Effects of the Use of Clickers for Promoting Participation in the EFL Class at Regional
Simon Bolivar School in San Antonio de los Caballeros in Florida-Valle.

Merly Lozada Cuellar

Director
Diana Lorena Rengifo

Universidad ICESI
Escuela de Ciencias de la Educación
Maestría en Enseñanza de Inglés como Lengua Extranjera
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Contenido

Resumen

Este proyecto de investigación tiene por objetivo determinar los efectos del uso de los clickers en la participación de estudiantes del colegio Regional Simón Bolívar en la clase de inglés. A través de una metodología cualitativa y un diseño de investigación acción, se utilizaron varios instrumentos para la recolección de datos tales como: un diario de campo, una entrevista y un grupo focal. Los resultados de este trabajo muestran que el uso de dispositivos electrónicos inalámbricos favorece la participación y el compromiso de los estudiantes en la clase de lengua extranjera. Adicionalmente, se pudo observar que los estudiantes desarrollaron estrategias de cooperación y colaboración para el desarrollo de las actividades con los *clickers*. Este trabajo abre las puertas para que dentro de la misma institución se potencie el uso de estas herramientas en otras asignaturas, así como pretende que se continúe investigando sobre los efectos de los *clickers* en otros ámbitos educativos como el desarrollo del trabajo cooperativo.

Palabras clave: Participación, compromiso, clickers, inglés.

Abstract

This research project aims at determining the effects of the use of clickers on the participation of students from the Simon Bolivar Regional School in the English class. Through a qualitative methodology and an action research design, several tools were used for data collection such as: a field journal, an interview and a focus group. The results of this work show that the use of Wireless Response System favors the participation and commitment of students in the foreign language class. In addition, it was observed that the students developed cooperation and collaboration strategies for the development of activities with the clickers.

This work opens doors for the use of these tools in other subject areas within the same institution, as well as aiming to continue research on the effects of clickers in other educational fields such as the development of cooperative work.

Key words: Participation, engagement, clickers, English.

1. INTRODUCTION

Nowadays, technology has influenced the way languages are taught. In the past, teachers could not have the possibility to use other resources apart from the blackboard and chalk. With the development of different devices, language teaching has changed from traditional classes to more interactive ones. This study presents the use of technological tools such as the Wireless Response Systems (or clickers) to promote student participation in the English class.

This study was carried out in a rural school called Regional Simon Bolivar in the municipality of Florida, Valle del Cauca. The study came from the researchers' interest to use some technological devices the school has. She wants to teach English in more enjoyable ways and at the same time promote student participation which is an important aspect in language learning. From that particular interest, she decides to use clickers as a tool to increase student participation and engagement. The research question of this study is: How can a Wireless Response System contribute to the participation in EFL classes of ninth-grade students of Regional Simon Bolivar School in San Antonio de los Caballeros in Florida-Valle del Cauca?

Studies about the use of clickers in the classroom are popular in many countries such as the USA, Canada, countries in Asia, and Europe. In Colombia, the use of these devices in language learning is not common. Only one study from Santiago de Cali University uses clickers for EFL evaluations. As those studies, this research explores the

benefits of the Wireless Response Systems in the participation of students. At the same time, we analyze the use of clickers to improve vocabulary.

This paper has following chapters: the first one presents the introduction, which contains the problem statement and research question. The second chapter presents the justification and objectives. The third chapter shows the previous studies and theoretical framework. The fourth chapter shows the methodology of the study. The fifth chapter presents the results and analysis. The sixth chapter shows the conclusions. Finally, some limitations and remarks are expressed.

Problem statement

One of the main problems faced by English teachers in rural schools in Colombia is the lack of motivation and engagement towards language learning. Students often express their lack of interest by saying: "no me gusta el inglés", "no entiendo nada cuando me hablas en inglés, profe".

A study conducted by the British Council (2015), shows that a large number of people consider that English skills improve job opportunities, A small percentage of English learners consider that English is useful for their jobs. This is because students from this region consider that learning English is not necessary or important for their future. The main reason for this is the lack of job and professional opportunities in small municipalities. Therefore, English teachers should look for strategies to

promote students' active participation of students in the class and engage them to learn the foreign language.

Nowadays, the use of different electronic devices allows to improve the participation of students in different areas of knowledge. Cardozo (2013) states that the use of a Wireless Response System in different educational contexts shows that it allows for greater interaction between teachers, students and the contents of the subjects.

The Wireless Response System is not a new tool used in different subjects. They have been used since the 60's. According to Lantz & Stawiski (2013), clickers are used in different disciplines such as: biology, mathematics, statistics, and others.

Although its application in English teaching and learning is not popular in Colombia, Ramos & Valderruten (2014) find that clickers can be used in EFL evaluations (quizzes and mid-term exams), but their use is scarce.

The investigation proposed here seeks to improve the level of participation of English students of the ninth grade in a rural school. The use of a Wireless Response System (WRS) can benefit not only students and their participation in the English class, but teachers of any subject area. Cardozo (2013) shows that both students and teachers find the use of clickers in the classroom as a positive tool for improving participation and evaluation in large classes. Moreover, clickers don't need internet connection so that makes it easier for rural schools to include the use of this technology in any class. The WRS can be both a pedagogical and didactic tool that helps teachers in their everyday activities. In the pedagogical aspect, clickers help teachers with reporting attendance and getting reports about the students' performance. In the didactical aspect,

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clickers help teachers getting the student's attention and participation, and testing their

knowledge.

Research question

How can a Wireless Response System contribute to the participation in EFL classes

of ninth-grade students of Regional Simon Bolivar School in San Antonio de los

Caballeros in Florida-Valle del Cauca?

2. JUSTIFICATION

In Colombia, English teaching has a recent history. Teachers use both traditional

approaches and the incorporation of ICT in their classes. Since 2004, The National

Ministry of Education has been working on the improvement of both English teaching and

learning to reach the standards described in the Common European Framework of

Reference. According to Guide 22 developed by the Ministry of Education in 2006 (MEN

in Spanish), there is a need for all Colombian citizens to be able to communicate in a

foreign language- English. The Ministry of Education in its Bilingualism National

Program (2006-2019), established a goal that all Colombian citizens needed to learn at

least a foreign language in order to be more competitive. That program states that learning

a foreign language, especially English, is a way to have more and better opportunities in

life.

The government is committed to improve the level of English in the country, but the outcomes remain very poor. Sánchez - Jabba (2013), in his study about Bilingualism in Colombia, confirms that only 2% of 11th-grade students reach B1.

This research developed at a rural school seeks to improve engagement and student participation in the EFL class by using clickers. The contribution and relevance of this study will rely on the effect of the use of the IRS in a particular context. Students are not motivated to learn a foreign language and are not engaged in the classroom activities. Improving language learning motivation and engagement might lead to better results in language performance. As stated by Bojinova, "clickers can be used as a means of anonymously testing students' understanding of the subject matter" (2017, p.4)

Besides, this project will benefit both teachers and students at Regional Simon Bolivar public school by promoting student participation in the EFL class. If students are actively engaged in the English class, their learning process might improve as well. Other teachers from different subject areas can also use the devices, and programs, so the whole community can take advantage of this technology. There is a significant advantage of implementing this project at the selected school since there is no need to buy the WRS and it does not require an internet connection.

General objective

To determine the effects of using a Wireless Response System to promote participation of ninth-grade students in the EFL class of Regional Simon Bolivar School in San Antonio de los Caballeros in Florida-Valle del Cauca.

Specific objectives

- To design and implement activities using a Wireless Response System in the English class to promote participation of ninth-grade students in the EFL class of Regional Simon Bolivar School in San Antonio de los Caballeros in Florida - Valle del Cauca
- To identify the level of participation of ninth-grade students in the English class by using a Wireless Response System through tests and classroom activities.
- To describe students' perceptions of the use of Clickers to promote their participation in the English class.

3. LITERATURE REVIEW

Previous works

Different studies and research projects demonstrate the benefits of using a Wireless Response System in several areas. In this section, fourteen studies show the potential benefits of using clickers in the EFL classroom. Although this type of research is not very

popular in the language field, the studies conducted in different parts of the world show that clickers are useful at motivating and engaging students.

According to Lantz & Stawiski (2014), clickers or Interactive Response Systems (IRS) became popular in the 60's. Later, they were available in the market since 1990, but they were quite expensive. In 2000, clickers began to be more popular in schools and universities. Many studies around the world show that the use of clickers in the classroom has had a positive impact on students' learning process. They are used in different educational levels (elementary, high school and higher education) due to the fact that clickers are easy to use in any classroom setting. Different authors emphasize that the use of clickers is an efficient and inexpensive solution to student interaction in large classes.

Clickers have different names: Student Response Systems, Audience Response Systems, Interactive Voting Systems, and Electronic Voting Systems. Clickers are recognized worldwide because with a simple electronic device any student can answer instantly using a PowerPoint Presentation. Clickers promote interaction in large classes, and provide students the opportunity to express an opinion.

Liu, Liang, Wang, and Chan (2003) explain that the IRS (Interactive Response System) consists of hardware that includes two devices - a set of signal transmitters and the response signal receiver. The institution or classroom need a large TV set. The IRS Software has the following functions: supporting the preparation of content (i.e. authoring materials), displaying content (i.e. showing materials on the screen), collecting all responses and processing them into meaningful information (i.e. grading students' answers), storing and

retrieving processed information, and generating reports. The teacher and students can use these functions to engage in interactive learning activities.

Kenwright (2009), presents clickers used in large classes during lectures. The main objective of this article is to show how clickers give immediate feedback. Clickers give feedback, and assess students through quizzes or final exams. The author states that the Wireless Response System (WRS) can promote students' participation by allowing them to answer or give their opinion anonymously. She also reports the results of other studies in which clickers promote camaraderie among students when they all answer correctly. The author also points out some problems related to the use of clickers. For example, Stuart et al. (2004) show that the time spent to set up the system causes problems in terms of loss of time. This document shows some problems when using the WRS that are compatible with some situations faced by the researcher. The amount of time spent to program the system is considerable.

Premkumar & Coupal (2008), present twelve tips for promoting students' engagement in the classroom. The tips consist on using the technological tools for: developing critical thinking, using a variety of activities, identifying the purpose of the activity and the amount of time for each question, assessing activities and the effectiveness of using the clickers. The author concludes that the objectives and the activities developed for using clickers in the classroom should be well prepared in advance. This paper presents some important aspects that the researcher took into account when developing the activities. The purpose of each activity matched the topic of the class and the abilities that students should reach.

Another study consulted by Moratelli & DeJarnette (2014), shows the impact of the use of clickers in students' engagement to improve reading comprehension in a heterogeneous class in elementary school. In this article, the authors explain how they use clickers not only for making the class more enjoyable but use the answers to analyze the choices of students. This way, students need to justify their selection and convince other students that their answer is the correct one. By implementing clickers in the reading comprehension class, students' results in tests got better (59% of them improved). Also, the authors analyze students' opinions about clickers. In this article, the authors present some graphs to show the improvement of student engagement and reading comprehension level. In the current study, graphs show the students' English level and their opinions about using clickers.

Also, Firsing, Yannessa, Fredanna, McGough, Delport, Po & Brown (2018), present the student preference of clickers at the university level. This investigation compare the use of traditional clickers with a similar system that uses cellphones in undergraduate students of health programs. This study uses a mixed (quantitative and qualitative) approach and a total of 306 participants (millennial students). The main result of this study is that millennials (people born from 1981 to 1999) prefer the traditional Turning Point System over the Smartphone version of the devices. This investigation is similar to the one presented here in the type of population selected (millennials) and the type of devices used (Turning Point System).

Lowery (2005) shows the following benefits of using a Student Response System (SRS) help teachers for getting attendance and checking comprehension of teacher's explanations. Also, teachers use clickers for checking participation and learning retention of topics in evaluations. The methodology used in this study allows Lowery to present the different options for using an SRS. By using online and offline clickers, the author presents the results comparing the possibilities for using clickers and what to consider when purchasing them. In conclusion, the author states that SRS facilitates student discussions to foster an active learning environment. Although, Lowery's study is different from the current project since online clickers are not used.

Another study conducted by Deslauriers, Schelew & Wieman (2011) show how learning in a large-enrollment physics class improves. By having the students spend time in class at "thinking scientifically" (making and testing predictions and arguments about the topics, solving problems, and critiquing their reasoning) by using clickers. The experiment consists of using clickers in three classes of three hours each. There were two groups: control and experimental. Students take an online survey. The main conclusion of this study is that attendance and class participation are higher in the experimental group. Using technology in our classrooms is not only a matter of making the class more enjoyable. Clickers help developing the students' ability to think critically. Through analyzing the correct answer, students need to think before they answer. Moreover, teenagers are difficult to manage. Clickers allow students to be more engaged in class and participate without any constraints. Deslauriers, Schelew & Wieman's work differs from the current research project in the use of an online survey to get student's opinions. Since

students at Regional Simon Bolivar do not have internet access at home, the researcher survey them using paper and pencil.

Regarding the language learning field, Cardoso (2013), shows the impact of using a Wireless Response System (WRS) and its contribution to effective learning. The author explains the different names that WRS has adopted: Interactive Response Systems (IRS), Learner Response Systems (LRS), Classroom Response Systems (CRS), Clickers, among others. The author also states that:

> It is clear from a review of the literature that research on the use of LRSs in L2 settings is still in its infancy. Despite the encouraging results obtained in the few studies available, it remains an empirical question whether they are generalizable to other communities of L2 learners. (Cardoso, 2013, p. 4.)

This study shows that in the literature review few studies on the qualitative approach research use a WRS. One conclusion from this research is that students can respond anonymously and they can get immediate feedback. The author also presents other uses of these devices such as controlling attendance and assessing understanding of the material presented by the teacher. They also provide immediate feedback and increase interaction in the class. Clickers encourage students' participation, test students' performance and survey students' opinions. The use of clickers in this study follows a similar path as Cardoso's investigation. The researcher uses clickers to give students feedback on their answers after each activity. Also, the researcher surveys the students to get their opinions about the use of clickers.

In addition, not all the results of previous studies are positive. Rodriguez Prieto (2014) in his quantitative study uses clickers to assess higher education students' level of

grammar and vocabulary in Spanish. He demonstrates that clickers affected negatively the students' scores, as students in the Clicker group obtains significantly lower scores on the quizzes than the Paper and Pencil group. One of the reasons for this result is that this technology by itself does not encourage participants to study more often before the quizzes. Besides that, the author considers that the use of clickers affected negatively students' performance on quizzes. The tool does not facilitate access to the readings neither reminds them about the reading assignments nor motivates them. Despite providing students with immediate feedback and the ability to compare their scores with those of their classmates. The study uses experimental groups to test the use of clickers. The participants of the study also answer a questionnaire about their opinion on the use of clickers. This study shows the limitation of using clickers in the classroom. Each technological tool has good and bad things, the teacher decides to take advantage of the positive aspects of it and leave aside the negative ones. In the current study, the researcher uses clickers to promote participation in the EFL class not for assessment purposes.

Another area in which clickers are used is in administration and pedagogy. In 2014, Mork from the Tokyo Woman's Christian University studies some pedagogical and administrative benefits of using ORSS (Online Response Systems) as a teaching tool for Japanese EFL learners. Its main objective is similar to the general objective of the present work in that it seeks to determine the benefits of an SRSS in an EFL class. The methodology consists of several steps such as selection of classes (participants), then the students use the system, take a survey and assess the SRSs. This investigation uses a survey to get a general impression of how students perceive the system. Then, data is analyzed using statistics. The software on the computer calculates some statistics such as

mean, standard deviation, and variance. One of the main conclusions of this study is that the device is useful for language learning. Also, SRSs is a tool that increases students' motivation and engagement. It is very important to consider the students' opinion. Both the current project and the study aim at looking at the benefits of clickers. The study developed at a university in Tokyo also assess students which is not the aim of the current proposal.

Another advantage of clickers is their contribution to class innovation. Lantz & Angela Stawiski (2014) show the use of clickers in the classroom as an innovative way to teach. The objective of this study is also similar to the one presented in this research since clickers are an innovative way to teach English. The main result of this study is that clickers are effective in lecture retention, improve memory and provide immediate feedback in the classes. The main conclusion of this study is that clickers allow participants to retain information and better results on the assessment of lecture material. The methodology used in this research consists of a quasi-experimental design with control and experimental groups. Again, feedback is important in the process of learning a language, and clickers are helpful in this aspect by providing immediate feedback. At the same time, clickers increase the interaction between students and the teacher by discussing their choices and why they are right or wrong. In the current study, feedback is not a category of analysis.

In addition, Levy, Yardley and Zeckhauser in 2017, highlight a good number of benefits of using clickers in a graduate program, such as: the promotion of attendance, attention, engagement, and encouragement of students to respond to more questions during a class, regardless of how they respond. The main conclusion of this study is that the

technique for eliciting choices (hand raising vs. clicking) affects individual responses in

group settings. The methodology used by the authors tests the following hypothesis: 1. Do

students give the same responses when using raised hands than when using clickers? 2. If

the answer to (1) is no, are the differences consistent with a herding hypothesis? A total of

1100 students from the Harvard Master of Executive Education program participate in the

study. The quantitative results show for the first hypothesis: Do students give the same

responses when using raised hands that when using clickers? The evidence provides a

definitive no. Over half (57.3%) of questions show a difference in hand and clicker

responses of over 10 percentage points, and nearly a quarter (24.6%) show a difference of

over 20 percentage points. The answer to the second hypothesis is less definitive. No

clicker response leads to a unanimous outcome. This study is quite different from the one

presented here because it uses a quantitative approach and compares the use of clickers

with hand-raise answers in a class. Despite that difference, it is evident that clickers

encourage student participation.

Clickers can also give information about students' engagement.

Bojinova &. Oigara's paper (2011) assess both students' experiences and perceptions

about the use of clickers and to identify the impact on the students' learning process. The

research conducted by Bojinova and Oigara finds that the responses, interviews, and

analysis of the use of the interactive tools can increase student engagement compared to

traditional instruction. The students in this study find classes more enjoyable thanks to the

use of clickers. In addition, clickers increase their attention to the class and make them

aware of the understanding of the material presented by the teacher. The authors also use a

survey to gather students' perceptions on the use of the Wireless Response System. There

are some similarities from the current study and the research done

by Bojinova and Oigara in 2011. Although the authors use clickers for increasing student

participation in lectures, the current study focuses on the use of clickers for promoting

student engagement in the English class. Since lectures are typical in large classes, this

way of teaching is different from what the researcher does in the English class. Clickers

can be part of the natural development of the teaching-learning process.

On other hand, the research done at the Towson University by Roush & Song

(2013), presents some benefits of using clickers in Spanish classes at two elementary

schools. The authors use a survey and an interview to collect data. The results of this study

suggest that the use of clickers look for improving student participation in both class

activities and assessment. Students and teachers report that working with clickers is easy

and enjoyable. This study presents some similarities with the current project especially in

the use of a survey and an interview. Many studies show that clickers improve attention

and participation in higher education, but few studies are done in elementary and high

school.

Regarding a common issue in schools –large classes-, Kenwright (2009)

in her article shows the use of clickers in lectures and immediate feedback. Clickers are

used not only to give feedback but also to assess students through quizzes or final exams.

The author states that clickers promote students' participation by allowing them to answer

or give their opinion anonymously. She also reports the results of other studies in which

clickers promote camaraderie among students when they all answer correctly.

Finally, Ramos & Valderruten's (2014) study at Santiago de Cali University use

clickers in evaluations (quizzes and midterm exams). Also, they survey the students who used

the Wireless Response Systems to identify the benefits of using these devices. As a main conclusion, the authors find that clickers are beneficial for the students learning process. Students feel that clickers made exams easier to answer. This study has a similarity to the current project in the sense that both studies use a survey to collect the students' perceptions about the use of clickers. Also, both studies use clickers in the English class. This may be an interesting point for future research in Colombia since there are not many studies like these in the language field.

An overview of the potential benefits of using clickers in the language classes allows to see that these devices offer more contributions than limitations in student engagement and learning.

Student engagement in EFL/ ESL classes

According to Taylor and Parsons (2011), student engagement focuses on increasing achievement, and positive behaviors so that students remain in the school. In recent years, Gilbert (2007) considers that student engagement refers to the way to enhance students' abilities to learn how to learn. All teachers hope for students to learn, for that reason, engagement is a fundamental concept nowadays. There are different types of engagement: cognitive, academic, intellectual, institutional, social, emotional, behavioral, and psychological, among others. One way to deal with the different notions is to define student engagement through the way it is measured. Taylor and Parsons (2011) state that student engagement is measurable by using quantitative data such as attendance, standardized test scores, and graduation rates.

In recent years, the educational institutions are implementing changes in the curriculum to promote student engagement. For example: including the use of ICT, changing the interaction forms in the classroom between students and teachers, improving and exploring new forms of learning experiences, and bringing relevant topics to the classroom.

Claxton (2007) in Taylor and Parsons, explains that technology also plays an important role in students' engagement. Teachers can use different types of activities to engage students. For instance: using blogs, wikis, projects, WebQuests to develop critical thinking.

Claxton (2007) in Taylor and Parsons summarizes his recommendations of strategies that promote learning engagement. He provides some ideas to successfully create "epistemic cultures" that support learning how to learn. Some of those strategies include talking about the process of learning with the students and planning challenging activities. He also recommends using metacognition to make sure students understand the content. Additionally, the author defends using real and relevant content, and arising students' awareness.

The current study takes some of the previous ideas such as: language, activity, involvement, and progression since the planning and designing of activities required an emphasis on English learning. The activities used in the classroom not only included the topics and competencies that students need to learn. Time management and self-reflection are part of the development of activities. These skills are not measured in this study.

Student motivation in the EFL classroom

Motivation is one of the issues in the EFL classroom. Teachers from the public and rural schools in Colombia reference the lack of motivation of their students to learn the foreign language. Dorney (1998) explains that learning a foreign language is a complex task that involves a good number of psychological, social and linguistic factors. Several authors: like Gardner (1985), Gardner et al. (2004), Lightbown & Spada (1993), have highlighted the importance of motivation in the EFL classroom. There is a connection between motivation and effective learning. The latter occurs when students live positive experiences that increase students' self-confidence.

According to Filer (2010), motivation helps students focus on content, increase memory, and enhances cognitive processing, all of which lead to improved performance. This is one of the reasons, motivation plays an important role in language learning. If a student is motivated, his/her learning process will have better results. Also, motivation helps students to use their efforts to make the class tasks in a more effective way.

Bahous, Bacha, and Nabhani (2011) explain that motivating students, especially teenagers, to learn a foreign or second language is a complex task. The authors consider motivation as a key element in language learning and teachers should find strategies that

promote effective language skills development. The study conducted by Bahous, Bacha and Nabhani (2011) included different aspects related to motivation in language learning such as content and teaching methods, positive learning experiences, attitude and anxiety, the impact of teaching strategies and interactive communication methods. The latter is important for this study since the way students and teachers interact in the classroom can affect or benefit language learning. The authors consider that students need opportunities to interact freely with their classmates and learn from their mistakes.

In addition, Lange (2018) states that student engagement is a result that can be affected by the school climate. That is why teachers need to use a variety of strategies to keep students engaged. One way of doing that is by choosing topics and activities students like. Lange (2018) presents some principles for developing engagement in the classroom. Teachers can plan activities that promote creativity and curiosity. Also, establishing a closer relationship with classmates and making comparisons foster student engagement. Making students successful in their learning process is another way of having motivated students.

Lange (2018) emphasizes on cooperative learning strategies as another element that promotes participation and engagement in the classroom. The use of technological tools is an easy way to combine language learning and student cooperation.

How to Measure Engagement

Taylor and Parsons (2011) explain that engagement is related to improving achievement, positive behavior, and high school completion. That is to say, engagement has a close

relationship with avoiding student dropouts in schools. In recent decades, engagement is connected to the idea of enhancing students' abilities to learn. Engagement is now seen as a concept related to academic, cognitive, emotional, behavioral, social and psychological development of skills in order to achieve goals.

In addition, Taylor and Parsons (2011) state that results from tests or attendance are forms to measure engagement. Also, students' time spent in a task, interest and enjoyment are measurable.

Furthermore, interaction is a key element in engaging students. Willms, Friesen, and Milton (2009), in their study, found that students want stronger relationships with their teachers, parents, and community. Also, students want teachers who understand how they learn and develop learning environments so that they can build learning networks. Technology also allows students and teachers to improve language teaching and learning. Taylor and Parsons (2011) explain that technology offers learners an accessible and relevant subject matter.

4. RESEARCH METHODOLOGY

In this section, the researcher presents the method, design, population, instruments and stages of the current study.

Method and Design

The present study intended to establish the effects of using clickers in the Regional Simón Bolívar Institution. The researcher uses a qualitative approach to determine the effects of using a Wireless Response System to promote participation of ninth-grade students in the EFL class of Regional Simon Bolivar School in San Antonio de los Caballeros in Florida-Valle del Cauca.

This study follows the qualitative approach. According to Hernández, Fernández & Baptista (2010), a qualitative approach defines techniques to collect data without using statistical analysis. In this approach, the researcher identifies a problem by observing a particular context and then, the problem is related to existing theories. By using observations, interviews and document reviews, the qualitative approach describes a particular reality.

According to the authors, the stages followed by a researcher in the qualitative approach are: problem statement, a review of literature (this helps to justify the research proposal, and identifying key concepts or theories), the specification of methods for data collection and analysis, and the analysis or interpretation of data.

Design

Action research is the design selected for the development of this study. According to Kemmis & McTaggart (2000), action research allows the researcher to change or transform a social situation. Action research also implies self-reflection in the process of investigation. Action research is a form of qualitative design that involves participants and looks for the continuous revision of what the researcher does in the process.

According to Kemmis & McTaggaart (2000), action research aims at promoting participation of the selected population in a study through the transformation of a social reality. Participants in this type of research can be any member of a community.

Kemmis & McTaggart action research spiral consists of the stages that a researcher should follow. A cycle starts with a planning stage. That means before deciding how to intervene in the process, planning needs to be done. The planning stage also helps researchers to think and prepare the activities. For the current study, the researcher planned the different activities using clickers.

The second stage is action. Taking into account the goal of this study, the researcher implements the activities using clickers and at the same time collects data. Using different instruments (field diary, and focus group) allows the researcher to have enough elements to analyze students' participation and engagement in the EFL class.

After the action stage, Kemmis & McTaggart (2000), propose the reflection phase. This stage allows researchers to go back and check what they do in the classroom. The cycle can be used again if changes are necessary.

Instruments for Data collection

This research used the following tools:

A survey: To describe students' perceptions of the use of Clickers to promote their participation in the English class. The survey consists of seven questions that focused on the English class, the technological tools used by the teacher and their previous experiences with

the implementation of technology in the language learning process. Also, the survey asks the students for their preferences regarding the use of clickers for participation.

The survey is available in annex #1.

An interview to focus groups: To gather students' opinions on the use of clickers. The interview confirms the effect of clickers on the students' participation level. The researcher meets with a small group of students and asks them some questions in order to know how they feel using clickers in their English class. The teacher researcher records in audio and transcribes students' answers. Student's answers are anonymous in this study in order to protect their identity.

Some students participate in the focus group interview. The researcher selects six students, three of them have good academic performance and three students have low academic performance. In the interview, the researcher asks six questions related to the use of clickers, logically after having used them for several hours of class.

The researcher asks students to respond anonymously in order to protect the students' identity.

The focus group interview is available in annex # 3

A field diary: to observe and register the impressions of the teacher and students on the use of clickers in the English class.

In the field diary, the researcher registers students' practices on the use of clickers and reports the comments on the use of the devices to promote participation. This diary allows the researcher to have more information to analyze the participation of the students in the language class.

In the field diary, different comments from the students on the use of clickers during the class are collected. Positive and negative students' comments are expressed during the use of clickers in the English class. They are going to be used in the next section (analysis of categories).

A sample of the field diary is available in annex # 2

In addition, the researcher analyzes the data collected through the field journal, the survey and the interview with the focus group. The triangulation of data and concepts help the researcher analyze the following categories: participation, the motivation and perception of the use of clickers in the English class.

Analysis of categories

Using data from the instruments, the researcher organizes the analysis in the following categories: participation, motivation, students' perception on the use of clickers and institutional issues. Each category is presented and supported with students' comments.

Project Schedule

The following chart contains the stages the researcher follows to implement this study.

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┌─────────────────────┐      ┌─────────────────────┐      ┌─────────────────────┐
│  Introduction of the │  →   │     Design and       │  →   │  Implementation of   │
│    Turning Point     │      │    planning of       │      │     activities       │
│  Program & Clickers  │      │     activities       │      │                      │
└─────────────────────┘      └─────────────────────┘      └─────────────────────┘
                                                                      │
                                                                      ↓
┌─────────────────────┐      ┌─────────────────────┐
│                      │  ←   │   Observation and    │
│     Data analysis    │      │     interviiews      │
│                      │      │                      │
└─────────────────────┘      └─────────────────────┘
```
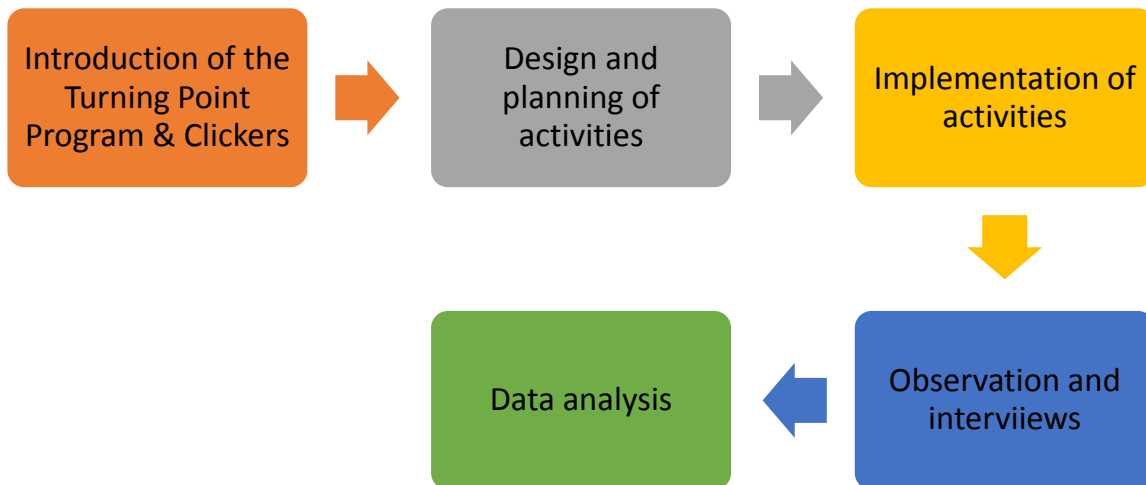
A detailed chronogram is also available in the annexes section.

Population

The researcher chose the Regional Simon Bolivar School in San Antonio de Los Caballeros in Florida, Valle del Cauca since she works there. Students from ninth grade participated in this study since they show low motivation and engagement in the English class.

The group has a total of 23 students, 5 are boys and 18 are girls ranging the ages of 16.

Almost all students live in the small towns around the school, and they come to class after a 20 minute walk.

Also, most of them belong to the low socio-economical strata. Although this research does not analyze the impact of the socio-economic situation of students, this factor may influence the students' perceptions about learning a foreign language in a rural school.

School description

Regional Simon Bolivar Educational Institution is located in San Antonio de Los Caballeros District, in the municipality of Florida, Valle del Cauca. In 1965, Mr. Jaime Domínguez Vásquez, donated the land to build the campus. The construction was carried out with the State participation and donations from the community residents. The school started operating in 1969 as a branch of the Germán Nieto School in Candelaria.

The school is located in the rural sector where the main economic activity is agriculture, especially the sugar cane plantation and production, and in a smaller scale other crops and the poultry industry. Given the local conditions, the institution offers training in the agricultural education emphasis.

In 2002, the Ministry of Education implemented the merging of educational institutions, so the Simon Bolivar Educational Institution became one single school that joins three schools (Simon Bolivar, the parochial school and Simón Bolívar Regional School).

Nowadays, the institution has 36 teachers, five of them are afro-descendants. There are 814 students distributed in the three branches. Most students belong to the social strata 1 and 2|, many of their parents have some level of education (at the elementary school level).

The English area at the school has two teachers for the high school section.

The social context of the school is complex given the economic, cultural and family conditions. The community is located in social strata one and two. A typical family in the context is either a nuclear family or a single parent family. Most students live with single mothers, others live with their grandparents. In other cases, they live with their stepfather or mother, creating great emotional instability in the students. Most students' fathers work in the sugar cane plantation of the region whereas mothers work in the poultry industry. Others don't have a job and stay at home. It is also common for families to face economic needs and limited job opportunities in the region. They decide to migrate to other places or towns. For this reason, there is a high percentage of drop-outs and absenteeism. Drug addiction has also reached this community, becoming a serious problem.

Learning difficulties at the school are significant. Due to all of the factors mentioned above, students are suffering from attention deficit, and there is also great absenteeism. They skip classes because they have no learning motivation. Besides, those who attend show apathy in class participation. These difficulties make teachers look for teaching approaches and creative tools in order to have students' attention, motivation and participation in class. There are problems regarding the consumption of liquor and drugs, as well as the early practices of sexual activity. Girls get pregnant at a very early age, a great number of them quit school.

Despite the complex situations in the school, students love and respect the educational institution. The school is part of the community, and it is the hope for a better future. This is the biggest challenge we face as teachers of the institution, to motivate students to learn, so they can succeed.

Implementation of activities

A total of 10 sessions were designed to observe students' learning behavior with the use of clickers. These sections are described below taking into account the learning objectives worked with the students and the language content addressed with them. Out of the ten sessions planned, five followed the area plan topics corresponding to the period in which the study was performed and the other five sessions were to review the same topics with different exercises, in order to verify the level of learning of the subject during the classes.

Session 1. Exchanging personal information

Objective: *Identify* and classify the different words we use to ask according to a given answer.

Activity 1. Questions and answer with Wh questions. The teacher wrote different questions on the board, such as: What's your last name? Where are you from? When is your birthday? What's your favorite color? The teacher begins the explanation of the topic. Then students should form two circles so that they are facing each other, where one student should ask questions and the other should answer the Wh questions that are written on the board.

The teacher pays attention to the dialogue by correcting pronunciation and grammar. Then, vocabulary is explained. Students were to form sentences with each word to facilitate their learning. To verify and reaffirm the understanding of the use and meaning of wh questions, a multiple selection quiz was performed using clickers where the student had to choose the correct answer to complete the question.

The teacher researcher observes students' practices during the first activity using clickers. Their reactions are: Student E: "Profe sigamos con otro ejercicio, dígale al otro profe que le regale la hora".

During the first activity, students are anxious to see how this devices work.

Activity 2. A reading on nature was projected. Students had to point out to unknown words, search the dictionary for meaning, and then write sentences with the new words. In order to use the clickers, a quiz is done, based on the reading, where students must choose the correct answer.

Students are eager to use the technology. One of the students asks: Student B. "Profe hoy vamos a volver a trabajar con los aparaticos?

Another student comments: Student A: "Profe venga yo le ayudo a repartirlos". When the activity is over, another student says: Student J: "Yo los recojo y los guardo ordenadamente"

Session 2. Describing people

Objective*:* Identify and use English adjectives to make oral and written descriptions. Learn the order that adjectives should have in a sentence.

Activity 1. Using Adjectives: The picture of a known character is displayed for students to describe the character using all possible adjectives they can find in the image.

Activity 2, the video of a song was projected which explicitly presents the order of adjectives with a nice and fun rhythm. Through repetition, this video helps students memorize the correct place of adjectives in a sentence, according to the function of each adjective. Then there were written exercises practicing the norm. To verify the learning of the topic, a quiz is performed in pairs using the clickers to answer questions similar to the Icfes exam.

Again, students show their preference for using clickers in the English class. A group of students say that even the ones that almost never participate, are trying to do it.

They say: "Profe, hasta Luis ahora trabaja en clase con los clickers"

Session 3. Comparing people using the Comparative form (er/ more).

Objective*:* Making comparisons with different adjectives.

36

Activity 1. Images of famous people are projected to compare them and identify the differences and similarities using the appropriate rule according to the adjective. Clickers were used to respond according to the projected image.

Activity 2, Images are displayed, and the student must choose the correct answer taking into account the comparative rules in the use of adjectives.

Session 4. Who is the best? Using the Superlative.

Objective: Using superlative with different adjectives.

Activity 1. The teacher explained the topic, students had to create sentences using the correct form of the superlative rule. The clickers were used to choose the corresponding superlative according to the rules taught.

During this session, students ask to their classmates the following questions:

Student C: ¿Cómo te fue?, ¿Cuántas buenas sacaste?

Student E: "La próxima te gano yo"

The teacher researcher noticed that they are competing to get more correct answers in the activities. This can be positive since students are now more engaged in their learning process. The teacher researcher listens to this type of comments for the first time.

Session 5. Reading comprehension:

Objective: To practice pronunciation, learn vocabulary and verify reading comprehension.

Activity 1. Reading: The teacher uses readings previously downloaded from the internet taking into account the level of the students. Understanding, memorization and vocabulary learning is verified, using clickers to respond.

During this session, students are motivated to use the clickers. They say: Student D: "Profe, a mi me gusta mucho trabajar con los clickers" "Sigamos trabajando así todas las clases".

The teacher begins classes with a warmup, as an activity of motivation and especially of introducing in the topic that we will develop. After this moment of relaxation and joy, the topic is presented. Students are not usually aware of this stage. Then we proceed to explain the corresponding topic in its linguistic components, through examples and exercises. Later the doubts are cleared. Finally the clickers are used to evaluate the topic seen.

Reflection on the lesson plan

As a general rule, classes start with a warmup. It is an activity for motivating and introducing students to the topic. After that, the teacher explains the topic. Later, the teacher gives examples regarding each topic, for example in its linguistic components (grammar, vocabulary or pronunciation). The teacher always asks students if they have questions about the topic. Finally, clickers are used to evaluate the activity.

For class preparation, the teacher uses clickers at the end of the class. Before that, it is necessary to make the slides with large vivid images to facilitate the understanding of the questions. The teacher also takes advantage of the TV screen and I download videos, songs and readings that help to develop the topic. In addition, they facilitate the acquisition of new vocabulary during the class. In order to teach these topics, the teacher uses other materials such as cards, whiteboard marker, worksheets, TV, computer, turning point (clickers), PowerPoint, and videos.

A very positive aspect to highlight in the students using the clickers, is that it allows them to develop the collaborative approach. When responding they share their views on the correct

answer justifying their decision. This creates the ability to analyze, encourage motivation, attention and participation. Also, they like clickers very much because the Turning Point System allows them to see their grades immediately. In addition, the System gives students feedback on the errors and achievements they obtained. Errors are a means of learning. Clickers promote cooperation among students as Revelo et al. (2018) explain that the construction of knowledge is enhanced through collaborative work.

5. RESULTS AND ANALYSIS

In this section, the researcher presents the analysis of the survey and the focus group interview. The current research project aims at describing the effect on the use of clickers to promote student participation in the EFL class. To achieve this goal, the researcher used different tools for data collection: field diary, survey and focus group. A field diary allowed to gather information on the use of clickers in the classroom. The teacher-researcher paid close attention to the use of the devices in class and registered the students' comments and impressions. The focus group interview complemented the instruments for analyzing the participation of students in the English class when using clickers.

Definition of categories

Before analyzing data, the researcher classifies the information collected through the instruments. That way, the researcher identifies four categories to organize and analyze data. The categories are: Participation, motivation, students' perception on the use of clickers, and

institutional issues. The last category is not initially considered, but the researcher identifies some aspects that are not related to the teaching learning process because they correspond to external factors regarding clickers handling and administrative management.

Each category is explained below.

Participation

The first category identified is participation. Participation is a key element in learning a language. It is an attitude that allows people to be involved in an activity. Since the main objective of this study is to determine how clickers promote students' participation, the researcher collected students' opinions regarding the use of clickers, and participation in their learning process. It is evident that students recognize that clickers changed their English class. They reported the differences before and after using clickers. According to Taylor & Parsons (2011), students succeed if they are taking a leading role in their learning. Participation is the way students show engagement in learning.

Motivation

The second category analyzed was motivation. Motivation refers to the interest or willingness to do something. Motivation plays an important role in language learning. If a student is not motivated in a class, he/she will not participate. Taylor & Parson (2011) explain that motivation and engagement ensure better learning outcomes.

Before the researcher use clickers in the English class, students are not motivated. They openly express that they do not consider English useful; therefore, they do not want to learn it.

With the use of the technology, students spontaneously refer to the clickers as a motivating tool to learn. They also express their preference over the traditional paper pencil exercises.

Students' perceptions about the use of clickers

The third category identified is the students' perceptions about the use of clickers in the English class. The concept of perception is related with the idea(s) that each individual has about a specific situation or phenomenon. It is the way individuals understand what is around them. According to that, the researcher collects the students' impressions on the use of clickers in the English class.

Institutional issues

The last category is institutional issues.

This category refers to the characteristics of the institutional context at Regional Simon Bolivar School and the importance of ICT in the curriculm and PEI (Proyecto Educativo Institucional in Spanish). The PEI at Regional Simon Bolivar School, establishes an aim regarding the importance of technology in the development of competent citizens:

La educación Media técnica prepara a los estudiantes para el desempeño laboral en uno de los sectores de la producción y de los servicios, y para la continuación en la educación superior.

Estará dirigida a la formación calificada en especialidades tales como: agropecuaria, comercio, finanzas, administración, ecología, medio ambiente, industria, informática, minería, salud, recreación, turismo, deporte y las demás que requiera el sector productivo y de servicios. Debe incorporar, en su formación teórica y práctica, lo más avanzado de la ciencia y de la técnica, para que el estudiante esté en capacidad de adaptarse a las nuevas tecnologías y al avance de la ciencia. (PEI, 2012:26)

It is clear that ICT has an important place in the process of teaching and learning at the school and the future job opportunities for students. In addition, the Technology Area Plan establishes the goals and objectives students should reach in this subject. Also, it includes the integration of technology in other subjects in ninth grade. One of the main objectives of this integration is: "Participo en equipos de trabajo para desarrollar y probar proyectos que involucran algunos componentes tecnológicos". This objective aims at improving participation and cooperative work among students by using technology. Another objective in the same Area Plan states that students should cooperate in order to use techonology under the legal and ethical terms: "Participa de procesos colaborativos para fomentar el uso ético, responsable y legal de las TIC". This way, Regional Simon Blivar School considers the use of technology as an interdisciplinary subject.

Although, the School has a clear statement of how to integrate technology in other areas, the Wireless Response System or clickers are not frequently used.

The set of clickers the researcher uses for the current study belong to the institution. In many rural institutions, the use of technology is not frequent. Dawson (2008) states that beginning teachers do not use technology regularly in their classes. Regional Simon Bolivar School is not an exception of this situation. Only the teacher researcher is currently using the clickers. Introducing clickers in other subject areas can be an interesting alternative to promote student participation in the school. In order to do that, training is necessary. Clickers are easy to use and the Turning Point System that allows power point presentations to become surveys and use them in the class. Teachers at Regional Simon Bolivar School will only have to show basic skills for creating presentations.

It is possible to implement the use of clickers in other subject areas, and the analysis of its impact can be considered a new research project.

Analysis of categories

Participation

In the field diary, and the focus group the researcher observes and identifies through the effectiveness of clickers in motivating students in the English class. In this way, some of the students' comments reflect this effectiveness of the use of technology.

Some of the students' comments on this category are:

Student A: Con los clickers se da uno cuenta quien es que no quiere trabajar, porque vemos las calificaciones inmediatamente, y nos damos cuenta quien es el que no pone cuidado y pues eso a nadie le gusta y de pronto por eso tratan de responder bien.

Student B: Ha mejorado en que llama más la atención de todos, todos mirando allá el televisor con textos en diferente color y todo, y pues a mí se me graban más las palabras mirando en una pantalla que uno copiando y copiando por copiar, entonces es mejor que se le quede a uno algo grabado y mirar en la pantalla porque luego usted nos vuelve a explicar.

Student C: Pues para mi si porque uno cuando ve los textos uno va aprendiendo como más, se fija uno más como se escriben las palabras y a veces como se pronuncian y lo hace como despertar a uno porque uno ve todo en inglés y uno tiene que despertarse para adivinar o asimilar y no tenemos que conocer todas las palabras sino con algunas palabras, saber que está diciendo la oración y además a uno lo pone como más activo que teniendo que escribir en el cuaderno.

Student E: Chevere porque podemos compartir las respuestas y nos ayudamos entre todos.

Students' comments about the use of clickers in the EFL class make evident that these devices helped them be more motivated and engaged in the foreign language class. In addition, they consider that sharing ideas and answers is a way of learning. This interaction is an additional

benefit of using clickers. As Revelo et al. (2018) state that the construction of knowledge is enhanced through collaborative work.

Student F: "Chevere porque podemos compartir las respuestas y nos ayudamos entre todos. Asi no nos da miedo equivocarnos, porque cuando nos devolvemos a ver nuestras respuestas usted nos aclara y eso hace que recordemos para un próximo examen."

The students' comments highlight a benefit of clickers in students' participation in a collaborative manner. He also highlights the possibility of responding without being afraid of making a mistake, which is one of the limitations that prevent students from participating in class. In addition, the student comments on another positive aspect of the use of clickers, which is the immediate feedback that the teacher can give, as expressed by the student. Similar results are found in the research done by Cardozo (2010) in which he demonstrates that students and teachers find the use of clickers in the classroom as a positive tool for improving participation in large classes.

Another student also says that clickers allow him to clear up doubts:

Student F: "No nos da pereza porque nos aclara dudas"

The student also says that clickers are fun and using them motivates him in class.

Also, in the focus group interview, the students' response shows that they prefer the use of the devices because they can even see their performance. Example:

Student A: "Me parece positivo, porque es más fácil trabajar, más rápido que estar sacando los cuadernos, poniendo la fecha y todo eso y además podemos ver ahí mismo nuestras calificaciones."

The study done by Lantz & Stawiski (2014) show the use of clickers in the classroom as an innovative way to teach. They found that clickers were effective in providing immediate

feedback in the classes just the same as the results of the current work. Students report the benefit of getting immediate feedback after an activity in the English class at Regional Simon Bolivar School. For example: In the field diary #1, the teacher researcher registered the students' level of participation when using clickers:

Teacher: All students paid attention during the explanation and use of clickers. A student says: "es muy novedoso y divertido", "Se parece a un celular o un juguete".

Teacher: Students are amazed by the fact that they can choose the correct option from their desks and get their grades immediately.

In another class, the teacher researcher registers other comments about the use of clickers.

Student: "Profe, vamos a usar hoy también los clickers?"

Even students show their joy and enthusiasm when using the clickers.

Teacher: Students make noise when they get the correct answer and applause when their classmates get good grades. They also run to the English class.

These are examples of how the use of clickers change students' participation in the EFL class.

Motivation

Motivation is a key element in language learning. Students at Regional Simon Bolivar School do not like English and they think it is not important. One of the reasons for this perception about the foreign language is the context they live in. Students from the school belong to the rural area and working conditions are limited. The school has an emphasis on agriculture, so this is a reason for students not seeing a foreign language as a necessary component of their education.

Despite that situation, the use of clickers changes their perspective about learning English. In the field diary and the focus group, the researcher observes and take notes of students' comments

regarding their motivation and the use of clickers. Some of the students' comments on this aspect are:

Student A: "¡Uy profe chévere! ¿Eso cuanto costo o lo compro usted, es suyo?
Student C: ¡Uy entonces tenemos que estudiar ahora sí!
Student D: ¿Profe y esto se pueden utilizar en las demás materias?".

These comments emphasize that students perceive positively the use of clickers with respect to motivation in the English class. Other comments also concerning the motivation for the use of the devices are:

> Student A: "Porque a nosotros nos ha encantado trabajar con ellos, nos motiva, nos mantiene activos y nos facilita el aprendizaje."
> Student F: "I liked the class teacher," "It is easier," "More fun."
> Student C: "I am more motivated to learn English when we use the clickers."
>
> Student D: Para mi es lo mejor, todos los exámenes deberían hacerlos así, con los clickers, nos cansamos menos y no nos aburrimos porque parece que estuviéramos jugando.
>
> Student B: Profe yo veo todo positivo con el uso de los clickers, me gusta mucho, me motiva.
>
> Student E: Pues todos se motivan más, porque es una nueva tecnología que nos ahorra escribir y entonces uno se motiva por seguir y responder como uno piense o en otras ocasiones compartiendo los conceptos con los compañeros, porque ellos se saben unos conceptos y otros se saben otros, y analizamos las respuestas.

The results of this study are similar to the ones presented by Lowery (2005) showing that clickers are beneficial for the improvement of student learning in the following through more active participation during class, and collaborative learning resulting in greater student satisfaction.

Other students considered that the use of clickers make their learning more difficult because they have to study before the class. Some comments about this issue are:

Student H: Profe eso estuvo muy difícil, yo creo que no lo gano.
Student I: Uy entonces tenemos que estudiar ahora si.
Student J: No profe yo pensé que sabía más.

Sometimes, the teacher has to explain to the students what to do (even when they are using the clickers). For example: Student C: Profe en la tercera y cuarta pregunta estaba confundido pero con la aclaracion suya, pudimos responder bien.
When the teacher resarcher explains that she has finished her study, students asked:

Student D: Profe entonces ya no los vamos a volver a usar?, Era solo para su estudio?

Porque a nosotros nos ha encantado trabajar con ellos, nos motiva, nos mantiene activos y nos facilita el aprendizaje.

It is evident that students like the use of clickers in their English class. Also, they consider the use of this technological tool as useful. Similar findings are reported by Ramos & Valderruten (2014) in their study. Students consider that clickers make quizzes and exams more difficult. Additionally, they report that clickers made them study more for the evaluations.

There are also challenges about using clickers in the EFL class, especially in a rural school like Regional Simon Bolivar. At the beginning of this research, the teacher researcher explains to the group the handling and care of these devices. The teacher needs to pay close attention to each student, so clickers are not lost. Some students report during the first sessions that their responses are not marked by the system. This is a common issue when students do not answer on time.

Students' perception about the use of clickers

Students consider that the use of clickers allow them to learn English in a fun way. They also say that they do not have to copy in their notebooks as in a traditional class. According to Taylor and Parsons (2011), student engagement increases by using technological tools. The student's achievement and positive behaviors help improving students' motivation in class. The results in the current study show that clickers improve students' engagement in the English class.

In this regard, students also report their preference when using the Wireless Response System. Some positive responses are:

Student A: "No tenemos que copiar tanto, solo mirar y prestar atención,"
Student D: "¿Y si yo marco una vez y luego quiero cambiarla, puedo hacerlo o que pasa?"
Student E: "It is fun and produces adrenaline."
Student F: "It is easier to learn English with the clickers."

A student also reports a negative aspect on the use of clickers in the English class in her comment:

Student G: "A mí lo único que me parece negativo es que uno tiene que estar con la cabeza mirando siempre el televisor entonces eso me molesta, me duele la nuca y mis compañeros también se han quejado del dolor de nuca."

In the focus group interview, another of the students' negative comments is as follows:

Student J: "Es que a mí los clickers me gustan mucho, ah, pero algo negativo seria que muchas veces uno oprime el botón y la otra persona lo mira y ya copia la respuesta y entonces ya sabe cuál es, como quien dice me copian. Entonces me toca taparlo"

The use of clickers for this student is a disadvantage because her classmates can copy her response. Prieto (2014) also highlighted that clickers have a negative effect on the students' scores in quizzes. Students consider that this technology do not encourage them   to study before the quizzes.

Some of the students' comments are:

Student C: Me gustó mucho, parece un celular, es como si estuviéramos jugando.

Student A: Nos facilita más el aprendizaje de inglés, pues a mí gusta, pues no tengo que estar sacando cuadernos, escribiendo y me parece chévere, que nos estén enseñando con
los clickers.

Student E: El uso de los clickers nos han enseñado más, nos enseña a diferenciar las palabras y ya.

Student B: Uno con los clickers ha aprendido más cosas, sale mejor ver en el televisor que escribir.

Student D: Si porque por ejemplo el tema que estamos viendo me ha parecido más fácil y yo creo que es gracias al uso de los clickers y todo eso.

Students' perceptions about the use of clickers are positive. Their comments report that clickers make their English learning process easier. They also consider that their class changed (no need to write down from the board). A student also recognizes the differences of word formation between English and Spanish. That means, students go beyond the novelty of using technology. They analyze how language works. Although this aspect was not the aim of this study, it can be analyzed in future research projects.

Students also had positive comments about the use of clickers in the focus interview, especially about the formation of English words and the possibility to have faster responses.

As the student I says: "Por lo menos en inglés, uno como que por las palabras, es más lento para escribir porque no las entiende bien o tienen muchas consonantes y uno no está acostumbrado a tantas consonante juntas, en cambio en ingles yo veo una palabra donde se repiten mucho las consonantes, entonces uno se puede confundir, en cambio con los clickers es más rápido y además el marcar a-b-c-d facilita todo así póngame las preguntas que sea porque así si es más fácil; porque a veces hay unos exámenes como en ingles donde hay unos parrafotes que le cuesta a uno mucho trabajo entender, entonces son más duros, entonces uno pone así cualquier respuesta, porque esos párrafos a uno como que yo no sé yo me hacen nublar"

Other comments are:
Student A: "Pues a mí me parece chévere, todos ponemos más atención, diferente cuando nos hacen un examen escrito, contestan de cualquier manera, en cambio con los clickers leemos y analizamos para responder la que es"
Student B: "Desde que llegaron los clickers todos nos esforzamos más para traducir las oraciones, aprendemos más los conceptos, porque sabemos que los tenemos que utilizar cuando utilicemos los clickers y tenemos que saber cómo se escriben las palabras"

During the study of the use of clickers in English classes, it is observed that EFL teaching benefited from the collaborative approach indirectly used by students when answering the questions in the class. In this way, the collaborative approach is evidenced through the interaction between the students of the class as follows: some students comment with their peers before selecting the correct answer with the clickers arguing among themselves which and why the option, they are going to select is the correct one. This is confirmed by the approaches of Revelo et al. (2018) who affirm that the construction of knowledge is enhanced through collaborative work. In addition, Willms, Friesen, and Milton (2009) show how interaction helps building learning networks. This is exactly what the students do in the English class at Regional Simon Bolivar School. Although the aim of this work is not to show the effect of technology on collaborative work, student participation in the class increases through the use of clickers and collaboration among students.

An advantage of the use of clickers in the EFL class is the use of this technology for reviewing or grading assessment exercises. Clickers allow each student's grade to be taken immediately. The students also show a positive response to get their results immediately with reactions like joy and applause. The teacher researcher sees their happy faces when they answer correctly. Another typical reaction is to jump and scream when they answer correctly.

6. CONCLUSIONS

The use of clickers in the EFL classroom to promote students' participation in the ninth-grade course at Regional Simón Bolívar will be compared to previous studies and theories on the same topic.

First of all, some studies are selected in order to see how similar or different results are. The study conducted by Deslauriers, Schelew & Wieman (2011) show how learning improves in a physics class. Although the subjects (English and Physics) are not the same, the findings of both studies are similar. For example: both studies showed that attendance and class participation increased with the use of clickers. Also, both studies show that students used strategies to think critically before answering the questions in an activity. It was observed that students got together to discuss and give their arguments why each option was correct or not.

Another study that presents similarities with the current research Project is the one done by Lantz & Stawiski (2014). Clickers are considered a tool that allows innovation in the class. Also, both studies report that clickers provide immediate feedback to the students. The possibility of getting feedback in a short period of time is one of the positive features of clickers. Students reported that they were anxious about knowing their results. This is a positive aspect that students highlighted in the focus group and the survey. Even though the current project did not analyze feedback, it can be considered for future research.

Another similarity found between this project and Bojinova & Oigara's paper (2011) is that students' experiences and perceptions were taken into account. Many research projects focus on the improvement of skills (for example), but they do not consider the students' opinions. The use of interviews and their analysis give significant input on the use of the technological tools. Bojinova & Oigara (2011) demonstrated that interactive tools (like clickers) increase student engagement. Students showed excitement when using clickers in both studies. Another

study that confirms this perception is the work done by Premkumar & Coupal (2008). According to Taylor and Parsons (2011), student engagement increases motivation and positive behaviors. Clickers help increasing motivation at Regional Simon Bolivar School. Students' comments on that aspect are:

Student A: Profe cada vez me gusta más la clase.
Student F: It is easier to learn English with the clickers.
Student C: I am more motivated to learn English when we use the clickers.
Student D: El uso de los clickers nos han enseñado más, nos enseña a diferenciar las palabras y ya.

To sum up, the current research project had positive effects on the use of clickers for promoting students' participation and engagement in the EFL class. It was evident that the use of this technology allowed students to feel more motivated to participate in the English class. Many authors like Gardner (1985), Gardner et al. (2004), Lightbown & Spada (1993), highlighted the importance of motivation in the EFL classroom. More research on this topic needs to be done in other institutions and educational levels in Colombia.

Regarding the general objective, clickers were useful in the English class by increasing students' motivation. It was evident that students found clickers not only an innovation and a tool to make the English class more enjoyable, but they reported that these devices allowed them to analyze and understand how language works. Also, students used group work strategies (collaboration and cooperation) during the classes where clickers were used. They expressed their opinions on why one option was correct or not. This situation can be the opening for new research on cooperative or collaborative work through the use of clickers.

Regarding the specific objectives, the level or participation and engagement in the English class was also possible thanks to the use of activities that incorporate clickers. The use of activities with power point presentations and clickers allowed students to find the class more

interesting. They also reported a better understanding of the topics and a sense of achievement in their learning process. According to Nelson, Voithofer and Cheng (2018), teachers and students can benefit from the use of technology in any subject. Besides that, institutions should provide support (in terms of teacher education and technological tools) in order to improve teaching and learning processes. In addition, John and La Velle (2004), emphasize that teachers may have different ideas about the use of technology in their classes. English teachers believe that ICT can help students improve different skills.

Another important aspect that arose during this study, although it was not an objective of it consisted in the institutional issues about caring for the equipment. A sense of commitment should be promoted at Regional Simon Bolivar School regarding the use of materials and teaching tools as clickers.

7. LIMITATIONS AND FINAL REMARKS

Among the disadvantages or limitations of clickers, it should be mentioned that the teacher must be very careful when making his/her lists so that each student has the correct device. The researcher faced some situations like: failures in the use of clickers (some did not record the student's response) and inconsistency in the grades and results of some students due to clicker failures. Also, the location of the television that projects the questions is in an inappropriate place (too high) and generated physical discomfort in the students.

Another aspect to consider is the use of a timer to set a time limit for each response. Some students who don't behave well constantly asked: how many questions are left to finish teacher? Using a timer or other icon that shows the number of questions left and time can help improve students' behavior.

One concern that needs to be expressed is the lack of responsibility of some teachers at the Regional Simón Bolívar School regarding the technological devices.

Teachers who wish to use the clickers should receive training. They need to know the flexibility of the system. Any teacher, of any subject can use this type of technology in his class. It is simple to use and does not require a specialized knowledge of Office. Power Point and Turning Point are required. They allow teachers to draw up class lists, quizzes, surveys, get results by student, by course, review results in graphs, or get results by question, etc.

Another aspect to take into account is that clickers have advantages for the teachers who use them. For example: clickers are great for assessment, and feedback. Just as Cardoso (2013) demonstrates that this type of technology help teachers give immediate feedback after an activity using clickers. When using clickers, teachers don't have to correct exams. In addition, students will not use paper or notebooks to copy from the board. Another advantage of clickers is students answer or participate in a class without using a textbook. Every day, students pay for the copies of each class. With the use of clickers, photocopies are no longer needed. This will reduce some students' expenses, paper and energy. At the same time, we are taking care of the environment.

The system even allows the same students to design and prepare exercises to present in class. Then, students can use the exercises in presentations. This gives them great motivation and a desire to participate. In addition, teachers will only create the material for the first time. As the use of clickers becomes more frequent, teachers will have a greater number of activities with varied topics. The only thing teachers need to do is update the activities.

According to the stated above, clickers offer advantages in various subjects. Total commitment of the school administrative staff is needed. Also, it is necessary to foster a sense of belonging, consciousness and care for these tools. Not only because of the high cost

of the equipment, but their educational value. Clickers promote participation, motivation and

engagement in different areas.

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9. ANNEXES

Annexe 1

SURVEY RESULTS ON THE USE OF CLICKERS

Question 1: ¿Te gusta la clase de inglés?

57

■ Siempre   ■ Algunas veces   ■ Nunca

The results of the survey show that in the 9-1 group, 90% of the students answered that they always like the English class. The rest of the students sometimes like the English class.

Question 2: ¿Crees necesario usar ayudas tecnológicas en la clase de inglés para facilitar el aprendizaje?
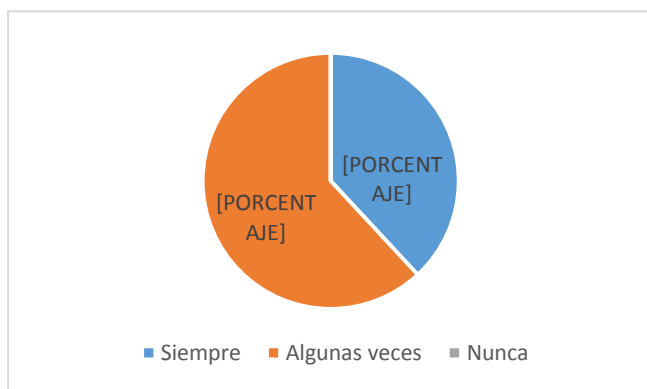
62% of the students in the group consider that it is sometimes necessary to use technological aids in the English class. 38% of the students in the group think that it is always necessary to use technology in the English class.

Question 3: ¿Has usado clickers en el desarrollo de las clases de inglés?

All students in the group report that they have always used the clickers in the English class.

Question 4: ¿Te gustaría participar en la clase de inglés en forma interactiva, marcando desde tu puesto la respuesta correcta?
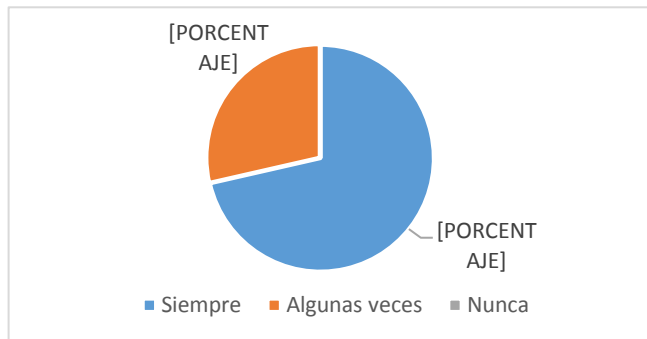

Seventy-one percent of the students in the 9-1 group felt that they would always like to participate in the English class interactively, choosing the correct answer from their desk and 29% of them answered that they would sometimes like to participate in the class that way.

Question 5: ¿Crees que el uso de los clickers que ha motivado para aprender inglés en la clase?
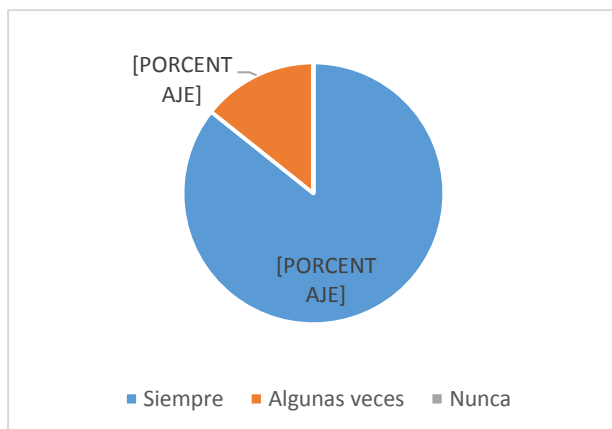
Most students (86%) answered that the use of clickers has motivated them to learn the foreign language. A few students (14%) considered that the use of the Wireless Response System has sometimes motivated them to learn English.

Question 6: ¿Crees que el uso de los clickers te ha ayudado para aprender vocabulario y gramática en inglés?
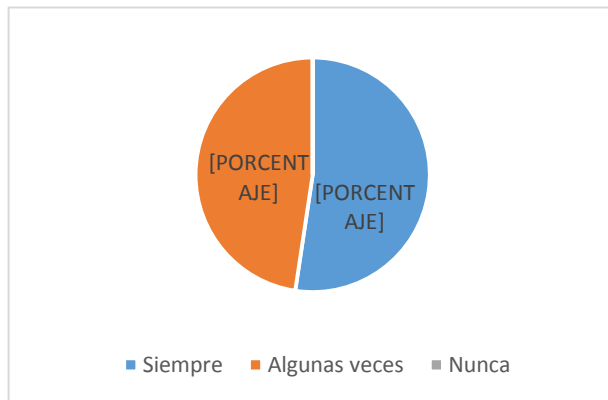
Many students (52%) reported that the use of clickers has helped them learn vocabulary and grammar in the English class, while 48% considered that the use of these devices sometimes has helped them learn vocabulary and grammar.

Question 7: ¿Crees que el uso de los clickers hace más fácil la participación en la clase de inglés? Explica tu respuesta.
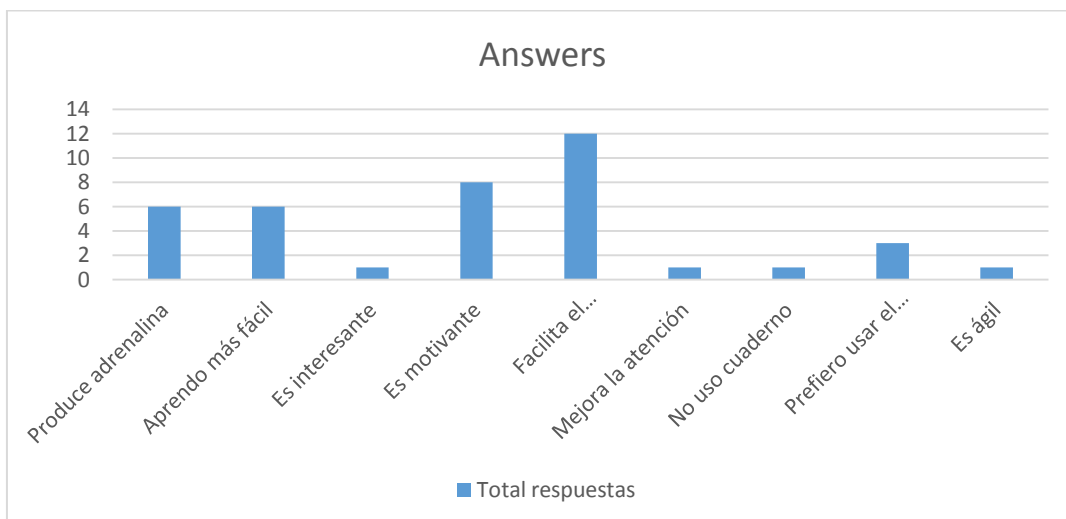
A variety of answers were presented in this question. Some of the comments expressed by the students about the use of clickers in the English classroom are:

"It is fun and produces adrenaline!"

"It is easier to learn English with the clickers"

"I am more motivated to learn English when we use the clickers"

Annexe 2

FIELD DIARY PAGE SAMPLE

FIELD DIARY	
SCHOOL	REGIONAL SIMON BOLIVAR
DATE	June 20/2019
GROUP	NINTH—ONE
TOPIC	WH—QUESTIONS
LEVEL OF PARTICIPATION OF STUDENTS	All students participated and were motivated with the use of clickers.
DIFFICULTIES PRESENTED AND POSSIBLE SOLUTIONS	Two clickers were failing, I had to change the batteries. There were two students who did not press the letter hard enough for the system to catch the signal. I had to change the batteries and repeat the exercise for them. I spent more time because of this situation.
STUDENT COMMENTS ON THE CLASS	Student F: I liked the class teacher. Student F: It is easier. Student F: More fun. Student I: Asi podemos seguir trabajando todas las clases, profe porque no les dice a los otros profes que trabajemos asi. Student C: Me gusto mucho, parece un celular, es como si

	estuvieramos jugando.
	Student A: No tenemos que copiar tanto, solo mirar y prestar atención.

Annexe 3

ANSWERS OF THE FOCUS GROUP INTERVIEW

  Entrevista focal

Quiero saber tus impresiones sobre el aprendizaje y la clase de inglés usando los clickers.

1. ¿Qué te ha parecido positivo de usar los clickers en la clase de inglés?¿ Por qué?

    A) Me gustan mucho más las clases cuando usamos los clickers, porque me ha facilitado más el aprendizaje, ayudándonos con imágenes en vez de hacer dibujos en los cuadernos como dijo mi compañera y por medio de las imágenes uno entiende más fácil.

    B) Me parece muy chévere y positivo, porque así podemos entender, nos facilita mucho el aprendizaje y pues a mí me queda un poquito más fácil, estoy motivada.

2. ¿Qué te ha parecido negativo al usar los clickers en la clase de inglés?¿ Por qué?

    A) A mí lo único que me parece negativo es que uno tiene que estar con la cabeza mirando siempre el televisor entonces eso me molesta, me duele la nuca y mis compañeros también se han quejado del dolor de nuca.

    B) Sería negativo porque hay unos compañeros que no los saben utilizar bien y entonces, pues según ellos por eso les va mal.

3. ¿Crees que tu aprendizaje de inglés ha mejorado con el uso de los clickers? ¿Por qué? En qué aspectos?

A) Pues a mí me parece chévere, todos ponemos más atención, diferente cuando nos hacen un examen escrito, contestan de cualquier manera, en cambio con los clickers leemos y analizamos para responder la que es.

B) Ha mejorado en que llama más la atención de todos, todos mirando allá el televisor con textos en diferente color y todo, y pues a mí se me graban más las palabras mirando en una pantalla que uno copiando y copiando por copiar, entonces es mejor que se le quede a uno algo grabado y mirar en la pantalla porque luego usted nos vuelve a explicar.

4. ¿Qué has observado en el aprendizaje de inglés y el de tus compañeros desde que están usando los clickers?

A) Que se memorizan más las cosas, con el uso de los clickers, eso es lo que yo he observado que todos siguen repitiendo las palabras, y eso hace más fácil, ósea a uno se le queda más en la cabeza a uno mirando ahí en la pantalla y utilizando los clickers más que copiando.

B) Desde que llegaron los clickers todos nos esforzamos más para traducir las oraciones, aprendemos más los conceptos, porque sabemos que los tenemos que utilizar cuando utilicemos los clickers y tenemos que saber como se escriben las palabras.

5. ¿Cómo crees que cambia la participación tuya y la de tus compañeros cuando utilizan los clickers en la clase de inglés?

A) Que todos se motivan más, que todos están como pendientes de la pregunta, porque por estar viendo la pantalla lo mantiene más activos y tiene que estar pendiente para decir la respuesta rápido, porque de lo contrario también pierde.

B) Que todos se motivan más, que todos están como pendientes de la pregunta, porque por estar viendo la pantalla lo mantiene más activos y tiene que estar pendiente para decir la respuesta rápido, porque de lo contrario también pierde.

6. ¿Qué opinión tienes de la realización de los exámenes usando clickers? ¿Por qué?

B) Por lo menos en inglés, uno como que por las palabras, es más lento para escribir porque no las entiende bien o tienen muchas consonantes y uno no está acostumbrado a tantas consonante juntas, en cambio en ingles yo veo una palabra donde se repiten mucho las consonantes, entonces uno se puede confundir, en cambio con los clickers es más rápido y además el marcar a-b-c-d facilita todo así póngame las preguntas que sea porque así si es más fácil; porque a veces hay unos exámenes como en ingles donde hay unos parrafotes que le cuesta a uno mucho trabajo entender, entonces son más duros, entonces uno pone así cualquier respuesta, porque esos párrafos a uno como que yo no sé yo me hacen nublar.

C) A veces cuando es de copiar se escribe mal la palabra y por eso le queda mal, por una letrica le quedo mala, porque cambia el significado, en cambio con los clickers solo tenemos que pensar y responder.

Annexe # 4

Chronogram of activities

DATE	ACTIVITIES
June 13-2019	Introduction of the turning point program to the 9-1 grade students and diagnostic test
June 18-20-25-27-2019	Activities using clickers
July 2-2019	Activities using clickers
July 4-2019	A survey will be conducted to the 9-1 students in order to get their opinios about the use of clickers
July 23-25-30-2019	Activities using clickers
August 1-6-8-2019	Activities using clickers
September 3-2019	A second survey will be conducted to the 9-1 students in order to determine the benefits and/or difficulties about the use of clickers
September 5-2019	Data analysis (survey and test)