DUOLINGO: AN USEFUL COMPLEMENTARY MOBILE TOOL

TO IMPROVE ENGLISH AS A FOREIGN LANGUAGE

LEARNING AND TEACHING

A Research Project

Presented to

The Program of B.A. in Teaching English as a Foreign Language

School of Education

Universidad Nacional Abierta y a Distancia

Colombia

In Partial Fulfillment

of the Requirements for the Degree of

Licenciado en Inglés como Lengua Extranjera

by

Natanael Mauricio Méndez Bermudez

Bayron Giovanni Marmolejo Diaz

December, 2017

ABSTRACT

This monograph involves a review on Doulingo application and how it could be used as a complementary mobile tool to improve English as a Foreign Language teaching and learning. The goal is to show the possible effectiveness of using Duolingo as a complement for English lessons. This has been done by examining different bibliography reviews on mobile technology and gamification, mobile technology and m-learning, language learning, the translation and crowdsourcing in Duolingo and some results on the effectiveness of Duolingo in the learning and teaching process. Upon examination of this review, it becomes clear that the use of mobile technology could bring an excellent opportunity to both students and teachers to practice and improve language skills everywhere, due to the facilities on use a smartphone that most people have. This monograph highlights the positive effect of using this application, the easy way to get it for free and the enthusiasm it could bring to some students.

Keywords: Duolingo, m-learning, crowdsourcing, learning-apps, teaching-app

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Teaching English as a Foreign Language has several challenges nowadays, one of these is the lack of opportunities to practice English out of the classroom, and we faced that problem with our students in Palmira and Cali Valle. We were looking for a way to motivate our students to become more independent on how they practice outside the classroom, that is how we came to Duolingo, as a proposal tool for students' improvement.

The vast majority of our students have Smart-phones or at the very least they own a computer in their homes where they consult daily tasks and communicate with other people and share what has been learned or lived. The use of Duolingo could let our students get a noticeable improvement in the four skill, and in the meantime it could leave a significant and positive result in our students' level as it allows them to practice in an attractive way.

Significance of the Study

We live in a globalized world that is in constant change. Globalization is characterized by a rapid exchange of information and communication. This continuous change includes changes in the way of teaching and practicing foreign languages. In the past, almost the whole practice of learning English was limited to the classroom and pedagogical contexts. Today ICTs challenge us in the use of such for the daily learning.

In the Colombian context, our students have not had the possibility to be in constant contact with native speakers who they could speak to regularly in English to familiarize with its pronunciation. This is how some of our teachers have taught what they have learned about the language.

However, there has not been enough motivation for students to learn on their own, that is, becoming more autonomous, and to use what they have learned in contexts aside from those of the classroom. And these current results show, perhaps, the state of use of English as what it is, a language, and not a set of rules to learn, which is how learning English is mistakenly approached. Many students want to learn English, but they need a guide. Duolingo, which is a way to motivate personal work.

If we can use applications that are within the reach of our students and also make them attractive to them, learning can be viewed not exactly as a game but as a constant challenge that awakens intrinsic motivation. This could break with the thought of traditional grammar-translation method for learning, and so students would be practicing more frequent listening and writing exercises, as a result they would improve these two skills.

Duolingo is a website and an app that as a social project is intended for free language learning, including English. The fundamental part that interests us in this subject is the possibility that the students can listen as they pronounce a word, or sentence at the same time that they must write it. If something makes Duolingo remarkable is the fact that it relies on crowd-sourcing, that is, for work and a good for the community.

Statement of the Problem

According to the IBEI Global Bilingualism Index Vida, (2015), a firm specializing in the teaching of foreign languages, Colombia's English proficiency across the population is very low,

this is the result among the 70 different countries that were evaluated, Colombia placed 57. The majority of students in Colombia finish their studies of high school with an average level of A1.

Most of our students confused learning English with studying or learning grammar, when this is only one part of the process. Most of Colombian English lessons have grammar as the main the learning-process. The possibility of using language as a means of communication among students has been ignored and they have limited themselves to "understanding a language code and simply translating it" rather than using it in daily living or real classroom use.

Having used the App Duolingo, we seeked to make learning a little more touchable, making use of images and sounds that allowed students to acquire vocabulary more realistically. When Duolingo was used, it also gave students the possibility of repeating the dialogues, or phrases in order to be able to achieve a clearer interpretation of what is intended to communicate. Another important aspect to consider is the way Duolingo presented this challenge by making this practice more engaging and entertaining, as a result, students' motivation was higher and they showed to be more eager to learn. Consequently, why can Doulingo be an useful complementary mobile tool for teaching and learning English as a Foreign Language?

Objectives

General Objective

To analyze the effectiveness of Duolingo as a tool of mobile technology in teaching English as Foreign Language through a critical compilation of literature review

Specific Objectives

To compile information about the effectiveness of Duolingo in research studies previously done.

To reference information of other study works done previously about the subject of

Duolingo.

   To contrast the advantages and disadvantages of using Duolingo based in some results

found in the literature review.

CHAPTER 2

LITERATURE REVIEW

This review of literature technology and its usefulness for language learning, including

apps such as Duolingo, our object of study, indicates how mobile technology and language

learning apps could contribute to learning and teaching English as a Foreign Language in our

classes. In addition, this review highlights the positive results of taking advantage of the time

and enthusiasm that most students have when they are using new technology and especially,

cellphone applications. This technology could engage students more in the academic and cultural

aspect, making learning accurate, challenging, attainable, enjoyable and appealing. This

literature review is taking into account the relationship among technology, and e-learning,

learning English as a Foreign Language, gamification, translation, crowdsourcing and Duolingo,

referencing the drawback but highlighting the effectiveness of Duolingo.

Technology and Gamification for Language Learning

In today's world advances in technology, particularly mobile technology and apps, have

turned learning a foreign language more accessible to anybody who has a device that has internet

connection. According to McGreal (2004), we must exploit the technology we have, and the

opportunities it offers, so that we can use apps to learn languages. Additionally, Rossing et al

(2012) present one of the few studies on users and what they think about using iPads when

learning. As the research was published in 2012, it emerges from the results that users were

affected by not being accustomed to using iPads, and therefore the user spent more time working out how to use the device than the app itself. The users also responded that they liked using the iPad because it made the learning more active and they did not have to sit quietly and listening to a class but were more involved.

Moreover, McGreal explains that we must understand that a mobile app gives options beyond learning in the physical world. As McGreal explains, teachers want to digitize learning materials, but one can usually not just move it directly. It must be understood that a digital platform offers new opportunities to present content. As observed in some of the existing apps for learning language, they often use monotonous learning techniques and content is presented exactly the same way as in the physical world. For instance, when it comes to grammar, some of the apps appear very similar to a physical book. To add up to this great advance, Naisith et al (20106) besides in the situated learning "the portability of mobile technology allows the learning environment to be extended beyond the classroom into authentic and appropriate contexts of use.

In the context of making learning appealing and entertaining gamification has played a big role in digital platforms. Connolly et al. (2011), as part of a foreign language course, students from different parts of Europe collaborated with each other to save languages that are under threat, by learning more about each other's countries. The results demonstrated that the majority of students who completed the post-test questionnaire would be willing to play the game as part of a foreign language course over a prolonged time period.

When we talk about gamification we simply mean Gamification is the use of elements of game design in non-game contexts. This differentiates it from serious games and design for playful interactions. The way gamification is used in language learning apps is explained by Ketyi (2016) highlighting the most well-known mobile language learning applications

(Duolingo, Busuu) including this idea (gamification) as well and to motivate and encourage their users they offer app-based elements such as collecting points, winning awards or badges and passing levels. However, the approach of gamification tries a faster and more intensive experience of learning and using game techniques to make activities more engaging and fun (Kapp, 2012). It is applicable almost everywhere and when applied correctly, results in the desired learning outcomes. However, let us define the role of gamification in mobile technology. Huotari & Hamari (2012) point out the role of gamification in invoking the same psychological experiences as games (generally) do. As in real life, gamification also requires a few characteristics such teamwork and interaction to which Ryu (2013) states that "…learning requires repeated and collaborative interactions in the situated contexts". Here we can clearly see that Ryu's study shows is that it is not only when gaming that one can learn language, but also after the game is over when you can discuss the game. In general, using games or gamification could create a more fun way of learning; particularly for people who think it might be a bit boring to learn, techniques within game could help make it a more exciting experience. This in turn, can be highly taken advantage of to inspire real life scenarios as pointed out by Gilmore (2011) stating that by combining with realistic scenes or situations, the design of authentic language learning games can be realized.

Mobile Technology in Education and Culture: Conceptualization: What is M-Learning?

M-learning (mobile learning) refers to the use of mobile devices (mobile phones, PDAs i.e. Personal Digital Assistants such as palmtop computers and "pocket PCs", mini media players such as IPods) for pedagogical purposes. Phrases such as "handheld learning" and "handheld technology" are also encountered; their semantic focus on the hand stresses the shift from

traditional e-learning (through desktop computers) to a more flexible paradigm (through portable "high tech" devices).

M-learning can rely on podcasts (audio contents, usually in mp3 format – or even video contents in MPEG-4) or more simply on texting (SMS). The aim is not to challenge nor replace other forms of interactions (face-to-face in classrooms, lecture theatres and studios, or virtually in online learning environments): it is a supplementary method that can support, enrich and enhance students' learning experience. Kukulska-Hulme & Traxler (2005) define mobile learning as learning mediated by the assistance of small portable devices available most of the time and that can be adapted to the learner's immediate context. We also have Keegan (2005) who defines mobile learning as" the provision of educational and training on PDAs/palmtops/handhelds, smartphones and mobile phones". He just went over a straightforward definition, in which a lady can carry in her handbag or gentleman can carry in his pocket. Therefore, m-learning of mobile learning system can deliver education to learners anytime and anywhere. Thus, we can define mobile learning as learning having the assistance of small portable electronic devices such as smart phones available to the learner when needed. Furthermore, Darmi & Albion (2014) claim that: The use of mobile technology in education offers new learning experiences and flexibility in learning –learning anywhere and anytime – with increased opportunities for decisions to be made by the learners. Furthermore, mobile technology offers ubiquitous and immediate access to information as well as saving resources (p .93).

So in this regard, exploring the benefits of mobile learning and its number of benefits and what it can go beyond traditional methods of teaching, transcending the academic aspect to a more cultural aspect Cervini, Solovova, Jakula, & Ru (2004) stated that Online and mobile

technologies have opened up exciting new possibilities for study in higher education. Mobile learning can make boundaries between educational settings, life and work more permeable. Such boundaries can also become relevant at a bigger scale when combined with teaching culture, to go expand on this particularly, Risager, (2006) adds that in an app that supports mobility, the cultural identities of the student and surrounding community become especially important. Cultures and languages are viewed as mutually dependent – as parts of the complex language-culture nexus which is historically and ideologically situated. In concordance with Lankshear & Knobel, (2006) who might also agree and state that the app serves as an interactive device that mediates and sustains the process of discovering new cultures and languages, while learners get engaged in open and fluid social relations.

Cavus & Ibrahim (2009), cell phones are the most common mobile devices in MALL research, due to their popularity among the student population. The reality here is that as mobile devices are more accessible with newer features every time, language learning becomes more accessible for the general population, particularly, language students. Chinnery (2006) believes that more recent models are known as smart phones, and have smart features enabling communicative language practice for language learning as well as giving access to authentic content and task completion.

What is ahead in the future relies on the potential mobile technology can reach and at the same time its effect on learning in a pleasant way. For example, Begum (2011) look into the potential of cell phones as tools in EFL teaching in the city Bangladesh focused on five EFL classrooms and their teachers. The results showed that there was a positive attitude among teachers and students because cell phone use enhanced motivation and collaboration from both sides. Additionally, to this case study, Cavus & Ibrahim (2009) look into the use of short

message services supported by a system that they developed to teach new technical English words to first-year Turkish college students. Participants enjoyed the new way of learning outside the classroom and were satisfied with what they had learned. Besides, El Hariry (2015) further claims that "Cell phones could possibly have a huge effect on teaching and learning by the use of many educational apps. Apple, BlackBerry, Google, Palm and others have their own 'app stores' for cell phones, so these applications can find their ways into the classroom curriculum" (p. 303).

El Hariry (2015), additionally, states that "a lot of researches are conducted to understand how the mobile devices could be used to reach better education because they include a wide variety".

Usefulness in the Academic Field

Working with mobile technology has always been appealing and useful in language learning environments when used according and well planned by teachers. Mahruf and colleagues (2010) analyze teachers' perceptions, and gathered opinions from EFL teachers in Bangladesh who were using videos on cell phones and iPods to improve their students' listening skills. With data from semi-structured interviews, teachers showed a positive attitude to using iPods and cell phones as complementary tools.

On the other hand, it has also been of great help for students as it becomes a useful tool to overcome difficulties. Miangah & Nezarat (2012) also add, via multimedia functions, they may record their own voices and submit them to the teacher. This would assist in assessing the students' weaknesses in pronunciation. Additionally, Gholami & Azarmi (2012) suggest that learners may download dictionaries to their mobile phones and learn the pronunciation of unfamiliar new words.

Concerning grammar, Miangah & Nezarat (2012) suggest designating grammatical points as a program and install it on mobile devices. This program teaches rules that are followed by multiple-choice activities. Different exercises can be formed, as 'true-false' or 'fill-in the blank', and practiced by the learners. Vocal services or SMS are also convenient tools for grammatical explanations.

Duolingo Appreciations

One of the most striking features is the concept itself of Duolingo among some researches. Khudiavok (2016) says that "Duolingo offers free courses which are set of text lessons with exercises. These lessons in course can be opened only in certain order, then a new lesson will become active only after the previous one is completed". Another special interesting thing in Duolingo is "Strength Bar". According to Khudiavok as soon as users finish a new lesson the "Strength Bar" will show the full indicator stripe, which symbolized the level of user knowledge. But after some time this stripe starts to decrease, which reminds user to repeat the lesson. After lesson repeated the stripe becomes full again. Also he says Duolingo uses gamification for users' motivation. User will get the bonus points "lingots" after lessons completed. These points can be spent by user on special tasks such as training on time or extended language tests and others". Similar to this point of view,

Krashen, S. (2014) gives a positive feedback on this application:

> 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 (P 1)

Munday. (2016) says that Duolingo is as a very modern-looking gaming app, in reality most of the activities necessary to complete the lessons based on translation, dictation, and pronunciation. Duolingo according to her, 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 leaderboard, 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. Apart from this, White, K. (2017). She believes that Doulingo is an online-learning program allows people take free language curses because they translate. This is a company, which runs out in Pittsburg has 27 employees and costs US$500,000 month to run. According to the author around 60,000 to 70,000 new users are joining Duolingo everyday. What is more, Doulingo was contracted to translate two of the biggest media in America CNN and the viral website buzzfeed.com. Buzzi claims that Doulingo generates translation at the accuracy level of those generated by skilled professionals. Also, Olson P. (2013), She considers Duolingo, a free, language learning app with 5 million monthly active users, could soon go into overdrive with the number of languages it can teach by opening up its teaching system for anyone to install a new language.

Olson, P. (2013) describes this application:

Duolingo has 27 employees working at an office in Pittsburgh, many of whom, like co-founder Severin Hacker, have been students of Von Ahn at Carnegie Mellon, where he is a professor of computer science and something of a local hero because he was born in Guatemala but having spent his adult life in the U.S., Von Ahn is best known for having invented CAPTCHAs, the squiggly characters that you have to type in after

filing out a web form to ensure that you're not a bot. After realizing that roughly 200

million CAPTCHAs were being typed everyday, wasting thousands of hours of human

time, Von Ahn pivoted his creation so that the squiggly characters became unscannable

text from books -- effectively harnessing the power of the crowd to digitize books. (p.1)

White & Siracusa (2013) think that Duolingo coexists on the World Wide Web along

with thousands of free language learning websites, and the competition is fierce. However, with

over five million users just a year after its launch, Duolingo stands out. They think that

Duolingo application meets the needs of today's youth, (i.e., the Net Generation), because of its

gaming qualities, while at the same time serving as a valuable learning tool. The program's

practice exercises involve scaffolded tasks that teach language skills that students should acquire.

"Players move at their own speed or frequency through comprehensible input tasks, and learn to

master rules through play. Just as children play to master situations in the surrounding and real

world", Duolingo, according to them, provides a low-anxiety environment where users negotiate

activity and practice skills.

Doulingo Drawbacks

What we are mainly concerned with here is some drawbacks in using Duolingo, some

authors like García & Questier, F. (2016). They believe that just a small number of students

make substantial use of Doulingo according to their research and not all students want to use all

the resources that Doulingo offers, they think that a self-direction learning requires modeling and

mentoring as a tutor or teacher. Other authors like Arvantis (2016) says that the result on the

improvement of students using this application is limited to the improvement if their lexical and

grammatical competences based on linguistic activities, i.e. the improvement is limited to what

students could get from the lexical and some grammar activities on Doulingo, as a result, they

believe the applications don't follow the standards proposed by the Common European Framework for languages.

For Khudiakov, (2016) As drawback Duolingo sometimes uses in lessons unnatural sentences, which usually are not being used in speech, and according to him, without some real and natural speech interaction students will face difficulties understanding the real language in a natural context more than understand some words and some meaning. Garcia, (2013) he believes that the level of satisfaction works better for those who are in the beginner levels and diminishes as they advanced. It is probably, according to him, that some people could feel that Duolingo doesn't have enough material provided to fully master the language skills, and as student understand more they demand more challenge. Besides, Meyer, (2013) she believes that Doulingo suffers from the same fault as all automated web-based programs; it cannot offer a real-life dialogues in the same way as classes or immersive study. And what is more, Doulingo weakness are the computer voice and the comparative lack of conversational phrases.

White, & Siracusa (2013) they believe that "Progress in Duolingo is much slower than what could be achieved in a foreign language classroom." For example, in a classroom setting, a teacher can introduce a vocabulary topic and facilitate activities that help students learn those lexical items, first receptively and then productively, within one (or a portion of one) class period. But in Duolingo the sequence of themes is fixed to the design of the program itself. Some authors think that Duolingo isn't focusing on teaching a language purely, it is more likely to get more people into the translation crowdsourcing service offers by Duolingo.   For example, for Munday, P. (2016). the accuracy of its translations and the advantage of using Duolingo in browser app where you can negotiate the meaning of a word in a way but it is not allowed in the mobile version. So here the author makes a comparison between the Duolingo app and Doulingo

website. According to White, & Kelsey. (2017). Duolingo praises the way it highlights translations as a language skill rather than focusing purely on communication. According to White, and Kelsey. (2017). Duolingo praises the way it highlights translations as a language skill rather than focusing purely on communication.

White & Siracusa (2013) have this appreciation:

"Duolingo would not be good for learning an entirely new language of which one has no knowledge"; they limit the use of Doulingo "it is better for reviewing a language one has already started learning or for learning a language that is closely related to one that you already know, and one of the most common complaint is that many users could benefit from more explicit grammar explanations and practice". (p2)

Krashen, (2014) in his rebuke of the Vesselinov & Grego (2012) study in which they equated 34 hours of Duolingo to a university language course, says that language learning is different from language acquisition. Krashen states that the activities presented in Duolingo (or in similar tutoring programs such as Rosetta Stone) involve conscious learning. In his opinion, conscious learning does not lead to language competence Noting that in his view, acquisition-oriented methods, which use subconscious learning, are superior to skill-based methods such as those used by Duolingo.

Language learning, Crowdsourcing, and Translation in Duolingo.

Arvanitis, Panagiotis, & Krystalli, (2016) believe that Mobile Assisted Language learning (MALL) offers moderns support to the process of language learning through the use of mobile devices such as mobile phones, tablets, pcs, pocket pcs and it opens a wide range of learning and teaching opportunities for second and foreign language learners and teacher. Therefore, due to the evolutions of topics that are used as pedagogical and the use of technology in teaching

process, they believe that this situation as an ideal solution to overleap language learning barriers in terms of time and place, and they place Doulingo in the top of the applications list. In addition, for Hacker (2014) Duolingo is an example of human computation, where computer systems enable massive collaborations between humans and computers for the benefit of humanity. It is possible with the crowdsourcing translation which is used by Duolingo, in this way he thinks "we establish that education can serve as a vehicle for human computation with millions of collaborators".

According to Olson (2013) Duolingo has a kind of wiki-style system and it lets Duolingo create a community of contributors and moderators who to help the app incorporate, and teach, new languages, these contributors won't be compensated, she believes that this is not a problem for Duolingo, because it gets dozens of requests each day to add a new language, and many of those requests include offers to help add the language to Duolingo's system for free. She explains how Duolingo already makes money rather cleverly by pooling its students to do translation exercises that another company is actually paying for. As well as Simonite, (2013) she thinks that Doulingo as "the cleverest business model in online education". Duolingo's design is inspiring others to look for new ways to apply human computation in education. Lucio, S. (2014) explains that Duolingo is an example of Crowdsourcing, therefore Duolingo has a goal and it is to improve languages skills in people Lucio, S. (2014) considers that:

> These people are working on translations and making corrections as the crowd.
> i.e. it woks as an organization who wants to achieve a certain goal, (translating, in this
> case) for this purpose, the organization creates a public platform (Duolingo) where the
> crowd can collaborate and reach this goal. When the platform is available, the

crowdsourcing process starts and the contributors complete the task they are supposed to perform P. 34

At the end, all the contributions are joined to form a final product, that is how in Doulingo people can contribute, he says, it facilitates and provide meaning in their mother tongue at the same time they are learning a new language. The author explains how the translation in Doulingo is validated by the users or crowds through voting.

According to Estellés & Gonzales (2012), Duolingo is a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task, The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate bringing their work, money, knowledge and/or experience, always entails mutual benefit (P. 1)

Added to that, Morford, Witts, Killingsworth, & Alavosius (2014) explain the crowdsourcing immerse in Doulingo, the Crowdsourcing is a method of recruiting voluntary participants online. These participants are engaged to Duolingo with the idea of learning other languages in a funny or interesting way. Duolingo provides students a visual indication of their progress by way of a graphic depicting which levels they have completed and which they have not, information regarding how many words they have learned, and an indication of their progress in relation to friends linked from social websites.

According to Siracusa (2013), Duolingo also benefits people and companies as members from all over the world team together to translate and edit real-life documents. In this way,

Duolingo combines linguistic practice with actual language use in a way that is user-friendly and free of cost. So it seems like Duolingo is here to stay, and thanks to the power of crowdsourcing from its growing number of users. For the founder of Duolingo, Ahn, Luis, (2011). Doulingo is a fair business model where people are learning a a new language meanwhile they are providing translations into their mother tongue, investing time instead of money, but this time invested in providing a translation is the same time they are using in learning a new language People learn languages with a real content despite of translation use of "has a bad reputation in foreign language learning and teaching, because it is associated with the Grammar Translation Method that lead the discipline for centuries". He explains how a growing number of voices which argue for the translation reintroduction, in the same way that Duolingo advocates for beginner students. Some value it as the fifth macro-skill to complement the other four (speaking and listening, reading and writing), which all educated bilinguals, not just translators. According to him, in America Latina there are a lot of people who want to learn English and don't have much money and those who have money already have learnt English as school. Ahn (2011) thinks:

> When people learn with Doulingo people are learning with real content instead of learn with a make-up sentences people are learning with real contest, provided by other users who are native speakers. And the surprising thing that the translation that Duolingo gets from people (native speakers) are as accurate as those of professional language translator. [Video File]. 13:22

What is more, according to the co-founder Anh, L. (2013) Doulingo is focus in Latin America with the aim of help Spanish native speaker to learn English. Additionally, Esselink, B. (2001) believes that both translator and researchers on translation should look as Doulingo with

interest. i.e. the machines use for make translations are not as good as Doulingo if it is used as by-product of language teaching.

Results on the Effectiveness of Duolingo in Learning and Teaching Process.

The authors García Botero, G., & Questier, F. (2016) collect data via the application tracking in order to understand what Colombian high education students think and do with Duolingo. They present the relevance of the data collection and according to the questionnaires answers this application is perceived to be useful for language learning. Also, Munday, P. (2016) believes that Duolingo is an easy-to-use app that is useful and has potential, although its main lessons are not based on communicative competence and it is enjoyed by students using different elements, such as the accessibility on a mobile device, the gamification aspect, and the variety of tasks. She thinks that Duolingo can serve well as an addition to a formal school or university language course, including on line and face-to-face education. She believes that the use of this application could substitute the classical types of homework. As result she thinks Doulingo has a good potential for use it in a course of studies as one more tool in the instructor's arsenal. According to her, the constantly use of Duolingo and the repetitions of the task become useful because students are aware of their own just listening and follow the dictations make the student more efficient.

Additionally, Vesselinov, Roumen, & John Grego. (2012) present as result the effectiveness of using Duolingo in American students who are learning Spanish, and how the motivation helps them to improve the language improvement, those students who are in a beginner lever gained more than those who already had some knowledge of this language. They present the Doulingo effectiveness with the students results with a Spanish Webcape test cut-off points, and the best result are in those students who take around 30 hours of study. The

effectiveness is show as result of Effect plus Efforts. The vast majority of students improved their Spanish level over 8 points of Webcape placement test per hour of study. In spite of this research was with students who are learning Spanish, they consider fair expect similar result with other languages. According to Krashen (2014) due to the facilities Doulingo uses it increase the motivation of students and it let them being in contact with the language. In the same way, Wijaka, Yufrizal, & Kadaryanto (2016) explain how researchers recommend English teachers to use Duolingo Application as the media in teaching English vocabulary because it can make students more interested in the teaching and learning activity.

For Garcia (2013), Doulingo gives the learner control over the learning process, as dealing with words only is easier than dealing with the whole communicative situation in which many other factors may apply and the gamification works: "the learner feels a sense of achievement when getting the points and challenged when not." What is more, students will notice the difference between having zero knowledge and having some knowledge. According to Ghashmari, (2014) Duolingo is giving the chance to students to express their opinions on the technology used in the classroom and to voice their recommendations can greatly benefit the learning process by increasing students' engagement and improving their performance. Meyer, (2013) thinks that Doulingo can be quite of addicting due to its cunning use of gamification: heart, levels, points, Facebook updates that collect Likes from friends and so on. It could make students spend more than 30 minutes per day on the application and creates motivation to persevere on learning process.

White & Siracusa (2013) believe that Duolingo allows learners to make connections between their L1 and the target language TL trough translation while offering its users many opportunities for enjoyment, rewards and success and what is more, Duolingo offers powerful

customization for each learner. As students complete each lesson, test, or practice session, the program collects data and uses this information, "to plan future lessons and select translation tasks specifically for [one's] skills and needs," thus personalizing the learning experience, according to blog writer settles. They consider that Duolingo also benefits people and companies as members from all over the world team together to translate and edit real-life documents. In this way, Duolingo combines linguistic practice with actual language use in a way that is user-friendly and free of cost. So it seems like Duolingo is here to stay, and thanks to the power of crowdsourcing from its growing number of users. For Savage, (2017) the creator of Doulingo, Von Ahn, rely on humans' understanding of language to get crowds to do what computers do inadequately translate in natural way text. He also stays that Duolingo help people to learn a language by asking them to translate sentences from that language to their own, starting with simple sentences and advancing to more complex ones as their skills increase.

Finally, Feifei, (2014) explains the effectiveness of Duolingo English Test. Recently Duolingo has developed a computer adaptive test of English competency for non-native English learners, Feifei, researched a study of the validity and realiabity of the Duolingo English Test, Participant were recruited from Duolingo users who studied English, international students in several United States universities and people took (TOEFL). The results: Feifei (2014) explains the results on her study:

> Participants' scores on the Duolingo English test correlated substantially with their TOEFL total scores, and moderately with TOEFL section scores, with higher correlations for the TOEFL Speaking and Writing sections. This provides criterion-related evidence of validity of the Duolingo test scores. (P 2)

Every day as teacher of English as a Foreign Language we are looking for new ideas to get students attention and what is more, to strengthen their enthusiasm for learning English, and this a challenge issue in teaching, using the students' desire for learning, and an possible way to do this is the technology used by students on a regular basis, Duolingo could help us to engage the enthusiasm and desire of students to learn English into a useful tool to improve English as a Foreign Language in teaching and learning. With this in mind, this literature reviewed in this monograph defines the application, the relationship between Duolingo and some effectiveness cases of learning English, including its drawbacks. We could take advantage of the development in technology, which is in most of our students' cellphones and the use of this by students in order to contribute to an improvement of learning in an appealing using Duolingo wherever and whenever students can.

CHAPTER 3

METHODOLOGY

The term monograph has its origin in mono that means unique and graphic that translates as writing, with which abstract nouns are formed that go from an expressing the relationship of the word to the original and primary root lexeme. It is a writing on a single theme. "(Más tipos de, equipo de redacción 2016, 12)

Krisppendorft, K. (2004) defines content analysis as a:

Research technique for making replicable and valid interferences from texts (or other meaningful matter) to the context of their use". We write this monograph taking into consideration Krispperdorft ideas of content analysis, such as "The nature of text demands than content analysis draws specific interferences" (p.24) or "Texts have meaning relative to particular contexts, discourses or purposes and validating evidence, which is the ultimate justification of the content analysis (P. 30).

This monograph was developed with a qualitative research due to we have searched for multiple interpretations by considering diverse authors as sources and we supported our interpretations by weaving quotes from the analyzed text and literature about the context into some conclusion. following a compiling design. The intention of this monograph was to present and write in critical way a literature review that exists in regards to the use of Duolingo, in its direct relationship and effects on learning and teaching English as a Foreign Language.

Investigation Line

This study work followed the "Bilingualism in Distance Education through technology" investigation line stablished by the Universidad Nacional Abierta y a Distancia. The objective of this investigation line is to guide to a reflection and review of teaching-learning processes of a foreign language of a distance education model, through information technology. (Lineamientos para los trabajos de grado ECEDU).

This specific line was chosen because it refers to teaching-learning processes for foreign language and also the development and implementation of didactic material for language learning processes. As mentioned early, this monograph compiles literature for the analysis of how the teaching-leaning process is affected by the use of mobile-technology and its multiple uses such as the application Duolingo.

Research Tools

To elaborate this research paper different tools were taken into consideration. The Literature review, existing information about advances in mobile technology, gamification, Duolingo, advantages and disadvantages and all concerning information on this topic. Those samples were analyzed using Index Card Templates (See Appendix A) designed by the researches of this study work. The index cards contain the author, the year, the citation and the analysis of the sample taken.

Population

Since this monograph follows a compiling style of bibliographical citations through the literature review, the population would be divided and analyzed in two different groups: 1) The authors chosen for the elaboration of this monograph and 2) The conclusions they come to from their studies, which in most cases involved a population of teachers and students.

Procedure

Through the development of this study paper there were four different moments, each moment focused on a particular task toward the completion of this monograph. First there was a review of biography about the chosen subject. Once we finished this the first review, we gathered only the bibliography available to this monograph and that had a relevant connection with the purpose of this study work. There was also design of an action plan to carry on and the distribution of chapters and a logical sequence of this paper. Finally, the monograph.

As far as the methodology, citations or samples as we may refer to them were selected for their corresponding analysis. During the analysis we were doing a detailed examination of the citations and we also evaluated the information it contains, as well as the relationship and why it connects or adds value to this work.

CHAPTER 4

RESULTS

This monograph based on the literature review presents some results on the use of Duolingo with the aim of improving students of English as a Foreign Language skills: Duolingo facilities and increase the motivation of students in learning English and it let them being in contact with the language:

Table 1

Results

Duolingo motivations: (challenges)	Author reference	Result:
As an app it is easy to install. Duolingo uses different elements such as the gamification aspect and the variety of tasks. Duolingo activities could become a kind of	Munday (2010)	Most of students could have this application in their mobile. The way how Doulingo presents the vocabulary through games and dictations, it catches students' attention and they enjoy spending time on those funny activities. Taking advantages of the enjoyable

substitution of classical types of homework		way how Doulingo lead English exercises, teacher could use them instead of classical homework.
Students have more contact with English by themselves outside room. The continues use of Doulingo	Wijaka, Yufrizal, & Kadaryanto (2016)	When students have a often interaction with new vocabulary and different repetition games using English, their vocabulary will improve and students will be more motivated on their own learning process.
Students involve their social network activities with Doulingo. Expending more that 30 minutes on this application	Mayer (2013)	When students have the opportunity to link this application wo their social networks like Facebook and Tweeter there is a challenged provide by the application where they should improve their English level in order to be better than their friends. Students get pronunciations and descriptions of a considerable amount of vocabulary. When students are motivated by the application and expend more than 30 minutes creates motivation to

		persevere on their own learning process.
Self control	White & Siracusa (2013)	Duolingo is connected to their phones and let them use it in a specific time or just when they want. So there is no an obligation on using this application and when they use it by themselves, they feel they have the control of the learning process.
Repetition aspect and the translation aspect	Neil (2017)	When students read the text used in Duolingo they are using real life text and present them to the application students in order to get helped with real translation and meaning based on the user's mother language.

The constant use of Duolingo and the repetition of its activities become useful to learners because students are aware of their own learning process just listening and follow the instructions of the application, and those indications are in English making Doulingo has a good potential for use it in a course of studies as one more tool in the instructor's arsenal.

Screenshots as example:

CHAPTER 5

DISCUSSION

Mobile technology and its features are presenting numerous challenges for education

nowadays. One of those important challenges could be the inclusion of this technology as part of

a formal curriculum, however we will have to see how something like this could evolve in a very

technological era, but still dominated by very traditional methodologies as far language teaching

is concerned.

Mobile technology would also leave room for questions such how it is effective to

strengthen the quality of Education. In regards to this topic, what advantages and disadvantages

it would present for our immediate context. We would like to highlight a few which will have

the most relevance for the context we're living in.

Table 2

Advantages and Disadvantages in the Findings

Advantages	Disadvantages
Ideas can fluid rapidly using mobile technology in educational environments.	Proper training is needed. And even though most people are technological-literate, still it needs to be considered part of the curriculum to be have its own space

Mobile technology connects provide immediate connection among people and their ideas.	to be used and training should be given for teachers and students. Access to mobile technology is still hard for a lot of individuals.
Access to learning material such as different application.	Internet connectivity may be an issue as not all schools and homes are equipped with this technology. Mobile technology would be almost irrelevant
People like using their smartphones and IPads, particularly young population, it would beneficial to take advantage of that to create meaningful tasks inside/outside of the classroom environment	On the flip side of the coin, it is still hard to make mobile technology fit and "coexist" with traditional education.

Note: This chart only shows the findings of our discussion based on the literature review compiled. Moreover, its purpose is to explain some advantages and disadvantages mobile technology in the form of challenges for the Colombian Context.

We would also like to highlight that through the realization of this work we could find in Duolingo a tool that has found success in design and the inclusion of gamification. Undoubtedly, gamification has made the app gain its popularity, its engaging and "catchy design makes learning a fun and appealing experience for the user.

We consider Duolingo a very good complement, an element that can work very well as a side tool for English learning as a foreign language. As mentioned before its engaging design and the fact that works via mobile technology could be applied within class or outside the classroom.

Our analysis helped us understand the fact that even though Duolingo is a great tool and it has been proved to be effective for language learning, it still may need some work to improve its effectiveness. Improvements would be needed in different areas such as a more concise purpose of the exercises, and skip the randomness, this could mislead students' attention of what the real target of the lesson could be. All in all, the application may need to have some work done.

CHAPTER 6

CONCLUSION

Duolingo is a practical and useful application that could be used in English as a Foreign Language courses to improve students´ language skills. This application is useful because it allows the student to regulate their own learning, interact and network with other users, and measure their own progress – all of which also creates motivation. Instead of perceiving the use of cell phones and applications by students as a distraction, teachers could take advantage of this technology to enhance learning. Nevertheless, Doulingo could not have the same result in the learning process as formal courses do in most students because this application is limited by the structure of translation, low grammar guide, and minimal language skills integration. More research should be done to help understand how effectively this application can improve language skills with future updates and improvements.

REFERENCES

Ahn, L. (April 2011 at TEDxCMU). "Massive-scale online Collaboration" [Video File].

Retrieved October 5th, 2017, from

https://www.ted.com/talks/luis_von_ahn_massive_scale_online_collaboration#t-801270

Ahn L. (2013). Interview by Anna Heim, "Duolingo Founder and CAPTCHA Creator Luis von

Ahn Talks Android, Crowdsourcing and A/B Testing," The Next Web International

Technology News, Business & Culture, June 9, 2013,

http://thenextweb.com/la/2013/06/09/duolingo-founder-and-captcha-creator-luis-von-

ahn-talks-android-crowdsourcing-and-ab-testing-interview/

Arvanitis, Krystalli, & Panagiotis. (2016) "Applications for mobile assisted learning a current

field research". Aristotle University of Thessaloniki. Greece. Proceedings of

INTED2016 Conference 7th-9th March 2016, Valencia, Spain. ISBN: 978-84-608-56177

http://www.academia.edu/24626289/APPLICATIONS_FOR_MOBILE_ASSISTED_LA

NGUAGE_LEARNING_A_CURRENT_FIELD_RESEARCH

Aydin, S. (2013). "Teacher's perceptions about the use of computers in EFL teaching and

learning: the case of Turkey" Retrieved from

http://www.tandfonline.com/doi/full/10.1080/09588221.2012.654495

Begum, R. (2011). Prospect for Cell Phones as Instructional Tools in the EFL Classroom:

English Language Teaching 4,(1). Bloom's taxonomy of educational objectives.

Typescript submitted for publication, Teaching and Educational Development Institute, The University of Queensland, Australia. Retrieved February 9, 2017, from https://kaneb.nd.edu/assets/137952/bloom.pdf

Bryman, A. (2007). The Research Question in Social Research: What is its Role? International Journal of Social Research Methodology, 10(1), 5-20. doi:10.1080/13645570600655282

Burston, J. (2011). Realizing the Potential of Mobile Phone Technology for Language Learning. IALLT Journal of Language Learning Technologies, 41, (2).

Cavus, N. & Ibrahim, D. (2009). m-Learning: An experiment in using SMS to support learning new English language words. British Journal of Educational Technology, 40(1), 78–91.

Cervini, C. Jakkula, A. Rut, K. & Solova, O. (2004). Mobile assisted language learning of less commonly taught languages: learning in an incidental and situated way through an app. page 2

Chinnery, G. M. (2006). Emerging Technologies Going to the MALL: Mobile Assisted Language Learning. Language Learning & Technology, 10(1), 9-16.

Connolly, T. M., Boyle, E. A., MacArthur, E., Hainey, T., & Boyle, J. M. (2012). A systematic literature review of empirical evidence on computer games and serious games. Computers & Education, 59(2): 661-686.

Darmi, R., & Albion, P. (2014). A Review of Integrating of Mobile Phones for Language Learning. 10th International Conference Mobile Learning (PP.93-100) education and training. Paper presented at m Learn 2005 - 4th World Conference on m-Learning, Cape Town, South Africa.

El Hariry, A. N. (2015). Mobile Phones as Useful Language Learning Tools. European Scientific Journal 11, (1).

Esselink, B. (2001). "Localization and Translation". In H. Somers (Ed.), Computers and

    Translation: A Translator's Guide (pp. 67-86). Amsterdam/Philadelphia: John Benjamins.

Estellés A, Gonzales, F. (2012). "Towards and integrated definition of crowdsourcing",

    Technical University of Valencia, Spain, Journal of Information Science pp 1-14, DOI:

    10.1177/01655150n

    http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.371.9949&rep=rep1&type=pdf

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

García, Q. (2016). "What Students Think and What They Actually Do in a Mobile Assisted

    Language Learning Context: New Insights for Self-Directed Language Learning in

    Higher Education." CALL Communities and Culture – Short Papers from EUROCALL

    2016, 150–54. Geof, I. (1996).

Ghashmari, A. (2014). "Rethinking the use of technology in ESL classrooms" Short paper.

    University of Akron. http://gozips.uakron.edu/~ag81/philosophy.pdf

Gholami,J.,& Azarmi,G. (2012). An Introduction to Mobile Assisted Language Learning.

    International Journal of Management, IT and Engineering,2, (8),1-9

Gilmore, A. (2011). "I Prefer Not Text": Developing Japanese learners' communicative

    competence with authentic materials. Language Learning, 61(3): 786-819.

Hacker, S. (2014). "Duolingo: Learning a Language While Translating the Web." PhD Thesis

    CMU-CS-14-116, Carnegie Mellon University, 2014. 5.

Huotari, K. and Hamari, J. (2012). "Defining gamification: a service marketing perspective", In

Proceedings of the 16th International Academic MindTrek Conference, October 3-5, 2012, Tampere, Finland, ACM, pp. 17-22.

Kapp, K. M. (2012). "The gamification of learning and instruction: game-based methods and strategies for training and education". United States of America: Pfeiffer, A Wiley Imprint. Retrieved from:

https://www.researchgate.net/publication/311206145_From_Mobile_Language_Learning_to_Gamification_an_Overlook_of_Research_Results_with_Business_Management_Students_over_a_Five-Year_Period

Katyie, A. (2016). "From Mobile Language Learning to Gamification: An Overlook of Research Results with Business Management Students over a Five-Year Period." Retrieved from:

http://www.ugr.es/~portalin/articulos/PL_monograph1_2016/art_4.pdf

Keegan, D. (2005.). The Incorporation of Mobile Learning into Mainstream Education and Training. Proceedings of mLearn2005-4th World Conference of mLearning, (pp. 25-28). Cape Town, South Africa.

Krashen, S. (2014). "Does Duolingo 'Trump' University-Level Language Learning." International Journal of Foreign Language Teaching 9 (1): 13–15.

Kukulska-Hulme, A., & Traxler, J. (2005). Mobile Learning: A Handbook for Educators and Trainers. Routledge. London

Lankshear, C., & Knobel, M. (2006). New literacies: everyday practices and classroom learning. Maidenhead: McGraw Hill

Lucio, S. (2014). "Market Study Using Conjoint Analysis for the Implementation of a Crowdsourcing Application." http://upcommons.upc.edu/handle/2117/86119

Mahruf, C., Shohel, C., & Power, T. (2010). Introducing mobile technology for enhancing

teaching and learning in Bangladesh:Teacher perspectives. Open Learning: The Journal of Open, Distance and e-Learning, 25(3), 201–215.

McGreal R. (2004). Online education using learning objects. London: Routledge Falmer; 2004. XXV, 361

Meyer, J. (2013). "If I want to learn a new language, how do the Pimsleur and Duolingo learning system compare? How do the two system compare for young children who cant to learn a new language?" In Quora. Retrieved from: https://www.quora.com/If-I-want-to-learn-a-new-language-how-do-the-Pimsleur-and-Duolingo-learning-systems-compare-How-do-the-two-systems-compare-for-young-children-who-want-to-learn-a-new-language

Miangah, T.M.,Nezarat,A. (2012). Mobile Assisted Language Learning. International Journal of Distributed and Parallel Systems, 3,(1) ,157-166

Morford, Witts, Killingsworth and Alavosius. (2014), "Gamification: The intersection between behavior analysis and game design technologies" et al. BEHAV ANALYST (2014) 37: Multilingual Matters Rossing JP, Miller WM, Cecil AK.

Munday, P. (2016). "The Case for Using DUOLINGO as Part of the Language Classroom Experience." RIED. Revista Iberoamericana de Educación a Distancia 19 (1). http://www.redalyc.org/html/3314/331443195005/

Naismith, L. Lonsdale, P. Vavoula, G. & Sharples, M. (2006). Literature Review in Mobile Technologies and Learning. October 13, 2016, from FUTURELAB SERIES Retrieved from: https://www.nfer.ac.uk/publications/FUTL15/FUTL15.pdf

Olson, P. (2013). "Doulingo takes online teaching to the next level, by crowdsourcing new languages" Foberbes staff, September 25th 2013. https://www.forbes.com/sites/parmyolson/2013/09/25/duolingo-takes-online-teaching-to-

next-level-by-crowd-sourcing-new-languages/#680993174dc2

Risager, K. (2006). Language and culture. Global flows and local complexity. Clevedon:

Ryu D. (2012). Play to Learn, Learn to Play: Language Learning through Gaming Culture.

> ReCALL. 2013(2) :286-301.

Savage, N. (2017). "Gaining Wisdom from Crowds." Communications of the ACM, Vol. 55 No.

> 3, Pages 131510.1145/2093548.2093553 retrieved from:

> https://cacm.acm.org/magazines/2012/3/146255-gaining-wisdom-from-crowds/fulltext

Simonite, T. (2012). "The Cleverest Business Model in Online Education," MIT Technology

> Review, The Power of Digital Education Collection, November 29, 2012.

> https://www.technologyreview.com/s/506656/the-cleverest-business-model-in-online-
> education/

Vesselinov, Roumen, & Grego. (2012). "Duolingo Effectiveness Study." City University of New

> York, USA. https://static.duolingo.com/s3/DuolingoReport_Final.pdf

White & Siracusa, (2013). "Translating with Duolingo for Language Learning." 2013. The

> FLTMAG. November 8. http://fltmag.com/duolingo/

White, K. (2017). "Duolingo: All the Buzz." The linguistic. Vol/53 No/1 2014.

> http://www.academia.edu/9700219/Duolingo_All_the_buzz

Wijaya, R. (2016). "IPI Improving vocabulary through Doulingo application in call at the

> seventh grade of Smp: Lampung University, U-jet Vol, 5 No 1

> http://jurnal.fkip.unila.ac.id/index.php/123/article/view/11139

Ye, F. (2014). Validity, Reliability, and Concordance of the Duolingo English Test. Citeseer.

> http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.691.9270&rep=rep1&type=pdf

APPENDIX A: INDEX CARDS

Template

Author:	
Year: Citation:	Analysis

Designed by: Byron Marmolejo and Natanael Mendez

Samples

Sample 1

Author:	Rory McGreal	
Year:	2004	Analysis
Citation:	McGreal (2004) we must exploit the technology we have, and the opportunities it offers, so that we can use apps to learn languages.	There's still a tendency to believe whether or not implementing technology in for language teaching can be of great help. We strongly agree that we must exploit the technology we have, especially for the kind of the generation of students of today who were born under a much digitalized world and era. McGreal explains to us the possibilities that technology as a learning object offers so that language can be taught and acquired and that is one of our pillar in this monograph

Sample 2

Author:	Ramiza Darmi & Peter Albion	
Year:	2014	Explanation
Citation:	"The use of mobile technology in education offers new learning experiences and flexibility in learning – learning anywhere and anytime – with increased opportunities for decisions to be made by the learners. Furthermore, mobile technology offers ubiquitous and immediate access to information as well as saving resources" (p .93).	People live on a very tight schedule, both educators and students not only spend part of their daily lives teaching or studying, but multiple occupations make it hard for people to progress in their further studies. As explained by …. Flexibility in learning anywhere and anytime have changed the way people can still deepen in their studies. Along with this …. Present in their study the important role of technology which is beneficial for language learning and it is increasing as it, technology, is being introduced in the classroom in the form of mobile technology that provides flexibility and portability.

Sample 3

Author:	El Hariry	
Year:	2015	Explanation
Citation:	"Cell phones could possibly have a huge effect on teaching and learning by the use of many educational apps. Apple, BlackBerry, Google, Palm and others have their own 'app stores'	We support the idea that cell phones could possibly have a huge effect on teaching and learning. There was a time where students were banned from even taking their cell phones to the classroom because it would promote distraction and lack of engagement in class. The author is lets us know

| | for cell phones, so these applications can find their ways into the classroom curriculum" (p. 303). | that software and different apps can find their way into the classroom curriculum, meaning it can be part as a tool, strategy, complement. This in particular caught our eye because technology needs to be a well earned spot in the curriculum and it must be used accordingly, this adds up value to our monograph in such a way that helps us analyze how effective applications such as Duo lingo, that works through a device like a smart phone, can be. |

Sample 4

Author:	Vesselinov, Roumen, & Grego.	Explanation
Retrieved from: https://static.duolingo.com/s3/DuolingoReport_Final.pdf.		
Year: (2012)	Citation: "Duolingo Effectiveness Study." They Present as result the effectiveness of using Duolingo in American students who are learning Spanish, and how the motivation helps them to improve the language improvement, especially those students who are in a beginner lever gained more than those who already had some knowledge of this language	These authors made a research study of Duolingo effectiveness conducted from September until November of 2012. This study lasted for approximately eight weeks. A random representative sample was selected from Duolingo users who studied Spanish. The participants were at least 18 years of age, native speakers of English who took around 30 hours of study. We considered this citation vey important because it is a real study case where there are at least five result could give us a real idea about the effectiveness of Duolingo. Most of studies about Doulingo refer to Doctor Vesselinov case.

Sample 5

Author:	White & Siracusa	Explanation
Retrieved from: http://fltmag.com/duolingo/		
Year: (2013)	Citation: "Translating with Duolingo for Language Learning" They believe that Duolingo allow learners to make connections between their L1 and the target language TL trough translation while offering its users many opportunities for enjoyment, rewards and success and what is more, Duolingo offers powerful customization for each learner. As students complete each lesson, test, or practice session, the program collects data and uses this information	We considered this academic paper into consideration because they present Doulingo background and the direct relationship between the invention of Ahn, the captcha and evolution until recaptcha and how due to it he came up with the idea about Doulingo as model for learning a new language for free and the possible effectiveness on using on a regular basis. They made a interesting analysis about how crowdsourcing is used in Doulingo for translations purposes and how it could let students of English as a Foreign Language could become actives as participant in a interesting project meanwhile they are learning English for free everywhere they are and whenever they want.

Sample 6

Author:	Anh. L.	Explanation
Retrieved from: https://www.ted.com/talks/luis_von_ahn_massive_scale_online_collaboration#t-801270		

| Year: (2011) | Citation: "Massive-scale online Collaboration" They believe that Duolingo allow learners to make connections between their L1 and the target language TL trough translation while offering its users many opportunities for enjoyment, rewards and success and what is more, Duolingo offers powerful customization for each learner. As students complete each lesson, test, or practice session, the program collects data and uses this information | We considered this academic paper into consideration because they present Doulingo background and the direct relationship between the invention of Ahn, the captcha and evolution until recaptcha and how due to it he came up with the idea about Doulingo as model for learning a new language for free and the possible effectiveness on using on a regular basis. They made an interesting analysis about how crowdsourcing is used in Doulingo for translations purposes and how it could let students of English as a Foreign Language could become actives as participant in a interesting project meanwhile they are learning English for free everywhere they are and whenever they want. |