

EVALUATION OF THE INFLUENCE OF M_LEARNING ON STRENGTHENING
VOCABULARY FOR THE TEST SABER 11 - ENGLISH IN THE I.E.M. CIUDAD
EBEN EZER OF FUSAGASUGÁ

A RESEARCH PROJECT

PRESENTED TO

THE PROGRAM OF B.A. IN TEACHING ENGLISH AS A FOREIGN LANGUAGE

SCHOOL OF EDUCATION

UNIVERSIDAD NACIONAL ABIERTA Y A DISTANCIA

COLOMBIA

IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE OF

LICENCIADO EN INGLÉS COMO LENGUA EXTRANJERA

BY

CARLOS EDUARDO ZAMBRANO VARGAS

GRADUATION JUNE, 2020

© CARLOS EDUARDO ZAMBRANO VARGAS, 2019

EDUCATIONAL ANALYTICAL SUMMARY

Text Title	Evaluation of the influence of M-Learning on strengthening vocabulary for the Test Saber 11 - English in the I.E.M. Ciudad Eben Ezer De Fusagasugá.
Name and Surname of the Author	Carlos Eduardo Zambrano Vargas
Publication Year	2020
Summary of the text:	
<p>This applied grade project; seeks to demonstrate the effect of the implementation of online activities as an approach to the M-Learning pedagogical strategy, with students from one of the tenth grades (10-01) of the Municipal Educational Institution Ciudad Eben Ezer of Fusagasugá. Through the implementation of educational and digital practice activities on mobile devices, in which students interact with various contents that enrich their English learning experience.</p> <p>The activities have a vocabulary acquisition approach to improve reading comprehension.</p> <p>It seeks to demonstrate that students participating in this learning process will enhance the necessary skills to face the test "Saber 11".</p>	
Keywords	M-Learning – Test Saber 11 – English – School education – Mobile phones
Problem addressed by the text:	
Colombian students are afraid of the results they can get on the Test Saber 11 in the English segment because most of them haven't acquired the necessary skills and training	

through their school life to face with property this evaluation, indispensable to access to the higher education in Colombia.

Objectives of the text:

General Objective

Determine how the M_Learning teaching strategy, a form of learning focused on the use of mobile devices in the classroom, promotes the development of English skills that are assessed in the test Saber 11 in 10th grade students of the I.E.M. Eben Ezer city of Fusagasugá.

Specific Objectives

- Identify the English language skills, which the Saber 11 ° test evaluates, in the students of the I.E.M City Eben Ezer de Fusagasugá from the results obtained in previous year, the mock Icfes Test, and the processes reported by the teacher.
- Design and apply the corresponding actions to the M_Learning pedagogical strategy, considering the results of the characterization of the students and the skills assessed by the Saber 11 test.
- Determine the effectiveness of the M_Learning pedagogical strategy in the development of the skills assessed by the Saber 11 test.

Hypothesis raised by the author:

The greater the articulation between the teaching of English with the use of mobile devices for educational purposes, the more effective the students' learning will be.

Main thesis of the author:

"The M_Learning teaching strategy facilitates the construction of knowledge in the classroom, motivate students to learn and promote the acquisition of vocabulary, improving their reading comprehension to face with properly the Test Saber 11".

Arguments presented by the author:

The new generations of apprentices are interested in digital learning and they find it interesting and familiar to use the mobile phone in their daily lives.

Therefore, it is essential that teachers adapt to the educational evolution and put them at the forefront in the management and application of pedagogical strategies that bring themselves closer to students.

Faced with this interesting and challenging situation, an excellent alternative is to teach learners to use the cell phone as a powerful learning tool, which facilitates classroom interaction and provides them with educational resources at all times and places.

English teachers should encourage the use of technological tools in the classroom to get closer to their students, otherwise their teaching work will be obsolete and boring.

Nowadays; those English teachers who are not prepared and willing to use technological elements in their classes will not have interesting and effective educational processes.

Conclusions of the text:

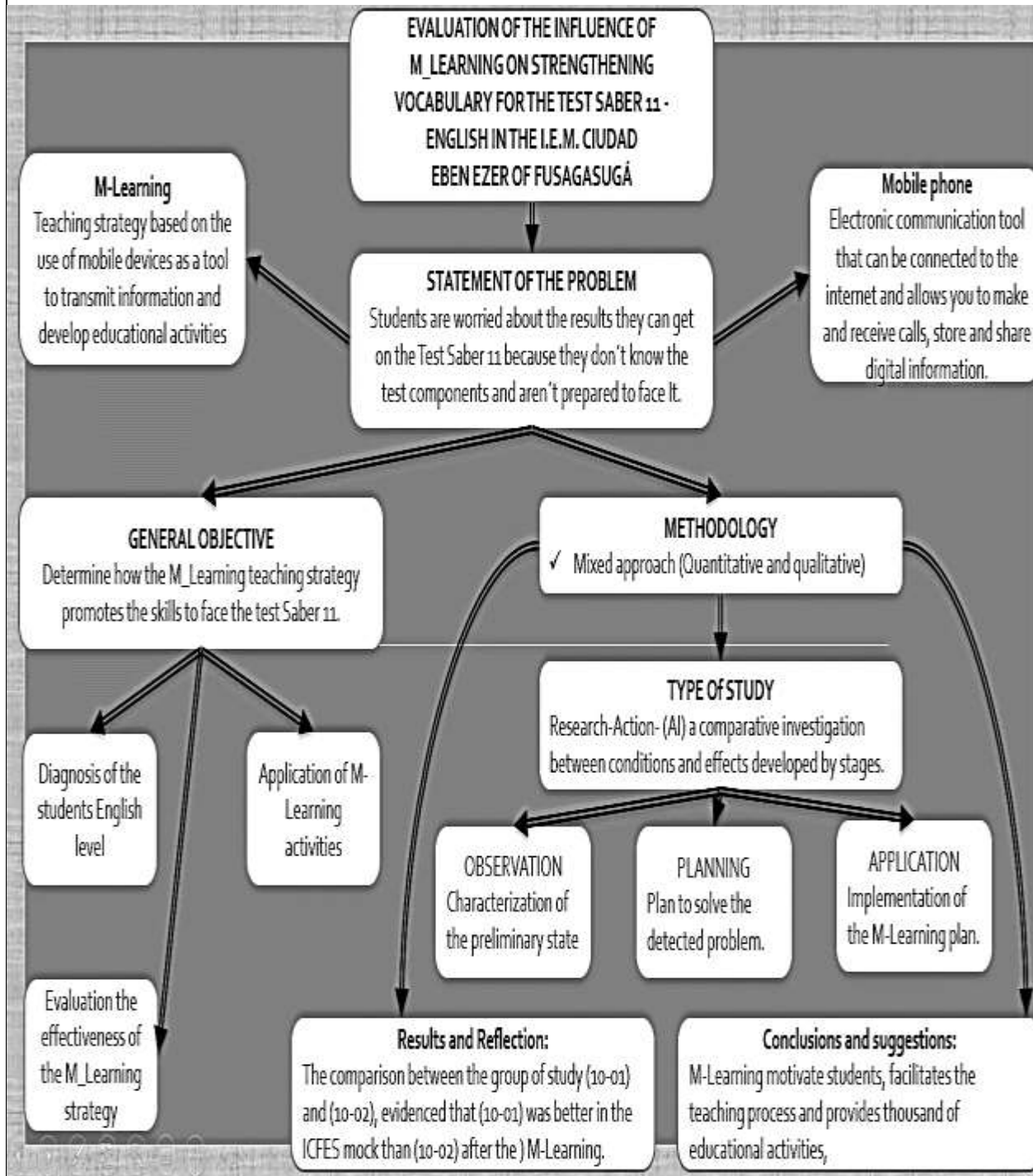
It was demonstrated through the obtained results of the research, that M-Learning teaching method is effective.

The M-Learning method facilitates the teaching process because many pages and educational activities are found in the network to learn or practice.

M-Learning teaching method optimize the effective class time because the teacher supports their explanations and class practical activities with digital resources making that students write less and practice more.

Name and surname of who developed this RAE	Carlos Eduardo Zambrano Vargas
Date this RAE was developed	09/03/2020

Image that summarizes and interconnects the main concepts found in the text:



ABSTRACT

Not having a broad vocabulary to understand English texts is one of the most common problems that Colombian students face when they take the knowledge test Saber 11. For eleventh grade students it is a challenge largely due to a lack of motivation and engagement with the current education system. This situation is caused by various factors, such as the lack of effective classroom strategies that optimize the learning process, and the lack of interest of young learners to expand their lexicon and understanding of the structure of the texts that are implemented in the test.

This research based on previous investigation on the "Evaluation of the influence of activities and applications developed through mobile devices in the strengthening of vocabulary for the English test Saber 11", carried out by UNAD teachers, Diana Mireya Cuellar and José Orlando Pachón in 2018; seeks to demonstrate the effect of implementing online activities on digital platforms as an approach to the M-Learning pedagogical strategy and motivate tenth grade students of the Municipal Educational Institution Ciudad Eben Ezer de Fusagasugá. Through the implementation of mobile devices, with modern and more engaging activities, interactions between the teacher and the students will strengthen and improve.

The M-Learning pedagogical strategy will utilize cell phones on which students will find and make use of tools that enrich the experience of learning English, with a focus on reading, grammar and vocabulary exercises. Through this learning process, students will receive the necessary skills to facilitate their understanding of the English language and allow them to confidently face exams such as "Saber 11".

RESUMEN

No tener un vocabulario amplio para comprender textos en Inglés es uno de los problemas más comunes que enfrentan los estudiantes colombianos cuando presentan la prueba de conocimiento saber 11. para los estudiantes de undécimo grado es un desafío en gran medida debido a la falta de motivación y compromiso con el actual sistema educativo. esta situación es causada por varios factores, como la falta de estrategias efectivas en el aula que optimicen el proceso de aprendizaje y la falta de interés de los jóvenes por ampliar su léxico y la comprensión de la estructura de los textos que se implementan en la prueba.

Esta investigación, basada en el estudio previo sobre la "Evaluación de la influencia de actividades y aplicaciones desarrolladas a través de los dispositivos móviles en el fortalecimiento del vocabulario para las pruebas saber 11 de Inglés", realizada por los profesores de la UNAD, Diana Mireya Cuellar y Orlando Pachón en el año 2018; busca demostrar el efecto de la implementación de actividades en línea en plataformas digitales como enfoque de la estrategia pedagógica m-Learning y motivar a los estudiantes de décimo grado de la institución educativa municipal ciudad Eben Ezer de Fusagasugá mediante el uso de dispositivos móviles, con actividades modernas y más atractivas, que seguramente fortalecerán y mejorarán las interacciones entre el profesor y los estudiantes.

La estrategia pedagógica M-Learning utilizará teléfonos celulares en los que los estudiantes encontrarán y utilizarán herramientas que enriquecen la experiencia de aprender inglés, con un enfoque en ejercicios de lectura, gramática y vocabulario. A través de este proceso de aprendizaje, los estudiantes adquirirán las habilidades necesarias para facilitar su comprensión del idioma inglés y les permitirá enfrentar con confianza exámenes como "Saber 11".

ACKNOWLEDGMENTS

First of all, I want to thank God for giving me the wisdom to elaborate and develop this project; my beautiful wife Johanna, who in the most difficult moments has been with me unconditionally with love and patience; my beautiful daughter Danna Sofia, who has been the engine that drives and encourages me every day to achieve my goals and be a better person; my parents who formed in me values that have made me an honest, hardworking and dedicated person; to my brother and best friend, Oscar Zambrano, for supporting me unconditionally and firmly believing in me; my tutor Diana Cuellar, who guided me during this research process, providing me with the necessary tools and knowledge to achieve my dream of being a professional English teacher; and last but not least, words cannot express my gratitude to the teacher Astrid Lemos who, with their professional advice, has assisted me in polishing this manuscript.

TABLE OF CONTENTS

EDUCATIONAL ANALYTIC SUMMARY.....	2
ABSTRACT.....	6
RESUMEN	7
ACKNOWLEDGMENTS.....	8
LIST OF TABLES.....	11
LIST OF FIGURES	12
INTRODUCTION	13
Significance of the Study	14
Statement of the Problem	15
Objectives.....	16
General Objective.....	16
Specific Objectives.....	17
LITERATURE REVIEW.....	17
Test Saber 11.....	17
Reading Comprehension.....	19
Vocabulary Learning.....	20
M-Learning.....	21
Mobile devices	24
Language competition.....	25
The Common European Framework of Reference for Languages (CEFR).....	26
The Colombian National Bilingual Program.....	27
Basic Learning Rights (DBA).....	28

Competent teachers in technology management.....	29
Information and communication technologies (ICT).....	30
State of the art.....	31
METHODOLOGY.....	35
RESULTS.....	50
DISCUSSION.....	62
CONCLUSION.....	63
REFERENCES.....	65
APPENDIX A: FIELD DIARY OF THE DEVELOPMENT OF THE ACTIVITIES IN THE I.E.M CIUDAD EBEN EZER DE FUSAGASUGÁ.....	68
APPENDIX B: PHOTOGRAPHIC EVIDENCE OF THE DEVELOPMENT OF THE ACTIVITIES IN THE I.E.M CIUDAD EBEN EZER DE FUSAGASUGÁ.....	73
APPENDIX C: PHOTOGRAPHIC EVIDENCE OF THE SUBMISSION OF INTERACTIVE ACTIVITIES VIA WHATSAPP, DEVELOPED BY STUDENTS OF GRADE 1001 OF THE I.E.M CIUDAD EBEN EZER DE FUSAGASUGÁ.....	75

LIST OF TABLES

Table 1. Characterization of the educational institution of the research	39
Table 2. Characterization of the research population.....	39
Table 3. Schedule of Stages and activities of the project.....	41
Table 4. Student percentage by performance levels in English 2017-2 and 2018-2 obtained in the test Saber 11 in the I.E.M Ciudad Eben Ezer from Fusagasugá.....	50
Table 5. Table of the scores obtained for the students of the grade 1001 in the test Saber 11, in the I.E.M Ciudad Eben Ezer from Fusagasugá.....	57
Table 6. Classified results in levels of the mock Test Saber 11 obtained by students of grade 1002 (Population not under study)	59

LIST OF FIGURES

Figure 1. Shield and anthem of ciudad Eben Ezer school.....	38
Figure 2. Evidence of the developed activities in PPT format during the research application with the tenth-grade students of the I.E.M Ciudad Eben Ezer of Fusagasugá.....	44
Figure 3. Statistic Graphic initial survey - 1st question.....	51
Figure 4. Statistic Graphic initial survey – 2nd question.....	52
Figure 5. Statistic Graphic initial survey – 3rd question.....	52
Figure 6. Statistic Graphic initial survey – 4th question.....	53
Figure 7. Statistic Graphic initial survey – 5th question.....	53
Figure 8. Statistic Graphic final survey – 1st. question.....	54
Figure 9. Statistic Graphic final survey – 2nd. question.....	55
Figure 10. Statistic Graphic final survey – 3rd. question.....	55
Figure 11. Statistic Graphic final survey – 4th. question.....	56
Figure 12. Statistic Graphic final survey – 5th. question.....	56
Figure 13. Statistic Graphic of the scores obtained by the students of grade 1001 in the mock Saber 11 of 2019.....	58
Figure 14. Statistic Graphic of the scores obtained by the students of grade 1002 in the mock Saber 11 of 2019.....	60
Figure 15. Statistic Graphic of comparative results between grades 1001 and 1002 in the mock Saber 11 of 2019.....	61

CHAPTER 1

INTRODUCTION

The National Open and Distance University UNAD in its social mission to support the development of communities and progress of the Colombian education sector. It has made different cooperation agreements with educational institutions such as CEAD Distance Adult Education Centers.

The agreement established between the CEAD of Fusagasugá and the Municipal Educational Institution Ciudad Eben Ezer of the same municipality, takes into account the applied project called "Evaluation of the influence of M-Learning in strengthening vocabulary for the test Saber 11 of English in the I.E.M. Ciudad Eben Ezer of Fusagasugá"; a study determining the impact of mobile device use on the learning and skills building process of students to improve their results in the English subject on the "Saber 11" status test.

This study will be developed with a group of twenty-four (24) tenth grade students, agreed upon by the selected school's English teacher and UNAD teacher, to carry out the investigative process - taking into account that in 2020, they will present the respective status test, from which data will be derived and compared against results from previous years. Ultimately, this will demonstrate the effectiveness of M-Learning as a pedagogical strategy in strengthening students' skills and knowledge against their ICFES-type assessment.

The above proposal will be assessed as a grade work option, since it establishes the need to generate interesting pedagogical alternatives for adolescents. The tools involved motivate students, bring them closer to knowledge by articulating digital theory and practice – and providing greater opportunities in education. Additionally, the process of learning with mobile devices will offer students an alternative to leisure, as they are most commonly used and abused.

Finally, the main aspect of this research activity is to establish the effectiveness of M-Learning with the use of mobile phone to strengthen language skills and practice the components of the test “Saber 11”. Through interactive vocabulary practice activities, association of images, phrases and reading comprehension - these being the fundamental characteristics in the lexical enrichment of the young apprentices – students will have access to a greater understanding of the evaluation. Practice will determine the effectiveness of the process, reflected by the improved results of students in the 2020 “Saber 11” test.

Significance of the Study

The UNAD University, in the quest to strengthen the social and academic processes of the communities has made agreements with different educational institutions of the municipality of Fusagasugá. Therefore, within its academic processes has involved the I.E.M. Eben Ezer City, a situation that has allowed an interinstitutional work that seeks to strengthen teaching-learning processes of young people in their final school stage.

Among the specific actions in the area of English carried out by the UNAD in the I.E.M Eben Ezer City, it is evident that the academic performance of the latest promotions in the subject is not as positive as they would like, this situation becomes noticeable in the results obtained in the last year in the Saber 11 status test. This low performance in this area has difficult the academic possibilities of young graduates, because the low results obtained have limited their access to scholarships in relation to the higher education.

Knowing this problem, the study process was aimed at a group of twenty-four tenth grade students who are between fifteen and seventeen years old from a medium-low socioeconomic context, coming from families with limited economic resources; who have had bilingual training

limited to textual content in English language school processes and in which the possibilities it offers to the use of technological tools in learning a language have not been considered at least one mobile device, its use does not go beyond that of social networks.

Statement of the Problem

Taking into account aspects mentioned for the object population of this research; the students had been familiar with a text translation approach from basic elementary, a situation that had given them a wrong idea of their ability to learn the language and only for some time more participation of apprentices in classes has long been generated and some of them took on an interactive role with their teacher, feeling more confident in conveying their concerns to them, an aspect that has generated a slight positive change in the academic performance of students.

In dialogue with some students, they mentioned that English was tough to learn because, although they had studied it during their previous school years, they could not use it as they would like. That is, they are frustrated that they cannot communicate fluently and are worried about the results they can get on the Test Saber 11 which is defined by MEN (2014) as the evaluation of the level of Middle Education aligned with the evaluations of Elementary Education to deliver data to the educational community in the growth of the basic skills to be developed a student during the passage through school life.

For this reason, vocabulary learning for the reader understanding of descriptive texts is the starting point for the realization of this application process, because due to the lack of vocabulary mastery, the necessity to improve their reading comprehension and thereby achieve good results in the Test Saber 11.

Because students must be guided to achieve the B1 language skills enshrined in the Basic

Foreign Language Standards; this study focuses on strengthening vocabulary for reading understanding of Descriptive Texts B1. In this regard, Mirici (2003) states that students are advised to take aptitude language tests to be trained within their own course of preparation.

However, vocabulary learning alone doesn't seem enough. As students also informed having feelings and negative practices towards vocabulary knowledge, the researcher student has decided to address this problem by using mobile devices as a motivating agent for the vocabulary learning through different apps and online activities.

In this sense the student-researcher is aware that the use of smartphones in the classroom is prohibited in most public schools; however, to determine aspects of the applied project, it is allowed its controlled use since this group of students will receive for four months in two-hour days a week vocabulary-strengthening and reading comprehension classes under the development of specific activities that are carried out through the use of the mobile phone, where the management will be consensus with the students.

Considering the above, after students have clear guidelines for cell phone handling in the investigation process, disciplinary inconveniences are avoided and the use of these devices is exclusively for educational purposes.

Objectives

General Objective

Determine how the M_Learning teaching strategy, a form of learning focused on the use of mobile devices in the classroom, promotes the development of English skills that are assessed in the test Saber 11 in 10th grade students of the I.E.M. Eben Ezer city of Fusagasugá.

Specific Objectives

- Identify the English language skills which the test Saber 11 ° evaluates, in the students of the I.E.M City Eben Ezer de Fusagasugá from the results obtained in previous years, the mock Icfes Test, and the processes reported by the teacher.
- Design and apply the corresponding actions to the M_Learning pedagogical strategy, considering the results of the characterization of the students and the skills assessed by the Saber 11 test.
- Determine the effectiveness of the M_Learning pedagogical strategy in the development of the skills assessed by the Saber 11 test.

CHAPTER 2

LITERATURE REVIEW

Test Saber 11

According to the publication of the Colombian Institute for Education Evaluation (ICFES) in the orientation guide Saber 11 2019 - 2, The Test Saber 11 is the National State Examination of secondary education that must be taken by eleventh graders, in order to obtain the official results necessary to enroll in higher education in Colombia. (Cahnspeyer et al.,2019) states that this exam consists of 5 tests: Critical Reading, Mathematics, Social and Citizen, Natural Sciences and English which is composed by fifty five (55) questions, separated in seven (7) parts: Part 1: with 11% of total English questions, in this we find the classic ads, which have a message and you have to identify where you can see that type of ads. Part 2: with 11% of questions, here the lexicon is evaluated, there are 8 words and a sentence that describes the word, you must choose the word that relates to the sentence. Part 3: also, with 11% of questions, communicative skills

are assessed. The classic dialogue where you must choose the right option that the character can answer in that dialogue. Part 4: with 18% of the English questions, grammar knowledge is evaluated, there is a text with blank spaces where you must choose the correct word, which fits in that blank part. Part 5: it has 16% of the questions. Here you must understand a text and answer questions based on the text. Part 6: it has 11% of the questions, you must read a text just like part 5, only the questions are not propping of the text, they are inference, such as the author's intention and aspects of the text to be highlighted. Part 7: with 22%, being the one with the most questions, it is like part 4 but with a greater touch of demand.

Similarly, Decree 869 of 2010 sets out as objectives of the exam Saber 11, Check the degree of development of the competencies of students who are about to finish the eleventh degree of middle education. Provide educational institutions with relevant information on the competencies of applicants to enter higher education programs, as well as those admitted, to serve as the basis for the design of leveling programs prevention of desertion at this level. Monitor the quality of education of the country's educational establishments, based on the basic standards of competences and quality references issued by the Ministry of National Education. Provide information that serves as a strategic reference for the establishment of national, territorial and institutional education policies, among others.

The Colombian MEN (2009) empowers to The ICFES (Colombian Institute for Education Evaluation) to relied on the Common European Framework of Reference for Languages (CEFR) as a reference in the construction of its evaluation indicators in the Saber 11 status test, with the purpose of carrying out the evaluation of institutional processes and make decision making easier at completely levels of the teaching system (ICFES, 2009: para. 3).

In order to establish possible changes in the domain of English, derived from the Colombia

Bilingual program, the National Ministry of Education – MEN included in its 2005 mandate measurement standards based on the CEFR. According to this plan, in 2019 all Graduate students of public and private school institutions must be located at level B1.

On the other hand, to measure the fulfillment of the objectives of the Colombian Bilingual program, the MEN has also entrusted the design and application of two examinations of competences based on the CEFR (Ministry of National Education, 2005). Below the management of ICFES and in alliance with the British Council Colombia and Cambridge ESOL, the English test Saber 11 was designed.

This test, in its English component, it is divided into seven parts, all of them with multiple selection questions. In this exam, they only assess reading, vocabulary and grammar skills, while listening, speaking and writing skills are not evaluated by difficulty with the technological elements and processes that are required for it.

Reading Comprehension

Reading comprehension depends on the reader's English proficiency and knowledge, but also on the characteristics of the text you are reading. This is very close to how Carver and Darby (as quoted in Carver, 1992, p. 348) have defined reading comprehension, as they claim that it is a process of communication of thought that comprises two factors: the rate at which thoughts are obtained and the accuracy with thoughts are interpreted. Therefore, the result of these two factors comes with the efficiency in which thoughts are transmitted.

For this research, reading comprehension in exams is considered a process in which students recognize words and understand ideas that lead them to make inferences from a text, understand small conversations, and pass on information.

Vocabulary Learning

Vocabulary learning is indispensable in the communication processes between them reading. This fact is corroborated by Fauziati (2005) who has been correct in saying that, without enough vocabulary, an effective message cannot be given, or ideas cannot be expressed in writing or oral. Based on Oxford's (1990) explanation, memory strategies served as "a highly specific function: helping students store and retrieve new information"(p.37). She found out that "language learners have a serious problem remembering the large amounts of vocabulary necessary to achieve fluency" (p.39).

As a result, some kinds of methods, procedures, exercises and practices have been suggested in the field of teaching vocabulary (Schmitt, 2000) and it has been proposed that education vocabulary should not only involve of teaching specific words, but also trying to equip students with the plans needed to increase their acquaintance of vocabulary (Morin and Goebel, 2001).

From another perspective, vocabulary learning is the procedure obtaining building blocks in second dialectal gaining according to Restrepo Ramos (2015). The impact of vocabulary on proficiency in second language performance "has become [...] an object of considerable interest among researchers, teachers, and materials developers" (Huckin & Coady, 1999, p. 182). From being a "neglected aspect of language learning" (Meara, 1980, as cited in Xu & Hsu, 2017) vocabulary expanded acknowledgement in the literature and reclaimed its place in teaching. Educators lifted their attention from accuracy to fluency by moving from the Grammar translation method to communicative methods to teaching. As a result, incidental vocabulary teaching and learning became one of the two major types of teaching programs along with the thoughtful method.

M-Learning

Over the past decade, the growth of wireless data networks has conceived the connection of mobile devices such as electronic tablets and smartphones to the internet network with the ability to access educational content instantly and in anywhere you find access to the web; this phenomenon gives rise to a new mode of distance learning called "mobile learning". Elkheir and Mutalib (2015) define M-learning as a combination of E-learning (*Electronic learning of the English language through the Internet with the use of various computer tools and the development of online activities*) and mobile computing (*Use of portable mobile devices with the capacity to store and share information online*) that fuses mobile and wireless technology to deliver learning practices.

Among the different definitions given to the M-Learning, it should be considered one of the most concrete and basic, but in turn it conforms to this process and given by the researchers (Pinkwart, Hoppe, Milrad and Perez, 2003; Quinn, 2000) define it as the direct descendant of the e-learning supported by resources, tools and digital electronics, also M-learning is the E-learning that is supported by mobile devices and broadcast of wireless; or simply, is when the Learning takes place with mobile devices and it is supported by wireless transmission.

As for the above, it is essential to mention the large number of functionalities of the M-Learning in English language teaching that can be given through the continuous use of different translation, pronunciation, association and organization of texts, phrases and words in different languages that allow the unlimited practice of its users and undoubtedly favors the acquisition of new vocabulary, a factor that enriches the grammatical understanding of the language that you want to learn and optimizes the understanding of texts.

Therefore, Elkheir and Mutalib (2015) defined M-Learning as the practice of mobile phones

and tablets to encourage students' interest in some subject and consequently make them spend more time in their learning process. Issa and Isaias (2016) and Baron (2016) determined the M-Learning strategy as a positive factor by using mobile devices connected to the internet to encourage communication and collaboration between individuals regardless of where they are.

(Ramírez, 2009) offers a very clear definition of M-learning, in which he interprets it as a way of learning in an educational frame of reference different from the classroom and a teacher, doing it through a mobile device, in which the motivation to learning plays a fundamental role in knowledge; and that considers the use of mobile devices, well-conceived favors the design of virtual educational environments making the teaching-learning process focus on the apprentice, who is the protagonist of his training so it is necessary to contribute to the development of a Critical and innovative thinking that knows how to work in a collaborative environment.

Thus, the concept of using mobile devices to improve the learning processes, involves designing suitable activities such as carrying out projects or work collaboration that helps facilitate student work in a double sense: on the one hand, encouraging their individual work, and on the other, stimulating interaction with their groupmates (Fiad and Galarza, 2015).

(McQuiggan, 2015) stated that "mobile devices are widely predicted to be the wave of the foreseeable future in educational technology. Therefore, through the advancement of technology, the invention of new mobile devices will never come to an end and will apply to the educational context if their effectiveness is positive in the field", with the above we can argue that the use of devices mobile sought for educational purposes does not stop, on the contrary, they are increasingly necessary, indispensable and of priority use, these are permanently updated and modified with more advanced technology.

This technology allows the use of audiovisual material and applications that allow to

expand the individual and group cognitive environment of the educated by building knowledge, providing new alternatives and advantages from didactics in the different areas and in the particular case of teaching a second language, since it allows the teacher to generate new innovation strategies when guiding a class. However, the benefit of using any mobile device will be beneficial if the teacher directs the process towards a teaching and pedagogical purpose for learning English, where these elements are mediators of available and relevant content in the web and students.

In the context of public schools, students usually have a low level of English proficiency and they are afraid to interact in English; it is there that the use of the devices plays an important role and becomes an effective instrument within the classroom, so that students move from being passive recipients of what they learn through books, or photocopies to being active participants and having through a device that is own and used daily, the tools necessary to manipulate, download, reuse various audiovisual resources that allow autonomous learning in a different environment to the traditional, as Fernando Huedo Duque states: In case of being introduced into the classroom, digital resources are often regarded as a fun to break with the traditional dynamics of the class due to the motivation and excitement they arouse among students, and not as a true tool Didactics. (Duke, 2013)

Therefore, it is essential that the teacher engages mobile devices for a specific and pedagogical purpose, focused on language learning and the use of applications, multimedia and/or digital resources available on the web for this purpose and not just for distracting the student or because it's a fashion strategy; but because it's really going to be useful for the student to lose the fear of interacting in English, acquire vocabulary, practice vocabulary, reading and grammar exercises.

Mobile devices

The development of the M-Learning in the schoolroom requires the usage of so-called mobile devices, according to Baz, Ferreira, Alvarez and García (2008) this is "a small device with some processing capabilities, with permanent or intermittent connection to a network, with limited memory, which has been designed specifically for a function, but can perform other more general functions" (p.1). For this research, it is necessary that both students and teachers have smartphones because they have various functions and capabilities necessary for the development of M-Learning, because they will have to make reproductions, recordings, downloads, development of online activities among other activities.

From the perspective of (Ramírez, 2009), "A mobile device is a processor with memory that has many input forms (keyboard, screen, buttons, etc.), also forms of output (text, graphics, screen, vibration, audio, cable). Some mobile devices linked to learning are laptops, phones cell phones, smartphones, digital personal assistants (Personal Digital Assistant, PDA), portable audio players, iPods, clocks with connection, platform of games, etc .; connected to the Internet, or not necessarily connected (when the material materials have already been archived) ”.

Smartphones allow a greater capacity to store data and perform computer-like activities and enable internet connectivity via Wi-Fi and email better than a conventional mobile phone. In addition, they can be music players, cameras and video, etc., also, it must be recognized that all smartphones allow the user to install programs or applications additional to those already installed by default, as well as the skill to read documents in PDF and Microsoft Office format; that is, today these devices have new and varied functionalities in relation to the old mobile phones, empowering them as suitable for the development of Mobile Learning.

Among some definitions on what a smartphone is, we can find: June Jamrich and Dan Oja

(2008) argue that: "From the humble origins of the cell phone, a digital device called a smartphone emerged, which in addition to voice communication, includes features such as a full qwerty keyboard, text messaging, email, Web access, removable storage, FM radio, digital music player, software options for games, financial management, personal organizer, GPS and maps. " (p. 20) June Jamrich and Dan Oja talk about the features that smartphones possess.

Pei Zheng and Lionel Li (2006), after an investigation, affirmed that the new era of technology will bring about the massive use of electronic communication; and that smartphones will fulfill these functions. They also mention that mobile wireless technology is probably the most active area in computing and current communications and that cell phones have evolved to be multifunctional smart devices that apart from providing communication through voice and text messages, facilitates the processing of data and have improved wireless connectivity.

To conclude, it is essential to establish the differences between Smartphones and cell phones as a determining aspect to give clarity regarding the devices and the conception that some people have about Smartphones. Regarding this, it can be said that smartphones are cell phones with a touch screen and keyboard and with which you can do more activities apart from making and receiving calls and text messages; unlike cell phones that are devices with functional limitations that restrict them from making and receiving calls, taking poor quality photographs and listening to music.

Language competition

According to Chomsky (1965) the Linguistic Competence is defined as the "system of standards that, internalized by the speaker, make up his oral knowledge (expression) and allow him to conceive an unlimited number of grammatical statements (understanding)", another part

Lyons (1969), stated it as the 'ability that the person achieves to know how to use a language correctly, bringing him to know the procedures, needs, intentions, purposes, purposes, etc.', on the other hand Hymes (1972), defined the Communicative Competence as the 'ability that the speaker acquires to know how to use a language with ownership leading him to distinguish the various possible social situations'. In this way we have the Competence in Linguistic Communication used to organize the ideas of our thinking (Understanding), also to express our inner world (Expression) and finally to relate in society (Relationship).

The Common European Framework of Reference for Languages (CEFR)

The Council of Europe (2001), defines The Common European Framework of Reference for Languages (CEFR) a standard that serves as an international reference to measure the level of comprehension, oral and written expression of a language.

It serves as a way to standardize language test levels and is used by the Colombian Ministry of Education (MEN) to classify people according to their knowledge in six levels: A1: The basic ability to communicate and exchange information in a simple way. A2: The ability to deal with simple, straightforward information and begin to express oneself in familiar contexts. B1: The ability to express oneself in a limited way in familiar situations and to deal in a general way with nonroutine information. B2: The capacity to achieve most goals and express oneself on a range of topics. C1: The ability to communicate with the emphasis on how well it is done, in terms of appropriacy, sensitivity and the capacity to deal with unfamiliar topics. C2: The capacity to deal with material, which is academic or cognitively demanding, and to use language to good effect at a level of performance which may in certain respects be more advanced than the native speaker average.

The Colombian National Bilingual Program

Guerrero, C. H. (2008) determines that The National Bilingualism Program is oriented toward “having citizens able to communicate in English in such a way that they move the country into universal communication processes, into the global economy, and into a cultural openness with internationally comparable standards.

On that way, he says that in the Colombian context, English language is considered a foreign language. Given its importance as a universal language, the Ministry of Education has established, as one of the core points of its educational policy, the improvement of the quality of the teaching of English, leading to better performance levels in this language.

According to Fandiño-Parra, Y. J., Bermudez-Jiménez, J. R., Lugo-Vásquez, V. E. (2012) the main objective of the National Bilingualism Plan (NBP) is to have citizens capable of communicating in English, with internationally comparable standards, that insert the country into the processes of universal communication, in the global economy and in cultural openness. Among the specific objectives, the NBP seeks that from 2019 onwards all students finish their secondary education with an intermediate level (B1 according to the Basic Standards of Foreign Language Proficiency: English). Likewise, as of this year, all English teachers in the country are expected to have at least intermediate-advanced level (B2 according to the Basic Foreign Language Proficiency Standards: English).

For its implementation, the NBP has established specific lines for the identification of teacher training needs, the formulation of training plans consistent with those needs and, in general, the monitoring of the teaching and learning processes of English in the country.

Basic Learning Rights (DBA)

The Ministry of National Education (MEN, 2015) specifies them as a group of elementary knowledge focused on the educational community that articulate teaching processes and promote conditions of educational equality to All Colombian students. DBAs are raised for each school year from first grade to eleven.

In this way, it arises a possible learning path for students to achieve the learning objectives set by the Ministry of National Education (MEN) for each grade group. Basic learning rights alone do not constitute a curricular proposal since these are complemented by approaches, methodologies, strategies and contexts that are developed in educational institutions, within the framework of the Projects Educational Institutional and are specified in the area plans.

Therefore, the Ministry of National Education (MEN, 2015) puts the DBA to disposition of the entire educational community as an educational tool, because it provides a reference that allows to the territorial entities to launch curricular initiatives adapted to the needs of each Educational Establishment. Basic Learning Rights presents an example of a route, which may or may not serve reference to articulate the disciplinary areas and classroom planning by grades and levels. For teachers, shows an example of a route for the grades of basic and secondary education, which can be referents for their curricular design processes, of area and classroom. For families, it allows them to identify and interpret the learning that are or are not reaching their students in the school process to generate actions of accompaniment from home, as well as getting involved in the decisions of the schools of their sons. Students are given information about what to learn in the year school and in each grade group to guide their personal study processes and prepare for some knowledge that evaluates the state tests and access to higher education. (Ministry of National education, 2015, p. III).

(MEN, 2015) Presents the basic English learning rights the eleventh grade:

- Identifies the purpose of medium length oral and written texts related to topics of general and academic interest and shares it with others.
- Explains orally and in written forms the causes and effects as well as the problem and the solution of a situation.
- Identifies opinions of the author in oral and written texts related to his/her school environment.
- Writes opinion texts about academic topics using a clear and simple structure.
- Expresses his/her position on a familiar topic in written and oral form, taking into consideration his/her audience.

Competent teachers in technology management

At the present time, teachers try to understand the new way in which their students learn and what would be the best way to teach them from their professional training and they face this challenge as expressed by Prensky, who said that as educators of digital immigrants, teachers are not speaking the same language as your students Teachers have not yet managed to understand the evolution of the technological world in which new generations have already become familiar. In other words, students could teach teachers because they are more involved on the technology subject (Prensky, 2001).

A competent teacher in the management of electronic devices and technological resources for educational purposes, is that professional who has not only been trained in pedagogical aspects, but also in the articulation between theory and digital practice; but unfortunately, a large part of the teachers in the Colombian education system still lack these

skills and are lagging behind the new generations of students immersed in technological modernity.

Considering the above, it is clear that there is resistance to the integration of ICTs in teaching by teachers, who received an education totally remote from ICTs (Sunkel, s / f). But It should also be mentioned that there are some teachers who they have assumed the new role of innovation in the processes of teaching and use technological resources in their classes; Applied activities in virtual platforms and classrooms that allow interactivity, simultaneity, peer feedback and learning optimization. These platforms allow to provide a diversity of experiences educational and are available and accessible from different devices, places and moments; they constitute a main factor for the commitment that teachers must have to integrate the technology in their learning units, given That is the way how current students learn (UNESCO, 2013).

Therefore, it is necessary for teachers to be competent in the management of technological resources in their classrooms and for that purpose, training and updating in pedagogical innovations based on the use of ICT, should be the point to which all Colombian teachers should point if they do not want to be considered as obsolete elements in current education.

Information and communication technologies (ICT)

First, I take an interesting definition of ICT in Adell (1997, p. 56), who says that they are “the whole process and products derived from the new tools (hardware and software), information media and communication channels related to storage, processing and digitized transmission of information ”.

On the other hand, I find a timely and interesting definition in Cebero (2007, p. 163) who

expresses that ICT “revolves around to four basic means: computer science, microelectronics, multimedia and telecommunications”. And most importantly, they turn

in an interactive and interconnected way, which allows get new communicative realities, and enhance those that They can be isolated.

Cabero (2005), expresses that technology should not be perceived as a technical instrument, but as a cultural instrument of the mind and formative at the same time and that

these must become significant tools for training by empowering different cognitive skills and facilitate an intellectual approach between attitudes and skills of the subject.

Taking into account the references mentioned above, I think that the fundamentals in the Colombian educational context are all the characteristics and possibilities that no one but ICT offers to the teaching and learning processes and I believe that the education system should promote the articulation of the processes pedagogical with the use of information technology and communication to be more effective.

State of the art

The Javeriana University launched in 2017 a free application for mobile devices aimed at students who take the Icfes test Saber 11. Challenge Saber 11 Javeriana, has material such as drills and vocational tests for students and face-to-face training and statistics for teachers in the components of this evaluation. This consists of an individual game in which the student must choose the subject that he/she wants to review and answer the questions correctly. Each success is equivalent to earning coins and medals and staying in the game advancing through different levels. If the player is wrong, at the end of the play streak you will have the possibility to review each question you answered to meet the academic goal of the mobile app. This application has

more than 1,500 random questions, where you establish a personal learning game structure (Week, 2017).

TOMSA. It is a tool created by a group of systems engineering students of the Industrial University of Santander (UIS) of Bucaramanga in 2014, focused on the preparation and digital training for the test Saber 11, which provides specific educational content of the component of English that evaluates this exam, able to adapt to the different learning styles of students interested in taking these State evaluation. It was featured by the Colombian Ministry of Technology and Communications as an effective tool for entrepreneurship and educational support (MINTIC, 2017).

PreSaber ESE 11 is a virtual preparation course for the ICFES exam, created by the company Education and Business in the city of Medellín in 2013, which provides training services to students and teachers, this program contains more than forty explanatory videos, interactive activities and more than 20 virtual drills with immediate comments (answers and justification). In addition, it includes virtual advice with teachers (ESE, 2017).

Ukanbook is an educational platform created by the teacher José David Arevalo in 2012 and recognized by the Colombian Ministry of Technology through its APPS program, aimed at students in tenth and eleventh grade, who seek to improve performance by presenting Saber 11 tests, using a simulator with ICFES tests in order to know the test and prepare to develop it. (MEN, 2014).

Huffman and Hahn (2015) mention the dizzying growth of mobile applications and therefore the importance of identifying those that promote the development of long-term information retention. In their research they fixated on detecting learning procedures that will strengthen the retention of their users' vocabulary (cognitive skills) and perceived learning

strategies that improved vocabulary memorization and cohesive them into a mobile application, in this way determine the importance of choosing the appropriate learning strategy for the context and its subsequent integration with the technology.

EDMODO was founded in 2008 by Jeff O'Hara and David Youngman; After some years of testing and improvement in 2013, this tool acquired the Root-1 startup (*Android operating system that allows users of Smartphones, tablets and other devices to obtain privileged control of their device, with which certain functions of storage, installation and uninstallation of programs that the manufacturer don't provide.* Borg (2013)) to become an educational app store, but its most important achievement was in 2014, with the launch of Snapshot, a component of the tool with a set of process evaluation tools designed to measure the educational progress of students, which is why Edmodo Snapshot received the award for the best educational evaluation solution, and the company allied itself with two great British issuers. Oxford University Press and Cambridge University Press- to provide educational content on their platform and introduce Snapshot in the United Kingdom.

This application designed on a free, social and educational platform, where teachers and students can create work groups, notes, alerts, assign tasks and develop evaluations is an app whose focal goal is to permit communication between educators and apprentices. It is a social media service grounded on the microblogging shaped for explicit practice in education that offers teachers of a private virtual place where posts, files and links can be collective, a schoolroom agenda, as well as propose tasks and activities and accomplish them. It was created in 2008 by Jeff O'Hara and Nic Borg, although a few years ago it was acquired by Revolution Learning. The project is available for free in Spanish and in 7 more languages, being accessible from the URL www.edmodo.com (Garrido, 2013, par. 2).

WhatsApp is an application that was launched in 2009 and since then WhatsApp has been located as one of the Most popular instant messaging networks in the world and has been incorporated in the M-Learning in recent years; This app in January 2016 reached the immense number of one billion users in 41 different languages. The above means in terms of percentages, that one of each of seven people on the planet constantly use this application of messaging (Cremades, Cuenca, & Onieva, 2016). The strong positioning of this messaging network has been produced by its broad advantages in contrast to applications similar, one of these characteristics, is the variety of formats in which the information can be sent (Text, Photos, Screenshots, audio and video).

Previous research points to similar aspects like the most Outstanding for choosing this application: real-time communication, be able to share images, music or videos for free (Padrón, 2013). The trend of wide use could be supported by the characteristics described by Vaquera (2014), who emphasizes on The WhatsApp and has some communication elements traditional (oral and written), turning it into a hybrid language that allows the immediate sending of messages, the condensation of these and the violation of some grammar rules In this sense and according to Bloom's Taxonomy for the digital era (Churches, 2008) the degree of appropriation of applications may vary from recall to creation, generating with experience and skills development a qualification in the contents and the form of the language used.

CHAPTER 3

METHODOLOGY

This applied degree project belongs to the School of Education Sciences (ECEDU) of the National University Open and Distance UNAD and the line of deepening and research of this program is "Bilingualism. This research, called "Assessment of the influence of M-Learning in strengthening vocabulary for the test Saber 11 English in the I.E.M. City Eben Ezer of Fusagasugá" is framed in the mixed method as it is sought obtain the information corresponding to the impact of the implementation of this pedagogical strategy on a group of tenth graders who will present the status test in 2020.

In the face of this method Chen (2006) defines the mixed approach as "the methodical incorporation of quantitative and qualitative approaches into a single study in order to acquire a more comprehensive "photograph" of the situation", similarly Johnson et al (2006) in a "sense they visualize mixed investigation as a continuum where quantitative and qualitative methods are mixed, converging more on one of them or giving them "weight".

Regarding the above, the implementation of this to investigative methodology allows the collection and analysis of quantitative and qualitative data, as well as its integration to make inferences a product of the obtained information.

Type of Study

According to Lewin (2002), Research-Action (AI) is a kind of "engineering social", which makes a comparative investigation between conditions and effects of various kinds of social action, such as an investigation that leads to action. Lewin explains that research that only

results in reports or texts is not enough, consequently action research in any aspect is a scientific category with the same importance of pure science.

In this order of ideas, the approach to problems is constituted by stages, each of them composed of a planning process, action and obtaining information about the result of these actions and considering the above, research–action, part of personality theory and field theory, articulated in a theory-practical relationship that leads to social action about certain facts to analyze and determine how the present situation is, what the urgent problems are and what needs to be addressed in these situations.

Therefore Lewin (S.F), mention that the research- action, conforms to the project as it allows interaction as a mechanism to create processes in which the actors of the research process provide solutions, creates proposals that fit the time, space and reality in which the participating population is located, and allows each of the students individually and collectively to generate actions that allow the acquisition of cognitive skills.

Research-Action- (AI) can be defined as a type of research applied that is done in everyday or daily work environments (Rojas Ginche, 2009, p.2). the author adds that his character is basically exploratory and can be done before, during or after the execution of a school intervention program. This process requires the collection of information systematically, using techniques quantitative and / or qualitative, in a participatory, reflective, comprehensive and critical way, with the purpose of proposing immediate solutions and / or readjustments to rational solutions and appropriate to problems detected. This research process focuses on two aspects: research (cognitive strategy) and action (operational strategy). It can be described as a research process on action, in action and for the action in which the research subject is closely related to the purpose of research (social relations in which he is involved).

The concept AI research-action; comes from the model developed Kurt Lewin (1944, cited by Rojas Ginche, 2009) and identify the next stages (Kemmis y McTaggart, 1988):

1. **Observation:** Characterization and recognition of the preliminary state.
2. **Planning:** Development of an action plan that seeks to solve a problem or satisfy a need identified in the previous stage.
3. **Application:** Act to implement the strategy and observe its effects in the context in which it takes place.
4. **Results and Reflection:** The respective critical analysis of the processes and results is carried out.
5. **Conclusions and Suggestions:** In this final step of the research, there are given the deductions of all the process.

Description of the applied project stages

1. Stage 1. Observation and characterization:

In this initial stage, the methods used were the consultation in the official web page (<https://iemciudadebenezer.webnode.es/>) the general information of the institution I.E.M Ciudad Eben Ezer of Fusagasugá and the results obtained by the students in the test Saber 11 in 2017 and 2018 in (<https://www2.icfesinteractivo.gov.co/resultados-saber>); as a fundamental input to make the initial diagnosis of students' development.

1.1. Characterization of the research Population

The population under study of this applied research project, is a group of twenty-four students of tenth grade 1001 of the Municipal Educational Institution Ciudad Eben Ezer of Fusagasugá.

1.2 Description of the Educational Institution



Figure 1. Official Shield and Anthem of the I.E.M Ciudad Eben Ezer of Fusagasugá Students I.E.M ciudad Eben-Ezer, Facebook august 2017, illustrations recovered from <https://www.facebook.com/estudianteseben/photos/a.391708094561068/466606923737851/?type=3&theater>

Who are they?

They are an Educational Institution that offers preschool education, primary, secondary and technical media in public health promotion and prevention, this school located in the southwestern commune of Fusagasugá, urban area. Their graduates meet a work and occupational profile and can perform on the archive of medical records, support in educational talks in health, induced demand, taking vital signs, diagnosis and control of physical condition and anthropometric profile, appointments physicians with a general practitioner and specialists in the system and accompaniment and collaboration with doctors in the consultation.

Table 1. Characterization of the Educational Institution

Elements	Information
Social reason	Institución Educativa Municipal Ciudad Eben Ezer
Municipality	Fusagasugá
Department	Cundinamarca
Address	23rd Street Santa Maria Av. 59th-36th
Nature	State
Sector	Official
Gender	Mixed
Character	Technical
Phone	8862669 – 3102130489 - 3107887505
DANE Record	125290002246
Levels	Preschool–Primary Basic– Secondary Basic and Technical Media.
Approval resolution	0627 of November 9, 2011
Title expiating	Technical baccalaureate in health promotion and prevention.

General official data of the I.E.M City Eben Ezer of Fusagasugá.

Table 2. Characterization of the study population

Elements	Information
Population	24 students
Can	Tenth
Socioeconomic stratum	1.2 and 3
Ages	14.15 and 16 years old
Housing location	Urban Area

Specific data of the study population - tenth students grade (10-01) from the I.E.M City Eben Ezer of Fusagasugá.

1.3. Characterization of the English level of the I.E.M Ciudad Eben Ezer de Fusagasugá:

In the first phase of the research, the results obtained by eleventh students in the Saber 11 2018-2 test will be taken as a reference, to know the general level of English of the school in the last years and in front of it, to be able to determine the level of English of eleventh grade students versus the results achieved in the state exam.

It is essential for the development of the applied M-Learning project to be able to determine the performance of the scholars in the English subject by analyzing the results provided by the ICFES in which the level of student competencies in percentage results of students can be visualized. In a general way, information presented and supported in the respective statistical graphs, which allow comparison with the results obtained in the test Saber 11 in 2017-2 and 2018-2; in this way the general level of English of the educational institution can be established accessing the CIMAT platform of the (MEN).

2. Stage 2. Planning:

(Development of an action plan to improve what is already happening). In this part was established the schedule and activity plan having into account the lesson plan created by the English teacher of the I.E.M. Ciudad Eben Ezer from Fusagasugá and the detected needs and difficulties of students according to the test Saber 11.

2.1. Location of the activities: The research project will be carried out at the installations of the I.E.M. Eben Ezer City of Fusagasugá with twenty-four students of the course tenth (10-01).

2.2. Lesson plan: The thematic components to develop with the research group were agreed by the English teacher of the IEM City Eben Ezer of Fusagasugá and the tutor of the articulation

programs of the UNAD - CEAD Fusagasugá, who determined the contents of the institutional curriculum that the researcher student had to work with some specific themes that are frequently evaluated in the Saber 11 test, for that reason the issues raised to be developed were: Advertising - Simple future - Simple past - Present perfect - Reading comprehension and general vocabulary.

2.3. Activities schedule

Table 3. Schedule of Stages and activities of the project (Graphical description)

ACTIVITIES SCHEDULE						
Activity	MY 1	MY 2	MY 3	MY 4	MY 5	MY 6
	July	August	September	October	November	December
Characterization of the level of English	X	X		X		
Implementation of activities		X	X	X	X	
Data collection	X	X	X	X	X	X
Data analysis and interpretation	X	X	X	X	X	X
Writing academic article	X	X	X	X	X	X

Presentation of the research stages and activities in the correspondent months to be developed.

3. Stage 3. Application:

In this phase of the process, the development of activities began through some applications in the mobile phones of the students, focused on strengthening vocabulary and reading comprehension according to the established schedule of activities, on Fridays at 8:00 am until 10:00 a.m. It is also implemented the sending of pedagogical activities via e-mail or WhatsApp to students to reinforce the concepts worked in class to practice and internalize the information.

As well as developed the feedback of activities at the beginning of each class for clarification of doubts and concerns that students present in the development of the different activities.

3.1. Description of the implementation of activities

After doing the respective characterization of the English level of the apprentices proceeds to carry out the implementation of the actions inherent in the research process as follows:

At this stage of the research process applied the student researcher designs an activity in PPT format type presentation for each class, addressing a topic assigned by the teaching professor who owns the Educational Institution and that corresponds to the curriculum that is developing with its students, which contains a specific grammatical and/or theoretical explanation, a video summarizing the topic and a series of exercises to be developed in the classroom, which allow online practice; interactive reinforcement activities are also developed for each topic in the

Having the reference of (Pérez Salazar, 2014) who indicates that Educaplay contributes to strengthening the learning of the apprentices through the creation and development of multimedia educational activities and that in addition any user registered on the platform can design them with an attractive and professional result, in just a few minutes, This app is Presented with an advantage over other applications because it can be played from any browser, either online or also from any media such as CD, DVD etc.

Educaplay (<http://www.educaplay.com/>), is an Internet portal, through which interactive activities and online evaluations can be generated and which allows other online tools to be integrated through HTML code (a blog or web for example) and that can be exported via WhatsApp, It is used without an Internet connection, directly from a browser or through an e-learning platform such as Moodle. Educaplay application allows design texts to complete,

crossword puzzles, word soups, column relationship, word organization, among others) that yield the respective score obtained in line by each of the apprentices

Another tool that was fundamental in the process of applying the M-Learning strategy with the tenth grade students of the educational institution Ciudad Eben Ezer de Fusagasugá was the WhatsApp Application, a strategy that not only facilitated communication and interaction between students and research teacher ; It was also the path by which the results of the activities developed by the apprentices on the mobile devices were sent.

3.2. Application of the preliminary survey of student's perception of English language learning experience in school

To determine the initial perception of the students about their English learning process before of the application of the M-Learning pedagogical strategy, were applied the next survey:

INITIAL SURVEY

- 1.** Do you consider that your experience in learning the English language in your school life has been?
 - a. EXCELLENT
 - b. GOOD
 - c. REGULAR
 - d. BAD

- 2.** Which of the following English language communication skills is more difficult for you?
 - a. READ
 - b. WRITE
 - c. TALK
 - d. LISTEN

- 3.** Do you think that your learning process of the English language has been?
 - a. DIFFERENT
 - b. EASY
 - c. BORED
 - d. DYNAMIC

- 4.** Is learning English for you?
 - a. INTERESTING
 - b. INDIFFERENT
 - c. IMPORTANT

d. INTRASCENDENT

5. When have you had to communicate using the English language you have generally felt?

- a. FEAR
- b. QUIETNESS
- c. SHAME
- d. SAFETY

3.3. Application of the M-Learning strategy:

In this part of the research, the classes adjusted to the lesson of the English teacher of the Eben Ezer de Fusagasugá City educational institution were developed, framed and designed to be developed on the students' cell phones as follows:

3.3.1. Designed activities in ppt format

The next activities were designed by the investigator teacher, attending the class schedule given by the English Teacher of the I.E.M Ciudad Eben Ezer and developed with the students on base to the M-Learning pedagogical strategy during the research process.



Figure 2. Evidence of the developed activities in PPT format during the research application with the tenth-grade students of the I.E.M Ciudad Eben Ezer of Fusagasugá.

3.3.2. Links of activities designed in educaplay

Sending practice and reinforcement activities to each of the students through the WhatsApp application designed on educational platforms such as EDUCAPLAY, as a tool for consolidating information and learning for schoolchildren.

The next links correspond to the activities developed by the students and created by the researcher teacher in the Educaplay platform.

- ✓ https://es.educaplay.com/recursos-educativos/4736632-complete_with_simple_future.html
- ✓ https://es.educaplay.com/recursos-educativos/4780994-future_simple_will.html
- ✓ https://es.educaplay.com/recursos-educativos/4781186-english_test_future_simple.html
- ✓ https://es.educaplay.com/recursos-educativos/4781079-match_the_sentences.html
- ✓ https://es.educaplay.com/recursos-educativos/4830524-animal_names_crossword_puzzle.html
- ✓ https://es.educaplay.com/recursos-educativos/4781079-match_the_sentences.html
- ✓ https://es.educaplay.com/recursos-educativos/4752040-listening_and_writing_activity.html
- ✓ https://es.educaplay.com/recursos-educativos/4134961-insects_in_english.html
- ✓ https://es.educaplay.com/recursos-educativos/4130404-wild_animals.html
- ✓ https://es.educaplay.com/es/recursoseducativos/4449380/html5/irregular_verbs_past_participle.html
- ✓ https://es.educaplay.com/recursos-educativos/4848674-icfes_test_mock.html

3.4. final perception survey on the application of m-learning activities

This survey was applied to determine the perception of the population study about the process and methodology developed during the semester and the impact It generated in their English level competences and skills to face the Test Saber 11

1. Do you believe that the M-Learning project with its activities has improved your English vocabulary?
 - a. NOTHING
 - b. LITTLE BIT
 - c. REGULARY
 - d. MUCH
2. To what extent has the M-Learning project strengthened your English-language reading comprehension?
 - a. NOTHING
 - b. POCO
 - c. MEDIANLY
 - d. MUCH
3. Do you consider that the activities developed during the implementation of the M-Learning project have been?
 - a. ENTERTAINED
 - b. DIFFERENT
 - c. BORED
 - d. DYNAMIC
4. Does learning the English language through your mobile phone work for you?
 - a. INTERESTING
 - b. INDIFFERENT
 - c. IMPORTANT
 - d. INTRASCENDENT
5. How would you rate the M_Learning project developed during this semester?
 - a. BAD
 - b. REGULAR
 - c. GOOD
 - d. EXCELLENT

3.5. Instruments used to collect the information

The main focus of this project is action-research for data collection and different instruments and methods were used, both quantitative and qualitative, as expected from a mixed

approach (CABS). According to Clark (2010), mixed method is a research approach, popular in the social, behavioral, and health sciences, in which researchers collect, analyze, and integrate both quantitative and qualitative data in a single study or in a sustained long-term program of inquiry to address their research questions.

which is expected to be post-intervention will be applied in order to measure the change achieved with the intervention program and whether the skill was acquired by the students.

From the qualitative approach, data collection methods will be used as a field journal where information is recorded according to Sampieri (2014) is used to:

- a. Description of the environment (initial and posterior) covering places, people, relationships and events.
- b. Diagrams, tables, and schematics (sequences of events or timeline of events, links between concepts of approach, networks of people, among others.
- c. List of objects or artifacts collected in the context, as well as the photograph and videos that were taken (indicating date and time) and why they were collected, their meaning and contribution to the research.
- d. Aspects of research development (as we go so far, what we lack, what we should do)

On the other hand, students will give their opinion on the application of activities developed during the research process and the individual impact that occurred at the end of the actions to strengthen reading comprehension and vocabulary acquisition through a survey that seeks to measure perception of the tenth grade youth with whom the M-Learning strategy was applied.

3.6. Data collection

From the first phase of the applied M-Learning project at the IEM Eben Ezer City in Fusagasugá, digital information that evidences the activities carried out during the research process is stored and organized and is outlined in the written academic document that consolidates all the information and is presented at the end of the investigation as follows.

The information obtained during the process is systematized in instruments such as field diary, photographic evidence album, surveys with their respective percentage graphic interpretation; and it is presented by means of the mentioned elements since they facilitate the interpretation and conclusion of results.

3.7. Information analysis

The analysis of the information will be carried out through an evaluative instrument called “internal mock Saber 11 2019” developed by Milton Ochoa through his company “Martes de Prueba” that has among its services the evaluation of students' knowledge prior to the presentation of the Saber 11 test. This process is done through a simulation with content similar to that of the ICFES evaluation every year . The objective of this service is to identify the weaknesses of those who present the simulation and provide feedback to the institutions regarding the actions they must take to improve the skills of their students when they present the Saber 11 test. Ochoa, M (2015).

3.8. Data analysis and interpretation:

It is essential to achieve the objective of the M-Learning project, the analysis and interpretation of data, since its first phase this process allows to determine aspects related to the

performance of students in the specific area of English and subsequently, during the development stages of the research, it provides the necessary information and data to structure a final report, which will surely determine the impact of the project on the population that was applied.

Writing of the academic article:

For the consolidation of the information obtained at each stage of the applied M-Learning project, it is necessary to record each and every aspect that gave shape and structure to the research taking into account the guidelines of the university Open and distance UNAD for the presentation of written works and the respective formats in which the information is collected; therefore, the formats provided online by the institution are taken as references and there the proposal or preliminary draft and the written work that underpins the implementation process is structured.

3.9. Measurement of the Effectiveness of M-Learning

This process is made through an evaluative instrument called “internal mock Saber 11 2019” developed by Milton Ochoa through his company “Martes de Prueba” that has among its services the evaluation of students' knowledge prior to the presentation of the Saber 11 test. This process is done through a simulation with content similar to that of the ICFES evaluation every year . The objective of this service is to identify the weaknesses of those who present the simulation and provide feedback to the institutions regarding the actions they must take to improve the skills of their students when they present the Saber 11 test. Ochoa, M (2015).

With the respective comparison of the results obtained by the students of tenth grade 10-01 (study group) and tenth grade 10-02 of the school Ciudad Eben Ezer of Fusagasugá at the end of the second semester of 2019 is made the comparative analysis of the scores of the two groups

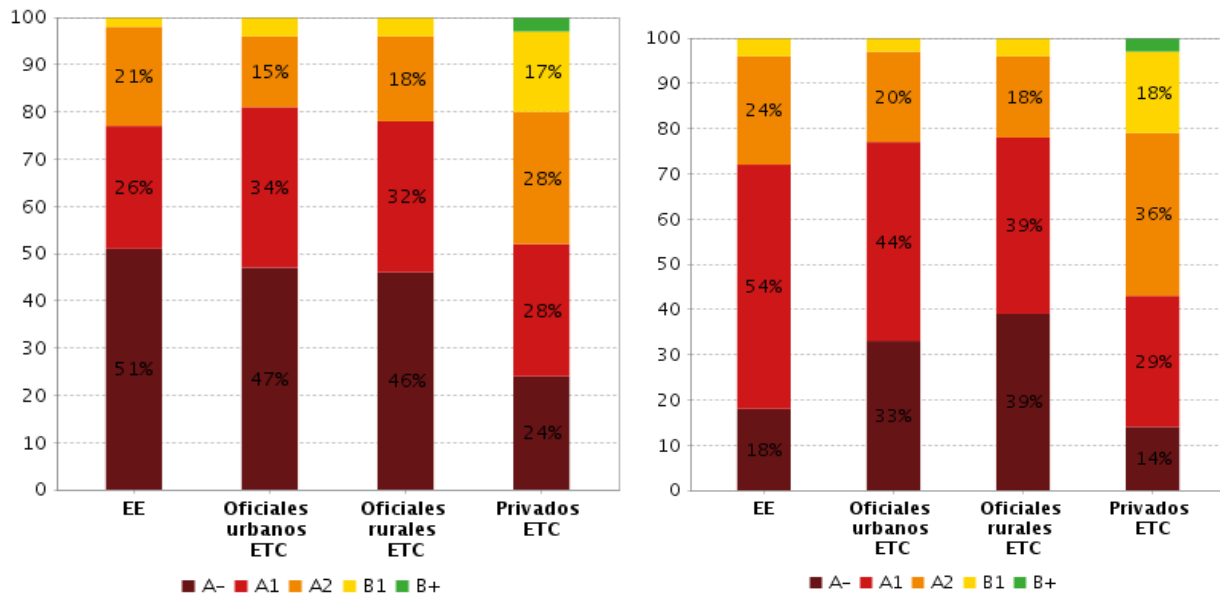
and with this information the impact of the process of strengthening and implementation of the M-Learning pedagogical strategy of the first group (10-01) of tenth grade students is determined, comparing their results with the students of the second tenth students group (10-02) are established the similarities or differences.

CHAPTER 4

RESULTS

4.1 Results obtained by eleventh grade students of I.E.M Ciudad Eben Ezer of Fusagasugá in the test Saber 11 in 2017 and 2018

Table 4. Performance levels according to the MCE in the test Saber 11 obtained by students from the I.E.M Ciudad Eben Ezer of Fusagasugá in the years 2017 and 2018.



Note: The first table shows the results obtained by the students of the educational institution I.E.M Ciudad Eben Ezer de Fusagasugá in 2017, classified in percentage in the first column, in the different English classification levels (A-, A1, A2, B1, and B+).

It is clearly evident that all students are located in the lowest levels (A-51%, A1 26% and A2 21%), evidencing the difficulty they have in presenting the Saber 11 test.

Note: In the second table, although there was a slight improvement in comparison with the previous year 2017, because some students migrated from the lowest level A- (18%) to the next level A1 (54%) and the percentage of students in level A2 (24%) improved slightly; The zero (0%) percent of students have managed to reach higher levels B1 and B +, evidencing difficulties of the students in the presentation of the test Saber 11 2018.

4.2. Results obtained of the preliminary initial perception of the students about their English language learning experience in school:

INITIAL PERCEPTION SURVEY APPLIED TO STUDENTS ABOUT THEIR ENGLISH LEARNING EXPERIENCE IN SCHOOL

1. Do you consider that your experience in learning the English language in your school life has been?
 - a. EXCELLENT
 - b. GOOD
 - c. REGULAR
 - d. BAD

Figure 3. Statistic Graphic initial survey - 1st question



Note: In this question most students perceive their English language learning experience as Regular.

2. Which of the following English language communication skills is more difficult for you?
 - a. READ
 - b. WRITE
 - c. TALK
 - d. LISTEN

Figure 4. Statistic Graphic initial survey – 2nd question



Note: In this question most students expressed that the skill that is most difficult in the English language is listening.

3. Do you think the learning process of the English language in school has been?

- DIFFERENT
- EASY
- BORED
- DYNAMIC

Figure 5. Statistic Graphic initial survey – 3rd question



Note: In this question the highest percentage of students expresses that learning the English language for them has been difficult.

4. Does learning the English language work for you?

- INTERESTING
- INDIFFERENT
- IMPORTANT
- INTRENCE

Figure 6. Statistic Graphic initial survey – 4th question



Note: In this question most students express that the English language is important to them.

5. When have you had to communicate using the English language you have generally felt?
- FEAR
 - QUIETNESS
 - SHAME
 - SAFETY

Figure 7. Statistic Graphic initial survey – 5th question



Note: In this final question, half of the students express that the feeling of having to express themselves in English is a shame.

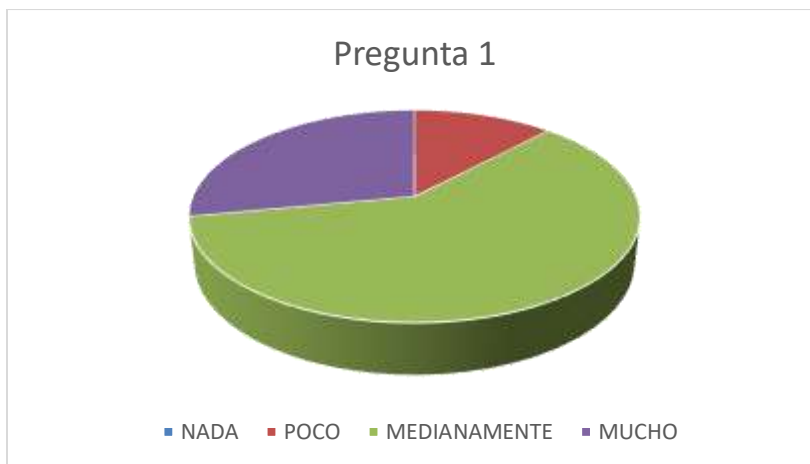
Results of the survey: The general analysis of this survey makes it possible to determine that the students' English learning process has not been satisfactory to them due to various factors such as the teaching methodologies applied by teachers in the previous years, disinterest in learning English, considering It is a difficult process between the most mentioned aspects. Although young learners perceive that English learning it is something important, most of them feel negative feelings when having to study it.

4.3. Results obtained from the final survey about the perception of students about the M-Learning activities developed.

FINAL PERCEPTION SURVEY APPLIED TO STUDENTS ABOUT THE APPLICATION OF M-LEARNING PEDAGOGICAL STRATEGY

1. Do you think that the M-Learning project with its activities has improved its English vocabulary?
- NOTHING
 - A LITTLE
 - MEDIANLY
 - MUCH

Figure 8. Statistic Graphic final survey - 1st question



Note: In this question most students perceive that the M-Learning pedagogical strategy has moderately improved their English vocabulary.

2. To what extent has the M-Learning project strengthened your English-language reading comprehension?
- NOTHING
 - POCO
 - MEDIANLY
 - MUCH

Figure 9. Statistic Graphic final survey – 2nd question



Note: In this question most students perceive that the M-Learning pedagogical strategy has moderately improved their English reading comprehension.

3. Do you consider that the activities developed during the implementation of the M-Learning project have been?

- a. ENTERTAINED
- b. DIFFERENT
- c. BORED
- d. DYNAMIC

Figure 10. Statistic Graphic final survey – 3rd question



Note: In this question the highest percentage of students think that the activities of the M-Learning process developed during the semester have been entertaining and dynamic.

4. Does learning the English language through your mobile phone work for you?

- a. INTERESTING
- b. INDIFFERENT
- c. IMPORTANT
- d. INTRENCE

Figure 11. Statistic Graphic final survey – 3rd question

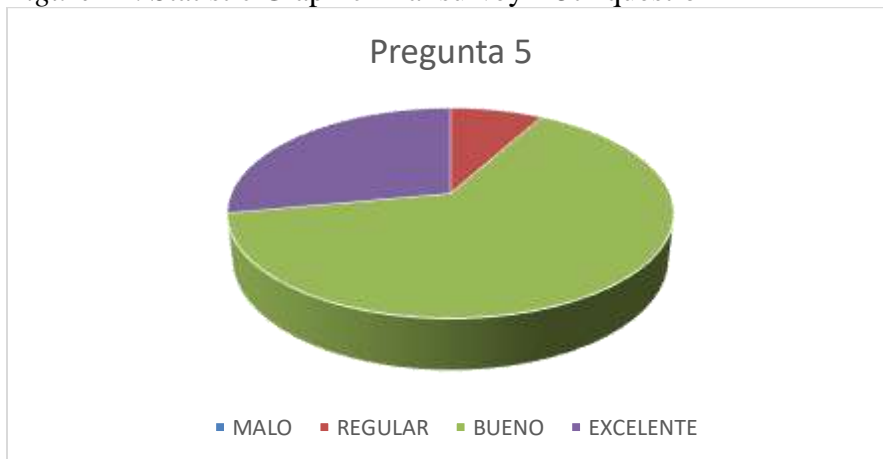


Note: In this question most students express that learning the English language through the mobile phone is interesting.

5. How would you rate the M_Learning project developed during this semester?

- a. BAD
- b. REGULAR
- c. GOOD
- d. EXCELLENT

Figure 12. Statistic Graphic final survey – 5th question



Note: The first table In this final question half of the students express that they would rate the M-Learning pedagogical process developed with them as good.

Results of the survey: The general analysis of this final survey makes it possible to determine that the tenth grade students who participated in the development of M-Learning activities, perceive their participation as positive, they felt motivated in the process and interested in the use of the mobile phone as a tool to practice the topics. Also, some of them expressed that their English knowledge had improved since they were participating in the research.

4.4. Results obtained by the tenth-grade students (10-01 and 10-02) in the mock of the test Saber 11 2019 English

Table 5. Results of the mock Test Saber 11 obtained by students of grade 1001

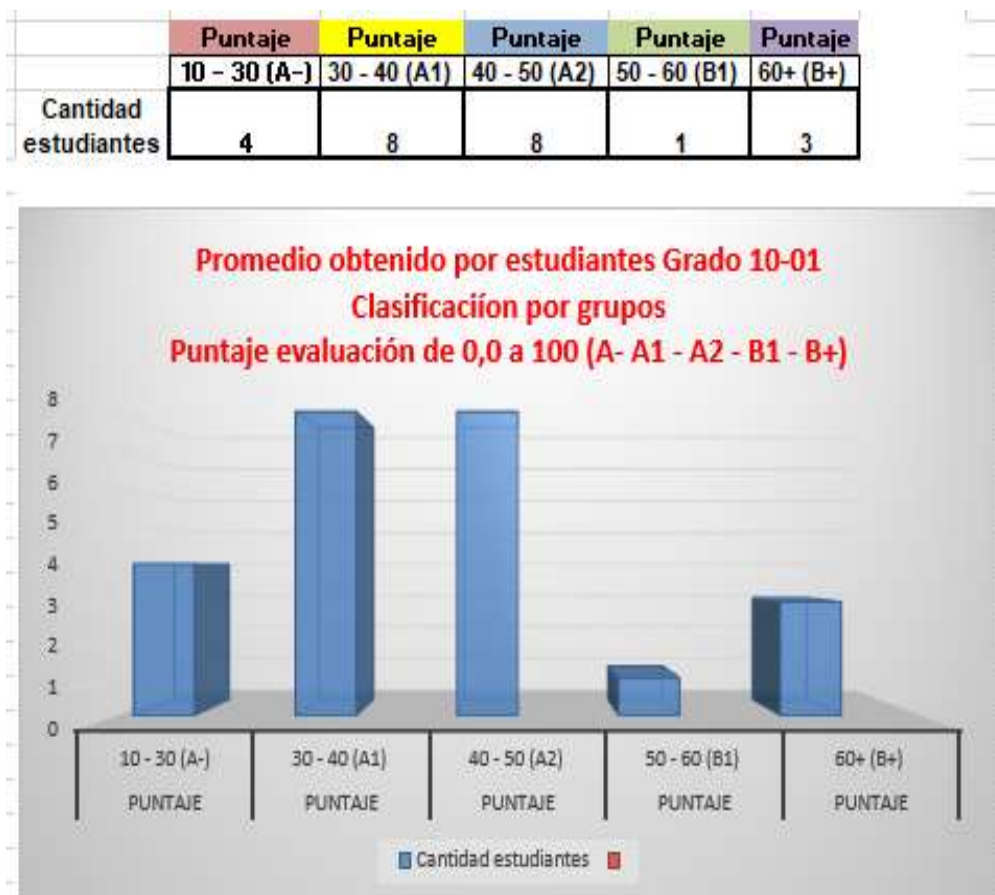
RESULTADOS SIMULACRO I.E.D CIUDAD EBEN EZER 2019			
	Grado	Nombre Estudiante	Resultado
1	1001	ARTEAGA SACHICA SALOMON	49,46
2	1001	BERNAL ESCOBAR DYLAN JOSEPH	80,26
3	1001	CARDENAS PEDREROS MICHAEL YEFERSON	37,74
4	1001	CASTILLO RINCON LAURA DANIELA	26,27
5	1001	CHACÓN HERNÁNDEZ VALENTINA	44,71
6	1001	CLAVIJO PAREDES NORMAN FELIPE	42,76
7	1001	CUPASACHOA CUBILLOS JUAN NICOLAS	45,11
8	1001	FERNANDEZ OJEDA RICARDO	25,65
9	1001	GARCIA MORALES LINDA TATIANA	32,93
10	1001	NIÑO MARTINEZ ANGIE NICOL	35,41
11	1001	OLARTE CLAVIJO SARA CATALINA	44,9
12	1001	PANQUEBA LOMBANA SANTIAGO	51,59
13	1001	PINEDA PARRA LAURA NAYELI	35,48
14	1001	PIÑEROS FONSECA TITO DAVID ESTEBAN	26,02
15	1001	REYES CRISTANCHO JHON ALEXANDER	70,83
16	1001	RODRIGUEZ PINZON BRAYAN JOSUE	33,05
17	1001	RODRIGUEZ VERGARA MARIANA	40,33
18	1001	SALAS GOMEZ JUAN MANUEL	68,54
19	1001	SUAREZ PACHECO ALCIDES	37,65
20	1001	URREGO PALACIOS LINDA VIVIANA	30,84
21	1001	VALERO CARBALLO MICHAEL DAYANA	28,72
22	1001	VANEGAS BASTO KEVIN SANTIAGO	35,39
23	1001	VANEGAS GUERRERO KEVIN SANTIAGO	44,67
24	1001	VARGAS CAICEDO KAROL VANESSA	35,24
		TOTAL	968,31

Note: The last table shows the individual results of Mock evaluation of the Saber 11 test, conducted by the Milton Ochoa Experts in Education.

Note: In this table you can see the list of the twenty-four (24) students of grade 1001 who presented the mock Test Saber 11 in the past month of November 2019.

It is worth mentioning that the rating is made from 0.0 as the lowest score, up to 100 as the highest score that can be obtained and at the end of the table the sum of all the ratings is made and they are totalized to have a reference data against the results of 1002 grade students.

Figure 13. Classified results in levels of the mock Test Saber 11 obtained by students of grade 1001 (Population under study).



Note: The first table This graph shows the classification of the students of the grade 1001 in the levels established by ICFES (A-, A1, A2, B1 and B +) according to the score obtained by each of them in the mock of the Test Saber 11 presented in November 2019. Is evident that even most students are located in the basic levels (A1 and A2), the quantity of young people located in the lowest level (A-) is low; in contrast, the most positive aspect is that there are located some students in the highest levels (B1 and B+) to difference with the results obtained by eleventh grade students in the previous years 2017 and 2018.

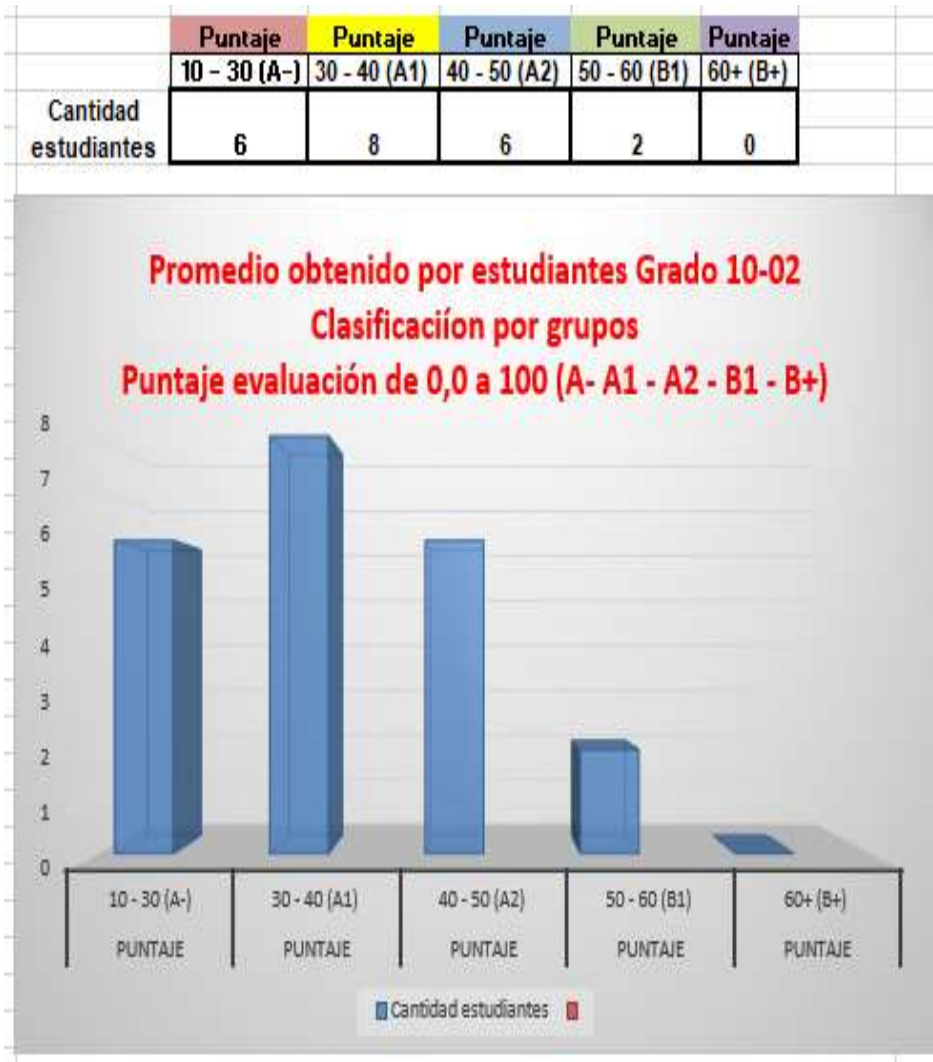
Table 6. Results of Mock evaluation of the Saber 11 test, conducted by the Milton Ochoa Experts in Education - Population not under study - grade (10-02) - population subject to comparison of results of the mock of test Saber 11 2019

RESULTADOS SIMULACRO I.E.D CIUDAD EBEN EZER 2019		
Grado	Nombre Estudiante	Resultado
1	1002 ARGUELLO BERNAL SAUL ANDRES	44,66
2	1002 BARBOSA BELTRAN LEIDY JULIETH	30,66
3	1002 CAMELO DIAZ DIEGO HUMBERTO	31,29
4	1002 CAMPOS BARRERO BRANDON ARLEY	14,05
5	1002 CASTANEDA CACERES LICED VALENTINA	44,96
6	1002 CASTILLO PEREZ LAURENCIO	20,89
7	1002 CASTILLO VENTERO CAMILO ANDRES	56,47
8	1002 DAZA MORA JULIETH LILIANA	20,89
9	1002 FRANCO PARDO LAURA VALENTINA	54,13
10	1002 GUEPENDO AROCA CRISTIAN FELIPE	49,37
11	1002 HERNANDEZ QUINTANA MIGUEL ANGEL	30,91
12	1002 LASSO VENDE DARLEY ANDRES	25,95
13	1002 MATEUS GARZON GINNA VANESSA	23,5
14	1002 MELO LONDOÑO LAURA STEFANIA	37,55
15	1002 MOLINA JACOBO VALENTINA	42,37
16	1002 PIÑEROS HERNÁNDEZ NICOLE NATALIA	23,32
17	1002 RADA VALENCIA BRAYAN ALEJANDRO	33,15
18	1002 RAMIREZ BERMUDEZ ANDRES FELIPE	30,83
19	1002 RAMIREZ NARVAEZ JENNIFER CAROLINA	42,45
20	1002 RINCON TORRES CAMILO ALEJANDRO	38,37
21	1002 RIVERA PEÑALOZA ANGIE XIMENA	25,58
22	1002 ROSAS BAUTISTA MARIA FERNANDA	44,47
23	1002 SOTELO CEPEDA VALENTINA	32,79
24	1002 TOSCANO VILLAMIZAR JUAN JOSE	49,14
	TOTAL	847,75

Note: The first table This table contain the list of the twenty-four (24) students of grade 1002 who presented the mock Test Saber 11 in the past month of November 2019.

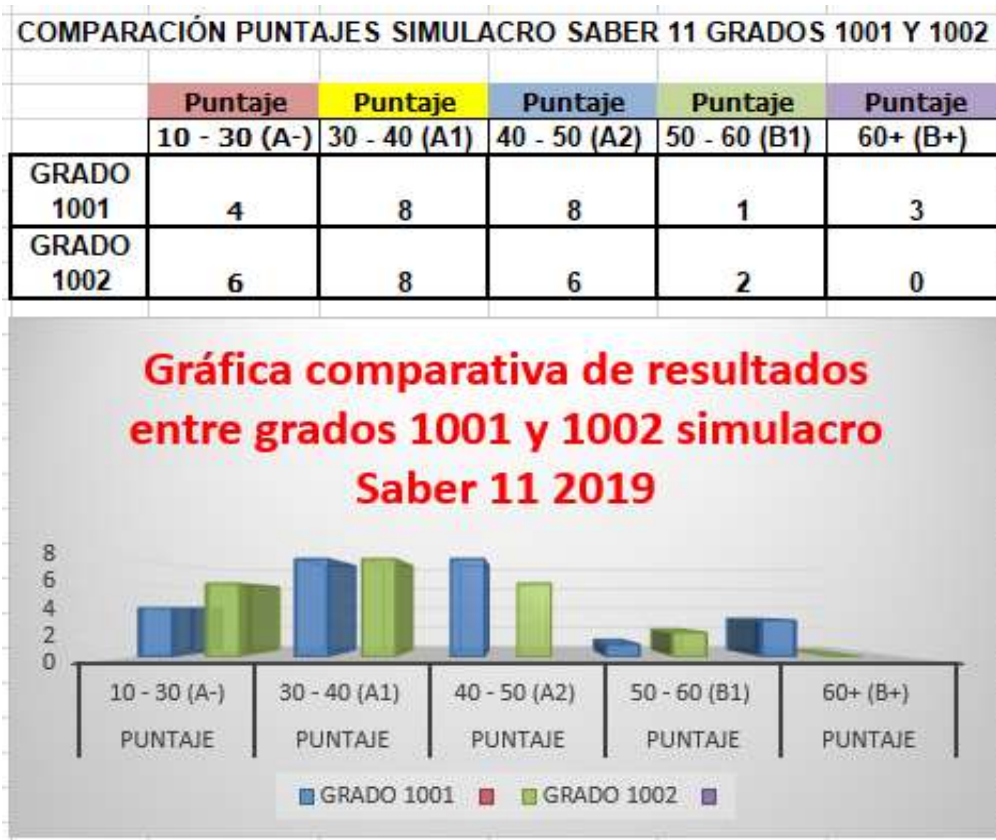
As was mentioned in the table number 1, the rating is made from 0.0 as the lowest score, up to 100 as the highest score that can be obtained and at the end of the table the sum of all the ratings is made and they are totalized to have a reference data against the results of 1002 grade students.

Figure 14. Classified results in levels of the mock Test Saber 11 obtained by students of grade 1002 (Population not under study).



Note: This graph shows the classification of the students of the grade 1002 in the levels established by ICFES (A-, A1, A2, B1 and B +) according to the score obtained by each of them in the mock of the Test Saber 11 presented in November 2019. Although, there is classification of the students of the grade 1002 in the levels established by ICFES (A-, A1, A2, B1 and B +) according to the score obtained by each of them in the mock of the Test Saber 11 presented in November 2019. Is evident that most students are located in the basic levels (A-, A1 and A2), the quantity of students located in this lowest levels (A-, A1 and A2) there were twenty two of them (22); in contrast, only two (2) students achieved the level (B1) and none of them was located in the highest level (B2).

Figure 15. Comparison of the results obtained by students of grade 1001 (population under study) and students of grade 1002 (population not under study) in the mock Test Saber 1.



Note: In this last graph is evident that the students of grade 10-01 who participated in the M-Learning pedagogical strategy obtained better general results than scholars of grade 1002 for the following reasons: a) At the lowest level (A-) 10-01 grade has two (2) students less than 10-02 grade; in the Low Level (A1) both courses have the same number of students; at intermediate level (A2), grade 10-01 has 2 students more than grade 10-02; in the intermediate-high level (B1) grade 10-01 has 1 student less than grade 1002 (this was the only level which grade 10-02 has a small advantage over grade 10-01); finally, at the high level (B +), the 10-01 grade has 3 students positioned in this one, while the 10-02 grade did not position any one, being this level, the remarkable one, that presents the greatest percentage difference and relevance in the comparison of both courses.

CHAPTER 5

DISCUSSION

This applied research project, carried out as a degree project, provided interesting information about the positive perception of students regarding the articulation of theoretical classes with the use of ICT, as a striking and motivational element in the construction of knowledge; because the young apprentices expressed that the usage of cellphones brings them closer to knowledge and facilitates the processes carried out in a class.

Another positive aspect that was obtained through the development of this research was the application of the teaching strategy M-Learning; because according to what the students expressed, they perceived it as a teaching methodology that allows the apprentice to be more involved in their training and having the information and activities at hand on their mobile devices at any time and place are a great advantage compared to the traditional strategies they have had in their school so far.

Having as reference the aforementioned, this research process allows us to deduce that English teachers must be involved in the management of technological tools to get closer to their students and the most assertive way is the application of theory and practice in use-based environments Technology education in the classroom.

CHAPTER 6

CONCLUSION

The outcomes of the research show a noteworthy variance between the group of students who were subject to the process of strengthening vocabulary and reading comprehension under the M-Learning educational method compared to the other group of teenagers with whom it was done, aspect that allowed me to determine that the M-Learning teaching strategy is an excellent option that English teachers should use because it facilitates the teaching work and optimizes the teaching-learning processes since it brings the teacher closer to their students through the use of a tool of common use and of great interest for teenagers, such as cell phone, whereby the impact criteria of the test were defined as follows:

1. The students were motivated and interested in this learning methodology.
2. It was demonstrated with the results of the simulation presented that the pedagogical strategy is effective to the extent that the students who were in the process improved their level of reading comprehension and vocabulary.
3. It was possible to show that the articulation between teaching and use of technologies facilitates the design and development of online activities, since the study time is maximized.
4. Thousands of pages and educational activities can be used that are found in the network to learn or practice English, apart from that, others can be adapted to the context or allow personalized design.

The M-Learning pedagogical methodology must be worked in concert with students and with the establishment of clear rules for cell phone use while the process is taking place; this with the purpose that the mobile device is used only for the development of the activities

inherent to the pedagogical process and the misuse of it in other actions that generate distraction or loss of study time is avoided.

For the application of the M-Learning pedagogical methodology, it must be taken into account that each student must have at least one cell phone that has the ability to connect to the internet and access WhatsApp; Apart from that, the teacher must have a mobile device with similar conditions but with a sufficient capacity for downloading and processing memory that allows him to send the online activities to his apprentices and receive their development with agility.

On the other hand, it is essential that the classroom in which the pedagogical activities are developed, has access to Wi-Fi, either through a modem or a sufficiently agile data packet, which allows the connection to the process actors.

Among some outstanding pages in the teaching of English and that allow its application in the M-Learning teaching methodology, I can mention:

9Slides: An interesting technique for educators to generate an interactive class through the design of presentations in slides with many images and tools to use.

Answer Pad: An assessment instrument for educators who can use their electronic devices to evaluate their students' knowledge.

Ask3: An application to convert the iPad into a digital board with recording functionality. It allows a tutor to produce directed trainings (adding typescript / illustration / story) that later scholars can see at home. Apprentices can use the application in lesson to response each other's requests before asking the tutor, while educators, in turn, can use it to evaluate apprentice knowledge.

Educreations: It converts the iPad into a digital board so that they can create “guided lessons” and distribute them on the network so that their pupils can see and work from home.

GoClass: This application allows teachers to design lesson plans and then estimate students’ progress in current and immediately time.

Finally, it should be noted that the M-Learning strategy can be worked with a wide variety of pages that can be easily found on the network and that do not require a large storage capacity in cell phones. In this order of ideas this process can be developed with digital files of the office package, in PPT or PDF format, as well as videos and audios in any format that the cell phone can reproduce and that serves as an element that favors the learning process.

In conclusion, I can mention that this research process was carried out satisfactorily, because all the participants through the investigative process assumed a participatory and dynamic role in relation to the activities carried out. On the other hand, the results show organization, structuration and planning in the different stages of the this applied degree project based on the M-learning teaching method.

REFERENCES

Baz, A. A., Ferreira, A.I., Álvarez R. M., García, R. (2008). Mobile devices. Available in http://isa.uniovi.es/docencia/SIGC/pdf/telefonía_movil.pdf

Carver, R. (1992). What Do Standardized Tests of Reading Comprehension Measure in Terms of Efficiency, Accuracy, and Rate? *Reading Research Quarterly*, 27(4), 347-359. doi:10.2307/747674

And Educational Services. (2017). Virtual PreICFES Pre-Knowledge ESE 11th. Available in: <http://eservicioseducativos.com/preicfes-preparacion-saber-11.html>

Fauziati, E. (2005). Teaching of English as a foreign language (TEFL). Surakarta: Muhammadiyah University Press.

Interactive ICFES. (2018). Results reports for educational establishments.

MEN. (2017). Guidance Guide To 11- 2017-2. Bogota: Ministry of National Education.

MEN. (2014). Know the applications in education that are developed in Colombia. Available in. <https://www.mineducacion.gov.co/cvn/1665/w3-article-342111.html>

MEN. (2010). https://www.mineducacion.gov.co/1621/articles-221588_archivo_pdf_decreto_869.pdf

MINTIC. (2014). The ICT Ministry presented 11 new applications made by Santandereans. Available in <https://www.mintic.gov.co/portal/604/w3-article-6859.html>

Morin, R. & Goebel, J. (2001). Basic vocabulary instruction teaching strategies or word? Foreign Language Annals, 34 (1), 16.

Oxford, R. (1990) Language Learning Strategies: What Every Teacher Should Know. Boston: Heinle & Heinle.

Schmitt, N. (2000). Vocabulary in language teaching. Cambridge: Cambridge University Press.

Huffman, W. B., & Hahn, S. (2015). Cognitive Principles in Mobile Learning Applications. Psychology, 456-463

Pinkwart, N., Hoppe, H. U., Milrad, M. & Pérez, J.(2003) “Educational Scenarios for the Cooperative Use of Personal Digital Assistant”, in: Journal of Computer Assisted Learning, 19, 3, 383-391.

Molenet (2009). The Impact of mobile learning
<https://crm.lsnlearning.org.uk/user/order.aspx?code=090068>

Sampieri, H. (2012) Research Methodology. Mc Graw Hill.

Garrido, A. (2013). Introducción. Obtenido de Edmodo:
<http://edmodo.antonio Garrido.es/introduccion.html>

Ministerio de Educación Nacional (2005). Colombia Bilingüe. AlTablero (37).
 Recuperado el 14 de Junio de 2008. Disponible en:
<http://www.mineduccion.gov.co/1621/article-97495.html>

Universidad Nacional Abierta y a Distancia. (n.d.). *Líneas de investigación de la ECEDU*. Retrieved from <https://academia.unad.edu.co/ecedu/investigacion-y-productividad/lineas-de-investigacion>

Council of Europe. 2001. The Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Cambridge: Cambridge University Press.
 (Also available at
http://www.culture2.coe.int/portfolio/documents_intro/common_framework.html.)

Trim, J. (ed.). 2001. The Common European Framework of Reference for Languages, A Guide For Users. Strasbourg: Council of Europe.

Guerrero, C. H. (2008). Bilingual Colombia: What does It Mean to Be Bilingual within the Framework of the National Plan of Bilingualism? Profile, 10 (1), 27-45.

CABERO, J. (2006): Nuevas Tecnologías Aplicadas a la Educación. McGrawHill. Madrid.

APPENDIX A: FIELD DIARY OF THE DEVELOPMENT OF THE ACTIVITIES IN
THE I.E.M CIUDAD EBEN EZER DE FUSAGASUGÁ

M_ LEARNING PROJECT FIELD DIARY		
Activity	Meeting establishing the investigative process	Date Friday, August 2nd, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	Define the schedule of activities and fundamental aspects of the project applied M-Learning in the I.E.M Eben Ezer City of Fusagasugá with the English teacher of the Institution and the manager and advisor of the M-Learning project, Bachelor Diana Cuellar of the University National Open and UNAD Distance.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_ Learning	
Characters involved	Teaching of English of the Educational Institution (Lic. Luisa Repizo), manager of the M-Learning project (Lic. Diana Cuellar from UNAD), researcher student from UNAD (Carlos Zambrano).	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
The English teachers of the Ciudad Eben Ezer educational institution and the UNAD were held in which the student researcher was told about the particularities of the applied M-Learning project, the objectives that were visualized in front of its application, the general characteristics of the school and the group with which the research process would take place with some important aspects of the environment in which the activities would be carried out.		This contextualizing process of the project and environment allowed the student researcher to determine the acceptance of the educational institution against the implementation of the M-Learning project and the actions that would be carried out during the second half of the 2019 with the selected group.
Observations	This meeting established the schedule of activities for the semester, determined the type of activities to be carried out with the group of students under study, defined some specific topics on which some dates were scheduled for the respective project progress counseling.	

FIELD DIARY PROJECT M_ LEARNING		
Activity	First class	Date Friday, August 9th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	To prepare students in the competence (ADS) advertisement association evaluated in the test Saber 11, bringing them closer and taught the topic (Advertisement) through interactive activities developed using the mobile phone as a fundamental element in the assimilation and appropriation of vocabulary and appropriation expressions related to the topic.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_ Learning	
Characters involved	Principal English teacher of the Educational Institution, Researcher student and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
The process of evaluating the influence of activities and applications developed through mobile devices on strengthening vocabulary for tests was initiated to know 11 English, more specifically with the development of the topic "ADVERTISEMENT" at the I.E.M. Eben Ezer City.		By developing this initial activity, I was able to determine that the student population under study has different levels of knowledge, a special situation that determines irregular advances in the appropriation of concepts.
Observations	Most students were interested, motivated and participatory in the face of class development based on the use of the mobile phone as a practical agent for the consolidation of theory; although a few were shy and fearful about their participation in activities in which they had to express their ideas or solve the interactive dynamics proposed by the teaching applicator of the project.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Second class	Date Friday, August 16th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	Consolidate the first competence (ADS) included in the test Saber 11, practicing with students some interactive activities focused on association of advertisement with different options to determine the correct one, developed by using the mobile phone.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
The training process on the theme "ADVERTISEMENT" was continued with the tenth graders of the I.E.M. Eben Ezer City, in which students demonstrated the appropriation of the vocabulary related to the subject by developing interactive activities in which everyone had to participate actively, demonstrating assimilation of the subject addressed in the previous class.		With the development of the second class I showed that students in general appropriated the vocabulary and expressions related to the topic addressed fulfilling the objective posed for the development of the topic.
Observations	Approximately one-third of the young people in the course had a data package on their mobile phones, which allowed them to access the links of the proposed online activities. This situation was relevant, because the work had to be carried out in groups of three students who shared their devices and developed in a cooperative manner the interactive dynamics assigned and which in turn were evaluated by the teacher holder with the respective qualification and recorded in the official note sheet of the institution.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Third class	Date Friday, August 23rd, 2019
Docente aplicador	Carlos Eduardo Zambrano Vargas	
Class objective	To familiarize students with the competences grammar and reading comprehension evaluated in the test Saber 11, explaining them the conjugation of the grammatical forms of the simple future (Will/Won't) through familiar and everyday situations that they project for their lives, by using the mobile phone as a practical and supportive element in the consolidation of vocabulary and concepts related to the topic.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
The process of teaching-learning with students developed, starting with a motivational question about young people's future expectations, which determined their preconceptions on the subject. Then a brief functional and grammatical explanation was made, emphasizing the importance of the knowledge that would be transmitted in the class and of participation in all the interactive activities proposed to develop on their mobile phones to achieve the proposed objective.		Although a medium percentage of students demonstrated prior knowledge of the subject, the other side showed a poor management of the grammar addressed, a situation that allowed to clarify some basic doubts of the developed topic, to move forward with the whole group in a level of knowledge and achieve the goal of the class.
Observations	At this stage of implementation of the M_Learning project, young people were interested in developing the class based on the use of the mobile phone as a practical agent for the consolidation of theory; on this occasion those students who were a little isolated in the previous sessions were more integrated into the activities and demonstrated the understanding gained through the previous explanations. On this occasion again only a third of the students had data package on their mobile phones, a situation that determined the formation of groups for the development of the proposed online activities. In the face of this, the teaching staff of the educational institution	

FIELD DIARY PROJECT M_LEARNING		
Activity	Fourth class	Date Friday, August 30th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	To consolidate the grammar and reading comprehension as fundamental competences of the test Saber 11 with the conjugation of the grammatical forms of the simple future (Will/Won't) through family and everyday situations that students project for their lives, by using the mobile phone as a practical and supportive element in the consolidation of vocabulary and concepts related to the topic.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
The practical process of the simple future theme was initiated in English with the development of three interactive activities developed in the educaplay application whereby students demonstrate their appropriation of concepts in affirmative, negative and strengthen their vocabulary by relating words to images and structure texts with the vocabulary learned with a final exercise of reading comprehension with Icfes-type questions.		By developing these specific M-Learning activities aimed at strengthening the Simple Future topic, some progress can be seen in students' interest in acquiring concepts that facilitate understanding and development proposed exercises for the class.
Observations	Unlike the first classes, students were perceived to be less shy about their participation in the activities and the vast majority of young people today dared to ask when they did not understand something and to clarify the doubts they had in the face of the development of the proposed activities.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Fifth class	Date Friday, September 6th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	To practice with the students the lexicon, completing dialogues and communicative skills as fundamental competences evaluated in the test Saber 11 through exercises about grammatical forms of the simple future (Will/Won't) and everyday situations that they project for their lives, by using the mobile phone as a practical and supportive element in the consolidation of vocabulary and concepts related to the topic.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
Simple Future was concluded with the practical assessment of the subject, through an online evaluation of the topic designed by the research student that the youth had to develop on their mobile phones, composed of ten questions structured with multiple selection and unique response in which students had to determine the correct way to use the WILL/WON'T auxiliary depending on the situation and demonstrate understanding of phrases and expressions.		The evaluation showed a good understanding of the subject by students and overall the scores obtained by the students show that the subject was assimilated and that their reading understanding of the subject was positive.
Observations	The results obtained in the development of the test account for the progress of students in the face of the appropriation of concepts through the application of M-learning in the process of teaching the English language.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Sixth class	Date Friday, September 20th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	Strengthen and practice with students their grammar knowledge, inferring in reading comprehension through word-reading and analysis strategies that allow general ideas to be articulated and keyword identification of an English-written text	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
Training activity was carried out, which explained to students how to approach an English reading, they were given reading strategies to identify the key vocabulary in a text, which allowed them to understand general ideas and determining the main idea.		Activity was presented in PPT analytical reading format as an exhibition for the first stage of the class in which students analyzed fundamental aspects of reading comprehension and in the practical phase completed a text presented in the application educational.
Observations	The first workshop on reading comprehension and English reading strategies was held with students in which they were given the conceptual tools to address an English text and a second class was planned to carry out the practical phase of the topic.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Seventh class	Date Friday, October 4th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	Expand students' vocabulary as an important aspect to improve their reading comprehension, grammar knowledge, lexicon between other competences evaluated in the test Saber 11, regarding animals, their skills and physical characteristics	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
Students were presented with an interactive activity designed in the Educaplay app, through which they had to organize the letters and discover the names of the animals in English and in turn the young people made a brief description of each of them when they were able to figure out what the hidden word was.		The development of this activity allowed students to actively interact with their peers on mobile phones, motivating them to express with the words they knew of the English language their ideas, so that their peers would discover the hidden word.
Observations	The students were very motivated and participatory in the development of this activity, which they perceived as competition and generated a fun and enthusiastic environment in which they were encouraged to achieve the objective of the class.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Eighth class	Date Friday, October 11th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	To motivate to students to expand their vocabulary as an important aspect to improve their reading comprehension, grammar knowledge, lexicon through the practical activities which strength them in the competences evaluated in the test Saber 11, regarding animals, their skills and physical characteristics.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
Students were presented with an interactive crossword designed in the Educaplay app to be developed on their mobile phones, through which they had to read some general characteristics of each of the animals in English so that by using the understanding of the descriptions presented will determine the name of the animal described.		The development of this activity allowed students to demonstrate progress in their reading comprehension and the acquisition of vocabulary regarding animals and their characteristics.
Observations	The development of this activity showed the progress of some students who have been involved in all activities and interest in using online applications such as Educaplay to strengthen their vocabulary.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Ninth class	Date Friday, October 18th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	To close to the students to all the competences, components and characteristics of the Saber 11 test in the English subject as a fundamental aspect that demonstrates their reading comprehension and vocabulary management at the end of their schooling.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Principal English teacher of the Educational Institution, Research Teacher and tenth grade students	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
A presentation in PPT format shares students on their mobile phones, a drill with 25 questions that include the different aspects that are evaluated in the ICFES tests for them to develop during the session and once it is finished proceeded to make the respective feedback and explanation.		The objective of the class was fulfilled because students knew aspects inherent in the Saber 11 test and became familiar with its characteristics in the feedback phase.
Observations	The proposed evaluation highlighted the difficulties of reading comprehension and ignorance of a part of the students' vocabulary and the need to strengthen the relationship of images with expressions and/or advertisements.	

FIELD DIARY PROJECT M_LEARNING		
Activity	Tenth class	Date Friday, October 25th, 2019
Applicator teacher	Carlos Eduardo Zambrano Vargas	
Class objective	To strength the grammar knowledge and lexicon, making students are aware of the characteristics of irregular verbs in past participle, their grammatical use and their phonetic classification as a strategy to facilitate their memorization as elemental aspect to face the test Saber 11.	
Place-space	Institución Educativa Municipal Ciudad Eben Ezer	
Population	Tenth grade students	
Applied technique	M_Learning	
Characters involved	Docente titular de Inglés de la Institución Educativa, Docente investigador y estudiantes de grado décimo	
Description of everyday activities, relationships and social situations		Interpretative/Analytical considerations regarding the purpose of the class
In a presentation in PPT format, students were told about the grammatical times in which irregular verbs are used in past participle and how they should be phonetically classified to facilitate their memorization. After this the practice of the subject was made by developing an exercise of converting irregular verbs to previous time designed in the Educaplay application by the student researcher.		With the development of this activity, the lack of knowledge of irregular verbs by most students and the need to work heavily on the subject with young people is evident to acquire the vocabulary that allows them to internalize them.
Observations	This topic shows the ignorance of irregular verbs in the past time of the students because at a general level it was difficult to assimilate them in this class.]	

APPENDIX B: PHOTOGRAPHIC EVIDENCE OF THE DEVELOPMENT OF THE ACTIVITIES IN THE I.E.M CIUDAD EBEN EZER DE FUSAGASUGÁ

An interactive class



Zambrano C. [2019, August the 9th] [An interactive class] [Photo].

This photograph corresponds to the photographic archive of the applied M-Learning project in the I.E.M Ciudad Eben Ezer of Fusagasugá.

English practice with intelligent students



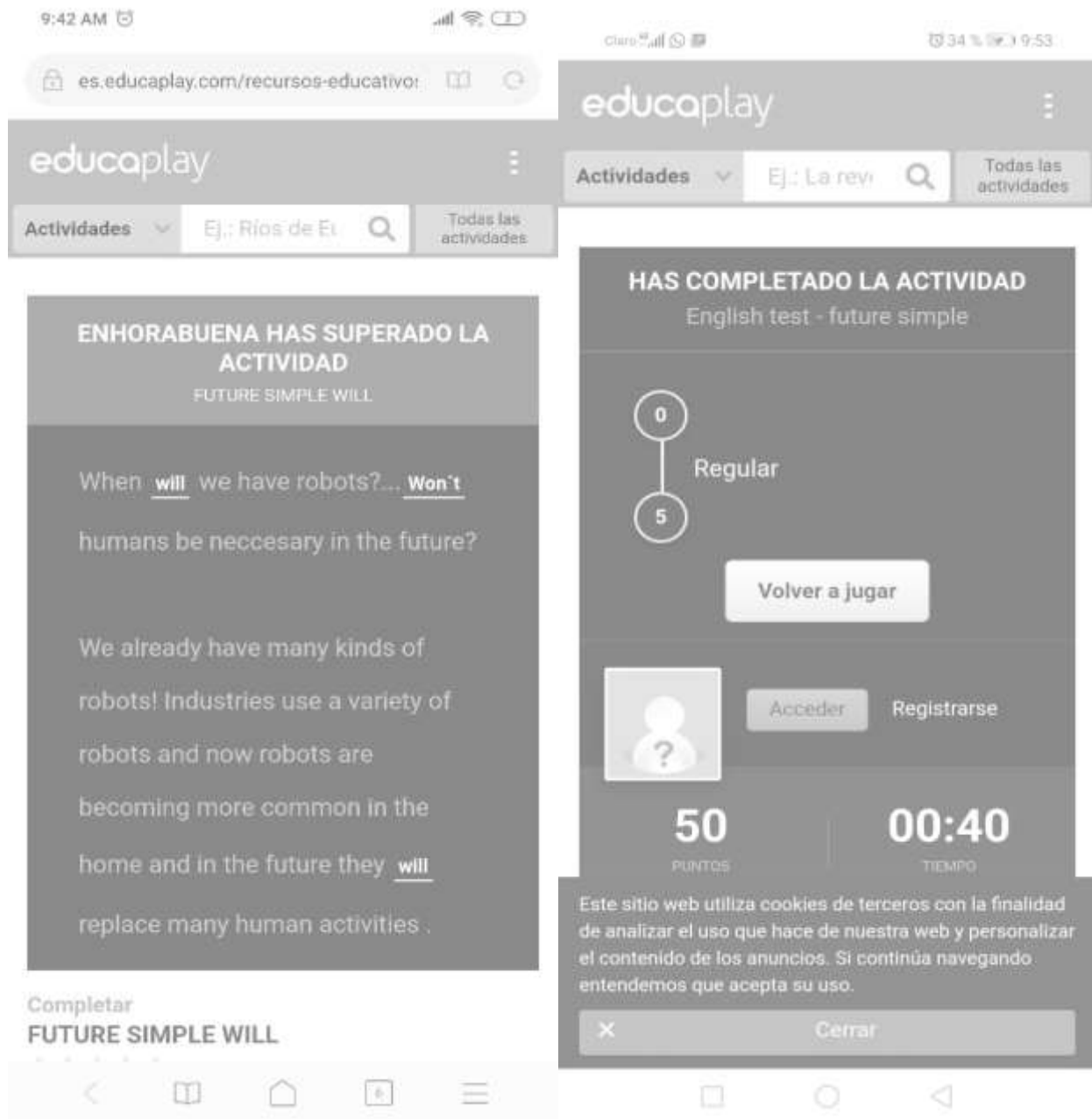
Zambrano C. [2019, August the 16th] [English practice with intelligent students] [Photo].
This photograph corresponds to the photographic archive of the applied M-Learning project in the I.E.M Ciudad Eben Ezer of Fusagasugá.

Answering questions



Zambrano C. [2019, September the 30th] [English practice with intelligent students] [Photo].
This photograph corresponds to the photographic archive of the applied M-Learning project in the I.E.M Ciudad Eben Ezer of Fusagasugá.

APPENDIX C: PHOTOGRAPHIC EVIDENCE OF THE SUBMISSION OF INTERACTIVE ACTIVITIES VIA WHATSAPP, DEVELOPED BY STUDENTS OF GRADE 1001 OF THE I.E.M CIUDAD EBEN EZER DE FUSAGASUGÁ



Zambrano C. [2019, October the 4th] [English practice with mobile phones] [Photo]. This photograph corresponds to the photographic archive of the applied M-Learning project in the I.E.M Ciudad Eben Ezer of Fusagasugá.