THE IMPLEMENTATION OF DUOLINGO AS MEDIA TO IMPROVE STUDENTS' ENGLISH LANGUAGE SKILL AT IAIN LANGSA

THESIS

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STATEMENT OF APPROVAL

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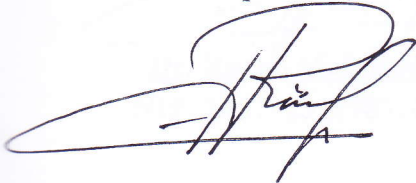*Sarjana Pendidikan* (S.Pd) in English Education

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STATEMENT OF CERTIFICATION

THE IMPLEMENTATION OF DUOLINGO AS MEDIA TO IMPROVE STUDENTS' ENGLISH LANGUAGE SKILL AT IAIN ZAWIYAH COT KALA LANGSA
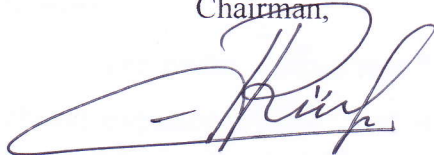
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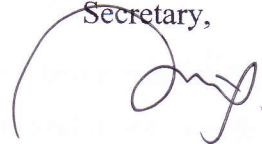Saturday, October 07th,2017 M
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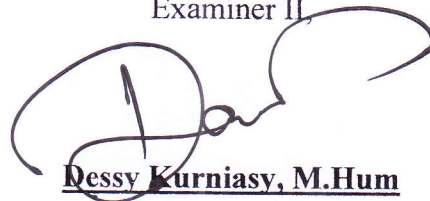**Dr. Razali Mahmud, M.M**
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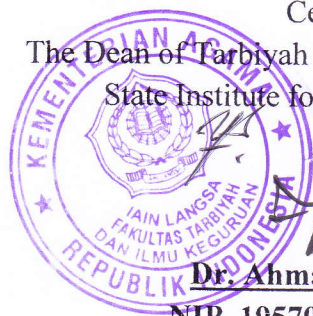
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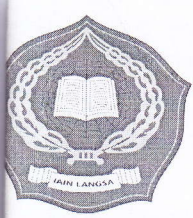**Shafrida Wati.MA**

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This thesis entitled: "**The Implementation of Duolingo as Media to improve Students' English Language Skill At IAIN Zawiyah Cot Kala Langsa**". On this occasion, I would like to express my deep gratitude to my beloved parents who support and encourage me to finish my study and the thesis.

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The writer realizes that the thesis is still far from being perfect. That is why always expected criticism and suggestions from readers and users in order to make improvement.

ABSTRACT

Due to the evolution of technology, this study focuses on the use of technology in order to promote language learning. Duolingo is one of the modern applications that facilitate acquiring an international language. Hence, the study aims to confirm the effectiveness that Duolingo helps learning for the students at IAIN Zawiyah Cot Kala Langsa. It is a survey research including questioner. It is also a case study that involves 26 participants who used Duolingo to learn English simultaneously for two months. The participant are male and female college student whose age are 19 to 25 years old, and they live in Langsa, Aceh, Indonesia. After collecting the data, they were analyzed and described to have the final results. At the end, the results displayed that Duolingo can be an effective learning application for the students at IAIN Zawiyah Cot Kala Langsa, but it has limitation. Thus, it is recommended to continue of Using Duolingo for advanced levels as well as for English language learners.

Key Words: **Effectiveness, Duolingo, English, Language Learning, Technology**

CONTENTS

CHAPTER I

INTRODUCTION

A. Background of Study

The use of the application to enhance the students' language acquisition seems ineffective in the classroom and outdoor at IAIN Zawiyah Cot Kala Langsa. The students have been concerned by using the application called "Duolingo" since it has been concerned for the last one year. It is proved that the students who used English as international language seems uneasy in the strategies to learn English. Moreover they found their own ways getting closed with an online learning application and the students often get confused learning it whether comprehending language skills in English or making effective strategies of the skills that can be reached.[1] English proficiency among learners in IAIN Zawiyah Cot Kala Langsa is still low and inefficient. .

This is concerned among English Foreign Language (EFL) learners whose English proficiency is below par. The learners of English as foreign language struggle in getting their ideas across English other than their own mother tongue language due to various reasons. Time constraint and the large number of students in a language classroom are the two main reasons why English seems difficult or learning through applications as media in English are ineffective in this study. As a result, students are influenced by uncontrolled anxiety when they perform

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[1] Journal of Interdisciplinary Research In Education (JIRE) ISSN 2232-0180 Vol. 5, Issue 1, 2015, pp. 43-67

English in front of their classmates and in public. It assumes that Students at IAIN Zawiyah Cot Kala Langsa are still exposed in using English because they are frightened of making mistakes while learning in front of their classmates. It can be the fear of being laughed and the fear of being judged. Hence, the students remain silent at the times, refuse to learn. This can be concerned among EFL learners in particular conditions at IAIN Zawiyah Cot Kala Langsa. The learners are not confident in using English because of two main reasons: afraid of making mistakes and feeling shy and etc. This lack of practice for English learners will affect their study performances and communication in learning English as foreign language. Hence, additional practice in a learning environment is recommended to solve these problems, because students would be able to practice their English skills at their own pace and time and without worrying about the audience and the supporting mobile phone technologies can make the learners seem easy to learn. The Duolingo was introduced to help students, employees and teachers across the faculties at IAIN Zawiyah Cot Kala Langsa as online media in order to improve English language as international language for EFL learners at IAIN Zawiyah Cot Kala Langsa. Duolingo is a web-based self-paced language teaching program that guides students step-by-step through a sequence of tasks, largely based on translation. It is clearly aimed at conscious learning, although some subconscious acquisition of language is inevitable, as students hear and read samples of the language. [2]

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[2] Mason, B.,Vanata, M., Jander, K., Borsch, R., & Krashen, S. (2009). The effects and efficiency of hearing stories on vocabulary acquisition by students of German as a second foreign language in Japan. The Indonesian Journal of English Language Teaching, 5 (1), 1-14.

The way we teach and learn languages can be changed with the technology; it has provided teachers with new facilities and approaches to teaching that can stimulate learners' interest while challenging their intellect. Likewise, it has provided learners with plenty of creative and authentic resources that can facilitate the process of acquiring a new language. Similarly, technology contributes to language learning in two important ways – it provides teaching resources such as podcasts, vodcasts, online dictionaries, weblogs, WebBoards etc. As well as enhances learning experiences, that is, increases access to the target language and opportunities for learners to work at their own level and pace, and choose when and where to learn. They add that technology has the potential to engage learners in language skills, an important process in foreign language acquisition.

Among the technological innovations, devices such as smart phones, tablet computers, laptops, MP3 and MP4 players, iPods, occupy a special niche since they offer learners the possibility to study anytime, anywhere and at their own convenience, an experience called "Duolingo". In fact, more than a decade ago believed that M (mobile)-learning, a subset of e-learning, would fashion the future of learning. Similarly, Wagner stated that "the mobile revolution is finally here. Wherever one looks, the evidence of mobile penetration and adoption is irrefutable no demographic is immune from this phenomenon,". Mobile-assisted language learning (MALL) is indeed a rapidly growing field, one that promises to have an enormous impact on second language teaching and learning Smartphones

are a prominent example of ubiquitous learning devices, and they are now a crucial part of many people's lives.

Data analysis is central to Duolingo's success. Using the app, you work your way through a series of lessons in one of the six languages available. Each lesson is comprised of a series of questions, requiring you to type out translations, respond to voice prompts, identify which pictures relate to specific words or sentences, and select answers from a multichoice list. The iPhone app and other Smartphone devices also have voice recognition, allowing you to test the way you speak the language. That functionality is not yet available on Android but is coming soon. At each step along the way, Duolingo pays attention to which questions you struggle with, which ones you fly through, and what sorts of mistakes you make. It then aggregates that data with the vast swathes of other data is processes and learns from the patterns it sees. That information informs which questions it delivers to you, and at what times. In other words, it is constantly, dynamically tailoring your lessons so that you are being challenged in the most relevant ways. At a broader level, Duolingo also tests new features with sample groups of its users to see if they improve learning scores before rolling them out to a wider user set.

Since it launched its private beta in late 2011, Duolingo has found out a range of fascinating things about how we learn languages. For instance, von Ahn says, Italian women learn English better than do Italian men. Perhaps counter intuitively, men have proven better than women at learning food-related language, including all the cooking stuff, throughout the world. Women, meanwhile, are

better at the sports material. Duolingo has also found that when it comes to teach English to Spanish students, it's better to teach the word "it" later in the course than other personal pronouns, such as "you," "I," "he," and "she." That's because in Spanish, there is no "it" – only "he" and "she." By delaying the introduction of "it," the Spanish students stayed with the course for longer and learned better.

The efficacy of Duolingo's data-driven approach has been backed up by a study that the company commissioned. Conducted by professors at City University of New York and the University of South Carolina, the study found that 34 hours on Duolingo was equivalent to the value of a first-year college semester, which takes in the order of 130+ hours. The same study found that Rosetta Stone users took between 55 and 60 hours to learn a similar amount. At the end of the day, you can either teach things because you have some sort of philosophy of how to teach things, or you can do things scientifically," von Ahn says of what makes Duolingo's approach different. He compares the change to how Google Ads made advertising efficacy measurable. What you care about is the outcomes, he says.

Von Ahn may not apply a data-driven approach to his teaching at Carnegie Mellon because he doesn't have enough data. Most of his classes have about 30 students, when you need at least 30,000 users before you start noticing any patterns. But his work in the classroom has informed his work on Duolingo. For example, the company decided to do quite a bit of hand-holding with its lessons. From his experience, von Ahn has found that most people are not motivated enough to take a self-directed approach to learning. Ultimately, von Ahn expects

data to take on an even more important role in the evolution of online education. "Online education may not take over offline, but it will certainly take over a fraction of it," he says, adding that the movement is just getting started. "The first step was taking what we know in the offline world and put them online, but clearly that cannot be the best possible way to do things online." [3]

In conclusion, the full potential and outcome of using this online application have not been empirically explored toward students in The Department of English at Iain Langsa. The case that the researcher considering the students are as inactive learners using Duolingo as media. Therefore, researcher raised the title "**The implementation Of Duolingo As Media To Improve Students' English Language Skill At Iain Zawiyah Cot Kala Langsa**".

B. Statement of The Problems

The aim of this study is to see the effectiveness Duolingo as part of online application towards the students in improving English language skill at IAIN Zawiyah Cot Kala Langsa, with the idea that students can practice anywhere and anytime, in a manner adapted to their level and needs, so as to ideally complement and augment what is covered in class and outdoor. With this aim, the instructor wanted to answer these questions:

1. Is it effective learning English Language through Duolingo Application for IAIN Zawiyah Cot Kala Langsa students?

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[3] Luis von Ahn, "Duolingo", accessed from http://www.pando.com/Pando Say what Duolingo points to data's important role in online education.html, date 07 july 2017 time 03.00.

C. Objective of the study

Based on the formulation of one the research question above, the objectives of this study are to evaluate how Dualingo is implemented as media to improve students' language skill as an effectiveness application and helpful media toward the students throughout the departments at IAIN Zawiyah Cot Kala Langsa.

D. Scope and Limitation

This study focused only on implementation Dualingo as online learning media to improve students' English language skills at IAIN Zawiyah Cot Kala, with an application which it provides four skills at to improve students 'ability in English language and their reasons how the students practicing English with Duolingo. The location of this research study was at IAIN Zawiyah Cot Kala Langsa.

E. Terminology

Duolingo (/ˌdjuːoʊˈlɪŋgoʊ/ DEW-oh-LING-goh) is a freemium language-learning platform that includes a language-learning website and app, as well as a digital language proficiency assessment exam. Duolingo offers all its language courses free of charge. As of November 2016, the language-learning website and app offer 68 different language courses across 23 languages, with 22 additional courses in development. The app is available on iOS, Android and Windows 8 and 10 platforms with about 150 million registered users across the world.[4]

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[4] Guliani, Parul. "Duolingo Looks To Dominate The Mobile Education Market With New Flashcard App TinyCards". Forbes. Retrieved 2017-02-17.

F. Significant of Study

1. Theoretically

The result of the study gives the high achievement to the students in English proficiency through the application. The research informs the readers that the Duolingo is an effective application which is recommended to be used to learn English language instantly.

2. Practically

The result of this study is expected to be effective for the students either in learning environment or implemented as media for online learning. It evaluates The students to the application which it provides language skills of each lessons in English and it can be used efficiently as part of a learning environment, with the idea that students can practice anywhere and anytime, in a manner adapted to their level and needs, so as to ideally complement and augment what is covered as online media to practice English .

CHAPTER II

THEORITICAL FRAMEWORK

The theoretical framework for this study was based on the application of a data-driven approach in applications as presented above. The use of online questioner to measure student's interest as an effective application with high frequency of errors are categorized as the problems faced by English learners in playing the software (Duolingo).

A. Review of Literature

1. Duolingo

Duolingo is a free language-learning website. It is designed so that as users progress through the lessons, they simultaneously help to translate different websites and other documents. It was developed to translate the web and as the side effect there are millions of people learning a foreign language. "Duolingo builds a world with free education and no language barriers. Users are able to learn languages for free while simultaneously translating the web. Duolingo is a free app created by Luis Von Ahn and Severin Hacker in November 2011. Its slogan is "Free language education for the world." According to its website, it has more than 30 million registered users. It offers several languages for English speakers as well as others for non-English speakers. Duolingo was launched last year by Carnegie Mellon University Professor Luis von Ahn and CMU doctoral student Severin Hacker. As mentioned in the previous chapter, the system of Duolingo is based on recaptcha. It all started in 2005 at Carnegie Mellon

University where the graduated student Luis von Ahn had an idea of a game. This game was one of the first examples of crowd sourcing, he had people looking at images and labeling them to improve image search. The game was acquired in 2005 by Google and renamed Google Image Labeler. Then in 2007 already titled Professor von Ahn had another idea. He realized that the people waste their time by typing the captchas and it could be beneficially used for digitizing books. This reCAPTCHA project was bought by Google again in 2009. [5]

2. The Duolingo Developers' Team

As can be noticed from the previous part of the text, the founder of Duolingo is Luis von Ahn together with his graduated student Severin Hacker. The current developers´ team is now composed of 27 people including mainly the software engineers and language experts. Some of the important names of the early founders are Antonio Navas, Vicki Cheung, Marcel Uekermann, Brendan Meeder, Hector Villafuerte, and Jose Fuentes Luis von Ahn and Severin Hacker together with the other members of the team started to work on Duolingo and developed the effective language learning portal. During the formation of Duolingo in its present form they faced a great deal of challenges. According to their utterances the biggest challenge was the multilingual nature of Duolingo, since the users with the keyboard layouts intended for English cannot easily generate special characters used in other languages such as the umlaut in German. Therefore the developers embedded a considerable amount of effort to improve

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[5] "Duolingo", accessed from http://www.techcrunch.com/definition of the application.html, date 07 juli 2017 time 04.00.

the interface including developing a fast and intuitive virtual keyboard for generating these characters.[6]

3. The Founder's Professional Resume

Luis von Ahn was born in 1979 in Guatemala City where he also grew up. He attended the American School of Guatemala, from which he graduated in 1996. He studied and obtained a Ph. D. from Carnegie Mellon University in 2005.[7] His accomplishments in the field have been recognized worldwide including through a 2006 MacArthur Fellowship and by Spanish-language Foreign Policy magazine, which last year named him as the most influential new thought leader of Latin America and Spain. In 2000 he succeeded with the already mentioned early work on captchas. This brought him a large interest among the public. In July 2006 he gave a talk at Google on Human Computation – crowd sourcing, where he was watched by over a million viewers. In 2007 von Ahn invented reCAPTCHA, which is a new form of captcha that also helps to digitize books. This product was sold to Google in 2009 and is currently used by over 100 000 websites and is transcribing over 40 million words per day. In 2011 he was awarded the A. Nico Habermann development chair in computer science (this award is given to a junior faculty member of unusual promise in School of Computer Science every three years). Von Ahn is now an entrepreneur and an

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[6] "Duolingo" Accessed from http://www.technologyreview.com/ translating the web while you learn/page 2/.html, date 10 juli 2017 time 13.00.

[7] Jašková, Veronika. *Duolingo as a new language-learning website and its contribution to e-learning education: diploma thesis*. Brno: Masaryk University, Faculty of Education, Department of English Language and Literature, 2014. Diploma thesis supervisor Ailsa Marion Randall, M.A.

associate professor in the Computer Science Department at Carnegie Mellon University. He was also awarded a MacArthur Fellowship (the „genius grant") in 2006 and later he obtained more different awards. He has also been named one of the 50 Best Brains in Science by Discover Magazine. From 2011 is von Ahn working on Duolingo. With his full attention devoted to Duolingo and the concept of a universally readable Internet was communicated to the public that the world should not expect to see any new ideas out of him soon.[8]

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In the desktop version, the app has different areas:

a) The "tree", which contains skills, each represented by a node that changes color from grey (indicating that a skill has not been started), to a color like red, blue or green (you have started the lessons within the skill), to gold (you have mastered all the lessons and vocabulary for that specific skill). Note that the gold color can "turn" back to another color if the algorithm

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[8] Ashton kutcher "Stories business" Accessed from http://www.post-gazette.com/ date 8 july 2017 time 04.00

[9] Luis von Ahn, "Duolingo", accessed from http://blog.duolingo.com/Pando Say what Duolingo points to data's important role in online education.html, date l 07 July 2017 time 03.00

of Duolingo establishes that you need to go back and review those nodes because you have forgotten the vocabulary or because enough time has elapsed. Duolingo has not, up to now, published the content of the tree. The only way to find out is to complete the tree yourself. Thankfully, in the case of Spanish, there is a Google Doc, with its content. These are the components of the tree:

    i. 66 Skills. Some examples of these are: Food, Animals, Plurals (for beginning nodes) to Modal Verbs, Subjunctive Past, or Past Imperfect (for the more advanced nodes).

    ii. 329 Lessons. Each skill has several lessons, which can range from one to eleven. Each lesson covers about seven or eight words. Each completed lesson gives 10 XP (points).

    iii. 1571 Words.

b) Words: A list of the words the user has studied or already knew. Each word is accompanied by a strength bar, which indicates if the word is still strong in your memory or if it is time to practice again, according to Duolingo's algorithm. You can also review these words through flashcards.

c) Activity: Duolingo works similarly to a social network site. You can follow other students, and other people can follow you. The activity stream shows not only what you and the people you follow accomplish in Duolingo (levels opened) but also if you or they have made a comment in the discussion board. All the people you follow and you yourself appear

on a "leader board" list, which shows the XP (Duolingo points) that you obtain weekly. This is reset every Sunday at 7:00 pm Eastern Standard Time (United States).

d) Discussion: In this area, users can post discussions about topics that interest them. A discussion will also be created if there are questions about any of the activities completed during the lessons, in which case users negotiate meaning among themselves. The discussions are divided according to the language you study, and there are also general discussion areas, like the one recently opened for educators (this will be discussed in more detailed later). Discussions are voted up or down (similar to places like *Reddit*), so the more popular ones are more visible. It is also the area where the creators or moderators of Duolingo post important messages to the community.

e) Immersion: This area is for more advanced students. Anyone can upload a public document in any language and the community can start translating it. Users can suggestions for better translations or can just make general comments.

f) Users get XP points for translating either their own documents or helping with other documents already uploaded to the site. They also get lingots (see below for a definition) if their translations are up-voted by other users. The Lingot Store: "Lingots" are the currency that Duolingo uses to reward its users. You get lingots when you complete a skill node or maintain a streak of days using the site. Users can also "reward" other users with

lingots in the Discussion area. With lingots you can buy several things, like a "freeze streak" which will allow you to miss a day and not lose your streak, some silly outfits for the Duolingo owl (the program's mascot), or, more important in my opinion, a progress quiz, which shows you on a scale of 0 to 5 where you currently stand in your studies.

The mobile version of Duolingo does not have these many areas. It is limited to the tree and the Lingot Store, although you still can see there the leader board with information about the people you follow. The app also informs you of your streak. You can set up daily goals (the minimum being 10 XP per day), and the app will send you reminders and notifications if your goal has not been completed that day. For this study, I have only used the tree area with the skills and lessons. The following description applies to this area exclusively: students can perform different types of activities on Duolingo. Once you click on a skill, you are presented with the available number of lessons for that particular skill. Each lesson lists the words (up to eight) that it will review. In addition to the lessons, each skill can be just reviewed in general, once you have completed all the lessons or have tested out of that skill. That is called "practice" or "strengthening skills" within the app in order to differentiate it from regular lessons. You can chose general practice in order to review areas that the program considers have not been practiced, rather than just one specific skill. Or you can choose to do practice within one skill once you have completed all the lessons.

There is a symbol in each lesson that indicates the "strength" of that skill with a maximum "grade" of 5. Once you reach five, the symbol for the skill

becomes gold. Following is a list of the most common activities in each lesson (it may not be comprehensive, since the app is constantly being modified):

i. Write a vocabulary word after seeing a picture that represents it.

ii. Translate a sentence into your native language. When words are first presented, the user can hover over the word to see its meaning.

iii. Translate a sentence into the language being studied.

iv. Write a sentence that you hear. There are two speeds, normal and slow, which you can click to hear the sentence more clearly.

v. Pronouncing a sentence. Through voice recognition software, the app can detect whether your pronunciation is correct.

vi. Match pairs of words.

vii. Put a series of scrambled words in order.

viii. Choose from three sentences in the target language to see which ones fit the sentence in the native language.

Activities are presented sequentially, and the lesson "extends" itself if you get wrong answers, as indicated by the strength bar at the top of the lesson. If there are no mistakes, it takes seventeen short activities like the ones described above to complete a lesson. This generally takes five to ten minutes. This time may vary, however, since new activities are added if you make mistakes. Duolingo incorporates some gamification elements to motivate and engage learners. Some examples of this are the lingots as awards given when you complete a skill; the inclusion of a weekly leader board, where you can "compete" against friends to see who has the highest XP; a symbol of a flame next to your

name with the numbers of days of your streak on the site; the aforementioned strength bar, which appears when a user is completing a lesson, to indicate how close they are to finishing it, etc. These elements make the app more enjoyable, although the exercises themselves are quite traditional, as we have seen.

4. Educator's Area in Duolingo

Recognizing that many educators were using this tool with their students, as evidenced by the numerous discussion boards posting to that effect, Duolingo opened a new area in its website in January 2015, dedicated to teachers who want to use the platform with their classes. The new area, https://dashboard.duolingo.com/, allows educators to create "groups" or classes. This generates a link, which can be sent to students so that they can join the group. In the dashboard, the teacher can monitor students' progress in several ways. The dashboard shows the time the student logged in, the lesson or practice he/she completed and the XP he/she obtained. A weekly report is sent by email, which includes all the work students have done during that time. In addition, there is now a dedicated area in the Discussion Forums just for educators' concerns and ideas. This dashboard did not exist when the study described here was conducted, and the instructor had to follow each student to see how many lessons they had completed. This new dashboard should facilitate the work of educators immensely and make this tool much more useful, as suggested in this study.

5. Duolingo as an educational tool for online and face-to-face courses.

As we can see, even though Duolingo is presented as a very modern-looking gaming app, in reality most of the activities necessary to complete the lessons are very traditional and are heavily based on translation, dictation, and pronunciation. fact, there is already some criticism of the app within the language learning research community. Duolingo provides written lessons and dictation, with speaking practice for more advanced users. It has a <u>gamified</u> skill tree that users can progress through and a <u>vocabulary</u> section where learned words can be practiced. Users gain "experience point" (XP) as they learn a language, such as when they complete a lesson. Skills are considered "learned" when users complete all the lessons associated with the skill. Users win one point for each correct answer, and lose one for each error, and validate the lesson when they reach 10 points. In an earlier version, users would start with four "<u>lives</u>" on early lessons and three on later lessons, a "life" being lost with each mistake.

Duolingo also includes a timed practice feature, where users are given 30 seconds and twenty questions and awarded a skill point and seven or ten additional seconds (time depends on the length of the question) for each correct answer. This timed practice feature is only available after purchase in the Lingot store for ten lingots, the currency the site uses. As the goal of Duolingo is to get people to learn the language, each skill (containing between 1 and 10 lessons) has a "strength bar" that corresponds to the computer's estimate of how strongly certain words or constructions still exist in the user's memory. After a certain

duration of time, strength bars fade, indicating a need for a user to refresh/re-study that lesson, or to "strengthen weak skills." Courses can teach upwards of 2,000 words. Duolingo uses a data-driven approach to lesson planning. At each step along the way, the system measures which questions the users struggle with and what sorts of mistakes they make. For each language, Duolingo also has a "Progress Quiz" feature. This is an extended quiz that you can purchase in the Lingot store for 25 lingots. It measures your language learning progress, with 5 being the perfect score. This quiz is not adjusted to your level and it only tests your overall language competence.[10]

6. The Translations Resulting from Duolingo

When considering this whole system an important question regarding the created translations may arise. The following lines indicate the strengths and weaknesses of this translation system. To teach the users a language Duolingo uses a combination of computer exercises and real-world texts from the Internet. Each learner inputs their own translation, which they consider being the best translated, Duolingo merges the best translations and chooses through an algorithm the most correct and common one. As feedback for the users they can search the words if they need clues for their translations and the program automatically recognizes the obvious mistakes. Users' attempts to translate a phrase are later voted on by other users, then Duolingo compiles input from multiple users to make its final translations. In a talk given at a recent conference

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[10] Pilar Munday The case for using Dolingo as part of the language classroom experience v. 19:1, 2016, pp 83-101

at Carnegie Mellon was said that the results "are as accurate as translations from professional language translators."[11]

7. The Available Languages

The languages available on Duolingo are: English, Spanish, Portuguese, Italian, French, German, Russian, Hungarian, Dutch, Turkish. From Hungarian, French, Portuguese, Russian, Italian, German, Spanish, Dutch and Turkish (as a mother tongue) it is possible to learn English. Also it functions vice versa but not equally yet - from English it is possible to learn: Spanish, French, German, Portuguese and Italian. Then there is one more combination – French from Spanish. For the Czech learners it means that they can learn for example German through English so far. The Czech is not available on Duolingo yet. However, this "duolingual" system is more effective because the learners (mainly those whose mother language is different from English) can try to think in English, discuss and deal with things in a foreign language.

Duolingo started with English, Spanish and German. It is necessary to mention that the system of available languages is still in progress and the new languages are still being added. Chinese is planned to offer next time. Due to popularity still new and new languages are required. At the beginning the developers wanted to meet these requirements and add the languages that people were requesting but they realized there were 70 of them. It would be very complicated to add them, so they decided to find a way to let users add new

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[11] Duolingo Accessed from http://www.technologyreview.com/news/423894/translating-the-web-while-you-learn/. Html Date 11 july 2017, time 12:00

languages themselves. There will be a certain model, which would ensure that only one single person wouldn't be able to start a language course, they would need to involve enough people interested and supporting the plan.

8. Methodical Aspects

This chapter describes the system of learning a foreign language through Duolingo. As mentioned in the previous chapters about e-learning methodology, every learning system must have elaborated a certain number of methodological aspects, which ensure the successful learning. These aspects, e.g. monitoring the progress, motivation, feedback, vocabulary and some others are described below.

9. Gradual Progress

Duolingo has an excellent learning strategy because it has very motivating learning system. It 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. 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 exercise types including multiple choices, writing and also speaking through a microphone. Duolingo uses mainly drills and repetitive exercises in the lessons.

10. Learning Vocabulary

There is also a special page to monitor a learner's level of vocabulary. In this page the words with all their forms used during the learning can be seen, the time of the last practice of it and how a learner was successful in using it. It was based on the learners' feedback, so they can easily see the level and size of their

vocabulary and the knowledge of each word. There is a possibility for them to practice words individually and see some sample sentences or more examples of them. In every lesson there is also an overview of the acquired vocabulary. It is possible to see there the individual words, the forms in which these words were used correctly and also how strong in using a word a learner was during completing a lesson.

11. Speaking, Listening and Pronunciation

While browsing the lessons a learner can come across some pronunciation tasks where they are required to rewrite a sentence according to the dictation which they hear, and thereby they develop the listening and writing skills. The dictated sentence can be played repeatedly, a learner can choose from the two options – slower speed of speaking or faster version of it. This system works even vice versa, i. e. a learner is required to read a sentence aloud with the right pronunciation, the sentence is recorded and if judged to be correct the lesson is continuing by the next task, otherwise it must be repeated (of course with the loss of one heart). This is important for development of the speaking skill.

12. Monitoring Progress and Skills

One of the most significant and motivating aspects when learning anything is the possibility to see the success, progress and development. Providing the feedback, evaluate and correct mistakes are the necessary tasks of each teaching subject. This learning project has an interesting way of recording the process is education. Students can learn gradually step by step and monitor their results and

progress. The skill points illustrated as a yellow coin and the words learned illustrated as a letter W in the blue circle can be seen on the right side.

13. The Skill Page

There is a special page focused on monitoring a learner's skill. In this new page, users can learn skill by doing all lessons and master it by translating the real world sentences from a set of skill-related translations. Whenever a lesson is completed, a user can see a list of the words they have learned on the lower part of the skill page (these words can be practiced on the Vocabulary page, as mentioned above). Before this Skill Page existed there were so called skill points to measure the progress. These skill points were divided into two groups: global skill points and skill-related points. Only skill-related points allowed the progress. There is only one type skill point on Duolingo now, these are earned by doing lessons and translations but are only used to measure progress towards the next language level. The Skill Page, however, represents a central element in learning experience and it is planned to be constantly developed to make a learner's progress more visible.

14. Motivation

As can be noticed in the previous chapters, the whole system of learning itself is highly motivating. In particular, it is the model of gradual improvement, monitoring of the learning skills and the feedback. "Users can acquire points for returning to the site every day and Duolingo uses a set of algorithms to re-enforce vocabulary and grammar according to rules that will maximize mental

retention."[12] There are also some minor motivating aspects, e. g. the fast tests allowing to pass a lesson easily, the limited attempts for a lesson or test, which means the limited possibilities to make a mistake during completing a lesson or test. More accurately, in a test there are three possibilities, in a lesson three or more. These are illustrated by the appropriate number of symbols of heart in the upper right corner otherwise the lesson must be done again from the beginning. Then, for instance, there is a possibility to win a golden cup after finishing a lesson.

One of the newest actualization is a Duolingo coach, which like a virtual teacher reminds a learner via email, follows the course of learning, praises or admonishes. The Duolingo creators found a model in the success of personal trainers and this new coach in visual form of an owl also encountered great success among the learners. These aspects may seem to be unimportant, but right these they the ones that make Duolingo different from the others learning portals. This "Duolingo game" made a large amount of people dependent on it (similarly as Facebook, twitter or other social networks). The learning online itself provides a sufficient level of motivation. "A hard thing when learning a language is just staying motivated. A large fraction of people want to learn a language but at end of day it is hard to do it."[13]

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[12] Luis Von Ahn Accessed from http://newtech.about.com/od/Tech-Startups/a/Startup Profile-Duolingo.html Date 9 August 2017, time 11:16 pm.

[13] Duolingo Accessed from http://www.technologyreview.com/news/423894/translating-the-web-while-you-learn/. Html Date 11 july 2017, time 12:00

The extremely high level of motivation, however, is represented by the possibility of interaction and communication. Duolingo as a communicative learning model enables to share the experience and knowledge with peers and friends via social networks. By login with Facebook or twitter to see how learner's friends continue, compare or compete. Also at the homepage when a user is logged there is a possibility to see friends who are following or preceeding a learner. Duolingo itself has its blog where a learner can share his/her experience, opinions, comments or evaluations, and discuss different problems regarding the lessons, learning or language.

The next point regarding motivation is the rapid development of the learning possibilities. At the beginning it was possible „only" to learn online, then it could be uploaded to a computer and available offline, now the high level of motivation especially for the young learners is represented by the availability on modern communication devices. It is possible to learn also on the new technological advances such as iPad or iPhone or tablets and smartphones, which is highly popular these days.

The modification of the visualization for new media was carried out by optimizing the previous stretched phone version to a new application for the bigger screen. Among actualizations there is, for instance, a new side-bar that enables to see immediately the Duolingo statistics or leaderboards of friends. Then, there was also added a landscape mode, which adapts the screen and therefore enables to hold a device in any way possible. Next steps in updating these features are planned, above all already mentioned offline mode and speaking

exercises. For a learner there is an option to ask for a link for their kind of device right through the Duolingo, consequently the link will be send by email.

B. The Description of Duolingo on Mobile Phone

To use the app, learners must download it from Google Play/iTunes and install it on their Android/IOS devices. English speaking learners can choose from a list of 16 languages from French through Irish to Esperanto. Speakers of other languages, however, do not have as many options. An English speaker can choose out of 15 complete courses, four Beta courses (with eight languages being "hatched"), whereas an Indonesian speaker can choose out of only one language is English and a French speaker has the opportunity to learn only 4 languages (with only one other language being hatched). However, compared to similar apps on the market, such as Babbel and Busuu, this is a very wide range of languages that is still growing, mainly due to its unique and broad community of learners and the platform provided for them to contribute to Duolingo. After the learners have selected which language they wish to learn, the app asks them to "pick a daily goal" from the list appearing before them. The daily goals range from *Casual*, through *Regular* and *Serious* to *Insane,* denoting respectively 5, 10, 15, and 20 minutes of practice per day (see Figure 1).
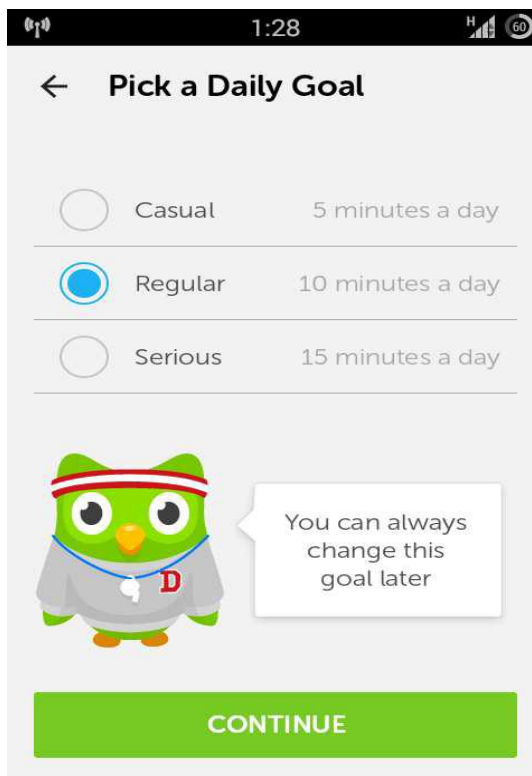
Figure 1. A screenshot of the settings before going into lessons.

The app then inquires whether the learner already knows anything about the language, and if so, it provides the learner with a placement test. If the learner is new to the language, they start with the basics. It is safe to say that Duolingo is a very straightforward app and very simple to use. Without any more questions or even registration for the course, the learner can go right into their first lesson by tapping *Start*. The exercises are of many types:

a. **Translation exercises**, in which the learners translate from the language they know to the language they want to learn or the other way around (see Figure 2);

b. **Matching exercises**, in which learners see a photo and match it with the words given or the other way around (see Figure 3);

c. **Pairing exercises**, in which learners are given an even number of equivalent words from both languages and are asked to pair them (see Figure 4);

d. **Listening exercises**, in which learners listen to a short phrase in the second language and have to type it correctly (see Figure 5);

e. **Speaking exercises**, in which learners have to say what they hear (see Figure 6). Each lesson contains 10 to 15 exercises, a few from each of the categories mentioned above, and learners have a progress bar on the top of their screens. Every time they get an answer right, the bar moves a little bit forward. Every time they get it wrong, the bar does not progress, Duolingo points out the mistake and repeats the question at the *end* of the exercises until the progress bar is completed. Duolingo also allows the learners to go back to whichever lesson they want, whenever they want, even if they have gotten all the answers right.

Figure 2. A translation exercise
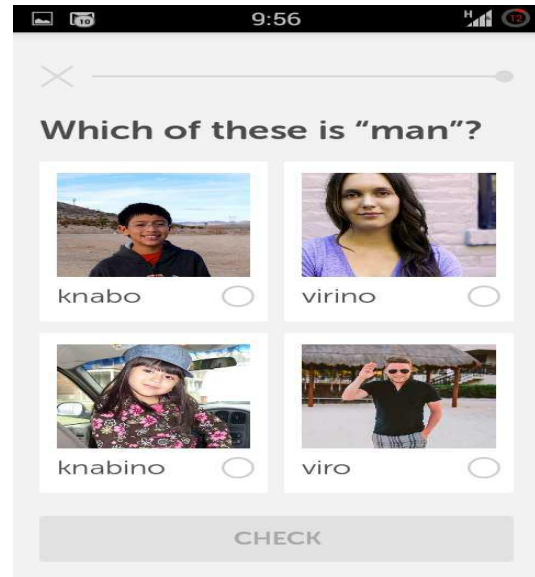
Figure 3. A matching exercise
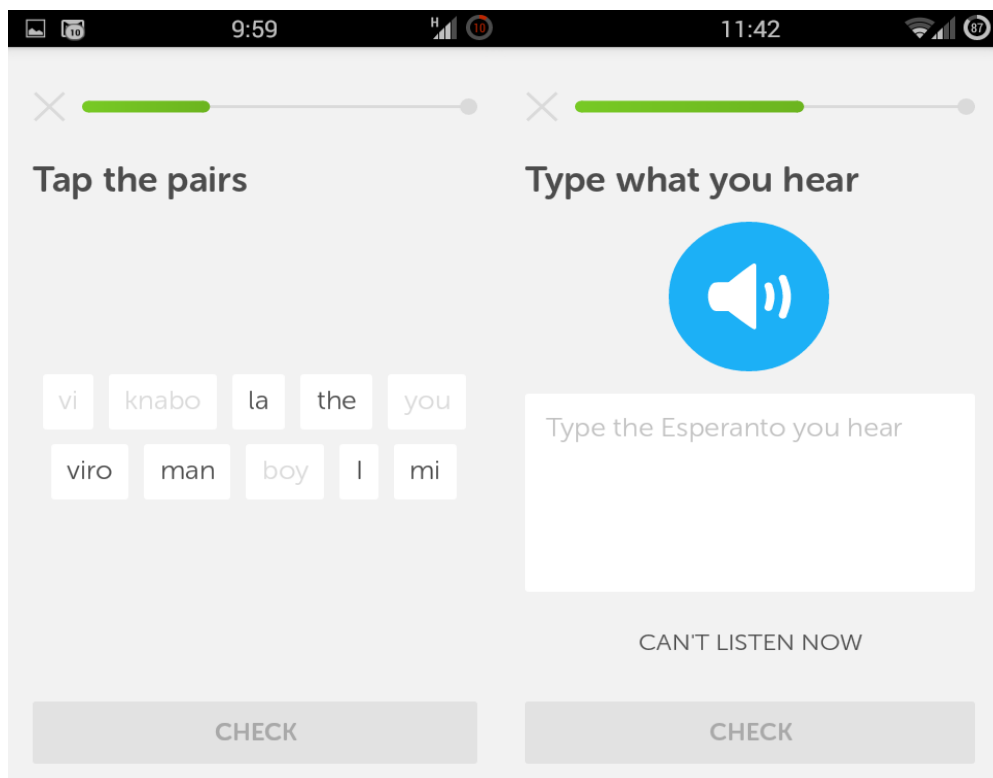
Figure 4. A pairing exercise

Figure 5. A listening exercise
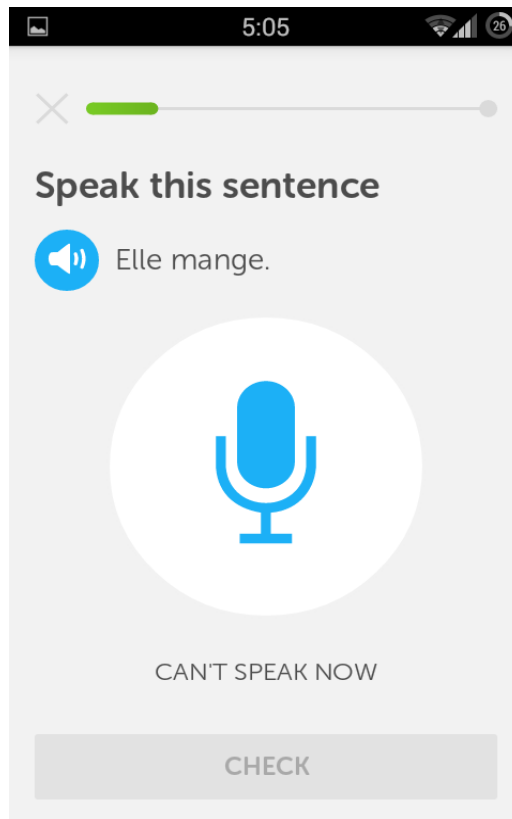
Figure 6. A speaking exercise

When the learners accomplish a daily goal, Duolingo rewards them with surprising and upbeat sounds and pictures, making the learners feel like they have accomplished something big (see Figure 7). If the learners don't sign into their Duolingo accounts to complete their daily goal, Duolingo sends a push notification to their phones and reminds them to do their exercises and meet their daily goals; usually these daily practice reminders are accompanied by promotional statements such as *62.5 million people are learning languages using Duolingo* to spur the learners into action. Duolingo does this by notifying learners at a specific time every day; however, if the learners are busy during that specific time every day (are at work, running errands, sleeping, etc.), they can tell

Duolingo when to remind them, for example 07:00 PM, and if by 07:00 PM they still haven't reached their daily goals, they receive these daily practice reminders.

Figure 7. A screenshot of what comes after you have completed your daily goal

Duolingo is a very smart app. For example, if in a translation exercise, learners type "Im not a teacher" instead of "I'm not a teacher", the app will know this is a typo and not a mistake. The learners pass the exercise but are reminded of the typographical error in their answers. Another interesting characteristic of the app is the *Dumbbell* button that learners can use from the home page of their course. Through this feature, Duolingo offers personalized exercises for each learner, focusing on their weaknesses and improving their skills.

To Duolingo, learners can add friends, and use this feature to communicate and/or compete with them. By finishing a lesson successfully, they gain (10) XPs,

and can see the number of XPs their friends have scored. Moreover, Duolingo users can make the app notify them when someone has more points than them (setting>someone passes me) which can be very motivating. It must be noted that Duolingo does not provide any grammatical explanations. It only immerses the learner in the target language by offering exercises centered on new vocabulary. To learn the grammar, learners must deduce the principles of grammar on their own and through trial and error. Even though Duolingo penalizes the learners for the tiniest of mistakes and points out the most insignificant typos, it does not present the learners with any grammar notes or rules of any kind. Should learners make a mistake in the new language, Duolingo shows them where they have made the mistake, but they will have to work out the rule on their own.[14]

1. Duolingo keeps education free with AdMob native ads

Duolingo is an online education platform that helps millions of people around the world learn languages and also one of the most popular educational apps globally. It was selected by Apple as iPhone App of the Year in 2013, and by Google as Best of the Best for Android in 2013 and 2014. Building, supporting, and expanding on a platform used by that many people can be expensive and complex. Thus, Duolingo faced a profound challenge — how could they monetize a free, beloved product without undermining their mission or hurting the trust of their users.

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[14] Musa Nushi and Mohamad Hosein Eqbali Duolingo: a mobile application to assist second language learning *Teaching English with Technology*, *17*(1), page 89-98.

Duolingo saw ads as a way to build a sustainable business while still placing product value as the most important feature. When implemented properly ads can have a transformational effect on a business's ability to grow. However, if implemented poorly they can be intrusive, poorly designed, erode trust and result in a bad user experience. So to ensure the best user experience, Duolingo chose to use AdMob native ads — a format that allows fully customized ads to be placed in ways that don't disrupt their students' learning flow. Below you can see what the app looked like prior to the update and then after Duolingo integrated AdMob's native ads solution with an improved design

Duolingo had tested different ad formats, image sizes, designs, and messaging with the goal of increasing click through rate (CTR) without hurting user retention. Through these tests, they found that using large images, calling attention to the visuals of the native ad, and fully styling ads to match Duolingo's distinctive visual brand delivered the most striking results. For example, Duolingo saw a 101% improvement in ad CTRs and an RPM increase with a single change by switching from small images to larger ones and emphasizing the call-to-action buttons within the ad unit.

2. Duolingo as a Gamified multiplatform

Duolingo is one of the most popular and well-known language learning platforms [10]. It started as a project on Carnegie Mellon University in Pittsburgh. Its goal is to get people to learn a language of their choice for free. It is available as a web page or mobile app for iOS, Android and Windows Phone systems. To

enhance user's motivation for learning Duolingo applied game mechanics. In Duolingo there is a skills tree that users can advance through and a practice section where learnt words or phrases can be strengthen. The skill is considered as achieved if all associated lessons are completed. Each skill has the strength bar which is connected to internal system that estimates for how long learnt words and language constructions exist in users' memory. After a period of time, strength bar fades out, showing that lesson needs refreshing. What is important, the user does not have access to all skills at the beginning. Only after the currently available skills are achieved, new content is unlocked for the user.

As users advance through lessons they earn *experience points* (XP). After choosing which language user wants to learn, he must decide how much XP he wants to earn daily to meet the *daily goal* . User may choose between one of five daily goals: 1, 10, 20, 30, 50 XP. If he meets the daily goal, the counter known as *daily streak* is increased by 1. Additionally, if he does not earn required amount of XP, streak is turned back to 0. Next important functionality of Experience Points is known as *levelling up*. After earning required amount of points, shown in users profile as *experience bar*, user *levels up*. *Hitting level* means that amount of points required for next level is increased. Another game mechanics implemented by Duolingo is *leader board*, which is activated if user adds a friend to his list. leaderboard shows automatically how much XP user and his friends earn today, in current week or month in a form of a ranking. This functionality allows users to compete and thereby increases desire to learn and beat friends in-game.

Duolingo uses the currency called *Lingot*. In order to earn it, user has to level up, invite new users via social networks, complete a skill or maintain a streak for a total of seven or more days. Lingots can be used to purchase additional skills, bonuses such as streak freeze or customize the appearance of Duo - the owl mascot. User also can give some Lingots to other user as a gift.

Duolingo also applied social aspects of gaming into its structure. There is a board called timeline. It presents all user achievements such as *level up* or *skill achieving badge* with date assigned to it. After earning such badge user can post it on Facebook or other social network such as LinkedIn. As well, users are notified of their friends achievements and invited to comment it. Duolingo also has discussion forum implemented. Users can comment on each aspect of the application, ask questions and report issues with translations. Users have freedom in adjustment of his own avatar as well as in settings the notifications and reminders. Duolingo also offers extensive written lessons and speaking practices for more advanced users. As of January 2016, 16 courses were available in English. Duolingo, as it was introduced, has implemented the game mechanics from each category: autonomy, competence, relatedness.[15]

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[15] Duolingo Accessed from http://www.duolingo.com/ /.html, date 10 juli 2017 time 13.00.

CHAPTER III

METHODOLOGY

A. Research Design

1. Survey Research

This research named a survey research which it is conducted in one instrument (the questioner survey). A survey is a method of collecting data in a consistent way. Survey research is useful for documenting existing community conditions, characteristics of a population, and community opinion. Surveys are a very traditional way of conducting research. They are particularly useful for non-experimental descriptive designs that seek to describe reality. So, for instance, a survey approach may be used to establish the prevalence or incidence of a particular condition. Likewise, the survey approach is frequently used to collect information on attitudes and behavior from the subjects who use *duolingo*. Some issues are best addressed by classical experimental design where participants are randomized to either an intervention group or a control group. In the real world it is not always a very practical design.

The survey is probably the most commonly used research design in health services research and the social sciences. We have all been asked to take part in a survey at some time. As consumers we are asked about our shopping habits, as users of services we are asked for our opinions of services. The survey is a flexible research approach used to investigate a wide range of topics. Surveys often employ the questionnaire as a tool for data collection. This resource pack

considers the use of surveys and questionnaires in health and social care research. There may be good reasons, either ethical or practical, why participants cannot be randomly assigned to a particular intervention. It may also be impossible to identify a control group. Control over the randomization process can also be difficult to achieve. Surveys can take many forms. A survey of the entire population would be known as a Census. However usually surveys are restricted to a representative sample of the potential group that the researcher is interested in, for reasons of practicality and cost-effectiveness.

The advantages of using a survey have internal and external validity. A survey which is based on some form of random sampling technique will produce a sample which is representative of the particular population under study and will produce findings which may be generalized to the wider population. Randomized clinical trials (RCTs) on the other hand often have very stringent inclusion and exclusion criteria which make generalizations of the findings very difficult to apply in the real world.

1. Surveys can cover geographically spread samples. Surveys can be undertaken using a wide range of techniques including postal questionnaires and telephone interviews. This means that participants who are widely dispersed can be accessed and included in the sample.

2. Surveys may have ethical advantages. Since most surveys do not expose individuals to possibly invasive techniques or withhold treatment, they may be considered more ethical, since the individuals included in a study

will merely be exposed to events that occur in the real world and Would have taken place anyway.

3. Surveys are flexible. Surveys can easily be combined with other methods to produce richer data. So for instance, you might want to consider also using diaries, focus groups, or in-depth interviews.

It is important to remember that a survey is a type of research design. In contrast, an interview or a postal questionnaire is a method of data collection. There is a wide range of methods available used for collecting data covering human participants, but the three main methods of collecting survey data from the research are:

Face-to-face interviews

1. face-to-face interviews
2. questionnaires

The selection of the appropriate method depends upon a number of factors, including:

1. access to potential participants/respondents
2. the literacy level of respondents
3. the subject matter
4. the motivation of the respondents
5. resources [16]

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[16] Mathers N, Fox N. and Hunn A. Surveys and Questionnaires. The NIHR RDS for the East Midlands / Yorkshire & the Humber, 2007.

B. Population And Sample

1. Time

The time of research was set up in one month. It is started on 1st July 2017.The students got the day off to study in the campus during experiencing to Duolingo.

2. Research Location

a. Place

The survey research is conducted at IAIN Zck Langsa that located in jalan Meurandeh, kota Langsa, Aceh.

3. Sampling Selection Technique

This research use a random sampling technique to recruit participants, relatively small sample sizes can be used to generate findings which can be used to draw conclusions about the whole population toward the students IAIN Zck Langsa. They are thus a very cost-effective way of finding out what people do, think and want.

b. The Participants

The subjects of the current study are male and female students whose age are 18-22 years old. They are native speakers of Indonesian, and study at IAIN Zawiyah Cot Kala Langsa, Indonesia. Additionally, they have a basic knowledge of English, and has not learned English before being introduced to Duolingo. They were selected due to their basic level of English, and they showed a desire to

learn English via *Duolingo*. In a bid to ensure the validity of the data, the samples chosen are 26 undergraduate students from 1200 as population in four faculties at IAIN Zawiyah Cot Kala Langsa in four skills and experienced learning through learning online software, technology, so that they could give reasons, based on their social experiences, why they should learn English based on the suitable online media to improve their abilities and considered the use of the *Duolingo* as a media to be harder and becomes the problems. To choose the samples, the researcher employed a random sampling technique in which the students are chosen randomly. The reason for choosing this procedure that by using random sampling, the result can be generalized for the entire population.[17]

C. The Procedure Of Data Collection

The instrument of the students were based on online survey questioner which social media a platform to assets student and to find out the result for the valid data. They were created by the researcher depending on the content of Duolingo. The questioner form was sent by researcher to the samples of 26 respondents through online survey from Google doc after two weeks of introducing the application. In collecting the valid data the researcher use some methods to get the result. By using sampling survey to measure the subjects' interest. These are methods as follow :

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[17] Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches, 2nd ed. Thousand Oaks, CA: Sage.

1. Questionnaires

a. Using Closed-Ended Questions

The respondents are given a list of predetermined responses from which to choose their answer The list of responses should include every possible response and the meaning of the responses should not overlap An example of a close-ended survey question would be, "Please rate how strongly you agree or disagree with the following statement: 'I feel good about my work on the job.' Do you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree?" A Likert scale, which is used in the example above, is a commonly used set of responses for closed-ended questions Closed-ended questions are usually preferred in survey research because of the ease of counting the frequency of each response.

Questionnaires are a useful option to consider when conducting a postal survey. They can be cheaper than personal interviewing and quicker if the sample is large and widely dispersed. For any postal survey regardless of the sample size you must allow at least six weeks for the first wave of questionnaires to be returned, and another four weeks for each successive mailing. As with telephone interviewing, a postal survey is useful if your respondents are widely distributed. However, due to the lack of personal contact between the respondent and the researcher, the design and layout of the questionnaire is all important. All mailed questionnaires should be accompanied by a covering letter and include a stamped, addressed envelope. In general, postal surveys tend to have lower response rates

than face-to face or telephone interviews. However questionnaires sent to populations with a covering letter from their general practitioner tend to have very high response rates. As an alternative to mailing the questionnaire, it is possible to hand them out directly to your potential respondents in your chosen sampling frame. For instance you may decide that questionnaires can be handed out directly to parents with young children attending a nursery. Another example might be a health visitor visiting mothers six weeks after birth and asking them to complete a questionnaire. In both cases it is relatively easy to approach respondents in these circumstances and you are likely to achieve a much higher response rate than would be possible with a postal survey. The main drawback of this approach is that your captive audience may in some way be biased. For example, if you carry out a survey of client satisfaction which is restricted only to those patients attending one drop in centre, then the results will be biased towards the views of the most frequent attendees and consequently those people with most problems.

Questionnaires can be either devised by the researcher or they can be based upon some readymade index. If you choose to design your own questionnaire for self completion, then the rules governing the style and layout are the same as those for designing a questionnaire for a postal survey (see above). There are now many pre-existing questionnaires covering a wide range of conditions and therapy areas as well as quality of life instruments and satisfaction measures. Some of these are designed for self-completion; others are designed to be administered by an interviewer. There are obvious advantages to using such questionnaires, including the fact that many of these have already been well

validated and tested for reliability, and there may well be normative data available as a baseline for you to compare your results with.

As described that the research is a survey to find out the effectiveness of the Duolingo improving students' language skill. The problem is to evaluate an efficiency application called Duolingo as media of online learning among the students in Iain Zck Langsa. The consideration of the problem among the students is there is no a match of online learning application and the student's are not too familiar learning English with online media application. In this case, the researcher created survey questioners to the students Online survey with Google docs. Online surveys are useful because they provide opportunities for users to share their views and be counted in a quick and easy manner. Aside from that, those who analyze surveys can use them to help promote ASHRAE membership ideas/programs such as a mentorship program. Creating Online Survey with Google Docs "Forms" which will be the basis of your online survey. All you need is the following:

    i.   A fully working Google account (you can't use Google Docs without a Google account).

    ii.   A prepared list of questions and choices. This can be the mentorship program application form questions provided to you by your RVC MP Chair, or you can create your own list of questions in an Excel spreadsheet or MS Word. Please review the Mentorship Program Guidelines prior to developing questions.

iii.   To access Google Docs go to welcome to Google Docs

(www.docs.google.com).[18]

D. The Procedure of Data Analysis

After acquiring the participant's approval, the following data collection

has begun. The data were collected by using survey sampling. It is a case study

that contains 26 participants whom are observed in depth during the daily learning

sessions. The participants were learning English simultaneously by using

Duolingo. Accordingly, the duration of the study was one month as the subjects

practiced four times a week. Each session was around 30 minutes, so the total was

two hour per week. At the end of the study, the participants have practiced 16

hours. Furthermore, the participants were tested one time during the learning

process. The online questioners sheet was an achievement which is after one

month of studying, but the test was created in simple questions. It is essential to

realize that the goal of the study is to discover how Duolingo can be an effective

application of English language simultaneously for the students by using Direct-

Translation Method. The interview took place at the end of the study to examine

the development of the learner.

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[18] Google Document Accessed from http:// www.docs.google.com//. Html Date 11 july
2017, time 12:00.

CHAPTER IV

FINDING AND DISCUSSION

A. Finding

The satisfaction and the feeling of usefulness in most cases is the most significant aspect from the learners' point of view. At the end of the study the 26 participants were asked to complete an exit survey with questions related above all to their experience with Duolingo through survey from Google doc and manual. The survey of this research are reported in the table based on the percentages of 26 samples and it is concluded automatically, regarding our first question from the aim of this study, "Is it effective learning English language through Duolingo Application?". Tables 1 and 2 show the results in one month of using Duolingo.

Table 1.1 User satisfaction/Google Form Survey Responses

No	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Is it effective learning English Language through Duolingo Application	30 %	70 %	0 %	0 %

If we combine the strongly agree with the agree result we obtained, we observed that 100% found Duolingo Is an effective application. In addition, not too many students seemed to disagree with these statements. The students seemed enjoyed using the application in one month. The researcher also added some questions which they seem to support the research question for the students' interest for learning English with Duolingo. The question is Duolingo an easy to use, helpful, an enjoyable app to practice. These questions are written already in questioner form and the research concluded as a result. Table 2 shows the supporting question for the student's interest in making duolingo an effective application to use.

Table : 1.2 User Satisfaction/Google Form survey responses

No	Question	Agree	Strongly Agree	Disagree	Strongly Disagree
1	Duolingo was easy to use	30 %	70 %	0 %	0 %
2	Duolingo was helpful to learn English	30 %	70 %	0 %	0 %
3	I enjoyed learning English with duolingo	80 %	0 %	20 %	0 %
4	I am satisfied with Duolingo	50 %	30 %	20 %	0 %

Based on the table 2 above, the researcher observed that 10 students have high interest in practicing English through Duolingo, therefore, If we combined it

again the result of strongly agree and agree. The students agreed that the use of the application was easy and the result got from the questioner survey was 100% and the similarity found it helpful and it is still encouraging that over 100 % of the students still found the app helpful. 80 % enjoyed using it and 50 % were satisfied with the application.

However, Over 20 % of the students seemed disagree in enjoying the application and it is similarly effected to the students' satisfaction. The next percentages are concluded based on Questioner form that the researcher gave it directly to the students. According to 16 samples who completed the survey question that given directly. The results counted that it also has the similarity to the students who wrote their answer on their survey sheet. 93.75 % found that Duolingo is effective application in learning English language. It showed on the table 3

Tabel 1.3 Manual Responses of 16 students

Question	Strongly Agree	Agree	Disagree	Strongly Disagree
Is it effective learning English through Duolingo Application?	40 %	53.75 %	0 %	0 %

The next question is a self direct learning from 26 students who sent their responds through emails and automatically made the percentages as the result in using the application. it showed on the table 4.

Table 1.4 Self Direct Learning/survey questioner via online

Will you recommend Duolingo as online media to improve your English Language skills?		
yes	No	maybe
80 %	0 %	20 %

We observe here the same differences than before. Students seemed much more inclined to do more lessons than the required ones (some of them even did lessons in other languages as well), and most of them believe that they may use Duolingo in the future without any prompt from a course. Most students, on the other hand, did not complete extra lessons and do not think they will continue using Duolingo, although if we combine the Yes with the Maybe, it indicates that more than 90% of the class thinks it is a possibility, Even though, it is almost reached to 100 %. The survey to the students also included the question "How did you access Duolingo?", since I wanted to gauge the popularity of the mobile options, the phone or tablet, as opposed to the browser version. Students could click on all that applied. The following table presents the results.

on the table 1.5 access modality.

How did you access Duolingo?		
1	Phone	70 %
2	Web	0 %
3	Tablet	70 %

From this table, we see that more than half of students in IAIN Zck Langsa used their mobile phones or tablets at some point. Over 22.2 % appeared to also

use the web desk version more often, but that may have had to do with the fact that in the web version, Duolingo allows you to do a quick practice to turn a skill back to gold, and this was what they needed to do for this class. In any case, based upon their written responses and these results, it is obvious that having the ability to do homework on your mobile devices is something preferred by the students.

In conclusion, the writer made the valid data overall by using likert scale as follow :

a) 6 Respondents who answered Strongly Agree with the score(4) : 6 x 4 = 24

b) 20 Respondents who answered Agree with the score(3) : 20 x 3 = 60

c) No respondent who answered Disagree with the score (2) : 0 x 2 = 0

d) No respondent who answered Strongly Disagree with the score (1) : 0 x 1 = 0   Total   : = 84

The ideal score of a question intended to respondents :

a) The highest Score :   4 x 26 = 104 (Strongly Agree)

b) The lowest Score   :   1 x 26 = 26 (Strongly Disagree)

Score interpretation of Observation   :   (84/104) x 100% = 80,76%

Based on the explanation above that over 80 % found that Duolingo is effective application for English learning process. The learners feel satisfied and engaged. The percentages covered up that Duolingo is acceptable as a media to improve student's language skills at IAIN Zawiyah Cot Kala Langsa. Lastly, all of the students were asked how the use of Duolingo in learning could be improved. Many students said that they liked it the way it was. Some mentioned that the

skills they were reviewing in Duolingo did not correspond with what was seen in class and thought that they should be better aligned. Others also suggested doing the lessons in class, maybe for five minutes every day and the students suggested that the requirement be made less stringent and count XPs rather than requiring five skills turned to gold per week, so that students could enjoy it more. [19]

B. Discussion

In this research, I have tried to see if adding Duolingo to improve students' Interest in learning English can give students a new tool for learning English. I studied the use of Duolingo among English learners at IAIN Zck Langsa with different pedagogical goals. In one course, the aim was simply to complement the lesson, while in the more advanced group, the goal was to have students review basic vocabulary and grammar that they should know at that level. Based upon the results in the survey and the aims of this study, students appear to find Duolingo as an effective application, and supporting feed backs such as an easy-to-use, helpful, and enjoyable app to practice English; they seem to like it more than regular, book based homework because of the convenience it provides; they like the fact that it can be accessed in different formats, particularly through mobile access; and lastly, they also enjoy its gamification aspects.

I believe that this app is also successful because of the way the lessons are presented, with short prompts that are varied and with different skills interleaved.

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[19] Febria Sri Handayani Accessed from http://www.Contoh Terapan Perhitungan Manual dan Analisa Hasil Kuesioner Menggunakan Skala Likert.com Html Date 11 july 2017, time 12: 31

As we saw with the research from Brown, these methods, together with spaced repetition, make learning more efficient. There are some drawbacks to Duolingo, which were also noticed by students. One of them is the accuracy of its translations, which may not always be exact or which sometimes do not accept other versions. In the browser app, you can discuss your answer with other learners to try to negotiate meaning in a way, but this is not possible in the mobile version. The writer has tried to do all of the Duolingo tree in English, and has experienced this only rarely and mostly in more advanced nodes, thus it does not represent an important obstacle.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

After analyzing and discussing about data findings before then the writer wants to draw some conclusions as follows:

1. Self-study is obviously important in language learning and Duolingo is a useful language application that can provide learners with practical and systematic steps to learn a new language on their own. Duolingo has a sleek design, is user-friendly, and can be used by learners of different ages and cultures. The app teaches English to millions of people for free, although some have criticized the developers' method of making money by getting people to translate texts for free as a by-product of learning a language.

2. What sets Duolingo apart from other free language learning applications is its methodology: teaching its users a foreign language via translation. Translation as a pedagogical technique fell out of favor with the advent of communicative approaches to language teaching in the late 1960s on the grounds that it creates a sense of false equivalence between the two languages and acts as an impediment to automatic and fluent language use. However, many second language researchers maintain that it is not the very translation but they way it is used for pedagogical purposes that counts. For instance, argues translation helps learners to relate new knowledge to old knowledge, reduces learning

anxiety, promotes noticing and metalinguistic awareness, and provides a means to assess learning.

3. Being in line with the prevailing constructivism paradigm in second language learning, Duolingo encourages peer-to-peer collaboration, with learner's friends being able to challenge one another. Despite its merits, the app has a number of drawbacks. First, while it can go somewhat well with regular classroom instruction, with learners using it for extra practice, its approach and principles can collide with the currently popular language teaching approaches such Communicative Language Teaching and Task-based Language Teaching. Duolingo's boldest method for teaching a new language, as mentioned before, is through direct translation in another language.

B. Suggestion

The researcher made some suggestion in this research which had a result of the analysis and also according to the condition above, the suggestion are as the following:

1. The students must give their attention and their care to the success of their education in learning through online media and should pay more seriously to their progression of successful education by taking technology as learning platform in English.

2. The government hoped to help and develop the educational facilities in all aspect.

3. The English instructor has to have more time to teach and guide them in studying English by all facilities and current technology.

4. The English teacher has to make the condition that happily in the class and
   anywhere.

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Appendixes 1

ANGKET PENELITIAN

Petunjuk Pengisian Angket

1. Bacalah pernyataan-pernyataan dibawah ini dengan baik dan seksama kemudian pilihlah jawaban yang Saudara/i rasa paling tepat dengan cara membubuhkan tanda check list (√) pada kolom kosong jawaban yang Saudara/i pilih.

2. Alternatif jawaban yang tersedia adalah:
   S   : Setuju
   B   : Setuju Sekali
   KB : Tidak Setuju
   TB : Tidak Setuju Sama Sekali

Identitas Responden

1. Jenis Kelamin
   - (……) Pria
   - (……) Wanita

2. Usia
   - (……) $\leq$ 22 Tahun

3. Pendidikan Terakhir
   - (……) SMU

4. Lama belajar di IAIN Zawiyah Cot Kala Langsa.
   - (……) $\leq$ 3 Tahun

5. Alamat Lembaga :
   - Jalan Meurandeh, Langsa Lama, Kota Langsa, Aceh.

6. Fakultas : Dakwah/Tarbiyah/Syariah/Febi/Usuludin

QUESTIONNAIRE FOR INSTRUCTOR

No	Angket	Kriteria			
		S	TS	SS	TSS
1	Duolingo merupakan aplikasi belajar bahasa Inggris secara online.				
2	Saya suka belajar bahasa inggris dengan menggunakan teknologi seperti Laptop, Hp.				
3	Aplikasi Duolingo mudah digunakan dalam pembelajaran Bahasa Inggris.				
4	Aplikasi Duolingo membantu untuk mempelajari Bahasa Inggris.				
5	Saya merasa puas belajar Bahasa Inggris dengan Duolingo.				
6	Belajar Bahasa Inggris tanpa batasan melalui aplikasi Duolingo				
7	Aplikasi yang mudah di download untuk belajar bahasa Inggris..				
8	Duolingo bisa di akses kapanpun dan di manapun untuk mempelajari bahasa inggris.				
9	Aplikasi online yang layak untuk direkomendasikan untuk belajar bahasa Inggris.				
10	Aplikasi Duolingo dapat di akses oleh semua kalangan				
11	Menghabiskan waktu anda selama 15 menit dalam sehari untuk mempelajari bahasa Inggris dengan duolingo.				
12	Anda dapat menguasai 4 skills (Reading, Writing, Speaking, dan Listening) dalam menggunakan aplikasi Duolingo				
13	Apakah anda mau merekomendasikan aplikasi				

		S	SS	TS	TSS
	Duolingo kepada teman anda sebagai aplikasi Online yang efektif untuk belajar bahasa Inggris.				
14	Akankah kamu mau melanjutkan belajar bahasa Inggris dengan aplikasi Duolingo.				
15	Gambaran visual yang menarik untuk proses pembelajaran yang efektif.				
16	Aplikasi bahasa Inggris yang memiliki proses pemebelajaran layaknya bermain sebuah game.				
17	Aplikasi Duolingo memberikan data yang akurat terhadap pembelajaran bahasa Inggris anda.				
18	Materi yang disediakan tidaklah sulit untuk di pelajari.				
19	Penggunaan aplikasi Duolingo menghematkan kuota anda dalam pembelajaran bahasa Inggris.				
20	Aplikasi Duolingo mampu mengukur kemampuan anda dalam belajar bahasa Inggris				

Note:

S   :   Setuju   SS   :   Setuju Sekali

TS :   Tidak Setuju   TSS   : Tidak Setuju Sama Sekali

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   From 2013 – 2017.

<div align="center">**SURAT PERNYATAAN KARYA SENDIRI**</div>

Saya yang bertanda tangan dibawah ini:

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		Kec. Langsa Kota

Dengan ini menyatakan bahwa skripsi saya yang berjudul "**The implementation of Duolingo As Media To Improve Students' English Language Skill At Iain Zawiyah Cot Kala Langsa**" adalah benar hasil karya sendiri. Apabila dikemudian hari ternyata terbukti hasil penjiplakan karya orang lain, saya siap menerima sanksi akademik sesuai ketentuan yang berlaku.

Demikian surat pernyataan ini saya buat dengan sebenar-benarnya.

Langsa, 25 Juli 2017

Penulis

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STATEMENT OF APPROVAL

THE IMPLEMENTATION OF DUOLINGO AS A MEDIA TO IMPROVE STUDENTS' ENGLISH LANGUAGE SKILL

Submitted to the Faculty of Tarbiyah and Teachers Traning Faculty IAIN Langsa
as a Partial Fulfillment of the Requirement for the Degree of
Sarjana Pendidikan (S.Pd) in English Education

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