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TOPIC:

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“M-LEARNING IN READING COMPREHENSION”

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Ambato – Ecuador

2021

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I, Mg. Ruth Infante holder of the I.D No. 0603016106, in my capacity as supervisor of the research dissertation on the topic: **“M-LEARNING IN READING COMPREHENSION”** investigated by Edison Patricio Cocha Toaza with I.D No. 1804440897, confirm that this research report meets the technical, scientific and regulatory requirements, so the presentation of it is authorized to the corresponding organism in order to be submitted for evaluation by the Qualifying Commission appointed by the Directors Board.

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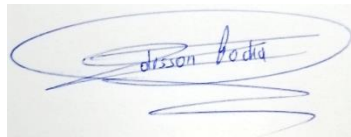
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I declare this undergraduate dissertation entitled “**M-LEARNING IN READING COMPREHENSION**” is the result of the author’s investigation and has reached the conclusions and recommendations described in the present study.

Comments expressed in this report are the author’s responsibility.

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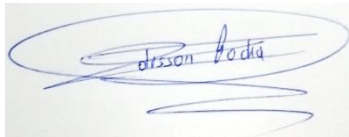
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## **DEDICATION**

To my parents, sisters and nephew who supported and motivated me to continue with my studies during all this whole time.

To “Universidad Técnica de Ambato” and my professors who gave me the opportunity to learn from them. Thank you to all of you for sharing with me your knowledge, experiences and advice.

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**UNIVERSIDAD TÉCNICA DE AMBATO**  
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**CARRERA IDIOMAS**

**TOPIC: “M-LEARNING IN READING COMPREHENSION”**

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**Abstract**

This research aimed to determine the effects of M-learning in reading comprehension of students from of “Pedagogia de los Idiomas Nacionales y Extranjeros” at “Universidad Técnica de Ambato” The methodology was a mixed approach. On the one hand, it is qualitative because a survey was applied in order to determine the most Web 3.0 application between students of fourth-semester focus on the educational environment. On the other hand, it is quantitative because a standardized pre-test and post-test were taken from Cambridge Assessment were used to measure the level of learners in reading comprehension in three levels: Literal, Inferential and Evaluative. In addition, this research used an experimental design because treatment was applied to 27 students of PINE majors. Also, through the platform "Mobincube", the researcher created a mobile application called "Developing Reading Levels 1.0" which contained authentic material focused on improving students' reading comprehension. This platform was very intuitive since it was easy to access and to complete the tasks provided by the teacher. Finally, learners demonstrated an increase in their cognitive abilities at the moment of answering literal, inferential, and evaluative questions and various points of view of the author. Consequently, it can be concluded that the use of mobile applications influenced the development of their reading comprehension when analyzing and understanding complex texts from the ease of their mobile device.

**Keywords:** M-learning, mobile application, reading, reading comprehension, technology. Mobincube.

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**EXTRANJEROS**

**TEMA:** “M-LEARNING IN READING COMPREHENSION”

**AUTOR:** Edisson Patricio Cocha Toaza

**TUTOR:** Mg. Ruth Infante

**Resumen**

Esta investigación tuvo como objetivo determinar los efectos del M-learning en la comprensión lectora de estudiantes de la “Pedagogía de los Idiomas Nacionales y Extranjeros” de la Universidad Técnica de Ambato. La metodología fue un enfoque mixto. Por un lado, es cualitativo porque se aplicó una encuesta con el fin de determinar la mayor aplicación de Web 3.0 entre estudiantes de cuarto semestre con foco en el entorno educativo. Por otro lado, es cuantitativo porque se tomaron un pre-test y un post-test estandarizados de “Cambridge Assessment” para medir el nivel de los estudiantes en comprensión lectora en tres niveles: Literal, Inferencial y Evaluativo. Además, esta investigación utilizó un diseño experimental porque se aplicó el tratamiento a 27 estudiantes de las carreras PINE. Asimismo, a través de la plataforma "Mobincube", el investigador creó una aplicación móvil denominada "Developing Reading Levels 1.0" que contenía material auténtico enfocado a mejorar la comprensión lectora de los estudiantes. Esta plataforma fue muy intuitiva ya que era de fácil acceso y para completar las tareas proporcionadas por el profesor. Finalmente, los aprendices demostraron un aumento en sus habilidades cognitivas al momento de responder preguntas literales, inferenciales, evaluativas y diversos puntos de vista del autor. En consecuencia, se puede concluir que el uso de aplicaciones móviles influyó en el desarrollo de su comprensión lectora al analizar y comprender textos complejos desde la facilidad de su dispositivo móvil.

**Palabras clave:** aprendizaje móvil, comprensión lectora, tecnología.

## CHAPTER I

### THEORICAL FRAMEWORK

#### 1.1. Investigative Background

Akpinar and Demir (2018) led an investigation which aimed to examine the different effects of mobile learning on undergraduate students, using significant applications and animated levels to develop this knowledge. The methodology used in this research was a quasi-experimental design because 41 students of Dokuz Eylul University were selected randomly to participate in this investigation. Participants were divided into two groups: Group1 (n=15) was selected as the experimental group, meanwhile Group2 (n=26) participants were signed as the control groups. The first group was tested through the use of an attitude scale to measure the effects of mobile applications during classes, while the second group was tested using rubrics to measure the learning attitude. Both groups demonstrated significant learning and a high score during the process, increasing their motivation at the moment to use applications to learn a foreign language. The results show that the impact with students is positive when they decide to use a mobile application to learn a new language.

Ugbaje (2020) conducted a study to analyze the different pedagogical and socio-technical theories in favor of the integration of M-learning in higher education in both small and middle-income countries. This research was divided into four phases. Phase one called the literature review attempted to put into context different implementations and adaptations within higher education and development in their communities. Phase 2 focused on a critical review of teaching models applied to students through the use of mobile devices in the classroom, preparing them pedagogically to change their teaching method within a social context. Phase 3 and phase 4 tried to demonstrate this experiment that was carried out in the research since two types of research methods were used. It was qualitative because it used semi-structured interviews to obtain data from the participants and the second was qualitative because it used a survey to collect accurate and empirical data from the selected participants. In addition, a total of 578 students and 21 teachers participated

in this exploratory research. Conclusions showed that when developing cooperative or group activities, students were able to develop a great potential when using platforms or any technological resource. Also, the methods used by the teacher at the time of evaluating tasks or classwork in a more efficient and clear way.

Moon, Francom and Wold (2020) carried out a research study aimed to determine the difference between traditional learning versus learning technology. It emphasized learning with mobile technologies and application through the use of the iPad to enhance learners' reading comprehension and constructionist learning. This research study was conducted by using a quasi-experimental research design. There were 47 students of the fifth level of elementary school selected from the North Midwest. The participants were divided into two groups an intervention group (G1) and a comparison group (G2). Both groups took three different types of tests: (1) AimswebPlus silent reading assessment, (2) reading tests in each unit, and (3) a survey which was useful to compare both groups' reading comprehension levels and habits. The results indicated that the implementation of mobile technologies and tools helped learners to improve their participation and motivation while they learned through the use of constructionist learning. Also, technologies allowed teachers to personalize students' learning processes according to their characteristics. In addition, the use of the iPad enhanced their reading comprehension as well as their interest to participate during the class as a support in the teaching process

Joshi (2018), investigated the use of mobile technologies in order to support children's grade 1 and 2 reading skills by emphasizing reading comprehension and foundational literacy by using mobile devices at home. It aimed to evaluate the effectiveness of mobile phones base on reading applications according to children's reading level. It was conducted by using a quasi-experimental research design. There were 627 participants in this investigation. There were divided into the intervention and comparison group. The researcher used an adapted version of the Early Grade Reading Assessment (EGRA) application. This tool was used to assess learners' reading skills, comprehension, and

fluency. The results showed that the intervention group over performed the comparison group scores. They had a significant improvement in four of the six subtasks administered oral reading fluency, syllable identification, letter name identification, and familiar word reading. These findings demonstrated that mobile phones were effective to deliver engaging and suitable content to develop children's reading competence.

Hazaea and Alzub (2016) developed a research study which aimed to investigate the effectiveness of the use of mobile technology in an English as a Foreign Language reading classroom. There were 30 men participants in this investigation. They belonged to the Preparatory Year at Najran University. It integrated the use of reading resources provided by Freebody and Luke in 1990 with the use of Mobile Assisted Language Learning. It was carried out by applying a mix-method which involves qualitative and quantitative research. At the beginning of the experiment, students were assessed by applying a pre-test. The experiment involved the use of a mobile WhatsApp group and tools which allowed learners to share images, check pronunciation and parts of speech, create photos of summaries and mind maps. Also, semi-structured interviews and self-reflection journals were applied. Then, a post-test was applied in order to determine students' reading improvement after applying the treatment. The results demonstrated that the use of mobile WhatsApp application, offline and online dictionaries, mobile resources, mobile, cameras, and memos helped learners to have a significant improvement in their reading practices such as text usage and analysis. At the end of this study, researchers recommended further research on the use of WhatsApp application in the development of students' writing skill.

Klimova and Zamborova (2020) carried out a study to determine the effects of technology, especially mobile applications on students' reading comprehension of English as a second language. In addition, in this research, several data collection tools were used such as standardized pre-test and post-test as well as questionnaires, interviews and observation sheets to about 290 participants aged between 14 and 21 years during the time of 1.5 hours for 17 weeks. At the end of the experiment, it was shown



that there is a significant effect among students and the use of mobile applications in favor of reading comprehension through articles uploaded to a database and online pedagogical resources such as Quizet, Whatsapp, etc. As final points to discuss, this investigation indicated that the environment that was created within the class and the aptitudes that the students demonstrated were optimal and positive, hooking them to the use of mobile applications independently and with a high level of motivation to be able to continue research and development in reading comprehension.

Elaish, Shuib, Ghani and Alaa (2017) developed an investigation with the objective of identifying the distribuion and taxonomy on mobile learning for English Language Acquisition. Also, it aimed to determine the strengths and weaknesses in order to provide resommendations about the use of mobile learning. It was conducted using a qualitative research desing. Thus, the investigators use some data bases to collet information such as ScienceDirect, ERIC, Web of Science, IEEE Xplore, Wiley Online Library and SpringerLink. After analyzing information of 133 articles related to mobile learning for English Language Acquisition, the results showed that most studies were conducted on non-application m-learning technologies. Also, blended mobile applications were the mostly used in the English m-learning context. The main challenges found within these investigations were related to the cost, privacy, safety, pedagogical practices, costs, usability, quality and integration. At the end, researchers provided some recommendations to facilitate users, policymakers, investigators and practitioners the use of mobile English language learning.

Sophonhiranrak (2021) conducted a study to investigate the application of mobile devices in higher education. This investigation focused on analyzing the features, barriers and factors of the use of mobile devices in learning by paying particular attention to clarifying the factors, techniques, and strategies that enhance learners' experiences in the use of mobile devices. It has two research questions: (1) What are the characteristics of mobile devices, appropriate learning strategies, factors influencing mobile learning, as well as barriers to using mobile devices in higher education instructional courses, adult

professional learning development and informal education? (2) What tools do teachers use in mobile learning sessions? This study was conducted by applying a qualitative research design in which studies published from 2006 to 2018 were analyzed. The findings indicate that mobile devices can be applied as learning tools to provide undergraduate learners with tasks like handing in homework, reflecting on learning experiences and sharing ideas. At the end of this investigation, researchers recommend teacher to consider three main aspects of mobile learning. Supporting systems, learning management and teachers' and students' readiness.

## **1.2. Theoretical Framework**

### **1.2.1. Information and Communication Technology (ICT)**

According to Castells (2011), Information and Communication Technology (ICTs) is an indispensable part of the contemporary world. In fact, culture and society have to be adjusted to meet the challenges of the knowledge age. The preponderance of ICTs has brought about rapid technological, social, political, and economic transformation, which has eventuated in a network society organized around ICT. The use of ICT equipment and tools around the globe has raised over the last few years, especially in Ecuador. It is of interest to realize that the gap in technological progress, particularly in internet connectivity has significantly reduced in the last decade in Ecuador. ICTs offer access to a vast range of diverse and different experiences that can inform the way of learning such as overseas websites, access to subject experts, or the use of simulators to learn/teach.

Exposure to the experience of others is a key ingredient to effective learning and a potential affordance of ICT. Information technologies provide a means by which people can be exposed to experiences very different from their own and extend or improve their learning process beyond their own communities. For example, there may be a disjuncture between the mediated 'reported' experience and the reality of lived experience at the moment of learning a language or practice it. Nowadays, ICTs are recognized as support of socio-educational transformation that provides a means of positive change in educative behavior. Also, the increase in the use of advanced technologies such as internet telephony and video conferencing provide numerous opportunities if referring to online education. The ICTs have many benefits including promoting economic growth and well-being of society (Ziemba, 2018).

### **1.2.2. Learning and Knowledge Technologies (LKT)**

Connolly and Thorn (1987) state that in our current era the use of technology to promote learning and knowledge has had a huge influence in the educational field. The Internet

allows us to study anytime and anywhere with unlimited resources. However, the application of Learning and Knowledge Technology (LKT) in education in Ecuador, especially in remote areas there still are many barriers such as limited access to the Internet or technological devices. From a language learning perspective, the terms learning, and knowledge are used to describe any kind of process in which students learn new things. Learning and knowledge require social interaction. However, it is important to know the difference between sharing information and other types of peer-to-peer learning interactions. Although they are student-centered, they require different ways of social interaction and communication. In addition, they take place within a different context and learning environment. Thus, it cannot be stated that these different interactions and their respective learning benefits are the same for every student.

Cascio and Montealegre (2016) state that Learning, Knowledge and Technologies have been a very interesting and popular topic of investigation in educational sciences because it changes constantly. It has received surprisingly huge scholarly attention in educational studies. Findings from research in organizational settings are expected to be only partially relevant to student knowledge sharing in formal education, because of many educative differences and learning methods. Therefore, the personal characteristics of teachers are an important influence on how easily they take up innovation using those technologies. Individual and personal characteristics may influence how teachers use technological tools to maximize students' knowledge and learning. There are teachers who use technological devices a lot because they feel comfortable using them to instruct their students. However, other teachers cannot change their minds to include technological tools in their classes because they prefer traditional classroom practices.

### **1.2.3. M-learning**

According to Sanchez, Mirlad and Vavoula (2009), over the past 10 years, mobile learning has grown from a minor research interest to a set of significant projects in schools, workplaces, museums, cities, and rural areas around the world. Each project has shown

how mobile technology can offer new opportunities for learning that extend within and beyond the traditional teacher-led classroom. We are in an era of personal and technical mobility where mobile devices such as phones, laptops, and tablets are carried everywhere. The variety of applications offered in the app stores makes it difficult to capture the essence of mobile learning or to show how it contributes to the theory and practice of education. Thus, we are going to consider the theory of mobile learning as “the processes of coming to know through conversations across multiple contexts amongst people and personal interactive technologies” (Sharples, 2006).

By using M-learning applications and content we have the opportunity to plan activities to help students to learn in an interactive way like linking people in real and virtual worlds, creating learning communities, providing expertise on demand and supporting a lifetime of learning. Nowadays, people are more interested in learning through a mobile application which enhances interaction, technology and understanding to build an appropriate theory of education for the mobile age. Mobile learning covers the delivery and support of learning using mobile phones. In the last five years, mobile phones have steadily assumed a place in further and higher education in the USA. Stone, Briggs, and Smith (2002), by supporting distant learners and part-time students. There are plenty of projects to create delivery of location-based content on mobile phones with group learning through computers in the classroom. The focus on technology does not assist the understanding of the nature of the learning. It overlooks the wider context of learning as part of an increasingly mobile lifestyle.

Research into mobile learning is the study of how the mobility of learners by personal and public technology which contributes to the process of gaining new knowledge, skills and experience. The design of mobile learning activities should be driven by specific learning objectives. The use of mobile technology is not the target outcome but rather it is a mean to provide activities which increase the benefits for students' learning process. Thus, the use of mobile technologies is suitable to create a technological learning environment. A challenge while teaching using M-learning is to enhance the teaching

and learning process by providing students learning experiences without being a distractor for learners (Beale, 2007).

Another big problem that schools face is students' attention. Changing the focus of attention from the surrounding world to a handheld device can be distracting or even dangerous. For example, learners can do other activities or be exposed to cybercrime or stalkers. On the other hand, after knowing how to deal with this problem, learners can have great advantages like a wide range of multimedia resources, file sharing, instant messaging, social interactions, collaboration, autonomy, social networking, etc. Instant messaging, file sharing, and social networking have been mainly restricted to home computers and Internet cafes. However, countries like South Korea or China have already adopted mobile networking and the next generation of personal devices which support collaboration and context awareness. The way to guide learners with powerful personal technologies, new skills, ways of collaboration, and networked learning is a key problem which schools face (McCloskey, 2006).

#### **1.2.3.1. Mobincube**

Mobincube is a technological tool which helps to create mobile applications even without knowing about programming. This application is very intuitive in its design and elements are very easy to use by people who want to create any educational app. Moreover, all the applications created are compatible with different operating systems such as Android, WindowsPhone, and Apple which is beneficial to allow learners to access to the applications created for any specific purpose. Ramos (2019) argues that Mobincube is a platform that helps to develop applications in an easy and simple way since it has step-by-step assistance in the case that an educator wants to create an application for the first time. This platform has pre-designed templates that help to guide the user to create the app. In addition, it has several elements that a user can add to the application, such as: adding images, informative texts, separators, and audiovisual aids.

According to Tapia (2019), Mobincube is software that helps its users to create, edit and design didactic applications. Most of the professionals or companies that decide to use this application are very satisfied with the accessibility that this software provides because it allows them to use many tools and guides them to learn how to use them. Indeed, Mobincube has many advantages in comparison to other platforms and software such as App Inventor, Android Creator, or Dreamweaver. Despite their latest versions, these platforms have some paid elements or limited resources. Tejedor, Ortega, and Prados (2019) indicate that the most interesting features that can be found in the premium version of this Mobincube are, advanced designs or templates with greater complexity, online videos which can be uploaded from your local computer, or online database. Also, you can add participants or learners within the application to control in they are developing the activities in real-time. It is very useful to obtain results in the case of evaluating students' knowledge and skills.

New technologies used in English classrooms provide students with new opportunities to learn in a more effective way by keeping them at the forefront in this globalized world. Technological resources are present in our daily lives and teachers can take advantage of these resources. In this case, teachers can apply them within their teaching practices especially English language teaching and learning process (Abella & Alcalá, 2014). The resources and elements found within the Mobincube platform helped to create the application "Developing Reading Levels 1.0" which contains authentic and interactive material such as, online PDF fields, interactive activities, informative videos, texts related to sociolinguistics topics, and assessment activities that measure students' reading comprehension level in each topic. Furthermore, students can develop all activities synchronously via Zoom application while they complete activities in real while the teacher supervises student's learning performances. At the end of the activities, the teacher helps learners to understand better by providing feedback and clarifying their doubts. It helps the investigator to obtain results towards reaching this investigation's objectives.

#### **1.2.4. Language skills**

According to Marlina (2018), languages have been in constant transformation. To teach a language and develop learners' language skills many teachers have applied different methods by moving from traditional methods such as grammar-translation, direct method and audiolingualism to innovative methods which emphasize the development of students' skills such as the communicative language approach, content integrated language learning, etc. In addition, language skills have been renewed and have adopted new forms and strategies of learning for students, where teachers cease to be the center of the class and become educational guides, directing and motivating the student to develop their language skills independently and cognitively.

O'Malley and Chamot (1985) explain that two important factors that affect learning must be taken into account: the first category is the strategy that directly affects learning, that is: student monitoring, memorization, the ability to deduce, reason, and practice the English language. The second category focuses on strategies that contribute to learning indirectly such as communicative and productive strategies for the student. Additionally, data collection for these strategies can be done by observing and analyzing student responses. This will help the teacher to develop and plan better use of teaching methods, as well as strategies to apply them to students according to their level of English and cognitive abilities.

#### **1.2.5. Cognitive skills**

According to Gill and Prowse (2014) cognitive skills are actions and behaviors that each person uses to plan and manage the performance of an activity. For example, the teacher at the time of observing the classes the student shows problems attending, concentrating, or focusing on the subject that is being taught with the classmates. In addition, the teacher and the students do not show positive results of having understood the main points that the author mentions in the book or the information that it provides to the readers. Finally, the synthesis of information means the way in which I analyze, interpret, and memorize



the information that the author gave within the paragraph or text. When we refer to cognitive skills, we refer to the tangible part of knowledge, that is, the goals achieved during the teaching-learning process with students.

On the one hand, Talkhabi and Nouri (2012) indicate that there are different problems in students' cognitive development because they tend to be passive during their learning process. They immerse themselves in their thoughts or in a reality in which they do not feel interested to learn new things or answer questions which help them broaden their vision and develop their meta-cognitive skills. On the other hand, they motivate us to innovate our learning and teaching methods in which teachers must recognize the problem of students when using their cognitive skills and help them obtain answers and make decisions, putting their skills in motion. skills to perceive reality and relate it to their experiences to obtain proper results when making decisions.

#### **1.2.5.1 Metacognitive skills**

Metacognition has undergone different epistemological changes over time. Moore (1982) in his first introductory book on educational psychology indicates that metacognition is primarily perceived as a characteristic of thought. This concept was constantly changing until Flavell (1979) provided clearer explanations and basis related to metacognition. He indicates that there are different factors that affect students' learning process and their way of perceiving and processing information. He argues that the way in which people decode information in their minds depends on their own context, knowledge, environment and experiences. Thus, there is a clear connection between external and internal factors and students' metacognitive skills.

Metacognitive skill helps students to promote their autonomy and resilience. Through metacognition, the student can evaluate their homework, find their strengths and weaknesses, plan an approach that helps them improve the subject and develop it to finally reflect on how to solve the problem and obtain critical thinking in this situation.

This skill is widely used in teaching methodologies such as Project-based learning, task-based learning, problem-solving learning, and mobile learning because all these teaching methodologies can be carried out within a social context where students can relate to the environment that surrounds them and actively participate within it (Willis, 2008).

#### **1.2.5.1.1 Thought process**

According to Clark and Peterson (1984), thought process is any cognitive process in which mental activities are involved like reflecting, remembering, reasoning, imagining, problem-solving, critical thinking or making judgments. Thought process involves many factors within which the teacher is the main source for students to carry out their knowledge construction process in a fast and agile way in which all students can achieve their learning outcomes with substantial bases of knowledge. All these thought processes help the student to obtain a generalized idea of the subject that is going to be addressed in the class and the way in which he will assimilate this knowledge. Students reflect and interpret knowledge with their own ideas which helps them to develop their cognitive skills and maximizes their learning.

On the one hand, **certainty** refers to those that arise at the time of obtaining a part of the information, for example, when reading a science fiction book or a novel we can identify fictional and imaginative characters. Meanwhile, if we read a cinematic article, we can find situations or tangible examples. Certainty tells us the difference between what is real and what is not real. On the other hand, **relationship** is based on a grouping or uniting the information that a person gives us and our ability to relate it to our knowledge and experiences. Consciousness is an ionic consciousness based on our ability to recognize the process of acquiring knowledge, the assimilation of the information it gives us, and our way of relating them.

### **1.2.6 Reading comprehension**

On the one hand, Wahyono (2019) explains that reading comprehension is a cognitive ability that allows us to interpret the information provided and assimilate it with existing mental processes in our brain, such as the relationship that exists between the text and events previously experienced by the reader, for example, the vocabulary used in the text. the style used by the author (formal or informal) and our understanding process. We know this entire cognitive process as reading comprehension. On the other hand, Yee (2010) argues that reading comprehension can also be interpreted as the process of recognizing words and transforming them in order to make sense and create meaning. The main goal of reading comprehension is to decode words or written symbols to understand a text using cognitive skills. These cognitive skills can improve, grow and evolve together as learners keep constantly exposing to those symbols or words throughout their lives. It is the ability to identify these elements as soon as we see them. While we read, we also create a mental representation of what we decide.

Reading comprehension has some strategies that help us understand the language used within the text more quickly and precisely. In addition, developing these strategies correctly learners can increase their reading and understanding capacity, for example during English practices teachers make feedback using worksheets and propose students do summaries about the topic previously learned or applying tests to measure their knowledge and planning some extra classes to reinforce the topic in case that learners need it. The first strategy of reading comprehension is the identification of the purpose of the reading. Then, the recognition of keywords within the text that can help you understand or infer the main idea of the paragraph or text. In this case, if the students are intermediate or advanced level, they can perform silent reading techniques which will better help them reading comprehension since they will focus on the whole context of the situation raised by the author (Ghaith, 2019).

### **1.2.6.1 Types of reading**

Brown (2004) indicates that there are different types of reading such as: receptive, selective, interactive and extensive. In receptive reading, we focus on recognizing written symbols such as alphabetic symbols, punctuation marks, words and phonemes which we can find within a paragraph. In interactive reading, we can find characteristics of the reading text such as the combination of forms focused on the meaning of the word to obtain more emphasis from it. Finally, in the extensive reading, we can find different text types such as: articles, diaries, reports and essays that constantly help us to understand and develop activities in an organized way during our task or work. It is also known as reading for pleasure which involves reading long texts without studying the language.

### **1.2.6.2 Levels of reading comprehension**

According to Miñoza and Montero (2019), the levels of reading comprehension are a process of interaction between the information obtained within the text and the meaning with which the student can represent it within their consciousness. In addition, it is a small relationship that arises between the context of the situation that the book relates with the experiences acquired by the student and the level of interpretation of it with the real world. All the levels of reading comprehension help the student or reader to improve their skills not only in language but also in their critical and analytical thinking to assimilate the things that happen around them. When combining these three levels of reading comprehension, the reader will obtain strong weapons when taking international exams, platforms, essays, or thesis within their academic life.

#### **1.2.6.2.1 Literal comprehension**

O'Malley et al. (1985) explain that this level is the most important in the reading because the reader must recognize and identify different characteristics within the text such as main ideas, secondary ideas, details, categorization, order, and summary of the text. In addition, at this level, the reader needs to locate the information quickly and accurately,

understand the context that the author describes within the paragraph and coherence that exists within it. The organization of the main ideas that the reader acquires is very important for their interpretation before the events that the author recounts within the text.

For example:

- Who, what, where or when the events occurred within the text?
- What words do you use to give your main ideas?
- Who was the main character within the text?
- Where did the events take place?
- When was it done?

#### **1.2.6.2.2 Inferential comprehension**

At the interpretive level, the readers focus on the interpretation that the author gives in the text. In addition, analyzing the context of the situation that the author tells us. It encourages us to relate the events with experiences and knowledge that the reader has previously had and their way of interpreting them by giving them an orderly meaning within their ideas (Suhadi, 2016). At this level of reading comprehension, readers have the ability to perform information tuning processes as graphic organizers that will allow them to obtain conclusions and general ideas on how to interpret the text, as well as the objective because they wrote the article or their intention towards the reader.

For example:

- Which is the topic?
- What values did the author take?
- How did this affect the characters within the story?
- How do I think the story would end?

### **1.2.6.2.3 Evaluative comprehension**

The evaluative level of reading comprehension allows the learner to be involved in the reading. It means that the reader can judge various aspects of the author's presentation within the text. This kind of interaction between the learner and the author provides the opportunity to create critical thinking and different points of view by testing the reader's judgments of the text. Also, the same text can have two very different points of view. This level requires a high level of reading comprehension because the reader will be subjected to several questions that test their critical thinking and their way of reasoning, generalizing, and evaluating all the content of the text. In addition, the reader has the obligation to put into practice several strategies and propose questions to evaluate the content and the intention of the author at the time he wrote the text (Suhadi, 2016).

For example:

- Is what the author wrote in the text possible?
- Are your ideas about him logical and relevant in a social context?
- Agree or disagree with the author's ideas?

### **1.3 Objectives**

#### **1.3.1 General objective**

- To determine the relationship between of M-learning and Reading Comprehension in students of the fourth semester “C” of the Pedagogía de los Idiomas Nacionales y Extranjeros career at “Universidad Técnica de Ambato”

#### **1.3.2 Specific objectives**

- To diagnose the use of M-learning tools that students and teachers commonly used to develop reading comprehension.
- To evaluate the level of students’ reading comprehension by the application through a pre-test and post-test in students of the 4th semester at Universidad Técnica de Ambato.
- To design a mobile application that helps students to improve levels of reading comprehension.

## **CHAPTER II**

### **METHODOLOGY**

#### **2.1 Resources**

##### **2.1.1 Population**

In this research, the population to carry out this research were the students of fourth semester “C” of “Pedagogía de los Idiomas Nacionales y Extranjeros” career at “Universidad Técnica de Ambato “made up of 27 students.

##### **2.1.2 Instruments**

An online questionnaire using Microsoft Forms was the first instrument used to collect data from the students, in which they presented their perspective about the use of Informational and Communicational Technologies or ICT in the classroom and its impact on the teaching and learning process. In addition, within this questionnaire there were dichotomous questions (yes or no questions), liker scales (very often, often, occasionally, rarely, never) and multiple-choice questions.

As a second point, a pre-test was applied using Google Forms to collect data about the level of reading comprehension of fourth semester students of the PINE program. First, a standardized Cambridge B1 level test was selected, from which questions of reading comprehension levels were obtained, i.e., literal, inferential and evaluative questions.

After completing the treatment phase of the experiment, we proceeded to evaluate the students again through an online post-test to measure their improvement in their reading comprehension levels mentioned above. Finally, at the end of the post-test, we proceeded to conduct a final survey about the usefulness and ease of the mobile application in the students and in the classroom. A liker scale helped to know if the students accepted or rejected the implementation of these mobile pedagogical resources during English classes.

Mobincube was the platform selected to support and help the researcher when creating the mobile application, since its interface and elements are easy to use and freely accessible to all the people who wish to create an App.



Zoom Meetings was the tool that kept the students and the researcher connected in real time, so that they could interact in a natural way and so they could develop the activities planned by the researcher within the APP.

Quizzez was the tool selected to collect the quantitative data or numbers that the students reflected during and after having applied the experiment.

### **2.1.3 Procedure**

During this process, all fourth semester PINE students had a total of 8 sessions in 4 weeks, each class lasting 30 minutes and meeting through the application Zoom meetings Aula 3 A in the virtual classroom platform of the “Universidad Técnica de Ambato”.

During the first week, in the first online session via Zoom, the researcher introduced himself to the class and proceeded to share an online survey through the Microsoft Forms web page in which there were several multiple-choice questions that helped to diagnose the use of web 3.0 tools in English language learning. In addition, a standardized pre-test was applied to evaluate and collect information about the students' reading comprehension levels before starting the experiment.

In the second session, the researcher proceeded to present the mobile application "Developing Reading Levels 1.0" to the students and describe some of the tools found within the App. The students proceeded to perform the activities planned within the App such as the presentation of a video based on "Language, Dialect and Varieties" prior to starting with the topic. Then, the students performed a pre-task, the reading of an abstract in a scientific article and finally an online evaluation.

During the second week, the third intervention of the researcher proceeded with the presentation of a video introducing the topic "Pidgins and Creoles", a pre-task was performed by the researcher to motivate the students during the class. In addition, a reading of an abstract of a scientific article and an online assessment focused on inferential questions described by the author within the abstract were shared. During the fourth session with the students, the researcher started the class with the use of a web page called "Padlet" within the mobile application for the introduction of the topic, then proceeded

with the socialization of the abstract of the book "An Introducing to Sociolinguistics" with the topic "Speech Community" and finally its respective evaluation.

In the third week, in the fourth and fifth weeks of intervention, the students proceeded directly with the reading of the abstract and proceeded to the realization of the corresponding evaluation focused on evaluative and literary multiple-choice questions. While in the sixth intervention, the researcher started the class with a didactic activity in which the students recorded an audio and shared it with the teacher through the application "Vocaroo", then they shared the corresponding abstract about "Language Variation" to their students and they proceeded to answer inferential questions based on the context of the author of the abstract.

In the fourth week and seventh intervention, the researcher proceeded to apply the post-test on the fourth-grade students and evaluate their improvement in reading comprehension levels through the use of the mobile application. Later, in the last intervention, the researcher applied a survey of acceptance or rejection to the use of the mobile application within the class hours and its focus on the improvement of the literal, inferential and evaluative levels of reading comprehension.

Finally, after applying the pre-test and post-test, the data obtained were collected, analyzed and shown through the use of tables and figures with quantitative values. As a result, accurate empirical and numerical data showed the progress or delay of their cognitive skills focused on reading comprehension through the mobile application Mobincube. Therefore, the researcher's hypothesis was verified using the SPSS statistical software and ratifying the positive effects demonstrated by the students at the end of the treatment.

## **2.2 Basic Methods of Research**

### **2.2.1 Approach**

The present research is based on the mixed approach in which qualitative and quantitative approach are involved.

According to Apuke (2017), explained that quantitative research is a method in which the analysis must be quantified within the variables and have an order along with the results. It involves the use of specific statistical numerical analyses that provide answers to Likert scale questions e.g., (frequently, occasionally, never) surveys and questionnaires. Furthermore, it was argued that quantitative research is the numerical representation of the manipulation of observable variables that can be described and measured within a phenomenon. This was evidenced by the use of standardized tests that yield numerical and quantifiable results for the researcher's analysis

In addition, a qualitative methodology was used because it was necessary to use techniques such as observation and intervention with students about the use of mobile technological resources in the classroom and their influence at the time of reading activities since in this way data were collected about the state of their reading comprehension at that time and its evolution after having applied the experiment.

### **2.2.2 Experimental Research**

Experimental research is when the researcher designs his own experiment i.e., creates a hypothesis manipulates variables that can be measurable, calculable, and compared also the researcher has control over the population to which he wants to perform his experiment finally the researcher collects all of these data analyzes and tests his hypothesis accepting or rejecting the hypothesis through the use of statistical tools. or rejecting the hypothesis by statistical tools.

Within experimental research, it could be noted that the researcher designed his own experiment, i.e., the creation of a mobile application that is freely accessible to the students of “Universidad Técnica de Ambato” and helps them to improve their reading comprehension levels and then evaluate them and measure their improvement.

### **2.2.3 Bibliographic or Documentary Research**

The information that contributed to develop this project were related to the two variables "M-learning" and "Reading Comprehension" different texts taken from scientific papers and books mainly to support this research. This modality allows the researcher to collect specific and scientific information taken from Internet documents, such as, thesis, scientific publications, journals, books, newspapers and articles. In addition, all this bibliographic content helps to support the study carried out by the researcher, resulting in a deeper analysis of the problem and the solution that the researcher proposes.

### **2.2.4 Field Research**

This research is in the field because it is carried out within a realistic situation and one or more variables are subjected to an experiment in a controlled condition. Moreover, this has field research due to the fact that data was collected in the place where the teacher and students carried out their activities and the topic took place. It means that the participants were in the natural environment where this project takes place. The place selected was the fourth semester "C" at "Universidad Técnica de Ambato".

### **2.2.5 Level or Type of Research**

#### **2.2.5.1 Exploratory Level**

This research is explorative because its main objective is to clearly identify the relationship between these two variables. In addition, being in direct contact with the students and their reaction to M-learning in reading comprehension within classes, the researcher will obtain detailed and structured results of the effects it caused on the students of the "Technical University of Ambato"

## **CHAPTER III**

### **RESULTS AND DISCUSSION**

#### **3.1 Analysis and Discussion of the Results**

This chapter shows the results obtained during the four weeks and the eight interventions that were carried out with the fourth-semester students of the film career at the Technical University of Ambato. These results will be analyzed and presented through the use of tables, figures, and interpretations of the most important points that were taken into account during the application of the experiment and the use of mobile applications in the development of their reading comprehension levels such as the inferential and evaluative literal level.

The experiment was carried out with twenty seven students of the fourth semester of the pedagogy of national and foreign languages faculty of human sciences and education at the Technical University of Ambato. The students were first subjected to a survey to collect qualitative data that demonstrated their frequent use of technological tools in favor of English language teaching and learning in the classroom.

Next, the researcher obtained quantitative results by applying a pre-test and a post-test adapted from a standardized test obtained from the Cambridge platform and focused on B-level students. Subsequently, the researcher proceeded to apply the treatment to the students, which consisted of the use of a mobile application created by the researcher and focused on reading comprehension activities and its three cognitive levels (literal inferential, and evaluative).

At the end of the treatment, concise data were obtained that reflected the improvement in their cognitive levels through the use of the mobile application. Finally, the researcher used a final survey to validate the effectiveness and impact of this mobile application in the classroom hours and the Sociolinguistics material, resulting in the acceptance or rejection of this technological tool in the teaching-learning process of the English language.

### 3.2 Diagnostic Survey

**Question 1.** How often do you use 3.0 technology tools for learning?

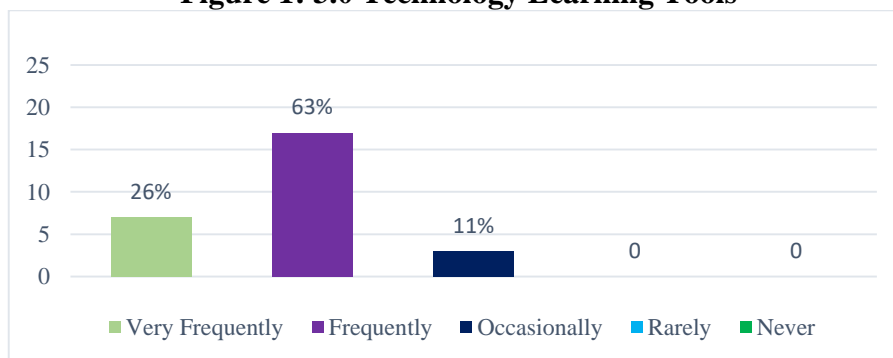
**Table 1: 3.0 Technology Learning Tools**

Indicator	Students
Very Frequently	7
Frequently	17
Occasionally	3
Rarely	0
Never	0

**Source:** Survey

**Author:** Cocha (2021)

**Figure 1: 3.0 Technology Learning Tools**



**Source:** Survey

**Author:** Cocha (2021)

#### Analysis and Interpretation

As it can be seen in the figure 1 regarding the 3.0 technologies that students use to learn, it was found that 7 students, representing 26% use these kinds of web 3.0 tools very frequently. On the other hand, 17 students representing 63% mentioned that they frequently use these technological tools to learn and only 3 students representing 13% expressed that they occasionally use these tools to learn in the classroom. However, no student mentioned that they never used a technological tool to learn English.

As shown in Figure 1, most of the students are accustomed to using web 3.0 tools for the development of learning activities within the classroom and the practice of the English language with their classmates. Therefore, it is indicated that this is a tool widely used by fourth semester students when acquiring knowledge and language skills, as well as in the teaching-learning process of the English language.

**Question 2.** How often do teachers use Web 3.0 tools to teach?

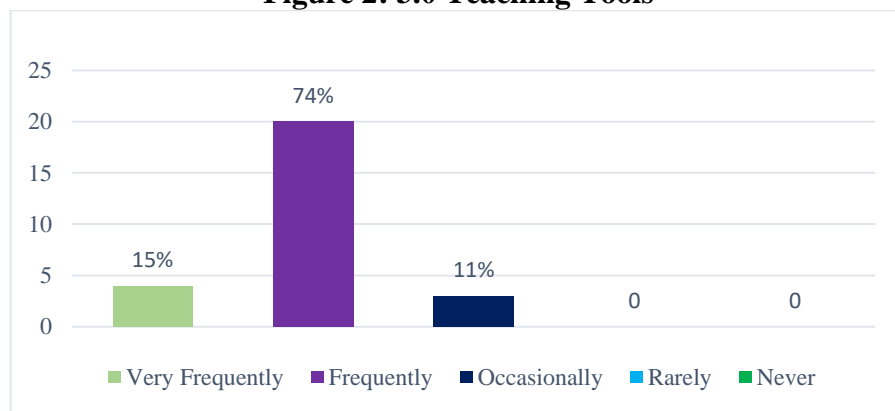
**Table 2: 3.0 Teaching Tools**

Indicator	Students
Very Frequently	4
Frequently	20
Occasionally	3
Rarely	0
Never	0

**Source:** Survey

**Author:** Cocha (2021)

**Figure 2: 3.0 Teaching Tools**



**Source:** Survey

**Author:** Cocha (2021)

### **Analysis and Interpretation**

In Figure 2, 20 students represented with 74% stated that their teacher frequently uses web 3.0 tools for teaching English language skills. In addition, 4 students, represented with 15%, mentioned that these technological tools are used very frequently in the classroom and only 3 students, represented with 11%, indicated that their teachers occasionally use technological tools to develop their topics during class hours.

As shown in Figure 2, most of the students stated that their teachers are accustomed to using 3.0 tools in the classroom, creating a more dynamic and participatory work environment when developing activities planned by the teacher and with significant learning. In addition, students frequently use web 3.0 tools not only for distraction and entertainment, but also for educational and research purposes.

**Question 3.** What kind of technological devices do you use to learn in virtual classes?

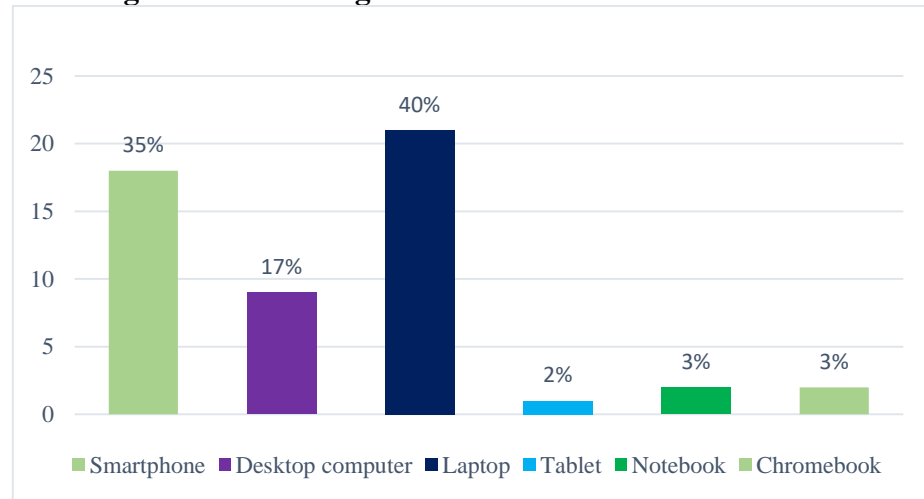
**Table 3: Technological Devices used in Virtual Classes**

Indicator	Students
Smartphone	18
Desktop computer	9
Laptop	21
Tablet	1
Notebook	2
Chromebook	2

**Source:** Survey

**Author:** Cocha (2021)

**Figure 3: Technological Devices used in Virtual Classes**



**Source:** Suvey

**Author:** Cocha (2021)

### Analysis and Interpretation

In Figure 3, there is a large number of students who use technological equipment when attending virtual classes and thus we found that 21 students represented with 40%, use laptops to learn during their virtual classes due to the pandemic. In addition, 18 students with the represented sum of 35% expressed that their favorite technological equipment are smartphones. On the one hand, 9 people represented with 17%, indicated that they use desktop computers to learn during virtual classes and on the other hand, 2 and 1 person represented with 3% and 2% respectively, responded that they preferred to use technological equipment such as notebooks, Chromebook and tablets in the teaching-learning process of the English language.



As shown in Figure 3, most students are accustomed to using laptops and smartphones in virtual classrooms because this technological equipment are freely accessible and easy to use when performing activities and practices planned by the teacher in the classroom, obtaining learning results in real time and providing the respective feedback to the student.

### 3.3 Data interpretation

#### 3.3.1 Pre-test and Post-test Literal Level of Comprehension

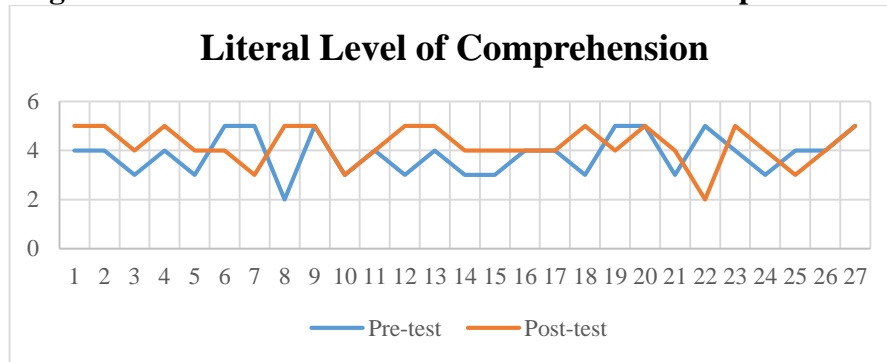
**Table 4: Pre-test and Post-test Literal Level of Comprehension**

Results	Pre-test	Post-Test	Difference
Average	3.9	4.2	0.3

**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

**Figure 4: Pre-test and Post-test Literal Level of Comprehension**



**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

#### Analysis and Interpretation

Figure 4 shows that out of 27 students who participated in the pre-test and post-test prepared by the researcher, 5 questions focused on reading comprehension at the literal level of the text were taken into consideration. However, the final average obtained by the students in this level increased from 3.9 to 4.2, evidenced in the application of the pre-test and post-test respectively. This shows that the treatment and the mobile application awakened their cognitive abilities when analyzing and obtaining specific information within the practice abstracts.

It was observed that an improvement in their average was evidenced due to the application of the experiment; therefore, it can be said that the use of the mobile application had a positive impact on the students when answering questions that require analyzing and searching for detailed information within the texts shared by the researcher and evaluated through the mobile application.

### 3.3.2 Pre-test and Post-test Inferential Level of Comprehension

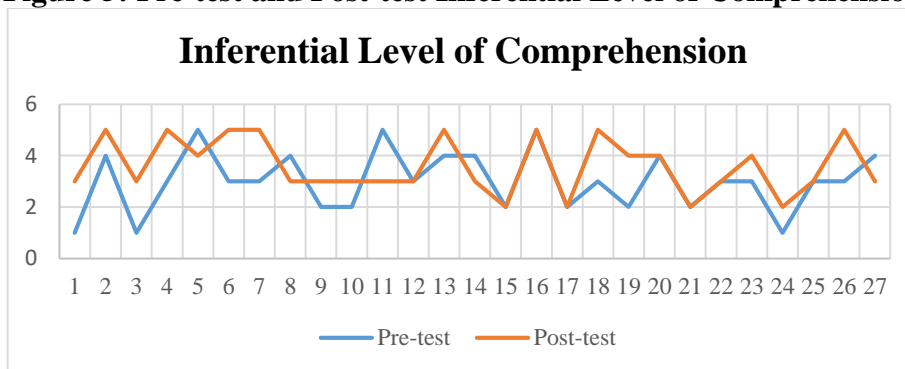
**Table 5: Pre-test and Post-test Inferential Level of Comprehension**

Results	Pre-test	Post-Test	Difference
<b>Average</b>	3.0	3.6	0.6

**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

**Figure 5: Pre-test and Post-test Inferential Level of Comprehension**



**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

#### Analysis and Interpretation

Figure 5, referring to the evaluation of the inferential level within the students shows us that there is a slight increase in their average due to the fact that in the pre-test a final result of 3/5 is found. While, once the treatment was applied the students performed the activities and tests through the use of the mobile application "Developing Reading levels 1.0", the result in the post-test showed an increase in the average of 3.6/5 in the development of their cognitive abilities focused on inferential questions.

As shown in the previous figure, students demonstrate an improvement when using their cognitive abilities in the inferential approach, that is, differentiating the meaning of some words or ideas that the author tries to explain in the text. This will have an impact on the students at the time of taking the next validation or accreditation exams and they will find an optimal level regarding this type of questions.

### 3.3.3 Pre-test and Post-test Evaluative Level of Comprehension

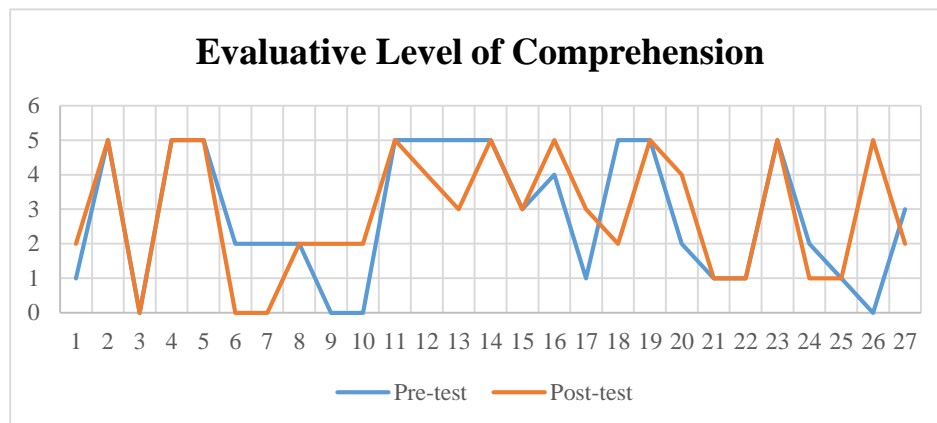
**Table 6: Pre-test and Post-test Evaluative Level of Comprehension**

Results	Pre-test	Post-Test	Difference
Average	2.8	2.9	0.1

**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

**Figure 6: Pre-test and Post-test Evaluative Level of Comprehension**



**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

#### Analysis and Interpretation

Figure 5, referring to the evaluative level of reading comprehension, it was found that the students demonstrated a poorly developed ability with an average of 2.8/5 because this is the most difficult part that a student can develop during learning the levels of reading comprehension. However, once the treatment and the post-treatment were applied, an increase of 0.1% was barely observed, that is to say that the students remained with the same abilities at the moment of performing evaluative questions found within an exam or standardized test.

As shown in the previous figure, most of the students have problems when developing evaluative questions found in a reading comprehension test, because their cognitive level is still fully developed due to the limited vocabulary they can use and the lack of knowledge of words.

### 3.3.4 Pre-test and Post-test Average

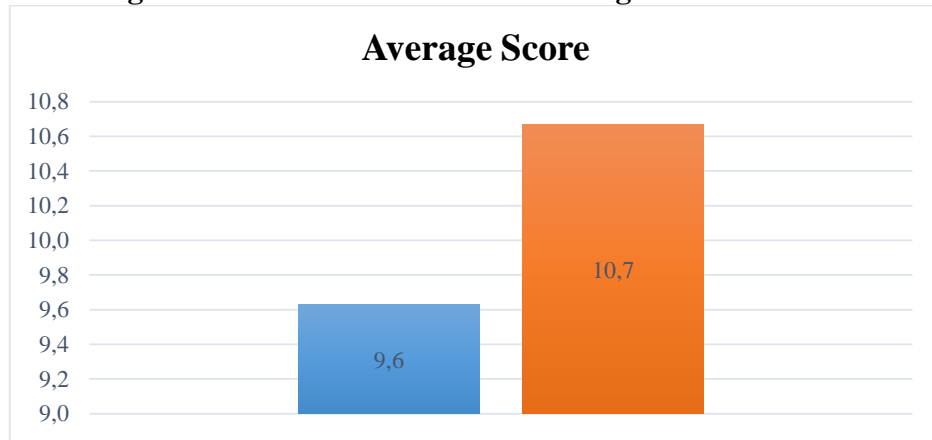
**Table 7: Pre-test and Post-test Average and Difference**

Results	Pre-test	Post-Test	Difference
Average	9.6	10.7	1.1

**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

**Figure 7: Pre-test and Post-test Average and Difference**



**Source:** PET Pre-test and Post-test

**Author:** Cocha (2021)

### Analysis and Interpretation

In Figure 7 about the average of the results between the pre-test and post-test we find that from the initial test the average obtained was a 9.6 while once the treatment and the application was applied to the fourth semester students a total improvement was obtained within their average reflected a 10.7 in the post-test. The level of difference that exists between these two tests marks a difference of 1.1 and shows that the students have improved during and after the treatment.

How it is represented in the previous graph. The average and the final average obtained by the students before, during and after the experiment is significant since improvements have been found within their results. This shows that the application influences the students when they used technological tools 3.0 during class hours and focused on the learning of the English language within the subject of sociolinguistics.

### 3.4 Hypothesis Verification

The results obtained and gathered for this research were analyzed by using the T-student statistical test with the SPSS program.

#### 3.4.1 Hypothesis Statement

##### Null hypothesis ( $H_0$ )

**H0:** The use of M-learning does not improve the reading comprehension of 4<sup>th</sup> semester students of “Universidad Técnica de Ambato”.

##### Alternative hypothesis ( $H_1$ )

**H1:** The use of M-learning improves the reading comprehension of 4<sup>th</sup> semester students of “Universidad Técnica de Ambato”.

#### 3.4.2 T-student test – Paired Samples Statistics

**Table 8: T-student-Paired Samples Statistics**

		Mean	N	Sdt. Derivation	Sdt. Error Mean
Par 1	Pre_test	9,63	27	2,911	,560
	Post_test	10,67	27	2,787	,536

**Source:** Software SPSS 22

**Author:** Cocha (2021)

#### Analysis and Interpretation

In table 8, it is possible to observe that there is a significant difference in the values obtained from the pre-test and post-test. The results of the mean in the pre-test indicate the value of 9.63, while the results obtained in the post-test is 10.67. Consequently, the significance that exists between these values is verified because the values in the post-test are higher than those obtained in the pre-test.

**Table 9: Paired Sample Test**

	Paired Sample Differences			Paired Sample Differences		t	df	Sig
	Mean	Sdt. Deviation	Sdt. Error Mean	95% confidence interval of the difference				
				Lower	Upper			
Par 1 Pre_test-Post test	-1,037	2,103	,405	-1,869	-,205	-2,563	26	,017

**Source:** Software SPSS 22

**Author:** Cocha (2021)

### **Analysis and Interpretation**

According to the analysis obtained from the IBM SPSS and using the T-Student test, the significance value obtained is equal to 0.017 which is less than 0.05, then this indicates that the null hypothesis is rejected and the alternative hypothesis is accepted. This ratifies that the treatment applied, i.e., the use of the mobile application "developing reading levels 1-0", helped in the improvement of the students' reading comprehension focused on the 3 levels of cognitive processes such as literal, inferential, and evaluative.

## **CHAPTER IV**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **4.1 Conclusions**

The conclusions stated below have been obtained after finishing this research:

There is a clear relationship between M-learning and students' reading comprehension since they show an improvement in this subskill after being instructed using mobile applications such as Padlet, Quizzes, Vocaroo and My Quizzes. This study indicates that ICTs tools can assist the English teaching-learning process especially because of the COVID-19 pandemic since virtual classes cannot be carried out without the assistance of technological tools which also provide a wide range of applications and resources to develop students' reading comprehension. It was demonstrated by using the statistical software SPSS and a t-test for paired samples since a single group was evaluated twice before and after applying the experiment.

The most common M-learning tools used by students to develop their reading comprehension were laptops 40%, smartphones 35% and desktop computer 17%. It was determined according to learners' survey responses. These web 3.0 tools strongly influence students' education, especially mobile devices when learning a second language. In addition, mobile applications helped students to improve the level of reading comprehension when analyzing and understanding readings focused on the introduction to sociolinguistics. After applying the experiment learners show a positive improvement when analyzing and understanding complex texts in English classes. They improved their course average from 9,6 to 10,7 which indicates that there was a difference of 1,1 points in their general average score. Also, the levels of reading comprehension with higher improvement were inferential reading comprehension with 0,6% and literal reading comprehension with 0,3%. Finally, evaluative reading comprehension was the level with the lowest improvement with only 0,1% of difference after applying the mobile application "Developing Reading levels 1.0".



The mobile application "Developing Reading Levels 1.0" was effective to improve learners' reading comprehension. This application had several important features like audiovisual aids, free download of this application, and free access. It was useful to catch student's attention and interest to use it inside or outside the classroom. Finally, the use of this application can also be used in different language skills such as writing, speaking, or listening since it is very intuitive and attention-calling for teachers and students.

## **4.2 Recommendations**

The teacher should select the appropriate material and technological resources so that the student can develop them in the easiest and simplest way possible because several applications or technological resources are not directly focused on education and the needs of students are not fully satisfied at the time of developing and improving their English language skills.

For this reason, it is suggested to apply a survey at the beginning of the research that demonstrates the accessibility of students when using technological resources in class in favor of learning because the lack of these technological resources can present as a barrier when performing classroom activities proposed in the lesson plan by the researcher and not being able to collect accurate data within the research and the application of the experiment.

Emphasize works and practices that help to improve the evaluative level of reading comprehension, because there are not many tasks or activities within textbooks or educational websites that focus on this. Through the use of the mobile application "developing reading level 1.0," we tried to apply several activities, but we could not observe a noticeable improvement in the students.

Motivate both teachers and students to develop classroom activities through the use of mobile applications, since this technological tool allows to create various activities and focus on different language skills such as writing, speaking, and listening depending on the skills that the teacher in charge wants to improve, but with the ease of designing their own authentic and freely accessible material for the whole class through the use of a smartphone.

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## ANNEXES

### Annex 1: School Approval

#### ANEXO 3

## CARTA DE COMPROMISO

Ambato, 03 de mayo del 2021

Doctor  
Marcelo Núñez  
Presidente  
Unidad de titulación  
Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros  
Facultad de Ciencias Humanas y de la Educación

Mg. Cecilia Larrea, en mi calidad de Vicerrectora de la Unidad Educativa González Suárez, me permito poner en su conocimiento la aceptación y respaldo para el desarrollo del Trabajo de Titulación bajo el Tema: **"M-learning and Reading Comprehension"** propuesto por el estudiante, Edison Patricio Cocha Toaza, portador de la Cédula de Ciudadanía, 1804440897 estudiante de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, Facultad de Ciencias Humanas y de la Educación, de la Universidad Técnica de Ambato.

A nombre de la Institución a la cual represento, me comprometo a apoyar en el desarrollo del proyecto.

Particular que comunico a usted para los fines pertinentes.

Atentamente.



Mg. Cecilia Larrea  
1803456514  
032849041  
0992882870  
vicerrectorado@uepgs.edu.ec



## Annex 2: Survey

# UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN (9no PINE.)

La encuesta tardará aproximadamente 8 minutos en completarse.

PROYECTO DE INVESTIGACIÓN: "Desarrollo de herramientas web 3.0 en la educación como apoyo en el trabajo colaborativo".

OBJETIVO: Diagnosticar el uso de herramientas web 3.0 en el aprendizaje colaborativo

Indicaciones: Marca la respuesta según tu experiencia real con las herramientas web 3.0 en el entorno educativo.

Hola, Edison: al enviar este formulario, el propietario podrá ver su nombre y dirección de correo electrónico.

\* Obligatorio

### DATOS INFORMATIVOS

#### 1. Nombre de la institución \*

#### 2. Sector \*

- Público
- Privado

#### 3. Nivel de educación al que usted pertenece: \*

- Educación inicial
- Educación básica elemental
- Educación básica media
- Educación básica superior
- Bachillerato general unificado
- Educación superior

#### 4. Escoja la edad a la que usted corresponde: \*

- 2-3
- 4-7
- 8-11

- 8-11
- 12-15
- 16-19
- 20-23
- 24-27
- 28 o más

5. Sexo: \*

- Hombre
- Mujer

Siguiente

\* Obligatorio

#### CONOCIMIENTOS HERRAMIENTAS WEB 3.0

6. Elija los tipos de herramientas 3.0 que usted utiliza para aprender: \*

- Dispositivos móviles (Whatsapp, telegram, viber, etc.)
- Redes sociales (Facebook, Instagram, Tik-Tok)
- Plataformas educativas (moodle, easle)
- Zoom, Teams
- Microsoft forms, google forms
- Página personal (Blog, correo electrónico)
- Kahoot
- Wix
- Canva
- Mural
- Classdojo

7. ¿Cuáles de estas herramientas 3.0 utiliza su docente en el proceso de enseñanza? \*

- Dispositivos móviles (Whatsapp, telegram, viber, etc.)
- Redes sociales como (Facebook, Instagram, Tik-Tok)
- Plataformas educativas (moodle, easle)
- Zoom, Teams
- Microsoft forms, google forms
- Página personal (Blog, correo electrónico)
- Kahoot
- Wix
- Canva
- Mural
- Classdojo

8. ¿Con qué frecuencia los docentes aplican trabajo colaborativo mediante uso de herramientas web 3.0? \*

- Nunca
- Raramente
- Ocasionalmente
- Freüentemente
- Muy frecuentemente

9. ¿Conoce el término herramienta y/o recurso sincrónico y asincrónico? \*

- Si
- No

10. En el caso de que la respuesta anterior sea positiva, ¿Cuáles herramientas-recursos de la siguiente lista son sincrónicos?

- Zoom
- Whatsapp
- Blog
- Sitio web
- Chat
- Foro
- Google meet

Atrás

Siguiente

---

### USO DE HERRAMIENTAS 3.0

11. ¿Con qué frecuencia utiliza herramientas tecnológicas 3.0 para aprender? \*

- Nunca
- Raramente
- Ocasionalmente
- Frecuentemente
- Muy frecuentemente

12. ¿Con qué frecuencia utilizan los docentes las herramientas 3.0 para enseñar? \*

- Nunca
- Raramente
- Ocasionalmente
- Frecuentemente
- Muy frecuentemente

13. ¿Qué tipo de dispositivos tecnológicos utiliza para aprender en clases virtuales? \*

- Teléfono celular
- Computadora
- Laptop
- Tablet
- Notebook
- Chromebook

14. ¿Qué tipo de herramientas tecnológicas utiliza su docente para la presentación de información? \*

- Aplicaciones Móviles (Whatsapp)
- Canva
- Prezzi
- Power point
- Padlet
- Genially

15. ¿Qué tipo de herramientas tecnológicas utiliza su docente para consolidar el conocimiento? \*

- Aplicaciones Móviles (Whatsapp)
- Moodle
- Kahoot
- Redes sociales
- Entornos Virtuales Inmersivos
- Contenidos 3D

16. ¿Qué tipo de herramientas web 3.0 utiliza para realizar mapas conceptuales y mentales? \*

- Creatly
- Lucidchart
- Mindmodo
- [Bubbl.us](#)
- Mind meInster

17. ¿Qué tipo de herramientas web 3.0 utiliza su profesor para la evaluación? \*

- Educaplay
- Kahoot
- Proprofs
- Classmaker
- Google Forms
- Microsoft forms

18. De la siguiente lista, ¿Qué herramientas utiliza su docente para fines de aprendizaje? \*

- Blogs
- Wikis
- Aplicaciones Móviles
- Redes sociales
- Documentos digitales
- Recursos multimedia
- Plataformas educativas
- Podcasts

---

### VENTAJAS Y DESVENTAJAS DE LAS HERRAMIENTAS WEB 3.0

19. ¿Qué tan importante es el uso de herramientas web 3.0 en su aprendizaje? \*

- Sin importancia
- De poca importancia
- Moderadamente importante
- Importante
- Muy importante

20. Considera que el uso de herramientas web 3.0 en el aprendizaje colaborativo es: \*

- Es un factor determinante en el aprendizaje de los estudiantes
- Es una moda, dada la era tecnológica en la que vivimos
- Es una herramienta de apoyo alternativa para la enseñanza de los diversos contenidos
- Es una herramienta totalmente prescindible
- Es una alternativa que no necesariamente influye en el aprendizaje de los estudiantes
- Facilita el trabajo en grupo, la colaboración y la inclusión con sus alumnos
- Minimiza tiempos y recursos

21. ¿Piensa usted que el uso de los Entornos Virtuales de Aprendizaje (EVA) hace al estudiante dependiente en el uso de la tecnología y poco reflexivo al momento de trabajar de forma colaborativa? \*

- Si
- No

22. ¿Considera usted que el docente debería generar sus propios recursos basados en herramientas web 3.0 para el desarrollo del trabajo colaborativo? \*

- Totalmente en desacuerdo
- En desacuerdo
- Indeciso
- De acuerdo
- Totalmente de acuerdo

23. ¿Considera usted que el desarrollo de recursos web 3.0 por parte del docente es importante para mejorar la enseñanza en la virtualidad de la educación para mejorar el trabajo colaborativo? \*

- Totalmente en desacuerdo
- En desacuerdo
- Indeciso
- De acuerdo
- Totalmente de acuerdo

24. ¿Cree usted que la correcta aplicación y utilización de herramientas web 3.0 promueven el interés, la participación y la motivación de los alumnos dentro de trabajo colaborativo? \*

- Totalmente en desacuerdo
- En desacuerdo
- Indeciso
- De acuerdo
- Totalmente de acuerdo

### Validación del instrumento

La fiabilidad es un concepto que tiene varias definiciones, aunque a grandes rasgos se puede definir como la ausencia de errores de medida en un test, o como la precisión de su medición. La fiabilidad es un tópico constante en todos los instrumentos de medida. Su estudio trata de establecer la precisión con la que mide cualquier instrumento de medida en general y los tests en particular. Cuanto más fiable es un test, con mayor precisión mide y, por lo tanto, menos error de medida se comete

Se toman en consideración para la validación del instrumento solo las preguntas que generan información para obtener tendencia, por consiguiente, los items nombre de la institución, Sector, Nivel de educación, Edad y Sexo no se las considera dentro de la fiabilidad del mismo.

### RESULTADOS DE LAS ENCUESTAS

Encuesta validada

#### Estadísticos de fiabilidad

Alfa de Cronbach	N de elementos
.846	19

Al tener un instrumento con preguntas en escala de Likert, se procede con la validación del instrumento y de esta forma verificar si las preguntas aplicadas en el mismo son confiables, para lo cual se aplica el estadístico Alfa de Cronbach, el cual emite como resultado 0.846; teniendo un instrumento Confiable para esta investigación.

El Alfa de Cronbach es un método de cálculo del coeficiente de fiabilidad, que identifica la fiabilidad como consistencia interna. Se denomina así porque analiza hasta qué punto medidas parciales obtenidas con los diferentes items son "consistentes" entre sí y por tanto representativas del universo posible de items que podrían medir ese constructo.

Por consiguiente para esta investigación y específicamente para el instrumento se utilizó el coeficiente Alfa de Cronbach para calcular la fiabilidad.

Hay que tener en cuenta que en los principales programas de estadística ya existen opciones para aplicar esta prueba de manera automática, de manera que no hay que conocer los detalles matemáticos de su aplicación. Sin embargo, saber cuál es su lógica resulta útil para tener en cuenta sus limitaciones a la hora de interpretar los resultados que aporta.

MARIA  
CRISTINA  
PAEZ QUINDE  
Firmado digitalmente por  
MARIA CRISTINA  
PAEZ QUINDE  
Fecha: 2021.07.14  
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Ing. Cristina Páez Quinde, Mg.  
**COORDINADORA SUBROGANTE**

### **Annex 3: Tests**

#### **Pre- test**

**Link:** <https://forms.gle/GhfcoTkToyqtnBLm6>

#### **Post-test**

**Link:** <https://forms.gle/iz4JW2sNzm6zeW338>



#### Annex 4: TAM Survey

##### 1. The use of technological tools in virtual classes improves the quality of my work.

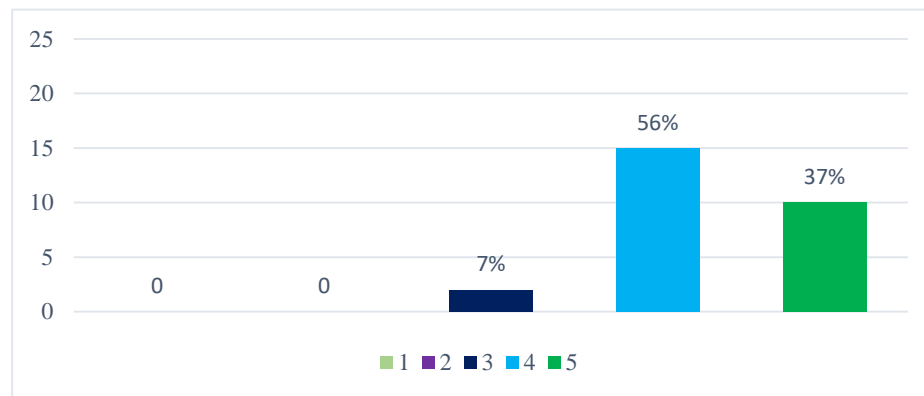
**Table 10: Technological Tools used in Virtual Classes**

Indicator	Students
1	0
2	0
3	2
4	15
5	10

**Source:** Survey

**Author:** Cocha (2021)

**Figure 8: Technological Tools used in Virtual Classes**



**Source:** Survey

**Author:** Cocha (2021)

#### Analysis and Interpretation

Figure 8 shows the use of technological tools in virtual classes, improves the quality of my work. The following results were obtained through the development of surveys of closed questions. In which 7% of participants think that they did not obtain any obvious improvement in the quality of my work. However, 56% of students noticed a relevant improvement, meanwhile 37% of students to show a significant improvement in the quality of technological tools that helped them to optimally understand the activities in their work.

As the analysis represents, a high percentage of students noticed a noticeable improvement in the activities during the virtual classes. In this way, students demonstrated the influence of technological tools 3.0 that focus on English language learning during virtual classes.

## 2. Technological tools make it easier for me to do my job.

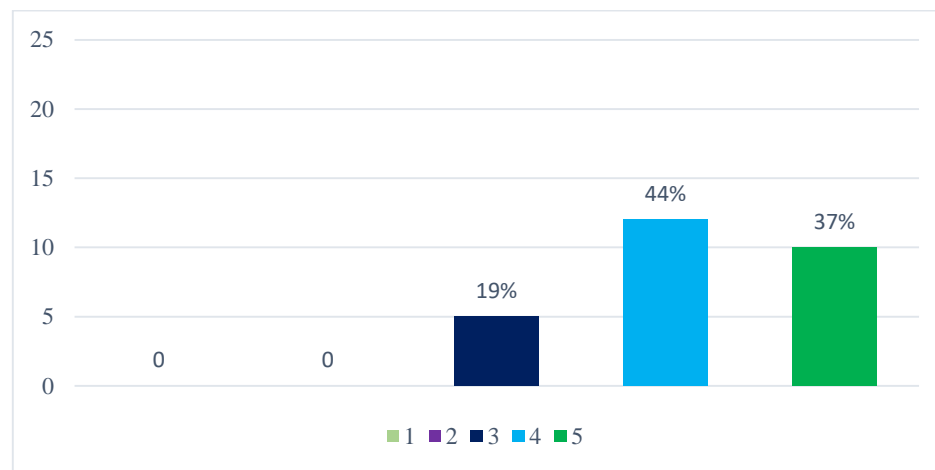
**Table 11: Technological Tools to Make my Job Easier**

Indicator	Students
1	0
2	0
3	5
4	12
5	10

**Source:** Survey

**Author:** Cocha (2021)

**Figure 9: Technological Tools to Make my Job Easier**



**Source:** Survey

**Author:** Cocha (2021)

### **Analysis and Interpretation**

Figure 9 demonstrated the technological tools simplify the completion of classwork, presented the following results, in which 19% of the students did not get any help or problem in completing their work with technological assistance, 44% of participants answered that their work was affected in the difficulty after using the tools. However, some students felt a significant improvement when performing their work represented with the 37%, who answered that the technological tools managed to facilitate the process of developing their work proposed in each class.

**Annex 4: Experiment Design**



**UNIVERSIDAD TÉCNICA DE AMBATO**

**FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN**

**CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y  
EXTRANJEROS**

**Proyecto de Trabajo de Graduación o Titulación previo a la obtención del Título de  
Licenciada en Pedagogía de los Idiomas Nacionales y Extranjeros Mención: inglés.**

**THEME:**

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**“M-LEARNING IN READING COMPREHENSION”**

**EXPERIMENT DESIGN**

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**AUTHOR:** Edison Patricio Cocha Toaza

**TUTOR:** Lcda. Mg. Ruth Elizabeth Infante Paredes.

Ambato – Ecuador 2021

## **INTRODUCTION**

Currently, the pedagogical teaching methods have undergone various changes over the years, adapting to the needs and teaching resources available to the teacher. First, the traditionalist method where the teacher was the center of the class to the constructivist method where the student builds their own knowledge, many techniques, and teaching approaches have been provided to us by teachers. In addition, this new teaching method has helped to develop new teaching approaches and the use of extra resources. Through the website "Mobincube", the researcher created a mobile application called "Developing Reading Levels 1.0", which contained authentic material focused on improving the cognitive abilities of students because it was very easy to access and easy to perform the tasks given by the teacher. Finally, this type of research helps to make the most of the technological resources of ICT in this globalized and networked world.

This research shows the influence of M-learning in reading comprehension with students of 4th semester "C" of the PINE career at "Universidad Técnica de Ambato" and their effect on English language learning. In addition, the group selected will be proved an experiment in which different strategies in reading comprehension were applied. Resulting in favorable results in the student learning process.

## **GENERAL OBJECTIVE**

- To create a mobile application that promotes the levels of reading comprehension.

## **SPECIFIC OBJECTIVES**

- To design lesson plans focus on the use of mobile application.
- To apply different lesson plans in classrooms with students.
- Evaluate reading comprehension improvement through a pre-test and post-test application.

### SCOPE OF THE EXPERIMENT

NUMBER OF LESSON PLAN	TOPIC	CONTENTS	NUMBER OF HOURS	READING SKILL	ACTIVITIES
N.- 1	Language, Dialect And Varieties	Abstract about Language, Dialect And Register Sociolinguistic Perspective	1	Reading for details. Reading for specific information. Skimming and scanning	<ul style="list-style-type: none"> <li>• Educaplay activity.</li> <li>• Quizizz test.</li> </ul>
N.- 2	Pidgins and Creoles	Abstract about Theories of origin of pidgins and creoles	1	Reading for details. Reading for specific information. Skimming and scanning	<ul style="list-style-type: none"> <li>• Google forms pre-task.</li> <li>• Proprofs test.</li> </ul>
N.- 3	Speech Community	Abstract about Early definitions of speech community	1	Infer information about speech communities. Inferential questions.	<ul style="list-style-type: none"> <li>• Padlet activity.</li> <li>• Quizizz test.</li> </ul>
N.- 4	Diglossia	Abstract about “Diglossia”	1	Reading for details. Reading for infer information.	<ul style="list-style-type: none"> <li>• Google drive document.</li> <li>• Quizizz test.</li> </ul>
N.- 5	Bilingualism and Multilingualism	Abstract about “Bilingualism and Multilingualism”	1	Reading for details. Reading for specific information.	<ul style="list-style-type: none"> <li>• Google drive document.</li> <li>• Quizizz test.</li> </ul>
N.- 6	Language Variation	Abstract about Language Variation	1	To infer information about Language Variation. To response evaluative questions.	<ul style="list-style-type: none"> <li>• Vocaroo activity.</li> <li>• Quizizz test.</li> </ul>

Source: <https://vulms.vu.edu.pk/Courses/ENG510/Downloads/ An Introduction to Sociolinguistics Blackwell Textbooks in Linguistics .pdf>

Elaborated by: Cocha, E (2021)

## LESSON PLANS

Universidad Técnica de Ambato

Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros

“M-LEARNING IN READING COMPREHENSION”

Lesson Plan 1

## Lesson Plan N° 1

<b>Topic: Language, Dialect and Varieties</b>			
<b>Level:</b> B1	<b>Age:</b> 18 – 25 years old	<b>Time:</b> 60 minutes	<b>No. Students:</b> 27
<b>Reading Comprehension Levels:</b> Pre-task, reading practice, evaluation.		<b>Reading Subskills:</b> Reading for details. Reading for specific information. Skimming and scanning	
<b>Objectives:</b> <ul style="list-style-type: none"> <li>• Students will be able to understand the key words about sociolinguistic.</li> <li>• Students will be able to response literal and evaluating question about finding explicit information in the text.</li> </ul>			
<b>Materials:</b> Computer, Zoom, Smartphones, Applications.			
<b>Anticipated Problems:</b> Students may have problems with their internet connection.			
<b>Timing</b>	<b>Teacher activity</b>	<b>Student activity</b>	<b>Success indicators</b>
32 min	<p><b>Pre-task</b></p> <p>Teacher presents a QR code to download a mobile application, in which students can find a video about sociolinguistics language, dialects and varieties.</p> <p>Teacher uses a pre-task to reinforce the vocabulary previously presented in the video completing an alphabet soup by educaplay provided in the application.</p>	<p>Students will infer an idea about keywords used in the lesson a</p> <p>Students will practice English language and vocabulary through mobile applications using educaplay in this case.</p>	Students' participation
	<p><b>Reading practice</b></p> <p>Teacher presents the abstract about</p>		

14 min	<p><b>Language, Dialect and Register Sociolinguistic Perspective</b>, in which students develop their cognitive skills to related the video with the alphabet soup activity to understand the text.</p>	<p>Students should read and analyze the text carefully finding specific information and details to comprehend the whole text and relate the previous activities with the text.</p>	<p>Students' Participation Silent Period.</p>
14 min	<p><b>Evaluation</b> Teacher presents the evaluation prepared by Quizizz application to reinforce the topic. Answering some literal questions with an extra evaluative question to develop their level of reading comprehension.</p>	<p>Students will answer questions about literal and evaluative levels of comprehension, through Quizizz application and mobile devices.</p>	<p>Response questions and answer correctly.</p>

Elaborated by: Cocha (2021)



## Pre-task

**Video:** <https://www.youtube.com/watch?v=ji6vURnWfrk>

**Educaplay activity:** [https://es.educaplay.com/recursos-educativos/9586814-language\\_dialect\\_and\\_register.html](https://es.educaplay.com/recursos-educativos/9586814-language_dialect_and_register.html)

## Resource 1

### Language, Dialect and Register Sociolinguistic Perspective

Author: **Budiarsa I.**

#### Abstract

Sociolinguistics pays attention to the social aspects of human language. Sociolinguistics discusses the relationship between language and society. In the following part of this paper, it will be focused on the use of (1) language (2) dialects, (3) language variation, (4) social stratification, (5) register. This discussion talks about the five types of those topics because they are really problematic sort of things, which relate the social life of the local people. In relation to this, the most important point is to distinguish the terms from one to another. There are three main points to discuss: language, dialects and register. Languages which are used as medium of communication have many varieties. These language variations are created by the existence of social stratification in the community. Social stratification will determine the form of language use by the speakers who involve in the interaction. The language variation can be in the form of dialects and register. Dialect of a language correlates with such social factors such as socio-economic status, age, occupation of the speakers. Dialect is a variety of a particular language which is used by a particular group of speakers that is signaled by systematic markers such as syntactical, phonological, grammatical markers. Dialects which are normally found in the speech community may be in the forms of regional dialect and social dialect. Register is the variation of language according to the use. It means that where the language is used as a means of communication for certain purposes. It depends entirely on the domain of language used. It is also a function of all the other components of speech situation. A formal setting may condition a formal register, characterized by particular lexical items.

The informal setting may be reflected in casual register that indicates less formal vocabulary, more non-standard features, greater instances of stigmatized variables, and so on.

**Source:** [https://www.researchgate.net/publication/314983260\\_Language\\_Dialect\\_And\\_Register\\_Sociolinguistic\\_Perspective](https://www.researchgate.net/publication/314983260_Language_Dialect_And_Register_Sociolinguistic_Perspective)

### Evaluation 1

**Quizizz:** <https://quizizz.com/admin/quiz/60bf69f5c7b8f9001f72d2a9>

**Answer Key:**

1. A
2. B
3. A
4. D
5. B

### APP QR Code



## Lesson Plan N° 2

<b>Topic: Pidgins and Creoles</b>			
<b>Level:</b> B1	<b>Age:</b> 18 – 25 years old	<b>Time:</b> 60 minutes	<b>No. Students:</b> 27
<b>Reading Comprehension Levels:</b> Pre-task, reading practice, evaluation.		<b>Reading Subskills:</b> Reading for details. Reading for specific information. Skimming and scanning	
<b>Objectives:</b> <ul style="list-style-type: none"> <li>• Students will be able to infer information about pidgin and creole.</li> <li>• Students will be able to response inferential questions about different theories of pidgin and creole.</li> </ul>			
<b>Materials:</b> Computer, Zoom, Smartphones, Applications.			
<b>Anticipated Problems:</b> Students may have problems with their internet connection.			
<b>Timing</b>	<b>Teacher activity</b>	<b>Student activity</b>	<b>Success indicators</b>
20 min	<b>Pre-task</b> Teacher uses a pre-task to introduce the topic with some inferential questions previously to presented abstract about different theories of origin of pidgins and creoles.	Students will infer an idea about the topic. Students will practice reading comprehension levels through mobile applications and google forms to achieve the goal.	Students' participation
16 min	<b>Reading practice</b> Teacher presents the abstract about <b>Theories of origin of pidgins and creoles</b> , in which students develop their cognitive skills to related the pre-task activity with the text.	Students should read and analyze the text carefully taking account specific information and the purpose of the authors in each theory to comprehend the whole text.	Students' Participation Silent Period.
24 min	<b>Evaluation</b> Teacher presents the evaluation prepared in Proprofs application to reinforce the topic. Answering some inferential questions to develop their level of reading comprehension.	Students will answer questions about inferential level of comprehension, through Proprofs application and mobile devices.	Response questions correctly.

Elaborated by: Cocha (2021)

## Pre-task

**Inferential questions (googleforms):** <https://forms.gle/cHob4j2ApfX8UTty7>

## Resource 1

### Pidgins and Creoles (Abstract)

A pidgin is a restricted language which arises for the purposes of communication between two social groups of which one is in a more dominant position than the other. The less dominant group is the one which develops the pidgin. Historically, pidgins arose in colonial situations where the representatives of the particular colonial power, officials, tradesmen, sailors, etc., came in contact with natives.

There are various theories about the origin of pidgins which have been proposed in the last hundred years or so.

2) Independent parallel development theory. - This view maintains that the obvious similarities between the world's pidgins and creoles arose on independent but parallel lines due to the fact that they all are derived from languages of Indo-European stock and, in the case of the Atlantic varieties, due to their sharing a common West African substratum.

3) Nautical jargon theory as early as 1938 the American linguist John Reinecke noted the possible influence of nautical jargon on pidgins. It is obvious that on many of the original voyages of discovery to the developing world many nationalities were represented among the crews of the ships. This fact led to the development of a core vocabulary of nautical items and a simplified grammar (at least as regards English). Later pidgins show many of these lexical items irrespective of where the language varieties are spoken.

4) Monogenetic/relexification theory According to this view all pidgins can be traced back to a single proto-pidgin, a 15th century Portuguese pidgin which was itself probably a relic of the medieval lingua franca (also known as sabir from the Portuguese word for 'know') which was the common means of communication among the Crusaders and traders in the Mediterranean area. Lingua franca survived longest on the North African coast and is attested from Algeria and Tunisia as late as the 19th century

5) Universalist theory This is the most recent view on the origin of pidgins and has elements in common with the other theories. However, the distinguishing mark of this theory is that it sees the similarities as due to universal tendencies among humans to create languages of a similar type, i.e. an analytic language with a simple phonology, an SVO syntax with little or no subordination or other sentence complexities, and with a lexicon which makes maximum use of polysemy (and devices such as reduplication) operating from a limited core vocabulary.

**Source:** [https://www.uni-due.de/SVE/VARS\\_PidginsAndCreoles.htm](https://www.uni-due.de/SVE/VARS_PidginsAndCreoles.htm)

## Evaluation 2

**Proprofs:** <https://www.proprofs.com/quiz-school/ugc/story.php?title=mziwmzuynaedrk>

### Answer Key:

6. A
7. D
8. A
9. B
10. C
11. A
12. B

### APP



**Link:** <https://mobincube.mobi/EU5D1Q>



Developing Reading levels 1.0 X

La publicación ya está lista.



[VER PUBLICACIONES](#)

### Lesson Plan N° 3

<b>Topic: Speech Community</b>			
<b>Level:</b> B1	<b>Age:</b> 18 – 25 years old	<b>Time:</b> 60 minutes	<b>No. Students:</b> 27
<b>Reading Comprehension Levels:</b> Pre-task, reading practice, evaluation.		<b>Reading Subskills:</b> Reading for details. Reading for specific information. Skimming and scanning	
<b>Objectives:</b> <ul style="list-style-type: none"> <li>• Students will be able to infer information about speech community.</li> <li>• Students will be able to response inferential questions about “Early definitions of speech community”.</li> </ul>			
<b>Materials:</b> Computer, Zoom, Smartphones, Applications.			
<b>Anticipated Problems:</b> Students may have problems with their internet connection.			
<b>Timing</b>	<b>Teacher activity</b>	<b>Student activity</b>	<b>Success indicators</b>
20 min	<b>Pre-task</b> Teacher uses a pre-task to introduce the topic with the question “What do you think speech community means?” through padlet application.	Students will response the question individually.  Students will practice inferential meaning through mobile application called padlet.com.	Students’ participation
16 min	<b>Reading practice</b> Teacher presents the abstract about <b>Early definitions of speech community</b> , using silent period to develop their inferential skills.	Students should read and analyze the text carefully taking account specific information.	Students’ Participation Silent Period.
24 min	<b>Evaluation</b> Teacher presents the evaluation prepared in Quizziz application to reinforce the topic. Answering some inferential questions to develop their level of reading comprehension.	Students will answer questions about inferential level of comprehension, through Quizziz application and mobile devices.	Response questions correctly.

Elaborated by: Cocha (2021)

## Pre-task

**Introductory question:** <https://padlet.com/edissoncoch/ugx4pnnd5qzc6ktq>

### Resource 3

#### Early definitions of speech community (Abstract)

Reservations and questions regarding the utility of the speech community concept have existed at least since 1933 when Leonard Bloomfield wrote: “A group of people who use the same set of speech signals is a speech-community” (1933: 29). This definition reflects a common belief of the time, that monolingualism – one language, one nation-state – is the canonical example of speech community (e.g. Anderson 1983). In this case, a community is considered to be a “social group of any size who reside in a specific locality, share government, and have a common cultural and historical heritage” (Random House Dictionary). At this particular time linguistic anthropology was mainly concerned with historical relationships of language families (Lyons 1981; Hudson 1980) and language was viewed as the result of history and politics but not as integral and entangled in it – and therefore not as an aspect of historicity and the context of politics and social life. Within the confines of descriptive and structural linguistics, the speech community reflected the linguist’s definition of language described above and thus it was a product and result of what was simply called contact. Of course, discovering the history of and describing the world’s languages is a very important business, and in many respects early definitions corresponded to Western arrogance and its responsibility to “represent the world correctly” – and with itself as the reference point (Said 1978). From this perspective, it is not surprising that while Bloomfield considered the speech community to be the most important kind of social group, his evaluation of contact situations did not assume that various sectors of society interacted with each other in a complementary way. Instead, communities that arose out of European aggression and cultural hegemony were relegated to supplemental status. Unfortunately, the notion that viable speech communities could not exist under such circumstances suggests that the great cultural and social restructuring and reconstitution accomplished by colonized and conquered people were inconsequential in light of the enormity of the catastrophic events that they endured.



This perspective also greatly influenced earlier works of language and contact and pidgin and creole studies, where African languages were thought to have marginal influence and where creoles were often treated as not quite a language at all (see below). Bloomfield's conception of the homogeneous speech community represented the canon in linguistic anthropology until Noam Chomsky (1965) began to challenge the concept's utility. Chomsky's work critiqued descriptive and structural analyses of language and introduced a theoretical approach that explored the human capacity to produce language rather than language as a social construct. In *Aspects of the Theory of Syntax*, Chomsky (1965) introduced the distinction between competence and performance and abandoned the model that incorporated the speech community as the basis of linguistic analysis. The possibility of discovering human linguistic capacity was found in the cognitive, psychological self that develops irrespective of where performance of that knowledge resided – the speech community. Instead of resolving the conflict between whether the speech community constitutes language and discourse or is constituted through linguistic descriptions, Chomsky insistently argued that the essence of language resides in discovering the mechanism and theory behind the human ability to produce language.

**Source:** <http://www.linguisticsnetwork.com/wp-content/uploads/The-Speech-Community.compressed.pdf>

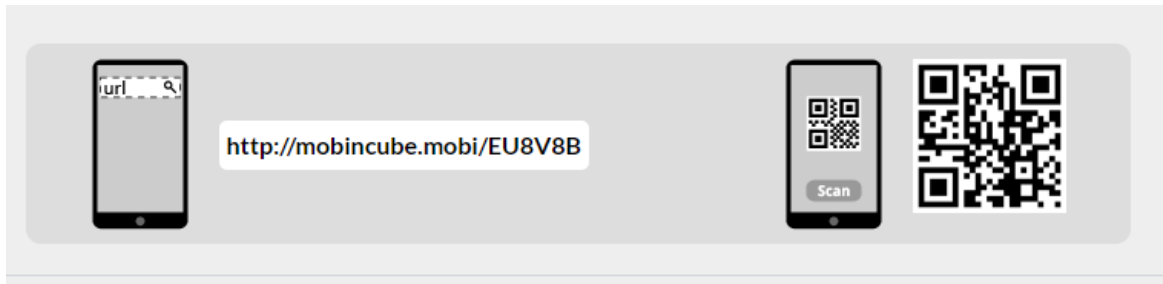
### **Evaluation 3**

**Quizziz:** <https://quizizz.com/join?gc=16692358>

#### **Answer Key:**

- 13. D
- 14. A
- 15. C
- 16. B
- 17. D
- 18. A
- 19. B

## APP



**Link:** <http://mobincube.mobi/EU8V8B>

### Lesson Plan N° 4

<b>Topic: Diglossia</b>			
<b>Level:</b> B1	<b>Age:</b> 18 – 25 years old	<b>Time:</b> 60 minutes	<b>No. Students:</b> 27
<b>Reading Comprehension Levels:</b> Reading practice, evaluation.		<b>Reading Subskills:</b> Reading for details. Reading for specific information. Skimming and scanning	
<b>Objectives:</b> <ul style="list-style-type: none"> <li>• Students will be able to infer information about diglossia.</li> </ul> Students will be able to response inferential questions about “Diglossia: Pag 89”.			
<b>Materials:</b> Computer, Zoom, Smartphones, Applications.			
<b>Anticipated Problems:</b> Students may have problems with their internet connection.			
<b>Timing</b>	<b>Teacher activity</b>	<b>Student activity</b>	<b>Success indicators</b>
30 min	<b>Reading practice</b>  Teacher presents the abstract about “ <b>Diglossia</b> ”, using silent period to develop their inferential level of reading comprehension.	Students should read and analyze the text carefully taking account specific information.	Students’ Participation Silent Period.
30 min	<b>Evaluation</b>  Teacher presents the evaluation prepared in Quizziz application to reinforce the topic. Answering some inferential questions to develop their level of reading comprehension.	Students will answer questions about inferential level of comprehension, through Quizziz application and mobile devices.	Response questions correctly.

Elaborated by: Cocha (2021)

## Resource 4

### **DIGLOSSIA: PAG 89**

A diglossic situation exists in a society when it has two distinct codes which show clear functional separation; that is, one code is employed in one set of circumstances and the other in an entirely different set. Ferguson (1959, p. 336) has defined Diglossia as follows: Diglossia is a relatively stable language situation in which, in addition to the primary dialects of the language (which may include a standard or regional standards), there is a very divergent, highly codified (often grammatically more complex) superposed variety, the vehicle of a large and respected body of written literature, either of an earlier period or in another speech community, which is learned largely by formal education and is used for most written and formal spoken purposes but is not used by any sector of the community for ordinary conversation.

In the same book, the author identifies four language situations which show the major characteristics of the diglossic phenomenon: Arabic, Swiss German, Haitian (French and Creole), and Greek. In each situation there is a 'high' variety (H) of language and a 'low' variety (L). Each variety has its own specialized functions, and each is viewed differently by those who are aware of both. In the Arabic situation the two varieties are Classical Arabic (H) and the various regional colloquial varieties (L). In Switzerland they are Standard German (H) and Swiss German (L). In Haiti the varieties are Standard French (H) and Haitian Creole (L). In Greece they are the Katharévousa (H) and Dhimotiki, or Demotic (L), varieties of Greek. In each case the two varieties have coexisted for a long period, sometimes, as in the case of Arabic, for many centuries.

Consequently, the phenomenon of diglossia is not ephemeral in nature; in fact, the opposite is true: it appears to be a persistent social and linguistic phenomenon. A key defining characteristic of diglossia is that the two varieties are kept quite apart in their functions. One is used in one set of circumstances and the other in an entirely different set. For example, the H varieties may be used for delivering sermons and formal lectures, especially in a parliament or legislative body, for giving political speeches, for

broadcasting the news on radio and television, and for writing poetry, fine literature, and editorials in newspapers.

**Source:**<https://drive.google.com/file/d/1-PYURK75oKSQJCzqyWCXSeyn3b58LNEy/view?usp=sharing>

#### **Evaluation 4**

**Quizziz:** <https://quizizz.com/join?gc=33682566>

#### **Answer Key:**

20. C

21. B

22. A

23. B

24. D

25. C

### Lesson Plan N° 5

<b>Topic: Bilingualism and Multilingualism</b>			
<b>Level:</b> B1	<b>Age:</b> 18 – 25 years old	<b>Time:</b> 60 minutes	<b>No. Students:</b> 27
<b>Reading Comprehension Levels:</b> Reading practice, evaluation.		<b>Reading Subskills:</b> Reading for details. Reading for specific information.	
<b>Objectives:</b> <ul style="list-style-type: none"> <li>• Students will be able to infer information about Bilingualism and Multilingualism.</li> <li>• Students will be able to response inferential questions.</li> </ul>			
<b>Materials:</b> Computer, Zoom, Smartphones, Applications.			
<b>Anticipated Problems:</b> Students may have problems with their internet connection.			
<b>Timing</b>	<b>Teacher activity</b>	<b>Student activity</b>	<b>Success indicators</b>
30 min	<b>Reading practice</b> Teacher presents the abstract about “ <b>Bilingualism and Multilingualism</b> ”, using silent period to develop their inferential level of reading comprehension.	Students should read and analyze the text carefully taking account specific information.	Students’ Participation Silent Period.
30 min	<b>Evaluation</b> Teacher presents the evaluation prepared in Quizziz application to reinforce the topic. Answering some inferential questions to develop their level of reading comprehension.	Students will answer questions about inferential level of comprehension, through Quizziz application and mobile devices.	Response questions correctly.

Elaborated by: Cocha (2021)

## Resource 5

### **Bilingualism and Multilingualism: PAG 96**

Monolingualism, that is, the ability to use only one language, is such a widely accepted norm in so many parts of the Western world that it is often assumed to be a world-wide phenomenon, to the extent that bilingual and multilingual individuals may appear to be ‘unusual.’

People who are bilingual or multilingual do not necessarily have exactly the same abilities in the languages (or varieties); in fact, that kind of parity may be exceptional. As Sridhar (1996, p. 50) says, ‘multilingualism involving balanced, natively like command of all the languages in the repertoire is rather uncommon. Typically, multilinguals have varying degrees of command of the different repertoires.’

Context determines language choice. In a society in which more than one language (or variety) is used you must find out who uses what, when, and for what purpose if you are to be socially competent. Your language choices are part of the social identity you claim for yourself.

Consequently, attempts to distinguish people who are bilingual from those who are dialectal may fail. There may be some doubt that very many people are actually bi- or even multi-dialectal. They may speak varieties which are distinctly different, but whether each separate variety is genuinely a dialect depends on how one defines dialect, which, as we saw in chapter 2, is not at all an easy matter to decide.

An interesting example of multilingualism exists among the Tukano of the northwest Amazon, on the border between Colombia and Brazil (Sorensen, 1971). The Tukano are a multilingual people because men must marry outside their language group; that is, no man may have a wife who speaks his language, for that kind of marriage relationship is not permitted and would be viewed as a kind of incest. Men choose the women they marry from various neighboring tribes who speak other languages.

Somewhat similar attitudes toward multilingualism have been reported from other parts of the world. For example, Salisbury (1962) reports that among the Siane of New Guinea

it is quite normal for people to know a number of languages. They choose the most appropriate one for the particular circumstances in which they find themselves. Moreover, they prize language learning, so that, when someone who speaks a language they do not know enters a community, people in the community will try to learn as much as they can about the language and to find occasions to use their learning. Salisbury specifically mentions the interest taken in pidgin English when a group of laborers returned from service on the coast; almost immediately a school was established so that the rest of the village males could learn the pidgin.

**Source:**<https://drive.google.com/file/d/1X2srBJSQchNDsTjQVDFn9uvJLFfWWh3w/view?usp=sharing>

### **Evaluation 5**

**Quizziz:** <https://quizizz.com/join?gc=39711878>

#### **Answer Key:**

- 26. A
- 27. D
- 28. B
- 29. A
- 30. B
- 31. A



### Lesson Plan N° 6

<b>Topic: Language Variation</b>			
<b>Level:</b> B1	<b>Age:</b> 18 – 25 years old	<b>Time:</b> 30 minutes	<b>No. Students:</b> 27
<b>Reading Comprehension Levels:</b> Pre-task, reading period, evaluation.		<b>Reading Subskills:</b> Reading for details. Reading for specific information.	
<b>Objectives:</b> <ul style="list-style-type: none"> <li>• Students will be able to infer information about language variation.</li> <li>• Students will be able to response evaluative questions.</li> </ul>			
<b>Materials:</b> Computer, Zoom, Smartphones, Applications.			
<b>Anticipated Problems:</b> Students may have problems with their internet connection.			
<b>Timing</b>	<b>Teacher activity</b>	<b>Student activity</b>	<b>Success indicators</b>
20 min	<b>Pre-task</b> Teacher uses a pre-task to introduce the topic through the page “Vocaroo” with the question “What do you think language variations means?”.	Students will response the question individually. Students will record an audio of 1 minute more or less through mobile application called vocaroo.com.	Students’ participation
26 min	<b>Reading practice</b> Teacher presents the abstract about <b>Language Variation: Page 135</b> , using silent period to develop their evaluative level of comprehension in the text.	Students should read and analyze the text carefully taking account specific information.	Students’ Participation Silent Period.
24 min	<b>Evaluation</b> Teacher presents the evaluation prepared in Quizziz application. Answering some evaluative questions to develop their level of reading comprehension.	Students will answer questions about evaluative level of comprehension, through Quizziz application and mobile devices.	Response questions correctly.

Elaborated by: Cocha (2021)

## Pre-task

**Introductory question:** <https://vocaroo.com/>

## Resource 6

### Language Variation: PAGE 135

The mapping of dialects on a regional basis has had a long history in linguistics (Petyt, 1980, Chambers and Trudgill, 1998, and Wakelin, 1977). In fact, it is a well-established part of the study of how languages change over time, i.e., of diachronic or historical linguistics. Traditionally, dialect geography, as this area of linguistic study is known, has employed assumptions and methods drawn from historical linguistics, and many of its results have been used to confirm findings drawn from other historical sources, e.g., archeological findings, population studies, written records. In this view languages differentiate internally as speakers distance themselves from one another over time and space; the changes result in the creation of dialects of the languages. Over sufficient time, the resulting dialects become new languages as speakers of the resulting varieties become unintelligible to one another. So Latin became French in France, Spanish in Spain, Italian in Italy, and so on.

All of this is not to say that this kind of individual and social variation has gone unnoticed in linguistics. Linguists have long been aware of variation in the use of language: individuals do speak one way on one occasion and other ways on other occasions, and this kind of variation can be seen to occur within even the most localized groups. Such variation is often ascribed to dialect mixture, i.e., the existence in one locality of two or more dialects which allow a speaker or speakers to draw now on one dialect and then on the other. An alternative explanation is free variation, i.e., random 'meaningless' variation of no significance. However, no one has ever devised a suitable theory to explain either dialect mixture or free variation, and the latter turns out not to be so free after all because close analyses generally reveal that complex linguistic and social factors appear to explain much of the variation.

A linguistic variable is a linguistic item which has identifiable variants. For example, words like singing and fishing are sometimes pronounced as singin' and fishin'. The final sound in these words may be called the linguistic variable (ng) with its two variants [ŋ] in singing and [n] in singin'.

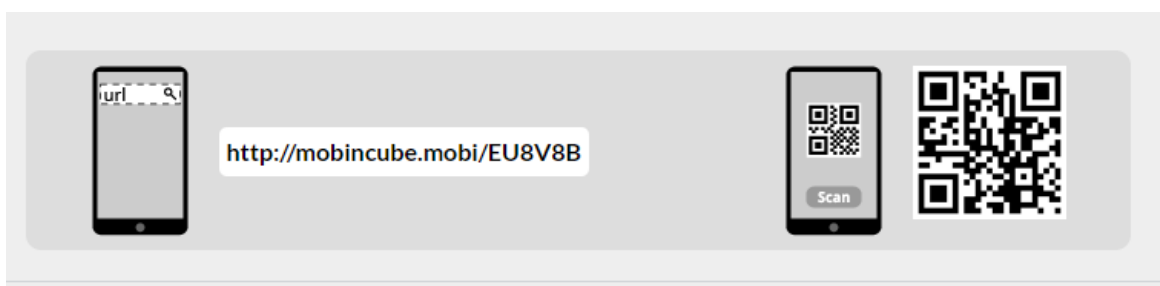
Labov (1972) has also distinguished among what he calls indicators, markers, and stereotypes. An indicator is a linguistic variable to which little or no social import is attached. Only a linguistically trained observer is aware of indicators. For example, some speakers in North America distinguish the vowels in cot and caught and others do not. Whether one distinguishes the vowels or not carries little or no social significance. On the other hand, a marker does carry with it social significance. In fact, markers may be potent carriers of social information.

**Source:** [https://drive.google.com/file/d/11ElXJisewxzIe8jmcmygKhE\\_IKMzWvVz/view?usp=sharing](https://drive.google.com/file/d/11ElXJisewxzIe8jmcmygKhE_IKMzWvVz/view?usp=sharing)

## Evaluation 6

**Quizziz:** <https://quizizz.com/join?gc=30405766>

## APP



**Link:** <http://mobincube.mobi/EU8V8B>

## Annex 5: Urkund Report



### Urkund Analysis Result

Analysed Document: Edison Cocha M-learning in reading comprehension.pdf  
(D110982026)  
Submitted: 8/4/2021 12:17:00 PM  
Submitted By: ecocha0897@uta.edu.ec  
Significance: 3 %

#### Sources included in the report:

M-LEARNING IN READING COMPREHENSION BIBLIOGRAPHY.pdf (D91465690)  
THEORETICAL FRAMEWORK.pdf (D83864132)  
[http://iiisci.org/journal/CV\\$/sci/pdfs/EB156JM18.pdf](http://iiisci.org/journal/CV$/sci/pdfs/EB156JM18.pdf)  
<https://www.sciencedirect.com/science/article/pii/S2405844021007994>

#### Instances where selected sources appear:

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Ambato-Ecuador

Ambato 08 noviembre 2021  
RES- N°- FCHE-CD-3255-2021

**Señores**

LCDA. MG. SARAH IZA  
MG. XIMENA CALERO  
MG. WILMA SUÁREZ  
MG. XAVIER SULCA  
MG. ALBA HERNANDEZ  
DOCENTES  
FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACION

Presente

Consejo Directivo de la Facultad de Ciencias Humanas y de la Educación, en sesión ordinaria realizada el 08 noviembre 2021, en atención a los informes de estudio y calificación del Trabajo de Grado de Licenciatura, sobre el tema: "**M-LEARNING IN READING COMPREHENSION**", propuesto por el **SR. COCHA TOAZA EDISSON PATRICIO** ex estudiante de la carrera de **Pedagogía de los Idiomas Nacionales y Extranjeros** modalidad presencial, promoción ABRIL - SEPTIEMBRE 2021 resuelve:

APROBAR LOS INFORMES DE ESTUDIO Y CALIFICACIÓN DEL TRABAJO FINAL DE GRADO, PRESENTADOS POR: **MG. XIMENA CALERO Y MG. WILMA SUÁREZ** COMO MIEMBROS DEL TRIBUNAL CALIFICADOR DEL TRABAJO FINAL DE GRADO CON EL TEMA: "**M-LEARNING IN READING COMPREHENSION**", PROPUESTO POR EL EX ESTUDIANTE ANTES MENCIONADO; EN TAL VIRTUD SE SEÑALA EL DIA **MIÉRCOLES 17 DE NOVIEMBRE DEL 2021, A PARTIR DE LAS 09H00**, COMO FECHA Y HORA PARA LA DEFENSA ORAL, ACTO SOLEMNE QUE SE LLEVARÁ A CABO POR MEDIO DE LA APLICACIÓN ZOOM, PARA LO CUAL DEBERÁ CONECTARSE AL ENLACE QUE SE ENVIARA A SU CORREO INSTITUCIONAL MEDIANTE CORREO ELECTRONICO, EN CONFORMIDAD A LO ESTABLECIDO EN LA NORMATIVA TRANSITORIA PARA LA EJECUCIÓN DEL PROCESO DE TITULACIÓN, DURANTE EL PERÍODO ACADÉMICO OCTUBRE 2020-FEBRERO 2021, MIENTRAS DURE EL ESTADO DE EMERGENCIA SANITARIA.

ACTUARÁ COMO PRESIDENTE DEL TRIBUNAL LA LCDA. MG. SARAH IZA DELEGADA DEL SEÑOR DECANO DE LA FACULTAD, Y COMO PROFESORES SUPLENTE MG. XAVIER SULCA Y MG. ALBA HERNANDEZ.

Atentamente,



Firmado electrónicamente por:  
**SEGUNDO VICTOR  
HERNANDEZ DEL  
SALTO**

Dr. Msc. Víctor Hernández del Salto  
**PRESIDENTE**

**CC:** **SRTA. COCHA TOAZA EDISSON PATRICIO**  
SECRETARÍA CARRERA PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS PRESENCIAL  
ARCHIVO NUMERICO CONSEJO DIRECTIVO  
CARPETA: GRADOS POR TESIS

VHS/SES

**INFORMACION PARA ELABORACIÓN DEL ACTA:** FECHA DESIGNACION DEL TRIBUNAL DE ESTUDIO Y CALIFICACIÓN TRABAJO DE INVESTIGACIÓN: RES-FCHE-CD- 3255-2021 DEL 08 DE NOVIEMBRE DEL 2021, DIRECTOR MG. RUTH INFANTE CALIFICACIÓN PROMEDIO DEL TRABAJO ESCRITO DE INVESTIGACIÓN (10,0 – 9.5 /10)