

UNIVERSIDAD TECNICA DE COTOPAXI

DIRECCIÓN DE POSGRADO

MAESTRÍA EN LINGÜÍSTICA APLICADA A LA ENSEÑANZA DEL IDIOMA INGLÉS COMO LENGUA EXTRANJERA

MODALIDAD: INFORME DE INVESTIGACIÓN

TITULO:

TEACHERS' PERCEPTIONS OF VIRTUAL REALITY IN THE DEVELOPMENT OF VOCABULARY.

Trabajo de titulación previo a la obtención del título de Magíster en Lingüística Aplicada a la enseñanza del Idioma Inglés como Lengua Extranjera

tranjera

AUTOR:

Pacheco Díaz Francis Marcelo Lic.

TUTOR:

Cando Fabiola Soledad Mg.Sc.

LATACUNGA - ECUADOR 2023

TUTOR APPROVAL

In my capacity of Tutor of the Research dissertation titled "Teachers' perceptions of virtual reality in the development of vocabulary" presented by Lic. Francis Marcelo Pacheco Diaz, for obtaining the Master's Degree in Applied Linguistics for Teaching English as a Foreign Language.

I CERTIFY THAT

This research dissertation has been fully revised and has the requirements and merits to be submitted for evaluation by the assigned Revision Committee and its presentation and public defense.

Latacunga, octubre, 02, 2023

.

Mg. Sc.. Fabiola Soledad Dando Guanoluisa cc.: 0502884604

COMMITTEE APPROVAL

This research dissertation: Teachers' perceptions of virtual reality in the development of vocabulary, has been revised, approved and authorized for printing and binding, before obtaining a Master's degree in Applied Linguistics for Teaching English as a Foreign Language; this meets the substantive and formal requirements to hand in for the presentation and defense.

Latacunga, octubre, 24, 2023

......

Mg. Sc. Emma Jackeline Herrera Lasluisa 0502277031 Presidente del tribunal

.

Mg.Sc. Wilmer Patricio Collaguazo Vega 1722417571 Lector 2

1.1.1.

Mg. Sc. Edison Marcelo Pacheco Pruna 0502617350 Lector 3

DEDICATION

The present research dissertation is developed to show that learning a language could be engaging. Thanks to everyone who was involved in this job, thanks for your unconditional support. This academic path was hard with several difficulties, but I overcame 'em.

François

ACKNOWLEDGEMENT

Thanks to my heavenly father for giving me the strength to end this academic life. Thanks to my family and my loved ones. I want to thank MSc. Fabiola Cando, my tutor, and Vivi for being there to help me finish this research.

AUTHORSHIP

I declare to be the author of the concepts, procedures, and findings in this research dissertation.

Latacunga, octubre, 02, 2023

FADROG ...

Francis Marcelo Pacheco Diaz CC.: 0502770720

COPYRIGIIT REFUSE

I confer the rights of this graduate dissertation and authorize its total reproduction or part of it, as long as it is under the regulations of the Universidad Técnica de Cotopaxi.

Latacunga, october, 23, 2023

MARCO

Francis Marcelo Pacheco Diaz CC.: 0502770720

COMMITTEE PRESIDENT'S APPROVAL

I declare that this research dissertation: Teachers' perceptions of virtual reality in the development of vocabulary, has the corrections and comments suggested by the members of the committee in the scientific session.

Latacunga, octubre, 24, 2023

neller -----

Mg.Sc. Emma Jackeline Herrera Lasluisa CC.:0502884604

UNIVERSIDAD TÉCNICA DE COTOPAXI GRADUATED SCHOOL

MASTER'S DEGREE IN APPLIED LINGUISTICS FOR TEACHING ENGLISH AS A FOREIGN LANGUAGE.

Title: Teachers' perceptions of virtual reality in the development of vocabulary.

Author: Pacheco Diaz Francis Marcelo Lic. **Tutor**: Cando Guanoluisa Fabiola Mg.Sc.

Abstract

Virtual reality is a technological tool that provides immersive learning experiences for a better understanding, promotes collaborative work, and contains authentic material to develop communicative competencies. Users can witness new things that the real environment cannot provide for learning. This qualitative research aimed to describe the teachers' perception of virtual reality in English language learning after participating in a training course of 5 sessions. It was phenomenological research because it analyzed 5 English teachers' experiences after being immersed in the virtual world to test VR apps to develop language. Participants tried 5 apps where students can enhance their language. Data was collected by using participants' journals. The teachers' reflections were analyzed through thematic analysis. The study shows that teachers believe that virtual reality can positively assist students in English language learning with an immersive language environment, authentic material, hands-on activities, and audio-visual aids. Teachers showed positive attitudes toward virtual reality to improve English language learning and teaching with this technological tool. Teachers suggest virtual reality promotes higher opportunities to enhance language learning and teaching. In conclusion, Virtual reality is an effective learning tool that teachers can apply in their classes to make them more engaging and meaningful for students.

KEYWORDS: Virtual reality; language learning; immersive environment; authentic material; phenomenological research

UNIVERSIDAD TÉCNICA DE COTOPAXI GRADUATED SCHOOL

MASTER'S DEGREE IN APPLIED LINGUISTICS FOR TEACHING ENGLISH AS A FOREIGN LANGUAGE.

Title: Teachers' perceptions of virtual reality in the development of vocabulary.

Author: Pacheco Diaz Francis Marcelo Lic. **Tutor**: Cando Guanoluisa Fabiola Mg.Sc.

La realidad virtual es una herramienta tecnológica que brinda experiencias de aprendizaje inmersivas para una mejor comprensión, promueve el trabajo colaborativo y contiene material auténtico para el desarrollo de competencias comunicativas. Los usuarios pueden presenciar cosas nuevas que el entorno real no pueden acceder para el aprendizaje. El objetivo principal de esta investigación cualitativa fue describir la percepción de los profesores sobre la realidad virtual en el aprendizaje del idioma inglés después de participar en un curso de formación de 5 secciones. Fue una investigación fenomenológica porque analizó las experiencias de 5 profesores de inglés después de estar inmersos en el mundo virtual para probar aplicaciones de realidad virtual para desarrollar el lenguaje. Los participantes probaron 5 aplicaciones donde los estudiantes pueden mejorar su idioma. Los datos se recopilaron utilizando los diarios de los participantes. Las reflexiones de los docentes fueron analizadas a través del análisis temático. El estudio muestra que los profesores creen que la realidad virtual puede ayudar positivamente a los estudiantes en el aprendizaje del idioma inglés con un entorno lingüístico inmersivo, material auténtico, actividades prácticas y ayudas audiovisuales. Los docentes mostraron actitudes positivas hacia la realidad virtual para mejorar el aprendizaje y la enseñanza del idioma inglés con esta herramienta tecnológica. Los profesores sugieren que la realidad virtual promueve mayores oportunidades para mejorar el aprendizaje y la enseñanza de idiomas. En conclusión, la realidad virtual es una herramienta de aprendizaje eficaz que los profesores pueden aplicar en sus clases para hacerlas más atractivas y significativas para los estudiantes.

PALABRAS CLAVE: Realidad virtual; aprendizaje de idiomas; entorno inmersivo; material auténtico; investigación fenomenológica.

INDICE DE CONTENIDOS

1.	INTI	RODUCTION	1
	1.1	JUSTIFICATION	1
	1.2	PROBLEM STATEMENT	5
	1.3	GENERAL OBJECTIVE:	8
	1.4	SPECIFIC OBJECTIVES:	8
2.	СНА	PTER I: THEORETICAL FRAMEWORK	9
	2.1	LITERATURE REVIEW	9
	2.2	CONSTRUCTIVIST LEARNING	10
	2.3	COLLABORATIVE LEARNING	11
	2.4	EMBODIED COGNITIVE	12
	2.5	LANGUAGE LEARNING.	13
	2.6	SOCIAL COGNITION THEORY	14
	2.7	SECOND LANGUAGE ACQUISITION	14
	2.8	THE ACQUISITION-LEARNING HYPOTHESIS	15
	2.9	THE INPUT HYPOTHESIS	16
	2.10	VOCABULARY LEARNING	17
	2.11	SPEAKING SKILLS	18
	2.12	LISTENING SKILLS	20
	2.13	THE AFFECTIVE FILTER HYPOTHESIS	21
	2.14	BEHAVIORAL LEARNING	21
	2.15	MOTIVATION THEORY	22
	2.16	EXTRINSIC MOTIVATION	23
	2.17	INTRINSIC MOTIVATION	23
	2.18	MULTIPLE INTELLIGENCES	23
	2.19	VISUAL-SPATIAL INTELLIGENCE	24
	2.20	COMMUNICATIVE LANGUAGE LEARNING.	24
	2.21	BODILY-KINESTHETIC INTELLIGENCE.	25
	2.22	INTERACTIVE TEACHING	25
	2.23	TOTAL PHYSICAL RESPOND (TPR)	26
	2.24	AUGMENTED REALITY (AR)	27
	2.25	AUGMENTED REALITY IN LANGUAGE LEARNING	28
	2.26	VIRTUAL REALITY (VR)	29
	2.27	THE IMPORTANCE OF VIRTUAL REALITY IN EDUCATION	30
	2.28	BENEFITS OF VIRTUAL REALITY IN EDUCATION	31
	2.29	IMMERSION	32
	2.30	INTERACTION	33
	2.31	STEAM IN VR	34
	2.32	INPUT AND OUTPUT DEVICES	35
	2.33	THE USE OF AUDIO-VISUAL AIDS IN LEARNING	36
	2.34	GAMIFICATION	37

	2.35	ENGAGING LEARNING TOOL	38		
	2.36	METAVERSE	38		
	2.37	MONDLY	39		
	2.38	VR CHAT.	41		
	2.39	JOB SIMULATOR	42		
	2.40	YOUTUBE VR	43		
	2.41	LANGUAGE LAB	43		
	2.42	GRAVITY SKETCH	44		
3	. CHA	PTER II: METHODOLOGY	45		
	3.1	RESEARCH APPROACH AND METHOD	45		
	3.2	RESEARCH CONTEXT	46		
	3.3	PARTICIPANTS/POPULATION/SAMPLING	47		
	3.4	DATA COLLECTION (TECHNIQUES/STRATEGIES, INSTRUMENTS,			
PROC		DURES)	47		
	3.5	PROCEDURE	47		
	3.6	ETHICS AND LIMITATIONS	48		
	3.7	DATA ANALYSIS	49		
4. CHAPTER III. RESULTS AND DISCUSSION					
	4.1	RESULTS	51		
5	. CON	CLUSION	63		
6	. REC	OMMENDATIONS	63		
7.	. REF	ERENCES	65		
8	. APP	ENDIX	82		
	8.1	Appendix 1	82		
	8.2	Appendix 2	83		
	8.3	Appendix 3	88		
	8.4	Appendix 4	89		
	8.5	Appendix 6	95		
	8.6	APPENDIX 6	106		

1. Introduction

1.1 Justification

This research holds pedagogical interest because it contributes to encourage the use of new teaching instruments in the classroom, and the application of educational technology tools for language learning in the most engaging way to encourage language learning in students and teachers. Students present a positive mood using VR and their engagement is higher participating in class (Dolgunsöz et al. 2018).

The importance of this research project is crucial because it introduces new capabilities that are able to provide guaranteed support for language learning. Virtual reality allows learners to interact with objects and visualize things that are not available in classrooms. Teachers can provide learning environments where students can feel motivated to learn, learners can work collaboratively with other students in different atmospheres. It encourages students to actively participate and increase their repertoire. The project aims to explore the acceptance of English teachers of virtual reality in English classes. Using VR students feel motivated and willing to learn English.

This innovative project shows how Virtual reality engages students in the learning process and also provides technological instruments to support teachers with more active and meaningful activities to develop English language skills. Now with the creation of the metaverse, new worlds are emerging faster than ever, those simulated worlds support workers with their projects and also are addressed for educational purposes. VR presents several advantages for language learning with amazing virtual environments, immersive activities human and computer interaction, 3D objects, and some other educational benefits. Virtual reality engages learners to develop the language skills, this technological device offers. There are apps for entertainment, construction designs, broadcasting, productivity, training, medical practice, and education. The employment of virtual reality in these fields is the most updated way nowadays (Cho & Ae Chun, 2019).

Teachers, students, and the whole educational field benefit from the application of this project, especially educators because it displays a new way of teaching and its advantages. Using VR, institutions cut back the use of resources such as realia and other materials that sometimes are expensive to get, it is easy to set up and use once you get into this topic. With the use of technology, students get engaged and this innovative way of teaching has the features to motivate students. This device can be used for 10 years and above, it provides meaningful activities. Virtual reality is predicted to be an excellent technique to engage students while also supporting learning connected to geographic knowledge (Cho & Ae Chun, 2019).

This research is done with only teachers because they know how to use the material appropriately according to each lesson. It had high feasibility to carry out due to the accessibility of the device. Moreover, it counts upon the approval of the authorities, and the institution's permission. University authorities allowed the investigator to carry out this research. Some studies show the advantages and benefits of using VR, it is possible to improve the quality of education. The use of technology brings a positive effect on education and might change the traditional teaching method.

Research background

There are several studies about this topic, for example:

Mouw et al. (2020) conducted a study identifying the teachers' perception of virtual reality to teach classroom management. In this study, a qualitative approach was used to gather users' responses and also grounded theory method. For this research 8 individuals were taken to prove VR experience and the semi-structured interview. The study revealed that both groups agreed with the realism of virtual reality, also they affirmed that VR improves knowledge transfer due to its visualization and content and could be a useful implementation in other subjects of education.

Kaplan & Wojdynski (2018) conducted a qualitative and descriptive study to investigate students' attitudes toward Virtual Reality in language learning. First, a demographic questionnaire was taken and a survey after the VR lesson using Mondly. 22 Polish University students took part in the study, the survey contained students' insights regarding language learning with VR, and the format of the survey was the Likert scale. The study shows that the majority of students are willing to learn the language using Vr. Moreover, the aim is that virtual reality provides an engaging environment for language learners, and most of the learners present a positive attitude toward virtual reality usage. On the other hand, some students present sickness by using this device, it is something that developers will be improving over the years to overcome this drawback.

Another study was carried out by Kaplan-Rakowski & Gruber (2021) to measure the effectiveness of virtual reality in language learning. This research study contained an autoethnography methodology and a qualitative approach to gather teacher and student insights. A 2 VARK questionnaires were developed to collect individuals' points of view, those questionnaires revealed that the learner is highly oriented to the kinesthetic learning method. The teacher and learner's journals showed some distinctions that virtual reality possesses over other learning methods; unique experience, language support, distraction, and content overload. However, virtual reality offers contextual vocabulary learning for teachers who uses vocabulary from previous lessons, it also revealed that VR can encourage learners to make more meaningful conversation. This technology is on the rise and can be implemented in more language learning lessons.

Huertas (2020) conducted an exploratory study with a mixed-method (qualitative and quantitative) was used with the aim of understanding and analyzing the perceptions of teachers in training for English as a foreign language in applications of virtual reality. Furthermore, the grounded theory was also used to make the first approximation to the phenomenon which serves as a theory to create a conceptual map with themes and content from the answers. The researcher took as population 26 university students from fourth grade in the primary education field to get their answers on virtual reality in English classes. This study shows that virtual reality in education increases the motivation and attention of students moreover it encourages collaborative and cooperative learning with a better understanding of the content. However, it presents challenges in the implementation of these devices.

Chen (2014) carried out a qualitative and quantitative approach study to investigate EFL adult students' communication tactics during task-driven, based on speaking negotiation, as well as avatar identities during language practice in the virtual course in Second Life. Furthermore, the grounded theory method for arising 3 themes such as perception in the virtual learning environment, point of view using avatar for learning, and e effects of task-based instruction. The researcher took 9 adult EFL learners from around the world who were selected to take part in a 10-session virtual lesson in Second Life. The study shows requests for clarification, confirmation checks, and understanding checks were the three most useful strategies, and also students learning experiences have an effective impact. Students in this research saw the virtual reality platform as a potentially powerful tool for enhancing their language acquisition.

Seung-heeo (2021) carried out a qualitative study to investigate the effects of virtual reality games on the development of vocabulary in English students, also knowing the learners' perceptions related to the game. The research was divided into two groups controlled and experimental, 25 students were selected. In the beginning, students took a survey related to the learning experience. Furthermore, learners took a pre and post-test vocabulary and cultural assessment. Finally, students took a survey to know their perceptions. The study shows effective results in improving vocabulary and cultural knowledge, virtual reality increases students' interest in learning and also motivation for learning.

Huang, et all. (2021) carried out peer-reviewed journals of the last decade, those studies contained qualitative and quantitative methodologies and included different research methods such as ethnography, phenomenology, narrative, and

case studies. The aim of the study is to get detailed information on VR literature on planned outcomes and the effectiveness of teaching VR programs. 57 pieces of research were checked and presented a beneficial use of VR in education. The information was coded in some categories such as study duration, candidates, study design, title, and some other categories. The investigation concluded that VR has positive outcomes and the implementation of VR could improve the education field.

1.2 Problem Statement

Learning a language has become an important skill for most people around the world. According to Coleman, (2010), from the British counsel "English is critical for countries' successful participation in the global economy, it provides individuals with access to crucial knowledge, skills, and employment opportunities and enables organizations to create and sustain international links." (p.3). English is the most spoken language used for communication, education, business, and research. The use of the English language achieves a high status and the role of English is recognized in most countries (Crystal, 2003).

In this globalized world knowing English is an essential part of personal growth for having a better life or just for fun. Being able to speak and understand English allows users to access unlimited educational resources and job opportunities. The majority of people in the world use English to study, meet people and do business. English has been recognized as a foreign language in Ecuador and its teaching is involved in the national curriculum. It is a compulsory subject in high schools and Universities. At the end of high school, students should reach a B1 level, mastering the four skills to convey their ideas clearly.

The learning and teaching process becomes successful if students conduct more practical activities using the current technology. Today, teaching and learning are limited to using papers, pens, boards, and markers; the same resources that the elderly used, and teaching methods of learning techniques have not changed at all in the last years. In some schools, teachers still use some old teaching techniques in classes, for some students and teachers teaching and learning a language is still a tedious and dull process. Students have to memorize rules, verbs, and prepositions that sometimes learners do not even remember.

Learning a new language involves boosting the four skills; listening, reading, writing, and speaking but most of the time learners do not accomplish this goal due to the limited interactive activities to develop language. To understand a language, students need vocabulary in their repertoire, words, and phrases which are an essential part of achieving this aim (Mofareh, 2020). New teaching and learning tools have appeared in the last few years in order to overcome learning and teaching problems. The way of presenting information, and the interaction between students and teachers have changed, using new apps, websites, platforms, and other technological resources to make language learning more interactive.

These tools and resources have narrowed the gap to keep students motivated and engaged in the lessons. Digital resources help teachers to personalize teaching activities, students learn in different ways some need more visual staff and others are more auditory. Technology provides tools to develop activities for almost all students' needs, incorporating engaging activities with updated content that shows great interaction and adaptability (Herold, 2016). Technology integration has positively affected teachers' and learners' attitudes overcoming anxiety and increasing enjoyment (Christensen, 2002).

In this pandemic, new apps and platforms have been developed to make learning more meaningful, interesting, and memorable. Educators have trained themselves to incorporate technology and new digital resources in their classes in order to make them more effective and engaging. However, some students do not present any progress even though the teachers' effort to incorporate technology into the lesson. On the other hand, 3D Vr tools provide great visual interaction and collaboration for input and output activities (Lin & Lan, 2015). This technology presents several

advantages for teachers and students, it incorporates motion learning activities that involve listening and spatial content.

Today, 3D illustrations, AR, and VR technology are on the rise in education, and language learning is not an exception. Teachers and students have to take advantage of these technologies to develop students' language skills. By the time there are no previous studies done showing perceptions of virtual reality in English teachers in Francisco de Orellana in the scholar year 2020-2021. In the last years, English teachers from Francisco de Orellana have limited knowledge of using new technologies such as apps, platforms, websites, or other types of technology to increase students' motivation and change the way of teaching. This is the reason why learners have lost interest in learning and have not been engaged in the lessons, but the integration of technology learners can build meaningful learning opportunities to draw their attention to be motivated in English classes (Martinez & Schilling 2010).

The majority of teachers are not involved in technology and most of them use basic teaching tools to present content. It is necessary for teachers to expand their knowledge using educational technology resources because it could help to narrow the gap between old traditional learning methods to new technological approaches. Furthermore, Teachers have no knowledge about using virtual reality and its advantages in education, today Technology has a good accepted by people around the world, because of its utility, facility, and efficacy (Venkatesh & Davis, 2000). Besides, 3D visuals increase learners' motivation and improve their attitudes through learning (Mei and Sheng, 2011).

Dalgarno et al. (2002) study (as cited in Pantelidis, 2009) states a good advantage of VR is the environment provided by the simulated tools for learning. With the use of virtual reality, teachers can enhance their English classes. Motivating students to learn, engaging them in the lesson, and participating actively. According to Jonassen, Hernandez-Serrano, and Choi (2000) learners can have a better performance when they actively participate, hands-on activities and TPR improves learning. Tools that incorporate motions, 3D object manipulation, and the English environment have a greater impact on learners' stimuli (Wilson and Soranzo, 2015).

That is why this research is relevant to know what are teachers' perception of virtual reality in the development of language learning. Teachers have limited knowledge of the theory behind virtual reality and implementation, it is something they have to consider at the moment to do the research. Changing the way of learning using VR would be the best option to foster students' language skills because it displays different environments to develop vocabulary and show the content in a more engaging way. Nevertheless, implementing VR in the English classroom is highly expensive, it is something that schools cannot afford and it should be set up in a laboratory or special room to save these types of equipment. For all these reasons there is no related research in this area in Francisco de Orellana.

1.3 General Objective:

To analyze English teachers' perception of virtual reality in language learning after experiencing 5 training courses with different VR apps at Unidad Educativa Padre Miguel Gamboa in Francisco de Orellana.

1.4 Specific objectives:

- To determine the theoretical foundation about virtual reality in English language teaching and learning.
- To describe the teachers' perception about the virtual reality apps
- To describe the teachers' perception about virtual reality in English language learning.

2. Chapter I: Theoretical Framework

2.1 Literature Review

Technology has allowed us to shift our lifestyles making lives easier to carry out, people can have a great amount of information at their fingertips and gadgets can do almost everything users want to. With the introduction of technology, several things have changed, for example; communication, work, meeting, education, and investigations. Educational institutions and universities are rapidly adopting new technologies such as virtual reality to train, teach and practice any subject. Teachers need to identify what is the best way their learners acquire the English language and which strategies and tools educators consider useful to integrate to accomplish this aim.

Technology offers new learning and teaching environments to foster students' knowledge, nowadays the educational field needs to be according to this new digital era, where hi-tech appliances rule the world. Immersive, practical, and engaging ways of learning and teaching have become widely available because of technological advancements (Carruth, 2017). Teachers who have never been active using tech may find it quite interesting and difficult to integrate current apps and tools in class moreover, it would present a significant opportunity to enhance teacher and learners' capabilities and creativity.

According to Power (2019), technological devices present special features for learning as collaborative work and learning, accessibility to interactive resources, connectivity, and suitable learning environments, these elements have the potential to engage and aim students in the learning process. In some cases, traditional classes are far away disappeared, and teachers still use old teaching methods even though at the present time that everything turned around to the use of computers and smartphones. Those devices provide good opportunities to engage, interact, and motivate students showing different ways of learning and teaching.

Innovative and interactive learning apps support teachers' jobs, this technology produces a more positive effect than other ways of teaching (Cheung & Slavin, 2011). Now students can receive education no matter where they are and can be taught synchronously and asynchronously way, those forms of teaching allow learners to access real-time classes or store video classes to watch them later. There are new innovative teaching and learning tools that teachers can implement into their classes to develop students' skills and engage them in the topic. It was discovered that when students use modern equipment, technology, and tools, their learning and engagement improve (Raja & Nagasubramani, 2018).

2.2 Constructivist Learning

Constructivism theory is not a recent idea; it has existed for decades. Constructivism is based on the concept that learners actively construct or make their knowledge regarding the experiences they get. Constructivism is a learning approach that permits learners to create their own understanding with the knowledge gathered in previous experiences (Elliott et al., 2000). Learners normally use their previous knowledge as a foundation and build on it with new things that they learn, each individual experiences different concepts that make their learning unique to them (Carswell, 2001).

In this model, learners actively participate to discover their surroundings. Jonassen, Hernandez-Serrano, and Choi (2000) and Greening's (1998) study (as cited in Chen,2010) said that simulated reality can assist learners in building learning. The constructivist model encourages students to study in a rich atmosphere that has both depth and breadth. Dewey argued that knowledge is based on active experience, learners have to participate and be immersed in the atmosphere to process and

develop an understanding (Dewey, 1916). This allows students to develop and foster their skills to build new knowledge.

The learners are aware of the world by connecting prior background experience, beliefs, and insights to construct new information. (Staits & Wilke, 2007). This term was first introduced by Jean Piaget "Cognitive development" stated that children's intelligence is formed through the years, as the learner grows the intelligence as well, it happens with environmental interaction. Jean Piaget also suggested humans possess mental pictures that represent features of the world "schemas" including things, activities, and ideas (Piaget, 1952). Schemas happen in three stages; assimilation, accommodation, and equilibration.

Those stages can be used in language teaching and learning because it builds knowledge in an organized way, learner associates certain items of a word they think, which means students develop cognitive patterns and it is used to differ from other words in order to recognize them, this process is called assimilation. If students learn new items and those fit with the schema, this process is called accommodation because the word matches the description. This process is useful in the learning-teaching process because augments the repertoire and is capable of recognizing new words to assign them a characteristic using prior knowledge.

2.3 Collaborative Learning

Collaborative learning is a technique where learners form groups to work for a common goal such as fulfilling a task or creating an object. Collaboration is the human interaction where members of a team use their abilities for making contributions. Learning is an active process that involves sensory input, VR and other technological devices provide this advantage to make the learning process more meaningful. Learning takes place when a group of students joins together to use their skills to solve problems (Jonassen, 1997). Collaborative learning also supports students' learning to create understanding and set up an appropriate environment to arise cooperation.

Collaborative learning improves critical thinking abilities, students get involved in the process, learners show better classroom performance and their problemsolving skills are improved (Marjal, and Seyed, 2012). According to Gazi (2009), Constructivism motivates learners to manage their learning through collaborative tasks, self-reflection, and metacognitive processes. It enhances learners' communication, group work activities, and critical thinking. Learning occurs when an individual interacts with another person, according to the cooperative or collaborative model of learning (Carswell, 2001).

One objective of constructivism is to make a meaningful environment that includes communication and collaboration (Gold, 2001). Hodgson & Watland (2004) collaborative group activities are a key component of making meaning, each thing students learn gives a better understanding of other things in the future. Because of the "options for exposure to diverse perspectives and interpretations," students gain greater knowledge through groups and other learning activities with their online classmates (Hodgson & Watland, 2004). Those authors mention learners working together with other peers could be able to build knowledge in this case students could increase their vocabulary or repertoire for better understanding and communication. Students support each other to construct meaning and build understanding.

2.4 Embodied Cognitive

It is concerned with the physical body movement to increase comprehension, the idea of this cognitive process is to involve the body learners' interaction with the environment to support the cognitive process. Craig & Amernic 2006 declares (as cited in Sullivan, 2018) that human-centered learning movements provide advantages such as active participation and improved learning quality. Embodied cognition refers to the body and brain working collaboratively to create understanding, it also advises all activities we do, as well as the ones we saw help us to build a learning experience. Johnson-Glenberg & Megowan-Romanowicz, 2017 claims students who see the teacher write do not experience the same

embodied effects as students who actively manipulate objects as part of their learning process.

Embodied cognition is a thinking method based on motor behavior, this approach highlights that cognition usually entails acting with one's physical body movements on the environment in which one's immersed (Shapiro, 2021). The involvement of physical activities increased students' grades, he highlights the importance of body experience in learning (Kontra et al. 2015). This is an effective and active way to foster cognition in students. Technology and embodied cognition have great potential with Virtual Reality, this learning theory has much to offer designers of VR content, especially when individuals use controls. The positive aspect of embodiment and education lies in the body should be moving, is not a passive instrument or imaging, for a high level of embodiment to be in a lesson (Johnson-Glenberg, and Megowan-Romanowicz,2017).

Embedding VR in teaching provides excellent benefits for learners such as retaining and recalling information, the drive and focus to learn, spatial awareness and mental visualization abilities, logical and analytical reasoning skills, teamwork skills, effective expression and interaction with others, deep engagement in a subject or activity, creativity, and understanding and managing emotions (Papanastasiou et al. 2019). Kavanagh et al. (2017) suggested VR can be used in simulations, practical activities, and remote learning. It can also give better learning environments so that students feel motivated, VR can foster intrinsic motivation.

2.5 Language Learning.

Language learning happens when the learners pick up words from their surroundings, people are exposed to the language and start learning words from the environment. There are some stages in how a person begins to acquire a language. According to Vygotsky's theory, a child's cognitive development and learning capacity can be influenced and supported by their interactions with others in their

social environment. Vygotsky (1978) highlights the importance of social interactions in a child's development, as it is believed that every mental function undergoes an initial stage that relies on external social influences.

2.6 Social Cognition Theory

This theory of learning is founded on the concept that people learn by watching others. Atmosphere, behavior, and cognition influences are involved in this learning process. In other words, learning is a social activity where teamwork and mutual exploration are important (Jonassen, 1997). Observing others doing something is how humans learn, if someone performs an action another person who is observing will do the same thing, or learn a similar behavior. The learning process is based on observations; people need to observe others in order to perform or display understanding. Didehbani, N., et al (2016) study (as cited in Leung, Zulkernine, & Isah, 2018)) VR has been used to enhance social interaction in adolescents with autism, it improved social skills, cognition, and interaction among people.

Schunk's 1989 study (as cited in Scavarelli, Arya, & Teather, 2021) defines social interaction, observation, and imitation as a learning process in the social cognition theory. It is vital that the VR system should contain a social context for improving understanding of the language. Most of the time, people fear communicating with others and making mistakes or errors. Lack of interaction leads students not to practice the target language and to lose opportunities to build fluency and confidence. Social cognition theory allows learners to interchange ideas and thoughts, and feelings with other people, this approach highlight learners' emotion to develop learning. A study shows learners' emotions affect the learning environment and quality, it has a positive impact on the language learning process (Bown, & White, 2010).

2.7 Second Language Acquisition

Second language acquisition is the process by which people acquire a language, it is an unconscious process where the individual picks up words or vocabulary without noticing. Ellies (1997) defined L2 as any other language that was learned right after the mother tongue. Language acquisition does not involve a large set of conscious grammar structures or neither repetition. According to Krashen (1982), "Acquisition requires meaningful interaction in the target language - natural communication - in which speakers are concerned not with the form of their utterances but with the messages they are conveying and understanding" (p.6-7). There are some researchers that have been studying this field to understand how an individual acquires language. Furthermore, this process of learning is studied by psychologists, linguistics, and educators.

There are some theories that try to explain this issue if language is inborn or learned. According to Trawiński (2005) in his book "An outline of second language acquisition theories", he mentioned there are some techniques for how language acquisition occurs. Furthermore, this research study takes some of Stephen Krashen's Theory of Second Language Acquisition and Mariusz Trawiński's approaches. Some hypotheses are cited as to how a person acquires the language, The Acquisition-Learning hypothesis, the Monitor hypothesis, the Input Hypothesis, the Affective Filter, the input hypothesis, the Natural Order hypothesis, and behavioral learning.

2.8 The Acquisition-Learning Hypothesis

In this stage, it is important to discriminate between learning and acquisition. The acquisition is an unconscious process of getting information. On the other hand, learning is the conscious process of obtaining information. Krashen (1981) believes that acquisition is highly important rather than learning. The acquisition resembles the way human acquires their mother tongue, kids learn their first language only by listening, in this hypothesis individuals are not concerned about learning grammar rules. Learning is the process of studying formal rules, analyzing, and paying attention to a specific subject, this activity mainly happens in classrooms. The acquisition is a subconscious process where an individual gets the language by interaction, producing language becomes an automatic process. If learners want to

speak and understand a language, they must interact with words and vocabulary until it becomes part of students the same as they acquire their mother tongue.

2.9 The Input Hypothesis

The hypotheses put primary importance on the comprehensible input CI that language learners are exposed to understanding spoken and written language input is seen as the only mechanism that results in the increase of underlying linguistic competence. On the other hand, output language is not produced or has any effect on learners' ability. Krashen (1985), linguistic competence is only advanced when language is subconsciously acquired and conscious learning cannot be used as a source of spontaneous language production finally learning is seen to be heavily dependent on the mood of the learner. This quote says language acquisition is an unconscious process that depends on the students' mood, VR provides the tools to engage learners in an attractive environment with unlimited resources. There is a distinction between language acquisition and language learning claiming that acquisition is a subconscious process whereas learning is a conscious one.

According to this hypothesis, the acquisition process in L2 is the same as L1 acquisition, the learning process is consciously learning and inputting the language being learned however this goes as far as to state that input is all that is required for acquisition. Visual aids are the most effective ways to show and present information, nowadays teachers and students have a wide variety of visual aids for a better presentation such as computers, devices, projectors, and smart boards are the new trends of showing information. These gadgets assist teachers to make their classes more engaging, interesting, interactive, and meaningful. These technological tools arouse learners' curiosity and motivation to immerse students in the learning process. Most teachers know that visuals enhance learning comprehension, they can bring the real world to the classroom, it is used to explain or activate prior knowledge and help to describe what words cannot, clarify

concepts, and recall and retain information. According to Geeraerts (2006), learners need to be in an environment that develops their language abilities in a real context.

2.10 Vocabulary Learning

Vocabulary are words that a language contains, these words have meaning and connotations (Pateşan, Balagiu, & Zechia, 2019). Learning new vocabulary is a challenging process for both language teachers and learners. Language learners need to learn a large number of words in order to communicate effectively in a new language. This can be a difficult and time-consuming process. Language teachers need to find effective ways to help learners acquire new vocabulary. In second or foreign-language classrooms, it appears that incorporating audio-visual materials as a supplementary approach to vocabulary learning can have advantageous outcomes. According to Harmon, Wood, and Keser (2009), the progress of learning a language is closely intertwined with the knowledge of vocabulary words.

To teach vocabulary is necessary to provide real phrases that students will hear in their daily speech for that reason authentic language material is essential to be taught. several educators also incorporate authentic English material in their teachings to familiarize learners with the language as it is used in real daily conversations (Person, 2023). Teachers can find these genuine language resources everywhere, it extends beyond just newspaper and magazine articles; authentic material includes songs, TV programs, films, radio shows, podcasts, leaflets, menus, or any written content in English. All these elements can help students to acquire new words, a study conduct by Legault et al. (2019) found at learners who were immersed in virtual reality environment had an increased vocabulary repertoire.

The Zone of Proximal Development (ZPD) is a concept in developmental psychology that recognizes the difference between what a learner can do independently and what they can achieve with the guidance of a more knowledgeable individual Vygotsky (1978). The ZPD can be used to guide instruction in the classroom. By identifying the ZPD for each student, teachers can provide the right amount of support to help students learn new concepts. Additional

resources like textbooks, dictionaries, worksheets, and self-learning materials can serve as supportive tools or scaffolding. Now teachers can rely on technological devices to support or scaffold language learning and improve the opportunities for learners.

Arndt and Woore (2018) emphasized that learners exposed to media and audiovisual input performed better on various second-language tasks. In this study, Kacetl and Frydrychova-Klimova (2015) used videos to teach vocabulary words, videos can provide learners with a large amount of exposure to the target language because the more exposure learners have to a language, the better they will become at understanding and speaking it. Moreover, videos can provide learners with realworld examples of how the language is used, it can help learners to understand the nuances of the language and to learn how to use it in different contexts. Furthermore, videos can be a fun and engaging way to learn a new language, it can help learners to stay motivated and to continue learning (Peters and Webb, 2018).

2.11 Speaking Skills

Speaking is a vital language skill that enables people to communicate with each other. It involves using both verbal and nonverbal cues to convey meaning. Verbal cues are words and phrases, while nonverbal cues include things like facial expressions, body language, and tone of voice. By using these cues effectively, speakers can create awareness and understanding between themselves and their listeners (Chaney & Burk, 1998). It is widely acknowledged that language acquisition involves initially speaking the language after extensive exposure to the sounds, words, phrases, and sentences in one's environment (Anuradha, Raman & Hemamalini, 2014). Learners need plenty of vocabulary words in order to develop speaking, the teacher provides phrases, words, and useful vocabulary so that students can produce thoughts.

In order to enhance students' speaking abilities, educators can employ brief questions and dialogues within the classroom setting (Bashir et al. 2011). Oral communication exchanges and engaging in meaningful tasks that require language production which offers valuable practice for internalizing the language. Asher (2003) reinforces the notion that learners are quick to imitate and reproduce language after observing teachers' models. According to Hammer (2007), speaking is human communication, and it is a multifaceted process. On the other hand, inadequate communication among students does not provide enough interaction to enhance their speaking proficiency. According to Banu (2017), students lack sufficient motivation or encouragement to engage in language practice and speaking activities beyond the outdoors of the classroom.

In his findings, Harmer (2001) suggests that learners should be aware of the "language features" and their ability to comprehend and utilize them during conversations. When speakers effectively manage these language functions, learners are guided toward achieving successful communication objectives. Microskills are the smaller units of language that create speech. They include things like phonemes, morphemes, words, collocations, and phrasal units (Brown, 2004). So learners at the first stages of life start learning words, phrases, and so on in order to build up a complete statement. The use of virtual reality (VR) had a notable impact on students' speaking performance in terms of grammar and vocabulary usage (Sally Wu & Alan Hung, 2022).

Pronunciation is a subskill of speaking, pronunciation is the manner in which words must be spoken (Kasimov, 2022). Pronunciation is developed after learners are exposed to the language. Learners must be surrounded by the language in order to acquire pronunciation. Piske et al., (2001) found that learners' pronunciation improves with longer exposure to the target language. Students need some guidance in order to pronounce words correctly. Young learners tend to acquire pronunciation like native speakers. Pronunciation is developed after learners are exposed to the language. Learners must be surrounded by the language in order to acquire pronunciation. Students need some guidance in order to pronounce words correctly. Acquiring pronunciation skills involves imitating; as a result, the teacher should exemplify proper pronunciation (Sachdeva 2011).

Moreover, by using virtual of virtual reality students can reduce their fear of speaking. Most of the students do not produce statements because they are afraid of making mistakes. In a study conducted by Boonkit (2010) regarding the factors that

contribute to the enhancement of learners' speaking skills, it was found that employing suitable speaking activities can be an effective strategy for reducing anxiety among speakers. Allowing participants to choose their own topics resulted in a sense of comfort, encouraging them to engage in English conversation and boosting speaking confidence among learners of English as a foreign language (EFL). In addition to its proven effectiveness in addressing social anxiety, virtual reality (VR) has been the subject of numerous studies exploring its potential to address public speaking anxiety (Heuett & Heuett, 2011; Wallach, Safir, & Bar-Zvi, 2009).

2.12 Listening Skills

It is the ability that all people have to receive information in spoken language, this skill is essential for effective communication in personal and professional relationships. "Without access to comprehensible input in the form of aural or written messages, a second language won't happen." (Numan, 2015, P. 34). Children and babies acquire everything in their surroundings sounds, this is the second sense humans develop. Krashen (1982) stressed the significance of "comprehensible input". In the early stages of language learning, listening holds greater significance for many individuals who are acquiring a second language, as they may encounter difficulties in comprehending the written script. In this context, listening plays a more foundational role compared to reading.

Providing students with instruction on effective listening strategies proves to be highly beneficial, as emphasized by Goh (2000). However, it is important to note that simply teaching listening strategies alone is insufficient. To enhance students' listening abilities, it is essential for teachers to also enhance their vocabulary, grammar, and phonology knowledge. Using VR in the language learning process or other technologies can narrow the gap and help students to pick words and phrases. Tai, & Chen, (2021) found that learners who were immersed in VR had better listening understanding and word retention, VR offers a simulated environment where learners interact each other to practice listening with authentic activities.

Chunks, identifying sounds, stress patterns, contractions, and other micro-skills are useful in enhancing listening, multi-word units are essential and crucial components of informal English that are indispensable for speaking, comprehending, deciphering, perceiving, and engaging in conversations. Understanding these units is imperative for effective communication and comprehension. Linking multiword significantly improves a learner's capacity for listening comprehension so verbs with several words are a fundamental feature of the listening English language (Mohseni et al. 2014). Research shows that learners' comprehension slightly exceeds their production ability, and students understand faster than product (W.R Miller, 1963 as cited in Brown, 2007).

2.13 The Affective Filter Hypothesis

This hypothesis refers to the individual feelings and emotions to contribute to second language acquisition. This affective filter contains three factors; self-confidence, motivation, and low anxiety. If the learner has higher affective levels will be unsuccessful in acquiring the language. According to Krashen (1983), the learner who possesses low levels of affective filter will have better input comprehension, and also motivation, and confidence will be increased. In other words, if the filter is up the learners will not fulfill acquisition but if the filter is down the learner will be a potential speaker. It is essential in language acquisition because learners stop caring about accuracy and can start producing words, to develop their communicative competence. The factors mentioned play an essential role in this hypothesis.

2.14 Behavioral Learning

There is no clear idea of how language can be taught, learned, or acquired but some researchers think behavioral learning is how learners get the language. Watson (1913) states that behavioral learning stays in oral language which conditions a particular behavior, this learning behavior is considered a process of imitation which one should reinforce to become a habit formation. According to the learning approach, children learn the spoken language of another individual through

modeling, it is seen as a process of habit formation that involves stimulus, response, and reinforcement.

This principle can be applied to how learners or infants learn a language, it is when a mom tells her baby a word (stimulus) so the baby responds with an action or with the same word (response), and finally, the mom repeats the words as well as the baby until it becomes a habit (skinner, 1960 as cited in Trawiński, 2005). So both theorist believes that learning takes place when learners have stimuli in other to conduct response and the reinforcement allows learners to remember in a habitually way.

2.15 Motivation Theory

The Cambridge Dictionary (2022) establishes "enthusiasm for doing something or the need or reason for doing something". According to Ellias (1997) in his study "Second language acquisition" motivation is conformed to attitudes and emotions that influence someone to keep trying. There are some kinds of motivation: instrumental motivation which grants learners to have great opportunities, integrative motivation concerns the cultural and social group an individual is interested in, and intrinsic motivation.

To reach motivation is necessary that people attain high levels of performance and break down barriers to progress (Vallejos, et al., 2012). It is the biological, emotional, social, and cognitive variables that trigger behavior that is all part of the motivation. The term "motivation" is widely used in ordinary speech to express why someone does something. It is the force that propels human behavior. motivation is the experience of wanting something or wanting to avoid it. There are two types of motivation intrinsic and extrinsic. On the one hand, learners want to belong, desire to be loved, and seek to get the attention they deserve. Students are motivated extrinsically by rewards, in order to progress socially. On the other hand, students strive to explore things that are satisfying in themselves, disregarding rewards. People are motivated intrinsically, by a natural curiosity because it feels right.

2.16 Extrinsic Motivation

Extrinsic motivation comes from outside factors, students are motivated by rewards or praise. This motivation is more linked to learning the language but for a complete engagement of students extrinsic and intrinsic motivation are required so learners can achieve good results in their performance (Pintrich & Schunk, 1996). Extrinsic rewards demand a connection between the activity and some distinct outcomes, such as tangible or verbal incentives, in order for satisfaction to be achieved (Porter and Lawler,1968). VR could give the opportunity to engage students in the learning process with rewards and achievements that the console contains. In some virtual reality environments, users have to unlock levels to use the new interface, this kind of reward will engage students to keep working on their learning.

2.17 Intrinsic Motivation

It is the type of motivation that is developed for oneself, the individual looks to satisfy his own learning needs. When individuals are intrinsically motivated, they do activities for their own sake and out of interest in the activity (Deci & Ryan, 1985). Ellis (1997) motivation involves the arousal of curiosity in the own personal interest. If this motivation is applied in virtual reality students will be able to inquire about knowledge for their sake, learners will be able to seek information using this device. This motivation will help learners to become self-reliant, and be more responsible with their learning process. Some learners need intrinsic motivation for learning, in the study done by Wen (2018), Chinese students increase their intrinsic motivations by the fact that they want to learn their own language and seek their customs, this motivation enhances students' learning and self-esteem. Moreover, motivation is also used for treatments, a study carried out in 2018 released that extrinsic motivation was useful for Stroke Rehabilitation.

2.18 Multiple Intelligences

Knowing how a human learns is important to choose and designing methodologies and activities according to the learners' needs. The ability to learn is unique as well as the intelligence required for each student. Garden (1989) suggested that each individual has different types of intelligence and can stand out in some areas or subjects more than other students. Humans have eight sorts of intelligence, based on some studies learners can learn better with a determined intelligence. According to Garden (1989) exist intelligences, Visual-Spatial, Linguistic-Verbal, Logical-Mathematical, Bodily-Kinesthetic, Musical, Interpersonal, Intrapersonal, and Naturalistic. In this research project, visual-spatial with bodily-kinesthetic intelligence will serve as a theoretical foundation for supporting the use of VR in classes.

2.19 Visual-Spatial Intelligence

This type of intelligence supports learners with visual aids, here students best learn through images and objects. This learning ability students are good at sketching, designing, and identifying signs or figures (Gardner, 1993). The learner has a higher chance of success if they watch videos, charts, pictures, and maps because it makes it easy for them to understand. Cawi, Marhaeni, & Dantes' 2014 study (as cited in Yuliyanto et al, 2020) mentions that the feature of having visual intelligence is learners possess an inclination to colors, forms, lines, objects, and constructions. Visual learners can catch information at once and also solve problems with noncommon ideas. These learners process or learn faster rather than auditory learners (Silverman, 2002). This intelligence is presented in all types of technological devices, it best matches with VR content which presents a great number of realia and activities for students to develop cognitive and thinking skills.

2.20 Communicative Language Learning.

CLT is a language approach that is mainly focused on interaction and communication. Richards and Rodgers (2001) argue that language learning is a communicative process that requires exposure to authentic language use and opportunities to practice using the language in meaningful contexts. Learners must be motivated and have a positive self-image as language learners. Students can foster their communicative abilities by having real-language conversations to apply what students know. To develop communicative competence role plays, flashcards, and audio-visual materials are added in the lessons to improve learners' interaction.
Provide learners with the resources they may encounter in real communication in a vivid way, which also brings interest to the class. In the CLT approach students learn a language to communicate and understand information rather than just learn grammar rules and structures.

In this approach teachers are in charge of carrying out the communication process between learners providing materials and leading the communicative activity, learners are placed in communicative settings and acquire language knowledge and communicative competence through active participation and interaction.

2.21 Bodily-Kinesthetic Intelligence.

This intelligence involves movements and physical activities which are linked to the learning process. Some students learn in an active way, they need to move and use motor-sensory interaction to perform actions that are stored in their brain, using actions students learn proactively to acquire or learn something specific. Vázquez et al. (2018), in their study "Words in Motion: Kinesthetic Language Learning in Virtual Reality" found that body motions help students to keep information longer than other ways of teaching, and learners show better performance rather than students who were sitting. People who prefer this intelligence usually have handeye synchronization. This learning method focuses on movement activities, we know that humans learn better by doing this rather than reading the theory. A study carried out by (Horst et al., 2009) demonstrated that cycling between watching and performance improves procedural learning and retention, according to a large body of evidence, observation and practice are incredibly didactic.

2.22 Interactive Teaching

It is a way of teaching that involves students actively participating in the learning process. This means that students are not just passively listening to lectures or reading textbooks, but they are also actively engaged in the lesson, group work, and hands-on activities. Students turn into active participants in the learning process and start performing creative tasks with the resources selected by the teacher. This

approach demands students' interaction with the teacher, learners, and the environment. Recent studies show that interactive teaching helps students to store knowledge for longer periods (Giorgdze, 2017). According to Dale's Cone of Experience, using role-playing a situation, content simulation, and hands-on experiences learners tend to remember things longer (Dale, 1969).

Interactive teaching also uses dynamic and communicative teaching methods, which are the common components of this approach to inspire learning. Interactive teaching fosters students' critical thinking, teamwork, communicative skills, and uses a range of learning styles to engage learners in the learning and teaching process. This interactive teaching approach encourages students' collaboration, and stimulates discussion, and experimental activities. Using new technological aids engages learners in the content (Senthamarai, 2018).

2.23 Total Physical Respond (TPR)

This learning-teaching approach is the same way children learn their mother tongue. Before language appears in any person, the individual has to listen to huge quantities of words to produce something. Children have to observe and act out what the speakers do or say to achieve understanding in this approach. TPR is about using the body and doing actions, this strategy allows learners to listen to a command in the target language and perform the action. According to Asher (1969) in his book "The Total Physical Response Approach to Second Language Learning", he mentioned if speech is joined with actions language learning becomes better. If both actions are performed, the learners start to acquire and understand the words. This strategy mainly focuses on listening skills as the audiolingual method does but this method tries learners to understand in order to replay an action instead of just hearing words and phrases without any sense.

This method is enjoyable and engaging for teaching-learning a language, there are some investigations about the effective use of TPR in English learning. Sühendan (2013), in his research "Using Total Physical Response Method in Early Childhood Foreign Language Teaching Environments," states that TPR is a helpful method to teach a language that combines speech and response, it allows students to learn a language through actions. Hsu and Lin's 2012 study (as cited in Sariyati,2013.) found that TPR improves learners' motivation and draws students' attention to learning a foreign language. Words and phrases learned through this method stay longer in the memory, facilitating the response of certain inputs. Sophaktra's 2009 study (as cited in Sariyati, 2013.) found that it allows students to acquire better pronunciation and store the words longer in their memory. This language method does not require as many things to be developed and is ideal for kinesthetic, this sort of activity is meaningful for kinesthetic learners.

This learning method is highly used in vocabulary development, students associate a word with the sound of the word to acquire the language. Children learn words by doing, watching, and listening to others. Most of the studies done with TPR showed that learners have increased vocabulary, which is this supported by the actions students do and the motivation that this method provides. The total physical response makes students practice the target language using movements and interactions among learners and objects.

2.24 Augmented Reality (AR)

According to Microsoft Dynamics (2022), is a dynamic version of a real-world environment with digital animations, augmented reality or alternate reality is a combination between simulated objects and the real world, this interaction makes users see objects in their real environment. These things are created by computer intelligence software, the objects are overlaid on any surface user wants to. This new technological application comes from computer-assisted language learning, this new technological trend mix both realities, virtual and the real world to display amazing objects in real time. Augmented reality provides interactive digital content using the surrounding of the real world.

This kind of combination generates innovative learning opportunities with simulated real-time objects and optimal resources (Billinghurst, & Poupyrev, 2001). AV can have different content for their users, text, objects, pictures, animations, and audio which are integrated into the environment. For the implementation of augmented reality, some requirements are necessary as a video

camera to analyze the area and recognize the stuff in that place, GPS to identify the students' position, an audio system to interact with the sounds of the projections, internet accessibility to start the app which makes all this process (Johnson et al., 2010). Furthermore, the software combines virtual and real content to start using augmented reality (Billinghurst et al., 2001).

The main attraction of AR is how computer mixes both real-world and digital objects which sometimes is perceived as real parts of the atmosphere. Some features of augmented reality are visual items text, objects, pictures, figures, and overlapping objects. The application of AR is highly used in different disciplines such as army aeronautics, medicine, tourism, manufacturing, entertainment, and education. This technology is concerned to adapt the special environment element in its simulations. Virtual reality can be seen from screens, head-up displays, and glasses. Nowadays, mobile phones have incredible features to do almost all the tasks that a computer does, and they have enough technology to display overlaid elements in the real world. There are several apps to develop in daily jobs, looking for information, making presentations, adding interactive elements, and even trying on clothes.

This technology goes beyond, there are some companies that use AR to assist their employees. Google is on the rise with this innovative device, this corporation uses glasses to improve the way people work, and their employees work smarter, faster, and safer. The glasses offer several features that make a unique experience, video call assistance, voice assistance, and text presentation. Big companies trust this technology to enhance their productivity and support faster solutions. AR in the industry provides great advantages such as improved accuracy, workers making no errors, and they have information on a hands-free device for smarter and faster hands-on work (Google, 2022).

2.25 Augmented Reality in Language Learning.

There are several studies conducted to identify the effect of AR in language learning, augmented reality technology can provide meaningful elements for learning. Learners engage with the content that appears in their real-world, text, graphics, video, and sound are able with the reality to create AR. This technology can be used in small spaces displaying interactive elements in the environment, bookful is an English learning app that allows users to visualize graphics in the space. This virtual representation boosts learners' attention and improves motivation (Billinghurst & Duenser, 2012). A study showed that AR and VR scaffold students in the learning process. Participants improved their writing skills using this technology, which suggested that the integrations of AR and VR might enhance learning skills (Soleimani, et al. 2019).

2.26 Virtual Reality (VR)

As its name suggests, a virtual world is a computer-based technology that provides audio-visual entertainment containing tactile object projections in different environments in real-time. Virtual reality, like digital games, draws on a variety of other fields of study, including cognitive science, computer graphics, and electronics. It happens to isolate the individual from the real world and immerses them in another atmosphere, it gives the user the feeling of being in another world. This virtual technology can also be defined as the immersion of a person into another reality (Seidel & Chatelier, 1997). Learners immerse into a 360° experience and individuals can also interact with the 3D world. An environmental immersion gives a rich learning atmosphere that allows students to feel like they were there (Kaplan-Rakowski & Wojdynski, 2018)

This technology is not new, some years ago some researchers speculated about this technology and its huge impact on education. Virtual reality deals with lots of inputs and outputs, and visual aids displayed in virtual reality make it more interesting and attractive to any user or learner to hook with this technology. VR was created for entertainment purposes, but later the air force, architecture, and art implemented it to train, develop and design new things that could be difficult to recreate in the real world. It empowers creativity and makes the classes more exciting. According to Oculus (2021), it is an amazing experience that transports users from the comfort of their homes to far-off worlds you never knew existed.

2.27 The Importance of Virtual Reality in Education

Technology has come to stay, in the last two years, teachers and students have discovered new teaching and learning tools. Now it is easier to get access to information, attend meetings, be online and learn virtually. So, the use of new technological resources has changed the way trainers teach and learners collect data. Nowadays, there are new engaging ways to teach and learn. Students are more motivated when they receive classes using apps, websites, programs, and other kinds of technological tools. It is important to identify the educational value that technological resources provide for the acquisition of knowledge (Lazar, 2015).

Using the computer and the cellphone has helped augment motivation in learning, but this engagement could be increased by using virtual reality. The use of virtual reality has several benefits in the classroom, it will change the way teachers teach, provide more authentic information, and engage learners in the learning process. Chandramouli et al. (2014) emphasized the important role of virtual reality in education because it uses visual stimulus that increases learners' interest. Students will interact with the objects and be able to stay in other environments, Students learn through interaction and VR provides these stimuli. Several studies showed by the kind of activities and virtual interaction, learners present higher cognitive results and positive positions regarding to technological teaching (Vogel et al., 2006).

Von der Emde et al. (2001) discovered five advantages of incorporating virtual reality (VR) into the process of learning a foreign language. (1) genuine communication and content, (2) independent learning and peer teaching, (3) individualized instruction, (4) experimentation and play, and (5) developing research skills. Several researches showed that virtual reality has positive advantages for students and teachers in language learning, Shi, Wang, and Ding (2019) created a learning virtual environment to increase motivation in math, fortunately the result was positive students present grades improvement. Not only math is beneficiated with VR also science classroom with independent and peer-supported learning (Bang & Andre, 2013).

2.28 Benefits of Virtual Reality in Education

Virtual reality presents a great opportunity for distance learning, even though nowadays we have distance communication and learning it is not the same as students face to face. This technology provides a virtual reality animation to interact with each other, it makes learning more interactive and meaningful. It also enables students to explore and experience a scenario completely safely, students can learn many things where the accessibility is too complex, under the water in the ocean to learn the different species, out of the world to learn about the planets and other environments to enrich the learning experience. Carvalho. (2019) emphasized that one of the benefits of virtual reality is that students can interact with the scene and with other users to increase the inputs in the virtual world, which makes it more engaging to work collaboratively.

The learning experience is more enjoyable, the learner gets in the environment and can experience the simulated scenario. Pinho, (2004) claimed that virtual reality has three features, immersion, interaction, and involvement. It means the user can navigate through the virtual world, virtual reality in education also aids pupils who are having difficulty understanding challenging academic subjects. Furthermore, VR may retain learners' knowledge, as kids, we learn to ride a bike and never forget, virtual reality will let students bring the knowledge in long-term memory. Humans do not forget things when they do or perform actions.

The prevalence of VR technology in language education has been steadily growing. Extensive research has highlighted the advantages of incorporating VR in language teaching. These advantages encompass a wider range of benefits, such as enhanced opportunities for language production, improved self-expression and self-confidence, heightened learner autonomy and motivation, increased crosscultural competence, improved listening skills, and positive outcomes in vocabulary acquisition (Alizadeh, 2019; Berti, 2019; Chen, 2016).

2.29 Immersion

Immersion is the sensory stimulation that allows the perception of the virtual environment and then its comprehension, it is the perception of being physically present in a non-physical or virtual world. The perception is created by surrounding the user of the VR system with images, sound, or other stimuli that provide a very absorbing environment. According to Pinho (2004), immersion is the sensation of a user experience staying in the virtual world or artificial intelligence (AI). Spatial immersion happens when the user experiences all the features of virtual reality, those characteristics make the simulated environment seem to be more realistic. Students are exposed to thousands of visual aids to recreate the scene to immerse the learning process. It makes the activity look more interesting using more authentic language according to the situation.

VR's immersion is a crucial element that enriches users' situated experience by allowing them to feel as though they are really there, without actually having to be physically present. This feature enables users to experience a sense of presence in virtual environments, which is a significant benefit of VR technology education (Flower, 2015). This characteristic provides some applications to other fields such as science where students can identify the smallest creatures and microorganisms. Using VR to teach geography, where students can identify countries, their boundaries, and their surfaces. Culture allows learning about other person's culture and the most well-known of that place. Dalgarno & Lee's 2010 study (as cited in Flower, 2015) found that a 3D environmental learning environment has five advantages or positive aspects including the representation of spatial knowledge, learning through experience, active participation, learning within specific contexts, and collaborative learning.

2.30 Interaction

In virtual reality, users engage with a digital realm to choose and modify virtual objects and manage their position and viewing perspective within the virtual environment. This interaction involves selecting and altering virtual elements (manipulation), as well as navigating through the virtual space by controlling one's location and direction of observation (navigation) or talking with someone else (social interaction) (Doerner et al, 2022). Once users are in the virtual world, they have the opportunity to interact with objects and other users. This is the reason why virtual reality is unique and above all input and visual devices, it allows learners to have a simulated atmosphere that teachers are willing to contextualize. It is also useful to put into practice like it were in the real world. This helps users to train and be familiarized with the workplace, language, and environment. It will create a good simulated scene to use all resources displayed in the virtual world.

This technology enables the user to interact in realistic three-dimensional situations in order to learn something new, to develop language there must exist interaction, to acquire new knowledge the learner must interact with each other and must be surrounded by environmental inputs (Krashen, S,1987). Thoms (2012) concluded that interaction is essential for learning a foreign language, external factors are involved such as human interaction and the environment where this takes place, which will potentially contribute to the teaching and learning process.

Walsh (2011) claims learners acquire new knowledge through language in interaction. Creating an environment that promotes communication and teamwork allows players to engage in social interaction as they immerse themselves in game contexts and work together with their team members to achieve their goals. This rich communication environment in a technology-mediated foreign language (FL) network provides an opportunity for FL learners to actively participate and engage in intercultural experiences (Zheng et al., 2012).

Interaction is a key aspect of virtual reality (VR) and has garnered significant interest from language researchers and educators. From a sociocultural second language acquisition (SLA) perspective, social interactions among foreign language (FL) learners contribute to improved learning results. By immersing learners in social VR experiences, they not only have the opportunity to explore virtual environments but also form friendships with individuals from diverse locations worldwide. Furthermore, apart from facilitating virtual conversations in settings like a shop, social virtual reality (VR) also provides users with the opportunity to engage in various activities with others through their avatars, including participating in sports. Social VR has changed the way people interact with each other on the internet (Metz, 2017).

2.31 Steam in VR

Today virtual reality education is focused on the STEM approach, this method means science, technology, engineering, and mathematics. This theoretical framework STEM was developed in this century for improving learning performance, relying on digital-oriented training and resources.

With the use of VR in education, students can real practice simulations, can design projects that would be expensive and impossible to recreate in the real world. For the science field, there are instructional biology resources that allow you to get up close and personal with a variety of dangerous wild animals, as well as tools that allow you to learn about human and animal anatomy. History, it allows you to know historical figures and recreates historical surroundings and scenarios. Art, students can visit the most famous art galleries such as; Smithsonian and le louver museum, which will unleash students' imagination. In Geography, students can travel anywhere in the globe using virtual reality. Immersion in a different environment on the opposite side of our world is both educational and entertaining.

2.32 Input and output devices

VR requires input and output interaction devices to make this possible, input means all the data that the users receive, which could be audio, pictures, and videos. Everything that the user hears and sees. On the other hand, an output device means everything that users produce or send information like sounds, utterances, and even movements that another person can interact with. The input devices that are used in virtual reality are; a headset or goggles, and headphones. While for the output device, there is a handheld control that tracks the user's movements. Students learn better if they are exposed to an enriched environment, it will help to develop thinking and decision-making.

This technology helps teachers to provide comprehensible input to make the classes more memorable, this input must contain challenging activities that allow learners to practice the subject, engaging material that provides students to have a vast of resources to draw learners' attention, and authentic language which will allow students to practice the target language. This comprehensible input increases the performance of students due to all the elements to enhance the teaching and learning process (Krashen, S,1987). There are some devices to access virtual reality, oculus, HTC, and Sony. Those companies have developed this technology to attract more users, all these marks have HMDs to access the virtual world. Picture 1.



Source Oculus headset or goggles (oculus quest 2, 2021)

https://www.oculus.com/quest-2/

Picture 2.



set of controllers or handheld (oculus quest 2, 2021)

2.33 The Use of Audio-Visual Aids in Learning

Many technological apps use audio-visual sources to facilitate information processing, it allows both visual and auditory learners to develop a new understanding of the subject matter. Audio-visual sources are well known to scaffold the learning and teaching process, it provides a better understanding and vision of what the facilitator wants to teach. This tool supports teachers' classes to clarify the material, give a better presentation, associate the material with the class,

expand learners' vocabulary, and engage students in the lesson. Hatami, S. (2013) claimed that visual learning is a teaching and learning method that uses illustrations and videos to show vocabulary, grammar concepts, and cultural information to improve language learning.

The most effective visual aids are videos that contain authentic material to develop their language skills, using audio-visual material learners have the opportunity to acquire new vocabulary and even their pronunciation will be enhanced. These technological tools arouse learners' curiosity and motivation to immerse students in the learning process. Most teachers know that visuals enhance learning comprehension and can bring the real world to the classroom, it is used to explain or activate prior knowledge and help to describe what words cannot, clarify concepts, and recall and retain information. According to Geeraerts (2006), learners need to be in an environment that develops their language abilities in a real context.

2.34 Gamification

To boost engagement, gamification involves incorporating game concepts into nongame environments such as a website, online community, or learning management system. Gamification aims to engage customers, learners, and partners in order to encourage them to collaborate, share, and interact. Gamification tries to solve some students' needs by adding new approaches and techniques to implement active learning. Gamification mechanics and game thinking engage and motivate students to promote learning and solve problems (Kapp, 2012). Gamification is activities presented as games, here students show what they know or have learned in the lesson. Facilitators use gamification to train students and work to solve problems, and create ideas, and concepts. One advantage of gamification is activities are more appealing to complete and challenging, students love to interact with each other or with the machine and feel the emotional reaction and the outcome.

2.35 Engaging Learning tool

Engagement learning tools refer to all materials that aim to keep students engaged in a task. Engaging apps are focused on motivating learners by offering rewards, and incentives, and presenting interesting content (Ryan & Deci, 2000). Virtual reality has the potential of changing teaching and learning, this learning tool promotes active participation and support in the teaching and learning process. Engagement is defined as a cognitive and motivational plan that happens in learning and teaching situations (Bangert-Drowns & Pike, 2001). Extrinsic motivation exists in virtual reality, such as rewarding, completing a duty, and discovering new objects can achieve higher learning outcomes in students (Pintrich and Schunk, 1996).

2.36 Metaverse

The metaverses are virtual worlds to let users 'imagination fly, in this experience the avatars are a crucial part of immersing in the virtual world. The graphics and the visuals take the users' minds to the clouds. New metaverses are arising with new and more innovative features such as language learning spaces, and places where native and non-native English speakers join to spend their time talking or enjoying any activity. Those spaces are important for non-native speakers to develop their language skills and train in virtual reality. Metaverses allow teachers or students to use thousands of resources in only one place. Users can use new teaching and learning techniques to implement in the classroom to make it more dynamic.

In the past even today English teachers still use drills, and memorization activities or sit in silence while the teacher explains. With the arrival of virtual reality, it has been establishing metaverses such as Second Life, it broadens an unimaginable world for teaching, the way in which students begin communication with other people, their knowledge grows and language teaching becomes easy, whether it is English or other languages. Mark Zuckerberg is committed to a new version of the Internet. It's called Metaverse, the CEO wants Facebook to be at the head of this technology. Zuckerberg essentially described the Metaverse as an immersive virtual world, much like virtual reality today, but in which people spend time together and share experiences.

The research was conducted to show the effectiveness of virtual reality in the learning process. Allcoat & von Mühlenen (2018) state "VR displayed an improved learning experience when compared to traditional and video learning methods." This research can prove that exists an improvement in using virtual reality in learning. Furthermore, teachers and students can rely on the effectiveness of this technology.

2.37 Mondly

Mondly is a language learning app that can be used in a smartphone or VR. It offers more than 40 languages available to learn, it uses gamification to assist learners in their learning process. This app contains several teaching techniques that become an engaging and interactive learning tool. It uses speech recognition to assess and practice pronunciation, Chabots to practice conversations, and also offers VR lessons where learners feel immersed in a foreign language environment. Learners can have real-life practice conversations in a simulated environment which can build confidence to speak.

The advantages of the app are learners do not need to travel to other places to speak, learners work with authentic learning activities to have instant feedback on their pronunciation and learners can use this app at their own pace. Mondly lessons include the four skills that are linked with vocabulary, grammar, and pronunciation. VR and learning aids can boost language learning, this technological tool could be seen as an emerging technological advancement in second language (L2) instruction (Bonner & Reinders, 2018). Mondly is a suitable language app for learners of all levels because it is accessible, innovative, and engaging.

Picture 3.



Source: Mondly VR (https://www.mondly.com/vr)

2.38 VR chat.

VRChat is a social platform where users can interact with each other in virtual worlds using 3D avatars. Users can access VRChat with a VR headset or a computer, and they can create their own avatars or use avatars created by others. In this app, players can have conversations with other users, work collaborative, discover new worlds, watch videos, and play games. The avatar moves through embodiment, thanks to the headset and the controls that track the user's movements. This app uses audio-visual aids to help learners explore different worlds, increase their knowledge and vocabulary, and improve their understanding of the material. A study by Cahyadi et al. (2022) found that VRChat can improve students' speaking skills by providing a safe and immersive environment where they can practice speaking without fear of judgment. The study also found that VRChat can help students to improve their fluency and accuracy.

Picture 4.



Source: VRChat (https://hello.vrchat.com/)

2.39 Job Simulator

Job simulator is a virtual reality simulation game where users are immersed in different worlds and have to learn how to do several job activities. The players can hold, grab, throw, and do different activities regarding the type of job the user decides. There are several job simulations such as gourmet chef allows players to learn how to cook, serve, take orders, and learn about restaurant stuff. Office worker simulation allows users to learn how to hire staff, make photocopies, manage documents, etc. Convenience Store clerk here players learn how to run a business, sell products, and everything related to the store. Finally, Automotive Mechanic allows players to learn how to fix and repair cars, vocabulary regarding to cars' engine.

Users can interact with the virtual objects using their hands, they can learn thousands of words, and experience different jobs in the virtual world. It is a great learning app for all ages, it has amazing content and provides vivid job experiences that make players feel immersed virtual world.



Picture 5.

Source: Job Simulator (https://jobsimulatorgame.com/)

2.40 Youtube VR

This is a VR app that shows videos in 360 degrees, it is available on a variety of headsets. Learners can visit, know, and witness unknown places or with difficult access. The users feel immersed in the virtual videos, and they can learn about cultures, places, and other subjects.

Picture 6.



Source: youtubeVR (https://youtube.com/)

2.41 Language Lab

This app helps learners to acquire a new language, the app uses hands-on activities to teach and learn new vocabulary. The user interacts with the objects to learn new words using total physical response. Students learn by doing, matching the object with the words they heard. The app is immersive, engaging, and easy to use.

Picture 7.



Source: language lab (https://www.languagelabvr.com/)

2.42 Gravity Sketch

Gravity Sketch is a 3D design app where users can create simple illustrations or 3D prototypes. This is a virtual studio for designers, they use the VR controls to make their sketches. Users can create anything they want, countless designs and illustrations can be displayed in this app.



Picture 8.

Source: Gravity sketch (https://www.gravitysketch.com/)

3. Chapter II: Methodology

3.1 Research Approach and Method

This is a qualitative research because it explores teachers' perception about VR in LANGUAGE learning. Qualitative research explores a phenomenon from the participants' viewpoint and it is appropriate when the research variables are unknown (Creswell, 2012). It aimed to comprehend people's insights, beliefs, experiences, actions, and involvement in the problem, this study does not gather statistical data. This sort of research suits observational studies, written logs, documentary and textual data (Pathak et al., 2015).

The teacher-researcher applied phenomenological research because it aimed to collect data regarding the participants' perceptions of a phenomenon. This research method tried to describe the experiences that all individuals have in common of any lived experience of something. Phenomenological research collects information from people who underwent any situation to create a description of the phenomena, it focuses on what and how participants experienced it (Welman and Kruger, 1999). Phenomenological research concerns of human perception of the phenomena to gather basic understanding of the analysis. According to Bliss (2016) phenomenological research assist people to understand the aspects of vivid experiences.

Phenomenological research is about trying to grasp the meaning of a phenomenon consciously by using experience, transcendental phenomenology aims to recognize the participant experience and collect data from various individuals who have experienced the same situation. The research examines the information provided by the participants to generate themes and remarkable statements. Creswell (2007) stated, "phenomenology is based on identifying the phenomenon

to study, bracketing out one's experience" (p. 8). In other words, the research deals with the participants' perceptions (Van Manen, 2017). The study is focused on analyzing data collected from the participants based on their insights regarding VR, how this experience was for them, and getting an overall idea of whether learners can develop the English language using VR.

3.2 Research Context

This research was conducted at Unidad Educativa Fiscomisional Padre Miguel Gamboa in Francisco de Orellana. This school is one of the oldest in the province; it serves a population of about 1600 students. Most of the students come from the same city, and some other students come from communities far away from downtown. This institution did not use to have an internet connection and teachers had to bring their own printed material to work in class, the basic resources to teach board, markers, internet, and sometimes a projector. Currently, due to the pandemic and some internal changes this institution has gotten an internet connection to improve learning and teaching.

In the last two periods, teachers of this Unidad Educativa did not use to know about technology which meant a difficult switching from boards to teaching from computers. Now teachers have been enrolling in some technology courses to manage updated devices and technological resources and tools. English teachers did use to work with government book photocopies and during the pandemic, teachers had to create slides to teach. The content of the books was not appealing to learners and was not showing improvement in learning the language. The research was developed in the main room of the institution, in this room exists enough space and an internet connection to carry out this project. The five teachers underwent to provide their insights about virtual reality in English teaching and learning, the VR training course was developed during the job schedule for its feasibility.

3.3 Participants/Population/Sampling

The research was carried out with all English teachers of the school, five English teachers from Padre Miguel Gamboa school participated in this research project (1 man and 4 women). The teachers' ages are around 30 and 45 years, and all of them live in the same city. Teachers are highly experienced in teaching, have been working as English teachers for around 10 years, and have been involved in some technological training Participants worked with students of different ages and levels, from 5 to 17 years old students. Most of the have an English proficiency exam certification (see annex 1). The researcher obtained ethical approval from the school (see annex 3) principals to conduct the study, participants signed a consent where they are willing to take part of the research (See annex 2). Teachers had to write some logs to collect data. The aim objective was to explore teachers' perceptions regarding virtual reality.

3.4 Data Collection (techniques/strategies, instruments, procedures)

To get specific information about the participants a demographic survey was needed, it provided a better understanding of the teachers underwent in the research such as teachers' degrees, ages of teaching, training courses, English level, and others. For data collection, the journal was used. It is a personal record to log events and experiences, this method can be used to contrast someone else experience. Kabir (2016) points out that "journals and diaries are used as research instruments to collect detailed information about behavior, events and other aspects of individuals' daily lives" (p.259).

3.5 Procedure

The researcher designed five trained course sessions (See annex 4) of tutoring virtual class, each tutoring class lasted 15 minutes for each participant and was conducted twice a week. The five sessions followed a lesson plan designed by the

researcher, the trained course content was approved by the English teacher coordinator of the school. The English coordinator verified and approved the content that the researcher applied in the study (see annex 2). The researcher applied the lesson plan to all participants, teachers tested the apps for 5 weeks due to the teacher's time availability. The candidates took the same lesson but at a different time, they experienced virtual reality one by one at their own pace to know how this device works.

It was necessary to take turns conducting the study due to the lack of equipment. The researcher had to use apps that contain language learning center methodologies such as Total Physical Response, The Grammar-Translation Method, collaborative learning, The Audio-Lingual Method, and The Communicative Approach that support and promote language learning. Those apps were selected due to their usefulness and affordance. Some apps had embedded conversations and others were more free-style conversations focused on the communicative approach allowing interaction with other users. The participants tested the following apps; Job simulator, Language lab, Mondly, YouTube VR, gravity sketch, and VR chat. After each session, teachers had to make a reflective journal (see annex 5), they had to write their experiences related to the virtual reality and apps they used in the training course.

3.6 Ethics and Limitations

Approval was sought and obtained, and participants could withdraw at any time during the research. Anonymity has been protected for the participants, codes were used to address the candidates. Participants' limitations include due to the small number of English teachers in the school. At the end of each week, participants present their journals. The researcher collected and stored them to analyze later. Most of the participants present their reflective journals. During the research, some drawbacks appeared such as teachers' journal delays, extra meetings, school documentation due day, and other problems that caused some teachers not to present the last two journals. But at least collaborated with the majority of journals.

3.7 Data Analysis

To analyze data from journals, it was suitable to implement thematic analysis due to it analyses qualitative data. This method usually searches written interviews, texts, journals, transcriptions, and other types of written material. The investigator analyzed the data and his purpose is to identify recurring themes - ideas, concepts, and meaning patterns (Caulfield, 2017). The data analysis process continued in several steps. First, getting familiar with the text, reading, and coding, creating new themes, reviewing themes, characterizing and naming themes, and writing.

Thematic analysis was used to research people's insights, viewpoints, opinions, and experiences taken from qualitative data. For instance, logs, journals, diaries, transcriptions, etc. In this method, the researcher gives questions to collect data from the participants and analyzed it. 17 journals were read by the researcher and took relevant extracts, and they were classified according to the specific research objectives. Using thematic analysis researcher has flexibility to interpret data and large data sets into broader themes much easier when interpreting the data, and you can sort large data sets into broader thematic analysis methodology, in this research participants describe the use of VR in the educational field (Kavanagh et al ,2017). In the thematic analysis, the deductive approach was determined to use because the researcher come up with preconceived themes expected to find the study due to the different studies done in virtual reality.

Data was categorized and analyzed into the light of the specific objectives:

Specific objective	Categories
• To describe the	Interactive teaching
teachers' perception of	Immersive environment
the virtual reality apps	Engaging tool
	Visual learning

Table 1. Clarification of categories according to the specific objectives.

•	To describe the	Vocabulary Learning
	teachers' perception of	Pronunciation practice.
	virtual reality in	Speaking development
	English language	Listening practice
	learning.	

Source: Adapted from teachers' perception of virtual reality by Francis Pacheco, (2023).

4. CHAPTER III. RESULTS AND DISCUSSION

4.1 Results

The first specific research objective is: To describe the teachers' perception of virtual reality in English language learning. The categories related to this objective are: Interactive teaching, Immersive environment, Engaging tool, and Visual learning.

Interactive teaching

Lu (2022) explains that interactive teaching "is guided by modern teaching thoughts and theories, and fully embodies a new teaching mode with teachers as the leading and students as the main body (p. 81). Participants mentioned:

It could be so useful in the teaching-learning process in order to encourage our students to learn English in an interactive way, applying educational and technological methods with things that they like or have an interest in (IM)

Students can learn in a more interactive and fun way, and students will be more interested in their lessons because in a classic way, everything is mechanical and nothing interactive (*PC*)

Virtual reality offers learners access to simulated, interactive, and immersive virtual environments to perform authentic learning activities, helping them activate prior knowledge (YM)

VR Chat is an online virtual world platform that allows users to interact with other 3D characters, or avatars that represent their likeness (IM)

I believe the use of virtual reality makes it possible for students to explore a lot of things through three-dimensional resources through the use and manipulation of the object (MY)

I had to move one world to another and I ran into with 2 teenagers who were so friendly and polite even they helped with some parts in the virtual world (IM) this app allows students to interact with their lessons with vocabulary and experience it in different ways (YM)

The teachers mentioned that using virtual reality can encourage students to learn English in a more interactive way since it connects to things they like. VR provides students with a more realistic and interactive experience, using technology students have access to vivid environments. Students will be interested in learning the lessons through the use of simulated worlds and authentic learning activities. VR allows teachers to make school subjects more entertaining to present English content interactively and dynamically.

According to Giorgdze (2017), teachers and students who use interactive teaching tents memorize for extended periods because it involves hands-on activities. Learning content becomes much more appealing since it new teaching methods to display authentic material. According to Person (2023), several educators also incorporate authentic English resources in their teachings to familiarize learners with the language they may use in their everyday life. Applying this material to English language instruction can enhance the learning experience, making it creative and inspiring for students. Interactive teaching activities engage learners in collaborative learning to construct their understanding of their experiences and shared work (Grabinger and Dunlap, 1995). The involvement of physical activities

helps students to have a better performance, it highlights the importance of body experience in learning (Kontra et al. 2015).

Immersive environment

Immersion is the sensation that a user experiences in virtual reality, where users can interact with images, sounds, videos, and objects in the environment. (Pinho, 2004). Participants mentioned:

In the social game, players can explore many virtual worlds built by others also using the platform (IM)

(MONDLY) According to my experience, the usage of this app is really interesting and enjoyable due to learners can feel immersive in the acquisition of a foreign language and feel emotions to catch their attention (KT)

I believe the use of virtual reality makes it possible for students to explore a lot of things through three-dimensional resources through the use and manipulation of objects (YM)

Virtual reality technology is characteristics of immersion, interaction, and involvement. It breaks through the limitations of traditional media, provides learners with a realistic simulated learning environment, and effectively supports their learning (YM)

I believe the use of virtual reality makes it possible for students to explore a lot of things through three-dimensional resources through the use and manipulation of the object (YM)

It (VR) transports you to an unreal place and I think it is very important and interesting for current youth (PC)

Gravity Sketch is a 3D design that let people or artists easily express their ideas and solve complex design challenges by working directly in 3D at any scale (IM) students learn by doing an action due to they can work in an active way applying their acquired knowledge (KT)

Some teachers have concluded that VR offers a unique learning experience, as learners can interact with 3D objects and avatars used by other users. This technological tool allows students to explore new virtual worlds without having to move to another place. Additionally, it provides a more realistic simulated learning environment. Mondly allows users to feel immersed in the English learning environment and have short speaking conversations. VR makes learners feel more involved in the learning process because they can manipulate virtual objects, handson activities are more memorable activities than theoretical classes.

Interaction refers to manipulating virtual elements, navigating in the virtual world, and having social interaction (Doerner et al., 2022). To learn a language, individuals must interact with other speakers and be surrounded by environmental inputs (Krashen, 1987). Thoms (2012) also concluded that human interaction and external factors are necessary for language learning. A rich and stimulating environment that promotes social interaction provides opportunities to develop language. (Zheng et al., 2012). Students can interact with other users and objects in the virtual world which makes it more engaging to work collaboratively (Carvalho, 2019). According to Dalgarno & Lee's 2010, 3D working environments offer advantages in special knowledge, learning. Visual aids support students to process faster information to develop cognitive and thinking skills (Silverman, 2002).

Engaging learning tool

Fredricks, Blumenfeld, & Paris (2004) explained that there are three types of engagement: behavioral engagement, emotional engagement, and cognitive engagement. These types of engagement aim to keep students engaged in a task. Engaging apps aim to motivate learners by offering rewards and incentives (Ryan & Deci, 2000). Participants mentioned:

Of course, because it catches a lot of people's attention, besides, contributes to acquiring more and more knowledge in an effective way. (IM)

First of all, using virtual reality is a wonderful experience as it allows the student to be actively involved in the learning process of the target language, it reduces anxiety, it is interactive, and it improves communication skills which are very positive (KT)

With this type of interactive activity, students can learn in a more interactive and fun way, and students will be more interested in their lessons because in the classic way, everything is mechanical and nothing interactive (LA)

First, the experience with virtual reality was really interesting because it is very dynamic, educational, and entertaining, and is a new way of teaching and learning in traditional education (LA)

virtual reality allows to capture the interest of students in a new way in all kinds of subjects, but they also turn the hours in the classroom into a more fun experience and encourage learning (YM)

Virtual reality (VR) is a new technological tool that offers more interesting and engaging language activities. These activities capture students' attention and encourage them to actively participate in class and acquire new knowledge. VR is useful for language learning and teaching because it includes interactive language activities that enhance communication. The activities and apps are based on the student's interests, which makes them entertaining and helps to reduce anxiety.

VR presents amazing scenarios and suitable material that makes learners actively participate in class demonstrating that learners are hooked on the lesson (Wright &

Huston, 1983). Game concepts are present in this technological tool, it aims to engage users to collaborate, motivate, share, and interact (Kapp, 2012). Extrinsic factors exist in virtual reality, such as rewarding, completing a duty, discovering new objects, and etc can achieve good results in students learning Pintrich and Schunk, 1996). To be able to communicate, inquire more about language, try to figure out new worlds or meet new friends involves intrinsic motivation (Wen, 2018).

Visual learning

Hatami (2013) claimed that visual learning is a teaching and learning method that uses illustrations and videos to show vocabulary, grammar concepts, and cultural information to improve language learning. Participants mentioned:

I loved using this app because It was the first time that I used something like this, Only I have seen videos o pictures on the internet or books about other countries, but it showed me a country and even let me know about it while I was listening and learning (IM)

Regarding visual aids, I think they help significantly to understand a certain activity because students have clues and can better identify the vocabulary (KT)

It is advisable to work using visual elements in all tasks through images, videos, charts, graphs, and maps to obtain a favorable result in the learning of youth and especially in childhood, data visualization tools provide an accessible way to see and understand (PC)

Instead of just reading about a subject, students are able to see the things about the words they are learning, helping students have a better understanding(YM).

Some teachers believe that teaching students with illustrations learning can be greatly enhanced. Pictures, graphs, charts, and videos can help students to obtain

better results in identifying or understanding vocabulary. Virtual reality provides an excellent visual environment where students are surrounded by images or videos, data visualization boosts students understanding with meanings they can recognize or match.

Virtual reality can help people learn and remember new words by immersing them in real-world situations where those words are used. The use of pictures can provide strong stimulation and help people understand the words in different contexts (Lawrence and Ahmed, 2020). According to Nitu et al. (2017) figured out that visual aids assist in students' learning process allowing them to acquire new concepts, grammar, and words. These learners process or learn faster rather than auditory learners (Silverman, 2002). Visual instruction promotes the utilization of audiovisual materials to render abstract concepts more tangible for the learners, it is the responsibility of the educator to transform learning into a vivid encounter, not merely something to memorize, but an integral part of life's experiences (Ode and Omokaro, 2007).

The second specific research objective is: to describe the teachers' perception of virtual reality in English language learning. The categories related to this objective are: Vocabulary Learning, Pronunciation practice, Speaking development, and Listening practice.

Vocabulary Learning

According to Pateşan, Balagiu, & Zechia (2019), vocabulary includes single units or word phrases which have certain meanings, vocabulary is all the words that a language contains. Participants mentioned:

through this tool, learners could acquire a series of new words and as a consequence, they can increase their vocabulary in an easy and dynamic way (KT)

First, the language lab gives the students a better opportunity to learn a lot of

vocabulary easier than the traditional method (YM)

working with students in such a way that you can learn countless vocabularies that, according to the topic presented (PC)

Students have the opportunity to learn all kinds of topics and designs, as well as get new vocabulary words (LA)

All teachers who test virtual reality mentioned that learning vocabulary becomes more accessible and dynamic. Students can learn new subjects and topics using this technological tool. Thousands of new words can be learned in this virtual world. It is a no common way to learn vocabulary. One teacher believes that by showing vocabulary with pictures, students are involved with the lesson and better understand words.

Some studies suggest learning vocabulary through media, students do much better tasks in a second language (Arndt & Woore, 2018). Peters and Webb 2018 found that students had fun and were more engaged and motivated to learn vocabulary using videos or pictures. In a recent study, Legault et al. (2019) found that learners who were immersed in virtual reality environment had an increased vocabulary repertoire. Any supporting material as pictures is used to reinforce and clearly understand the meaning of words through modeling and training (Vygotsky,1978). Jeong et al. (2010) found that by using VR students can memorize words for longer periods of time because several brain parts are involved in the retrieval process.

Pronunciation practice

According to Kasimov (2022), pronunciation is the manner in which words must be spoken, words correctly pronounced convey understandable ideas and provide self-confidence in English. Participants mentioned:

Through (VR) it we can motivate our students to use this second language

increasing in them the fluency in it when they learn how to pronounce the words in English with the vocabulary provided for it and the interactions that they can have (IM)

Finally, based on my experience I can say that phonology is complex for me since it involves accent, voice strength, and idiomatic expressions that usually appear in a normal context. For this reason, I consider it vitally important to learn everything related to phonology it is interactive, and it improves communication skills which are very positive (KT)

Mondly is a good alternative to incorporate in the EFL class in order for to learners practice the active skills as speaking (KT)

Students get instant feedback on your pronunciation in virtual reality and build the confidence to speak new languages in real life (KT)

Some teacher believes that Virtual reality helps students how to pronounce words using the vocabulary provided. VR activities make learners practice accent, voice strength, and language expression. Mondly allows learners to practice their pronunciation giving feedback after each production. Piske, Mackay, and Flege (2001) found that learners' pronunciation improves with longer exposure to the target language. If teachers and students start using VR their pronunciation can be improved. Kröger et al. (2010) reported that virtual reality programs are effective in language acquisition, making them an excellent tool for pronunciation guidance. This learning tool and the app can improve students' pronunciation. Acquiring pronunciation skills involves imitating; as a result, the teacher should exemplify proper pronunciation (Sachdeva 2011).

Speaking development

According to Chaney and Burk (1998), speaking is the process of conveying and creating ideas in a verbal way. Brown (1994), defined speaking as the process of making, getting, and processing sounds to give a meaning. Participants mentioned:

One of the benefits of this app is related to the improvement of your speaking skills through a series of conversations (KT)

I consider that is an innovative way to teach because students use virtual world to practice conversations in realistic scenarios (KT)

In my opinion, was a new experience the usage of VR Chat and I am interested in learning more about this important app due to the active participation in the speaking productions (YM)

Third, the use of the app Mondly is an interesting simulator to learning better in order talents are be able to acquire speaking skills to act in different situations like in transport, taxi, train, restaurants, hotels and so on (YM)

Some teachers mentioned that virtual reality allows learners to practice their speaking skills. Virtual reality offers apps with interactive speaking activities so students can practice speaking in different contexts. VR chat provides learning opportunities where learners can improve and develop their speaking ability through conversations. Moreover, VR allows conversation in different scenarios. Another teacher believes the same; the Mondly app is a simulation to acquire speaking skills to act in different situations.

Speaking is one of the most difficult skills that appears after extensive exposure to the language, students have to be surrounded by the target language to acquire some
words and produce a speech (Anuradha, Raman & Hemamalini, 2014). Moreover, Krashen (1985) believes that learners need comprehensible input and vocabulary that is appropriate for their level. They can then produce speaking once they have imitated and observed teachers' language models (Asher, 2003). Using virtual reality (VR) had a notable impact on students' speaking performance (Sally Wu, Y, & Alan Hung, S. 2022)

Listening practice

According to Brown (1987), listening skills can be described as "the capacity to use auditory or spoken information to create understanding. Participants mentioned:

A positive experience could be that I had the opportunity to appreciate in other ways how can be applied listening activities with my students (IM)

Secondly, I consider that this type of listening activity is appropriate for students of all levels according to the Common European Framework because they are able to master the context according to the learning corresponding to each level acquired (*KT*)

you could work with this tool when we introduce vocabulary so that the student will practice listening skills (PC)

One of the benefits of this app (VR chat) is related to the improvement of your listening through a series of conversations (KT)

A positive experience could be that I had the opportunity to appreciate in other ways how can be applied listening activities with my students in order to improve on them this skill (IM)

According to teachers, Virtual Reality provides fresh opportunities for listening

activities and can be implemented across all proficiency levels rather than using traditional listening exercises to introduce new vocabulary. VR can be an effective and engaging tool, it allows students to practice their listening skills and subsequently improve their speaking abilities. Listening is a difficult skill to develop, students need to be in an appropriate language environment to develop this skill.

Krashen (1982) argued that learners must be exposed to language that is slightly beyond their current level of comprehension in order to acquire new linguistic skills. Teaching multiword expressions in listening activities improves learners' listening comprehension (Mohseni et al., 2014). A study by Tai and Chen (2021) found that learners who used virtual reality (VR) had significantly improved listening comprehension and word recall. Learners who used VR were able to better understand the meaning of spoken language and were better able to remember the words they heard. The ability to understand spoken language is more present than producing words (W.R Miller, 1963 as cited in Brown, 2007).

5. Conclusion

According to the teachers' opinions, VR is an amazing learning tool to present English content in a more entertaining way, making it interactively and dynamically. Using audio visual representations support learning and can be used to reinforce the lessons content. Learners can interact and manipulate objects in virtual environments making language learning more memorable and engaging since immersive environments provide plenty of authentic material for teaching and learning. Interactive teaching activities can assist teachers and learners with more realistic activities and vivid simulations that make learning content more appealing for learners.

Teacher's think that virtual reality can help students improve their language skills because it has activities to develop speaking, listening, and reading skills. It has interesting and exciting tasks that involve gamification, so students don't feel stressed. VR promotes curiosity and a sense of adventure, and can reduce learners' anxiety which has a negative effect on student's performance. This technological tool assists students in their learning process, it teaches how words must be pronounced to build confidence. Virtual reality allows learners to work collaboratively giving them the opportunity to enhance their language production to deal with real-life situations.

6. Recommendations

Trying to implement virtual reality in schools to enhance student's language proficiency, make government agreements to invest in education and create a language laboratory to use this kind of tool. Language learners need to immerse in the target language, it offers a safe environment where the learner can foster their language abilities with many thousands of authentic material at their hand. Making workshops to present new technological tools such as virtual reality to use in EFL classes. Teachers demonstrate that Virtual reality can improve language learning and teaching process providing hands-on experiences using new words. Old teaching methods makes impossible learners can acquire language, in the most cases students get bored and start hating language. For that reason, teachers should implement new technological tools to draw learners' attention and provide more opportunities to develop language.

7. REFERENCES

- Alizadeh, M. (2019). Virtual reality in the language classroom: Theory and practice. CALL-EJ, 20(3), 21-30. https://www.researchgate.net/publication/335969992_Virtual_Reality_in_t he_Language_Classroom_Theory_and_Practice
- Allcoat, D., & von Mühlenen, A. (2018). Learning in virtual reality: Effects on performance, emotion and engagement. *Research in Learning Technology*, 26. <u>https://doi.org/10.25304/rlt.v26.2140</u>
- Anuradha, RV, Raman, G, &Hemamalini, HC. (2014). Methods of Teaching English. Hyderabad: Neelkamal Publications. <u>https://www.scirp.org/pdf/ce_2020102115345649.pdf</u>
- Arndt, H. L., & Woore, R. (2018). Vocabulary learning from watching YouTube videos and reading blog posts. Language Learning & Technology, 22(3), 124-142. https://doi.org/10125/44660/
- Arnold, J., & Fonseca, M. C. (2004). Multiple intelligence theory and foreign language learning: A brain-based perspective. *International Journal of English studies*, 4(1), 119-136. https://doi.org/ 10.6018/ijes.4.1.48141
- Asher, J. J. (1969). The Total Physical Response Approach to Second Language Learning. *The Modern Language Journal*, 53(1), 3–17. https://doi.org/10.2307/322091
- Asher, J. J. (2003). Learning Another Language through Actions (6th edition). Los Gatos, CA: Sky Oaks Productions, Inc. <u>https://es.scribd.com/document/477091688/James-J-Asher-Learning-Another-Language-Through-Actions#</u>
- Bangert-Drowns, R. L. & Pykc, C. (2001). Student engagement with educational software: An exploration of literate thinking with electronic literature.

Journal of Educational Computing Research, 24(3), 213-234. https://doi.org/10.2190/0CKM-FKTR-0CPF-JLGR

Banu, R. (2017). Difficulties Faced by College Student in Speaking English—A Sociological Reflection. International Journal of Trend in Research and Development, 4, 435.
 <u>https://www.researchgate.net/publication/318108936_Difficulties_Faced_by_College_Student_in_Speaking_English_-_A_Sociological_Reflection</u>

Bashir, M., Azeem, M., & Dogar, A. H. (2011). Factor Effecting Students' English Speaking Skills. British Journal of Arts and Social Sciences, 2(1), 34-50. <u>http://widyawatipalupi.blogs.uny.ac.id/wp-</u> <u>content/uploads/sites/15732/2018/04/Factors-effecting-students-speaking-</u> <u>skill.pdf</u>Berti, M. (2019). Italian open education: virtual reality immersions for the language classroom. In A. Comas-Quinn, A. Beaven & B. Sawhill (Eds), New case studies of openness in and beyond the language classroom (pp. 37-47). Researchpublishing.net. <u>https://doi.org/10.14705/rpnet.2019.37.965</u>

Billinghurst, M., & Duenser, A. (2012). Augmented reality in the classroom. Computer, 45, 56-63. <u>https://doi.org/10.1109/MC.2012.111</u>

Billinghurst, M., Kato, H., & Poupyrev, I. (2001). The magicbook-moving seamlessly between reality and virtuality. IEEE Computer Graphics and Applications, 21(3), 6-8. <u>http://www.ivanpoupyrev.com/wpcontent/uploads/2017/01/CGA_magicbook.pdf</u>

Bliss, L (2016). Phenomenological Research: Inquiry to Understand the Meaning of People's Experiences. International Journal of Adult Vocational Education and Technology.
 https://sageprofessor.files.wordpress.com/2017/10/phenomenological-research-inquiry-to-understand-the-meanings-of-peoples-experiences.pdf

Boonkit, K. (2010). Enhancing the Development of Speaking Skills for Non-Native Speakers of English. Procedia Social and Behavioral Sciences, 2(2010), 1305–1309. https://doi.org/10.1016/j.sbspro.2010.03.191

- Bown, J. & White, C. (2010). A social and cognitive approach to affect in SLA., 48(4), 331-353. <u>https://doi.org/10.1515/iral.2010.014</u>
- Brown, D. H. (2007). Principles of Language Learning and Teaching (5th ed., p. 423). Pearson. <u>https://smartlib.umri.ac.id/assets/uploads/files/af2ff-language-teaching-principles-1-.pdf</u>
- Brown, H. D. (1994). Teaching by Principles-An Interactive Approach to Language Pedagogy. Prentice Hall Regents. <u>https://octovany.files.wordpress.com/2013/12/ok-teaching-by-principlesh-douglas-brown.pdf</u>
- Cahyadi, P., Wardhana, D. I. A., Ansori, W. I., & Farah, R. R. (2022).
 ENHANCING STUDENTS'ENGLISH SPEAKING ABILITY
 THROUGH VRCHAT GAME AS LEARNING MEDIA. Journal of
 Research on Language Education, 3(2), 54-61.
 https://ejurnal.teknokrat.ac.id/index.php/JoRLE/article/view/2135
- Carruth, D. W. (2017, October). Virtual reality for education and workforce training. In 2017 15th International Conference on Emerging eLearning Technologies and Applications (ICETA) (pp. 1-6). IEEE. https://doi.org/ 10.1109/ICETA.2017.8102472Carvalho Mano, R. M. (2019). The benefits of virtual reality in education (Doctoral dissertation, Hochschule für angewandte Wissenschaften Hamburg). http://hdl.handle.net/20.500.12738/8592

Caulfield, J. (2017, September,6). How to Do Thematic Analysis | Step-by-Step Guide & Examples. Scribbr. <u>https://www.scribbr.com/methodology/thematic-</u> <u>analysis/#:~:text=Thematic%20analysis%20is%20a%20method,meaning</u> <u>%20that%20come%20up%20repeatedly</u>.

Chandramouli, M., Zahraee, M., & Winer, C. (2014, June). A fun-learning approach to programming: An adaptive Virtual Reality (VR) platform to teach programming to engineering students. In *IEEE international Conference on Electro/information technology* (pp. 581-586). IEEE Electro/Information Technology (pp. 581–586). Los Alamitos: IEEE Press.

- Chaney, A. L., & Burk, T. L. (1998). Teaching Oral Communication in Grades K-8. <u>https://doi.org/10.4236/ce.2017.81002</u>.
- Chaney,, A. L., & Burk, T. L. (1998). *Teaching Oral Communication in Grades K*-8 (1st ed., p. 311). Allyn and Bacon.
- Chen, Y.-L. (2016). The effects of Virtual Reality learning environment on student cognitive and linguistic development. Asia-Pacific Education Researcher (Springer Science & Business Media B.V.), 25(4), 637–646. http://10.0.3.239/s40299-016- 0293-2
- Cheung, A. C., & Slavin, R. E. (2011). The Effectiveness of EducationTechnology for Enhancing Reading Achievement: A Meta-Analysis.*Center for Research and reform reform in Education.*
- Cho, D, & Ae Chun, B. 2019. Virtual Reality as a New Opportunity in Geography Education: From the teachers' perspectives in Korea. *Research Gate*. 1 (1). <u>https://www.researchgate.net/publication/335456393_Virtual_Reality_as_a_New_Opportunity_in_Geography_Education_From_the_teachers'_persp_ectives_in_Korea</u>
- Chomsky, N. (1957). Syntactic structures. The Hague, Netherlands: Mouton.
- Gold, S. (2001). A constructivist approach to online training for online teachers.
 Journal of Asynchronous Learning Networks, 5(1), 35- 57.aolj.
 http://onlinelearningconsortium.org

Coleman, H. (2010). The English language in development. British council, 1-24.<u>https://d1wqtxts1xzle7.cloudfront.net/57667063/UK011-English-</u> Language-Development-with-cover-pagev2.pdf?Expires=1643232100&Signature=WR~P6sqA7~mPQJvRQEpE4Y 80ZMFopxDRmNWxdMCekXYen8lmMzc6O4QgZLfMa8Q8TtkPrFm~qJ-Y7QrVFXdhSI7oDd3mDaAUGicjDv7fzPEEbAD1Dgk9RAuZ5QeGasnv xvtDG2bniBZckx-qv0TCIOEdeKuHc25Mpc-H3VP7D-WFMdh0FWAk38RPe6iZYScsTPEXTyiw4e7TDj7Fun4LYP-4HMP-HtJisziQxMks4K3Kt-s~pOV9PNnRhF~732jcWvP5p9N9-Cvu6l-RtTeC~547YqmRxfWsO3c4rokRibEo3TQnu0BTjCuulnUZ6hWPRv3NP wgyNpnBfqhBpI7Ug_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

- Creswell, J. W. (2002). Educational research Perspect Clin Resh: Planning, conducting, and evaluating quantitative, vol(11). http://repository.unmas.ac.id/medias/journal/EBK-00121.pdf
- Dale, E. (1969). Audio-Visual Methods in Teaching (3rd ed., p. 108). Holt, Rinehart & Winston, New York: Dryden Press.
 <u>https://www.researchgate.net/figure/283011989_fig1_Figure-2-Edgar-</u> Dale-Audio-Visual-Methods-in-Teaching-3rd-Edition-Holt-Rinehart-and
- Doerner, R., Geiger, C., Oppermann, L., Paelke, V., Beckhaus, S. (2022).
 Interaction in Virtual Worlds. In: Doerner, R., Broll, W., Grimm, P., Jung, B. (eds) Virtual and Augmented Reality (VR/AR). Springer, Cham.
 https://doi.org/10.1007/978-3-030-79062-2_6
- Elliott, S.N., Kratochwill, T.R., Littlefield Cook, J. & Travers, J. (2000).Educational psychology: Effective teaching, effective learning (3rd ed.).Boston, MA: McGraw-Hill College.
- Ellis, R. (1997). Second language acquisition. <u>https://drive.google.com/drive/folders/1D4mh2TKnqhN-</u> <u>1kYWxN57v92iPdRt6Bf9</u>
- Flower, C. (2015). Virtual reality and learning: Where is the pedagogy? British Journal of Educational Technology, 46(2), 412–422. <u>https://doi.org/10.1111/bjet.12135</u>

- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 74, 59–109. <u>https://doi.org/10.3102/00346543074001059</u>
- Gardner, H. (1993). Multiple Intelligence: The theory in practice. New York: Basic Book.
- Giorgdze, M. (2017). Interactive Teaching Methods: Challenges And Perspectives. IJAEDU- International E-Journal of Advances in Education, Vol. III, Issue 9, December 2017. http://ijaedu.ocerintjournals.org/en/download/article-file/390165.
- Goh, C. (2000). A cognitive perspective on language learners' listening comprehension problems. System, 28, 55-75.
- Google (2022) Glass Enterprise Edition. https://www.google.com/glass/start/
- Gravity Sketch. (2023, August 27). Gravity Sketch | 3D sketching and design software. Retrieved from <u>https://www.gravitysketch.com/</u>
- Hernández-Serrano, J. & Choi, I. & Jonassen, D. (2002). Integrating Constructivism and Learning Technologies. <u>http://doi.org/10.1007/0-306-47584-7_7</u>.
- Hammer, C. S., Uchikoshi, Y., & Gillanders, C. (2014). The language and literacy development of young dual language. <u>https://doi.org/10.1016/j.ecresq.2014.05.008</u>
- Harmon, J. M., Wood, K. D., & Keser, K. (2009). Promoting vocabulary learning with interactive word wall. Middle School Journal, 40(3), 58-63. <u>https://doi.org/10.1080/00940771.2009.11495588</u>
- Hatami, S. (2013). Learning styles. *Elt Journal*, 67(4), 488-490. <u>https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=b8087a</u> <u>87faa8d5cb832fd2a7bcbafec5809138d5</u>

- Herold, B. (2016). Technology in education: An overview. Education Week, 20, 129-141. <u>https://tedna.org/wp-content/uploads/2016/02/technology-in-</u> education_-an-overview-education-week.pdf
- Heuett, B. & Heuett, K. (2011). Virtual reality therapy: A means of reducing public speaking anxiety. International Journal of Humanities and Social Science, 1(16), 1–6.
 https://ijhssnet.com/journals/Vol_1_No_16_November_2011/1.pdf
 https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/Reference
 spapers.aspx?ReferenceID=757162
- Hodgson, V., & Watland, P. (2004). Researching networked management learning. Management Learning, 35(2), 99-116. <u>https://doi.org/10.1177/135050760404302</u>

Huang, H.-M., Rauch, U., & Liaw, S.-S. (2010). Investigating learners' attitudes toward virtual reality learning environments: Based on a constructivist approach. Computers & Education, 55(3), 1171–1182. https://doi.org/10.4018/jwltt.2012010102

- Johnson, L., Levine, A., Smith, R., & Stone, S. (2010). The 2010 Horizon Report. New Media Consortium. 6101 West Courtyard Drive Building One Suite 100, Austin, TX 78730. <u>https://files.eric.ed.gov/fulltext/ED510220.pdf</u>
- Johnson, L., Smith, R., Levine, A., & Haywood, K. (2010). The 2010 horizon report: Australia-New Zealand edition. Austin, Texas: The New Media Consortium.

Johnson-Glenberg, M. C., & Megowan-Romanowicz, C. (2017). Embodied science and mixed reality: How gesture and motion capture affect physics education. Cognitive Research: Principles and Implications, 2(24), 1–28. <u>https://doi.org/10.3389/frobt.2018.00081</u>

Johnson-Glenberg, M. and Megowan-Romanowicz, C. (2017). Embodied science and mixed reality: Howgesture and motion capture effect physics education: *Principles and Implications* 2:24. https://doi.org/ 10.1186/s41235-017-0060-9

Jonassen, D., Hernandez-Serrano, J., & Choi, I. (2000). Integrating constructivism and learning technologies. In M. Spector & T. M. Anderson (Eds.), Integrated and holistic perspectives on learning, instruction and technology: Understanding complexity (pp.103-127). Netherlands: Kluwer Academic. https://doi.org/ 10.1007/0-306-47584-7_7Kacetl, J., & Frydrychova-Klimova, B. (2015). English vocabulary in video clips on travel and tourism. Procedia Social and Behavioral Sciences, 182, 364-368. https://doi.org/10.1016/j.sbspro.2015.04.788

Kaplan-Rakowski, R and Wojdynski, T. (2018). Students' Attitudes Toward High-Immersion Virtual Reality Assisted Language Learning (September 26, 2018). Available at http://dx.doi.org/10.2139/ssrn.3255611

Kapp, K. M. (2012). The gamification of learning and instruction: game-based methods and strategies for training and education. John Wiley & Sons. https://www.cedmaeurope.org/newsletter%20articles/Clomedia/Gamification%20-%20Separating%20Fact%20from%20Fiction%20(Mar%2014).pdf

Karami, A. (2019). Implementing Audio-Visual Materials (Videos), as an Incidental Vocabulary Learning Strategy, in Second/Foreign Language Learners' Vocabulary Development: A Current Review of the Most Recent Research. *Journal on English Language Teaching*, 9(2), 60-70. <u>https://files.eric.ed.gov/fulltext/EJ1220725.pdf</u>

· --

Kasimov. A, (2022). THE İMPORTANCE OF TEACHİNG PRONUNCİATİON. Zamonaviy Dunyoda Innovatsion Tadqiqotlar: Nazariya Va Amaliyot, 11, 57–59. https://doi.org/10.5281/zenodo.6047740

Kavanagh, S., Luxton-Reilly, A., Wuensche, B., & Plimmer, B. (2017). A systematic review of virtual reality in education. *Themes in Science and Technology Education*, 10(2), 85-119. https://www.learntechlib.org/p/182115/

Kavanagh, S., Luxton-Reilly, A., Wuensche, B., & Plimmer, B. (2017). A systematic review of Virtual Reality in education. Themes in Science and Technology Education, 10(2), 85–119

Krashen, S. (1982). Principles and practice in second language acquisition.

- Kröger, B. J., Birkholz, P., Hoffmann, R., & Meng, H. (2010). Audiovisual tools for phonetic and articulatory visualization in computer-aided pronunciation training. In *Development of Multimodal Interfaces*: Active *Listening and Synchrony* (pp. 337-345). Springer, Berlin, Heidelberg
- Lawrence, G., & Ahmed, F. (2020). Avatar teaching and learning: Examining language teaching and learning practices in Virtual Reality Environments.
 In Recent Developments in Technology-Enhanced and Computer-Assisted Language Learning (pp. 340-360). Hershey, PA: IGI Global.
- Lazar, S. (2015). The importance of educational technology in teaching. International Journal of Cognitive Research in Science, Engineering and Education, 3 (1), 111-114.
- Legault, J., Zhao, J., Chi, Y. A., Chen, W., Klippel, A., & Li, P. (2019). Immersive virtual reality as an effective tool for second language vocabulary learning. Languages, 4(1), 1-32. https://doi.org/10.1016/j.bandl.2020.104874
- Lin, T. J., & Lan, Y. J. (2015). Language learning in virtual reality environments: Past, present, and future. Journal of Educational Technology & Society, 18(4), 486-497. <u>https://www.researchgate.net/profile/Karey-</u>

Lan/publication/281027027 Language Learning in Virtual Reality Envi ronments Past Present and Future/links/562d988208ae04c2aeb4a7c5/La nguage-Learning-in-Virtual-Reality-Environments-Past-Present-and-Future.pdf

- Marjal, I., & Seyed, M. 2012.Benefits of collaborative learning. Procedia Social and Behavioral Sciences, 31(1), 486-490. <u>https://doi.org/10.1016/j.sbspro.2011.12.091</u>.
- Metz, R. (2017). Virtual reality's missing element: Other people. MIT Technology Review, 120(4), 85–87. <u>https://www.technologyreview.com/2017/06/14/150815/virtual-realitys-missing-element-other-people/</u>
- Microsoft dynamics 365 (2022), *Augmented Reality*. <u>https://dynamics.microsoft.com/en-us/mixed-reality/guides/what-is-augmented-reality-ar/</u>
- Mikropoulos, T. A., & Natsis, A. (2011). Educational virtual environments: A tenyear review of empirical research (1999–2009). Computers and Education, 56(3), 769–780.
 <u>https://doi.org/10.1016/j.compedu.2010.10.020</u>
- Mohseni, A., Marzban, A., and Keshavarzi, A. (2014). The Effect of Chunk Learning on Listening Comprehension, International Journal of Language and Linguistics. Volume 2, Issue 5, pp. 310-316. http://doi:0.11648/j.ijll.20140205.14
- Mondly. (2023, August 25). Mondly: Learn Languages Fast. Retrieved from <u>https://www.mondly.com/?avangate_src=srcgob2b</u>
- Moore, D. M., & Dwyer, F. M. (Eds.). (1994). Visual literacy: A spectrum of visual learning. Educational Technology.
- Mouw, J. M., Fokkens-Bruinsma, M., & Verheij, G. J. (2020, April). Using Virtual Reality to promote pre-service teachers' classroom management

skills and teacher resilience: A qualitative evaluation. In *Proceedings of the 6th International Conference on Higher Education Advances (HEAd'20)* (pp. 325-332). Universitat Politècnica de València. DOI:http://dx.doi.org/10.4995/HEAd20.2020.11049

- Muhammad. (2016). METHODS OF DATA COLLECTION. Basic Guidelines for
- Nitu, K. S., & Dahiya, H. (2017). Audio Visual Aids: An Essential Tool for Teaching. *Amarjeet Kaur Sandhu*, 9(1), 64.
 https://www.researchgate.net/profile/Heaven-Dahiya/publication/312489874 Research Article on 'Audio Visual Aids <u>An Essential Tool for Teaching' published in International Journal of Nursing Education IJONE e-ISSN-0974-9357p-ISSN-0974-9349_Vol 9_No1_January-March 2017_PP_64/links/587e594108aed3826af45e04/Research-Article-on-Audio-Visual-Aids-An-Essential-Tool-for-Teaching-published-in-International-Journal-of-Nursing-Education-IJONE-e-ISSN-0974-9357p-ISSN-0974-9357p-ISSN-0974-9349-Vol-9-No1-January-March-2017-PP-6.pdf#page=69
 </u>
- Nolin, P., Stipanicic, A., Henry, M., Lachapelle, Y., Lussier-Desrochers, D., Rizzo, A., & Allain, P. (2016). ClinicaVR: Classroom-CPT: A virtual reality tool for assessing attention and inhibition in children and adolescents. Computers in Human Behavior. https://doi.org/10.1016/j.chb.2016.02.023
- Numan. D. (2015). Teaching English to speakers of other Languages (Routledge y Taylor & Francis 2015).
- Owlchemy Labs. (2023, August 27). Job Simulator. Retrieved from https://jobsimulatorgame.com/
- P. Pintrich and D. Schunk, Motivation in Education: Theory, Research & Applications, 3rd ed. Englewood Cliffs, New Jersey: Prentice-Hall, 1996

- Panteldis, V. (2009). Reasons to use Virtual Reality in education and training courses and a model to determine when to use Virtual Reality. Themes in Science and Technology Education, 2(1-2), 59-70. <u>https://files.eric.ed.gov/fulltext/EJ1131313.pdf</u>
- Papanastasiou, G., Drigas, A., Skianis, C., Lytras, M., & Papanastasiou, E. (2019).
 Virtual and augmented reality effects on K-12, higher and tertiary education students' twenty-first century skills. Virtual Reality, 23(4), 425–436. <u>https://doi.org/10.1007/s1 0055-018-0363-2</u>
- Pateşan, M., Balagiu, A., & Zechia, D. (2019, June 1). Vocabulary Acquisition. *ResearchGate*, 25(2):300-304(International conference KNOWLEDGE-BASED ORGANIZATION). <u>https://doi.org/10.2478/kbo-2019-0098</u>
- Person Language (2023, February 24). Using authentic material from the real world to teach English. Pearson Language. Retrieved July 17, 2023, from https://www.pearson.com/languages/community/blogs/2023/02/using-realworld-materials-to-teachenglish.html#:~:text=Authentic% 20material% 20is% 20any% 20material,im aginative% 20and% 20motivating% 20for% 20students.
- Peters, E., & Webb, S. (2018). Incidental vocabulary acquisition through viewing L2 television and factors that affect learning. Studies in Second Language Acquisition, 40(3), 551-577. <u>https://doi.org/10.1017/S027226311 7000407</u>
- Piaget, J. (1952). The Origins of Intelligence in Children. New York, NY: W.W. Norton & Co. <u>https://doi.org/10.1037/11494-000</u>
- Power R. (2019) Design of Mobile Teaching and Learning in Higher Education: An Introduction. In: Zhang Y., Cristol D. (eds) Handbook of Mobile Teaching and Learning. Springer, Singapore. <u>https://doi.org/10.1007/978-981-13-2766-7_1</u>
- Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, 3(1), 33-35.

- Research: An Introductory Approach for All Disciplines (1st ed.) <u>https://www.researchgate.net/publication/325846997_METHODS_OF_D</u> <u>ATA_COLLECTION</u>
- Richards, J. (1983). Listening comprehension: Approach, design, procedure. TESOL Quarterly 25(3). 407–430.
- Richards, J.C. and Rogers T.S. (2001). Approaches and Methods in Language Teaching. New York: Cambridge University Press. : http://dx.doi.org/10.1017/CBO9780511667305
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, 25, 54–67
- Sally Wu, Y. & Alan Hung, S. (2022). The Effects of Virtual Reality Infused Instruction on Elementary School Students' English-Speaking Performance, Willingness to Communicate, and Learning Autonomy. Journal of Educational Computing Research, 60(6), 1558–1587. https://doi.org/10.1177/07356331211068207
- Sariyati, I. (2013). The Effectiveness of TPR (Total Physical Response) Method in English Vocabulary Mastery of Elementary School Children. PAROLE: Journal of Linguistics and Education, 3(1 April), 50-64. https://doi.org/10.14710/parole.v3i1 April.50-64
- Scavarelli, A., Arya, A. & Teather, R.J (2021). Virtual reality and augmented reality in social learning spaces: a literature review. *Virtual Reality* 25, 257–277. <u>https://doi.org/10.1007/s10055-020-00444-8</u>
- Seidel, R. J., & Chatelier, P. R. (1997). An overview of virtual reality/virtual environments for education and training. *Virtual Reality, Training's Future*?, 1-6.
- Senthamarai, S. (2018). Interactive teaching strategies. Journal of Applied and Advanced Research. 3. 36. 10.21839/jaar.2018.v3iS1.166.

https://www.researchgate.net/publication/325085137_Interactive_teaching ______strategies

- Seunghee, J (2021). The Effects of Digital Virtual Reality Game-Based Language Learning on English Language Learners' Development of Vocabulary and Cultural Knowledge and Affective Attitudes. Journal of English Teaching through Movies and Media 2021; 22(3): 78-94. DOI: https://doi.org/10.16875/stem.2021.22.3.78
- Shaaban, K. A., & Ghaith, G. (2000). Student motivation to learn English as a foreign language. Foreign language annals, 33(6), 632-644.
 https://dlwqtxts1xzle7.cloudfront.net/51241525/Student_Motivation_to_L earn_English_as_a20170107-7201-22pem4-with-cover-page-v2.pdf?Expires=1641657895&Signature=fT5kdBCXJ0KLOj1Uc81pxOu
 <a href="https://bintacodiscommunication-bintactio
- Shi, A., Wang, Y., & Ding, N. (2019). The effect of game–based immersive virtual reality learning environment on learning outcomes: designing an intrinsic integrated educational game for pre–class learning. Interactive Learning Environments, 1-14. https://doi.org/10.1080/10494820.2019.1681467
- Shneiderman et al. (2016) in their book Principles of User-Interface Design, they define interaction as the collaboration between individuals and computers to accomplish shared objectives.

- Shneiderman, B., Jacobs, S. M., Cohen , M. S., Diakopoulos, N., Elmqvist, N., & Plaisant, C. (2016). *Designing the User Interface: Strategies for Effective Human-Computer Interaction* (6th ed.). Person.
- Soleimani, H., Jalilifar, A., Rouhi, A., Rahmanian, M. (2019). Augmented Reality and Virtual Reality Scaffoldings in Improving the Abstract Genre Structure in a Collaborative Learning Environment: A CALL Study. *Two Quarterly Journal of English Language Teaching and Learning University* of Tabriz, 11(23), 327-356
- Suchdeva, MS. 2011. A New Approach to Teaching of English in India. Ludhiana: Tandon Publications.
- Sühendan Er. (2013). Using Total Physical Response Method in Early Childhood Foreign Language Teaching Environments. Procedia - Social and Behavioral Sciences. Sciencedirect journal. <u>https://doi.org/10.1016/j.sbspro.2013.10.113</u>.
- Sullivan, J. V. (2018). Learning and Embodied Cognition: A Review and Proposal. Psychology Learning & Teaching, 17(2), 128–143. <u>https://doi.org/10.1177/1475725717752550</u>
- Tai, T.-Y., & Chen, H. H.-J. (2021). The Impact of Immersive Virtual Reality on EFL Learners' Listening Comprehension. Journal of Educational Computing Research, 59(7), 1272–1293. https://doi.org/10.1177/0735633121994291
- Thoms, J. J. (2012). Classroom Discourse in Foreign Language Classrooms : A Review of the Literature. Foreign Language Annals, https://doi.org/10.111/j .1944-9720.2012.01177.x.FOREIGN
- Trawiński, M. (2005). An outline of second language acquisition theories. <u>https://drive.google.com/drive/folders/1D4mh2TKnqhN-</u> <u>1kYWxN57v92iPdRt6Bf9</u>
- Vázquez, C. Xia, L. Aikawa, T. & Maes, P. (2018). Words in Motion: Kinesthetic Language Learning in Virtual Reality. *IEEE 18th International*

Conference on Advanced Learning Technologies (ICALT), pp. 272-276, DOI: 10.1109/ICALT.2018.0006

- Von der Emde, S., Schneider, J., & Kotter, M. (2001). Technically speaking: Transforming language learning through virtual learning environments (MOOs). The Modern Language Journal, 85(2), 210-225.
- VRChat. (2023, August 26). VRChat Plus. Retrieved from <u>https://hello.vrchat.com/vrchatplus</u>
- Vygotsky, L. (1978). Mind in Society, the Development of Higher Psychological Processes, Cambridge: Cambridge University Press, 1978) p. 121
- Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press
- Wallach, H. Safir, P. & Bar-Zvi, M. (2009). Virtual reality cognitive behavior therapy for public speaking anxiety. Behavior Modification, 33(3), 314– 338. Https://doi.org/10.1177/0145445509331926
- Walsh, S. (2011). *Exploring Classroom Discourse: Language in Action*. Oxon: Routledge Taylor & Francis Group.
- Watson, J. B. (1913). Psychology as the behaviorist views it. *Psychological Review*, 20(2), 158–177. https://doi.org/10.1037/h0074428
- Welman, J. C., & Kruger, S. J. (1999). Research methodology for the business and administrative sciences. Johannesburg, South Africa: International Thompson.
- Wen, x. (2018). Motivation and Language Learning with Students of Chinese. Wiley Online Library. <u>https://doi.org/10.1111/j.1944-</u> 9720.1997.tb02345.x
- Yuliyanto, A., Abdul, R., Muqodas, I., Wulandari, H., & Mifta, D. (2020).Alternative Learning of the Future Based on Verbal-Linguistic, andVisual-Spatial Intelligence Through Youtube-Based Mind Map When

Pandemic Covid-19. Jurnal JPSD (Jurnal Pendidikan Sekolah Dasar), 7(2), 132-141.https://www.researchgate.net/profile/Aan-Yuliyanto/publication/344397697_ALTERNATIVE_LEARNING_OF_T HE_FUTURE_BASED_ON_VERBAL-_LINGUISTIC_AND_VISUAL-SPATIAL_INTELLIGENCE_THROUGH_YOUTUBE-BASED_MIND_MAP_WHEN_PANDEMIC_COVID-19/links/5f70a4de299bf1b53ef76cff/ALTERNATIVE-LEARNING-OF-THE-FUTURE-BASED-ON-VERBAL-LINGUISTIC-AND-VISUAL-SPATIAL-INTELLIGENCE-THROUGH-YOUTUBE-BASED-MIND-MAP-WHEN-PANDEMIC-COVID-19.pdf

Zheng, D. P., Newgarden, K., & Young, M. F. (2012). Multimodal analysis of language learning in World of Warcraft play: languaging as valuesrealizing. ReCALL, 24(3), 339–360. <u>https://doi.org/10.1017/S0958344012000183</u>

8. Appendix

8.1 Appendix 1

APPROVAL OF THE PRINCIPAL OF THE PADRE MIGUEL GAMBOA HIGH SCHOOL

A Letter of Request to Conduct Research at Unidad Educativa fiscomisional "Padre Miguel Gamboa".

MSc.

Ana Moreira

Principal

Unidad Educativa fiscomisional "Padre Miguel Gamboa"

Puerto Francisco de Orellana, Ecuador

Subject: Letter of Authorization to Conduct Research at Unidad Educativa fiscomisional "Padre Miguel Gamboa"

This letter will serve as authorization for Francis Pacheco Diaz, teacher of English at

Padre Miguel Gamboa, Francisco de Orellana Ecuador, to conduct the research project

entitled. "TEACHERS' PERCEPTIONS OF VIRTUAL REALITY IN THE

DEVELOPMENT OF LANGUAGE LEARNING" with the English teachers' of the school".

The Facility acknowledges that it has reviewed the protocol presented by the researcher, as well as the associated risks to the Facility. The Facility accepts the protocol and the associated risks to the Facility, and authorizes the research project to proceed. The research project may be implemented at the Facility upon approval from the institutional Review Board.

If we have any concerns or require additional information, we will contact the researcher at 0984214013.

PADRE MIGUEL GAMBOA"

Sincerely

Facility Authorized Signatory

Orellare, 11-3-2022 Date

Ecoarder

8.2 Appendix 2

Agreement form

Agreement form

Francis Pacheco Díaz English Teacher Unidad Educativa Fiscomisional "Padre Miguel Gamboa" Francisco de Orellana Ecuador.

I, ______, agree to participate in the study TEACHERS' PERCEPTIONS OF VIRTUAL REALITY IN THE DEVELOPMENT OF LANGUAGE LEARNING" Conducted by Francis Pacheco Díaz, Teacher of English in Padre Miguel Gamboa high school.

I understand that:

- My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time I need not answer all the questions.
- My identity will be kept confident4.

I have read the information above and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

Signature

Date

Francis Pacheco Díaz English Teacher Unidad Educativa Fiscomisional "Padre Miguel Gamboa" Francisco de Orellana Ecuador.

I, ______, agree to participate in the study TEACHERS' PERCEPTIONS C VIRTUAL REALITY IN THE DEVELOPMENT OF LANGUAGE LEARNING" Conducted by Francis Pacheco Díaz, Teacher of English in Padre Miguel Gamboa high school.

I understand that:

- My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time I need not answer all the guestions.
- My identity will be kept confident4.

I have read the information above and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

March 11th. 9020 Date Signature

Francis Pacheco Díaz English Teacher Unidad Educativa Fiscomisional "Padre Miguel Gamboa" Francisco de Orellana Ecuador.

I, Agree to participate in the study TEACHERS' PERCEPTIONS OF VIRTUAL REALITY IN THE DEVELOPMENT OF LANGUAGE LEARNING" Conducted by Francis Pacheco Diaz, Teacher of English in Padre Miguel Gamboa high school.

I understand that: many find where an a course for the protection of generating appleare

it we have ady concerns of require additional miorogation, we will connect the

0	My answers will be used for educational research.
0	My participation is voluntary.
0	I may stop participation at any time I need not answer all the
	questions.
0	My identity will be kept confident4.

I have read the information above and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

as well us the associated risks to the Facility. The Facility accepts the protocol and the

DEVELOPMENT OF LANGUAGE LEARNING" with the English trachers' of the

of Sambon, Free acco de Orellana Leundor, to conduct the research project

2022

03

Signature Date Date

meno energiacio de Citaliana, Ecuanar

Francis Pacheco Díaz English Teacher Unidad Educativa Fiscomisional "Padre Miguel Gamboa" Francisco de Orellana Ecuador.

I, service of the study TEACHERS' PERCEPTIONS OF VIRTUAL REALITY IN THE DEVELOPMENT OF LANGUAGE LEARNING" Conducted by Francis Pacheco Díaz, Teacher of English in Padre Miguel Gamboa high school.

I understand that:

- My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time I need not answer all the questions.
- My identity will be kept confident4.

I have read the information above and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

11-03-2022 Signature Date

Francis Pacheco Díaz **English Teacher** Unidad Educativa Fiscomisional "Padre Miguel Gamboa" Francisco de Orellana Ecuador.

agree to participate in the study TEACHERS' PERCEPTIONS OF VIRTUAL REALITY IN THE DEVELOPMENT OF LANGUAGE LEARNING" Conducted by Francis Pacheco Díaz, Teacher of English in Padre Miguel Gamboa high school.

I understand that:

- o My answers will be used for educational research.
- My participation is voluntary.
- I may stop participation at any time I need not answer all the questions.
- My identity will be kept confident4.

I have read the information above and any questions I asked have been answered to my satisfaction. I agree to participate in this activity, realizing that I may withdraw without prejudice at any time.

Signature

11/03/2022

Date

8.3 Appendix 3

Participants	age	gender	ethnicity	level of education	professional degree	Teachers' degree	language certificates	technological training	time of teaching	students age	code
teacher l	30	female	mestizo	bachelor	English teacher	Licenciatura en ciencias de la educación Ingles	ITEP	20 h	5	14-17	M
teacher 2	36	male	half-blood	bachelor	English teacher	Licenciatura en ciencias de la educación Ingles	none	20 h	5	11	LA
teacher 3	45	female	half-blood	master degree	English teacher	Maestro en Docencia	ITEP	12 h	11	14-16	MY
teacher 4	33	female	half-blood	bachelor	English teacher	Licenciada en lenguage extranjera Ingles	The certificate of Proficiency in English - Fine Tuned English Academy	14 h	6	14-16	Т
teacher 5	22	female	half-blood	master degree	English teacher	Master in Teaching and Curriculum Development.	none	12 h	3	14-16	2

Demographic information

8.4 Appendix 4

Virtual Reality Training Course Outline

MODULE 1 Virtual Reality Training Course Outline

Virtual Reality Training Course Outline

Virtual reality is the most fascinating experience in technology, it makes us feel people being in other places without moving from one place to another. This tech is changing the way people work, train, and study. There are several apps and programs that could make up your mind and change the way people are doing things today. This course will be useful to learn the basics of VR and its application in education. Your first step is to describe your course. This includes the:

STEP 1 The basics

• Title Virtual Reality

Ready, Set, Engage! A Teacher-Training Program on Virtual Reality

• Training hours and schedule

1 hour per day, Monday-Tuesday- Wednesday and Thursday for 4 weeks (16 total course hours)

Course description

In this course teachers will know the basics of virtual reality, what is it and how they need to access. They will understand the difference between virtual world and virtual reality. Furthermore, Teachers will try some apps to teach and develop language utterances in students.

1. Describe your course.

• Title: My first steps in VR

Training Hours and Schedule: 1 *hour per day once a week for 4 weeks (16 total hours). , on 6th, 13th, 20th and 27th March.*

Course Description: In This 1-hour course introduces what its VR and the requirements to access. The workshop will provide a sample training

to get used to the virtual reality and the command it presents. Participants will use the headset to know the controls and the interface.

STEP 2 Set

Course Goal Statement(s):

This course goal is for participants to be able to summarize if virtual reality provides meaningful and engaging activities for language learning.

Course Objectives:

At the end of this course, participants will be able to

Describe the activities in virtual reality. Decide which app are useful for students for language learning. Apply virtual reality classes to assess students understanding.

STEP 3 Learning APPS

3. Description

This 60-minute users will learn about JOB SIMULATOR.

This training app provides a real work simulation, users will have to manage several tasks in order to accomplish the work. Exist the different scenarios where users' skill will be needed.

Office worker

in this simulation user have to do some task such as make copies, seal documents, sent email, hire and fire employees and other things of the work. Users have to be able to understand the direction and read them to complete the work.

Gourmet chef

In this scenario user has to become a chef in order to prepare all the dishes that people ask for, the environment in a small cooking will all utensils. This is an excellent way to learn vocabulary for cooking. Store clerk

In this store atmosphere user has sell products, participants will learn to charge money and know the basic thing in a store.

Auto mechanic

In the last scenario user has to become a mechanic, deal with anger driver in order to fix and repair cars. Participants will learn basic vocabulary related to this field.

Teaching & Learning Processes

Demonstrations and hands-on authentic activities in a virtual reality headset.

STEP 3.1

Description

This 60-minute users will learn about **BARISTA EXPRESS AND GRAVITY SKETCH.**

Hubs by Mozilla

In this browser app allows teacher create their own rooms, sections and activities. Here teachers have the opportunity to add material they consider, at the same time students will immerse and learn.

Teaching & Learning Processes

Demonstrations and hands-on authentic activities in a virtual reality headset **SKETCH**

This amazing app will give the opportunity make designs; users will have the opportunity to develop the creativity. This app is excellent for making warm ups, using this app will develop listening, follow direction.

Teaching & Learning Processes

Demonstrations and hands-on authentic activities in a computer lab

STEP 3.2

Description

This 60-minute users will learn about MONDLY

This virtual reality app allows users to interact with a virtual system, the IA of the app will answer and ask question according to the situation. Participants have to use the prior knowledge so that the conversation flows. There are several situations where the user that provide and choose the correct answers.

Teaching & Learning Processes

Demonstrations and speaking authentic activities in a virtual reality headset VR chat In this 3D virtual world, user will be able to explore and meet new people. This apps will learn the basic, how to customize your avatar, how to surf in this reality. This app allows to practice language with other users, there are thousand of world to join and find new people every day.

Week 1	Topic: What is	VR and youtube VR	
(REQUIRED)			
Objectives:		Activities:	Assessment:
By the end	of the 1-hour		
training worksh	op, participants		
will be able to:			
 Recognize what is VR and how to access to this technology. Describe the purpose of VR use in Language Learning and Teaching. Differentiate between Virtual reality and virtual words and know the equipment to run this technology. 		 Facilitator explains about virtual reality. Participants review advantages of virtual reality Participants identify the purpose of use virtual reality in class. Participants experiment what is virtual reality. Participants test the apps by themselves 	 In pairs, participants' identify the pros' and cons of VR. In pairs, how they would include these apps into their classes. Write a log about their experiences.
Week 2	Topic: Job sin	nulator immersion	
(REQUIRED)			
Objectives:		Activities:	Assessment:
By the end	of the 1-hour		
training worksh	op. participants	 Participants analyze 	
will be able to:		lesson that contains	 In pairs
		the app	narticinants
 Identify content contains Observe the vo 	the different of this app and examine ocabulary and	 Participants observe a class with VR (developed by the trainer). Participants report what activities are 	 describe orally which contents are useful for students. Participants
useful students • Practice	expression s will acquire. using the	 useful for language learning. Participants analyze activities of different 	writes a journal about their insights of this app.
headset	in the app.	 stages. Participants practice using the app and the headset to feel the experience. 	 Individually, participants interact with the app to accomplish

Week 3 Topic: Grabity	skotch	some stages of it.
(OPTIONAL)	Sketon	
 Objectives: By the end of the 1-hour training workshop, participants will be able to: To identify the apps' interface and the controls. To describe how these apps are useful for language teaching and learning. To implement these activities in their lesson plans. To identify the principles of designing a simple class for students. 	 Activities: Participants sees the interface and its options. Participants observe a new class using these apps. Participants compare which activities they could use in classes for language teaching. Participants reflect on the teaching process with VR. Participants practice how to use these apps. 	 Assessment: In pairs, participants write a reflective journal. Participants describe weak and strong of these apps
(OPTIONAL)	and VR chat.	
 Objectives: By the end of the 4-hour training workshop, participants will be able to: To explain how to use Mondly and VR chat effectively in English Teaching. To identify the benefits of these apps in learning English. To respond and ask questions. To understand basic conversation orally and written way. 	 Activities: In pairs, participants observe a demo practice of both apps Participants talk in pairs about their teaching experience with VR. Participants discuss on tips to use VR apps. Participants participate and test to apps. Participants write their reflective journal. 	 Assessment: Participants write a list of tips to use VR in English teaching. Individually, participants write a reflective journal about the benefits of Mondly and VR chat in learning English.

Week 5	Topic: Lost red	cipes	
Objectives:		Activities:	Assessment:
 To iden advanta vocabu in the a languag learning To expl know th ancient To iden of the ir To unde comma and pres 	tify the ages and lary presented pp for ge teaching- g. ain how to he recipes of civilizations. tify the names ngredients erstand nds to cook spare	 Participants observe a demo practice of the apps Teachers check the vocabulary and experience with VR. Participants discuss on the activities of the app and how they could incorporate in classes. Participants participate and test to apps. Participants write their reflective journal. 	 Participants write a list of words they get during the session. Provide an activity related to the previous Individually, participants write a reflective journal about the benefits of lost recipes in learning English.

STEP 5 collect journals

Answer the reflection questions:

Ask participants to present their journals regarding each session, it is necessary to know if virtual reality has a good impact in language learning.

8.5 Appendix 6

Teachers' journals

Data analysis/Results

Session 1: Introduction to VR and job simulator

Participant	Extract of open ended surveys
ICM	Technology has been revolutionizing and improving the world through the years. For that, I consider this experience like something really interesting because it is a new tool that let me appreciate this second language in a modern way. On the one hand, it could be so useful in the teaching-learning process in order to encourage our students to learn English in an interactive way, applying educational and technological methods with things that they like or have an interest in. Therefore, we can have a better result in the learning process. On the other hand, it is necessary to explain to students how to work with this new technology due to there are students who could have trouble if they didn't know to use it in a proper way. For instance, in the beginning, it was a bit hard because I didn't know how to control it until my partner explained it to me. Additionally, if we applied this technology, students could feel the necessity to inquire more in the target language, and consequently, they could interact with others using the vocabulary that they heard and practice with this virtual tool. however, one disadvantage could be that we don't have the necessary resources to get it. In conclusion, this implementation could be so beneficial for everyone because it will help students to acquire knowledge without feeling stressed. I would like to apply this tool with them in the same way that I did because I really enjoyed so much working with it.
KGT	Nowadays, virtual reality has a great impact in different factors especially in the education field So, I consider that virtual reality is a good option in the process of teaching-learning of another language as English for its multiple benefits.

	First of all, I can mention that my experience using virtual reality has been really great because I enjoyed it a lot when I proved it with my partners in the lab. Second, I strongly agree with the statement that states students learn by doing an action due to they can work in an active way applying their acquired knowledges. Regarding to use I think is not difficult, only is important paid attention and follow all the instructions to work without problems. Also, through this tool learner could acquire a series of new words and as a consequence they can increase their vocabulary in an easily and dynamic way. Therefore, anxiety is reduced to facilitate the understanding of learners. Additionally, EFL teachers could implement this app to language teaching in order to promote learners critical thinking, increase their self-reflection and creativity, the active participation of learners will let learners with autonomy. Finally, as a teacher, I consider it feasible to apply this tool at school to learners learn the English language through a different and innovative method. In summary, would like to apply new teaching techniques using technology due to learners are digital native, and is really easy for them the usage, in my case I liked a lot the simulator app and I recommend it.
PC	For me, it was a very new tool, since it is the first time I used it. Also, it was something scary because it transports you to an unreal place and I think it is very important and interesting for current youth, teacher should include these tools to provide quality teaching and get excellent students who are very prepared for future times. practice is the most important in students when working with new tools it will take time until the students adapt to use, but I am sure they will learn in a better way. I consider that it is something new, as a beginner it is a little difficult and at the same time, everything will depend on the practice that is performed. It seems that it is a very useful tool, I am sure that students can learn vocabulary very easily this job simulator feels interesting, I liked it and you could work with this tool when we introduce vocabulary so that the student will practice listening skills. As educators that we are, we can put this tool into practice in the school, children up to high school, everything will depend on the topics and the strategy that is applied to work. Technological tools are very important in all aspects, so our generation will be prepared for the future. Within
	the daily activities of people, the most important thing is practice, that matters most for learning; that is for technological tools will be the world of the new generation making use of the skill in teaching and learning. It is a little difficult for the student to develop the activities when using new tools, but if the teacher guides them with patience they will learn easily, then they will give excellent results in their knowledge, in such a way that is preparing for real life. I consider that if we use this tool frequently, the students will have a wide knowledge of vocabulary, both writing and pronunciation; knowledge will be very high, as teachers I have the ambition that in the future all establishments have classrooms and laboratories with all the facilities for our students very advanced technologies and like this tool. I would love to work with this simulator and others apps. I know that they are very useful and important for the education of children today. I would like to acquire a technological tool like this one and use the app according to the grade or course, that is my responsibility to make them work in pairs with a lot of vocabulary and dialogues between two or three people so that they have good pronunciation in the English area. I imagine working with this tool and lower grade students is the most beautiful thing is students learn using this tool and work with the app so that in higher grades they do not have problems with its use and knowledge of learning English language.
-----	--
YLM	First, in my opinion, this was an awesome experience because I have never seen it in my life. Second, I think virtual reality is a new learning method to motivate people or students to improve their knowledge; I believe the use of virtual reality makes it possible for students to explore a lot of things through three-dimensional resources through the use and manipulation of objects. Also, Not only does virtual reality allow to capture the interest of students in a new way in all kinds of subjects, but they also turn the hours in the classroom into a more fun experience and encourage learning. Besides, students can acquire a lot of words as a vocabulary. Third, the use of virtual reality as a teaching and learning tool is very important because it is an alternative to ensuring the educational process's quality, especially given the current physical distancing situation due to the pandemic.

	In conclusion, the potential of virtual reality as an educational tool is evident. However, it can be used appropriately because it is a little difficult to use and its use must be carefully evaluated. I think students will like it very much like me, so I would like to use it in my class soon.
LA	First, the experience with virtual reality was really interesting because it is very dynamic, educational, and entertaining, and is a new way of teaching and learning in traditional education. Such resources can undoubtedly be used in the educational field, and even more so in learning a new language since this is done interactively in accordance with new educational paradigms. I think that the students would learn with these kinds of resources so that they would not get bored and would be more interested in learning the language, I can speak about using this device in my personal experience if there was a bit of difficulty, but that's only until I get rhythm control and rules. Students have the opportunity to learn all kinds of topics and designs, as well as get new vocabulary words, of course, because this tool has everything to be able to do this competence. I believe that due to my experience in using this device, I would personally like to work with this application because it will be able to carry out this application in language teaching on the basis of vocabulary topics, primary structures, and content where the student must practice the subjects observed in a usual class. I can also deduce that the use of these tools in our school is possible, however taking into account components such as our surroundings, prices and admission to the same.
ICM	How was this virtual reality experience for you? Firstly, I have never used this kind of technology before and as a result, I felt strange in the beginning because I wanted to control my hands better and I couldn't do it but later was funny. Only I had problems with one button which is necessary to handle this virtual reality. Secondly, Technological advances are essential in each activity of our life according to the era. For that, I consider this work as a new way to improve people's life since through it we can motivate our students to use this second language increasing in them the fluency in it when they learn how to pronounce the words in English with the vocabulary provided for it and the interactions that they can have.

	Lastly, I believe that students could inquire more about the target language and interact with others using the vocabulary or situations that are in the virtual application however, we don't have the necessary resources to get it, and I think that you need to create more applications to have a variety of it. In conclusion, this second part of your work could be so useful for our students as long as it continues improving for benefit of the educational system. Working in other aspects not only in vocabulary because this experience was good but there are some things that we can work on more using it. For instance, I should add other situations and let to use us use our ownases to inte better
YLM	2 Virtual Reality (Language lab, and Mondly) There are some important apps to use in the virtual reality in the class, two of them are Language lab and Mondly. First, the language lab gives the students a better opportunity to learn a lot of vocabulary easier than the traditional method. Second, this app allows students to interact with their lessons with vocabulary and experience it in different ways. Instead of just reading about a subject, students are able to see the things about the words they are learning, helping students in a better understand vocabulary. Third, the use of the app mondly is an interesting simulator to learning better in order talents are be able to acquire speaking skills to act in different situations like in transport, taxi, train, restaurants, hotels and so on. To conclude I have to say virtual reality technology is characteristics of immersion, interaction, and involvement. It breaks through the limitations of traditional media, provides learners with a realistic simulated learning environment, and effectively supports their learning.
KGT	Mondly Virtual Reality Mondly is a good alternative to incorporate in the EFL class in order to learners practice the active skills as speaking using their mother tongue and the target language with a series of activities to reinforce the level of English. According my experience, the usage of this app is really interesting and enjoyable due to learners can feel immersive in the acquisition of a foreign language and feel emotions to caught their attention. Also, I consider that is an innovative way to teach because students use virtual world to practice conversations in realistic

	scenarios, they get instant feedback on your pronunciation in virtual reality and build the confidence to speak new languages in real life. I think is fun and easy to use, only is important paid attention and follow all the instructions to work without problems with the aim to explore new worlds and learn new languages. So, just put your headset on and enjoy the experience. Additionally, EFL teachers could implement this app to language teaching in order to practice oral productions, give instructions or commands, teach vocabulary, increase the self-reflection and creativity of learner's, among other. Finally, as a teacher I consider feasible to apply this tool at school to learners learn English language through a different and innovative method. In conclusion, I really love this app as a method of teaching- learning and I would like to use with my students during class to motivate them due to all my students are connected with technology.
LA	In this development of activity, the experience gained is exclusive because it is more interactive since there are activities that test our relationship skills and help us to improve our own language skills. It is a wonderful tool for working with students of all levels of English language ability and finding just the level of complexity that should be present in developing these professions. With this type of interactive activity, students can learn in a more interactive and fun way, and students will be more interested in their lessons because in the classic way, everything is mechanical and nothing interactive. Regarding the use of the device in this new activity, I was already more familiar with the controls and commands that facilitated the activity at the time of development. Of course, it is possible to work and learn vocabulary with this type of professions, since they are interactive and dynamic, which makes it possible to use the digital tool to motivate young people to learn a second language. The use of this type of tool in educational institutions is quite feasible, it depends on a good socialization and demonstration of what makes it interesting for others and easy to use and develop.

ICM	A positive experience could be that I had the opportunity to appreciate in other ways how can be applied listening activities with my students in order to improve on them this skill which in some cases is so harsh. Since it was able to let me to be in places despite I wasn't there. I suppose that students of the B1 Level will have more benefits based on their knowledge. Furthermore, they will demonstrate more interest than the rest of the students at a low level. Obviously, working so hard with these activities to have better results and catch the attention of our students day to day. I loved using this app because It was the first time that I used something like this, Only I have seen videos o pictures on the internet or books about other countries, but it showed me a country and even let me know about it while I was listening and learning. Of course, because it catches a lot of people's attention, besides, contributes to acquiring more and more knowledge in an effective way. Improving the problems that we have with it. Well, in the beginning obviously I understood because we are teachers, but in some parts, it was confusing because it had words or phrases that I haven't heard before. However, we have new things to learn with our partners or in apps like these every day which help us to graph this second language with interactive activities instead of practicing with traditional ones.
KGT	Virtual reality has had a great impact on the teaching and learning of the English language in order to motivate the interest of students to improve the skills required by the language in an active way. Therefore, I consider the use of technological tools within the classroom to be very successful. First of all, using virtual reality is a wonderful experience as it allows the student to be actively involved in the learning process of the target language, it reduces anxiety, it is interactive, and it improves communication skills which are very positive. On the other hand, I can mention that the high cost of the different devices and adaptations for the use of virtual reality is negative compared to other traditional resources used for speaking teaching. Secondly, I consider that this type of listening activity is appropriate for students of all levels according to the Common European Framework because they are able to master the context according to the learning corresponding to each level acquired.

	Regarding visual aids, I think they help significantly to understand a certain activity because students have clues and can better identify the vocabulary. Finally, based on my experience I can say that phonology is complex for me since it involves accent, voice strength as well as idiomatic expressions that usually appear in a normal context. For this reason, I consider it vitally important to learn everything related to phonology. In summary, virtual reality is a great support in the educational field and as a teacher I am aware that this entails constant preparation to provide quality education
YLM	Virtual reality via mobile displays has emerged as a valuable English language learning tool. I think virtual reality assists with the English as a second language listening is engaging and beneficial. Virtual reality offers learners access to simulated, interactive, and immersive virtual environments to perform authentic learning activities, helping them activate prior knowledge and make appropriate inferences at all levels of education. In my opinion, virtual presence in virtual reality brings learner involvement, prevented cognitive overload, reduced anxiety, and thus aided comprehension. In addition, teachers and students must use virtual reality whether it is complicated or not, if they can understand it or not. In spite, of different intonations or accents, I believe that virtual reality will be our study environment in the near future. To conclude virtual reality is a new learning method to motivate teachers and students to improve their knowledges; I believe virtual reality makes it possible for students to explore a lot of things through three dimensional resources.
PC	1 this application is seen to be important for all levels since you learn through visualization by living class experiences that are learning processes, you move to virtual reality and that makes the class very exciting and interesting for the youth of any level and children. But I can think that this application would be better for the upper middle basic levels, which would be taught with small comics that go according to the level or age of the student. since metacognitive learning can be developed through appropriate learning experiences. Every person has metacognitive views in some way, sometimes unconsciously. Depending on the methods used by teachers during instructions,

	 student metacognitive tendencies can be encouraged or discouraged. 2 tell the truth, I like the visibility of this activity that we can appreciate when working with students is such a way that you can learn countless vocabularies that, according to the topic presented, listening ability is one of the most important skills to learn. Be developed in classroom learning, since auditory skills are the abilities that a person has to capture, understand and discriminate sound stimuli. If we apply the auditory ability, it is certain that there will be a better identification and understanding of words and the production of language, selective attention, and high- order movement control. So auditory development in early childhood cannot be limited to anatomical and physiological elements. 3 Visualization is very important to better understand everything we do, it helps us to meditate, to harmonize our body and mind, when we reach that balance we make a huge leap in the quality of our lives. It is advisable to work using visual element in all tasks through images, videos, chart, graphs and maps to obtain a favorable result in the learning of youth and especially in childhood, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in the information presented. If we visualize, even if there is no reading, we form our own concept or story according to the images seen is such a way that we reach a very clear understanding and we can learn in a different way. 4 If we work with students inside the classroom using this app that catches our attention, there will surely be a 30 percent difficulty since they will put a lot of interest in the audio, vocabulary and accent presented. So learning will be more effective without a doubt. Listening is paying attention to that you hear, paying attention and understanding. Whoever listens exercises the sense of hearing. Attendant applies the intellect to understand that people hear. to know that we
CIM	listening
	Explain what is gravity sketch app? What did you do? What is used for? What positive and negative aspects did you find using this app?

Based on your previous work experience, what do you think are
the most important features for gravity sketch app?
Explain what was a VR chat app? What did you do? What is
used for?
What benefits and challenges have you experienced with using
this program?
Gravity Skotch is a 3D design that let people or artists easily
Gravity Sketch is a 5D design that let people of artists easily
express their ideas and solve complex design challenges working
directly in 3D at any scale. I drew many pictures about a story
that I read before using this useful tool.
Well, from my point of view I consider that it is so useful tool and
really easy to control. For that I don't believe that it has negative
aspects: however, it could have as other applications but I don't
know because it was my first time using this application
On the other hand, mentioning the positive ones. I would say I
can do eventthing with my fingers which I enjoyed a let because
it depends metter if you are sitting or standing
It doesn't matter if you are sitting of standing.
I believe that they could be furniture related to arts such: colors, a
good background
VR Chat is an online virtual world platform that allows users to
interact with other 3D characters, or avatars, that represent their
likeness. In the social game, players can explore many virtual
worlds built by others also using the platform.
Firstly, my partner explained everything that I needed to know
about it in the same way with the other apps. Then I started to
use it at the beginning I felt so strange because I was a bit
difficult to speak or interact with someone but after a couple of
minutes Leguld Obviously, Lond to move one world to enother
minutes reduid. Obviously, r had to move one wond to another
and I ran into with 2 teenagers who were so friendly and polite
even they helped with some parts in the virtual world because for
both it was their first time like me. However, inside it I noticed that
some people are in the own world and not interact with others.
Being honest, the first benefits for me was when I could interact
with those teenagers because I was able to listen to them that
seemed me so interesting. In fact, it is so harsh to find native
people in the real world, in my case I talk and interact with
English teacher like me but we learnt it as a second language
which is not the same. For that I consider that it has many
bonofite for us in the moment we are interacting. Because when L
wee in it. I didn't green some things but later I sould that I
was in it, i didn't graph some things but later i could that i
consider it was a challenge for me since I am not used to talking
with native speakers all the time and they have so much fluency
that I need to improve

KGT	Currently, virtual reality has been included in the education field, especially for EFL teachers who use a series of apps in order to facilitate the comprehension of learners. Also, the use of technology lets the learners practice all the skills required in the target language in a dynamic and realistic way. Regarding the Gravity Sketch app, I can mention that is a good alternative in the teaching-learning process for learners to practice reading comprehension and then they reinforce by making some draws related to the topic that they have read before. However, among the negative aspects, the gravity sketch technology is not designed to protect the security of excluded data. excluded data is uploaded at your own risk and gravity sketch assumes no responsibility or liability for the protection, handling, processing, or transmission of any excluded data. Another app that is used for teaching languages is VR Chat offers an endless collection of social VR experiences in different contexts. In my opinion, was a new experience the usage of VR Chat and I am interested in learning more about this important app due to the active participation in the speaking productions. One of the benefits of this app is related to the improvement of your listening and speaking skills through a series of conversations. The challenge to me is understanding the phonology that appears in the conversations because it is difficult for to me understand all that they said. So, I need to improve my knowledge of phonology to interact in a better way. To sum it up, I recommend the usage of virtual reality it in order to provide to the student's meaningful learning in the future to interact in different contexts without problems in an easy and dynamic way.

8.6 Appendix 6

RESEARCH REPORT_ FRANCIS			2% Similarities I 1% Text between quotes <1% similarities between quotation marks <1% Language not recognised			
ocu ocu rigi	ment n ment li nal doc	ame: RESEARCH REPORT_FRANCIS.docx Submitter: FABIOLA SOLI 0: 8cc2580b803409deb13ac2eb7529992e75e00195 Submission date: 9/4/20 ument size: 2.38 MB Upload type: interface analysis end date: 9/4/20	EDAD CANDO GUA 23 123	NOLUISA NI	umber of words: 17,746 umber of characters: 119,411	
atio	n of sim	ilarities in the document:		-		
in	sourc	es detected				
No.		Description	Similarities	Locations	Additional information	
	0	en.wikipedia.org Input hypothesis - Wikipedia https://en.wikipedia.org/wiki/Input_hypothesis 1 similar source	< 1%		(1) Identical words: < 1% (72 words)	
2	0	core.ac.uk https://core.ac.uk/download/pdf/525004984.pdf 1 similar source	< 1%		D Identical words: < 1% (55 words)	
3	0	mdpl-res.com https://mdpi-res.com/d_attachment/sustainability/sustainability-14-03147/article_deploy/sustainabili 1 similar source	< 1%		D Identical words: < 1% (28 words)	
	8	en.wikipedia.org Second-language acquisition - Wikipedia https://en.wikipedia.org/wiki/Second-language_acquisition 1 similar source	< 1%		0 Identical words: < 1% (30 words)	
5	Â	Document from another user #1066ad The document is from another group 1 similar source	< 1%		D Identical words: < 1% (31 words)	
rce	s witl	h incidental similarities				
0.		Description	Similarities	Locations	Additional information	
	0	repositorio.utc.edu.ec http://repositorio.utc.edu.ec/bitstream/27000/8226/17MUTC-001066.pdf	< 1%		ስ Identical words: < 1% (33 words)	
	0	www.frontiersin.org Frontiers Immersive VR and Education: Embodied Design https://www.frontiersin.org/articles/10.3389/frobt.2018.00081	< 1%		0) Identical words: < 1% (26 words)	
	0	customwritings.co Affective Filter And Second Language Acquisition CustomWr https://customwritings.co/affective-filter-and-second-language-acquisition/	< 1%		0 Identical words: < 1% (19 words)	
	0	repositorio.utc.edu.ec Mnemonic Keyword Method in the development of vocab http://repositorio.utc.edu.ec/bitstream/27000/8194/6/MUTC-001047.pdf.bt	< 1%		ලා identical words: < 1% (17 words)	
	ര	www.mondly.com Mondly VR: Language Learning Immersion	< 1%		D Identical words: < 1% (19 words)	

3 🕅 https://jobsimulatorgame.com/

4 X https://youtube.com/

5 X https://www.languagelabvr.com/