aspects of gamification in learning English, so that it can motivate and involve students in learning. So, learning English Vocabulary will be very easy.

The third statement is “The Duolingo application allows me to learn vocabulary anytime and anywhere”. A total of 26.7% of respondents strongly agree, 66.7% agree with this statement. There are 6.7% of respondents disagree and 0% strongly disagree. So, it can be said that this Duolingo application allows students to learn vocabulary anywhere and can be used anytime. But, there are some students who do not agree with this statement. In my opinion Duolingo application can be accessed anytime and anywhere, so teacher and students is not difficult to apply it in indoor learning or outdoor learning.

The fourth statement is about the impact on student’s motivation. At this statement, the students agree that Duolingo application can motivate them to remember the new English vocabulary because in this application they can determine the targets that must them achieve. Based on the data 90% of the students agree and 10% of them strongly agree. It means that all of them has positive perception and agree that this application can motivate them. If they have good motivation we can’t neglected that their spirit to study will be increase. So, they will increase their vocabulary mastery.

Then, the fifth statement is about the reason why students like Duolingo Application. 73.3% of the students agree, 23.3% strongly agree that they like Duolingo Application because they can adjust the level of questions based on their abilities. Although there are 3,4% of them who disagree. In this learning process, the level of questions actually will affect students’ confident in learning process. If there is the level stage, the students can choose the level based on their ability. So they will not feel afraid to try answer the question and feel more enjoy.

Then the sixth statement is about the degree of the users’ believe on their vocabulary improvement. Based on the data, there are 76,6% of the students agree, 16,7% strongly Agree, 3,3% disagree and 3,3% strongly disagree about that statement.
So, there are more users that agree than disagree about this statement. Because 93.3% of them agree and believe that Duolingo Application can increase their English vocabulary, and only 6.6% students disagree with that statement. It means that students feel enjoy in using this application. Because they feel enjoy, so they have high degree of beliefs that Duolingo application can increase their vocabulary.

The seventh statement is about the Duolingo application that provide some simple sentences and vocabulary. Based on the data, 76.7% of students agree, 16.7% strongly agree, 3.3% disagree, and 3.3% strongly disagree. Then from the data, the students agree that Duolingo applications is has a simple sentences and vocabulary. The simple sentence can make students easy to understand the question and not will bored before try to answer the question. As we know, that the longer sentences in the question, the more students feel bored and did not want to answer the question.

Then, the eighth statement is about the interesting learning concept. Which is Students agree that Duolingo application can motivate students to increase about English vocabulary because in this application they can feel exciting, enjoy like playing a game. Based on the data, 73.3% of the students agree and 26.7% of them strongly agree. It means, the students has a positive perceptions and very enjoy to learn this application that motivate them with some of several learning strategies by interesting games.

The ninth statement in this research is the reason why students like the Duolingo application "I like using Duolingo because if I choose wrong answer, Duolingo give me the correct answer". As many as 76.7% respondent are agree and 20% respondent answered strongly agree with this statement. There are 3.3% of respondent disagree and 0% strongly disagree. It can be conclude that Duolingo is very helpful for students to know the correct answer from the wrong answer so that student can improve their vocabulary and motivate to learn more often.

The last statement is question about utility of Duolingo application for teacher as a medium to increase student’s vocabulary. As many as 70% respondents are answered agree and 26.7% respondents are strongly agree. There are some respondent disagree 3.3% and 0% strongly disagree. So, Duolingo application is very useful for the teacher and in learning activities as a medium while teacher in the class. In addition, the student can increase their vocabulary continuously and effectively.

**DISCUSSION**

Based on the first statement, it showed that most students agree that the Duolingo application is easy to use in the process of learning English. This is in line with Munday (2016) which stated that the Duolingo application is very interesting for students to learn English because the Duolingo application has an attractive appearance so that it makes students happy when students learn it is not boring. This means that the Duolingo application is easy to use and friendly media to use in the teaching and learning process.
Then, the second statement showed that most of the students agree that the Duolingo application can help them to improve their vocabulary. It is supported by Nursyamsiah (2001) regarding the use of Duolingo Application Media in Improving English Vocabulary Mastery which proves that the use of Duolingo application has increased students' English vocabulary mastery. It can be happened because Duolingo application is easy to use and the procedure is simple, so Duolingo can be used for all ages. It means that Duolingo is easy to use and more interesting, so it will be comfortable as a medium if we use in daily life for learning vocabulary mastery.

The third statement showed that most students agree that the Duolingo application can be used to learn English vocabulary anywhere and anytime. This is in line with Eggen and Kauchak (2012) who provide a cognitive dimension of perception by looking at perception as a process when people attach meaning to certain experiences. They explain that after people pay attention to certain stimuli in sensory memory, processing continues with perception. Perception is very important because it affects the information that enters working memory. Background knowledge in schema form influences perception and subsequent learning. Thus, students who have background knowledge about using Duolingo, they think that Duolingo can be a medium for learning English whenever they need it.

Then Duolingo application actually has the impact on students' motivation. In this research, the students agree that Duolingo application can motivate them to remember the new English vocabulary because in this application they can determine the targets that must they achieve. It is in line with Habibie (2020) who stated that in his Research All participants. Participants felt the impact on the urge to learn felt more interesting and enjoyable after getting to know and try the duolingo application. He also assumed that the application of Duolingo was quite effective in influencing students' motivation to learn English.

Next, the students also state the reason why they like Duolingo Application. They state that they like Duolingo Application because they can adjust the level of questions based on their abilities. In this learning process, the level of questions actually will affect students' confident in learning process. It is accordance with Yana (2021) who found that because of Duolingo Application, students feel confidence to talk to their teachers, and even possible to speak to English native speakers. It is because Duo Lingo Application is not only for language learning but also to level up English Proficiency there is the level stage, the students can choose the level based on their ability. So they will not feel afraid to try answer the question and feel more enjoy.

Then the sixth statement is about the degree of the user. In this research we found that students believe that Duolingo Application can increase their English vocabulary. It is in line with Ajisoko (2020) who found based on the data of post-tests score showed that there was development on learners’ score. The mean score of post-tests is greater than pre-test (57.45>79.15). It means that learners’ vocabulary mastery has been improved. It means that our research have same finding that Duolingo Application can increase students’ vocabulary. It is accordance with Kessler and Matt...
(2021) study, the students’ perception towards the activities in Duolingo application believe that using the Duolingo Application is free of mental and physical effort. So, the learning activities in Duolingo is beneficial and enjoyable for them. Then because they feel enjoy they believe that their vocabulary mastery will be improve.

The seven statement state that the Duolingo application provides simple sentences and vocabulary. Duolingo application teaches us about simple sentence and vocabulary that can be understand by students. However, Duolingo application is give simple sentences and vocabulary were in line with Anna et.al (2016) who state proved that Duolingo contributed to increase their student’s vocabulary, pronunciation and grammatical structures. Besides, they also found there was a significant increase in students’ confidence and effectiveness of themselves when trying to communicate in English. The student may be able to have a simple conversation because Duolingo provides them with some simple sentences related to everyday life. Besides, the rest of the students give an opinion that the topic in Duolingo is related to everyday life.

The eight statement state the interesting learning concept. Which are the Students agree that the Duolingo application can motivate students to increase about English vocabulary because in this application they can feel exciting, and enjoy playing a game. In line with Mulya and Refnaldi study (2016) who agree that Duolingo has interesting features that can increase students’ interest and motivate them to learn English. Another finding also proved that educational game applications have positive effects on students’ ability. It is congruent with Hyungsung (2012) who states that the positive effect of educational games is it can promote students’ academic achievement through special subject education which supports by selected games. It means that this application could help the students’ learning process which contributes to the students’ achievement.

The ninth statement state that most of student like using Duolingo application because if we choose the wrong answer, Duolingo give us the correct answer. In addition, they can get new vocabulary and improve their ability. It is supported by Pramesti and Ani Susanto (2020) who stated that the wrong questions will continue over and over until we can answer them correctly. The student will also remember the material because it is repeated. It means that Duolingo application gives control for the students to keep learning by giving them motivation with its engagement and gives a solution for each problem.

For the last statement, it showed that most of students agreed that Duolingo application is the correct application and very helpful for the teacher as a medium to increase student’s vocabulary. It is accordance with Anisa Dwi Tiara, M. Arinal Rahman, and Ciptro Handrianto (2021) which stated that Duolingo's application is believed to help learners to produce positive changes in improving the new vocabulary that must be taught and studied. The teacher can recommend to the student that this application is very helpful, enjoyable, and have several learning activities especially for increasing the vocabularies. Therefore, this application is very interested for learners to improve
their ability of vocabularies and can used to help the student's difficulty in learning English.

CONCLUSION

In conclusion, the purpose of this study actually to determine the students' perception of UIN Prof. K.H Saifuddin Zuhri Purwokerto about the use of Duolingo application to increase their vocabulary mastery. In this research, we found that the students have a positive perception about the use of Duolingo application towards English vocabulary mastery. They have positive perception because the Duolingo application has many benefits to support students' learning processes, especially in increasing their vocabulary. This application can improve students' English vocabulary skills and motivate them in learning English. Students also find it easy to learn English vocabulary through the Duolingo application. Furthermore, most of the students agree that using the Duolingo application in mastering English vocabulary is an interesting way.

Many students agree that Duolingo application can be easily used anytime and anywhere. Duolingo application as a tool used by students, not only improves vocabulary but also provides instant feedback for students where this application can correct wrong answers made by students. This shows that the features of the Duolingo application with many different features motivate students to learn, it is easy to understand the material and improve their mastery of English vocabulary. Whereas, the weakness of this application are requires an internet connection, and quite difficult for the students in desolate area. The last, the researcher recommends both the teacher and students using the Duolingo application as medium in the teaching and learning process because Duolingo application has many benefits to improve student's vocabulary mastery.

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