# UNIVERSIDAD TÉCNICA DE AMBATO



# FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

# MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

# TEMA: "MULTIMEDIA RESOURCES AND EFL LEARNERS' READING COMPREHENSION."

Trabajo de investigación, previo a la obtención de Grado Académico de Magister en Pedagogía de los Idiomas Nacionales y Extranjeros

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A la Unidad Académica de Titulación de la Facultad de Ciencias Humanas y de la Educación.

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Cynthia Landázuri

# **DEDICATORY**

I dedicate this research work to my mother for her great support, for believing in me, more than me. She was sure that I would achieve this goal. Furthermore, to my husband for his help at home while I studied and worked at the same time and to my daughters for providing my strength to move forward.

Cynthia Landázuri

# UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN MATESRÍA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

#### THEME:

# "MULTIMEDIA RESOURCES AND EFL LEARNERS' READING COMPREHENSION"

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**LINE OF RESEARCH:** Methods and means for teaching

**DATE:** August, 30th, 2022

# **EXCECUTIVE SUMMARY**

This research work was based on a study conducted with the topic: "Multimedia resources and EFL learners' reading comprehension," which investigates whether students can improve their reading comprehension by using multimedia resources such as videos, photos and audios. First, this research was carried out using a mixed approach, in which a pre-test and a post-test were applied in the experiment. The evaluation was a Cambridge standardized test (A2 Flyers), regarding only the reading sections. The strategies used were pre-reading, while reading and post reading. Paired samples t-test statistics were used to analyze quantitative data using SPSS. The researcher used three surveys. The first one was about the use of the web 3.0. for the two groups based on 24 questions. The second survey was based on the TAM model in order to assess the acceptance or rejection of web 3.0 in education. It was about 15 questions on a Likert scale and it was applied only for the experimental group. The last survey was apllied for the two groups which was centered on the topic of this research in order to explore the opinions and acceptance of students about the application of multimedia resources in reading comprehension. The questionnaire was divided into 8 items on a Likert scale. Additionally, the experiment was applied through online classes with reading-based activities using technological resources through the educational platform TEAMS in order to analyze whether they helped improve reading comprehension in students. Alternatively, the study participants were 50 sixth-grade students from "Unidad Educativa Baños." Eventually, it was shown that the students increased from 15.24 to 19.16 in their reading comprehension with the use of technological resources. According to the results of the surveys and tests, it can be concluded that multimedia resources help improve their reading comprehension of English as a foreign language.

**Descriptors:** multimedia resources, reading comprehension, Teams educational platform, web 3.0, EFL learners', foreign language.

# UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN MATESRÍA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

# **TEMA:**

# "RECURSOS MULTIMEDIA Y COMPRENSIÓN LECTORA DE ESTUDIANTES DE INGLÉS COMO LENGUA EXTRANJERA"

AUTOR: Doctora Elsa Mayorie Chimbo Cáceres, Magister

**DIRECTORA:** Lcda. Mg. Elsa Mayorie Chimbo Cáceres

LÍNEA DE INVESTIGACIÓN: Métodos y medios para la enseñanza

**FECHA:** 30 de agosto del 2022

# **RESUMEN EJUECUTIVO**

El presente trabajo de investigación fue a base de un estudio realizado con el tema: "Recursos multimedia y comprensión lectora de estudiantes de inglés como lengua extranjera." que investiga si los estudiantes pueden mejorar su comprensión lectora mediante el uso de los recursos multimedia tales como videos. En primer lugar, esta investigación se lo realizo mediante un enfoque mixto, en la cual se realizó una evaluación antes y después del experimento. La evaluación fue una prueba estandarizada de Cambridge (A2 Flyers), tomando en cuenta solo las secciones de lectura. Las estrategias que se utilizó fueron la pre lectura, durante la lectura y después de la lectura. La estadística de la prueba t de muestras pareadas se utilizó para analizar los datos cuantitativos utilizando SPSS. El investigador utilizó tres encuestas. El primero fue sobre el uso de la Web 3.0. para los dos grupos basados en 24 preguntas. La segunda encuesta se basó en el modelo TAM para evaluar la aceptación o rechazo de la Web 3.0 en la educación. Esto se trataba de 15 preguntas en una escala Likert y se aplicó solo para el grupo experimental. La última encuesta se aplicó para los dos grupos centrados en el tema de esta investigación para explorar la aceptación o rechazo sobre la aplicación de recursos multimedia en la comprensión de lectura. El cuestionario se dividió en 8 ítems en una escala Likert. Adicionalmente, se aplicó el experimento mediante clases en línea con actividades en base a lecturas utilizando recursos tecnológicos a través de la plataforma educativa TEAMS para analizar si estos ayudan a mejorar la comprensión lectora en los estudiantes. Por otra parte, los participantes del estudio fueron 50 estudiantes del sexto grado de la "Unidad Educativa Baños". Finalmente, se evidenció que los estudiantes mejoraron de 15,24 a 19,16 en su comprensión lectora con el uso de los recursos tecnológicos. De acuerdo a los resultados de las encuestas y las evaluaciones, se puede concluir que los recursos multimedia ayudan a mejorar la comprensión lectora de los estudiantes de Inglés como lengua extranjera.

**Descriptores:** recursos multimedia, comprensión lectora, plataforma educativa teams, web 3.0, estudiantes de inglés, lengua extranjera.

## **CHAPTER I**

## THE RESEARCH PROBLEM

#### 1.1. Introduction

This study, entitled "Multimedia resources and EFL learners' reading comprehension," used an innovative strategy to improve learners' reading comprehension. The uthor used a quasi-experimental design, including a pre-test and a post-test to assess the students' initial and final progress, as well as three surveys to learn about their attitudes and acceptance of web 3.0. Students deal with some difficulties with reading comprehension during the prior teaching procedure. As a result, multimedia resources strive to assist in the traditional classroom through some innovative tools, as well as motivate students in their learning process, in accordance with learner-centered teaching. This research is being disseminated in the following way:

**CHAPTER I:** This chapter is concerned with the study's introduction, justification, and objectives. It is a synopsis of the issue and the various components of this inquiry.

**CHAPTER II:** This chapter discusses the research background and includes the state of the art, which is a collection of publications connected to the issue of this investigation, as well as the theoretical framework, which gives components of both variables.

**CHAPTER III:** This chapter describes the research methodology, including the location, equipment and materials, research question, hypothesis, population and sample, data collection, data processing analysis, response variables or results, budget and schedule

**CHAPTER IV:** This chapter displays and discusses the statistical results of the examination by using graphics and data.

**CHAPTER V:** This chapter includes the results' conclusions and recommendations for further research, as well as the study's bibliography and annexes

#### 1.2. Justification

For many years, learning English was monotonous, but today's education has made a significant turn based on technology. For that reason, this research problem is about the multimedia resources and EFL learner's reading comprehension in the 6th year of "Unidad Educativa Baños" in Baños de Agua Santa in order to determine how the use of technological tools might help students improve their reading comprehension skills.

This investigation is important because it will be helpful to teachers to have an idea on how to implement multimedia resources, using different tools such as canva, kahoot, liveworksheets, genially and so on, in order to develop reading comprehension in students. Virtual classes were used since the crisis caused by the pandemic that affected all around the world that was the coronavirus (COVID-19). For that reason, this research has had a significant impact since education has taken a great turn that forced all of us, both students and teachers to use technology, changing and improving the strategies, methodologies, and techniques. Additionally, had a significant impact on the economy of education since parents were saved from paying high fees in institutions, ticket expenses, snacks, and uniforms. Moreover, the beneficiaries of this research are the teachers and students since it is shown that with multimedia resources students can have a more dynamic education and the results will be very helpful for teachers since they will be able to have a broader and more innovative vision to develop reading comprehension.

On the other hand, this research is a novelty because with the technology we can find a lot of multimedia resources in order applications, platforms, or other technological

means that help to improve and motivate students in their learning process. For instance, stuff based on videos, photos, and audio like tips and tools in order to make education more effective and meaningful, making the classes more creative and dynamic to encourage them to continue learning without feeling frustrated by the change. Additionally, the researcher investigated how teachers could support students while their reading comprehension is developed properly. That is something that ESL learners do not master very well or it is difficult to understand texts due to many factors. The students struggle with various problems while taking reading comprehension tests related to their level of mastery (Nurjanah, 2018). According to the author, there have been some factors that affected children's reading comprehension. Asyiah (2017) insisted that vocabulary should be ideally placed as an important aspect of language learning that should be given much attention in the practice of teaching English as a foreign language (TEFL) to improve students' vocabulary mastery.

Furthermore, the research is original because teachers through technology can find and have a better methodology to teach, and also students because they can have a meaningful learning using different technological tools and interactive activities. It is also original because reading comprehension strategies were sought and applied using technology, leaving aside the monotony of education.

In this research, it was found that multimedia resources aid students in their learning, and vocabulary are a crucial process for them, especially for reading comprehension. Moreover, this would be valuable to know because students could have better knowledge through reading and they could learn many things and new words in order to enrich their lexicon. However, this topic is important because students do not know enough vocabulary and they even should learn more about grammatical structures. The use of multimedia technology and reading comprehension in EFL has been an enormous barrier and this is why in this study, the researcher proposes to investigate more factors that have been affecting reading comprehension and how the use of multimedia technology can aid in solving this problem to make the learning process more meaningful.

# 1.3. Objectives

# **1.3.1.** General

To analyze the impact of multimedia resources in reading comprehension in students of the sixth year of "Unidad Educativa Baños."

# 1.3.2. Specifics

- To determine the level of learners' reading comprehension in the pre- and post-test.
- To identify which multimedia resources with interactive activities develop reading comprehension.
- To discover the use of multimedia resources that students use in their leaning process.

#### **CHAPTER II**

## RESEARCH BACKGROUND

This section collects data from google scholar and authors whose investigations were related to the topic of this research project. The investigations revealed a link between keywords like multimedia resources and reading comprehension from different countries in the recent years. The studies are related to various levels, including school, college, and high school and university, all of which focus on the English language. Most of them demonstrate the use of various technological tools to assist students in improving their reading comprehension.

Omar and Bidin (2015) carried out an investigation about the impact of multimedia graphic and text on autistic learners in reading. Multimedia materials assist these learners in improving their skills, particularly those with problems with reading comprehension. Students also gain motivation to communicate, such as the effect of using intervention tools (graphics with text). The most common strategies they use of the colors effect on autistic children, the effect of focusing on attention and understanding as cognitive processes on improving their skills. Interacting with computing devices such as mobile phones or tablets. Using pre- and post-tests to assess the children. Using a multimedia graphic with text. The findings provide answers to the research questions that were raised. There is a significant relationship between the effects of graphics, the text, the learning outcome, computer-based programs, intervention, and colors because it encreased the attention of autistic learners. This study mentioned the effectiveness of multimedia elements on the reading comprehension of children with autismant. It is a great contribution for the research study because the researcher could realize that multimedia resources are also effective for students with special needs.

Nurjanah (2018) suggested the analysis of students' difficulties in the reading comprehension. This work was an attempt to discover the difficulties that students face when performing reading comprehension in order to discover the best technique to

overcome these problems. The subjects of this study were 8 second-semester students of English Literature at Universitas Ngudi Waluyo. It used an explanatory multi-method strategy, first administering a test to students and then analyzing the results. During the study questionnaire was used to determine student expectations for the class. The findings indicated that they struggle with vocabulary knowledge. These issues stem from a lack of reading habits and a less interesting reading comprehension in the classroom. The contribution for the research study is that students required more interactive learning activities in the learning process, such as games, videos, audio to keep them engaged in reading and reduce anxiety. As a result, teachers should be more aware of the problems that students face with and employ more interactive teaching techniques.

Samat and Aziz (2020) carried out a research study called "effectiveness of multimedia learning in enhancing reading comprehension among indigenous pupils." This study explored multimedia learning as an approach to teach reading comprehension. Besides, it answered two questions based on the effectiveness of multimedia learning in helping indigenous pupils in Malaysia. Two instruments were used to collect the data from 20 indigenous pupils in a primary school located in Kluang, Malaysia, and an action research design was used to achieve this purpose. SPSS was used to analyze the data collected from the test, and thematic analysis was employed to analyze the semi-structured interview. The results demonstrated that using multimedia learning to teach reading comprehension was beneficial because the combination of multiple media elements scaffolded the process of understanding. However, it was the least effective in assisting students in comprehending the information. This study is proof that multimedia resources help students' reading comprehension.

Kaban and Karadeniz (2021) proposed children's reading comprehension and motivation on screen versus on paper due to the fact that young generation is constantly engaged in digital activities. This article explored the perceptions of sixth-grade students in Turkey of their e-reading experiences based on their personalized, gamified, PDF electronic reading practices in school, their perceptions of reading comprehension and levels of motivation in English as a foreign language classrooms. The study used a quasi-

experimental design with four treatment groups and one control group. It involved 96 students in Turkey. For 5 weeks, the three treatment groups read sequentially from the personalized, gamified, PDF electronic reading, while the control group used a printed guided reading program. The findings suggested that EFL learners' use of screen reading had the potential to increase students' reading motivation. This despite the fact that the control and experimental groups used different reading mediums. There was no significant difference in their reading comprehension levels. This study shows that learning through screens motivates students in their learning

Alsofyani (2019) insisted on examining EFL learners' reading comprehension. Based on that, he set up the impact of metacognitive strategies and collaborative learning within multimedia e-book dialogic environments. The current study investigated how Saudi EFL learners could better address reading comprehension challenges by the use of metacognitive reading strategies through discussion and extensive collaborative learning activities within a multimedia e-book dialogic environment. It also looked into the effects of metacognitive strategy-based discussion, collaborative learning, and combining the two on EFL learners' reading comprehension. The research also looked into how Saudi EFL students perceive the effectiveness of the multimedia e-book environment on their overall reading comprehension. The participants were 115 Saudi female intermediate college students from a Saudi university's English language institution. A quantitative-qualitative mixed-methods approach was used. The findings revealed significant effects on learners' use of reading strategies after being exposed to the treatment. The effect of the metacognitive strategy-based discussion on learners' reading comprehension and collaborative learning was significant. According to the qualitative findings, metacognitive strategy -based discussion and collaborative learning aided EFL students in improving their focus on the text, use of strategies, comprehension, and reading performance. Participants rated the effectiveness of the multimedia e-book features of a discussion board, videos, glossing, and illustrations. The benefits and drawbacks of the e-book environment were discussed and compared to the traditional face-to-face classroom setting. This study has pedagogical implications that were very helpful to carry out this research.

Erfiani et al. (2019) recommended developing supplementary reading materials for grade 11 students in a multimedia study program. The aim of this study was to create supplementary reading material to meet the needs of students in one of the multimedia study programs in Mangelang, Indonesia. This research was geared toward product development and was carried out in two stages: exploration and product development. The exploration stage consists of three parts: a literature review, a field study, and a need analysis. Meanwhile, the product development stage was described with number 1 prototype development, number 2 expert judgment, and number 3 pilot. This study was carried out in a vocational secondary school with the participation of an English teacher, two material experts, and students. The findings revealed that the existing textbook used to teach reading contains general English material and is not tailored to the program's students. The contribution of this study to the present investigation is that supplemental reading materials should be available for the teacher to use in developing reading skills to meet students' needs

Winnie et al. (2019) claimed that a multimedia-supported e-learning environment offers EFL learners more opportunities to acquire a language effectively. The purpose of this research was to investigate primary school students' perceptions and experiences with self-regulated science learning. It included 11 classes from grades 3 to 6 from four Hong Kong schools. All e-learning lessons were observed, and 33 students were interviewed using cognitive walkthroughs to demonstrate how they used multimedia resources and system tools, scaffolds, or prompts to direct their own learning in each of the three selfregulated learning phases suchas forethought, performance, and reflection. The discussion forum and statistics table appeared to facilitate the students' diagnosis of their prior knowledge of natural phenomena during the forethought phase, according to the findings. During the performance phase, students preferred to learn with graphic data, animation, and simulation experiments. Some people thought the e-learning system's prompts or tools were useful for learning about operations and science. During the reflection phase, the students self-assessed their learning by taking quizzes with emoticons as positive feedback, which seemed to boost their enthusiasm for learning science. However, without the teacher's guidance, not all students could effectively use the system tools or prompts, maintain focused self-discipline, or achieve deeper science learning. This study is a sample that teachers should increase students' exposure to electronic learning resources and, at the same time, help them in the use of digital tools or resources, adjust their learning strategies and research processes to guarantee learning more effective.

Iyamuremye and Ndagijimana (2022) carried out a study called "Challenges facing the use of multimedia in teaching and learning in secondary schools in muhanga district, rwanda". The aim of this study was to create a context for subject teaching because it emphasizes the role of students and emphasizes the value of "interaction" between teachers and students. Furthermore, it promotes students' ability to communicate by training and to improve their ability to listen and speak. The researcher used a descriptive survey to present the collected data in an understandable manner. This study employed a survey method with multiple-choice questions to assess the challenges associated with the use of multimedia in teaching and learning. Classroom observations, a survey questionnaire, and interviews were used to collect primary data. The questionnaire was designed to elicit opinions and perceptions from teachers and students, whereas the interviews were conducted with directors of studies and principals. SPSS version 22 was used to transform, analyze, and interpret the collected data. 380 students, 46 teachers, 2 Directors of Studies, and 2 Head-teachers from Groupe Scolaire de Shyogwe and Groupe Scolaire Gitarama from 17 schools whose science teachers were given computers were among the target population. The population was 430 people. The sample size for the students in this study was calculated using Slovin's formula. According to the findings of this study, the majority of teachers (32%) have difficulty accessing school computers, and more than 27% have no access to resources used to integrate multimedia in e-learning. As a result, Access to school computers, projectors, and the internet was found to be very limited because these tools are scarce and the internet is slow. This study shows the reality that we lived many years ago with the availability of resources and skills which were the barriers that prevented many teachers and students from using multimedia in teaching and learning.

Halpern et al. (2020) carried out a study called "School performance: new multimedia resources versus traditional notes" This study sought to learn how students choose which resources to use for studying, as well as the impact of WhatsApp, YouTube, the internet, and handwritten notes on academic performance. This study was exploratory in nature, based on a correlational model, and used a mixed methods approach. Participants came from a total of 11,749 primary and secondary educational establishments. A simple random sample of 11 schools from various regions of the country was chosen for the qualitative analysis. A total of 176 students between the ages of 12 and 18 were interviewed. According to the findings, the positive impact of technologies on learning is dependent on students' motivation for learning, their ability to efficiently control and manage available digital resources, and their ability to search and evaluate information on the Internet. According to the survey, those who study with their notes more frequently have better academic performance, whereas those who study with YouTube and WhatsApp more frequently have a lower GPA, with no significant differences when it comes to internet browsing. These findings support the need for scholars to develop policies that promote digital literacy both inside and outside of the classroom. This study contributes to this research regarding the challenges students face today by increasing their ability to regulate their exposure to various stimuli, as well as learning to select online resources more efficiently, which facilitates the learning proces

Roy et al. (2017) carried out a study titled "Multimedia resources designed to support learning from written proofs: an eye-movement study." The overall goal of this study is to evaluate the challenges associated with the use of multimedia in teaching and learning in Muhanga District secondary schools. 380 students, 46 teachers, 2 directors of Studies, and 2 head-teachers, were chosen from 17 schools whose science teachers were given computers. Two studies of an intervention designed to help undergraduates understand mathematical proofs were presented in this paper. The intervention made use of multimedia resources such as proofs with audio commentary and visual animations to draw attention to logical relationships. Students in study 1 examined a standard written proof. The second study used eye-movement analyses to show that participants who

studied an e-Proof exerted less processing effort when not listening to the audio commentary on reading processes. The first study used an experimental design to compare the effect of studying an e-Proof. The findings revealed that time had a significant main effect. The immediate test was significantly better for both groups than the delayed test.

Study 2: The researcher looked at reading habits to learn more about the cognitive processes that underpin reading in English and other languages. The fact that when reading fixed materials, eye movements are not smooth but instead consist of short stops called fixations and rapid movements called saccades was used in these studies. Fixation points were used to determine the locus of attention, and appropriate analysis software allows the user to define areas of interest within the material to be read. Researchers also investigated reading habits by comparing saccade patterns between areas. Researchers used a within-subjects design to compare students' reading behaviors when studying an e-Proof versus a textbook proof. Participants were randomly assigned to one of two groups to ensure a fair comparison of e-Proof- and textbook-prompted reading behavior: for each proof, half of the participants saw an e-Proof and half saw the textbook format. Each participant's eye movements were recorded using a Tobii T120 remote eye-tracker set to sample at 60 Hz and calibrated at the start of the study. Although comprehension test scores were not the primary focus of Study 2, differences between groups were investigated using Kolmogorov-Smirnov Z tests. There were no significant betweengroup differences for any proof. Finally, teaching interventions occur all the time. Teachers and lecturers recognize that proof is a challenge for their students and innovate on a daily and yearly basis to provide better explanations or tasks related to specific proofs, as well as to help students experience the process of proving and learning about the meaning of proof in the mathematical community. This study contributes to this research in the way that teachers realize that multimedia resources can facilitate access to electronic resources and create their own in the current educational environment, fostering creativity, which generates positive feelings

Awogbami (2020) "Lecturers' Use of Multimedia Resources for Knowledge Transfer" The descriptive survey design was used. The primary goal of this research is to determine the extent to which lecturers at Adeleke University in Ede, Osun State, use multimedia resources for knowledge transfer. Using census techniques, the study was conducted among the 84 full-time academic staff. (27 from the faculty of business and social sciences, 15 from the faculty of sciences, 11 from the faculty of arts and humanities, 15 from the faculty of health sciences, 4 from the faculty of law, and 12 from the faculty of engineering). A self-developed questionnaire was used to collect data, and 80 questionnaires were properly completed and retrieved for analysis, yielding a 95.2% response rate. The use of descriptive and inferential statistics such as frequency counts and percentage distribution, mean and standard deviation, as well as the student ttest and multiple regression analysis, were used in data analysis. Cronbach's alpha was used to assess the questionnaire's validity and reliability. The inter-item consistency was found to be very high in the reliability test. The Cronbach Alpha test result was 0.7, indicating that its inter-item consistency was very high and adequate for the study. This study is significant for the present investigation since according to the findings they said multimedia technologies are important for the transfer of knowledge and collaboration between teachers.

Abubakar and Tukura (2017) carried out a research study called "teacher's attitude towards use of multimedia for teaching in colleges of education in niger state" The goal of this study was to look into teacher educators' attitudes toward using multimedia to teach pre-service teachers. The study's population included 601 academic staff from the College of Education Minna and the Federal Colleges of Education in Kontagora. There were a total of 288 academic staff from the Federal College of Education Kontagora and 313 academic staff from the Niger State College of Education. A structured questionnaire was used as the study's research instrument. The questionnaire - Likert scale responses, The data collection instrument was adapted and modified for the purpose of the study. The instrument was validated, and its dependability was determined using Cronbach Alpha computation and a threshold. The study found that

male and female attitudes toward the use of multimedia for teaching are not different, but there is a significant difference in their behavioral intentions toward the use of multimedia for teaching. This study is very helpful for the present investigation since the results revealed that most teachers have a positive attitude toward the future use of multimedia in the classroom.

Adekunle et al. (2019) carried out a study called "Appraisal on perceived multimedia technologies as modern pedagogical tools for ttrategic improvement on teaching and learning". The purpose of this study was to look into multimedia as a modern pedagogical tool for strategic teaching and learning improvement. To select 250 students and 100 teachers, a simple random sampling technique was used. For this study, a descriptive survey was used. Cronbach's alpha statistical software was used to obtain a reliability coefficient of 0.83 on validated questionnaires distributed to respondents. Mean, standard deviation, percentage, and partial correlation were used statistically to answer the research questions, while the t-test and Chi-Square were used to test the hypotheses at the 0.05 level of significance. The findings revealed that television sets, projectors, and computers were the most commonly used multimedia facilities for teaching and learning in the council, and those multimedia facilities had a significant impact on teaching and learning. It was discovered that multimedia enhanced the teaching of cognitive and psychomotor skills, as well as the concretization of abstraction on any subject matter. This study contributes to the present investigation by showing that multimedia installations had a high impact on teaching and learning as students could develop their cognitive skills and psychomotor skills.

Saputri et al. (2021) carried out a research study called "An analysis on English teacher strategies in teaching reading comprehension" The purpose of this study is to discover the teachers' strategies for teaching reading comprehension at one of Bengkulu's Senior high schools. This study employs a mixed-method research design. The subjects of this study are two English teachers who teach English to students in grades X, XI, and XII.

An observation checklist is used by the researchers as the main instrument in each meeting to collect data. Three meetings in the classroom were held to conduct the observation. According to the findings of the study, the most common strategies used by teachers in teaching reading were question generation (27%), encouraging the use of dictionaries (25%), and question answering (23%). This indicated that teachers used only a few strategies to teach reading comprehension. As a result, the outcome will be more advantageous and applicable to a larger area. Finally, the two teachers employed the nine most prevalent strategies for teaching reading comprehension. These included generating questions, answering questions, encouraging the use of dictionaries, predicting, monitoring comprehension, generating text, skimming, scanning, and summarizing. Furthermore, they used a variety of strategies and modified their teaching strategies based on the materials or genre of the text studied. This study contributes to the present investigation with useful strategies that are more likely to help students understand the text since reading comprehension cannot be easily achieved without the use of appropriate strategies.

Sofyan et al. (2020) carried out a study called "teachers' strategies in teaching reading comprehension" The purpose of this study was to determine the strategies used by English teachers in teaching reading and how they were implemented. The researcher only selected two teachers who excelled at teaching reading comprehension, particularly the English teacher, to students in class VIII at Bengkulu City Junior High School No. 9. This study was designed as a descriptive qualitative study. The researcher observed each English teacher's eight meetings. The research instruments were a strategies checklist and an interview. The findings revealed that teacher one employed a variety of strategies in teaching reading comprehension. Brainstorming, reading aloud, and asking for specific information were among the strategies used. Teacher two employed nine strategies. They were encouraging the use of dictionaries, reading aloud, rereading to check comprehension, evaluating comprehension in specific tasks, and asking specific questions. Both teachers used and combined three stages of teaching reading comprehension strategies. The stages were as follows: pre-reading, while reading, and

post-reading. In that school, the strategies used to teach reading comprehension were extremely effective. This study contributes to the present investigation by showing that the pre, during, and post-reading strategies used to teach reading comprehension were highly effective and emphasized the motivation of the students, the attention, and the ease of the teachers in the teaching and learning process.

Ismail et al. (2020)carried out a study called "the effect of moodle e-learning material on EFL reading comprehension" The goal of this study was to look into the impact of moodle e-learning on EFL reading comprehension. The study included 27 EFL college students, ranging in age from 19 to 22 years old. They were taught and learned about reading comprehension by using moodle e-learning material, which consists of eight units of material, as a tool for facilitating and enhancing learning. The reading comprehension pretest and posttest were used to collect data. The data were analyzed in three stages: normality testing, homogeneity testing, and hypothesis testing using the statistical package for social science (SPSS) for the window. The results show that using moodle e-learning improves students' reading comprehension significantly. Finally, Elearning is defined as the delivery of training material through information and communication technology, such as the internet, CD-ROM, DVD, smartphones, and other media, both inside and outside of the classroom, and has been widely adopted by educators worldwide. This study contributes to the current research by showing how elearning, which has been widely used by educators around the world, dramatically enhances students' reading comprehension.

Hamdan et al. (2017) carried out a study called "Hypermedia reading materials: undergraduate perceptions and features affecting their reading comprehension" The goal was to describe TESL students' reading processes and attitudes toward hypermedia reading materials. In order to create a more natural environment for online reading. This case study included eleven third-year undergraduate TESL students between the ages of 22 and 24 who were enrolled in a course called 'Teaching of Reading Skills in an ESL

Context.' The case study method was used in this study's qualitative research. The think aloud protocol, semi-structured interviews, and reflective notes were used to collect data. The study's findings revealed various participants' perceptions of hypermedia reading materials. The design of the hypermedia materials and content in terms of how information was displayed were among the factors that improved their reading comprehension. Participants emphasized the difficulties associated with reading long hypertexts and expressed a preference for point-form texts. Other features mentioned as useful in their reading included the inclusion of pictures, tables, diagrams, audio materials, and videos in addition to the text. Other features included hyperlinks and glossaries provided by websites, which the students found helpful in understanding the text. Other disadvantages of reading hypermedia materials were advertisements on websites, easy access to social media websites, and a slow Internet connection and bandwidth speed. These were reported to have an effect on the reading process in such a way that they distracted the participants' concentration, which in turn affected reading comprehension to some extent. It is hoped that these findings will aid course developers in developing or selecting websites for teaching and learning purposes. Finally, there are a few major characteristics of hypermedia materials that affect students' level of reading comprehension as well as their reading interest, namely the presence of audiovisual materials, glossaries and annotations, and website design. This study contributes to the present investigation, showing that students prefer hypermedia materials, such as diagrams and videos because they help to better understand the reading materials.

Delgado et al. (2018) carried out a research study called "Don't throw away your printed books: a meta-analysis on the effects of reading media on reading comprehension" The goal of this meta-analysis was to gain a broad perspective of empirical studies comparing the outcomes of digital and print reading. The studies included in the meta-analysis fulfilled the following requirements: 1. The study compares comprehension in paper-based and digital-based reading, which are defined as reading texts printed on paper and reading texts displayed on digital screens such as computers, tablets, phones, and e-readers, respectively. Analyses revealed three significant moderators: (1) time

frame: the advantage of paper-based reading increased in time-constrained reading compared to self-paced reading; (2) text genre: the advantage of paper-based reading was consistent across studies using informational texts but not those using only narrative texts; and (3) publication year: the advantage of paper-based reading increased over time. The implications for theory and education are discussed. This study contributes to the current investigation that digital-based reading is an unavoidable part of our daily lives and an essential component of the educational realm. Although the current findings suggest that paper-based reading should be preferred over digital-based reading, avoiding digital devices is unrealistic.

Orencia (2018) carried out a research study called "The effect of using multimedia blurb on 12 reading comprehension of narrative text" The purpose of this study was to see how Multimedia Blurb (MMB) affected the second language (L2) reading comprehension. To express their understanding of the text read, readers created an MMB using internetbased tools and a specific language. Participants were drawn from a pool of intact secondary education pre-service teachers with a variety of majors and assigned to one of three conditions. In this study, a quasi-experimental research design with non-equivalent groups was used. Participants included complete sections of secondary education preservice teachers. Two experimental groups created MMBs, one using their first language (L1), Filipino, and the other using their second language (L2), English. The control group did not form an MMB. After reading and creating an MMB, all groups were tested for comprehension. The effect of MMB on comprehension was determined using a oneway between-groups analysis of covariance. The experimental groups outperformed the control group significantly, with the L2 group producing the highest mean score. The digital tools and language used to process the narrative text most likely improved readers' comprehension. Further investigation of the MMB elements is advised. Two instruments were used to collect data. A 40-item questionnaire with a reliability index of.93 and test-retest reliability of.87 was used to assess learners' attitudes toward reading. Its construct validity was.80 (p.01) when correlated with another attitude measure, the Rhody scale of reading attitudes. Only six items focusing on one of the five dimensions of reading attitude, specifically reading activity enjoyment, were used for this study. This study is helpful for the current investigation showing that reading is a critical skill for learning and is required for students to achieve higher levels of academic success.

Brante and Holmqvist (2017) carried out a research study called "Reading from multimedia materials: benefits of non-congruent pictures on reading comprehension for dyslexic readers" The purpose of this study was to collect students' perceptions of hypermedia reading materials and identify factors influencing their reading comprehension. The National University of Malaysia had 28 third-year undergraduate TESL students enrolled in the teaching of reading skills in an ESL context, a required course for their degree. Twelve students volunteered to participate in this study, but only eleven of them, all female students aged 22-24, were accepted. This study used qualitative research and the case study method. This mixed methods study employs quantitative eye-tracking data as well as qualitative data such as oral responses to determine whether picture characteristics influence patterns of text-picture transition in readers with (n=10) and without (n=14) dyslexia and how this affects reading comprehension. Early in the inspection process, most participants focused on the image with a "noncongruent with reality" motif. The qualitative analysis of oral responses revealed that remembering the gist of that specific image resulted in more developed answers, even for the dyslexic group. Early attention to the image thus provides readers with a good chance of starting with a comprehensive impression of the material to be processed. According to the fixation mappings, the participants perceived the gist of each screen during the initial centrally placed fixation. This study is helpful for the current investigation demonstrating that a person does not need to fixate on a picture in order to process it globally; the picture can be processed through peripheral vision during the apprehension of the gist of a text-picture integrated medium, such as the screens in the experiment.

## Theoretical framework

This research is based on two variables: Multimedia resources and reading comprehension.

Nowadays, the use of multimedia resources is part of our lives especially at the moment to study online because of the pandemic that changed our lives. Students use them in different devices such as laptops, computers cellphones, IPads, and so on.

## 2.1 Independent variable

## 2.1.1 Multimedia resources

#### Definition

Pavithra et al. (2018) explained that multimedia is the computer-controlled integration of text, graphics, drawings, still and moving images, animation, audio, and any other media in which any type of information can be represented, stored, communicated, and handled digitally. Multimedia stands out among the various media in fine art; for example, by including audio, it has a broader scope.

Malik and Agarwal (2012) claimed that in the early days of multimedia, the terms "rich media" and "collaborating multimedia" were interchangeable, and "hypermedia" was a type of multimedia application. By increasing interaction between teachers and students, multimedia technology empowers the educational process,

## 2.1.2. Educational technology

Malik and Agarwal (2012) insisted on practicing learning and enhancing performance through the creation, use, and management of appropriate technological processes, which are referred to as educational technology. It is most simply characterized as a collection of tools that may be useful in the teaching-learning process. The term

technology involves the use of cutting-edge tools and techniques such as computers, interactive whiteboards, smartphones, and the internet, Wi-Fi, among others. Moreover, they are preferred by students since they include it in their learning process in order to be more efficient, interactive, and easy to understand and get better information.

# 2.1.3. Advantages of multimedia

Pavithra et al. (2018) explained that multimedia is appropriate for all types of students and breathes new energy into debates. Multimedia typically necessitates only a one-time purchase of hardware and software, which can be used indefinitely. In terms of evaluation, it provides suitable learning assessment methods and realistic approaches that are also motivating for pupils. Additionally, multiple media formats are accessible for use with various representations. This cultural trend is toward technology especially in education.

# 2.1.4. Disadvantages of multimedia

Pavithra et al. (2018) admitted that multimedia needs electricity to be run, which may not be available in some rural areas or may not be routinely available owing to deficiency and interruption. Multimedia production is more expensive than other types of production since it incorporates more than one resource. Its production necessitates the use of an electrical instrument, which might be costly. The user requires a significant amount of time, energy, and needs regular extensive practice to master it. There is a broad range of device models, which causes media format incompatibilities. On the other hand, the device used for multimedia must be used with caution; exposure to wetness or other components could result in expensive, reparable damage, requiring the purchase of new equipment.

# 2.1.5. Multimedia learning environment

Malik and Agarwal (2012) informed that multimedia creates a technology-based constructivist learning environment in which students can solve problems through self-exploration, collaboration, and active engagement. The resources such as visual aids, video, and audio integrated in an organized manner greatly improve the learning of new knowledge. Additionally, the interactive aspect of multimedia allows students to improve their learning process by giving them greater freedom to adapt to individual learning strategies. The multimedia promotes and strengthens the learning process, as well as creativity and innovation.

# 2.1.6. Multimedia and its pedagogical strengths

Malik and Agarwal (2012) admitted that drilling and practicing with multimedia aid a student's mastery of basic abilities in problem-solving through learning by doing. Additionally, it comprehends abstract concepts, providing enhanced access for teachers and students in remote locations, facilitating individualized and cooperative learning. Furthermore, assist in the management and administration of classroom activities and learning content, simulating real-life problem-solving environments. Nowadays, multimedia technology is employed and experimented with within its own created forms by numerous educational institutions of all levels all around the world.

## 2.1.7. Multimedia tools and applications

Pavithra et al. (2018) agreed that a multimedia application is one that can use several media foundations, such as text, graphics, photos, audio, animation, and video. Multimedia conferences encompass specific technologies, which include audio and video distribution, virtual reality and three-dimensional imaging, multimedia, and artificial intelligence. They are interesting due to connecting information adjusted for the user in a non-linear communicating mode. Some multimedia characteristics are management, programming, security, and human-computer interfaces and application

facilities such as audio and video processing; education and training; multimedia analysis and the internet; artificial intelligence; virtual reality and 3-D imaging; wireless and mobile computing; animation and graphics, and visual communication

# 2.2 Dependent variable

# 2.2.1 Reading comprehension

#### **Definition**

Pourhosein et al. (2016) explained that reading comprehension is the process of gaining meaning from written language. The goal is to comprehend the text rather than to derive meaning from individual words or sentences. Reading comprehension produces an intellectual demonstration of a text's meaning that is combined with the readers' prior knowledge.

# 2.2.2. Theories of reading comprehension

There are three types of reading comprehension theories. Mental representations, content literacy, and cognitive processes are examples of these.

## • Mental representations

Smortchkova et al. (2020) considered a mental representation, the most productive way to think and collectively create our sense of the real world. This could help the reader's knowledge, become familiar with the context, develop a mental image and create different mental representation. The principal component of mental representation is when the words or phrases are encoded rather than the meaning of them. Readers could generate a more flawless and consistent mental representation in a pure text-based environment. The scenario model, is a framework that integrates the text-base and relevant elements of the reader's knowledge. It is broader and is required for decoding

texts in general, whereas previous knowledge in the formation of a situation model is more relevant to the content of the text.

#### • Content literacy

Kane (2017) mentioned that content literacy could help readers improve their reading knowledge, motivation, tools, and confidence. Readers could have the ability to read, comprehend, and learn from materials about a specific subject. This knowledge is used in a mental representation in order to create a text-base or a mental image of a situation. For instance, mathematics necessitates content-specific literacy abilities, and mathematical reading comprehension depends on more general literacy abilities and prior knowledge. The demand for content-specific reading abilities in mathematics can be attributed to the symbolic language used.

# • Cognitive processes

Barzillai et al. (2018) claimed that reading is a complex skill involving the execution and coordination of many cognitive processes. Students can learn better if they observe a model. During reading, they can indicate what they are doing to deal with a specific reading comprehension challenge. Additionally, various cognitive processes are consciously or unconsciously. Awareness is described as an automatic and unconscious process that occurs in the brain. For instance, when people see an animal, immediately recognize it, people are aware of the result of the process, but there are no active or conscious mental processes involved in this identification. The automatic and unconscious application of syntactic and semantic principles, as well as the activation of more specific prior information, occurs.

# 2.2.3. Types of reading

According to Pourhosein Gilakjani and Sabouri (2016) "Reading can be classified into two types. They are extensive and intensive reading."

# • Extensive reading

According to Spratt et al. (2011), extensive reading is also known as reading for pleasure. It entails reading lengthy passages of text. People's attention and interests differ. Some parts of the text may be read in detail, while others may be skimmed.

David Nunan (2015) claimed that extensive reading in the target language is an excellent learning tool. Learners who read extensively in the target language become fluent readers, improve their reading comprehension, acquire new vocabulary, increase their motivation to learn the language and have positive attitudes toward language learning. Extensive reading activities can help learners become individuals who seek meaning if they are based on student-selected texts that learners will be interested in what they are reading. The reading texts will be chosen based on their content, level of difficulty, and length. Skimming and scanning activities have a significant impact on learners' knowledge. Additionally, by reading extensively, students can improve their language proficiency, advance their reading skills, become more independent in their learning, gain cultural knowledge, and increase their confidence and incentive to continue their learning.

#### • Intensive reading

Spratt et al. (2011) climed that this ability is known as reading for details. Additionally, it involves reading for language study. The goal of these activities is to increase learners' awareness of how language is used.

Park (2017) suggested that teachers could guide learners to read and understand in the teacher-centered intensive reading approach. Teachers can help students feel more

supported and confident. If students have some understanding of how an author works, they will be closer to some critical values in his/her reading. Learners can read to find the meaning, gain practice and become familiar with writing strategies. For instance, text-based or learner-based, which can help them improve their reading comprehension. It is crucial to learn vocabulary and comprehend how a text is constructed. There is a link between intensive reading and language proficiency. Teachers involve intensive reading to increase the three stages of learning known as pre-reading, during-reading, and post-reading in order to improve language readiness, retention, and activation strategies.

# 2.2.4. Strategies that promote reading comprehension

Gilakjani and Sabouri (2016) claimed that teachers can continue using some practices for reading comprehension instruction to build on children's educational knowledge of what they learned about the English language with reading fluency.

There are three stages reading comprehension process that can be classified into the following categories: pre reading, while reading and post reading.

#### Pre reading

At this stage, students can prepare their minds through these strategies. Using multimedia resources, teachers can produce, improve, and design their own content literacy strategies for lessons. These activities are some examples before reading strategies that can be used, such as brainstorming, pre-reading, word ladders, word sorts, word walls, anticipation guides, book talks, and picture walks, kwl charts that is based on what the students know, want to know and learned.

#### • While reading

This stage is crucial for students to understand the reading while they are reading for themselves. These strategies assist them in thinking about what is happening in the reading, making personal connections with the text, deepening their understandings, going beyond literal meanings, and recognizing underlying themes.

There are some strategies that can be used during reading. For instance, for narrative text, use: think aloud, reciprocal questioning, open-ended questioning, questioning the Author, personal vocabulary journal, Bree-response journal, illustrative journal. For a nonfiction expository text: double-entry journal and learning logs.

# Post reading

This stage assists students in order to understand the reading after they have read it for themselves. This process helps them reflect on what occurred in the reading passage, making personal connections with the text, deepening their understandings, going beyond literal meanings, and identifying underlying themes. Additionally, this category includes reading strategies such as narrative text (story retelling, sketch-to-stretch, storyboards, story ladder, story map, book boxes, quilts, open-mind portraits and, story face) and a nonfiction expository text (Venn diagram, kwl charts, alphabet books, book boxes, t-charts and, data charts)

#### 2.2.5. Effective strategies for reading comprehension

#### Activating and using background knowledge

Deshpande (2016) explained that the Communicative Approach to language teaching places a high priority on the learner's prior experience and background knowledge as key contributors to the learner's learning process. Instead of being viewed as an empty container compelled to absorb the language's structural systems, the student is seen as an intelligent, problem-solving human. Readers use this method to activate their knowledge and apply it to help them understand what they're reading. It is based on people's experiences, as well as their ideas about how written text work, such as word recognition, print concepts, word meaning, and how the text is constructed. Based on the schema theory, people develop a set of knowledge frameworks or schemas as they learn

about the world. As people gain new information through experience and reading, their schemas evolve and adapt. For instance, a child's schema for cat may include an understanding of the family pet such as cats' colors, meals, and so on. Additionally, summarizing is a key factor for helping readers remember text quickly. They can be aware of the text structure, what is significant, and how points of view are related to one another. Connecting events in a story or understanding the elements that encourage a character's activities and behavior are examples of effective summarizing narrative material.

# Visualizing

Bazarbaevna (2017) claimed that teachers can help students improve their reading comprehension by using visualizing strategies. Visualization enables the reader to create an image of what is being read. As a representation of the reader's interpretation of the text, this image is stored in the memory. Teachers can encourage students to visualize different scenes of a story by asking them to draw or write about the images that come to their minds after reading the text. Additionally, it has been regarded as one of the most effective reading comprehension strategies. This ability reveals how well the readers understand passages. People who imagine what they're reading are more likely than those who don't to remember what they've read. Readers can easily understand what is going on in narrative materials by picturing the environment.

#### Comprehension monitoring

Tighe et al. (2022) stated that comprehension monitoring is meta-cognitive skill defined as the ability to self-evaluate one's understanding of a text. Struggling adult readers are poor at monitor comprehension. Successful readers are aware of their mental processes using various techniques and strategies that really work for them in order to improve their comprehension. Furthermore, they are versatile for implementation or making decisions about which tactics to use and when to use them. Comprehension strategies

can help readers enhance their understanding by using them consciously during the learning process.

# • Generating and asking questions

Gilakjani and Sabouri (2016) mentioned that in this method, readers read the text while asking themselves crucial questions. This method supports people in combining information, identifying important concepts, and summarizing material. Successful readers can concentrate on the most relevant information in a text by asking suitable questions, focusing on comprehension issues, and taking the necessary actions.

# • Making inferences

Gilakjani and Sabouri (2016) advised readers to evaluate or infer textual materials. In this method, writers may not always convey complete information about a topic, location, person, or event. Instead, they supply information that readers can use to read by drawing inferences with prior knowledge. It is crucial for readers because they can improve their ability to make sense by going through this procedure.

#### Predicting

Gilakjani and Sabouri (2016) said that readers can gain meaning from a book by making educated guesses. Successful readers use predicting to apply their prior knowledge to new information from a text in order to derive meaning from what they read. Before reading, people can use what they know about the author to predict what the text will be about. Successful readers can guess by the title of the text what will happen next or what the writer will offer to promote a discussion for reading. They can attempt to constantly evaluate these predictions and change them if they are not authorized by reading.

# Summarizing

Gilakjani and Sabouri (2016) agreed that readers mix facts in a text to explain what the text is about in their own words. Summarizing is an important method for helping readers remember text quickly. Pupils can be aware of text structure, what is significant, and how viewpoints are related to one another using this method. Condensing the steps, the stages, or the incidents that result in certain major happenings are examples of effective summarizing of explanatory material. In addition, connecting events in a plotline or understanding the elements that motivate a character's activities and behavior are examples of effective narrative text summarization. According to the author, using the summary as a method helps students a lot in developing their reading skills. It is crucial for teachers since through the summary it is possible to realize whether the students understood the text and be able to provide feedback at the end of the class.

Based on this investigation, it can be said that multimedia resources and reading comprehension must go hand in hand because with the use of multimedia resources, teachers could help students to a better understanding and develop their reading skills. In the learning process, motivation plays an essential role. It is necessary to encourage learners to learn through innovative activities using pictures, videos, games, live worksheets, and so on. Thus, it is a worthwhile idea to teach reading comprehension using technological means where teachers can find countless tools and activities and improve meaningfully students' skill in a better and easier way.

#### **2.2.6. Reading**

Spratt et al. (2011) mentioned that it is a receptive skill that responds to rather than produces text. People must understand the language of the text at the word, sentence, and whole-text levels. People must relate the text's message to their knowledge of the world. Reading also involves the use of various reading skills or subskills such as scanning (not reading the entire text), reading detail (getting the meaning out of every word), deducing meaning from context (reading the words around an unknown word),

undestanding text structure (understanding how certain types of text generally develop), skimming (glancing through a text to get a general idea), inferring (use to get meaning from a text), and predicting (using clues before reading)

#### **CHAPTER III**

# RESEARCH METHODOLOGY

#### 3.1. Location

The research was carried out at "Unidad Educativa Baños" located in Baños de Agua Santa - Tungurahua province, on Amazonas Avenue via to "Salado." It has a regular and fiscal morning education with 1.201 students and 59 teachers that offers EGB and bachelor. The purpose of this study is focused on examining the enhancement of sixth-grade learners' reading comprehension by using of multimedia resources.

# 3.2. Tools and techniques

Due to COVID-19 pandemic's social isolation, the researcher preferred to use technology means. Teams application and WhatsApp were aid in the provision of some activities in which students used electronic devices such as laptops/computers, the internet, mobile phones, and the iPad. In addition, the instrument used in this study was a Cambridge standardized reading comprehension test. This instrument's level was Pre A2 Flyers. This test was developed in 2018. Additionally, a survey was taken from the research project based on the "Development of web 3.0" and TAM questionnaire and a survey based on the topic of the study with a Likert scale for sixth-grade students.

# 3.3. Research aproach

**Quasi-experimental:** This research is quasi- experimental because of the use of group assignment. It was considered a sample of 50 students of sixth grade from the "Unidad Educativa Baños" who participated in the data collection. A control and an experimental group were already chosen based on a descriptive methodology. To validate the research, students were divided into two groups. The first one was the experimental group, made up of 25 students from 6<sup>th</sup> "A" and the second, the control group was conformed of 25 students from 6<sup>th</sup> "B," with an emphasis on the function of multimedia resources and reading comprehension. In terms of quantitative analysis, this collects and

analyzes data from a multiple-choice questionnaire about the web 3.0, using as reference the Technological Acceptance Model (TAM) in order to accept or reject the use of technological means for reading comprehension. The participants were between 10 and 11 years old. This study had about six sessions. The firs one with the pre-test, four sessions with classes developing reading comprehension using multimedia resources and the last one with the post-test. Additionally, it required a statistical examination of the two variables, multimedia resources in EFL learners' and reading comprehension.

**Assessment:** A standardized test was a Cambridge exam (A2 Flyers), which served as the instrument. The research study was about three weeks with six interventions. In the pre-test and post-test, students developed four sections based on reading comprehension. The answer sheet was also taken from Cambridge, both instruments were adapted to measure reading comprehension. Each session lasted approximately 40 minutes. As a result, the experimental group was required to complete the pre-test prior to applying the treatment, as well as the post-test following the treatment, synchronously online with the Platform Teams and WhatsApp. The results of the Cambridge reading section questionnaire were used to collect data for the current study. There was a picture and some sentences about it in the first section, and students needed to write "yes" if the sentence was correct, and "no" if the sentence was false. In the second section, there was a semi-factual text with some gaps and a box with some pictures and words below the text. Students had to select the appropriate word from the box and write it in the appropriate space. Next, in section 3, there were three pictures that told a story. Each image was accompanied by one or two questions. Students were required to look at the pictures and write their responses to each question. They only needed to write one word for each response. Finally, in the last section, students had to read a passage and choose the right words and write them on the lines.

It was important to note that in the pre-test and post-test to collect data, is graded based on the Cambridge reading answer sheet, resulting in a total of 22 points in a scale of (21-22) excellent, (16-20) good, (11-15) satisfactory, (6-10) poor, (1-5) failure. Finally, four lesson plans were used as an instrument in order to plan the classes for each session.

**Survey:** This was a multiple-choice questionnaire, taken from the research project based on the "Development of web 3.0" was conducted by the researcher with a Likert scale to examine if students acknowledge the role of multimedia resources.

Additionally, at the end of this investigation, the experimental group was given a survey based on the Technology Acceptance Model (TAM). Davis, Bagozzi, and Warshaw (1989) claimed that TAM is the most influential framework for predicting user technology adoption behavior. According to this model, the researcher conducted a survey with twelve questions in order to examine the acceptance or rejection of the use of multimedia resources in reading comprehension. The answers were divided into five categories based on a Likert scale: (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, and (5) agree strongly

Furthermore, during the intervention with the experimental group, the (Analyze, Design, Develop, Implement, and Evaluate) was used. It was useful for the students' activities based on their reality. This research, stated model aided students' ADDIE technique reading comprehension skills by using multimedia resources.

#### 3.4. Hypothesis - research question- idea to defend.

**Null hypothesis (H0)** the multimedia resources do not aid the development in EFL learners' reading comprehension of sixth grade at "Unidad Educativa Baños" in Baños de Agua Santa.

**Alternative hypothesis** (**H1**) the multimedia resources aid the development in EFL learners' reading comprehension of sixth grade at "Unidad Educativa Baños" in Baños de Agua Santa.

Research question: ¿How do multimedia resources aid the development in EFL learners' reading comprehension of sixth grade at "Unidad Educativa Baños" in Baños de Agua Santa?

# 3.5. Population or sample

For the current investigation, 50 students from the age of 10 to 11 years old among men and women were selected. From parallel "A" and "B" of sixth grade of "Unidad Educativa Baños". It is vital to say that only these children were part of this study because all of them had access to the Team app and they had not issues with intern et connectivity. They worked actively, so they enjoyed engaging in new learning activities.

**Table 1**Population

LEVEL	POPULATION	SAMPLE
Sixth "A"	25	25
Sixth "B"	25	25
TOTAL	50	50

Note: 50 participants

#### 3.6. Data collection

Due to the worldwide pandemic, face-to-face data collection was impossible. As a result, the investigator employed technological techniques in the current investigation by using the Platform Microsoft Teams, Forms and WhatsApp. Only the last survey was collected in face-to-face classes. The procedure was carried out at sixth-grade students from the "Unidad Educativa Baños." The researcher in this study used three surveys (web 3.0, TAM and field research). The first one, about the use of the web 3.0. A total of 50 students took part of it. What is more, the survey included 24 questions. Students could select more than one option depending on their experiences and involving information related to web 3.0 as support in their education. Additionally, the author conducted another survey to determine whether students accept or reject a specific information

technology based on the TAM model in order to gather the necessary information for assessing the acceptance of web 3.0 in education. The questionnaire was about 15 questions on a Likert scale and it was applied only for the experimental group. At the end of the study, the author presented a survey for the two groups which was centered on the topic of this research in order to explore the opinions and acceptance of students about the application of multimedia resources in reading comprehension. The questionnaire was divided into 8 items on a Likert scale. However, in the three surveys, only three questions were chosen to give information based on the topic. Additionally, to measure the reading comprehension among the two groups of the study. Teatment group and the control group. The author went over the pre-test and post-test results for the Cambridge standardized test reading section in detail. The goal of it, was to provide a clear picture of students' grades by averaging the final grade out of 22 points and taking Cambridge system evaluation into account and in scale of (21-22) excellent, (16-20) good, (11-15) satisfactory, (6-10) poor, (1-5) failure. Furthermore, the study included an itemized graphic demonstration of each table to assist the reader understanding the parameters by comprehending how the use of multimedia resources help students in their reading process.

As a final point, the hypothesis is verified using the T-test statistic, which compares students' progress by implementing the multimedia resources experiment in educational settings. Consequently, at the end of this chapter, the verification of the hypothesis is explained using the SPSS program and the T-test statistic, in which there is a comparison of students' development by implementing a web 3.0 experiment in an educational system.

# 3.7. Data processing and analysis

After the data had been collected, the two variables were examined using descriptive statistics and the t-test through software SPSS in order to determine whether there was a statistical difference between learners who received treatment and those who did not.

3.8. Response variables or results

**Independet variable:** Multimedia resources

**Dependent variable:** Reading comprehension

A before and posttest with two components was used to measure the dependent variable.

First of all, the study was involved an observing class to determine strengths and

weaknesses in reading comprehension. After that, EFL students were present outcomes

based on exercises using multimedia resources to aid reading comprehension. On the

other hand, the independent variable, multimedia resources, were assessed using a

survey and a linker scale to determine whether or not the instructor uses multimedia

resources in reading sessions.

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# CHAPTER IV RESULTS AND DISCUSSION

# 4.1 Analysis and discussion of the results

# **4.1.1** Web **3.0** survey

This section aims to identify the opinion that the participants have about: the types of 3.0 tools frequently used, the frequency, the importance and the effect on learning by the study participants.

In table 2, it is observed that a great amount of students make use of multimedia resources in order to achieve better results in their learning process. Participants mainly used four 3.0 tools (Kaboot, Wix, Classdojo, and Plataforma Educativa) for the development of their English language learning. 'Kahoot' and the 'Educational Platform', cumulatively represent more than 60% of the preferences or greater interest among them. It is also evident that there is not a wide and varied use of 3.0 tools, which in some ways can limit the process of strengthening learning in the absence of diversity.

**Table 2**Types of 3.0 tools that students use to learn

Tool	Frequency	Percentage
Kahoot	35	50%
Wix	4	8%
Canva	0	0%
Mural	0	0%
Classdojo	5	10%
Redes sociales	0	0%
Página personal	0	0%
Plataforma educativa	6	12%

Note: 50 cases

Table 3 shows that the frequent use of 3.0 tools exceeds approximately 80% as knowledge generation and learning tools combined with other tools. In addition, most participants frequently use 3.0 tools for their learning and a few students do not use them. The absence of the use of this type of tool is less than 10%.

**Table 3**¿Con qué frecuencia utiliza herramientas tecnológicas 3.0 para aprender?

Tool	Frequency	Percentage
Nunca	2	4%
Raramente	3	6%
Ocasionalmente	4	8%
Frecuentemente	26	52%
Muy frecuentemente	15	30%

Note: 50 cases

Table 4 shows the degree of importance that students have towards the use of 3.0 tools for learning. The participants consider that it is between important and very important as resources for learning English language. Given that between both conditions it exceeds 80% of the opinions. These data are important to take into account since they can help the teacher to consider the use of them to improve performance and the level of learning English. The perception of low or no importance that these tools have among students is largely low (less than 10%), given that without exception all of them consider that they have some level of importance.

**Table 4**¿Qué tan importante es el uso de herramientas web 3.0, en su aprendizaje?

Tool	Frequency	Percentage
Sin importancia	0	0%
De poca importancia	2	4%
Moderadamente	4	8%
importante		
Importante	26	52%
Muy importante	18	36%

Note: 50 cases

# 4.1.2 Pre-test analysis

Table 5 shows the performance of (control and experimental) groups based on reading comprehension in the diagnostic or pre-test phase. It is observed that both the control and experimental groups present global averages equivalent to satisfactory reading comprehension. In addition to this, the section with the highest domain corresponds to: 'Look to read' with the maximum score for both groups, while there is less domain in the 'Read and Complete' section with the lowest evaluation score.

Regarding the differences between groups, both in the sections and in the global evaluation of the test, the score shows the presence of the level of reading comprehension prior to the implementation of standard-type reading comprehension strategies in the control group and the virtual and technological type with the experimental group. Adittionally, it is observed that at this stage there are no significant differences in any of the cases since the p-value of the t-test is greater than .05. Thus, the Null Hypothesis (H0) is not rejected, giving as a result that the groups are similar in the level of reading comprehension.

**Table 5**Control and Experimental group descriptive analysis in the Pre-test phase

Variables	Con	trol	Experi	mental			Contrast
v artables	M	SD	M	SD	t	Sig.	Decision
Look and read	5,00	,00	5,00	,00	0.00	1.0	Ho is not rejected
Read a choose a word	3,24	1,88	4,08	1,35	1.82	.08	Ho is not rejected
Read and complete	2,64	2,27	2,64	2,12	0.00	1.0	Ho is not rejected
Read and choose	3,92	1,19	3,52	1,36	1.12	.27	Ho is not rejected
Total	14,80	3,07	15,24	2,35	0.57	.57	Ho is not rejected

*Note:* M: Mean; SD: Standard Deviation; t: t-test for independent samples; Sig.: significance; Ho: null hypothesis

#### 4.1.3 Post-test analysis

Table 6 shows the performance of the groups based on reading comprehension in the phase after the application of the teaching processes, both the standard (for the control group) and the virtual and technological (for the experimental group). Globally, it can be seen that both the control and experimental groups present global means equivalent to good reading comprehension.

Regarding the differences between groups, significant improvements are observed with greater mastery by the experimental group in the 'Read and Complete' section, as well as in the general assessment of reading comprehension, given that the p-value of the t-test is less than .05. Thus, the Null Hypothesis (H0) is rejected and the Alternative Hypothesis (H1) is accepted, resulting in the groups being different from each other with respect to the level of reading comprehension.

**Table 6**Descriptive analysis of the Control and Experimental groups in the Post-test Phase

Variables	Control		Control Experimental			Contrast		
variables	M	DT	M	DT	t	Sig.	Decision	
Look and read	5,00	0,00	5,00	0,00	0.00	1.00	Ho is not rejected	
Read a choose a	5,00	0.00	5.00	0,00	0.00	1.00	Ho is not rejected	
word	3,00	0,00	3,00	0,00				
Read and complete	3,84	1,68	5,00	1,44	-2,62	.01	Ho is rejected	
Read and choose	4,12	0,93	3,52	0,94	-0,15	.88	Ho is not rejected	
Total	17,96	2,13	19,16	2,17	-1.97	.05	Ho is rejected	

*Note:* M: Mean; SD: Standard Deviation; t: t-test for independent samples; Sig.: significance; Ho: null hypothesis

# 4.1.4 Pre-test – post-test analysis

The purpose of this section is to determine the existence or not of inter-phase changes in reading comprehension between the control and experimental groups through the context manipulation process based on both standard and experimental educational intervention processes.

#### Analysis in the control group

Table 7 shows the changes in the performance of the control and experimental groups have had before and after the teaching process with the standard strategies. It is observed that the use of reading comprehension strategies applied to the control group, as well as the technological strategies in the experimental group, improved reading comprehension levels in both situations. Additionally, it is observed that there is an improvement in the general performance of the participants since the global average went from satisfactory to good with significant differences (p< .05) in both cases. However, a more detailed review of the results shows that the increase in scores is slightly higher in the experimental group, given that the changes between the phases appear to be larger and

more significant. That is, the change caused by the use of virtual and technological reading comprehension strategies is greater in this group than in the control group.

The differences found were significant in all sections (except 'Look and read') together with the global assessment, given that the p-value of the t-test for related samples was less than .05. In this way, in those sections mentioned, H0 is rejected and H1 is accepted. Thus, the final condition differs from the initial condition, signaling improvements in reading comprehension.

 Table 7

 Inter-phase change analysis for the control group

Variables	Pre-test		Post-test		Contrast		
variables	M	SD	M	SD	t	Sig.	Decision
Look and read	5,00	0,00	5,00	0,00	0.00	1,00	Ho is not rejected
Read a choose a word	3,24	1,88	5,00	0,00	-4,69	,000	Ho is not rejected
Read and complete	2,64	2,27	3,84	1,68	-3,01	,005	Ho is not rejected
Read and choose	3,92	1,19	4,12	0,93	-2,44	,022	Ho is not rejected
Total	14,80	3,07	17,96	2,13	-5,25	,000	Ho is not rejected

*Note:* M: Mean; SD: Standard Deviation; t: t-test for related samples; Sig.: significance; Ho: null hypothesis

On the other hand, Table 8 shows the changes in the performance that the participants of the experimental group have had before and after the teaching process with virtual and technological strategies. It is observed that there is an improvement in the general performance of the participants, since the global average went from satisfactory to good. The differences found were significant in all sections (except 'Look and read' and 'Read and Choose') as well as in the overall assessment, since the p-value of the t-test for related samples was less than .05. Therefore, based on these results, H0 is rejected and H1 is accepted, the final condition differs from the initial condition, indicating improvements in reading comprehension.

**Table 8** *Related Samples Statistics* 

	Pre-test		Post	Post-test		Contrast		
	M	SD	M	SD	t	Sig.	Decision	
Look and read	5,00	0,00	5,00	0,00	0,00	1,00	Ho is not rejected	
Read a choose a word	4,08	1,35	5,00	0,00	-3,40	,002	Ho is not rejected	
Read and complete	2,64	2,11	5,00	1,44	-5,91	,000	Ho is not rejected	
Read and choose	3,52	1,36	4,16	0,94	-2,00	,058	Ho is not rejected	
Total	15,24	2,35	19,16	2,17	-8,30	,000	Ho is not rejected	

*Note:* M: Mean; SD: Standard Deviation; t: t-test for related samples; Sig.: significance; Ho: null hypothesis

# **4.1.5 ADDIE** methodology (Application, Design, Development, Implementation, Ecaluation)

Besides, ADDIE model was applied. The main purpose was to provide a structured method to create different sessions applying multimedia resources for the development of reading comprehension, in order to improve interaction with students and create effective learning experiences. Moreover, this traditional model consists of five phases such as analysis, design, development, implementation, and evaluation which represent a dynamic and flexible guide for building and supporting student performance. On the other hand, based on the pre-test applied to the students, it was possible to start with the first phase of the analys. Subsequently, several lesson plans were designed based on the previous analysis. Then, all the content planned was developed using multimedia resources before being taught to the students. The fourth and fifth phases were applied from the second to the fifth session of the study. Finally, in the sixth session, a general summative evaluation of the entire study was taken.

Primarily, during the analysis phase, the researcher established the objectives and learning environment for each session. The researcher also identified the learner's knowledge and skills based on the pre-test.

Table 9 Analysis phase

GRO	OUP 2
"PRE TEST FOR SIX	TH GRADE STUDENTS <sup>6</sup>
• Read the questions carefully.  Student name: Thony MaluSin 6.45 2 8.0.  Part 1	Part 3  • In the city
• No  1.	- Commission  1quiet  2Grandpa  3. noistrucks  4. Work_outside  5lell  6. tired but happy  7. best farmer
(1) Spiders (2) legs (3) tail (4) trees (5) Sand	Are  1. which  2 at  3. most  4. cating  5. atc

*Note:* pre-test Done by Cynthia Landázuri

Second, in terms of design. The researcher worked on learning objectives, assessment tools, exercises, content, lesson plan, and multimedia resource tools.

**Table 10**Design phase

	LESSON PLAN I	
Teacher's na	me: Cynthia Landázuri	
Date: January	18*, 2021	Time: 40 minutes
Level: Sixth		Time: 40 minutes
LANGUAGE SKILLS:	Reading and writing	'
	ats will be able to read and talk about what they can se	e in a picture
- To pra	RJECTIVES:  actice vocabulary  or W/h questions  d for details to identify specific information	
- To pra - Answe - To rea	setice vocabulary er W/h questions	hects
- To pra - Answe - To rea	ectice vocabulary er W/h questions d for details to identify specific information	heets
- To pra	ectice vocabulary or W/h questions d for details to identify specific information  Mentimeter,canva, NearPod, Padlet, Livework	heets  Materials:

Note: lesson plan

Done by Cynthia Landázuri

Derived from the previous phase, the researcher develops the contents and activities based on reading passages and vocabulary using various multimedia resources such as kahoot, canva, nearpod, kwl, genially, power point, mentimeter, liveworksheets, and puzzle.

**Table 11**Development phase

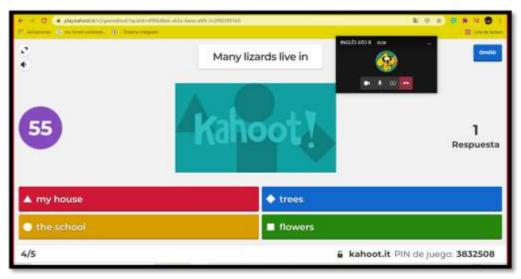


Note: vocabulary

Done by Cynthia Landázuri

The following step is implementation. The study and learning outcomes, methods, and testing procedures for developing reading comprehension using multimedia resources were all discussed by the researcher.

**Table 12** *implementation phase* 



Note: game

Done by Cynthia Landázuri

Finally, there was an evaluation. The researcher used a formative assessment throughout the study and a summative assessment at the end.

**Table 13** *Evaluation phase* 



*Note:* post-test

Done by Cynthia Landázuri

# 4.1.6 Technological Acceptance Model (TAM) survey

Next, the results of the TAM survey are presented to evaluate the perception of the 3.0 tools and that they have been fully applied to the experimental group. In table 9, the participants mainly agree about the use of tools to improve initiative in classes, with a group of participants also fully agreeing there is a high consensus in considering that tecnological tools effectively facilitate the development of the academic initiative. And although there are 0% of participants are in disagreement, there is a relevant tendency of participants to be undecided about the implementation of technological tools in classes. It ends up being minimal.

**Table 14** *Technological tools improve my initiative in class?* 

Response	Frequency	Percentage
Strongly disagree	0	0%
Disagree	1	3,6%
Undecided	4	21,4%
Agree	13	50%
Strongly agree	7	25%

Note: 25 cases

In table 10 on the facilitation provided by technological tools to carry out school work, more than 75% think that they agree with this. It seems that the use of technological tools has allowed students to streamline and improve their work in class, which is why they feel comfortable and pleased. The margin of indecision is approximately 1/5 and there is no strongly disagreement on this aspect among the participants.

**Table 15** *Technological tools make it easier for me to do my job?* 

Response	Frequency	Percentage
Strongly disagree	0	0%
Disagree	0	0%
Undecided	5	21,4%
Agree	6	25%
Strongly agree	14	53,6%

Note: 25 cases

Finally, table 11 shows that there is a relevant group of participants who do not show sympathy and satisfaction with the use of technological and gamification tools for teaching. Most of them agree with this premise with a limited opinion. It is likely that this can be understood by the lack of control, mastery, or management of these tools that have generated some discomfort in their use and application.

**Table 16**I have felt satisfied when carrying out activities with web 3.0 or gamification tools?

Response	Frequency	Percentage
Strongly disagree	2	7,1%
Disagree	3	10,7%
Undecided	3	10,7%
Agree	12	50%
Strongly agree	5	21,4%

Note: 25 cases

# 4.1.7 Multimedia resources and reading comprehension survey

Table 12 shows the perception of the participants (control and experimental group) about the use of multimedia resources. In the distribution of responses, a large majority (close to 90%) consider that these resources help and allow reading comprehension. It is likely that the characteristics of these resources have a better reception by them and that this stimulates their reading comprehension processes.

**Table 17** *El uso de recursos multimedia facilita la comprensión de textos* 

Frequency	Percentage
2	4%
4	8%
25	50%
19	38%
	2 4 25

Note: 50 cases

Table 13 shows the response pattern regarding the levels of motivation that they emulate when making use of multimedia resources. Agreement levels close to 90% (between agree and strongly agree) are observed. It can be inferred that the study participants are highly motivated to read thanks to the use of multimedia resources. The prevalence of disagreement is relatively low. This is relevant given that its inclusion in the normal development of learning to read in a second language can be benefited by the inclusion of multimedia resources.

Table 18

Mi motivación por la lectura ha aumentado con el uso de recursos multimedia

Response	Frequency	Percentage
Strongly disagree	0	0%
Disagree	8	16%
Agree	20	40%
Strongly agree	22	44%

Note: 50 cases

Table 14 shows the answers about the perception of benefits acquired in the learning process thanks to the use of multimedia resources. This allows estimating that in their eyes this allows them to improve their performance. There is broad agreement (over 80%) that these resources have benefited them in the learning process, while only 16% do not agree with this statement. This must be taken into account by teachers at the time of curricular planning since these resources seem to have a better acceptance and appreciation.

Table 9El uso de recursos multimedia ha sido beneficioso en mi proceso de aprendizaje

Response	Frequency	Percentage
Strongly disagree	2	4%
Disagree	6	12%
Agree	16	32%
Strongly agree	26	52%

Note: 50 cases

#### **CHAPTER V**

#### CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Conclusions**

Afterward analyzing and interpreting the results of the treatment that included multimedia resources and EFL learners' reading comprehension of sixth-grade students from "Unidad Educativa Baños" in "Baños de Agua Santa," this chapter provides the following conclusions and recommendations for future research:

- Based on the results, the experimental group got in the pre-test 15, 24 points, while in the post- test it got 19,16 points. Thus, it can be assumed that multimedia resources have had a meaningful impact on reading comprehension in students of sixth year of "Unidad Educativa Baños" because with the help of technology, more dynamic activities could be applied, which helped motivate and engage students in the learning process and have better reading comprehension, through games, videos, puzzles, and other gamifications that improved their leaning
- According to the study applied to the control group. It could determine the level of learners' reading comprehension in the pre-test and post-test, which had an improvement in the general performance since the global average went from satisfactory to good. The final condition differed from the initial condition, indicating improvements in reading comprehension. The students improved in the post-test because the multimedia resources were applied with several motivating and interesting activities. Additionally, the pre reading, while reading and during reading strategies were used in the process. Thus, they would have a better understanding of the readings. Furthermore, the differences found were significant in the majority of the sections as well as in the overall assessment, since the p-value of the t-test for related samples was less than .05.

- To conclude, the researcher could identify that multimedia resources such as audio, text, video, images, or animation through the tools of canva, kahoot, genially, nearpod and liveworksheets with interactive activities in which such content was integrated, allowed students to increase their reading comprehension since they responded to student actions in a better way. Moreover, there were improvements with the help of several strategies to promote reading comprehension, such as visualizing in order to create an image of reading. Predicting to use prior knowledge. Summarizing in order to remember the text and among others. When students read using technological tools, they felt engaged, confident, and motivated in the learning process. They learned a lot by doing and at the same time they had fun simultaneously. Furthermore, learners found it easy to answer different questions through games synchronically.
- Based on the result of the surveys, the researcher could descover the use of multimedia resources that students use in their learning process. They consider it between important and very important. Given that between both conditions, it exceeded 80% of the opinions. Even though there was frequent use of 3.0 tools that exceed 50%. The students frequently used multimedia resources because it has been a great help to understand better the reading passages. Additionally, during the study, the students felt more motivated to use multimedia resources specially they loved Kahoot becuase it is a tool, which students can compete answering questions and win the game. On the other hand, based on the results of the TAM survey, more than 70% of students show sympathy and satisfaction for the use of technological and gamification tools for learning. It can be concluded that technological tools have been very helpful for most students since they facilitate and motivate them during their learning process.

#### **5.2 Recommendations**

It is strongly advised based on the information supplied during the current research and taking into account the significant association of multimedia resources in reading comprehension:

- It is strongly advised that teachers use multimedia resources in the learning process in order have a meaningful impact in reading comprehension of learners.
   Due to the technology, students can have better reading comprehension and feel more motivated to read.
- To improve the level of reading comprehension teachers and the Ministry of Education should encourage the use of multimedia resources in the learning process due to it is the most effective technique for students to feel motivated and engaged in their learning taking into account that with multimedia resources learners can develop their skills and learn by doing. As a result, it is recommended that teachers implement interactive activities by using different tools in order to promote and improve reading comprehension.
- It is advised to train teachers in the management of different multimedia resources and tools in order to use them with interactive activities to increase reading comprehension and avoid monotony. Additionally, with the use of multimedia resources, teachers can be able to help and guide their students in the learning process. Furthermore, they could make more interactive, motivating, and meaningful classes for students especially to improve reading comprehension, among other things.
- Because of the fact that students have had a great acceptance of multimedia resources, it is strongly recommended that the Ministry of Education applies in each institution, English laboratories with computers in good condition and all the implements such as speakers, cameras, microphones, headphones, projectors,

and internet in order to use multimedia resources. In this way, teachers could engage students in their learning process and improve their reading skills.

#### 5.3 References

- Abubakar, Hussaina; Alabi, O. T. (PhD);, & Tukura, Charles, s. (2017). Teacher's attitude towards use of multimedia for teaching in colleges of education in niger state, nigeria. *Department of Educational Technology, Federal University of Technology Minna*.
  - http://repository.futminna.edu.ng:8080/jspui/bitstream/123456789/3779/1/9.\_Teach ers\_Attitude\_towards\_Use\_of\_Multimedia\_for\_Teaching\_in\_Colleges\_of\_Educati on\_in\_Niger\_State\_Nigeria.pdf
- Alsofyani, A. H. (2019). Examining EFL Learners' Reading Comprehension: The Impact of Metacognitive Strategies Discussion and Collaborative Learning within Multimedia e-Book Dialogic Environments. *ProQuest*, 1–9. https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=8926&context=etd
- Asyiah, D. N. (2017). the Vocabulary Teaching and Vocabulary Learning: Perception, Strategies, and Influences on Students' Vocabulary Mastery. *Jurnal Bahasa Lingua Scientia*, 9(2), 293–318. https://doi.org/10.21274/ls.2017.9.2.293-318
- Awogbami, P. A. (2020). Lecturers' Use of Multimedia Resources for Knowledge Transfer. *Information Impact: Journal of Information and Knowledge Management*, 11(2), 35–50. https://doi.org/10.4314/iijikm.v11i2.4
- Barzillai, M., & Thomson, J. M. (2018). Learning to read in a digital world. In P. van den B. Barzillai, Mirit, Jenny thomson, Sacha Schroeder (Ed.), *First Monday* (Vol. 23, Issue 10). Jhon Benjamins Publishing Company. https://doi.org/10.5210/fm.v23i10.9437
- Bazarbaevna, B. L. (2017). Learning foreign language through reading. *Наука И Образование Сегодня*, 40–41. https://cyberleninka.ru/article/n/learning-foreign-language-through-reading
- Bin Abdul Samat, M. S., & Abdul Aziz, A. (2020). The Effectiveness of Multimedia

- Learning in Enhancing Reading Comprehension Among Indigenous Pupils. *Arab World English Journal*, 11(2), 290–302. https://doi.org/10.24093/awej/vol11no2.20
- Brante, E. W., & Holmqvist, M. (2017). Reading from Multimedia Materials: Benefits of Non-congruent Pictures on Reading Comprehension for Dyslexic Readers. 16(1), 101–114.
- Nunan David, J. C. R. (2015). Language Learning Beyond The Classroom (1st Editio).

  Routledge.

  https://books.google.com.ec/books?hl=es&lr=&id=sjNyBgAAQBAJ&oi=fnd&pg=
  PP1&dq=LANGUAGE+LEARNING+BEYOND&ots=i5osWGumON&sig=n3PkrM5XXifUfkh\_gKDPAai\_yY#v=onepage&q=LANGUAGE LEARNING
  BEYOND&f=false
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). *User acceptance of computer technology: A comparison of two theoretical models. Management Science*. 35(8), 982–1003.
- Delgado, P., Vargas, C., Ackerman, R., & Salmerón, L. (2018). Don't throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension. *Educational Research Review*, 25(September), 23–38. https://doi.org/10.1016/j.edurev.2018.09.003
- Deshpande, S. K. (2016). Activating Background Knowledge: An Effective Strategy to Develop Reading Comprehension Skills. 1(3), 191–202.
- E. Adekunle, S., Olumide S., A., & Olutayo K, B. (2019). Appraisal on Perceived Multimedia Technologies as Modern Pedagogical Tools for Strategic Improvement on Teaching and Learning. *International Journal of Modern Education and Computer Science*, 11(8), 15–26. https://doi.org/10.5815/ijmecs.2019.08.02
- Halpern, D., Pina, M., & Gunckel, C. O. (2020). School performance: New multimedia resources versus traditional notes. *Comunicar, Media Education Research Journal*, 64(28), 37–46. https://doi.org/https://doi.org/10.3916/C64-2020-04

- Hamdan, N. A., Mohamad, M., & Shaharuddin, S. (2017). Hypermedia reading materials: Undergraduate perceptions and features affecting their reading comprehension. *Electronic Journal of E-Learning*, *15*(2), 116–125.
- Ismail, H., Rahmat, A., & Emzir, E. (2020). The Effect of Moodle E-Learning Material on EFL Reading Comprehension. *International Journal of Multicultural and Multireligious Understanding*, 7(10), 120. https://doi.org/10.18415/ijmmu.v7i10.2069
- Iyamuremye, F., & Ndagijimana, J. B. (2022). *Challenges Facing the Use of Multimedia* in Teaching and Learning in Secondary Schools in Muhanga District, Rwanda. 5(9), 86–109. https://journals.researchparks.org/index.php/IJIE/...
- Kane, S. (2017). *Literacy & Learning: In the Content Areas* (3rd Editio). Routledge. https://doi.org/https://doi.org/10.4324/9781315211435
- Liman Kaban, A., & Karadeniz, S. (2021). Children's Reading Comprehension and Motivation on Screen Versus on Paper. *SAGE Open*, *11*(1). https://doi.org/10.1177/2158244020988849
- Malik, S., & Agarwal, A. (2012). Use of Multimedia as a New Educational Technology Tool—A Study. *International Journal of Information and Education Technology*, 2(5), 468–471. https://doi.org/10.7763/ijiet.2012.v2.181
- Nunun Nuki Erfiani, Ngadiso Ngadiso, S. S. (2019). Developing supplementary reading materials for grade 11 students at a multimedia study program. *SIELE Sudies in English Language and Education*, 6(1). https://doi.org/https://doi.org/10.24815/siele.v6i1.11667
- Nurjanah, R. L. (2018). The Analysis on Students 'Difficulties in Doing Reading Comprehension Final Test. *Metathesis: Journal of English Language Literature and Teaching*, 2(2), 258. https://doi.org/10.31002/metathesis.
- Omar, S., & Bidin, A. (2015). The Impact of Multimedia Graphic and Text with Autistic Learners in Reading. *Universal Journal of Educational Research*, *3*(12), 989–996.

- https://doi.org/10.13189/ujer.2015.031206
- Orencia, M. A. R. (2018). The Effect of Using Multimedia Blurb on L2 Reading

  Comprehension of Narrative Text. 12(1), 100–133.

  https://d1wqtxts1xzle7.cloudfront.net/57282265/MMBL2RC\_TNL2018libre.pdf?1535769514=&response-contentdisposition=inline%3B+filename%3DThe\_Effect\_of\_Using\_Multimedia\_Blurb\_on
  .pdf&Expires=1664504946&Signature=TXYufzFkiSOSKfGKivNp4HmHFyUBpb
  110~TNdz8JlmqH4fK
- Park, A. Y. (2017). Comparison of the Impact of Extensive and Intensive Reading Approaches on the Korean EFL Learners' Reading Rate and Reading Comprehension Development. *International Journal of Applied Linguistics and English Literature*, 6(3), 131. https://doi.org/10.7575/aiac.ijalel.v.6n.3p.131
- Pavithra, A., Aathilingam, M., Prakash, S. M. (2018). Multimedia and Its Applications. International Journal for Research and Development in Technology, 10(5), 271–276. www.ijrdt.org
- Pourhosein Gilakjani, A., & Sabouri, N. B. (2016). How Can Students Improve Their Reading Comprehension Skill? *Journal of Studies in Education*, 6(2), 229. https://doi.org/10.5296/jse.v6i2.9201
- Roy, S., Inglis, M., & Alcock, L. (2017). Multimedia resources designed to support learning from written proofs: an eye-movement study. *Educational Studies in Mathematics*, 96(2), 249–266. https://doi.org/10.1007/s10649-017-9754-7
- Saputri, Y. A., Rizal, S., & Afriani, Z. L. (2021). An Analysis on English Teacher Strategies in Teaching Reading Comprehension. *Jadila: Journal of Development and Innovation in Language and Literature Education*, 1(3), 353–361. https://doi.org/10.52690/jadila.v1i3.125
- Smortchkova, Joulia, Krzysztof Dotega, T. S. (2020). *What are mental representations?* (T. S. Smortchkova, Joulia, Krzysztof Dotega (ed.)). OXFORD University Press. https://doi.org/10.1093/oso/9780190686673.003.0001

- Sofyan, D., Nadira, G., Gendis, D., & Puspita, H. (2020). Teachers' Strategies in Teaching Reading Comprehension. *JALL (Journal of Applied Linguistics and Literacy*, 4(2), 67. https://jurnal.unigal.ac.id/index.php/jall/index
- Spratt, M., Pulvernes, A., & William, M. (2011). *Course* (second). University of Cambridge, ESOL examinations.
- Tighe, Elizabeth L., Gal Kaldes, A. T. (2022). Do Struggling Adult Readers Monitor Their Reading? Understanding the Role of Online and Offline Comprehension Monitoring Processes During Reading. *Learning Disabilities*. https://doi.org/https://doi.org/10.1177/00222194221081473
- Winnie Wing Mui So, Y. C. and Z. H. W., & So, W.W., Chen, Y. & Wan, Z. (2019).
  Multimedia e-Learning and Self-Regulated Science Learning: a Study of Primary School Learners' Experiences and Perceptions. *Journal of Science Education and Technology*, 28(508), 522. https://doi.org/https://doi.org/10.1007/s10956-019-09782-y

#### 5.4. Annexes

#### **Annex 1:** institution authorization



#### Ministerio de Educación

Baños de Agua Santa, 06 de septiembre de 2021.

#### CARTA DE INTERÉS INSTITUCIONAL

La "UNIDAD EDUCATVA BAÑOS", luego de conocer sobre el pedido de autorización para realizar el proyecto de Investigación cuyo tema es: "MULTIMEDIA RESOURCES AND EFL LEARNERS' READING COMPREHENSION" para optar por el título de Magister presentado por CYNTHIA ALEJANDRA LANDÁZURI ALVAREZ C.C. 180475620-1 en calidad de investigadora, se extiende la presente CARTA DE INTERES INSTITUCIONAL, para que el mencionado proyecto de investigación, pueda ser ejecutado en la Institución siempre que la investigadora cuente previamente con todos los requisitos exigidos por la Ley.

En este sentido, la "UNIDAD EDUCATVA BAÑOS" mantendrá la comunicación expedita e intercambio de información necesaria para armonizar el interés Institucional, con el interés de la investigadora solicitante.

Particular que comunico para los fines pertinentes.

Atentamente.

Mg. Javier Sánchez C. RECTOR (E)



## **Annex 2:** survey web 3.0

## https://forms.gle/cjsd8fQCUwHK2ezF8

AN	MBATO FACULTAD DE CIENCIAS						
	HUMANAS Y DE LA EDUCACIÓN						
OBJE	PROYECTO DE INVESTIGACIÓN: "Desarrollo de herramientas web 3.0 en la educación ". OBJETIVO: Diagnosticar el uso de herramientas web 3.0 en el aprendizaje: Marca la respuesta según tu experiencia real con las herramientas web 3.0 en el entorno educativo.						
3	cintybebe@gmail.com (no compartidos) Cambiar de cuenta						
*Obli	gatorio						
Elija	los tipos de herramientas 3.0 que usted utiliza para aprender: *						
0	Kahoot						
0	Wix						
0	Canva						
0	Mural						
0	Classdojo						
0	Redes sociales (Facebook, Instagram, Tik-Tok)						
0	Página personal (Blog, correo electrónico)						
0	Plataformas educativas (moodle, easle)						
0	Dispositivos móviles (Whatsapp, telegram, viber, etc.)						
0	Zoom, Teams						
0	Microsoft forms, google forms						
¿Coi	n qué frecuencia utiliza herramientas tecnológicas 3.0 para aprender? *						
0	Nunca						
0	Raramente						
0	Ocasionalmente						
0	Frecuentemente						
0	Muy frequentemente						
2001	n qué frecuencia utilizan los docentes las herramientas 3.0 para enseñar? *						
0	Nunca						
0	Raramente						
	Ocasionalmente						
0	Ocasionalmente						

**Note**: Survey Web 3.0

## **Annex 3:** Field research survey



## SURVEY ADDRESSED TO SIXTH GRADE OF ELEMENTARY SCHOOL UNIDAD EDUCATIVA BAÑOS

## "Multimedia resources and reading comprehension"

Objetivo: Explorar las opiniones y la acentación de los estudiantes sobre la aplicación

Objetivo. Explorar las opi	mones y la aceptación de	of los estudiantes source la	i apricación
de recursos multimedia en l	a comprensión lectora.		
1: En las clases, el doc	ente aplica estrategias	que promueven la co	mprensión
lectora (pre, durante y pos	st lectura).		
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			
2: El docente utiliza recur	rsos multimedia para ap	ooyar la comprensión le	ctora.
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			
3: El uso de recursos mult	-		
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo )			
4: Mi motivación por la le	ctura ha aumentado cor	ı el uso de recursos mul	timedia.
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			
5: El profesor proporcion	na materiales de compr	ensión lectora utilizand	lo recursos

multimedia.

Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			
6: Debido al uso de	recursos multimedia, mi	is habilidades de lectu	ra se han
enriquecido.			
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			
7: Puedo interactuar m	ejor en clases con el uso d	e recursos multimedia.	
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			
8: El uso de recursos m	ultimedia ha sido benefici	oso en mi proceso de ap	rendizaje.
Muy en desacuerdo	En desacuerdo	De acuerdo	Muy de
acuerdo			

## **Annexes 4:** Survey 3.0 (TAM)

## https://forms.gle/jcRJKE8fPQoQEogb6

The purpose of this instument is to determine whether students accept or reject a specific information technology based on the TAM model in order to gather the necessary information for assessing the acceptance of web 3.0 in education.						
cintybe	be@gmail.co	om (no compa	artidos) Camb	iar de cuenta		0
Read each statement carefully and assign a score of 1 to the lowest and a score of 5 to the highest. 1 Strongly disagree 2 Disagree 3 Undecided 4 Agree 5 Strongly agree						
1. Using wel	o 3.0 tools a	allows me to	get my wor	k done faste	r*	
	1	2	3	4	5	
	0	$\circ$	$\circ$	$\circ$	$\circ$	
2. The use o	of technolog	gical tools in	virtual class	es improves	the quality of my	
	of technolog	gical tools in 2	virtual class	es improves 4	the quality of my	

Note: Survey Web 3.0 (TAM) in forms tool

#### **Annex 5:** Pre-test/Post-test



# UNIDAD EDUCATIVA "BAÑOS" "PRE AND POST TEST FOR SIXTH GRADE STUDENTS"

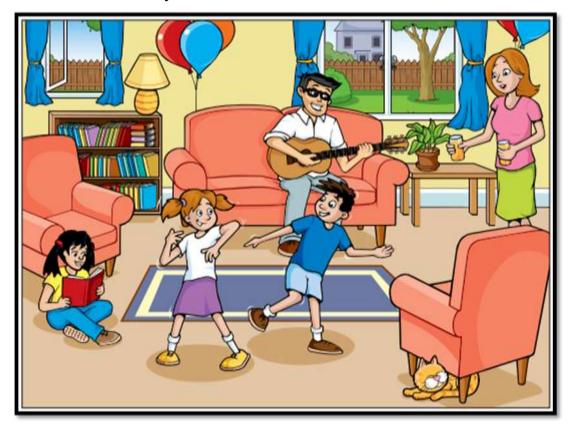
### **INSTRUCTIONS**

- Click on the following link:
- <a href="https://es.liveworksheets.com/5-ek132639za">https://es.liveworksheets.com/5-ek132639za</a>
- Write your full name.
- Read the questions carefully.
- The test is about 40 minute.

Student name: .....

#### Part 1

Look and read. Write yes or no.



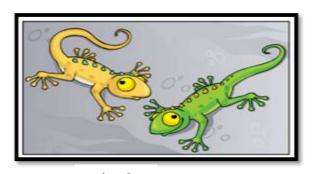
## **Examples**

There	are two armchairs in the living room.		yes	
The b	ig widow is open.		no	
Quest	ions			
1.	The man has got black hair and glasses.	• • • • • • • • • • • • • • • • • • • •		
2.	There is a lamp on the bookcase.	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •
3.	Some of the children are singing.	•••••	• • • • • •	• • • • • • • • • • • • • • • • • • • •
4.	The woman is holding some drinks.			
5.	The cat is sleeping under an armchair.			

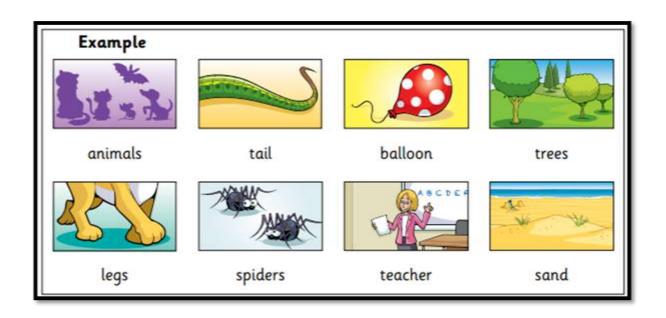
#### Part 2

Read this. Choose a word from the box. Write the correct word next to numbers 1–5. There is one example.

### Lizards

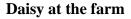


Lots of lizards are very small ... animals .... but some are really big. Many lizards are green, grey or yellow. Some like eating (1)...... and some like eating fruit. A lizard can run on its four (2)..... and it has a long (3)..... at the end of its body. Many lizards live in (4)..... but, at the beach, you can find some lizards on the (5)...... Lizards love sleeping in the sun!



Part 3

Look at the pictures and read the story. Write some words to complete the sentences about the story. You can use 1, 2 or 3 words.





Daisy's family lived in a flat in the city, but every weekend they drove to the countryside to see Daisy's grandparents. They lived on a farm.

In the car, last Saturday, the family talked about the farm.

- 'It's so quiet there!' Daisy's Mum said.
- 'I like working outside!' her father said.
- 'I love helping Grandpa with all the animals,' Daisy said. 'Look! Here we are!'

### **Examples**

Daisy's home was..... in the city ..... Daisy's family went to the ..... countryside .... by car every weekend.

#### **Questions**

- 1. Daisy's mother liked the farm because it was a ...... place.
- 2. Daisy enjoyed working with ...... on the farm.



They were surprised when they saw six noisy trucks on the farm. And when they got out of the car, it started to rain. It was cold, too.

- 'Oh dear!' Daisy's mum said. 'It's very noisy here today.'
- 'And I can't work outside in this rain,' Daisy's father said.
- 'Well, you two can sit and have tea with Grandma,' said Daisy. 'But I have to help Grandpa with the cows and sheep!'
  - 3. There were some ...... outside the house when they drove into the farm.
  - 4. Daisy's dad didn't want to ...... in the wet weather.
  - 5. Daisy told ...... to go and have tea with her grandmother.



Daisy worked all afternoon in the cold, wet weather. She gave the cows their dry grass, washed some sheep and carried vegetables.

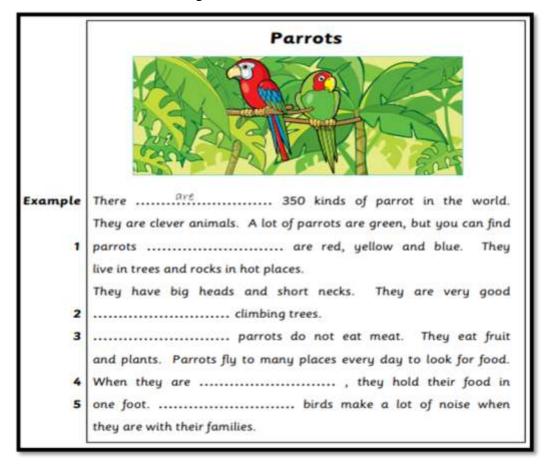
After dinner, Daisy was tired but happy. 'The best farmer in your family isn't your dad or your mum. It's you, Daisy!' her grandfather said.

'That's good because I want to be a farmer like you one day, Grandpa,' Daisy answered!

- 6. Daisy was ...... after all her work outside.
- 7. Grandfather said Daisy was the ..... in her family!

Part 4
– 5 questions –

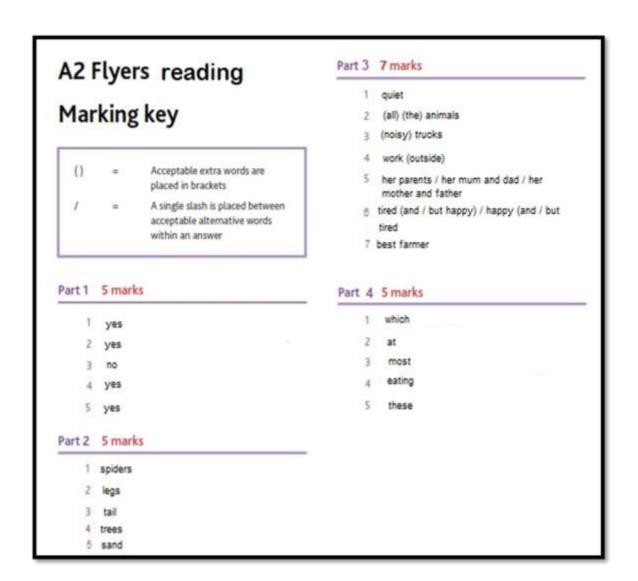
Read the text. Choose the right words and write them on the lines.



Example	is	are	was
1.	what	which	where
2.	at	one	of
3.	Every	Both	Most
4.	eating	ate	eat
5.	That	These	This

**Retrieved from:** <a href="https://www.cambridgeenglish.org/images/young-learners-sample-papers-2018-vol1.pdf">https://www.cambridgeenglish.org/images/young-learners-sample-papers-2018-vol1.pdf</a>

#### **Annex 6:** Answer sheet



*Note:* retrieved from:

 $\underline{https://www.cambridgeenglish.org/Images/357180\text{-}starters\text{-}movers\text{-}and\text{-}flyers\text{-}}\\ \underline{handbook\text{-}for\text{-}teachers\text{-}2021.pdf}$ 

# **Annex 7:** Application

## **SESSION 1: Pre-test**

	OUP 2
PRE TEST FOR SIX	TH GRADE STUDENTS*
INSTRUCTION	
<ul> <li>Read the questions carefully.</li> </ul>	
Thony Malusin 6+6 Bo	
Part 1	Part 3
• Yes	In the city
• No	Countryside
1. Yes	1. quiet
2	2 Grandpa
3no	3 nois trucks
4	4 Work outside
syes	s Well
Part 2	a tired but happy
<ul> <li>Animals</li> </ul>	7. best farmer
(1) Spiders	Part 4
(2) egs	• Are
(3) tail	1. Which
(4) trees	2. gt
(5) Sand	3. most
	4. eating
	s. atc

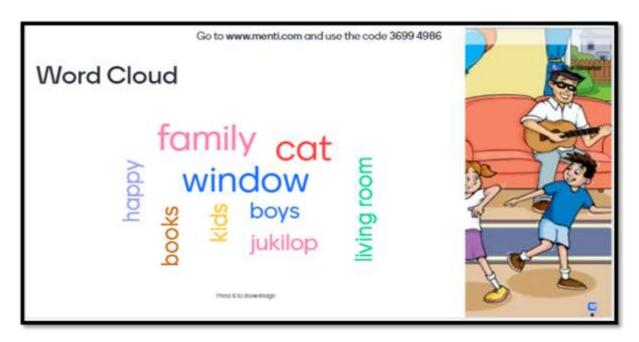
## **SESSION 2 -** READING 1

LESSON PLAN 1				
Teacher's nam	e: Cynthia Landázuri			
Date: January 1	8 <sup>th</sup> , 2021	Time: 40 minutes		
Level: Sixth				
LANGUAGE SKILLS:	Reading and writing			
GENERAL O	BJECTIVE:			
- Students	s will be able to read and talk about what they can see in a pictu	re		
SPECIFIC OB	SJECTIVES:			
- To prace	tice vocabulary			
- Answer	W/h questions			
- To read	for details to identify specific information			
Materials:	Mentimeter,canva, NearPod, Padlet, Liveworksheets			
	Procedure:			
Time:	Activities:	Materials:		
10 min	Pre- reading	Mentimeter		

Warm up activity:	https://bit.ly/3xWuqKe
-The teacher shows students a family picture and asks them to access to Mentimeter. They must enter with the link and	
brainstorm their ideas about what they can see in the picture	
Then, the teacher checks the students' ideas and shows vocabulary related to the picture using canva in order to get a better idea	Canva <a href="https://bit.ly/3fb5iJc">https://bit.ly/3fb5iJc</a>
-Teacher engages students to participate in order to predict what happen in the picture.	inteposition of the second of
While – reading	
-Teacher asks students to read some sentences in canva and compare with the picture. Then, write "yes" if the sentences are according to the picture and write "no" if the sentences are different	
-Teacher sends students a NearPod link and the code <b>5867R</b> in order to practice vocabulary -Teacher gives students feedback	NearPod <a href="https://bit.ly/3foI1DF">https://bit.ly/3foI1DF</a>
Post-reading	Padlet
-Teacher asks students to choose one word of the vocabulary, look for the meaning in the dictionary and write in the padlet -Teacher asks students to match each sentence with the correct picture in the liveworksheet.	https://bit.ly/3Re4r7Z liveworksheet https://bit.ly/3dHAtvB
	-The teacher shows students a family picture and asks them to access to Mentimeter. They must enter with the link and brainstorm their ideas about what they can see in the picture  Then, the teacher checks the students' ideas and shows vocabulary related to the picture using canva in order to get a better idea.  -Teacher engages students to participate in order to predict what happen in the picture.  While – reading  -Teacher asks students to read some sentences in canva and compare with the picture. Then, write "yes" if the sentences are according to the picture and write "no" if the sentences are different  -Teacher sends students a NearPod link and the code 5867R in order to practice vocabulary -Teacher gives students feedback  Post-reading  -Teacher asks students to choose one word of the vocabulary, look for the meaning in the dictionary and write in the padlet

#### **MENTIMETER** - PICTURE

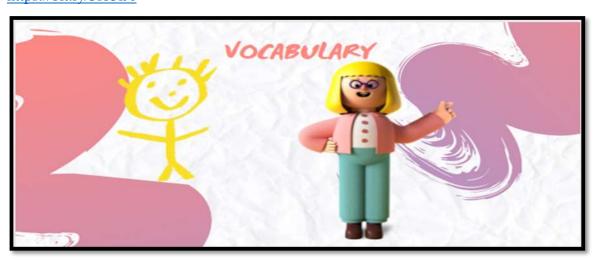
## https://bit.ly/3xWuqKe



Note: Mentimeter activity base don the picture

#### **CANVA** – VOCABULARY

### https://bit.ly/3fb5iJc



Note: Presentation of the vocvabulary in Canva

### **NEARPOD**

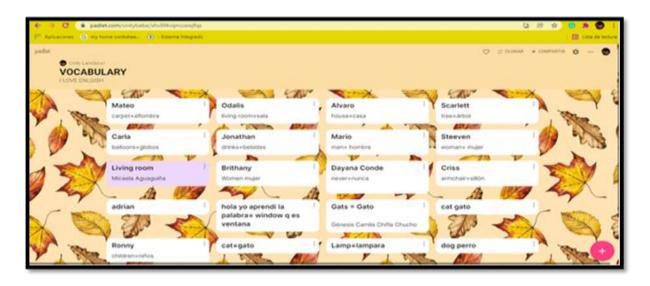
## https://bit.ly/3foI1DF



Note: Students asnwered some questions using the nearpod tool

## **PADLET** – VOCABULARY

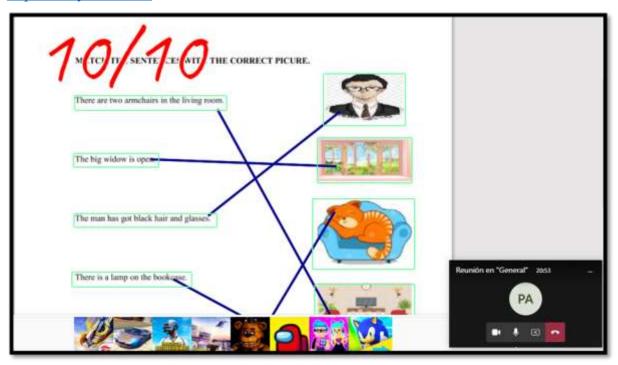
## https://bit.ly/3Re4r7Z



Note: In the padlet studets wrote some new words for them with the meaning

## **LIVEWORKSHEET** - MATCHING

## https://bit.ly/3dHAtvB



Note: Activity using liveworksheet tool

## **SESSION 3 -** READING 2

	LESSON PLAN 2	
Teacher's nam	e: Cynthia Landázuri	
Date: January 1	19 <sup>th</sup> , 2021	Time: 40 minutes
Level: Sixth		
LANGUAGE SKILLS:	Reading and writing	
SPECIFIC OB  - To prace	s will be able to identify key words in order to complete the reac	
	Procedure:	
Time:	Activities:	Materials:
10min	Pre- reading  Warm up activity:	Canva <a href="https://bit.ly/3flXQLz">https://bit.ly/3flXQLz</a>

	-Teacher shows students some vocabulary words in canva	liveworksheet
	and gives students a liveworksheet in order to practice the new vocabulary	https://bit.ly/3r7MBsI
	-Teacher gives students a summary of the story using some pictures in a genially.	Genially <a href="https://bit.ly/3fgXx4B">https://bit.ly/3fgXx4B</a>
	-teacher uses KWL chart, gives to students the link and asks them to complete with information they know before about the reading, what they would like to learn and what they learned during the reading. KWL:	KWL: <a href="https://bit.ly/3SyQDG">https://bit.ly/3SyQDG</a> <a href="mailto:m">m</a>
20min	While – reading	
	-Teacher shows students the reading passage and ask them to read each sentence by turns using power point  -teacher asks students to complete the reading using the new vocabulary	Power point
10min	<ul> <li>-Teacher asks students to scan the story for answering some questions in kahoot using the code.</li> <li>-Teacher looks at students score and share them</li> <li>Post-reading</li> </ul>	kahoot <pre>https://bit.ly/3BMg8N E</pre>
	-Teacher gives feedback	padlet
	-Teacher asks students to write the characteristics of lizards in the padlet	https://bit.ly/3BMXDs h

### **CANVA** - VOCABULARY

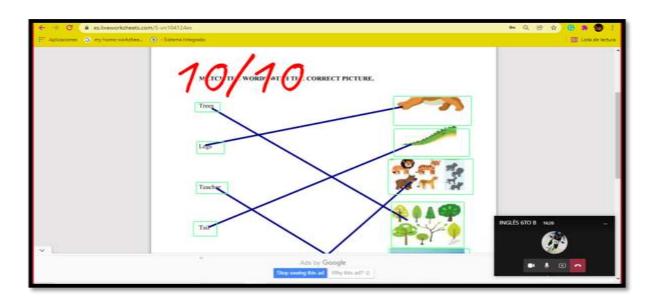
## https://bit.ly/3flXQLz



Note: Presentation of the vocvabulary in Canva

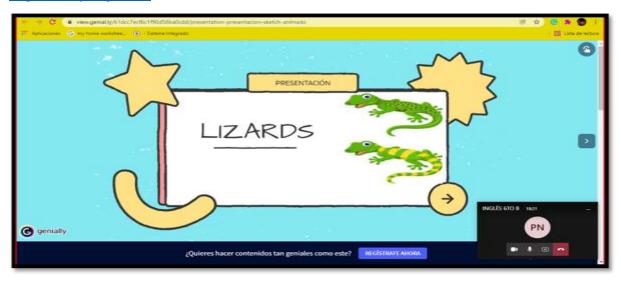
## LIVEWORKSHEET - MATCHING

https://bit.ly/3r7MBsI



*Note:* Acitvity using liveworksheet tool **GENIALLY** – SUMMARY OF THE STORY

## https://bit.ly/3fgXx4B



Note: Presentation of a reading in the geanially tool

## **KWL: KNOWLEDGE**

## https://bit.ly/3SyQDGm



Note: Acitivity in the KWL chart

## **POWER POINT** – READING ABOUT LIZARDS

		LIZARI		
Mai	s of lizards are veny lizards are gre	en grev or vellow	Some like eating	are really big.
(2). bod find	y. Many fizarus l some lizards or	and some like eating it has a long (3 live in (4) tree the (5).	s but, at the	at the end of its beach, you can e sleeping in the
sun	!			o oloopiiib iii alio
	Lund		~ <b>&amp;</b>	
	animals	tail	balloon	trees
	453		7	The state of
	legs	spiders	teacher	sand

Note: Reading activity in power point

## **KAHOOT** – QUESTIONS ABOUT THE READING

https://bit.ly/3BMg8NE

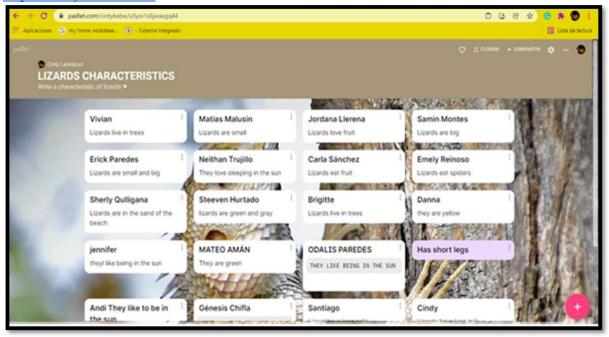




Note: Game based on aswering some questions

## **PADLET** – LIZARDS CHARACTERISTICS

https://bit.ly/3BMXDsh



Note: Students wrote in the padlet some characteristics of lizards

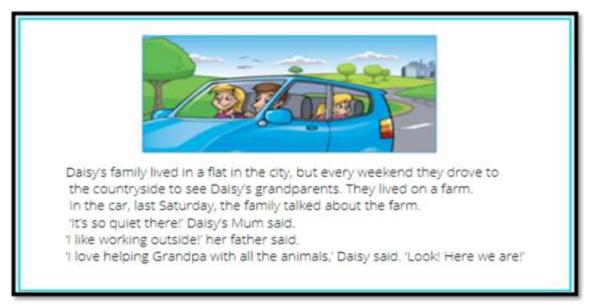
## **SESSION 4 - READING 3**

	LESSON PLAN 3	
Teacher's name:	Cynthia Landázuri	
Date: January 20 <sup>t</sup>	Time: 40 minutes	
Level: Sixth		
LANGUAGE SKILLS:	Reading and writing	
- Ask and a	vill be able to read and answer some questions  ECTIVES:  nswer W/h questions	
	Procedure:	
Time:	Activities:	Materials:
10min	Pre- reading	Canva
	Warm up activity:	https://bit.ly/3flXtRb
	-Teacher shows students some pictures using canva and	

	T	T
	asks them to predict the story	
	-Teacher gives students a link of Mentimeter and asks them to write some ideas about the story.	Mentimeter <a href="https://bit.ly/3SeIZkL">https://bit.ly/3SeIZkL</a>
	While – reading	
20min	-Teacher shows the story using Canva and makes students	Canva
	to skim. Then asks them what the story is about.	https://bit.ly/3LMAjzx
	-Teacher makes students read the story by turns	
	Teacher asks students to complete the sentences about the	
	story using 1, 2 or 3 words.	
	Post- reading	liveworksheet
	-Teacher shows students a liveworksheet and asks them to	https://bit.ly/3DVECq
10min	match the paragraphs of the story with the correct pictures. At the end of the activity the teacher shows the	<u>h</u>
	score of the worksheet and give feedback.	
	-Teacher asks students to answer some question in kahoot	kahoot
		https://bit.ly/3BMfDT  M

#### **CANVA** – DAISY'S FAMILY

### https://bit.ly/3flXtRb



Note: Presentation of a reading using Canva

#### **MENTIMETER**

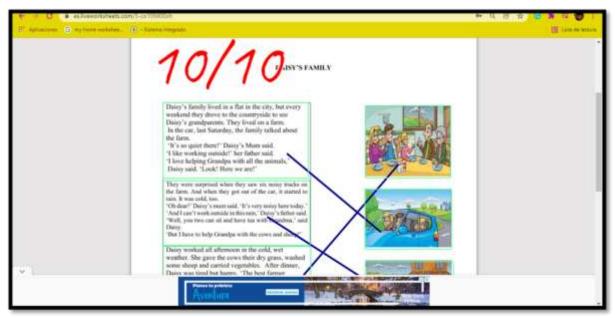
https://bit.ly/3SeIZkL



*Note:* Activity based on the reading using mentimeter tool

#### **LIVEWORKSHEET** – MATCHING THE SOTRY

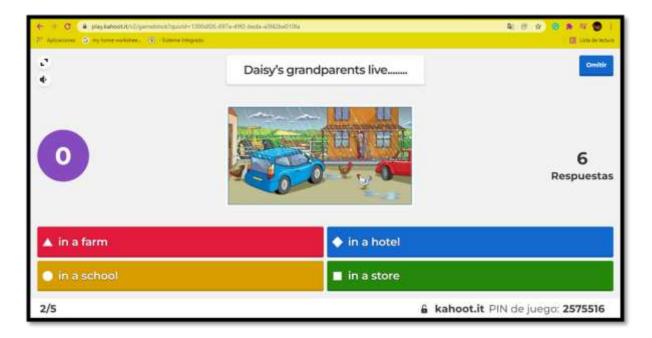
## https://bit.ly/3SeIZkL



Note: Reading activity using liveworksheet tool

## **KAHOOT** – QUESTIONS ABOUT THE READING

### https://bit.ly/3BMfDTM





Note: Kahoot game by asnwering some questions

## **SESSION 5** – READING 4

	LESSON PLAN 4	
Teacher's name	: Cynthia Landázuri	
Date: January 21	Time: 40 minutes	
Level: Sixth		
LANGUAGE SKILLS:	Reading and writing	
GENERAL OBJ	IECTIVE:	
- Students v	will be able to read and complete the reading passage	
SPECIFIC OBJ	ECTIVES:	
- To read fo	or details	
- To Ask ar	nd answer W/h questions	
- To practic	ee vocabulary	
Materials:	Puzzle, canva, liveworksheets, Near Pod, padlet	
	Procedure:	
Time:	Activities:	Materials:
5min	Pre- reading	

	Warm up activity:	Puzzle
	-Teacher gives students a link and asks them to make the puzzle in order to discover the picture	https://bit.ly/3dJdGiV canva
	-Teacher presents and explains the meaning of some words that students are going to use in the reading using canva	https://bit.ly/3xQIYLl
25min	While – reading	
	-Teacher presents students the reading about parrots and asks them to read by turns	
	-Teacher asks students to complete the text using the words given before.	
	- Teacher read again the text and asks them to repeat with the correct pronunciation.	
10min	-Teacher asks to complete a liveworksheet about the reading	liveworksheet <a href="https://bit.ly/3CdPA9x">https://bit.ly/3CdPA9x</a>
	Post-reading	
	-Teachers gives students a link of Near Pod in order to answer some questions about parrots	NearPod <a href="https://app.nearpod.co">https://app.nearpod.co</a> <a href="mailto:m/?pin=fmuw7">m/?pin=fmuw7</a>
	-Teacher asks students to draw how they would like their parrot to be, write some characteristics and upload their task to the padlet assigned	Padlet <a href="https://bit.ly/3Rv7cCd">https://bit.ly/3Rv7cCd</a>

#### **PUZZLE - PARROTS**

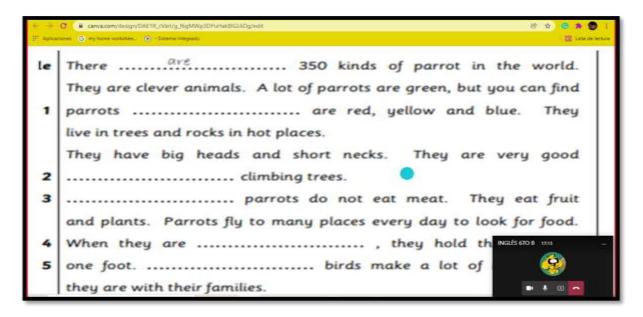
### https://bit.ly/3dJdGiV



*Note:* Students participated in the puzzle based on parrots

#### **CANVA** – PARROTS READING

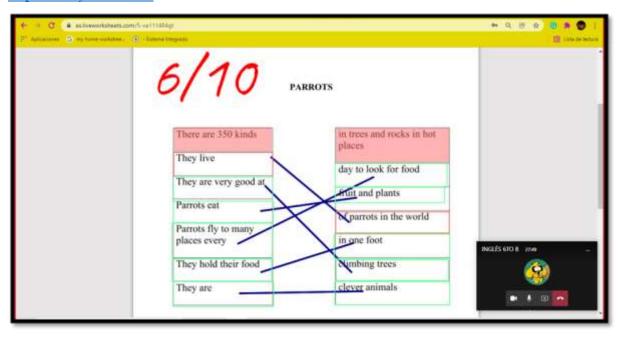
https://bit.ly/3xQIYLl



Note: Reading presentation using Canva tool

### **LIVEWORKSHEET** – COMPLETE THE SENTENCES

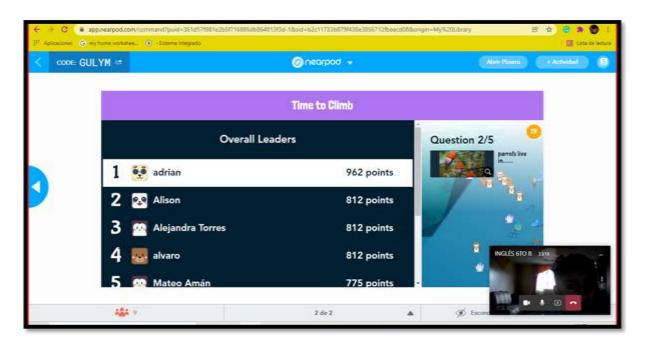
https://bit.ly/3CdPA9x



Note: Activity based on the previous reading using liveworksheet tool

## **NEARPOD** – QUESTIONS ABOUT THE STORY

## https://bit.ly/3dFGBEF

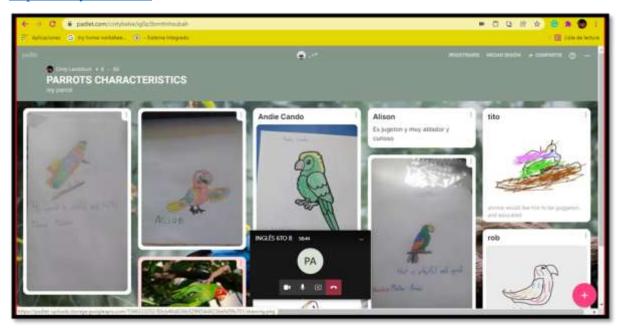




*Note:* Nearpod game based on questions

## **PADLET** – DRAWINGS AND CHARACTERISTICS ABOUT PARROTS

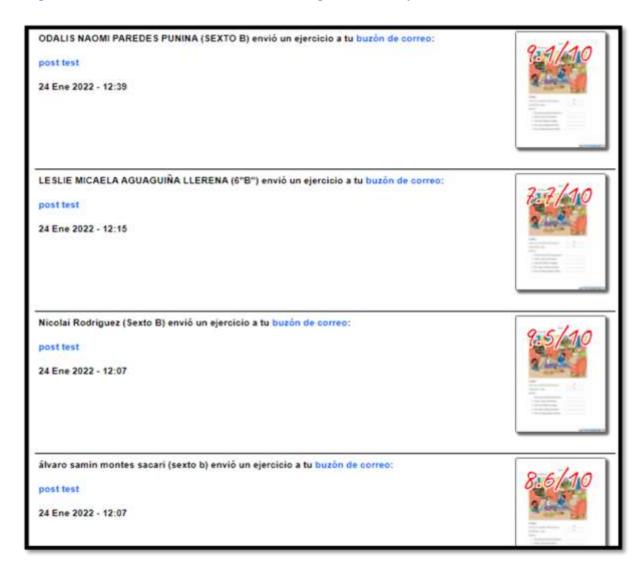
## https://bit.ly/3Rv7cCd



Note: Students draw parrots and wrote some characteristics

### **SESSION 6: POS-TEST**

https://es.liveworksheets.com/showanswers.asp?idanswers=ys2791366et



*Note:* Students did the post-test using liveworksheet tool.

## **Annex 8:** Validation survey



# UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN POSGRADO

MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS, MENCIÓN INGLÉS COHORTE 2021

Avda. Los Chasquis y Rio Payamin, Ambato - Ecuador

#### FORMATO PARA LA VALIDACIÓN DE LA ENCUESTA PERTENECIENTE A LA INVESTIGACIÓN:

#### "MULTIMEDIA RESOURCES AND EFL LEARNERS' READING COMPREHENSION"

Objetivo: Explorar las opiniones y la aceptación de los estudiantes sobre la aplicación de recursos multimedia en la comprensión lectora.

AUTORA: Cynthia Alejandra Landázuri Álvarez

Señale con un 🗸 según la validación para cada pregunta:

1D; DEFICIENTE 2R; REGULAR 3B; BUENO 4O; OPTIMO

PARÂMETROS PREGUNTAS	Pertenencia de las preguntas del Instrumento con los objetivos				Pertenencia de las preguntas del Instrumento con las variables y enunciados				Galidad técnica y representatividad				Redacción y Lenguaje de las preguntas			
	10	2R	38	40	10	28	38	40	10	28	38	40	10	2R	3B	40
En las clases, el docente aplica estrategias que promueven la comprensión lectora (pre, durante y post lectura).	2	(6)	3	x		234	38	х	SP - 8		3	х		8		х
El docente utiliza recursos multimedia para apoyar la comprensión lectora.				×				x				×				x
<ul> <li>A Él uso de recursos multimedia facilita la comprensión de textos.</li> </ul>	5	0	20	×		23	50	×	92 - 3 92 - 3			x				×
<ol> <li>Mi motivación por la lectura ha aumentado con el uso de recursos multimedia.</li> </ol>				×				×				x				×
5 El profesor proporciona materiales de comprensión lectora utilizando	į.	8	50	×		50	26	×	80 S		9	×		- 3	-8	×
recursos multimedra, 6 Debido al uso de recursos multimedia, mis habilidades de lectura se han enriquecido.				x				×				x				x
<ol> <li>Puedo interactuar mejor en clases con el uso de recursos multimedia.</li> </ol>		88		x				×				×				×



8,- El uso de recursos multimedia ha

# UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN POSGRADO

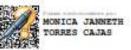
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Avda. Los Chasquis y Rio Payamin, Ambato - Ecuador

sido beneficioso en mi proceso de aprendizaje.		- 1	H - 10		6.		9 9	, ,		
BSERVACIONES :										

	CYNTHIA ALEJANDRA LANDAZURI ALVAREZ
1	

Realizado For: Lic. Cynthia Alejandra Landázuri Álvarez CI: 1804756201



Validado For: Mg. Mónica TorresFhD CI: 0601877368



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Señale con un ✓, según la validación para cada pregunta:

1D: DEFICIENTE 2R: REGULAR 3B: BUENO 40: OPTIMO

PARAMETROS	Pertinencia de las preguntas del Instrumento con los objetivos					Pertinencia de las preguntas del Instrumento con las variables y enunciados					Calidad técnica y representatividad				Redacción y Lenguaje de las preguntas			
	10	2R	3B	40	1D	2R	38	40	1D	ZR	38	40	10	2FI	38	40		
<ol> <li>En las clases, el docente aplica estrategias que promueven la comprensión lectora (pre, durante y post lectura).</li> </ol>	3.000			1								-		35.43				
<ol> <li>El docente utiliza recursos multimedia para apoyar la comprensión lectora.</li> </ol>	0	123		1			90	~				_		8	1% 160	60		
<ol> <li>El uso de recursos multimedia facilita la comprensión de textos.</li> </ol>		ľ		V		1		1				~	n			T		
<ol> <li>Mi motivación por la lectura ha aumentado con el uso de recursos multimedia.</li> </ol>	S.	100		1			1	~				-		ii.	(c)	10		
<ol> <li>El profesor proporciona materiales de compressión lectora utilizando recursos multimedia.</li> </ol>				~				~				_						
6 Debido al uso de recursos multimedia, mis habilidades de lectura se han enriquecido.		100		1			3	~				-		10.	67	30		
<ol> <li>Puedo interactuar mejor en clases con el uso de recursos multimedia.</li> </ol>				<b>√</b>				V				~						
<ol> <li>El uso de recursos multimedia ha sido beneficioso en mi proceso de aprendizaje.</li> </ol>		102	8	1			3	1		5		-		15-	67	10		



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Avda. Los Chasquis y Rio Payamin, Ambato - Ecuador

OBSERVACIONES:			



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Realizado For: Lic. Cynthia Alejandra Landázuri Álvarez CI: 1804756201



Validado For: Lic. Mg. Wilma Suárez CI: 1802859841

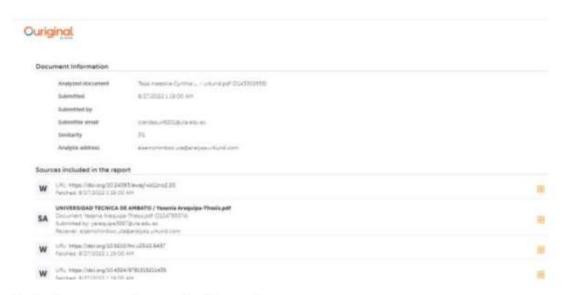
## Annex 9: urkund report

Ambato agosto 30, 2022

Doctor Víctor Hernández del Salto PRESIDENTE UNIDAD ACADEMICA DE TITULACIÓN FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN UNIVERSIDAD TÉCNICA DE AMBATO Presente.

#### De mi consideración:

Por medio de la presente pongo en conocimiento el reporte del URKUND del trabajo de investigación con el tema "MULTIMEDIA RESOURCES AND EFL LEARNERS' READING COMPREHENSION", presentado por la maestrante Cynthia Alejandra Landázuri Álvarez, mismo que evidencia un 3% de similitud, como se puede observar en la captura de pantalla siguiente:



Particular que comunico para los fines pertinentes. Atentamente,

chimbo caceres

Dra. Elsa Mayorie Chimbo Cáceres, Mg.

Director