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FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACION

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

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Interactive multimedia resources and speaking skills

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CERTIFY:

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I declare this undergraduate dissertation entitled "Interactive multimedia resources and speaking skills" is the result of the author's investigation and has reached the conclusions and recommendations described in the present study.

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DEDICATION

TO:

God because he has given me the intelligence, wisdom, strength, and capacity to do this research. I am grateful to God because he cared of me all this time and has given me the best family. Additionally, I would like to dedicate this to my parents because I have received their support and unconditional love. They have motivated me to study and always give the best of myself. My siblings who have given me their support when I wanted to forget everything. And finally, I would like to mention my two nephews, who I hope that they can read this and know that they were significant support for me.

Jemima

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FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

THEME: Interactive multimedia resources and speaking skills

AUTHOR: Jemima Abigail Torres Pérez

TUTOR: Dra. Mg. Elsa Mayorie Chimbo Cáceres

ABSTRACT

The present study analyzed students' perspective on interactive multimedia resources and speaking skills. A total of 63 children (35 males and 28 females) participated in descriptive research. Data was collected using a survey with 21 items on a Likert scale and 3 open-ended questions. The survey was divided into three sections: types of interactive multimedia for educational purposes, interactive multimedia strategies and strategies to improve speaking skills. This survey was validated by Cronbach's Alpha coefficient, of which obtained a value of 0,925. In addition, the research was based on three research questions according to the stated objectives of this study. In the first section, the results revealed that the types of interactive multimedia most used by students are virtual platforms and interactive videos. However, students mentioned that they would like to implement interactive whiteboards during their lessons. In the second section, the results showed that students also used various interactive multimedia strategies. The most selected strategies were small quizzes and online activities. However, the English teacher used more the strategy of audiovisual materials for language teaching. In the last section, it was observed that there were several strategies to apply to improve speaking skills. Most of the students preferred dialogues, surveys, and questionnaires. Finally, it was concluded that most teachers use interactive multimedia resources during their lessons as it is a fun and innovative way of teaching. In addition, the students enjoy their learning process showing positive results in the learning of the second language, which is English.

Key words: interactive multimedia, types of interactive multimedia, strategies, speaking skills.

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RESUMEN

El presente estudio analizó la perspectiva de los estudiantes sobre los recursos multimedia interactivos y la habilidad del habla. Un total de 63 niños (35 hombres y 28 mujeres) participaron en una investigación descriptiva. Los datos se recogieron mediante una encuesta con 21 ítems en una escala de Likert y 3 preguntas abiertas. La encuesta se dividió en tres secciones: tipos de multimedia interactiva con un propósito educacional, estrategias de multimedia interactiva y estrategias para mejorar la habilidad del habla. Esta encuesta fue validada mediante el coeficiente Alfa de Cronbach, la cual obtuvo un valor de 0,925. Además, la investigación se basó en tres preguntas de investigación de acuerdo a los objetivos planteados de este estudio. En la primera sección, los resultados revelaron que los tipos de multimedia interactiva más utilizados por los estudiantes son plataformas virtuales y videos interactivos. Sin embargo, los estudiantes mencionaron que les gustaría que se implementara pizarrones interactivos durante sus lecciones. En la segunda sección, los resultados mostraron que los estudiantes también utilizaban varias estrategias de multimedia interactiva. Las estrategias más seleccionadas fueron pruebas pequeñas y actividades en línea. Sin embargo, el profesor de inglés utilizaba más la estrategia de materiales audiovisuales para la enseñanza del idioma. En la última sección se observaron que hubo varias estrategias que aplicar para mejorar la habilidad del habla. La mayoría de los estudiantes prefirieron los diálogos, encuestas y cuestionarios. Finalmente, se pudo concluir que la mayoría de profesores utilizan recursos multimedia interactivos durante sus lecciones como una forma divertida e innovadora de enseñar. Además, que los estudiantes disfrutaban de su proceso de aprendizaje mostrando resultados positivos al aprendizaje del segundo idioma que es el inglés.

Palabras clave: multimedia interactiva, tipos de multimedia interactiva, estrategias, habilidad del habla

CHAPTER I. THEORETICAL FRAMEWORK

1.1 Research background

This research used several research resources to conduct this research. In addition, the information found in this study was collected from different academic papers and journals. Therefore, many teachers try to make their classes interactive for their students. In addition, the information collected is about interactive multimedia resources and speaking skills.

Mahdi (2022) aimed to analyze the relationship between student language skills and interactive multimedia. In this case, a mixed-method study combining qualitative and quantitative approaches has been employed. Forty-six students from the Faculty of Languages and Translation at King Khalid University were selected. In this study, one group was taught using a traditional teaching method, while the other group was exposed to interactive multimedia. The researcher observed that the use of interactive multimedia had a positive influence on the development of students' speaking skills.

Lisnawati (2021) developed a study with the objective of describing the use of multimedia to learn speaking skills. In this study, the literature method was used. The use of different books, articles, journals, and other documents was studied. On the other hand, this research discussed important aspects of multimedia, including its definition, various types, benefits, advantages, and weaknesses. The researcher concluded that multimedia is beneficial for improving speaking skills, as it enables students to develop their speaking abilities.

Lempas et al. (2021) reported that the objective of the study was to examine the demand of students for interactive multimedia in virtual learning. The participants in this study were eighteen teachers and ninety students. The methodology used was a descriptive method and a qualitative approach in order to identify what needs students

have. In addition, data collection techniques included interviews and questionnaires. In conclusion, the research showed that participants considered the use of multimedia to be more effective during the pandemic.

Shofi (2020) managed a study whose objective was to determine the effectiveness of interactive multimedia in learning language skills. The population was composed of students from the second semester at the University of Qomaruddin Gresik. The methodology applied was classroom action research, which is divided into two cycles. The first cycle consisted of four steps such as planning, action, observation, and reflection. Meanwhile, the second cycle consisted of using the same stages but solving the problems that occurred in the first cycle. Additionally, a qualitative and quantitative approach was used. In conclusion, the researcher mentioned that the implementation of multimedia had a good impact on students' speaking development.

Budiyanto (2019) conducted a study whose objective was to analyze the effectiveness of multimedia in English education, especially speaking skills. The research was conducted on third-semester students at Jinarakkhita Buddhist College. The methodology used was qualitative and descriptive. In addition, observation, interviews, questionnaires, and tests were used as data collection tools. The researcher concluded that the use of this multimedia is effective for learning speaking skills.

Rachmadtullah et al. (2019) developed a study with the objective of determining the effectiveness of interactive multimedia in elementary schools. This research was applied to students in the fifth grade at public elementary schools in Kabupaten Mempawah. The methodology used was an experimental design with an experimental group and a control group. Furthermore, the tool applied for data collection was a test. In conclusion, the research found that interactive multimedia is a more effective method of learning that enhances direct interaction among students.

Saputri et al. (2018) carried out a study whose objective was to describe the existence of interactive multimedia in the learning process. The population of this research was students from fifth grade primary school in Indonesia. The methodology used was descriptive research and a qualitative approach. Additionally, the tools used to collect the data was a questionnaire, an interview, and observation. However, the results showed that the teachers use a multimedia tool, which causes disinterest in the students. Finally, the research concluded that teachers needed to develop interactive multimedia to make classes more interesting and dynamic.

Misir (2018) managed a study with the objective of explaining the utilization of interactive and multimedia tools for language learning. In this study, a literacy study was conducted. Therefore, this comprehensive study delved into various crucial topics like recognizing prevalent concerns and obstacles in utilizing digital tools, assessing the authenticity of diverse sources, addressing the issue of plagiarism, and evaluating the efficiency of employing multimedia tools. In conclusion, the researcher emphasized the increased importance and relevance of multimedia tools compared to traditional materials.

Jeong (2018) explained that the purpose of the study was to explore ways to develop English as a foreign language using multimedia. The participants of this study were students from an intermediate level at a university in Korea. During the research, the participants were required to engage the classroom with the purpose of improving their speaking skills. Additionally, for data collection, questionnaires and interviews were applied. Finally, the researcher determined that using multimedia had a positive impact on the participants' English study, improving motivation and overall performance.

For this research, various articles, academic papers, and journals were consulted to gain a deeper understanding of the application of interactive multimedia in developing speaking skills. Additionally, most of the papers employed experimental methodologies, conducting both pre-tests and post-tests, and employing a combination

of qualitative and quantitative approaches. On the other hand, only a few papers were descriptive research with questionnaires and interviews using a quantitative approach. Therefore, this research focuses on descriptive research with a quantitative approach. In conclusion, the findings of these research papers consistently demonstrated the effectiveness of interactive multimedia for English language learning.

Theoretical foundation of the variables

Independent variable

Information and Communication Technology (ICT)

According to Arellano et al. (2016), ICT was first introduced in the 19th century with the invention of the telegraph in 1837 and telephone 1876. Additionally, the invention of these objects generated a significant advance in that period. Therefore, this technological advancement facilitated seamless communication, enabling individuals to easily connect and interact with others regardless of their location, whether it be within the same town or across continents. At the same time, two inventions were created that revolutionized the new era in the middle of the 20th century: radio and television. Radio allowed people to hear different voices, while television allowed people to see images and hear sounds. By the end of the century, the Internet had become crucial for various activities such as entertainment, communication, research, and staying updated. However, this resulted in the creation of the term ICT, which means Information and Communication Technology.

Many authors have different concepts of Information and Communication Technologies. Rouse (2023) defined ICT as the use of technologies and telecommunications to create, collect, process, transmit, and store information. In the same way, Ratheeswari (2018) reported that ICT refers to a wide array of technologies that enable seamless access to information via telecommunications, including the internet, networks, cell phones, and various communication tools. According to UNESCO (2023), ICT is described as a collection of technological tools and resources that are utilized for transmitting, creating, sharing, or exchanging information. To

conclude, ICT is all tools and resources that involve technology to share information around the world. Therefore, it has a great impact on nowadays as in society, economy, education, politics, and more.

ICT in education

Information and communication technologies in education play an important role. Pandey (2021) described ICT as the fuel of development and the essential ingredient of education. ICT empowers educators to foster innovative ideas in both the content of their lessons and the overall curriculum. Furthermore, it provides them with ample scope to create engaging learning materials and employ effective teaching methods.

Rouse (2023) acknowledged that with the increasing use of technology, there will be various changes, including the adoption of artificial intelligence and virtual reality. The use of ICT in education has transformed the way of teaching and learning. It has improved learning and engagement for students, allowing them to be more interested in various subjects. Additionally, it has also aided teachers in effectively sharing knowledge and connecting with their students.

Henderson (2020) indicated that the aim of ICT is to improve learner learning and teaching techniques. However, technology has been advancing, so many schools, universities, and institutions have had to adapt to the use of technology. Therefore, the use of ICT in education has made learners feel motivated and encouraged to learn. Some teachers have used ICT in their classes to engage their learners.

Educational advantages of ICT

Henderson (2020) proposed some benefits of using ICT in the classroom. First, it allows learners to engage with subjects as learning becomes more fun. Second, it improves the retention of information in learners as they feel attracted to what they are

learning. Fourth, it encourages autonomous work, as each learner can learn in their own way according to their different learning styles and abilities. Finally, it encourages collaborative work since learners can work with other learners through virtual environments.

According to Mubinakhon (2021), ICT plays an important role in education, providing numerous benefits for students in their personal and professional development. For this reason, educational institutions can benefit from the advancement of technology by enhancing their teaching materials. This can be achieved through measures like improving the quality of books and introducing virtual books and libraries. Therefore, students can perform activities autonomously to acquire new knowledge and experience. Additionally, ICT open new opportunities for students to learn new things by introducing innovative methodologies, strategies, and learning styles.

ICT tools

ICT has many tools that can be used in different applications. However, there are several tools available for teaching and learning that can be useful for both students and teachers. These tools can be applied in different fields of education. Therefore, several authors divide into different categories.

Alkamel and Chouthaiwale (2018) divided ICT tools into two types: non-web-based and web-based. Non-web-based learning tools, such as radio, television, films, overhead projectors, and language labs, are considered traditional tools that do not rely on the web. On the other hand, web-based learning refers to various online resources and platforms that use the web, such as YouTube, email, blogs, and smartphones.

Pandey (2021) classified ICT tools into three categories: physical tools, non-physical tools, and ICT services. First, physical tools refer to things you can see or

touch such as televisions, cell phones, modems, and computers. Second, non-physical tools refer to things that you cannot see or touch such as software and wireless networks. Finally, ICT services or communication technology services, are a collection of services that make communication and information exchange easier using technologies like the internet.

Web 3.0

John Berners-Lee (2006) stated that the goal of Web 3.0 is to develop a smarter and more interconnected internet, enabling machines to comprehend human semantic expression. In addition, John Berners-Lee admitted that the website will be personalized based on the preferences of everyone. However, Web 3.0 started a few decades ago with the creation of the WWW. In 1989, the brilliant English scientist Tim Berners-Lee revolutionized the world by creating and publishing the first website, marking the beginning of the extraordinary history of the World Wide Web (WWW).

However, Web 3.0 is the third generation of the World Wide Web. Essex et al. (2023) stated that Web 3.0 aims to provide access to documents and applications on the Internet. This vision involves unifying all the world's data into a web known as the semantic web. Therefore, Iqra (2023) defined Web 3.0 as a more intelligent web where machines can understand and interpret information. It incorporates new technologies such as artificial intelligence, machine learning, blockchain, and the Internet of Things (IoT). In contrast, Driscoll (2022) emphasized that Web 3.0 aims to reduce the influence of major corporations such as Google and Facebook, enabling individuals to freely exchange information without being subjected to company or government control.

Features of Web 3.0

According to Nasar (2023), Web 3.0 is expected to bring significant improvements and changes to the way people interact with technology. Web 3.0 has several important features including decentralization, interoperability, personalization,

enhanced security, AI, IoT, semantic web, transparency, incentivization, content monetization, openness, and user control. Therefore, Nasar (2023) explained each feature.

Decentralization: Web 3.0 is expected to allow users to have more freedom of information without the need for intermediaries.

Interoperability: Web 3.0 is expected to allow users to communicate with each other without problems, regardless of their technology.

Personalization: Web 3.0 is expected to provide personalized features for users with content according to each user's preferences.

Enhanced security: Web 3.0 is expected to have a lot of security to protect user data and privacy.

Artificial intelligence: Web 3.0 is expected to integrate artificial intelligence (AI) and machine learning (ML) capabilities to facilitate smarter decision-making.

Internet of Things (IoT): The expansion of Web 3.0 is set to revolutionize the Internet by enabling seamless communication and data exchange between technological devices.

Semantic web: Web 3.0 is expected to be a "semantic web" to improve the web where data is organized for machines.

Transparency: Web 3.0 is expected to be transparent to track information and ensure accountability and trust in online interactions.

Incentivization: Web 3.0 is expected to bring new methods for engaging users and promoting their participation in online communities.

Content monetization: Web 3.0 is expected to allow users to earn money through the content they create.

Openness: Web 3.0 is expected to allow the creation of new and innovative applications.

User control: Web 3.0 is expected to give users greater control over their online information.

Advantages and benefits of Web 3.0

Deepali (2023) explained some advantages and benefits of Web 3.0. First, data ownership is characterized by users having complete autonomy over their personal information, including the ability to choose what content they view, share, and explore. Second, there will be fewer intermediaries where users will not have to submit to any authority, like large companies. Third, transparency is achieved by allowing users to access their data without intermediaries. Fourth, efficient search and linking of information will allow users to find relevant information faster. Fifth, a personalized browsing experience where users will be able to obtain recommended sites based on their preferences. Finally, uninterrupted services without interruptions to users when using the applications.

Multimedia

Multimedia is the combination of two or more media such as text, audio, images, animation, and video (Guan et al., 2018). Multimedia can promote interaction, diversity, and integration between teachers and learners. By the mid-1990s, multimedia had become a new type of technology that attracted the attention of learners because they were interested in the subject, felt motivated, and paid attention to the lessons. Furthermore, multimedia offers teachers the ability to generate captivating visual aids, construct informative tables and graphs, and deliver engaging presentations that are both dynamic and interactive. According to Vagg et al. (2020), the term multimedia is the combination of sound, text, animation, video, or art transmitted by a website.

Abdulrahman et al. (2020) pointed out that multimedia resources help learners process information by using a combination of text, image, video, and audio. Therefore, its retention is better and helps learners increase their security, motivation, and efficiency. The use of multimedia is the integration of text, graphics, drawings, still and moving images, animation, audio, and any other media digitally (Akinoso, 2020). Additionally, education is playing an important role in the field of learning due to the digital age. Teachers need these resources to facilitate teaching and help learners

in their learning process. To summarize, multimedia facilitates learning since learners can learn at home or from anywhere.

Characteristics of Multimedia

According to Guan et al. (2018), multimedia has two important characteristics, which are visualization and concretion. First, visualization is the phase where learners might perceive English as boring and challenging. Additionally, if learners have problems learning, multimedia can help solve these problems and make learners understand better. Second, teachers having the freedom to use multimedia allows them to determine the level of difficulty for the activities that students will engage in, which leads to concretion. Therefore, learners will be able to participate and feel that they are included in the learning. In conclusion, multimedia can provide a new teaching method by making lessons interesting and interactive.

Elements of multimedia

Guan et al. (2018) categorized five elements that are common components of multimedia. Text can vary according to the font and size to suit the presentation. Images help to present the information in a visual way such as charts, diagrams, and photographs that contain non-movements. Audios contain different sounds such as voice, music, and sound effects. Videos show objects in real life through a set of sounds and images. Animation brings static images to life, creating motion and making them visually appealing. It can be in the form of 2D or 3D images.

Pavithra et al. (2018) explained five elements which are text, audio, images, animation, and video. Text is the basis of several programs with multimedia. Audio enhances application comprehension and increases user engagement by making information more compelling. Images are an important part of multimedia because they make visualization easier. Animation refers to moving graphic images. Finally, videos include images, audios, or texts.

Categorization of multimedia

Lisnawati (2021) divided multimedia into two categories: hardware and software. Hardware refers to the tangible components that comprise a computer system or electronic device, such as interactive whiteboards, computers, televisions, or mobile phones. However, software is a collection of intangible programs, instructions, and data that enable electronic devices to perform tasks. These tasks can include functions like email or video conferencing.

According to Klímová (2013), multimedia consists of two categories: linear multimedia and nonlinear multimedia. Linear multimedia refers to situations where learners have no control over the use of multimedia and are merely passive participants. This includes activities such as reading e-books, watching TV, or movies. Nonlinear multimedia refers to the type of multimedia where learners could control and interact with the content. This includes activities like using video games or interactive multimedia.

Types of multimedia

Subramanian (2019) divided into three types of multimedia. These types are interactive, multimedia hyperactive multimedia and linear multimedia. However, each type of multimedia contains various elements such as text, graphic art, sound, animation, and video.

Dhir (2021) described interactive multimedia as a method of communication in which people can engage and interact with them. Consequently, people have the power to command, merge, and manipulate diverse forms of media, including text, sound, video, computer graphics, and animation. Additionally, common applications include social networking, video games, applications, virtual reality and more.

Faizal (2021) mentioned that hyperactive multimedia contains different elements that people can control, for example graphics, audio, video, plain text, and hyperlinks. In addition, hyperactive multimedia is designed to capture the attention of the audience and create an engaging experience. Some examples of hypermedia are websites and online games.

Arthur (2008) explained that linear multimedia refers to multimedia content that is presented in a predetermined sequence or order. Additionally, it provides information to groups such as seminars, meeting, sessions and more. Some examples of linear multimedia include movies, television shows, presentations, and pre-recorded lectures.

Interactive multimedia resources

Interactive multimedia derives from two concepts. The Cambridge Dictionary (2023) defined multimedia as the combination of visuals, audio, music, and text. In contrast, interactive refers to something that enables people to communicate and share information with it. However, Deliyannis (2012) stated that interactive multimedia refers to a digital system where multiple media influence on the way that people interact. In conclusion, the purpose of using interactive multimedia is to use multiple media to express or communicate emotions, thoughts, and ideas.

Mahdi (2022) argued that the interactive multimedia environment is beneficial for learners as it provides them with attractive options for their learning process and allows them to feel free to learn in their own way. However, Cheng (2009) recognized that the aim of interactive multimedia is to improve learning performance by motivating, satisfying, and engaging the learner. Additionally, multimedia provides an interactive and creative way of presenting information. The learner has the option to choose from multiple options, select what they want to do, and choose the materials they want to use in their learning process.

Normadina et al. (2023) indicated that interactive multimedia are interactive and innovative media that can increase the effectiveness and efficiency of learning activities. Therefore, learners can develop skills, recognize problems, coordinate, evaluate, and provide information. The use of interactive media includes sound, images, and videos. In summary, interactive multimedia helps learners better understand the material and makes their learning process more effective.

Meaning of interactivity

According to Gouhar and Mahapatra (2016), interactivity refers to the ability of a user to engage with and interact with digital or multimedia content. It allows the user to actively participate, influence, or manipulate the content in some way, rather than being passive. Gouhar and Mahapatra divided this interaction into two types: active and passive. The terms active and passive are used to describe how much a person is engaged or involved in a specific activity or situation.

According to Li et al. (2023), active interaction refers to people who is in direct contact with the media. In this case, students are actively engaged, participating, or acting. It implies that the person is actively thinking, doing, or responding in some way. While passive refers to people use the information and do not interact directly with it. It implies that the person is receiving or observing something without actively engaging or participating.

Gouhar and Mahapatra (2016) highlighted that the level of participation may vary depending on the activity, factor, or situation that students face. Some activities may be more passive, while others are more active. Moreover, the level of commitment can be affected by factors such as the teacher's ability to generate interest and motivation among students, as well as the engaging and well-designed activities and content implemented in the classroom.

Importance of interactive multimedia

Renou (2023) pointed out three main reasons why interactive multimedia is important in people's lives. First, it improves communication with the use of platforms or websites where people can exchange, share, and watch information. Second, it creates memorable experiences when people interact with each other. This makes the experience more engaging for people. Finally, it is cheaper because all magazines, news, and books are online. As shown above, interactive multimedia is easier to use, engage with, and find.

Characteristics of interactive multimedia

Sharma et al. (2018) described that there are some characteristics that interactive multimedia contains. The characteristics of interactive multimedia are specific target group, specific objectives, content in small chunks, learner-controlled and adaptive mode, interactivity, immediate feedback, and reinforcement, validated program, multimedia elements and advanced technology. A specific target group has the purpose of developing multimedia content and resources according to a target group. Second, specific objectives refer to establishing clear and precise objectives and then evaluating the student according to these objectives. Third, content in small chunks helps the student master the content. The fourth characteristic, called learner-controlled and adaptive mode, has the purpose of enabling students to easily navigate and select multimedia resources according to their preferences and needs. Fifth, interactivity provides active feedback in terms of questions and answers, quiz solving, and puzzles. Sixth, immediate feedback and reinforcement provide immediate confirmation of each student's response. Seventh, a validated programmer refers to ensuring the accuracy of multimedia resources through validation. Eighth, multimedia elements contain elements such as graphics, animations, sounds and videos. Finally, advanced technology offers abundant resources for research, including academic papers, articles, reviews, glossaries, etc.

Types of interactive multimedia

According to Renou (2023), there are many types of interactive multimedia. However, he highlighted only five types that are the most important in interactive multimedia. These are social networking, games, application software, mobile apps, and virtual reality.

Kenton (2023) pointed out that social networking refers to the use of websites or applications that allow people to connect and interact with each other. Moreover, the main aim of social networking is to offer individuals the chance to establish friendships and become part of communities or groups that share either similar or contrasting interests. Examples of social networking are Facebook, Twitter, Instagram, Pinterest, and more.

Wright (2022) described games as play an electronic device that offer a variety of engaging activities designed to entertain people. They can be played individually or with friends. To make the experience enjoyable, users are provided with a range of interactive elements, including dynamic images, engaging videos, and digital text. These games have some benefits such as develop cognitive, thinking and reasoning skills. Examples of games are cloud gaming, virtual reality, augmented reality and more.

Quickbase (2023) mentioned that application software refers to a type of computer program designed to assist individuals in performing specific functions or tasks, leading to enhanced productivity, communication, and creativity. Examples of application software are Microsoft suite (Excel, Word, PowerPoint, Outlook, etc.), internet browsers (Firefox, Chrome, Safari, Internet Explorer, etc.), music software (Pandora, Apple Music, Spotify, etc.), communication software (Slack, Skype, Zoom, Teams, etc.) and more.

Rouse (2020) defined mobile apps as programs designed specifically for cellphones and tablet devices. It performs the same purpose as application software. However, it is generally small with limited function. There are several types of apps such as productivity apps (sending emails, booking hotels, etc.), lifestyle and entertainment apps (dating, sharing information, watching videos, etc.), mobile commerce apps (Amazon, eBay, etc.), travel apps (booking tour and tickets, finding maps and geolocation, etc.) and more.

Rouse (2023) highlighted that virtual reality refers to a technology that people can interact with and explore a digital environment. The primary objective of virtual reality is to allow people to experience, manipulate and engage the environment with a sense of being physically present. It can create fun and stimulating gaming experiences such as problem-solving, exploring new places, simulating real-world situations, and more.

Applications of interactive multimedia

Phillips (1997) stated that interactive multimedia has a wide range of applications, including information kiosks, reference materials, games, entertainment, and education. Information kiosks are independent systems designed to provide indirect information in various scenarios such as airports, shopping malls, museums, libraries, and other public places that offer specific information. In addition, there is a wide range of reference materials available in print format, such as encyclopedias, books, magazines, dictionaries, handbooks, and bibliographies. Additionally, games are designed to provide enjoyment, challenge, and engagement for participants. This is the reason that games contain most multimedia elements, which has allowed educational games to be created. Therefore, entertainment refers to activities or experiences that provide enjoyment for people. It can be found in different environments, like movies, TV shows, music, live performances, websites, and apps. Finally, in education, interactive multimedia plays an important role so that teachers and learners can enjoy the lessons.

Interactive multimedia in education

Djamas et al. (2018) explained that interactive multimedia learning materials combine various media, such as text, image, sound, video, and animation that students can control. In addition, students can get feedback from other peers, allowing for active participation in the learning process. Interactive multimedia in education is a student-centered approach that empowers students to become active, critical, creative, independent, and responsible learners.

Phillips (1997) discussed that interactive multimedia has potential for use in different ways such as instructional aids, interactive tutorials, and reference works. Instructional aids help teachers when they search for material or resources, carry out interactive and interesting activities, and draw the attention of their learners. However, interactive tutorials are a helpful learning tool. They allow learners to watch them repeatedly, helping them to learn at their own speed. Finally, reference works are a fantastic way to categorize and store various types of information.

The strength of interactive multimedia in education

Cairncross and Mannion (2001) admitted that there are several factors that can benefit learners. First, multimedia can help learners with their different learning styles, so the use of multimedia is helpful. Additionally, the use of audio and video increases the concentration of learners, and at the same time, they have fun. Second, delivery control, where learners are free to decide which applications to use and in what order. Therefore, they can choose the material they find relevant and interesting and use it as many times as they want. Third, access routes where learners have free access to materials and resources. In addition, learners are free to explore and analyze them for their own learning. Fourth, individual preferences have the possibility of determining how learners want information to be processed according to their preferences. In this case, learners will be able to search for resources based on what they like, their preferences, and their needs. Fifth, interactivity, in which learners can interact with multimedia in a variety of ways.

Types of interactive multimedia in education

The field of educational technology is in a state of constant growth, with continuous development of innovative interactive multimedia tools that significantly enrich the learning process. Spinning (2023) described some types of interactive multimedia for educational purposes such as interactive videos, websites, games, apps, whiteboards, and e-books as a virtual platform.

Interactive videos

Stan (2019) commented that interactive videos can be used in various educational settings and subjects. Additionally, different activities can be performed, for example add open-ended questions, multiple choice questions, fill-in-the-blank tasks, and more. These videos can be accessed on computers, tablets, or smartphones, making them flexible and accessible for learners. Examples of interactive videos are H5P, Play Posit, EdPuzzle, Zaption, or other.

Interactive websites

Wiesen (2023) mentioned that interactive websites are digital platforms that offer interactive features to engage users and provide an interactive and dynamic browsing experience. These websites allow users to actively participate, explore content, and interact with various elements on the site. Examples of interactive websites are National Geographic Kids, the British Council, Codecademy, and more.

Interactive applications

Podmurnyi (2023) defined interactive apps as applications for mobile devices or computers that actively engage users, creating an immersive experience that allows them to interact with the app's content, features, and even other users. These applications frequently offer an immersive and captivating user experience by integrating a wide range of interactive features. Examples of interactive apps are SkyTrak, Visartech, Duolingo, ELSA, Quizlet, Lingokids, and more.

Interactive whiteboards

Brown (2014) described that interactive whiteboards are divided into two kinds: electronic version and physical display. It allows teachers and students to interact with digital content, make notes, work together, and change things in real-time. Interactive whiteboards are commonly used in educational institutions, corporate settings, training centers, and conference rooms. They promote active learning, engagement, and collaboration by providing a dynamic and interactive platform. Examples of interactive whiteboards are Google Jamboard, SMART board, Clevertouch, and more.

Virtual platforms

Narh et al. (2019) pointed out that virtual platform is a digital system in which a target activity is facilitated. Therefore, the use of virtual reality facilitates communication and the exchange of information and knowledge between people. One example of these virtual platform is Moodle, Google Classroom, Microsoft Teams. However, Moodle allows students to experience online learning spaces that are flexible, secure, and accessible.

Advantages of interactive multimedia

Gouhar and Mahapatra (2016) pointed out several advantages of using interactive multimedia in the classroom. The first is that it benefits education in a way that makes learning more interactive and interesting for students. Second, it facilitates understanding for students since it allows them to investigate more about what they need. Third, multimedia resources can be of great help to both teachers and students in making learning effective. In addition, it helps to make better use of time and makes it easier to plan and carry out activities. Finally, students can easily remember the information learned as they pay attention to the topics.

Strategies with interactive multimedia

According to Miller (2020), interactive multimedia encompasses a variety of powerful strategies that can be effectively utilized. However, this study focused on five key strategies for effectively engaging students using interactive multimedia. These strategies are online activities, audiovisual materials, small quizzes, presentations, and online learning.

Online activities

Miller (2020) reported that online activities are an effective method for students to acquire knowledge and remain motivated. These activities involve the utilization of digital tools and platforms. On the other hand, audiovisual materials are educational resources that incorporate audio and visual elements to effectively communicate information and enrich the learning process. These materials can be used in various educational settings like classrooms, online courses, presentations, and training programs.

Online quizzes

Teachmint (2022) pointed out that online quizzes have become very popular among teacher because they are compact, engaging, and effective for assessing knowledge on various platforms and tools. Small quizzes like this are usually made to evaluate how well someone knows and understands specific topics or subjects. Examples of quizzes platforms are Quizizz, Kahoot, Google Forms, Socrative, Quizlet, and more.

Online presentations

According to Ball (2021), the concept of online presentations encompasses creating and delivering engaging visual content using digital tools and platforms. Additionally, they are used for many teachers in order to send their students to perform research about specific topic and then must present their reports in class. However,

Taylor (2023) believed that the biggest problem of using presentations is that students do not have the necessary resources (computers, cellphones, and projectors). Examples of online presentations are Canva, Prezi, Google Slides, and more.

Online learning

Aristovnik et al. (2023) mentioned that during the COVID, learning changed because of isolation, schools, colleges, and universities had to look for other alternatives. As a result, education became online. Nolasco (2022) highlighted that online learning is the revolutionary method of acquiring knowledge, skills, and education through the power of digital technologies and the vast reach of the internet. Furthermore, it fosters student autonomy by providing the opportunity to learn at their own pace or delve deeper into specific topics through additional research.

Dependent variable

English language

According to the Cambridge Dictionary (2023), language is a system of communication that involves speaking, writing, or making signs in a way that can be understood. Meanwhile, the Oxford Dictionary (2023) defined language as a system of communication in speaking and writing that is used by people of a particular country. Language is our main source of communication, through which we express ideas, feelings, and messages. There are many languages in the world, which means that each country has its own language and culture. However, one of the most common languages spoken is English.

English as the top language

English is a very common language for those who want to learn a new language. According to Palomo (2018), Chinese is the most widely spoken language in the world, but English is the most widely extensive; 80% of electronically stored information and 75% of scientific literature are available in this language. On the other hand, Ilyosovna (2020) emphasized that English holds a position of dominance as the

official language in numerous countries. It is spoken as a first language in 67 countries and as a second language in 27 others.

Ilyosovna (2020) described some reasons why English is the top language. First, English has played a key role in many sectors. Second, English dominates the media industry primarily due to the global prominence of Hollywood, which holds sway over various forms of entertainment such as films, television shows, and music. Third, English is the language of the internet because most of the information found on the internet is in English. Fourth, traveling is a lot easier with good knowledge of the English language. Fifth, English is one of the most important languages for business. Sixth, English is spoken in many countries, and people can find schools or universities around the world that offer programs. Finally, English gives you access to multiple cultures, traditions, and languages.

The benefits of learning English

According to Palomo (2018), there are some benefits to learning English as a second language. First, the first language, or mother tongue, is improved. Since learning a new language allows for the knowledge of various terms such as vocabulary, grammar, comprehension, and sentence structure. Second, it improves the ability to establish contacts by communicating with other people with different lifestyles and cultural ideas. Third, communicative competence improves with the acquisition of new concepts, strategies, skills, abilities, attitudes, and linguistic codes. Fourth, performance in other academic areas improves as cognitive abilities are developed. Fifth, learning other languages becomes significantly easier since the learning process employed in one language can be readily applied to multiple languages. Sixth, learners develop their creativity, improve their ability to solve problems, and think more rationally. Seventh, increase self-confidence by mastering a new skill. Eighth, it improves brain capacity as the brain must adapt to new words, phrases, and sentences. Ninth, it improves memory as the learner must be able to remember and use all that information. Finally, it helps students have more opportunities in their future working lives.

Language skills

Language is a tool for communication. It allows people to express their ideas and understand the ideas of others. According to Kadamovna (2021), the importance of communication is very important for learners of any language. However, to be a good learner, you need to master the four language skills. English has four main skills: listening, speaking, reading, and writing. These skills are divided into receptive skills and productive skills.

Sreena and Ilankumaran (2019) pointed out that language has its own way of organizing its structure which means that each language has its own sounds or phonemes in different situations. Additionally, the way you organize your words into phrases and sentences is different. On the other hand, Sreena and Ilankumaran defined language as a set of sounds such as vowels. These vocal sounds are produced by the lips, tongue, and larynx. Finally, this language allows the message to be transmitted, so people can make hundreds of varieties of sounds.

Receptive skills

Receptive skills are commonly referred to as listening and reading. Receptive skills can be used to introduce new vocabulary and grammar. According to the British Council (2023), receptive skills do not necessitate learners to generate language; rather, they emphasize the ability to receive and comprehend it. The Indeed Editorial Team (2023) defined listening as the process of understanding, interpreting, and analyzing the speaker's message. It involves identifying the accent, pronunciation, grammar, vocabulary, and understanding the message. Additionally, listening is important when people are participating in meetings, discussions, feedback sessions, and interviews. On the other hand, the English Club (2023) emphasized the importance of listening, which involves the act of receiving language through the ears. This means that people can identify sounds, words, and phrases that are sent to the brain to be processed into messages that mean something to the listener.

According to the English Club (2023), reading involves observing a sequence of written symbols and extracting meaning from them. By engaging in the act of reading, individuals can recognize letters, symbols, and gaps that are then processed by the brain, transforming them into meaningful words, sentences, and paragraphs that effectively convey a message to the reader. The Indeed Editorial Team (2023) defined reading as understanding various types of written content, such as texts, letters, messages, notes, memos, emails, and reports. Therefore, it depends on the learner's previous knowledge of vocabulary and grammar.

Productive skills

Speaking and writing are referred to as productive skills because they involve generating language through words, phrases, sounds, sentences, and paragraphs. Productive skills can be used to practice new vocabulary or grammar. The Indeed Editorial Team (2023) reported that writing consists of presenting your ideas, thoughts, or feelings in text form. On the other hand, English Club (2023) mentioned that writing involves utilizing symbols such as letters, punctuation marks, and spaces to effectively express thoughts and ideas in a clear and comprehensible manner. Therefore, it is necessary to have previous knowledge of the language such as vocabulary, grammar, and structure.

Speaking skills

Speaking is a productive skill that is important for communicating with others. The Indeed Editorial Team (2023) revealed that speaking is the verbal expression of your thoughts, feelings, and ideas. On the other hand, Markström (2019) considered that speaking is the ability to use spoken language for another person to understand. According to Suban (2021), speaking is a form of communication, which is oral. Therefore, it is the process of constructing and sharing a message using verbal and non-verbal symbols. However, Royani et al. (2023) explained that it is expected that teachers, when teaching speaking skills, can promote communication skills in students through the use of techniques and strategies.

The importance of speaking skills

According to Kadamovna (2021), speaking is important for professional success and personal life. Therefore, speech is essential in communication since, without speech, there is no communication. On the other hand, Akhter et al. (2020) pointed out that oral expression is considered the most important. Therefore, speaking has been given significant importance in the teaching and learning process. The importance of speaking means that English language learners work hard to master this productive skill.

Speaking situations

Rao (2019) divided the speaking situation into three kinds: interactive, partially interactive, and non-interactive. First, interactive, where people can exchange information by asking for repetition, clarification, and responding to questions. Calls and face-to-face conversations are examples of interactive situations. Furthermore, individuals could express themselves without any disruptions. However, at the conclusion, the audience can seek clarification for any uncertainties during the question-and-answer session (Q&A). Finally, it is non-interactive, where the audience does not participate, and the speaker is limited to recording.

Advantages of speaking skills

Rao (2019) emphasized several advantages of speaking skills such as actively participating in academic activities, speeches, debates, and competitions. Additionally, individuals can enhance their critical thinking skills and expand their knowledge by studying abroad, interacting with people from diverse backgrounds, and traveling to different countries. Furthermore, people can obtain better employment opportunities and learn about different cultures around the world.

On the other hand, Akhter et al. (2020) described other advantages of speaking skills such as the fact that people can participate in paired or group activities, be able

to talk about any topic, encourage critical thinking, and increase knowledge. In addition, people can establish good relationships with people from other countries and increase their level of confidence.

Speaking subskills

According to Rora (2018), speaking skills have five subskills that are necessary to become a good speaker. These subskills are vocabulary, grammar, pronunciation, fluency, and comprehension. However, Mustafayeva (2021) mentioned three subskills: grammar, vocabulary, and pronunciation. On the contrary, Seaton, J. and Seaton, S. (2018) focused on four subskills that are vocabulary, grammar, pronunciation, and fluency.

Vocabulary: it consists of all the words present in a specific language and used by individuals. This means that they must be able to know the meaning of the word and use it in a phrase or sentence.

Grammar: it is important for both writing and speaking because it ensures that information is communicated clearly and effectively. For this reason, having knowledge of sentence formation across the various grammatical tenses is crucial.

Pronunciation: it is important when speaking, so that the listener can understand the message you are trying to convey. In addition, pronunciation sub-skills such as word and sentence stress, intonation, rhythm, and use of the individual sounds of a language.

Fluency: it is the ability to speak or write a language easily. Additionally, it aims to show comfort, confidence, and a connection with the listener.

Comprehension: it is the ability to easily understand the message being spoken.

Speaking competencies

According to Guebba (2021), speaking contains a variety of competencies. These competencies are communicative competence, grammatical competence, discourse competence, sociolinguistic competence, and strategic competence. First, communicative competence is mastering the linguistic system, which allows people to

transmit and interpret messages within specific contexts. Second, grammatical competence consists of mastering and knowing its rules to be able to use them accurately in specific situations. Third, discourse competence focuses on how words, sentences, phrases, and statements relate to each other to give meaning to the text. Fourth, discursive competence refers to the remarkable ability to comprehend a multitude of sentences within a larger framework encompassing paragraphs, conversations, essays, and various other forms of discourse. Fifth, sociolinguistic competence is the ability to know how to use language appropriately in different social contexts. Finally, strategic competence refers to the communication strategies that are used to improve linguistic competence.

Functions of speaking

Nandini (2020) mentioned some functions of speaking skills. These functions are talk as interaction, talk as transaction, talk as performance. On the other hand, Suban (2021) described three main functions: talk as interaction, talk as transaction, and talk as performance. Both authors agree on the three functions of speaking skills.

Nandini (2020) described that talking as interaction refers to the interaction between two or more people. This interaction is also known as a conversation where people exchange greetings, share experiences and knowledge on some topic. The main characteristics of conversational interaction are using a conversational register that can be formal or informal, and establishing social relations and friendships.

Suban (2021) mentioned that talk as transaction refers to situations in which a negotiation takes place between speakers. In this case, the focus is on what is said or done. The message should be clear and concise for the other person to understand the purpose of the conversation. In addition, this function focuses on the information and the message, and not on the participants.

Nandini (2020) pointed out that talk as performance is the art of engaging in public dialogue that effectively conveys information and captures the audience's attention. Usually, this conversation takes the form of a monologue instead of a dialogue, with predictable structure, precision, and organization of form and sequence. Finally, listeners can evaluate this conversation by the efficiency of its impact on the listener and the understanding of the listener.

Principles in teaching speaking

Royani et al. (2023) defined three important principles. Teachers focus on these principles when teaching English to help students develop and improve their speaking skills. The first focuses on oral expression such as paying attention to pronunciation, grammar, and vocabulary. The second should focus on the meaning of the activities as providing opportunities to produce language. Finally, students should have the opportunity to practice and improve the language.

Suban (2021) recognized five fundamental principles of teaching speaking. The first is based on identifying the different contexts of second language learning. However, students have limited opportunities to use English outside the classroom because students are exposed to the native language. The second aims to provide activities for students to practice both fluency and accuracy. The third provides opportunities to practice language through conversations and discussions in pairs or group work. The fourth aims to design activities where students can gain benefits, socialize, and learn for pleasure. Finally, it is important to consider how students learn, what strategies they use and what they learn.

Types of speaking performance

Sreena and Ilankumaran (2019) categorized types of speaking performances into six types that students are anticipated to perform in the classroom by means of certain principles, ways, and strategies. These categories are imitative, intensive, responsive, transactional, interpersonal, and extensive.

According to Brown (2001), Imitative is the activity of repeating or pronouncing something according to what the teacher shows or says. The objective of this method is to focus on a specific feature of the language. Therefore, the teacher becomes a role model for the students. However, intensive refers to the constant practice of the language through oral performances such as conversations, discussions, and debates. Additionally, teachers give real life situations to students so that they can improve their speaking skills.

Guebba (2021) reported that responsive is based on the teacher-student relationship. The ability of the student to speak depends on the teacher. In this method, the teacher asks questions and expects a brief answer, not a dialogue. These responses are meaningful and authentic. On the other hand, transactional communication is focused on transmitting or exchanging specific information. In a classroom setting, teachers use this type of communication to help students improve their speaking skills.

Helvionita (2018) mentioned that interpersonal is the exchange of information between two or more people. This method helps students make friends and create a friendly classroom atmosphere. Finally, extensive refers to the specific time students must discuss about a topic. This method depends on the level of the students. Therefore, students at advanced levels are given extensive monologues.

Strategies to improve speaking skills

Suban (2021) pointed out eight strategies to improve speaking skills: dialogue, surveys, picture description, picture differences, information gap, role play, story completion, and storytelling. However, Kayi (2006) highlighted thirteen strategies: discussions, role play, simulations, information gap, brainstorming, storytelling, interviews, story completion, reporting, playing cards, picture narrating, picture describing, and find the difference. These activities are based on the language proficiency level of students, learning goals, and resources.

Dialogues

Newell (2019) described those dialogues is a common activity for practicing various language functions. The dialogue can be performed in different roles, moods, and contexts, reflecting real-life communication. This practice helps develop oral fluency and builds confidence in speaking English. In addition, dialogue practice is beneficial for language learners, especially at elementary levels, as it provides real communication.

Surveys and questionnaires

Harmer (2008) highlighted that surveys and questionnaires are beneficial in transforming the classroom structure from being teacher-centered to learner-centered. Additionally, they provide an opportunity for physical movement within the classroom. It also promotes a variety of interactions. Additionally, students can be involved in designing the surveys or questionnaires themselves, which helps them activate their language knowledge and generate new ideas.

Picture description

Turito (2023) reported that picture description involves dividing the class into groups and giving each group the opportunity to describe several pictures. The pictures are displayed for all group members to see, and each group has two minutes to describe the picture. This technique promotes speaking practice in groups, encourages participation from all group members, and develops the confidence of students.

Picture differences

Ur (2012) believed that picture differences have the purpose of creating question-and-answer exchanges and helping students develop cognitive skills in comparing. The variation of picture description involves students working in pairs to compare different pictures. Each student is given a different picture, and they identify and highlight the details on their respective pictures.

Information Gap

Garside (2021) commented that information gap involves providing students with the same text but with different missing parts. Students should interact with their partner to get the missing information. They should use appropriate language without looking at each other's text. In addition, through this exchange, students can complete all the information.

Role play

Persico (2009) described that role play is a popular activity in language classes. It helps students practice communication in various social situations and roles. There are two types of role-plays: very structured and less structured. On one hand, in very structured role-plays, students memorize a text. On the other hand, in less structured role-plays, students decide what to say.

Story completion

Gravett (2019) commented that story completion is an engaging and enjoyable activity in speaking class where students sit in a circle. The teacher starts narrating a story but stops after a few sentences. In this part, each student takes a turn to continue the story. This activity helps build students' confidence, interest, and speaking skills. It encourages imagination, creative thinking, and the construction of individual points of view.

Storytelling

Cameron (2001) described that storytelling students retell a story they have read or heard in their own words, reconstructing, and internalizing the memory and ideas. Storytelling involves two key actions: remembering the story and telling the plot of the story. Repeating these activities over time is the best way to improve memory retention. The quality of attention during each repetition also enhances the effect of repetition.

Interviews

Kayi (2006) pointed out that interviews based on answering questions according to a topic, situation, or experience. It can be a valuable educational tool to enhance learning and promote student involvement. Interviews allows students to develop research skills, critical thinking abilities, and effective communication. Additionally, it encourages empathy, cultural understanding, and the ability to consider different perspectives.

Brainstorming

Kayi (2006) highlighted that brainstorming is used as an introduction to a topic. It involves generating many ideas in a group to share their ideas. It is a way to encourage free thinking, open discussions, and innovative solutions. It encourages a free flow of thoughts and allows for the exploration of multiple perspectives, leading to more effective and dynamic solutions.

Presentations

Harmer (2007) mentioned that presentations is based on the student performing a learning project on a specific topic with the purpose of presenting the information. Therefore, presentations provide an opportunity for students to develop their research, organization, communication, and speaking skills. Presentations help students showcase their understanding and gain confidence when sharing their thoughts with the class. However, after the presentation students receive feedback from their partners or the teacher.

1.2 Objectives

General objective

- To describe the perspective of the learners about the interactive multimedia resources and speaking skills.

Specific objectives

- To identify the types of interactive multimedia for educational purposes that students use in most classrooms.
- To discover the interactive multimedia strategies that learners use during their English lessons.
- To determine the strategies that learners use to improve in their speaking skills.

1.2.1 Description of the fulfillment of objectives

This research aims to examine students' perspectives on the use of interactive multimedia and speaking skills in use of interactive multimedia and speaking skills in the Unidad Educativa 'Jerusalen'. To achieve the general objective, three specific objectives were outlined to investigate how the independent variable affects the dependent variable. In addition, a survey was conducted based on these objectives to reach the general objective proposed in this research. Finally, to find out more about the students' perspective on this topic, open-ended questions were created in each section. This was done with the purpose of allowing students to add more options than those proposed in the survey.

To identify the types of interactive multimedia for educational purposes, a research study was conducted, in which several authors who had proposed different types of interactive multimedia that people use were analyzed. However, this study focused on those types for educational purposes. After that, the author conducted a survey where a specific section was created related to the types of interactive multimedia used by students in the classroom. This allowed students to respond in an easy way and according to their needs. Finally, the author analyzed and compared the results of the survey with research conducted by several authors.

To discover the interactive multimedia strategies that students use during their lessons, extensive research was conducted to find out the best strategies proposed by various authors. Then, using the same survey described above, another section was added regarding the types of strategies students use. Therefore, students could answer easily and in a short time based on the experiences they have in their English classes. Finally, the results were analyzed and compared. As a result, the author was able to obtain all the desired information.

To determine which strategies students use to improve their speaking skills, information from various authors was analyzed to identify the most common ones. Subsequently, a third section of the survey was created, which is based on the strategies that students use to improve their speaking skills. Finally, the information collected was analyzed and compared with the strategies obtained from the different authors.

CHAPTER II. METHODOLOGY

This chapter focuses on understanding the process, methods, and materials used for the data collection and analysis of this research. Therefore, it explains in detail how this research was conducted. In addition, the purpose of this research is to provide credible and meaningful findings.

2.1 Materials

In this research, several resources were used, such as technological resources, physical resources, and human resources. On the one hand, the physical survey was used to collect the students' answers and a technological tool to analyze the information were used. In addition, physical resources such as sheets, copies, pens, and pencils were used to answer the survey according to the topic of this study. On the other hand, the students of the Unidad Educativa 'Jerusalen' were totally involved in the study.

2.2 Methods

2.2.1 Research approach

For this research, a quantitative approach was used. This approach consisted of collecting data through a survey that was used to obtain information about interactive multimedia resources and speaking skills. The objective of this approach is to explore the complexity of factors surrounding a phenomenon in students (Creswell, 2013). In addition, Creswell mentioned that the quantitative approach involves the use of statistical techniques and mathematical models to quantify and measure variables, relationships, and patterns in a systematic and objective manner. Therefore, in this research, the quantitative approach collected data information and analyzed numerical data to answer research questions.

2.2.2 Modality

Two types of modalities were used for this research: bibliographic and field research. The bibliographic research was focused on the search for information

through reading. This was of great help since it was possible to find the necessary information to carry out this research. On the other hand, the field research was based on direct observation of the institution. This was important when the researcher visited the institution to obtain the necessary information.

According to Rousseau et al. (2018), bibliographic research is a research method that involves examining and analyzing bibliographic resources such as books, thesis, articles, or academic papers to obtain information about a specific field of the study. Therefore, it involves studying published literature, bibliographic databases, citation indexes, and other sources to explore scholarly communication and information dissemination in a particular field.

On the other hand, Bernard (2016) defined field research is a research method that involves collecting data directly from the actual environment such as an institution, school, or university in which the phenomenon or problem occurs. It usually involves observing, interacting with, and collecting data from the research participants. Therefore, this approach allows researchers to study and understand phenomena in a more authentic context, providing deeper insights and understanding of the subject matter.

2.2.3 Type of research

This research was exploratory and descriptive because its objective was to explain, collect and analyze the methodology to be used on the independent variable and the dependent variable. On the one hand, the objective of exploratory research is to investigate a problem. Therefore, it was used to explore the problem that exists at Unidad Educativa ‘Jerusalen’ through direct observation. On the other hand, the objective of descriptive research is to describe the research process to provide more information. Therefore, it was used to describe the two variables: the independent variable (interactive multimedia resources) and the dependent variable (speaking skills).

Babbie (2016) mentioned that exploratory research is a type of research design or methodology used to develop a preliminary understanding of a certain phenomenon or problem. Exploratory research helps researchers identify relevant variables, formulate research questions, and develop hypotheses for further investigation. Finally, exploratory research is an important first phase in the research process, helping researchers develop a deeper understanding of a topic and provide direction for further research.

McMillan and Schumacher (2014) explained that descriptive research is a type of research design or methodology used to describe and document the characteristics of different variables or phenomena in a specific population. Thus, it seeks to provide an accurate and detailed description of the research topic. It involves the collection of data through a variety of methods, such as surveys, observations, interviews, and existing records or documents.

2.2.4 Technique/tools

A technique refers to the methods, processes and tools used to collect, analyze, and interpret data in a research study for the purpose of answering research questions (Hassan, 2023). This research, data was collected through a brief survey. On the other hand, a tool refers to any instrument, device, or method used to collect, measure, or analyze data (Parhar et al., 2018). It is a tangible or intangible resource that researchers use to perform a specific activity to obtain a product or result.

In this research, a survey was used to collect information about the two variables: the independent variable (interactive multimedia resources) and the dependent variable (speaking skills). According to Mathers et al. (2007), survey is a traditional way that it is useful for descriptive design to collect information. The purpose of this survey was to find out the perspective of the students on the application of interactive multimedia for the improvement of speaking skills.

The structure of this survey was based on 21 items according to the Likert scale and 3 open-ended questions. The 24 questions were divided into 12 questions for the independent variable and 12 questions for the dependent variable. The first section was related to types of interactive multimedia and contained 6 items with one open ended question. The second section was about types of interactive multimedia for educational purposes and included 6 items with one open ended question. The last section corresponded to strategies to improve speaking skills and involved 11 items with one open ended question. This survey, SPSS was used to analyze the data from this research.

2.2.5 Population

A population is a group of people who have characteristics in common. In this research, it refers to the population that was investigated and taken as a sample. The population of this research was 63 children from twelve to fourteen years of age from the seventh, eighth, ninth and tenth grades of the Unidad Educativa ‘Jerusalen’ located in the city of Ambato. The purpose of this research is to investigate what interactive multimedia resources students use and what strategies they use to improve their level of English, specifically their speaking skills.

Table 1

Population

Population	Participants	Percentage
Male	35	55.6%
Female	28	44.4%
Total	63	100%

Note: It shows the population from the survey

2.2.6 Procedure

The investigation was carried out in a detailed and progressive manner. Therefore, a procedure was followed to guarantee an accurate and reliable investigation. The first step was to carry out bibliographic research on interactive multimedia resources and speaking skills. Therefore, various sources such as books,

articles, academic papers, and journals, were used to collect relevant information. Additionally, multiple libraries and platforms such as Research Gate, Sage Publication, Erick, E-book, Google Scholar, and websites were explored to gather a wide range of perspectives on the two variables of this research.

The next step after the literature research was the creation of a survey designed to investigate students' perspectives on the use of interactive multimedia resources and speaking skills. To develop the instrument, the specific objectives of this research were considered, which were changed into three research questions. Therefore, for each research question, a meticulous investigation of Chapter I that corresponds to the theoretical framework was required. This process involved a thorough analysis of relevant theories and methodologies. The important factors of the theoretical framework were identified and interpreted into items for the survey.

Finally, three sections were created with questions according to the Likert scale based on the information found. Additionally, to encourage participants to share their perspectives and learn about their experiences, three open-ended questions were incorporated. These open questions aimed to explore new situations that go beyond the existing literature, allowing participants to share their thoughts. On the other hand, during the survey development process, multiple interventions and revisions were carried out to ensure the clarity, relevance, and understandability of the questions.

The survey was reviewed and validated by three experts, where the operationalization of variables, objectives, the survey, and the validation table are attached. Additionally, the survey was piloted and validated by Cronbach's Alpha through SPSS. Cronbach's Alpha allows measuring the reliability and evaluating the correlation between the items of an instrument. All 21 items of this survey were validated and a value of 0.925 was obtained, which means that the survey is very reliable.

In order to obtain the data, students were given copies of the survey so that they would not be distracted by the use of cell phones and obtain better results. On the other hand, once the results of the survey were obtained, a proper analysis of each question and each student's answer was carried out. Therefore, the results were able to obtain the mean of each question and perform the respective analysis and discussion of the same.

2.2.7 Research questions

- What types of interactive multimedia for educational purposes are used in their classrooms?
- What are the interactive multimedia strategies that learners use during their English lessons?
- What are the strategies that learners use to improve in their speaking skills?

CHAPTER III. RESULTS AND DISCUSSION

3.1 Analysis and discussion of the results

This chapter shows the data collected through the survey. It was conducted on the students of the Unidad Educativa ‘Jerusalen’. This data was analyzed with the purpose to answer the three questions proposed according to the objectives of this study. The data was processed with SPSS to calculate the mean for each item and organize the results based on each question.

1. What types of interactive multimedia for educational purposes are used in their classrooms?
2. What are the interactive multimedia strategies that learners use during their English lessons?
3. What are the strategies that learners use to improve in their speaking skills?

3.1.1 Descriptive analysis of survey

Table 2

Types of interactive multimedia for educational purposes

Item	Mean
My English teacher uses interactive videos to teach grammar or new vocabulary. For example: H5P, PlayPosit, Edpuzzle, Zaption, or other.	3,21
My English teacher uses websites to encourage student interaction and participation. For example: National Geographic Kids, British Council, Codeacademy, and more.	3,10
My English teacher uses different apps to develop English language skills. For example: Duolingo, ELSA, Quizlet, Lingokids, and more.	3,10
My English teacher uses interactive whiteboards to show digital content, draw, and annotate. For example: Google Jamboard, SMART board, Clevertouch, and more.	1,40
My English teacher uses virtual platforms as resources for student learning. For example: Moodle.	3,87

Note: Data collected according to the independent variable.

Analysis and Interpretation

Research question: What types of interactive multimedia for educational purposes are used in their classrooms?

The results of the survey in Table 2 indicate that students use virtual platforms as their first choice with a mean of 3.87. These virtual platforms are used as resources to help students in their learning progress. The second most selected option by students was interactive videos with a mean of 3.21. These interactive videos can be used to help students in their learning. In addition, it can be observed that both websites and applications were chosen as the third option with a mean of 3.10. Websites are used to encourage student participation while apps can be used to practice the language easily. Finally, interactive whiteboard was the least option by the students with a mean of 1.40. Interactive whiteboards are intended to display digital dynamically and interestingly.

According to the survey results, it is evident that students have a diverse range of preferences when it comes to interactive multimedia. However, it is noteworthy that most of them show a strong inclination for educational purposes. However, virtual platform was the most chosen option among the students. The pandemic has caused a shift in education: online learning has become the norm, and teachers are relying on these virtual platforms to help students in their learning progress.

Table 3

Interactive multimedia strategies

Item	Mean
My English teacher does activities and games to make the lessons interesting. (Online activities)	3,87
My English teacher uses images, videos, and audios to get our attention. (Audiovisual materials)	3,10
My English teacher gives us quick quizzes using different apps. For example: Quizziz, Kahoot, Google Forms and more. (Small quizzes).	4,03

My English teacher makes presentations using web pages. For example: Canva, Prezi, PowToon and more. (Presentations)	3,41
My English teacher motivates us to search for more information online. (Online learning)	2,76

Note: Data collected according to the independent variable.

Analysis and Interpretation

Research question: *What are the interactive multimedia strategies that learners use during their English lessons?*

The findings of the survey in Table 3 show the use of different interactive multimedia strategies by students during English lessons. It highlighted both the most and least used strategies. First, the analysis showed that one of the most used strategies by the students is small quizzes with a mean of 4.03. Small quizzes are intended to be short and easy quizzes interactively for students. In second place, online activities with a mean of 3.87 are the most used by students. These activities include games, challenges, and assignments that are online to motivate students' participation in classes. The third strategy chosen by the students is presentations with a mean of 3.41. These presentations are made by teachers using websites such as Canva to make the lessons dynamic and interactive. On the other hand, audiovisual materials are in fourth place with a mean of 3.10. The use of audiovisual materials as a strategy includes videos, images, and audios that are used to attract students' attention. Lastly, the least chosen strategy was online learning with a mean of 2.76. Online learning is based on the student doing extra research on a topic to reinforce their learning.

According to the survey findings, the most widely employed interactive multimedia strategy in classrooms is the use of small quizzes. This is because it facilitates the grading process for teachers, as they present a comprehensive report at the end that displays each student's grade. On the other hand, the least chosen strategy by students was online learning.

Table 4*Strategies to improve speaking skill*

Item	Mean
My English teacher motivates us to have conversations to practice our communication skills. (Dialogue)	4.51
My English teacher asks us several questions to interact and practice the language with my classmates. (Surveys and questionnaires)	4.25
My English teacher motivates us to describe different images or objects to develop our reasoning. (Picture description)	3.51
My English teacher motivates us to make distinctions with different images to develop our critical thinking. (Picture differences)	2.56
My English teacher divides us into small groups to complete the missing information. (Information Gap)	3.59
My English teacher motivates us to interpret a character to develop our creativity. (Role play)	2.08
My English teacher tells us a story that we need to continue in order to expand our ideas and thoughts. (Story completion)	2.22
My English teacher motivates us to narrate stories that we have heard or read to develop our own ideas and thoughts. (Storytelling)	1.95
My English teacher motivates us to answer questions to obtain information about a topic to develop our critical thinking. (Interviews)	4.10
My English teacher motivates us to share our ideas on topics to express our thoughts. (Brainstorming)	3.08
My English teacher motivates us to make presentations on a specific topic to develop our communication skills. (Reporting)	2.49

Note: Data collected according to the dependent variable.

Analysis and Interpretation

Research question: What are the strategies that learners use to improve in their speaking skills?

The survey results revealed that students use various strategies to improve their speaking skills. However, they use more strategies than others. The first strategy selected by students was dialogue with a mean score of 4.51. Dialogue focuses on

developing students' fluency through conversations. The second strategy mentioned was surveys and questionnaires with a mean of 4.25. The surveys and questionnaires are designed for students to engage with their peers and improve their grammar skills. They consist of short questions that encourage interaction and help students focus on their language use. Finally, the least preferred strategies by the students were story completion with a mean of 2.22; role play with a mean of 2.08; and storytelling with a mean of 1.95. The story completion strategy is based on continuing the story that the teacher is telling. This strategy is used to develop student fluency. Furthermore, role play is a strategy that helps students improve their fluency by pretending to be a character and using their imagination. In contrast, storytelling involves the art of narrating stories, which enables students to immerse themselves in the grammar being employed and develop their critical thinking skills. According to the survey findings, it can be summarized that students use various strategies to improve their speaking skills. Therefore, the dialogue strategy was the most chosen by the students because the English teacher encouraged them to have conversations in class. This results in them being able to interact and converse with their classmates. On the other hand, the least chosen strategy was storytelling. The reason for this is that the teacher has limited time to hear each student's story, making it challenging to implement this strategy efficiently.

Table 5

Open-ended questions

Question 1	Answer	Total
What type of interactive multimedia would you like your English teacher to use in the classroom?	Interactive whiteboards	37
	Interactive videos	14
	Applications	12
	Total	63
Question 2	Answer	Total
What strategy does your English teacher use in the classroom?	Audiovisual materials	19
	Online activities	18
	Presentations	15
	Small quizzes	11

		Total	63
Question 3	Answer	Total	
	Dialogue	21	
	Role play	12	
	Brainstorming	12	
What strategy would you like	Story completion	5	
your English teacher use to	Picture differences	4	
use to improve your speaking	Storytelling	3	
skills?	Surveys and questionnaires	2	
	Picture description	2	
	Information Gap	2	
		Total	63

Note: Qualitative results were obtained from the open-ended questions.

Analysis and Interpretation

The results shown in Table 5 are based on the open-ended questions that were asked to the students. In addition, the purpose is to know the students' perspective according to each proposed section.

The first open-ended question: What type of interactive multimedia would you like your English teacher to use in the classroom?

The results indicated that the type of interactive multimedia they would most like their teacher to use in the classroom is interactive whiteboards with 37 responses. Interactive whiteboards allow students to interact with the content displayed on the screen using touch or stylus input. The second type of interactive multimedia chosen was interactive videos with 14 responses. These interactive videos allow students to click on objects, choose different paths, answer questions, or perform actions within the video itself. Finally, the third type of interactive multimedia was applications with 12 responses. These applications can serve different purposes when learning a language.

The second open-ended question: What interactive multimedia strategy does your English teacher use in the classroom?

The results of the second open-ended question showed that the most common interactive multimedia strategy used by the teacher is audiovisual materials with 19 responses. Audiovisual materials are anything that contains pictures, images, and audio to attract students' attention. The next strategy mentioned by the students was online activities with 18 responses. These online activities are mostly used to send homework to students to do at home. The other strategy highlighted was presentations with 15 responses. Presentations are a great help for teachers as they allow them to deliver their lessons creatively and interactively. Finally, the small quizzes strategy was also chosen with 11 responses. The small quizzes allow students to answer several questions in a fun way.

The third open-ended question: What strategy does your English teacher use to improve your speaking skills?

The results revealed which strategies they would like their English teacher to use to improve their speaking skills. The first strategy chosen was dialogues with 21 responses. Therefore, it was the most chosen among all the strategies. The dialogue strategy was chosen because students enjoy interacting and conversing with their peers. The other selected strategies were role play and brainstorming with the same number of 12 responses. They also found these strategies interesting and creative to use in the classroom because they allow them to interact with each other. On the other hand, the story completion strategy had 5 responses, while the picture differences strategy had 4 responses. The storytelling strategy had 3 responses. However, the strategies surveys and questionnaires, picture description, and information gap had 2 responses. Therefore, they were the least chosen strategies by the students.

3.1.2 Discussion of the results

The following three research questions were designed to explore students' perspectives on interactive multimedia resources and speaking skill.

***Question 1:** What types of interactive multimedia for educational purposes are used in their classrooms?*

The results showed that there are different types of interactive multimedia proposed by Renou (2023), who categorized them into social networks, games, apps, and virtual reality, which are used by people in their daily lives. Additionally, Fincash (2023) mentioned that he agrees with the author's viewpoint that these types are most used by people. However, Spinning (2023) pointed out that there are five types of interactive multimedia for educational purposes such as videos, websites, apps, whiteboards, and virtual platforms. Therefore, based on the finding of the students score showed that most students prefer using virtual platforms with a mean of 3.87, videos with a mean of 3.21, websites with a mean of 3.10, and applications with a mean of 3.10. The high rating given to these types suggests that many students were exposed to these types of multimedia to engage their attention and make the lessons more dynamic and interactive. Mayer (2003) highlighted that interactive multimedia is an effective teaching and learning tool because it promotes students understanding and improvement in their learning process.

Lakhan (2023) believed that the best types of interactive multimedia are videos and whiteboards because these are more attractive for students. The positive perception of the interactive videos as the second chosen option with a mean of 3.21 was also consistent with the findings of a study conducted by Stan (2019), who explained that creating annotations on a video can enrich the content as it becomes interactive for the students. In addition, this author described that different activities can be performed, for example add open-ended questions, multiple choice questions, fill-in-the-blank tasks, and more. On the other hand, interactive whiteboard was the least chosen option among students, with a mean of 1.40. This negative perception of the interactive whiteboards could be the lack of student exposure to this type of interactive

multimedia because these interactive whiteboards are more expensive than traditional whiteboards. According to Brown (2014), interactive whiteboards are divided into two types: electronic version and physical display.

Question 2: What are the interactive multimedia strategies that learners use during their English lessons?

The survey results indicated that students use more the following strategies: small quizzes with a mean of 4.03 and online activities with a mean of 3.87. The high rating given to these strategies indicate that they help students to expand their knowledge in an interest and interactive way. Therefore, these strategies are supported by Miller (2020), who emphasized that interactive multimedia strategies are divided into online activities, audiovisual materials, small quizzes, presentations, and online learning. On the other hand, Ball (2021) stated that presentation is the most popular strategy among students. This is because many teachers send their students to perform a research, gather information, and compile findings, and then must present their reports in class. In contrast, based on the results of the survey, it is observed that presentation strategy was not total acceptable by the students with a mean of 3.41 was also consistent with the findings by Taylor (2023), who believed that one of the main factors is that students not having the necessary resources, for example computers or projector to share their presentations with the rest of the students.

Aristovnik et al. (2023) informed that during the COVID, learning online became mandatory. However, the pandemic has improved, online learning is becoming increasingly popular in education, so people were interested in researching and learning about different topics. Nevertheless, the survey results reported that online learning with a mean of 2.76 was the last chosen option by students. This low rating given to this strategy is because many students prefer to study face-to-face. Nolasco (2022) considered that online learning has many benefits, but there are also many problems like distractions, isolation, poor internet connection and other factors that can affect students' learning.

Question 3: What are the strategies that learners use to improve in their speaking skills?

Suban (2021) pointed out eight strategies: dialogues, surveys, picture description, picture differences, information gap, role play, story completion, and storytelling. Additionally, Kayi (2006) highlighted other strategies to improve speaking skills like discussions, role play, simulations, information gap, brainstorming, storytelling, interviews, story completion, reporting, playing cards, picture narrating, picture describing, and find the difference. However, the survey results indicated that of all the strategies mentioned by Suban and Kayi. Students use more dialogues with a mean of 4.51, surveys and questionnaires with a mean of 4.25 and interviews with a mean of 4.10. The main acceptance of these strategies is because the English teacher motivates his students to interact with each other. These findings are consistent with the research by Azadi et al. (2015), who described that through interaction, students could share and receive information to get to know new people, cultures, traditions and express their needs, feelings, and thoughts. Therefore, Newell (2019) described that dialogues develop the social interaction skills of the students that are necessary to manage in their lives. Meanwhile, Harmer (2008) believed that surveys and questionnaires is a relevant strategy that allows learners to exchange opinions, ideas, and thoughts, so it is a good strategy for them. For this reason, based on these authors and the survey results indicated that dialogues, interviews, surveys, and questionnaires are the strategies most used by students.

CHAPTER IV. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

In conclusion, it was observed that most types of interactive multimedia for educational purposes are used in classrooms. However, there was one type that was not selected, interactive whiteboards. This is because interactive whiteboards are more expensive than traditional whiteboards. Therefore, many schools do not have this type of interactive multimedia, especially private and public schools. In addition, teachers were able to find different types that can be useful for their lessons. These types of interactive multimedia help students to capture their attention, create an interactive and interesting environment, and help them to learn in a better way.

It was discovered which strategies students use through interactive multimedia resources. Therefore, it was possible to find several strategies that can be applied for teaching English. In addition, two main strategies were highlighted which were short quizzes and online activities. These strategies were chosen because they are easy to apply, and students enjoy doing these quizzes, tasks, and activities. In addition, these strategies help the teacher when creating new activities and tasks for their students. However, it should be considered that many of these activities are available online but not all of them are valid or appropriate for the age and English level of the students. Therefore, teachers should consider incorporating these interactive multimedia strategies to improve their classes and make them more interesting for students.

Finally, it was possible to determine which strategies the students use to improve their speaking skills. The most selected strategies were dialogues, interviews, surveys, and questionnaires. This is because these strategies are most used by the teacher to motivate students to interact with each other. In addition, they are easy and quick strategies to carry out during the classes. Therefore, it can be deduced that English teachers put emphasis on interactive strategies so that students can communicate with each other and express feelings, ideas, and thoughts. In addition, there are a variety of strategies that teachers can apply to their students to further

develop their speaking skills such as debates, round tables, discussions, presentations, etc.

4.2 Recommendations

It is recommended that teachers implement various types of interactive multimedia to teach the English language. They will help students learn in an easy, entertaining, interactive, and fun way, making the learning process enjoyable and engaging. In addition, different types of interactive multimedia can help teachers in conducting activities for their students during English lessons. These types of interactive multimedia provide a dynamic learning experience and can assist in reinforcing language skills, vocabulary, and comprehension.

It is recommended for teachers to use interactive multimedia strategies to make lessons more engaging for students. By incorporating activities that are both educational and enjoyable, students are more likely to stay motivated and actively participate in the learning process. Therefore, it will make students more interested in learning a second language such as English. Additionally, the advancement of technology in recent years has made students more comfortable with innovative and efficient tools that can greatly assist them in their learning process.

It is recommended that teachers integrate new strategies to improve their students' speaking skills. For this reason, it is important to motivate students to communicate effectively so that they can express their ideas, feelings, and thoughts while in a fun way. Several effective strategies were identified that can provide significant support for students in their learning process. These strategies can play a crucial role in improving academic performance and enhancing the overall learning experience for students.

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ANNEXES

Annex 1: Institution approval letter

ANEXO 3
FORMATO DE LA CARTA DE COMPROMISO.

CARTA DE COMPROMISO

Ambato, 04 de septiembre, 2023

Doctor
Marcelo Núñez
Presidente
Unidad de titulación
Facultad de Ciencias Humanas y de la Educación

Yo, Hernández Pinto Fanny Leonor, en mi calidad de Rectora de la Unidad Educativa "Jerusalén", me permito poner en su conocimiento la aceptación y respaldo para el desarrollo del Trabajo de Titulación bajo el Tema: "Interactive multimedia resources and speaking skill", propuesto por la estudiante Torres Pérez Jemima Abigail, portadora de la Cédula de Ciudadanía, 050416073-0 estudiante de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros Facultad de Ciencias humanas y de la Educación de la Universidad Técnica de Ambato.

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

Particular que comunico a usted para los fines pertinentes.

Atentamente.

Lcda. Fanny Hernández
Rectora
CI. 180122222-3
Telf. 0979143532
Email. fannyhernandez2121@gmail.com



Annex 2: Cronbach's Alpha validation

Reliability Statistics	
Cronbach's Alpha	N of items
0,925	21

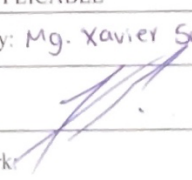
Note: Reliability statistics with Cronbach's Alfa of the 21 questions with Likert scale.

Item Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My English teacher uses interactive videos to teach grammar or new vocabulary. For example: H5P, PlayPosit, Edpuzzle, Zaption, or other.	60.00	416.500	.325	.926
My English teacher uses websites to encourage student interaction and participation. For example: National Geographic Kids, British Council, Codecademy, and more.	60.00	389.500	.769	.918
My English teacher uses different apps to develop English language skills. For example: Duolingo, ELSA, Quizlet, Lingokids, and more.	60.00	407.500	.470	.923
My English teacher uses interactive whiteboards to show digital content, draw, and annotate. For example: Google Jamboard, SMART board, Clevertouch, and more.	60.00	380.500	.924	.914
My English teacher uses virtual platforms as resources for student learning. For example: Moodle.	60.00	474.500	-.537	9.42
My English teacher does activities and games to make the lessons interesting. (Online activities)	60.00	407.500	.470	9.23
My English teacher uses images, videos, and audios to get our attention. (Audiovisual materials)	60.00	383.500	.872	.915
My English teacher gives us quick quizzes using different apps. For example: Quizziz, Kahoot, Google Forms and more. (Small quizzes).	60.00	383.500	.872	.915
My English teacher makes presentations using web pages. For example: Canva, Prezi, PowToon and more. (Presentations)	60.00	383.500	.872	.915
My English teacher motivates us to search for more information online. (Online learning)	60.00	389.500	.769	.918
My English teacher motivates us to have conversations to practice our communication skills. (Dialogue)	60.00	383.500	.872	.915

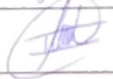
My English teacher asks us several questions to interact and practice the language with my classmates. (Surveys and questionnaires)	60.00	383.500	.872	.915
My English teacher motivates us to describe different images or objects to develop our reasoning. (Picture description)	60.00	389.500	.769	.918
My English teacher motivates us to make distinctions with different images to develop our critical thinking. (Picture differences)	60.00	383.500	.872	.915
My English teacher divides us into small groups to complete the missing information. (Information Gap)	60.00	389.500	.769	.918
My English teacher motivates us to interpret a character to develop our creativity. (Role play)	60.00	465.500	-.410	9.40
My English teacher tells us a story that we need to continue in order to expand our ideas and thoughts. (Story completion)	60.00	410.500	.421	.924
My English teacher motivates us to narrate stories that we have heard or read to develop our own ideas and thoughts. (Storytelling)	60.00	410.500	.421	.924
My English teacher motivates us to answer questions to obtain information about a topic to develop our critical thinking. (Interviews)	60.00	407.500	.470	.923
My English teacher motivates us to share our ideas on topics to express our thoughts. (Brainstorming)	60.00	389.500	.769	.918
My English teacher motivates us to make presentations on a specific topic to develop our communication skills. (Reporting)	60.00	389.500	.872	.915

Annex 3: Expert validation

A. CHECKLIST VALIDATION

ITEM	CRITERIA TO EVALUATE										Observations	
	Clarity in writing style		Internal Coherence		Induction to the answer(Bias)		Appropriate Language		It measures what it stated in the objectives/research questions			
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
1	✓		✓			✓	✓		✓			
2	✓		✓			✓	✓		✓			
3	✓		✓			✓	✓		✓			
4	✓		✓			✓	✓		✓			
5	✓		✓			✓	✓		✓			
6	✓		✓			✓	✓		✓			
7	✓		✓			✓	✓		✓			
8	✓		✓			✓	✓		✓			
9	✓		✓			✓	✓		✓			
10	✓		✓			✓	✓		✓			
11	✓		✓			✓	✓		✓			
12	✓		✓			✓	✓		✓			
13	✓		✓			✓	✓		✓			
14	✓		✓			✓	✓		✓			
15	✓		✓			✓	✓		✓			
16	✓		✓			✓	✓		✓			
17	✓		✓			✓	✓		✓			
18	✓		✓			✓	✓		✓			
19	✓		✓			✓	✓		✓			
20	✓		✓			✓	✓		✓			
21	✓		✓			✓	✓		✓			
22	✓		✓			✓	✓		✓			
23	✓		✓			✓	✓		✓			
24	✓		✓			✓	✓		✓			
General Aspects										Yes	No	*****
The instrument has clear and precise instructions to answer the questionnaire										✓		
The items allow to accomplish the objective of the research.										✓		
The items are distributed in a logical and sequential way										✓		
The number of items is enough to collect data. If not, suggest the items to be included.										✓		
APPLICABLE					NOT APPLICABLE							
Validated by: Mg. Xavier Sulca					ID: 1802447548					Date: 07/11/2023		
Signature: 					Email: manuelxsulca@uta.edu.ec							
Place of work:					Academic degree: Magister							
<p>Note. Taken and adapted from Corral, Y. (2009). Validez y Confiabilidad de los instrumentos de Investigación para la recolección de datos. <i>Revista Ciencias de la Educación</i>. 19. 228 - 247</p>												


A. CHECKLIST VALIDATION

ITEM	CRITERIA TO EVALUATE										Observations	
	Clarity in writing style		Internal Coherence		Induction to the answer(Bias)		Appropriate Language		It measures what it stated in the objectives/research questions			
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
1	/		/			/	/		/			
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24	/		/			/	/		/			
General Aspects										Yes	No	*****
The instrument has clear and precise instructions to answer the questionnaire										/		
The items allow to accomplish the objective of the research.										/		
The items are distributed in a logical and sequential way										/		
The number of items is enough to collect data. If not, suggest the items to be included.										/		
APPLICABLE					/	NOT APPLICABLE						
Validated by: Mg. Doris Cumbo					ID: 1103694269			Date: Nov. 15 2013				
Signature: 					Email: dm.cumbo@uta.edu.ec							
Place of work: UTA					Academic degree;							
<p>Note. Taken and adapted from Corral, Y. (2009). Validez y Confiabilidad de los instrumentos de Investigación para la recolección de datos. <i>Revista Ciencias de la Educación</i>. 19. 228 - 247</p>												

A. CHECKLIST VALIDATION

ITEM	CRITERIA TO EVALUATE										Observations	
	Clarity in writing style		Internal Coherence		Induction to the answer(Bias)		Appropriate Language		It measures what it stated in the objectives/research questions			
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No		
1						/						
2						/						
3						/						
4						/						
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General Aspects										Yes	No	*****
The instrument has clear and precise instructions to answer the questionnaire										/		
The items allow to accomplish the objective of the research.										/		
The items are distributed in a logical and sequential way										/		
The number of items is enough to collect data. If not, suggest the items to be included.										/		
APPLICABLE					X	NOT APPLICABLE						
Validated by: <i>Mr. Edgar Encalada T.</i>					ID: <i>050/824/17-1</i>			Date: <i>14/Nov/23</i>				
Signature: <i>[Signature]</i>					Email: <i>eg.encalada@uta.edu.ec</i>							
Place of work: <i>UTA-FCAE-PINE</i>					Academic degree: <i>MAGISTER</i>							
<p>Note. Taken and adapted from Corral, Y. (2009). Validez y Confiabilidad de los instrumentos de Investigación para la recolección de datos. <i>Revista Ciencias de la Educación</i>. 19. 228 - 247</p>												

Annex 4: Turnitin Report

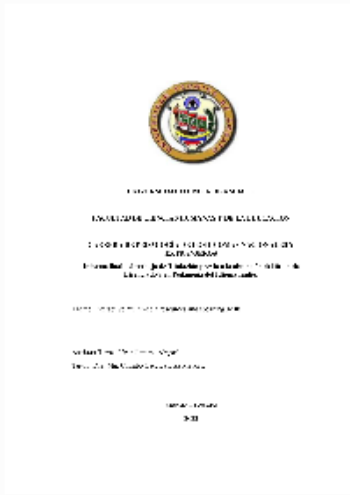


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