"The Effectiveness of Duolingo in Improving Students' Speaking Skill at Madrasah Aliyah Bilingual Batu School Year 2019/2020"

THESIS

BY

HAFIFAH (21802073041)



UNIVERSITY OF ISLAM MALANG POSTGRADUATE PROGRAM ENGLISH LANGUAGE TEACHING STUDY PROGRAM JANUARY 2021

ABSTRACT

Hafifah. 2020. The Effectiveness of Duolingo in Improving Students' Speaking Skill at Madrasah Aliyah Bilingual Batu School Year 2019/2020. Thesis, English Education Department, Postgraduate Program, Islamic University of Malang, Advisor: Dr. Mirjam Anugerahwati, M.A.

Key words: Duolingo, Speaking Skill

There are many applications used in learning English. One of the applications of technologies that popular is *Duolingo*. *Duolingo* is a great example of straightforward language application. *Duolingo* can help learners to improve their speaking skill in communication. By using *Duolingo* application as an effective media to improve the students' speaking skills.

The objective of this study was to get an empirical evidence of the effectiveness of using *Duolingo* application to improve students' speaking skill. The method of this study was quasi-experimental study. The population of this study was the tenth grade of Madrasah Aliyah Bilingual Batu. The samples are consists of 20 students from X IPS 2 as the experimental class and 20 students from X IPS 1 as the controlled class. The experimental class was taught by using *Duolingo* application and controlled class was taught without using *Duolingo* application.

The research instruments were questions and answers tests for pre-test and post-test, and rubric for speaking. The data of this study was analyzed by using t-test. Based on the statistical calculation with the significance level 5%, it showed that $t_0 = 2.881$ is higher than $t_t = 1.672$. The result of the study was indicated that the use of *Duolingo* application can give a positive effect to improve students' speaking skill at the tenth grade students in MA Bilingual Batu school year 2019/2020. Therefore, it can be concluded that using of Duolingo application as a media technology may implemented in the schools.

ABSTRACT

Hafifah. 2020. Keefektifan Penggunaan Aplikasi Duolingo dalam Meningkatkan Keterampilan Berbicara Siswa di Madrasah Aliyah Bilingual Batu Tahun Pelajaran 2019/2020. Tesis, Jurusan Pendidikan Bahasa Inggris, Program Magister, Universitas Islam Malang, Pembimbing: Dr. Mirjam Anugerahwati, M.A.

Kata Kunci: Duolingo, Keterampilan Berbicara

Ada banyak aplikasi yang digunakan dalam belajar bahasa Inggris. Salah satu aplikasi teknologi yang populer adalah Duolingo. Duolingo adalah contoh yang bagus dari aplikasi bahasa langsung. Duolingo dapat membantu pelajar untuk meningkatkan keterampilan berbicara mereka dalam komunikasi. Dengan menggunakan aplikasi Duolingo sebagai media yang efektif untuk meningkatkan keterampilan berbicara siswa.

Penelitian ini bertujuan untuk mendapatkan bukti empiris tentang keefektifan penggunaan aplikasi Duolingo dalam meningkatkan keterampilan berbicara siswa. Metode penelitian ini adalah penelitian eksperimen semu. Populasi dalam penelitian ini adalah siswa kelas X Madrasah Aliyah Bilingual Batu. Sampel terdiri dari 20 siswa dari X IPS 2 sebagai kelas eksperimen dan 20 siswa dari X IPS 1 sebagai kelas kontrol. Kelas eksperimen diajar dengan menggunakan aplikasi Duolingo dan kelas kontrol diajar tanpa menggunakan aplikasi Duolingo.

Instrumen penelitian berupa tes tanya jawab untuk pre-test dan post-test, dan rubrik untuk berbicara. Data penelitian ini dianalisis dengan menggunakan uji-t. Berdasarkan hasil perhitungan statistik dengan taraf signifikansi 5% menunjukkan to = 2.881 lebih tinggi dari tt = 1.672. Hasil penelitian menunjukkan bahwa penggunaan aplikasi Duolingo dapat memberikan efek positif untuk meningkatkan keterampilan berbicara siswa kelas X di MA Bilingual Batu tahun pelajaran 2019/2020. Dengan demikian dapat disimpulkan bahwa penggunaan aplikasi Duolingo sebagai media teknologi dapat diterapkan di sekolah.

CHAPTER I

INTRODUCTION

In this chapter, the researcher presents background of the research, question of the research, objective of the research, significances of the research, hypothesis of the research and definition of key terms.

1.1. Background of the Research

As English becomes the global language in the world, people's demand for mastering English gradually increasing. The widespread need for English as a second language or foreign language needs a considerable pressure on the educational resources of many countries. In countries where English is regarded as a foreign language not as a second language, for example in Indonesia, it may be an important school subject and necessary to pass an examination in English to enter a higher education. According to Richard, Platt, and Weber (1985:93), as a foreign language, English has a role as a subject in school but used as a medium of instruction in education not as a language of communication in government, business, or industry within country.

English becomes a compulsory subject taught by most school in Indonesia, starting from kindergarten, elementary school, junior high school, senior-high school until university. It covers the four basics language skills: listening, speaking, reading and writing. As the main purpose of learning English is to interact and communicate with other people, speaking skill take the highest place as the most important skill to master (Bright & McGregor, 1970). Speaking, which is said to be one of the productive skills of language, is an essential part in learning language. As stated by Spratt, Marry, *et. al.* (2005:34), speaking is a productive skill, like writing which

involves using speech to express meanings to other people. Therefore, speaking involves not only an active or productive participation but also receptive participation.

Speaking becomes a crucial skill that should be acquired by the learners. It is also as a part of people's daily life. According to Lazarton (Kurniawati, 2013), speaking is an active interaction between speaker and listener as the process of building and sharing meaning involving the components of pronunciation, grammar, vocabulary, fluency and comprehension.

In this era, technology grows rapidly in most aspect of life. People try in using technology to find a lot of information through the existence of technology for instance by using internet. People can browse any information and news through internet. The development of English is said to the expansion of technology also. Technology can change the way people work, learn, communicate and spend the spare time. It also helps to lead the way in improving the teaching and learning process in school. Today, many schools have applied technology as a learning media in their teaching and learning process. The implementation of English curriculum considers the use of technology. It is an essential part to support the teaching and learning process in order to make it more enjoyable and interesting. So far, audio, video, movie, cassette, and power-point presentation are used in teaching and learning process.

In addition, it will be one of the teaching and learning instructional that was used either in the class or in outside class.

According to National Research Council (1995, p. 51), technology offers new ways of teaching and learning, and provides new ways for all students in education to be

openly accountable to parents, communities, and students. The use of technology can facilitate the learner's achievement since it provides interesting media to learn English to become more fun and effective. Technology has a crucial role in teaching and learning process. Bajcsy (2002, p. 81) says that technology in teaching and learning is more variety. He suggests that technology can effort to help organize and provide the material for students, help students, teachers, and parents interact, anytime and anywhere. In addition, technology can facilitate and assist in the authentication and prioritization of internet material and simulate, visualize, and interact with scientific structures, processes, and models. For instance, the students are able to find the additional materials from the Internet. Dudeney and Hockly (2007) states that the Internet access is becoming increasingly available to learners. Younger learners are growing in technology era, and English as an International language is being used in technological context. Therefore, it is substantial to employ the technology as the media to support the teaching and learning materials without the limitation of time.

The use of internet or technology is popularly mentioned as CALL (Computer Assisted Language Learning). As Warschauer (1996) states that it is an approach to teaching and learning foreign languages through which the computer and computer-based resources such as the internet are used to present, reinforce, and assess material to be learned. And nowadays, the use of internet can be more easily accessed through mobile devices. Another term, MALL (Mobile Assisted Language Learning) has come to its existence to supply independent and effective learning. Kukulska-Hulme and Shield (2008) define MALL as an access to wireless device network, which will communicate with such networks increase, the utilization of

mobile devices in supporting learning becomes more common. MALL deals with the use of mobile technology in language learning (Miangah & Nezarat, 2012). Since mobile technology develops, it creates new opportunities for improving learning experience of students at all level of education. It can facilitate students to access educational resources without need to be present at the working environment. Mobile devices are a useful tool and a way to access last recent events in the classroom (Calimag, Miguel and Conde, 2014).

There are many applications used in learning English. One of the applications of technologies that popular is Duolingo. In Wikipedia web site, "Duolingo" uses a heavily data driven approach to education. At each step along the way, the system measures which questions the users struggle with and what kinds of mistakes they create. Then it aggregates those data and learns from the patterns recognizes". To ease the process of learning English language, and supported by a very advanced technology currently, the young learners who want to learn English with practical and fun applications might use Duolingo to practice English. Practices are important to enable students to master English skills, and exercise is very important since it is made as a tool for measuring and evaluating student's ability in achieving the material, in which is given. When doing exercises someone should examine whether the exercises are relevant or not. The researcher focuses on the exercises of speaking-vocabulary presented in Duolingo Free Language Learning Application.

Duolingo Free Language Learning Application can be downloaded on the mobile phone or PC/Laptop; therefore, the user can practice anytime and anywhere. Duolingo uses a strategy of game mechanics to create the incentive to keep students

learning. It is built very similarly to a computer game, where the participants have to pass certain levels. The following lessons are unlocked after a learner has mastered the previous material or level. Users can complete a variety of exercise types including multiple choice, writing and speaking through a microphone.

Duolingo deliberately brought the concept of play and learn in order to feel more comfortable and easier to use by all occupations. We certainly have felt tired doing daily routines and for a flash, we will relax while learning a foreign language.

The research aims to offer convenience to learn English with the use of multimedia learning applications using Duolingo, which can be used to practice independently and can be used in place of study, course, school, home or everywhere.

Two previous studies were conducted by Mahmudah (2015) and Bermudez (2017). The similarity of these two researches are about using Duolingo application these two previous researches are Mahmudah used descriptive qualitative approach and the field of her research was pronunciation. Bermudez also used qualitative approach. Her research was about showing the possibility effectiveness of using Duolingo as a complement for English lessons. Whereas, in this research the researcher wants to know the effectiveness of using Duolingo application in Madrasah Aliyah Bilingual Batu and how Duolingo can improve the students' speaking skill. The researcher will be used quantitative approach with quasi experiment type.

In this study, the researcher will use the Duolingo application to improve the students' speaking skill at tenth grade of Madrasah Aliyah Bilingual Batu. The researcher wants to conduct a research entitled "The Effectiveness of Duolingo in Improving Speaking Skill at the Tenth Grade of Madrasah Aliyah Bilingual Batu, School Year 2019/2020".

1.2. Question of the Research

The researcher formulates the research question as follow:

Is Duolingo application effective to improving speaking skill at the tenth grade of Madrasah Aliyah Bilingual Batu?

1.3. Objective of the Research

To find out the effectiveness Duolingo application to improving speaking skill at the tenth grade of Madrasah Aliyah Bilingual Batu.

1.4. Hypothesis

Hypothesis is a statement of the research assumption about the influences of two variables that the researcher plans to test within the framework of the research.

The hypothesis of this study was prepared as a tentative answer for research problem stated previously. In this case, the alternative hypothesis (Ha) is read as follows:

There is a significant difference in students' achievement in speaking skill between students who are taught by Duolingo application and students who are taught without Duolingo at the tenth grade of Madrasah Aliyah Bilingual Batu.

Because of statistical computation, the alternative hypothesis needs to be changed into null hypothesis (Ho) as follow:

There is no significant difference in students' achievement in speaking skill between students who are taught by Duolingo application and students who are taught without Duolingo application at the tenth grade of Madrasah Aliyah Bilingual Batu.

1.5. Definition of Key Terms

In order to make the readers get easier in understanding this study, here the researcher will give the definition of some key terms that important to be understood as the following:

1. Effectiveness

"Effectiveness refers to the intervention's ability to do many good than harm for the target population in real world setting". (Schillinger, 2010, p. 43). In this research, effectiveness is expected outcome on how Duolingo application is effective to improving speaking skill at the tenth grade of Madrasah Aliyah Bilingual Batu.

2. Speaking skill

Speaking skill is one of four language skills that should be mastered by the students as means for communication. So, as the teachers we should always explore and examine the student' ability in speaking. In this study, speaking means that the teacher will record all student or student's action (performance of conversation).

3. Technology

"Technology in teaching and learning as an enabler and suggests that technology can work to help organize and provide structure for material to students; help student, teachers, and parents interact, anytime and anywhere" Bajcsy (2002, p. 81)

In this research, technology means an application that can be used as English learning medium. It can be installed in PC, laptop, and smartphone. It is free language-learning application that called Duolingo Application.

4. Duolingo

Duolingo is a free language-learning application. To ease the process of learning English language, and supported by a very advanced technology currently, the young learners who want to learn English with practical and fun applications might use Duolingo to practice English.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

This research was conducted to get the empirical evidence about the effectiveness of Duolingo in improving students' speaking skill at MA Bilingual Batu in academic year 2019/2020. Based on the experiment, which has been processed in teaching speaking by using Duolingo application in experimental class and without using Duolingo application in control class. Then, the researcher analysed the data of experiment and continued to conclude the research.

Based on the research findings and discussion in Chapter IV, teaching speaking by using Duolingo application is appropriate to be implemented in the class. It can be seen from the students' average score of post-test in the experimental class 80.00, which was higher than the control class 74.25. In data analysis, it can be proved that the t_0 (2.881) is higher than the t_{table} (1.672) in the significance level of $\alpha = 0.05$ (5%). In addition, it can be seen from the comparison between the averages gained score of experimental class was 13.75 points, higher than the average gained score of control class was 8.75 points. Therefore, the $t_0 > t_{table}$ which means that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected.

Therefore, the researcher concluded that the answer of research question is proven that Duolingo application is effective to improve students' speaking skill at MA Bilingual Batu.

5.2. Limitations

The researcher had a few limitations during this research. First, the researcher apologizes from the results of the previous empirical studies about Duolingo application are not enough in the literature to prove this expectation. Further research are needed to expand the current research. Second, during the treatments in the experimental class, the students must have a mobile phone individually and it can be used in the class after getting permission from headmaster.

5.3. Recommendations

In view of the importance and impact of using Duolingo application on teaching and learning in classroom, the researcher is suggested that schools at senior high level may be provided opportunity of training for teachers in order to know the media use in classrooms effectively. The teacher should introduce many kinds of applications that can be applied in teaching and learning. It can also make the students easier and more interested to learn English. The education institution or schools should put more emphasis on the learning activities for teacher in addition to theory i.e. teaching methods and instructional technology. Therefore, it can be concluded that using of Duolingo application as a media technology may implemented in the schools.

REFERENCES

- Arikunto, S. (2002). *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta: Rineka Cipta.
- Bajcsy, R. (2002). *Teaching and learning*. In Visions 2020: Transforming education and training through advanced technologies. Washington, DC: U.S. Department of Commerce. http://www.technology.gov/reports/TechPolicy/2020Visions.pdf
- Bermudez, N.M.M. (2017). Duolingo: A Useful Complementary Mobile Tool to Improve English as a Foreign Language Learning and Teaching. Columbia: Universidad Nacional Abierta y a Distancia.
- Bright, J. A,. & McGregor, G. P. (1970). *Teaching English as a Second Language*. London: Longman Group, Ltd.
- Calimag, Miguel & Conde. (2014). *Ubiquitous Learning Environment Using Android Mobile Application*. International Journal of Research in Engineering & Technology, Vol.2, Issue 2, Feb 20104, 119-128.
- Creswell, J.W. (2003). Research design: Qualitative, Quantitative. And Mixed Method Approaches Second Edition. Sage Publications. Inc.
- Dudeney, G. & Hockly, N. (2007). *How to teach English with technology*. Edinburgh Gate: Pearson Education Limited.
- Fulcher, Glenn. (2003). Testing Second Language Speaking. London: Longman.
- Garcia, I. (2013). "Learning for free while translating the Web. Does Doulingo work? (2009). International Journal of English Linguistics; Vol 3, No 1; 2013 ISSN 1923-869X E-ISSN 1923-8703 Published by Canadian Center of Science and Education URL: http://dx.doi.org/10.5539/ijel.v3n1p19
- Ghashmari, A. (2014). "Rethinking the use of technology in ESL classrooms" Shortpaper. University of Akron. http://gozips.uakron.edu/~ag81/philosophy.pdf
- Harmer, Jeremy. (2001). The Practice of English Language Teaching (Third Edition). London: Longman.
- Heaton, J.B. (1975). Writing English Language Tests: A Pratival Guide for Teachers of English as Second or Foreign Language, London: Longman Group Limited.
- ----- (2004). Writing English Language Tests. New York: Oxford University Press.
- Herlina A. 2014. *The Utilization of Technology to Improve English Speaking Skills*. Journal for the Study of English Linguistics. 2 (2):19-24.
- Hetrakul, K. (1995). *The Second Language*. It is accessed on March 08, 2020 from http://eserver.org/courses/spring95/76-100g/KavinHetrakul.html.
- Hughes, D. (2007). Public speaking. Jakarta: Gramedia Widiasarana.
- Iskandar. (2009). Metodologi Penelitian Kualitatif. Jakarta: Gaung Persada Press.
- John W. Creswell, Educational Research: planning, conducting, and evaluating quantitative and qualitative research, (Pearson Education, Inc. 2012).
- Kamus Besar Bahasa Indonesia, (Jakarta: Pusat Bahasa, 2008).
- Krashen, S. (2014). Does Duolingo "Trump" University-Level Language Learning. International Journal of Foreign Language Teaching 9 (1): 13–15.

- Kurniawati, Indah. (2013). The Effectiveness of Circle the Sage to teach Speaking Viewed from Students' Self-Confidence. Surakarta: Sebelas Maret University.
- Ishikawa, Lynn, Kelley, H. and Burr, S. (2016). *The Duolingo English Test and Academic English*. Duolingo Research Report DRR-16-01 June 29, 2016 (6 pages) englishtest.duolingo.com/resources. Accessed on March 2020.
- Mahmudah Laila (2015). An Analysis of Pronunciation ExercisesiInDuolingo Application and Its Contribution as English Learning Media. Thesis. Semarang: English Education and Teacher Training Faculty Walisongo State Islamic University Semarang.
- Miangah, T. And Nezarat, A. (2012). Mobile-Assisted Language Learning. International Journal of Distributed and Parallel Systems (IJDPS) Vol.3, No.1, January 2012, pp. 309-319.
- Mauricio, Natanael&Gioanni, Bayron., "Duolingo: An Useful Complementary Mobile Tool to Improve English as a Foreign Language Learning and Teaching" Thesis (Universidad Nacional Abierta y a Distancia, Colombia, 2017)
- Munday, P. (2016). The Case for Using DUOLINGO as Part of the Language Classroom Experience. RIED. Revistalberoamericana de Educación a Distancia 19 (1)
- Nunan, David. 1991. Language Teaching Methodology. London: Prentice Hall.
- ----- 2003. Practical English Language Teaching: First Edition. New York: McGraw-Hill Companies, Inc.
- Richards, J., & Renandya, W. (2005). *Communicative Language Teaching Today*. RELCP. Singapore: SEAMEO Regional Language Center.
- Richard, J., Platt, J., and Weber, H. (1985). Longman Dictionary of Applied Linguistic. England: Longman.
- Schillinger, D. (2010). An Introduction to Effectiveness, Dissemination and Implementation Research. USA: Clinical Translational Science Institute Community Engagement Program, University of California San Francisco. Accessed from-http://ctsi.ucsf.edu/files/CE/edi_introguide.pdf. On August 06, 2020.
- Spratt, Pulverness, & Wiliam. (2005). *The TKT Course*. New York: Cambridge University Press.
- Sudjana. (2005). Metode Statistika Edisi ke-6. Bandung: Tarsito.
- Sugiyono. (2012). *Metode Penelitian Pendidikan, Pendekatan Kuantitatif, Kualitatif, dan R&D.* Bandung: AFABETA, cv.
- Syakur. (2000). *Language Testing and Evaluation*. Surakarta: Sebelas Maret University Press.
- Vasselinov, R & Grego, J. (2012). Doulingo Effectiveness Study. Queens College University Journal. 1(01):1-24.
- Warschauer M. (1996). Computer Assisted Language Learning: An Introduction. In S. Fotos (ed), Multimedia Language Teaching Tokyo: Logos International, pp. 3-20.
- Watkins, Peter. (2007). Learning to Teach English: A Practical Introduction for New Teachers. England: Viva Books Private Limited.
- Wijaya, R. (2016). Improving vocabulary through Doulingo application in call at the seventh grade of SMP: Lampung University, U-jet Vol, 5 No 1

Wipf, J. A. (1998). Educating Listening Comprehension and Speaking Proficiency of Prospective Student Teachers in German. Los Angeles: MLA Convention.