

# DUOLINGO COMO UMA FERRAMENTA PARA APERFEIÇOAR A ESCRITA DO VOCABULÁRIO NO INGLÊS COMO LÍNGUA ESTRANGEIRA

## *DUOLINGO AS A TOOL TO IMPROVE VOCABULARY WRITING IN ENGLISH AS A FOREIGN LANGUAGE*

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**Resumo:** O objetivo deste estudo foi investigar a eficiência do *Duolingo* como uma ferramenta para ajudar no aprendizado do inglês como língua estrangeira. Mais especificamente, o estudo teve como foco a melhoria do conhecimento do vocabulário na habilidade escrita. As evidências coletadas emergiram do desempenho dos alunos antes e depois do uso da ferramenta. Os participantes envolvidos para a coleta de dados consistiram em um grupo controle, referido como Grupo A, com vinte e oito alunos do 6º ano (onze meninas e dezessete meninos) e um grupo experimental, referido como Grupo B, com vinte e três alunos do 6º ano (onze meninas e doze rapazes) todos com a faixa etária entre 10 e 13 anos. Os resultados deste estudo sugerem que o *Duolingo* deve ser considerado uma ferramenta em potencial nas salas de aula tendo em vista que esta ferramenta também parece afetar positivamente os aspectos motivacionais.

**Palavras-chave:** Duolingo, aquisição de vocabulário, inglês como língua estrangeira.

**Abstract:** *The goal of this study was to investigate the efficiency of Duolingo as a tool to assist the learning of English as a foreign language (EFL). The investigation focused most specifically on the improvement of vocabulary knowledge in writing. The collected evidence emerged from students' performance before and after the use of the tool. Participants involved in data collection consisted a control group, referred to as Group A, with twenty-eight 6th graders (eleven girls and seventeen boys) and an experimental group, referred to as Group B, with twenty-three 6th graders (eleven girls and twelve boys), within the age range from 10 to 13 years old. The results of this study suggest that Duolingo should be considered a potential tool for improving vocabulary in language classrooms since it also seems to affect positively on motivational aspects.*

**Keywords:** *Duolingo, vocabulary acquisition, English as a foreign language.*

## INTRODUCTION

The advancement of technology in the current world has changed the availability of information and this has consequences in the way that we learn. Whereas in older times, research in the classroom environment would be restricted to consulting encyclopedias, nowadays, students can reach every kind of information in the palm of their hands, through their smartphones. Therefore, it is important for teachers to take advantage of this technological advancement, using this as an aid in the teaching-learning process. Students seem to have already embraced these technologies. However, classrooms are still behind this technological movement.

Assuming that the use of smartphones in the classroom, through new applications (APPs) can support the acquisition of foreign languages, the present study investigated the efficiency of *Duolingo* as a tool for learning English as a foreign language (EFL) and to improve vocabulary knowledge in the writing skill. Therefore, in the present study, cell phones were used as a tool to assist in sharing information for purposes of communication.

Due to the constant insertion of technologies in the teaching of languages, the adaptation of teaching practices aims to improve the quality of content-learning presented in the classroom, as can be seen in the document PCN:<sup>1</sup>

The new communication and information technologies permeate everyday life, regardless of physical space, and create life and coexistence needs that must be analyzed in the school space. Television, radio, computer science, among others, caused men to approach images and sounds of worlds previously unimaginable. (...) Technological systems, in contemporary society, are part of the productive world and the social practice of all citizens, exercising a power of omnipresence, since they create forms of organization and transformation of processes and procedures. (PCN's, 2000, p. 11-12).

In this context, the use of some applications as language learning tools can be especially effective for the moments of fun and for the significant contributions to the teaching and learning process per se.

However, it has to be noticed, that there is a gap between students and teachers regarding the use of technology. Prensky (2001) uses the terms digital natives and digital immigrants in trying to demonstrate how teachers and students occupy different settings. Shrum & Glisan (2010, p. 449) say that, digital natives are the “21st century students who grew up using the Internet and who are always connected in technological devices”. On the other hand, the teachers “are called digital immigrants” because it is most likely that the teachers did not grow up with knowledge of such tools. As so, teachers need to become more acquainted with the use of the Internet and other technological devices in

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<sup>1</sup> Citação original: As novas tecnologias da comunicação e da informação permeiam o cotidiano, independente do espaço físico, e criam necessidades de vida e convivência que precisam ser analisadas no espaço escolar. A televisão, o rádio, a informática, entre outras, fizeram com que os homens se aproximassem por imagens e sons de mundos antes inimagináveis. (...) Os sistemas tecnológicos, na sociedade contemporânea, fazem parte do mundo produtivo e da prática social de todos os cidadãos, exercendo um poder de onipresença, uma vez que criam formas de organização e transformação de processos e procedimentos. (PCN's, 2000, p. 11-12)

classrooms since these tools can create powerful ways for students to learn and engage with more integrating and more communicative classes.

There has been an increasing educational movement heading towards bilingual education, therefore the teaching of English at some schools has gained considerable attention. However, this movement towards bilingualism has not been so effective in making schools develop new ways to teach a foreign language. This is unfortunate, since being bilingual does not only result in the increase of knowledge in only one language, but also brings advantages for the L2 user in the communicative, cognitive and cultural fields (Wei, 2000).

In Brazil, children from public schools start learning English only on the 6<sup>th</sup> grade. This late start can be pointed out as one of the reasons why regular schools do not present concern in introducing more adequate methodologies along with different ways to motivate students to learn English at school.

Another aspect that seems to be relevant is that teenagers tend to be more distracted when they are in classroom especially if the classes are not interesting for them. With the English lessons, the same applies. The degree of involvement on their part can be put at stake even if they know that learning a foreign language is important for their future. Therefore, teachers need to be aware that innovating in their classes could be a way to motivate learning. With this understanding, learning can be more enjoyable and effective.

In this scenario, the incorporation of technological tools in English classes can be a good choice since they “bring new challenges and opportunities more rapidly” (Shrum & Glisan, 2010, p.450). Considering that there are some sets of modern tools to help teachers make good decisions, *Duolingo* can be an example of a successful integration of technology and foreign language classrooms.

This App, beyond bringing enjoyable interaction options, provides several technological activities. As Martinez-Lage and Herren (1998) state “technology use in the language classroom should be embraced only if there are substantial benefits to learners” so, the learners acquire knowledge and have fun.

Martinez-Lage and Herren (1998) also highlight that the planned and purposeful use of technology can bring benefits to learners, such as:

- More effective use of time: it can be used beyond classroom walls.
- Individualized learning: students can go at their own pace following their own study rhythm.
- Student empowerment: with modern technologies, this new term also emerged. Empowerment is a new term to refer to students’ autonomy. By using technological tools, students can gain control of their own learning.

Having in mind that the use of tools and applications carry potential possibilities for learning, *Duolingo* was chosen to be applied in the present study. *Duolingo* (App) offers the teaching of six foreign languages in a fun way. The App presents gamification elements that can provide learning with

different levels, from basic level to the most advanced level. Each lesson is a phase and when you complete a lesson, another is unlocked such as in a video game. In addition, the App promotes meaningful interaction, even if the interaction provided can be characterized by an asynchronous communication tool mode.

The present study aimed at investigating the effectiveness of the use of *Duolingo* as a tool for learning English vocabulary in the classroom for improving the writing skill. More specifically, the present study set out to verify to what extent the application helps to develop vocabulary knowledge in writing skills and to collect evidence from students' performance, observing if the content is learned effectively or not.

## LEARNING VOCABULARY

Using technology in the language classroom provides some possibilities for teachers who seek to work with vocabulary development. Such instructional strategy, when used in foreign language classrooms seems to be more attractive and interesting to the learners.

Multimedia learning provides students ways to increase the classroom learning providing flexibility to each type of learning that can enrich the classroom experience. Crompton (2013, p. 4), states that m-learning is the process to "learning across multiple contexts, through social and content interactions, using personal electronic devices".

Shrum & Glisan (2010) argue that including technologies and its tools can help them plan lessons that will improve vocabulary in writing. Some pedagogical principles pointed by the authors are:

- Elaborate and enrich input with exposure to varied sources using the internet.
- Promote learning by negotiating meaning using the internet.
- Encourage inductive learning with implicit instruction using the internet.
- Focus on form, error correction with learners noticing and adjusting their interlanguage.
- Respect learners' individual developmental learning with timing pedagogical intervention to learner's zone of proximal development (ZPD) in branching and additivity programming.
- Individualize instruction with learners' analysis needs and provide differential strategies and tasks using autonomous learning.

Technology provides interesting and unique ways to connect language learners to the target language and culture. It enables learners to establish interaction with peers who are learning the language and improve student motivation and enthusiasm for language learning (Shrum & Glisan, 2010, p. 452).

*Duolingo* is an application (APP) with an easy and fun platform for studying foreign languages. According to the website *Duolingo*, the platform is developed as a game with phases and challenges. Each phase presents some challenges to accumulate scores and complete many tasks. The way the platform was developed makes the application a study tool.

FIGURE 1 - Duolingo to mobile phone



Source: Own authorship photo.

Furthermore, teachers who have problems in motivating students in the classroom can use *Duolingo* to get students more interested. From this perspective, *Duolingo's* contribution offers a personalized practice for each student, allowing a better use of the content presented in the classroom.

According to the web site *Duolingo*, many teachers, and some governments are already using *Duolingo* as a technological tool in the classroom. By using this new source, teachers can check the development of their students individually and in one place. Because each class includes multiple conversation, comprehension, translation, and challenge questions using multiple choices, the App allows the learner to immediately know whether his/her answers are correct or not. If the student fails, he/she will soon be informed, and immediately the application shows how to improve. Nation (2008, p. 102) argues that:

Most published books of prepared vocabulary exercises use teach, test, and mark format. That is some aspects of the words are taught, and then the learners do labelling, completion, rewording, classifying, correcting or matching activities that they later mark using an answer key.

To corroborate what Nation (2008) mentions regarding vocabulary, the tests used to investigate *Duolingo* efficiency for learning vocabulary in the present study were based in the exercises proposed in the classroom during previous experiences. Nation (2008) states clearly that the teaching and learning of vocabulary is often neglected since, commonly, teachers apply a list of simple activities which require little or no preparation. However, Nation (2008) points out that the attempt to use additional sources to engage students in practicing vocabulary input is consistent with good pedagogical decisions. The next section presents the method applied in the present study.

## METHOD

The present study was carried out in a public school in Caucaia, Fortaleza, Ceará. Before the start of the study, the principal and the coordinator of the school were informed about the research goals as well as about the instruments to be adopted for data collection.

The participants who took part in the present study were divided in two groups: the experimental group (Group A), which consisted of 23 6<sup>th</sup> graders (eleven girls and twelve boys), and the control group (Group B), which consisted of 28 6<sup>th</sup> graders (eleven girls and seventeen boys). The age range of these participants was 10-13 years old. Classes happened once a week and lasted 100 minutes each. The experimental group was the one submitted to the use of the application *Duolingo*.

The data for this study was collected through an Action Research design which is defined by Thiollent (2005, p.16) as:

a type of empirical social research that is conceived and carried out in close association with an action or with the resolution of a collective problem and in which researchers and participants of the situation or problem are involved in a cooperative or participatory way.

It means that this kind of research is conducted by teachers at their classrooms with the participation of their students, in other words, the action research happens during an authentic moment in the classroom.

The present study was designed in order to compare, students' understanding of the topic presented before and after classes, therefore, evaluating the extent to which *Duolingo* can benefit the acquisition of vocabulary. Regarding data collection, it was divided in four parts: a) diagnostic questionnaire; b) preparation of plans; c) pre-test and d) post-test.

The first part of data collection was conducted through a questionnaire. It was applied to students in order to verify their previous knowledge regarding the application *Duolingo*. It consisted of twelve questions: five open-ended questions in which students had to write their own answers, and five close-ended questions that students needed to choose and mark one or more answers and two multiple choice questions.

The questionnaire was formulated in order to gather information regarding participants' characteristics such as age, level of learning of English and knowledge about some educational applications. In addition, the questionnaire intended to find out how many students knew the App *Duolingo* and if they used it to study English.

Students were guided to answer the questions according to their opinions about the English classes and not to worry about providing right or wrong answers. They were also instructed not to identify themselves in their questionnaires. In addition, they were informed that their answers would not be judged or corrected at any point in the research.

After the findings obtained in this diagnostic questionnaire data collection begun. The textbook adopted by the school (Way to English - Editora: ÁTICA. Ensino Fundamental II - 6<sup>o</sup> Ano. 1<sup>a</sup> Edição - 2015), was used to follow the vocabulary topics suggested in three lessons that were designed

in both groups. This approach was adopted in order to test and compare students' level of learning of during the investigation.

The classes were planned to follow this instructional sequencing: the warm-up, vocabulary bank and exercises. The warm-up was planned to last about fifteen minutes maximum and involved a brief discussion about a theme suggested by the textbook. After that, the vocabulary bank consisted of twelve words. All the words were exposed in the whiteboard and the explanation of the vocabulary was made through a presentation of video with sentences and funny images. In the end, students completed follow up exercises collectively.

When the application *Duolingo* was used, the instructional sequencing was different. It was composed of the sequence: the warm-up, vocabulary bank, time to use the application to practice the vocabulary and exercises. The warm up followed the same theme explored in the class without the use of the application, and the explanation of the vocabulary was made through a presentation of video with sentences and funny images. To practice the vocabulary all the students made exercises using the application during thirty minutes.

Comparing the two learning formats, without the use of the application and with the use of the application, they were similar in the way of presenting the content. However, when the same vocabulary is practiced with the use of the application *Duolingo* the learning becomes less stressful and full of fun.

The insertion of a different manner of practice of the exercises through the application *Duolingo* before the production activity makes learning more fun. To compare the results between both formats, the students were instructed to complete a simple production test about the topic studied in the end of each format.

These tests were applied after both formats to evaluate students' understanding of the topic presented after the activities and to verify if the control group (Group A) would complete the test with more ease after the practice using the APP.

The procedure was repeated three times whenever new vocabulary was applied. The application of formats was done in the same day in both groups. The following data analysis was made through quantitative comparisons between the results obtained in the activities applied in both formats (with application *Duolingo* and without it). In this way, it was possible to compare if the performance of the control group was better than that of the experimental group (Group B) after the use of the APP.

Besides verifying if the content is learned effectively or not when the application is used, a secondary goal of the present study was to verify to what extent the application helps to develop vocabulary knowledge in writing. Therefore, the analysis was made through quantitative comparisons between the results obtained in the production activities applied in both formats with application *Duolingo* and without it. The results of the present study are presented in the next section.

## RESULTS

This section aims at presenting the results obtained after each type of class format conducted. The results of students' vocabulary knowledge were compared before and after the application of tests. This section is subdivided into the following: the diagnostic questionnaire, the pretest, and the post test.

### *The diagnostic questionnaire*

A diagnostic questionnaire was applied to the experimental group (Group B) to find out about their familiarity with the *Duolingo* application. The results pointed out that of the twenty-three answers collected, only seven students reported that they knew and used the application.

The same diagnostic questionnaire also pointed that all students consider that the English classes are important for their lives and some students use applications in their daily lives for leisure activities such as listening to music and playing games, and social network access. Because of this, these twenty-three learners agreed that using *Duolingo* could contribute to effective learning.

Regarding the interest for learning English, all of the students from the experimental group (Group B) answered they liked to learn English and agreed that English is one of the most important languages in the world. However, it has to be mentioned that the same students did not show much interest during the classes where expositive presentation of vocabulary was carried out.

The questionnaire also pointed that none of the students had previously studied English. This information might suggest the reason why they have difficulties learning the language. Since most of the students are exposed only to English grammar and vocabulary in the classroom, they lose interest in learning the language at school.

Regarding question number six "Could you provide your cell phone to an English class?" all students answered "Yes" in their questionnaires. Therefore, the experimental group (Group B) agreed to use mobile phones in the English classes.

The following question asked about the types of applications that are used in their mobiles. All students informed that they frequently use social networks, applications and games, such as *WhatsApp*, *Facebook* and "*Spirit Guardian* by":<sup>2</sup>

The number "1" and "2" were used to indicate the rank of frequency in response to Question 8, which was: "Number the order of the applications below in the order of frequency you use". The question was followed by a list of four APPs: Social Networks application; games; Photos Edition; Educational games. The result pointed that 61% of students use the social networks application and 39% of students use games.

The tenth and last question, "*Do you know the Duolingo application?*" asked students about the possible relationship between the App and the student. It pointed out that from the twenty-three stu-

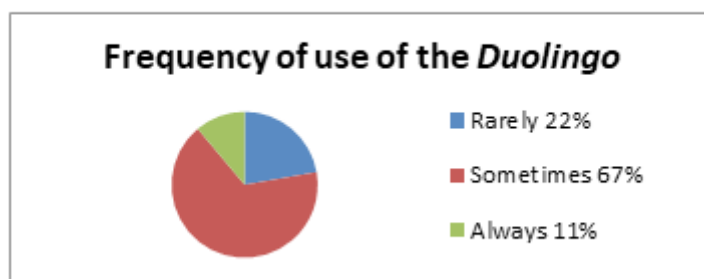
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<sup>2</sup> Spirit guardian: Vanguard rash for Android is very popular and thousands of gamers around the world would be glad to get it without any payments.



dents who answered the questionnaire, only seven students knew and used the application. Regarding the frequency of use of the application among the nine students, the graphic below shows the results obtained:

GRAPH 1 - Frequency of use of the *Duolingo*



By analyzing the diagnostic questionnaire, it becomes clear that students consider that *Duolingo* could help them in their English learning. Therefore, the inclusion of App in English classes seemed to be an effective tool to assist students' acquisition of vocabulary. The next section presents the intervention carried out in the English classes.

#### *The intervention*

The second part of this research consisted of testing the hypothesis pointed out by the questionnaire: the use of *Duolingo* could be more interesting to the students and their English language learning? If so, could motivation in the classroom be improved?

In order to test this hypothesis, three vocabulary themes were chosen to introduce new vocabulary. The introduction of vocabulary was performed in two formats: one without the use of the application and one with the use of the application. The goal was to compare if any difference in the results would become evident.

The choice of vocabulary topics was based on the themes explored by the textbook adopted by the school, and the procedure for collecting data followed these steps:

For the control group: (Group A)

- a) A Pre-test was applied before input.
- b) After a warm-up, a vocabulary bank input and exercises without *Duolingo* were carried out.
- c) A Post-test was applied

For the experimental group: (Group B)

- a) A pre-test was applied before input.
- b) After a warm-up, a vocabulary bank input and exercises using *Duolingo* was carried out.
- c) A Post-test was applied.

### *Pretest*

The pre-test consisted of nine questions and was divided in three parts. Each part consisted of three questions to assess vocabulary knowledge. Questions fit in multiple choice formats, in which the students needed to choose one correct answer. In addition, the questions intended to investigate *Duolingo* efficiency for learning vocabulary.

Following this idea, the tests were prepared based on the exercises proposed in classroom during previous experiences. The tables below show how the tests were presented:

The set of 3 questions below was used in the first pre-test for both groups:

1. *Em qual desses itens a palavra “pai” está escrita corretamente em inglês?*

father    fater    fader    phather

2. *Em qual desses itens a palavra “avó” está escrita corretamente em inglês?*

blue    mater    gandmader    grandmothe

3. *Em qual desses itens a palavra “irmã” está escrita corretamente em inglês?*

sisther    sister    sader    siather

The set of 3 questions below was used in the second pre-test for both groups:

4. *Como se escreve a palavra “estudante” em inglês?*

stuther    studhent    student    sthudent

5. *Como se escreve a palavra “cozinheiro” em inglês?*

cok    cook    kuck    cooker

6. *Como se escreve a palavra “professor” em inglês?*

teacher    tater    teader    thather

The set of 3 questions below was used in the third pre-test for both groups:

7. *A escrita da disciplina “Inglês” na Língua Inglesa inicia-se com a letra:*

A    O    I    E

8. *A disciplina “Educação Física” na Língua Inglesa tem duas iniciais:*

E.F.    P.E.    E.P.    F.E.

9. *A escrita da disciplina “Matemática” na Língua Inglesa inicia-se com a letra:*

M    N    A    MA

As can be seen, the three vocabulary topics chosen to assess vocabulary knowledge were: Family, Professions and School Subjects. For three classes, the control group (Group A) was exposed to an explicit explanation of the vocabulary bank with twelve words. The twelve words were written on the whiteboard and the new vocabulary was presented through a combination of video with related sentences and funny images.

Following this way, students were asked to complete a production activity about each topic suggested to each class. The activity consisted of some items in which students should complete using the correct form of vocabulary.

For the experimental group, (Group B) vocabulary explanation was followed by the same sequence of lessons as with Group A. However, to practice the vocabulary knowledge in writing all the students were guided to complete exercises proposed by *Duolingo*.

The task with *Duolingo* lasted for thirty minutes. By the end of the activities, each student presented his/her results through the App. If the student obtained good scores, the golden icon was shown (Figure 3).

FIGURE 2: Icon from App *Duolingo*

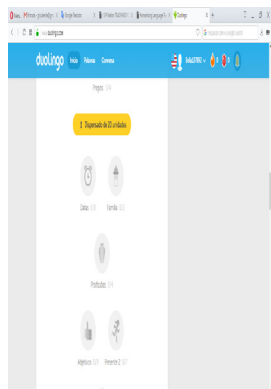
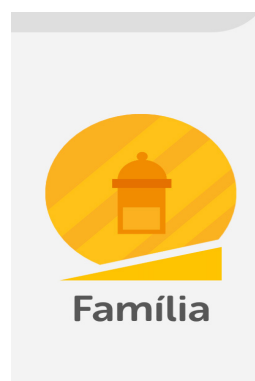
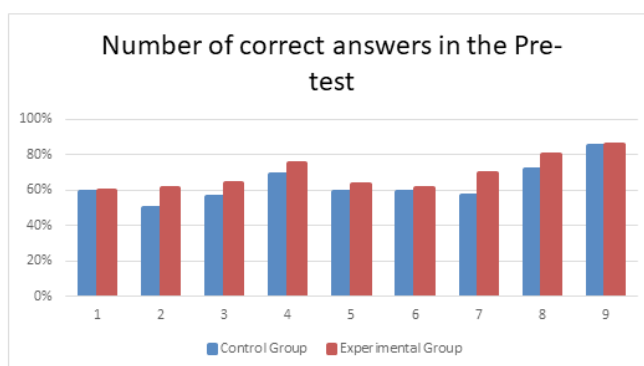


FIGURE 3: Golden Icon from App *Duolingo*



Graph 2 illustrates the results collected after the application of the three parts of the pre-test in both groups. It was observed that of the twenty-eight students in group A, the number of correct answers in pre-test was about 50% to 85%. In addition, in group B, the number of correct answers in the pre-test was about 60% to 86%.

GRAPH 2 - Number of correct answers in Pretest



The results obtained show that all students of both groups have a good previous knowledge about the vocabulary items.

At the end of each class investigated, a Post-test was applied to verify if the content had been learned effectively or not when the application was used. This procedure was used to provide evidence for comparing results.

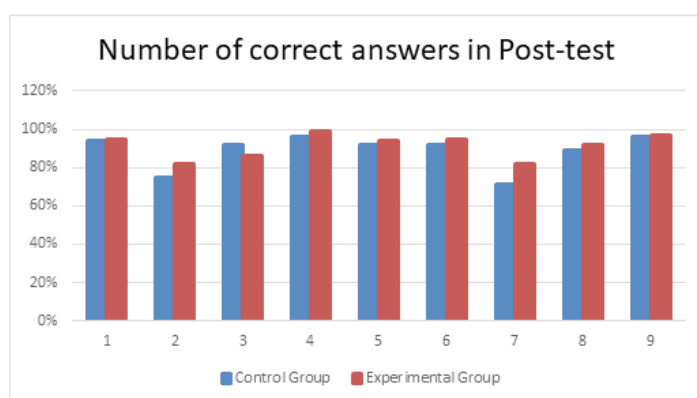
#### *Post-test*

The use of *Duolingo* after the production activity seemed to make learning funnier. To compare results between groups, students were instructed to complete the exact same test used in the Pre-test. These tests were applied for both groups to verify which group would perform better.

Besides verifying if the content was learned more effectively, the goal of this study was also to verify to what extent the application helped in acquiring vocabulary knowledge in writing. To investigate these data, the analysis was made through quantitative comparisons. The results obtained in the production activities applied in both formats with application *Duolingo* and without it. In this way, it was possible to compare and identify which group performed better.

Analyzing each question of the post-test, they obtained the following percentage for the number of correct answers for each question.

GRAPH 3 - Number of correct answers in Post-test



After verifying if the content exposed was learned effectively when *Duolingo* was used, it was observed that results showed similar numbers of correct answers in the post-tests between both groups.

By analyzing both tests, Pre-test and Post-test, results were positive suggesting that the use of *Duolingo* to improve vocabulary shows a slight difference in knowledge gain. In addition, these results show that the use of the application seems to help students in motivational aspects as engagement and more interest in classes were demonstrated.

Comparing the results of pre and post-test, we could observe that of the twenty-eight students of the control group (Group A), the numbers of correct answers in the post-test were about 71% to 96%.

As for comparing the results of the pre and post-test for the experimental group (Group B)

the results showed that the number of correct answers in the post-test was about 82% to 99%. Even if it is a slight gain, this suggests that *Duolingo* is a potential tool to improve vocabulary knowledge. These results are further discussed in the next section.

## DISCUSSION

After investigating three experimental lessons with *Duolingo* application it seems fair to say that *Duolingo* not only improved vocabulary knowledge in writing of 6th grade students, but also, it became clear that the App worked as a motivational tool for students, since they demonstrated more interest and engagement in classes.

According to Gardner and McIntyre (1993 *apud* Brandl 2008, p. 21) a motivated learner wants to achieve a particular goal. In the present study, the application *Duolingo* was adopted as a tool to improve vocabulary knowledge in writing in English classes, but it seems to have worked more efficiently as a motivational tool for learning.

There are two aspects to point out:

- 1 vocabulary gain
- 2 motivation

The first point to be mentioned is that the App was adopted in the experimental lessons in order to practice the vocabulary presented in the lessons and also to improve the vocabulary knowledge in writing. This can be assumed once all the levels of the *Duolingo* were related to vocabulary input. However, students demonstrated more motivation when they used the App while learning vocabulary.

The second aspect is that if we agree that the inclusion of technology tools in the English language learning classroom should only be adopted in the case it brings benefits to learners, *Duolingo* can serve as an example of successful integration of technology in second language classrooms. Such idea is supported by Martinez-Lage and Herren (1998) which says that planned and purposeful use of technology point benefits learners in the following aspects: students can make more effective use of time, learning can become more individualized and can gain more empowerment.

## FINAL CONSIDERATIONS

The results of this action research suggest that the use of *Duolingo* as a tool for learning vocabulary seems to be a potential tool to improve vocabulary. It also seems to affect positively on motivational aspects, as students were clearly more interested in learning English using the App.

Several previous studies have been conducted under the same phenomenon investigated here; therefore, this study is not new. However, when we talk about teaching and learning processes that use the technologies some “[...] studies have shown that technology in general has been used effectively” to facilitate the vocabulary acquisition, enrich input, increase writing ability and enhance motivation. (Shrum & Glisan, 2010, p. 454.)

The question brought by this research “What is the effectiveness of application *Duolingo* as a tool for learning English in the classroom to improve the writing vocabulary?” resulted in a positive answer once the findings showed that the application helped to develop vocabulary knowledge in writing skills. Besides, students seemed to be more motivated after being exposed to *Duolingo*. Such results are supported by Shrum & Glisan (2010) ideas in that technological tools and the way teachers use them can improve the learners’ vocabulary writing.

Beyond improving vocabulary knowledge in writing in English, another positive aspect found in the present study was the increasing level of students’ motivation with the insertion of application in the classes. Increased levels of motivation alone do not solve all problems, however, this motivation has the potential to generate more discipline and consequently to improve the relationship between teacher and students.

Despite the positive results observed after the insertion of application *Duolingo* in the English classroom, there are some limitations of the present study to be pointed out. The main factor is the length of classes. The schools require teachers to fulfil a course plan, in which a required curriculum should be observed, within a very limited period of time.

Although the textbook adopted by the school offers some suggestions on activities to practice vocabulary in writing, time constraints impacts directly on teachers’ actions. Because of this, to cover the content of the textbook adopted, teachers choose expository classes. Such choice serves to guide curriculum impositions, but can be very limiting for students learning.

It is important to point that we do not advocate for the application *Duolingo* as a substitute for traditional classes, but we suggest that it can be used efficiently as a complement for these classes. Although most students demonstrated they were not interested by the class when it was presented in expository form, the traditional explanations are important to complement learning. The suggestion presented in this research is a balanced method in which expository classes can be followed by activities using the *Duolingo* in order to reinforce the learning of vocabulary in a more pleasurable way.

After exposing some positive effects resulting from the use *Duolingo* as a tool for learning the English language in the classroom, it seems fair to say that this application can be considered a powerful tool to improve writing vocabulary and motivate students, promoting a better performance in English classes.

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