

UNIVERSIDAD NACIONAL DE CHIMBORAZO FACULTAD DE CIENCIAS DE LA EDUCACIÓN, HUMANAS Y TECNOLOGIAS

CARRERA DE PEDAGOGIA DE LOS IDIOMAS NACIONALESY EXTRANJEROS

Technological resources to teach English vocabulary to children with dyslexia; the case of students at 9th year of Educación Básica, "Unidad Educativa Santo Tomás Apóstol Riobamba" in Chimborazo province, Riobamba city, period 2021-2022.

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DEDICATION

To my mother and grandmother for allowing me to get this far, for their advice, wisdom and support and for being the cornerstone of my life, without you I would not be the woman I am, thank you for making me a good person because of the values you instilled in me.

To my brother for being the force that drives me to achieve my goals, for his love and understanding, for always being with me despite the adversities. To my Kevin Armas for his patience and support, for being the one who gives me strength when I needed it most, for always being there for me, listening to me and encouraging me. To my cousins and aunts who are always looking out for me and giving me a smile and extending their hand in solidarity.

Last but not least to my daddy Vicente who, although he is no longer here, I have always felt his presence and support, because in the last moments he was the person who inspired me to go forward. I love you and miss you very much my daddy.

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RESUMEN

La dislexia en la educación se ha hecho notar visiblemente en los últimos años, por lo que las Unidades Educativas e instituciones se están haciendo más presentes con posibles soluciones y ayudas para los estudiantes que necesitan una atención especial a sus necesidades, de ahí la preocupación y curiosidad de como estas dificultades son resueltas. El objetivo principal es analizar los recursos tecnológicos que se usan para enseñar vocabulario a estudiantes con dislexia. La investigación se lleva a cabo utilizando un enfoque cualitativo, el cual nos ayuda a identificar y obtener la perspectiva de los participantes con dislexia para adquirir información y conocimiento mediante los recursos tecnológicos. También adopta un paradigma interpretativo que nos encamina a buscar suposiciones sobre el proceso de la enseñanza del vocabulario a los estudiantes con dislexia y como son usados los recursos tecnológicos para cumplir con ese fin, es una investigación no experimental, por lo que la situación es observada en su contexto natural sin ninguna intervención del investigador. El tipo de investigación usado fue exploratorio ya que fue necesario investigar el problema y comprobar su fiabilidad mediante un instrumento de observación lo que nos reveló los puntos específicos entre la dislexia y la enseñanza del vocabulario con recursos tecnológicos en los estudiantes de noveno año. La guía de observación nos mostró las dificultades que los estudiantes con dislexia presentan en el aula de clases y cómo estás afectan a su aprendizaje, puesto que conllevan varios síntomas que deben ser valorados a tiempo, sin embargo la aplicación de recursos tecnológicos en la enseñanza ayudó al progreso significativo del aprendizaje del vocabulario de los estudiantes, haciendo que se sientan más cómodos al aprender, ya que los docentes se basaron en sus estilos de aprendizaje para resolver o menorar los contratiempos estudiantiles. Se finaliza la investigación recalcando la importancia del correcto manejo de los recursos tecnológicos y estrategias estrechamente ligadas al aprendizaje de nuevo vocabulario enfocándose en los estilos de aprendizaje de cada estudiante con dislexia.

Palabras claves: dislexia, estudiantes, recursos tecnológicos, estilos de aprendizaje, docentes, vocabulario.

ABSTRACT

Dyslexia in education has been visibly noticed in recent years, so that educational units and institutions are becoming more present with possible solutions and help for students who need special attention to their needs, hence the concern and curiosity of how these difficulties are solved. The main objective is to analyze the technological resources used to teach vocabulary to students with dyslexia. The research is conducted using a qualitative approach, which helps us to identify and obtain the perspective of participants with dyslexia to acquire information and knowledge through technological resources. It also adopts an interpretive paradigm that helps us to seek assumptions about the process of teaching vocabulary to students with dyslexia and how technological resources are used to that goal, the research is non-experimental, so the situation is observed in its natural context without any intervention by the researcher. The type of research used was exploratory since it was necessary to investigate the problem and check its reliability by means of an observation instrument which revealed the specific points between dyslexia and the teaching of vocabulary with technological resources in ninth grade students. The observation guide showed us the difficulties that students with dyslexia present in the classroom and how they affect their learning, since they have several symptoms that must be assessed in time, however the application of technological resources in teaching helped the significant progress of vocabulary learning of students, making them feel more comfortable when learning, since teachers relied on their learning styles to solve or minimize student setbacks. We conclude the research by emphasizing the importance of the correct use of technological resources and strategies closely linked to the learning of new vocabulary, focusing on the learning styles of each student with dyslexia.

Keywords: dyslexia, students, technological resources, learning styles, teachers, vocabulary.

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CHAPTER I

1.1 INTRODUCTION

Dyslexia is a special educational need that has been gaining prominence and importance for teachers, parents, and students in recent years. As it has been diagnosed more accurately, teachers are more aware that action must be taken both inside and outside the classroom. Being part of the students' learning process, teachers must be attentive to the correct processes that must be taken to ensure that their students achieve meaningful learning, without feeling left out or neglected.

Currently, educational institutions are being trained to face the educational challenges that are presented today. One of them is dyslexia which is why all of us in the educational community must be aware of special education and how to conduct a class with children with this disability. The first step is to stay educated on the subject, to illustrate, to be informed about the conditions of dyslexia, its symptoms, and most importantly, how to work with children who have dyslexia, and include them in an appropriate way to the rest of the class and society.

Dyslexia is a learning disorder, focused on reading and writing which affects the decoding of words, particularly specific phonemes, which impacts the proper understanding of those who have it. However, it can be treated with appropriate and individualized attention that the students need. In terms of English language learning, teachers have some challenges to overcome because it is not easy for the student to learn words and much less in a language that is not phonetic as in the case of English. Nevertheless, there are several strategies that help students and teachers to be able to achieve the objectives set out in the educational curriculum.

Lodej (2016) mentioned that dyslexia as a learning disorder is a difficulty in language and language processing, as it mainly affects reading and writing letters, numbers, and symbols due to the different abilities of the brain to process information presented in an auditory form and decode it in written form. Shaywitz (2005) stated that most people assume that having a high IQ or being intelligent is the result of being able to read and write well. However, research has indicated that even people with remarkable skills in music or mathematics sometimes have problems with reading.

The teaching of the English language has become indispensable due to globalization and the importance it has taken on in today's world, which is why vocabulary teaching strategies have progressively increased, in addition to the use of technology, which has become part of everyone's daily life. As a result, various options have been found to teach students properly, so that they are able to process information in a differently than usual, which is why they are more active and ready to learn.

This study is focused on the importance of the proper use of technology in the educational area and how it can be of considerable help to students with learning difficulties, as well as providing us with a number of well-structured pedagogical solutions that follow the current educational model. Technology has become part of our lives and we must know how to take advantage of it for our growth and education. It is important to take into account children with dyslexia, as it is the most common learning disorder, varying from 5 to 17% of children who have it, according to (Shaywitz, 1998). For this reason, the technological resources used during classes are of vital importance to achieving meaningful learning in all students.

The main beneficiaries of this research will be the children in the ninth year of basic education, since extensive research will be carried out on what technological resources are used for learning English vocabulary and how they benefit their intellectual and cognitive development. In order to carry out this research, the descriptive type of research was taken into account, since it is closely linked to the situation of the variables to be investigated and provides us with characteristics about the reality of the situation, in addition to giving us information about how often the phenomenon to be studied occurs. The research design adopted by the investigator is that of the interpretive paradigm which in this case will help us to know how the process of teaching English vocabulary to students with dyslexia is. The qualitative approach presented in the study will help us to identify the technological resources to be used for teaching English vocabulary.

1.2 PROBLEM STATEMENT

At least 10% of the world's population has dyslexia, which equates to around 700 million people, although it is difficult to estimate exactly how many dyslexics there are in the world. According to Dyslexia and Literacy International, the lack of basic skills development in early literacy and language acquisition, both oral and written, means that

many young adults still lack the functional skills they need to thrive in today's world (Galluzzo, 2019).

Dyslexia is a specific reading and writing disability. It is globally recognized and widely studied when it was first identified over a century ago. Dyslexia has had significant advances and studies have produced a vast body of evidence with which to better inform and understand the disorder. Researchers have made ongoing contributions to the definitions, identification and management of the needs of those struggling with dyslexia (Fallon, 2020).

In Riobamba in Unidad Educativa Santo Tomás Apóstol Riobamba, the presence of students with dyslexia in the ninth year of basic education was detected through observation, which after monitoring it was noted that it considerably affects learning in the English language, focusing on reading and writing. English being a non-phonetic language alters the writing and pronunciation of words, which leads to students with dyslexia having difficulty in learning the vocabulary established for their academic development. Therefore, it has been considered to identify specific resources for these students to better understand and analyze the topics discussed in class because it is relevant to know how these students manage to obtain or fulfil the objectives set by the teacher through the resources available to them.

1.3 PROBLEM FORMULATION

How do technological resources influence the teaching of English vocabulary to students with dyslexia of Ninth year of General Basic Education at Unidad Educativa "Santo Tomás Apóstol Riobamba" in Chimborazo province, Riobamba city, and period 2021-2022?

1.4 JUSTIFICATION

The reason that led me to carry out this research is to identify the technological resources with which teachers work to teach vocabulary in English to children with dyslexia, since as we know it is extremely important to know that people with this learning disorder are present in the classroom and their educational needs must be addressed because they have difficulties in recognizing letters, this makes it difficult for them to learn correctly

and makes it fastidious when trying to decipher the letters when they write and read, as in the case of English, which is a non-phonetic language, the words are not written as they are pronounced, which leads to students having constant conflicts when they learn English. Therefore, it is considered important to approach the research to find out how teachers act when faced with students who have dyslexia and how they help the student to learn by providing them with the necessary tools.

This research helps future educational solutions as dyslexia is a global problem, which must be taken with great care. That is why conducting research that contains these important points to address such as dyslexia and technological resources is of great importance worldwide, so that the conclusions of this research will greatly help the progress in terms of academia and education, thus allowing both teachers, students and all those who make up theeducational institution are more aware of the issues that can be found taking into account the educational needs of students. This study is intended to be the starting point for future research, which will be focused on possible solutions to the problems that could be found in this study concerning dyslexia, the resources used, and how English vocabulary teaching is managed, contributing in this way to better performance and use of materials that teachers and students could use to facilitate learning.

It is also of great importance at the country level, since teachers and managers will be able to make decisions based on results. That is why teachers, being properly trained to help the meaningful learning of all those who are part of education, have managed to discover and design useful tools that greatly help the easy understanding of those who have difficulties in the process. Being immersed in an era in which technology is part of our daily lives, we have taken advantage of this by using it for teaching through useful resources, which provides facilities for both teachers and students to acquire skills in a different and didactic way, which leads to better performance and understanding by those who have greater difficulty in assimilating the vocabulary.

The research is in line with the current needs of the educational system concerning children with dyslexia, and therefore it is pertinent to carry out the study in order to identify the technological resources to be used by teachers with the previously mentioned students. When talking about the viability of the study we can say that both the authorities of the Unidad Educativa Santo Tomas Apostol Riobamba and the authorities of the Universidad Nacional de Chimborazo, are available for this study as well as being properly trained to deal with the subject, for this reason, they have great professionals equipped with a wealth of knowledge willing to solve problems and take part in any difficulties that

arise, as well as theparents of students with dyslexia who have been properly informed and trained to overcome together with the students the problems that arise day by day with dyslexia. The Universidad Nacional de Chimborazo has the necessary technological and bibliographical resources to perform the research, therefore it provides students and teachers with the appropriate material — for their training and development, which facilitates the present study. The economic resources necessary for this research are covered by the student researcher.

Finally, but not least, this research is of great personal interest and its importance is of infinite help for the intellectual and academic growth of the researcher, since the study involves certain specific points, which draw attention and are of public interest, since dyslexia and its management in the classroom has been evolving, so it is necessary to understand and know what kind of material should be used or what are the best resources forstudents with dyslexia to achieve a better quality of understanding and education, as it is important for their academic and personal process.

1.5 OBJETIVES:

1.5.1 GENERAL OBJECTIVE

1.5.1.1 To identify the technological resources to teach English vocabulary to children with dyslexia; the case of students at 9th year of Educación Básica, "Unidad Educativa Santo Tomás Apóstol Riobamba" in Chimborazo province, Riobamba city, period 2021-2022.

1.5.2 SPECIFIC OBJECTIVES

- 1.5.1.2 To analyze how dyslexia is manifested in students of the nineth year of Educación Básica, "Unidad Educativa Santo Tomás Apóstol Riobamba".
- 1.5.1.3 To understand how important technological resources are in teaching English vocabulary to students.
- 1.5.1.4 To describe what the relationship between dyslexia and the teaching of English vocabulary is in students of the ninth year of Educación Básica, "Unidad Educativa Santo Tomas Apóstol Riobamba".

CHAPTER II

2.1 RESEARCH BACKGROUND

According to The International Dyslexia Association (IDA) and the National Institute of Child Health and Human Development are currently using the following definitions:

Dyslexia is a specific learning disorder caused by the nervous system. It is characterized by difficulty in recognizing words, and defects in spelling and decoding. These impairments are often the result of a deficit in the phonological component of language which compared with other cognitive skills and effective classroom learning, this is often unexpected. Secondary effects may include reading comprehension problems and decreased reading experience, which can hinder the growth of vocabulary and prior knowledge.

Developing skills in the field of reading and writing has become essential for communication and understanding of a language and even more so if it is a foreign language, which is why there has been a great deal of research into dyslexia and how to help people with this disability through technology, which has been of great help lately. In recent years, in Latin America, the process of education of children and teenagers has been taken into account in order to solve the problems that students have when learning vocabulary in English. The good development both in writing and reading has been considered as it is a fundamental basis for learning.

Extensive research in Brazil by Signor, (2020) shows that literacy programs were successful in reducing the percentage of people with dyslexia. However, they tested certain studies that helped with the effective progress of people with dyslexia, for example their work plan was to provide interventions based on phonology, reading and writing, as well as technology interventions to help better understand vocabulary, using auditory and visual resources for a better outcome. These interventions were very much in line with current international theory and they identified a number of methodological issues to address and reinforce in order to achieve the desired outcome.

On the other hand, in Panama, Tejada, (2019) talks about how the socio-economiclevel of the students affects their learning depending on the institutions where they are educated, since teachers in public institutions are generally not sufficiently trained to deal with the problems and help that a student with disabilities needs. That is why, there are no specific

tools for their development both inside and outside the classroom, adding the lack of time required to learn a new language as the time given by the institutions is not enough. However, this problem is being given voice and the education system has managed to put more attention on children who need special tools and methodologies to develop their learning.

According to the investigation by Vélez, Tarranga, & Fernández, (2015) carried out in Cuenca with 207 primary school students attending public and private institutions, it was determined that 26.57% of the total number of students had dyslexia, which is divided into three main types: superficial dyslexia, phonological dyslexia and mixed dyslexia. In other words, the Ecuadorian population has a moderately high rate of people with dyslexia, who are generally diagnosed in the first years of academic training. However, it is a special ability that can be treated both inside and outside the educational institution.

According to Moreno, (2016) the use of didactic resources in students of "Dr. Nicanor Larrea León" in Riobamba in the teaching-learning process offers students the opportunity to handle, understand, pay attention and have a better learning relationship in terms of vocabulary. It is essential for the teacher to take into account that within the phases of the teaching-learning process in all areas. The use of resources according to the age of the student is fundamental to achieve good levels of abstraction at higher levels.

In Ecuador, the level of students with dyslexia who have been diagnosed is considerable. Teachers and parents work together to achieve good results with these students when carrying out the teaching-learning process, however, despite knowing about the different ways and strategies to better reach the student's significant learning, it can be observed that students have problems in both reading and writing. Teaching resources are objects of motivation for the student, which is why their application is of vital importance.

2.2 THEORETICAL FRAMEWORK

2.2.1 INCLUSIVE EDUCATION

"Education is the most powerful weapon which you can use to change the world" –Nelson Mandela.

2.2.2 DEFINITION

Education is a necessary and powerful tool for human and community development, which is why it is essential not to leave anyone behind. This is where inclusive education takes part in the daily life of people and institutions because as its name suggests, inclusive education involves everyone who belongs to society to ensure that both the education system and the members of the community have access to a decenteducation.

In Ecuador, it is determined that all people, even those with individual differences, have the right to inclusion in the education system. This is established in the constitution, section five, article 26:

Education is a right of individuals throughout their lives and an inescapable and inexcusable duty of the State. It is a priority area of public policy and state investment, a guarantee of equality and social inclusion, and an indispensable condition for a good life. Individuals, families, and society have the right and the responsibility to participate in the educational process. (Asamblea Nacional del Ecuador, 2008)

Equality and inclusion are established in the constitution, which obliges citizens to give preferential attention to people in society who have special educational needs, and in this way, they can achieve their academic studies without any inconvenience and with the facilities they need to learn and feel comfortable in their environment. Knowing that the ministry of education protects them at any time, it is of vital importance to know and understand that each person has the right to an education and this is the main point of inclusive education to be able to work together to give the importance we all deserve.

2.2.3 CHARACTERISTICS

An inclusive school ensures the personal and social well-being of all those who conform to the educational community, not only of those who have special educational needs because everyone is accepted and taken into account in the same way, additionally valuing their weaknesses and skills so that they appreciate their effort and dedication and therefore celebrate their achievements, whether small or large. In addition, all aspects of school life are taken into account, that is, not only the academic part but also their environment and extracurricular activities, which show us a side closer to the reality of those who are part of the institution. The main objective of inclusive institutions is to

eliminate barriers to learning and opting for justice and equality, which is why it is necessary to comply with certain characteristics that an inclusive school must have.

The inclusive institution must establish a vision based on a philosophy that generates security and certainty to the entire educational community in order to achieve learning based on inclusion. Leadership is one of the infallible characteristics in the inclusion process because the institution must have authorities and managers with the ability to get involved with the educational community to develop, promote and use the necessary methods and strategies that respond to the educational needs of students, which will lead them to create an inclusive institution thinking of all those who are part of it. The educational community includes parents who must be immersed in the education of students, which is why in order to sustain an inclusive institution it is necessary to take into account the parents and students, the training will be provided in order to guide and support and cooperation with their peers, generating practice of inclusion and attention to diversity. The institution must have a diversified educational offer, which means having an educational program in which students have facilities and opportunities for admission and continuity of studies, in addition to having varied educational modalities with adaptations that respond to educational needs, that is, having an inclusive and flexible curriculum that allows students to achieve their goals. Facilitate teacher training so that they can be able to solve problems and promote inclusion (Educación, Moreno, & Gloria Vidal, 2011).

2.2.4 SPECIAL EDUCATIONAL NEEDS

2.2.4.1 WHAT ARE SPECIAL EDUCATIONAL NEEDS

Special Educational Needs allude to students with learning, physical, and formative disabilities; behavioral, emotional, and communicative disorders, and learning insufficiencies that make it harder for them to learn, in an effective way. Special Educational Needs concerns the teaching of students who have cognitive, intellectual or medical issues that affect their education process compared with their partners (Delaney, 2016).

Marie Delaney in Special Educational Needs (p.12) argues that:

Students have special educational needs if they have significantly greater

difficulty in learning than most students are of the same age and need special education.

Special educational needs include anyone who has both cognitive and medical impairments, in other words, disabilities or deficiencies, such as blindness or deafness or even more severe disabilities such as loss of motor functions, and in this way to include students and make them part of the educational community allowing them access to knowledge both inside and outside the classroom. This is because these students have extensive knowledge to offer to society and should not be left out of the institutions, which allows knowing about these needs that student have, allowing both teachers and students to obtain more individualized learning, which will help them to know their strengths and weaknesses and work around them.

2.2.4.2 TEACHING STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

Teaching students with special educational needs began a long time ago. However, it has become more and more generalized in modern times, because people have become knowledgeable and more involved in the learning needs of children and teenagers. A very well-known case about the education and teaching of children withspecial needs is that of María Montessori, who was one of the precursors of this educational model, which is very necessary nowadays. The main objective of teaching students with special educational needs is to give them personalized tutoring with different strategies to help them improve their learning, with adaptations and modifications that benefit them in their academic process and therefore have a differentiated education. It is important to involve parents in the teaching and learning process because they are an important part of the student's development and how he/she progresses in his/her environment since learning is not only limited to the classroom but also outside of it where students apply the acquired knowledge (D. & B., 2017).

2.2.4.3 LITERACY AND LANGUAGE DIFFICULTIES

Communication is a significant and important tool for life, that is why we have to consider how important are literacy and language in our lives and how much they affect our daily life if we have difficulties with them. Most of the children with syntactic or semantic difficulties often have issues with written language such as poor vocabulary and organization (Hartshorne, 2019).

Hartshorne in Speech, Language and Communication Needs and Literacy Difficulties (p. 3) argues that:

Learning to read is the interaction between developing systems for mapping between printed words (orthography), spoken words (phonology) and word meanings (semantics). It is this interaction which is helpful in explaining the range of ways in which speech and language difficulties can result in difficulty with reading.

Relationship between speech and reading is quite close so that one affects the other if it is not well developed from the beginning. Speech difficulties lead to reading problems, the two main ones being dyslexia and reading comprehension which affect the correct understanding of writing and therefore its comprehension in terms of meaning or decoding.

Language and literacy difficulties originate in oral communication, which is why it is of vital importance to focus on the development of language skills from an early age, in order to avoid or decrease the chances of having difficulties in written expression and reading comprehension in the future. One of the most common alternatives in this area is to promote and apply effective interventions provided by experts and professionals trained in these programs. Promoting phonemesegmentation training for children is fundamental to reinforce their linguistic development; which makes it possible to significantly improve the reading and writing skills of children with dyslexia through systematic training and coaching that increases their knowledge considerably.

2.2.5 DISLEXIA

2.2.5.1 DEFINITION

In the academic life as students, teachers, or as members of the educational community, educators have heard about dyslexia in their students. However, many timesthe concept varies and is not very clear. That is why, it is important for the research to be familiar with its definition, to understand it well, and then analyze how students live with this educational need daily inside and outside the classroom.

There is no specific definition that explains what dyslexia is, although it is defined similarly in several texts and dictionaries. The Collins Dictionary of English (2009) tells us

that dyslexia is defined as "any of various reading disorders associated with impaired ability to interpret spatial relationships or to integrate auditory and visual information" or also "developmental disorder that may cause difficulty in learning in one or more areas of reading, writing, and arithmetic." (p. 292).

The Board of Directors of the International Dyslexia Association requested to reestablish dyslexia as a disability. Therefore, the term dyslexia is adopted as the appropriate term to refer to the disability in reading and writing, which manifests itself as difficulty in word recognition, spelling, and comprehension, thus affecting readingfluency (Martínez & Rico, 2013). Despite the request, no agreement was reached; however, there is an agreement regarding its definition, which is why dyslexia is described as a disorder that occurs due to learning difficulties in reading, writing, and signrecognition, despite having a conventional educational context, in other words, this disorder depends specifically on neuronal-cognitive alterations that originate the imbalance and conflict in the processing and identification of letters and their writing.

2.2.5.2 CAUSES

Researchers have identified specific genes that affect or are responsible for dyslexia,in other words, dyslexia is a disorder that is present in the person from the moment of brain development. However, it does not affect their comprehension or intellect. Thanks to neuroimaging studies it has been observed that people with dyslexia show certain structural differences in the brain, the most notorious area in the left hemisphere where the area of writing words with their phonetic components is located. There is another theory that says that dyslexia is caused by an alteration in the phonological process, which means that there is not the same phoneme- grapheme decoding process, which makes reading and writing difficult (Alsina, 2014).

People with dyslexia must develop alternative neurological pathways to help them better understand and analyze written language, so they make an extra effort to obtain the same results as people who do not have dyslexia, making greater use of Broca's area, which is responsible for language processing.

Currently, it is known that dyslexia is a congenital and evolutionary condition, which causes some neurological abnormalities in the brain, that is to say, the neurons are somewhat disordered, making it difficult for them to function effectively.

Symptomatology begins to manifest itself when the person enters school and is in contact with reading and writing (ASANDIS, 2010).

In Influencia de la dislexia en el proceso de la lecto- escritura en los niños (p. 32) argues that:

Dyslexia has also been blamed, among other factors, on inadequate eye movement, poor memory performance, insufficient brain development to integrate auditory and visual stimuli, affective problems, pedagogical problems, or deficiencies in language development (Caiza, 2012).

There are other reasons why dyslexia may occur. However, all agree that it is due to neural complications that affect the proper development and processing of letters. For this reason, it is important to have the relevant information regarding how dyslexia is caused and resort to a treatment that becomes more effective and beneficial if taken from an early age, in addition to strengthening the weaknesses taking into account what is most difficult for the person and implementing the respective accommodations.

2.2.5.3 TYPES

Dyslexia comes in multiple varieties or types, therefore people with dyslexia usually manifest auditory-phonological, visual-spatial or psychomotor problems or deficits. They are subdivided into three main types.

Primary dyslexia is the most common among people with dyslexia, which presents deficits of function in the left side of the brain, which does not change with age. This type of dyslexia is transmitted from generation to generation and is therefore genetic in nature. Secondary or developmental dyslexia, this type of dyslexia is caused by problems in the brain at an early age or in the early stages of fetal formation and development. Trauma IQ dyslexia commonly occurs after trauma or injury to the brain in the area that controls reading and writing (Perlstein, 2020).

2.2.5.4 SIGNS AND SYPMTOMS

It is difficult to determine if a person has dyslexia because you have to put a lot of attention to detect the early signs and of course you have to consult an expert in order to diagnose the disorder appropriately, but here we have some signs and symptoms related with dyslexia.

Students or people who have dyslexia commonly present delayed early language development, problems recognizing the main differences between similar sounds, slow learning of new vocabulary, difficulty copying or writing fast, difficulty with learning reading or spelling skills, a problem with spatial relationships, difficulty decoding words, also they have uncoordinated movements, organization problems, difficulty following commands, words missed in the sentences, and trouble finding the correct words to express their ideas. We have some symptoms and signs that may be easier to identify. However, it is important to confirm the diagnosis with specific tests for dyslexia (Perlstein, 2020).

2.2.6 CLASSROOM ACCOMMODATIONS AND MODIFICATIONS

As we have analyzed in previous paragraphs, students with dyslexia have difficulties in reading and writing, so including certain modifications or accommodations in the classroom would be of great help to them, in addition to being a support for the teacher in charge of these students and be able to overcome any barrier that obstructs the good learning of students in terms of reading and writing.

In terms of the materials and routines used in class, we can take into account certain accommodations for students with dyslexia, such as sticking up schedules that are visible and attractive and reading them aloud, providing to our students' bookmarksto help focus on a line of text when reading, use large-print text for worksheets in order to help students visualize and identify the letters better, use audiobooks, provide them extra time for reading and writing, give the student multiple opportunities to read the same text and work in a team, in other words assigning a partner to be the student's support. To introduce new concepts teachers can use visual or audio support to help students understand all the words in the lecture. To give instructions is important to give them step-by-step directions, also simplify directions using key words and highlight the most important ideas on worksheets, check our student frequently to make sure that he or she understands the directions, provide them a rubric with the principal ideas, break assignments into smaller steps and arrange worksheets problems from easiest to hardest (Morin, 2020).

2.2.7 IMPORTANCE OF ENGLISH

In the modern world, English has become indispensable for the development and progress of people, since it is one of the most spoken and used languages in the world for communication, business, and studies. That is why, it has become of vital importance to know and learn more in-depth about this language which is so essential for everyone. This language needs a lot of practice and effort to be well used in the context in which it needs to be applied. Therefore, teachers who teach the language must be in constant training, innovation, and learning in order to ensure that their students obtain an appropriate level of English to use in the environment they need (Nishanthi, 2018).

2.2.8 TEACHING VOCABULARY TO STUDENTS WITH DYSLEXIA

Teaching vocabulary to students with dyslexia can be a challenge for both the teacher and the student because it is difficult for students to read and write in their native language and even more so in a foreign language. However, there are ways in which the student can acquire new vocabulary as Elke Schneider tells us in the text "Dyslexia and Foreing Language Learning" (pg. 13).

Even if the student is never able to produce brilliantly written language or to read particularly well, confidence in listening, understanding and speaking the language of choice must be the main aims of our teaching to dyslexic students who already struggle to read and write in their native language. If we can also make the language learning process personally meaningful, motivating and fun for the learner, we can truly congratulate ourselves and our students on a successful outcome (Schneider & Crombie, 2012).

Students with dyslexia have an excellent intellectual level, they have difficulties understanding words correctly due to a disorder in their linguistic process, which is why teachers must manage the process of teaching vocabulary with a lot of patience, determination, and motivation for the student to achieve the desired goals. This process is called inclusion since the teacher and the entire educational community are aware of how to help the student progress so that he/she can learn according to his/her educational needs. It is important to take into account the modifications and accommodations mentioned above in order to teach vocabulary more effectively and implement teaching strategies that will

benefit the students' learning process.

2.2.9 TECHNOLOGICAL RESOURCES

Technology has become part of everyone's daily life, and it is very useful in terms of education, which is why it is important to take into account the resources that the technology industry can offer today to help students learn in a better way. These useful resources are available to students and are functional in order to facilitate the teaching process in addition to providing comfort and innovation to learners, which are very interested in this type of material because it helps to develop their learning by relating objects and putting into practice their knowledge.

Rahman, Mokhtar, Alias & Saleh (2012) suggest that instructional designers should develop textual-based multimedia instructional materials by supplementing with their graphical and auditory versions for learners with dyslexia because of the significance of multi-sensory learning environment for them. Designing learning materials in this way helps learners with dyslexia to decrease their difficulties about recognizing or confusing between letters or familiar words and mispronunciations of new spoken words (Emine, 2016).

It is important to provide students with tools that are useful for their academic and learning development, that is why viable alternatives should be identified to facilitate the understanding of students with dyslexia, such as the use of visual material, with clear letters and drawings as a guide, In addition to audio material that will help them to process and understand the words in a better way, thus giving concrete meaning to the vocabulary, the teaching of vocabulary can be complemented with keyboards in which the student will be able to write in a better way since having the letters within reach will provide a better view of them and therefore fewer mistakes in writing. It is essential to have technological material to be able to teach students more easily and thus be inclusive.

CHAPTER III

METHODOLOGY

3.1 APPROACH

This research presented a methodological proposal with a qualitative approach asit is the one that best suits its search for identifying the technological resources to teach English vocabulary to children with dyslexia; the case of students at 9th year of Educación Básica, "Unidad Educativa Santo Tomás Apóstol Riobamba".

Qualitative description was done through qualitative data or information, i.e., the data consisted of obtaining the perspectives and points of view of the participants, in order to increase the knowledge about a specific phenomenon (Orellana & Sánchez, 2006). In addition, qualitative research analyzed the protagonists in their natural context, individually and in relation to the surrounding factors to understand and deepen these phenomena (Guerrero Bejarano, 2016).

3.2 RESEARCH MODALITY

This research adopts the interpretative paradigm, which helped in the search for assumptions and in this case on how was the process of teaching vocabulary in English to students with dyslexia? What technological resources did teachers use? and in this wayand with the information collected, to know more in-depth about the subject and to be the starting point for future research based on the problem.

This research was of a non-experimental type since the variables were not be manipulated at the convenience of the research, but only the situations or phenomena existing in their natural context was observed in order to analyze their effects in a real context. The non-experimental research was a transactional or transversal nature since the events, variables, contexts, categories, characteristics and the relationship between them will be studied at a single particular moment (Sampieri, Collado, & Lucio, 2014).

METHODS

ETHNOGRAPHIC METHOD

The ethnographic method was used for the development of the research, (Müller, 2020) Argues that ethnography is an appropriate method for research because it is constantly oriented towards social realities, which helps researchers to acquire specific knowledge about the study. The purpose of ethnographic research was to describe and analyzed the reality of the subjects of a given location or context, therefore the results present the regularities they have in the process (Hernández, Fernández, & Baptista, 2010).

BIBLIOGRAPHIC METHOD

The bibliographic method facilitated the analysis and understanding of the theoretical and conceptual support of the study in addition to the organization and synthesis of the information obtained through previous consultations with the assistance of the different reference sources it was possible to support arguments with greater precision.

Through the use of paraphrasing, it has been possible to make interpretations and analyses of information sources with a high level of confidence, which guarantees the reliability of the publications that served as reference, a situation that allowed a better development of the research.

3.3 TYPE OF INVESTIGATION

According to the objectives of the study, the type of research to be developed was qualitative, since it "seeks in-depth understanding of social phenomena within their natural setting. It focused on the "why" of social phenomena or situation and relies on the direct experiences of human beings as meaning-making agents in their everyday lives." (Sampieri, Collado, & Lucio, 2014) and exploratory because was necessary to investigate the problem which was not clearly defined in this case, children with dyslexia and the teaching of the vocabulary in the ninth year of basic education in Unidad Educativa "Santo Tomás Apóstol Riobamba".

The exploratory research examined the reliability of the research instrument and tell

us what and why the situation to be investigated is occurring. On the one hand, the exploratory research can reveal the specific problems between dyslexia and the teachingof new vocabulary, it showed that if is appropriate or not to put in practice the strategies that the teacher is applying, also know if those are reliable, useful and support in the relationship between students with dyslexia and the teaching and learning of new vocabulary in English (Zukauskas, et al., 2018).

3.4 POPULATION

The study population was strictly limited to teachers and students of the ninth year of Basic Education of the Unidad Educativa "Santo Tomás Apóstol Riobamba". This institution was taken into account because it has an inclusive education where there are all types of students. This population diagnosed with dyslexia have generated more studies that have guided to pay attention to their educational needs. The decision to work with students with dyslexia was based on the curiosity to know how was their educational process using technological resources in the teaching of English vocabulary, taking into account their difficulties in reading and writing but also, besides being an area of abundant interest to the researcher.

3.5 TECHNIQUES AND INSTRUMENTS FOR COLLECTING DATA

The techniques and instruments for collecting data was observation, an observation guide, they will be used to be completed according to the parameters to be investigated. The observation will be necessary to obtain information as well as a better understanding and comprehension of the technological resources used for teaching English vocabulary to students with dyslexia. The observation sheet had three aspects that are intimately related to the objectives set out in the research, each question helped us to evaluate and obtain the information in the most accurate way possible, with which we achieved a deeper understanding of how the study developed. Each question had four evaluation points; excellent, very good and regular, which helped us to measure in a more precise way and finally consisted of an observation section in which the particularities that were observed throughout the research are noted.

3.6 DATA ANALYSIS AND INTERPRETATION TECHNIQUES OBSERVATION GUIDE

Observation is used in the social sciences as a method for collecting data about people, processes, and cultures. the objectives are to provide a brief historical view of observations as a data collection method, illustrate how observations may be used to collect data, discuss the advantages, disadvantages, and limitations of observation methods (Kawulich, 2012). To create a good observation guide we have to take into account some specific points such as time intervals, a period of time, or a checklist, those help us to determine what is happening around us in the social environment that we are investigated, the observation allows us to remember the situations that we observe through notes. On the other hand, the observation guide helps us to determine the situations that we can improve in relation to the investigation, in the listing part is possible to list the main activities that we want to observe and it supports us in a better focusing of the situation and what is happening. This observation guide had specific points referring to the objectives each one had and aspects that helped us to understand the environment and find the correct reflexion about what was happening in relation with theinvestigation.

CHAPTER IV.

RESULTS AND DISCUSSION

4.1 Observation form applied to the class of the teacher of the ninth grade of basic

education.

RESULTS

Objective one: To analyze how dyslexia is manifested in students.

The first aspect to evaluate in this objective is reading fluency and according to the

results of the observation it was analyzed how dyslexia manifests in students in terms of

reading fluency and it was determined that the students who present dyslexia maintain a

regular reading fluency when they have to read a short or long text.

The second aspect about pronunciation words shows that students with dyslexia

maintain regular pronunciation of words when they read the vocabulary, they have bad

pronunciation and with a considerable difficulty understand the correct pronunciation of

the word.

The third aspect is proper spelling and the information of the observation guide

reveals how dyslexia manifests in students in terms of proper spelling and it was

determined that the students who present dyslexia maintain good proper spelling when they

have to spell some words, they can memorize the most of the time the words but

sometimes they spell the words like they sound.

The fourth aspect is showing a good spatial coordination and according to the resultsof

the observation, it was analyzed how dyslexia manifests in students in terms of showing a

good spatial coordination and it was determined that the students who present dyslexia

maintain regular showing of a good spatial coordination in terms of organization and

spatial location in relation of position of letters or specific indications such as numbers or

placements.

The fifth aspect is about the demostration of motor coordination, the information of

the observation guide indicates that students who present dyslexia maintain very good

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demostration of motor coordination when they have to do assignments and follow instructions in relation to body movements.

The sixth aspect is maintaining *an active and participatory classroom*, the poor participation of the students in the class shows us a regular answer in this aspect, students are not active in class and no participate at any time, they are with the microphone off.

The seventh aspect is about *understand the meaning of the words and sentences*, according to the results of the observation, it was analyzed how dyslexia manifests in students in terms of understanding the meaning of the words and sentences and it was determined that the students who present dyslexia maintain good understanding of the meaning of the words and sentences because they understand the context of the sentence first and they relate it to the word and in this process they are able to understand its meaning, definition and usage.

The eight aspect is *students feel confident*, the observation guide indicates that the students with dyslexia have a regular feeling of confidence in class because they do not feel comfortable when they have to participate for the reason that they do not understand all the content of the class in the same way as their partners.

Discussion: After seeing the performance of the students in the classroom and how they act as the class progresses, it was able to determine that students with dyslexiatend to have behaviors in common, such as confusion when reading or difficulty with the directions given; however, these attitudes tend to vary depending on the topic to be covered or the length of the class. Researchers have identified specific genes that affect or are responsible for dyslexia, in other words, dyslexia is a disorder that is present in the person from the moment of brain development. However, it does not affect their comprehension or intellect (Martínez & Rico, 2013). That is why the students don't present any difficulty understanding the topic only have trouble decoding words in their reading and writing, therefore, it is difficult for themto understand at the same speed as their peers who do not have this condition. There is another theory that says that dyslexia is caused by an alteration in the phonological process, which means that there is not the same phonemegrapheme decoding process, which makes reading and writing difficult (Alsina, 2014). But in this specific case the phonological alteration does not appear at all because students are really good at listening and pronunciation, the only difficulty here is the writing and reading that are the most common and persistent problems nevertheless, they do not occur all the time.

People with dyslexia must develop alternative neurological pathways to help them better understand and analyze written language, so they make an extra effort to obtain the same results as people who do not have dyslexia, making greater use of Broca's area, which is responsible for language processing. (ASANDIS, 2010) for this reason the teacher gives students with dyslexia extra time to write or read, or maybe they use different strategies such as audios or podcasts when they have to read big paragraphs.

An important point to be considered is that, it is mandatory to identify those symptoms with a professional, teachers can notice those symptoms but they cannot diagnostic the disability that is why is necessary to contact the parents to obtain an accurate diagnosis and start with the accommodations in the classroom because the students who present problems in the understanding of vocabulary and grammar are affected in their school performance by dyslexia.

Those characteristics can affect the academic progress in the students, also the development and increase in vocabulary and its use that is why we analyze the most common symptoms among the scholars in the "Unidad Educativa Santo Tomás Apostol Riobamba" and we noticed that dyslexia in these students affect their process of understanding promptly the vocabulary as learning a foreign language makes it a little more difficult to assimilate the correct writing, pronunciation, reading, and use of vocabulary, for this reason, we analyzed properly the signs and symptoms that the students presents, therefore, in this particular case we can act with the correct material that they need to learn appropriately the language.

Objective two: To understand the importance of technological resources in teaching English vocabulary to students.

The first aspect to be analyzed is the *usage of audiovisual resources to present the vocabulary helps in its comprehension* and according to the results of the observation it was analyzed how technological resources in teaching English vocabulary are useful for students and it was determined that the students who present dyslexia maintain very good results using audiovisual resources that help them in the comprehension of the vocabulary because they understand better the context of the topic.

The second aspect is the use of technological resources facilitates learning and comprehension. According to the results of the observation, it was analyzed that the students who present dyslexia maintain good results using technological resources because they are immersed in the technological era, but not all the students have the possibilities to

have technological devices in their houses so it is a big problem in the process of learning.

The third aspect is *employing visual materials that help students understand the meaning and usage of vocabulary* the observation guide shows us that visual material helps students understand better the meaning and usage of new vocabulary in English and it was determined that the students who present dyslexia maintain good results using this kind of material to improve comprehension because they learn better when they watch the material, but this is only possible in the speaking skill, as in the written part, it is still difficult to write and spell properly.

The fourth aspect is the usage of alternative tools to promote better writing in students, for example keyboards or electronic whiteboards, according to the results of the observation, it was noticed how dyslexia manifests in students in terms of the usage of alternative tools to promote better writing in students, for example keyboards or electronic whiteboards and it was resolute that the students who present dyslexia maintain good results using alternative tools to write better with this material. However, a good spellingof words is not observed; the resources help them not to confuse the letters, but they stillhave problems in the correct spelling.

The fifth aspect is operates more than one electronic device to support teaching in order to make the class interesting, the observation reveals that this instance help students to learn vocabulary and it was determined that the students who present dyslexia maintain good results operate more than one electronic device because they need to use many options than the can to improve their knowledge, but the issue is that not all the classrooms have the enough material to fulfill the students' needs, so is necessary to have all the material that the students need in each class.

The sixth aspect is *providing students with technological resources for teaching vocabulary helps them to better understand the meaning of words*, the observation guide demonstrations us that this material helps them to better understand the meaning of words and it was determined that the students who present dyslexia maintain very good results using technological resources to learn English and the links and material support students to stay active in their learning process.

The seventh aspect is *the usage of creative and eye-catching resources to encourage interest in learning*, the observation guide confirms us that the creative material provokesthe interest of the students in the language and it was determined that the students who present dyslexia maintain good results using creative resources that the teacher give to them because they can connect the words with the context of the text.

Discussion: Nowadays students are really familiarized with technology, resources and apps that imply visual material such as videos, games, speakers, audios, etc. that is why us as teachers have to know how to manage those resources very effectively, in addition to finding and recognizing the appropriate resources for use in class and which can be very useful for the needs that students require at the time of acquiring the new vocabularyof the new language.

Designing learning materials in this way helps learners with dyslexia to decrease their difficulties about recognizing or confusing between letters or familiar words and mispronunciations of new spoken words (Emine, 2016) these materials are much better received by students when they call their attention and being in an era where everything is digital and innovative students react positively to the type of technological resources that they will use for their academic process, so they are able to adapt better to the classes in terms of reading and writing, since these materials help them to communicate their ideas better and of course improve their spelling and understanding of vocabulary.

Rahman, Mokhtar, Alias & Saleh (2012) suggest that instructional designers should develop textual-based multimedia instructional materials by supplementing with their graphical and auditory versions for learners with dyslexia because of the significance of multi-sensory learning environment for them. As students with dyslexia often have difficulty reading and writing, they often acquire other skills with which they can achieve better integration into their learning, such as listening or speaking, which is why they come to have a high level of multisensory that benefits them when using these technological resources that give them an advantage when understanding and putting into practice the vocabulary learned. On the other hand, we have to noticed that students need special technological devices to use this type of material and that is a disadvantaged in the short, medium and long term and will not be able to continue with their process in the same way as the rest of the students.

Technological resources are really useful in the teaching and learning process. However, they must be accompanied by a tutor or guide who is trained to help and solve the needs that students need for better learning. Designing learning materials in this way helps learners with dyslexia to decrease their difficulties about recognizing or confusing between letters or familiar words and mispronunciations of new spoken words, because the interactive material like keyboards help the students to recognize better the letters and their writing, in addition to providing them with the facility of correcting grammatical errors,

but this point can affect their ability to improve their writing skill without devices and this is a disadvantage that is why the devices should be used for teaching and better understanding, but not for permanent use since, as we know, this condition does not have cure, but is controlled as the student practices and relates to the words and texts.

Computer designers with the help of experts in education should develop textual-based multimedia instructional materials by supplementing with their graphical and auditory versions for learners with dyslexia because of the significance of multi- sensory learning environment for them and they can feel comfortable with this kind of material at their fingertips. We know that these students need more attention in terms of organization and spatial development, these materials are adapted to their needs and provide them with all the support they requirement to feel confident in learning the language. Therefore, these resources are functional and facilitate the teaching process and the student learning because students can put in practice the knowledge that they acquire in classes, in addition, they can use them at any time inside the classroom and keep learning and reinforcing their knowledge whenever they want to, so it is necessary for the institution to obtain more innovation material for all the students who need special attention and guide.

Objective three: To describe what is the relationship between dyslexia and the teaching English vocabulary.

The first aspect is *how effective is vocabulary learning for students with dyslexia* and according to the results observed it was determined that the students who present dyslexia maintain regular results learning new English vocabulary when they are in classes because they have difficulties understanding the reading and writing. However, they understand the meaning when they listen to the word and compare it with the context, nevertheless when they must apply the vocabulary in the writing, they do not know how to do it.

The second aspect is *students achieve meaningful vocabulary learning*, the observation guide shows us that the students who present dyslexia maintain regular results learning vocabulary in a useful and meaningful way since they can apply the vocabulary they have learned in academic and personal situations because they get confused with the words and they are not be able to memorize all the vocabulary although they can understand the context of the texts in a better manner.

The third aspect is *students* are able to apply the vocabulary learned, taking into account its meaning and usage, the observation guide reveals us that students maintain

regular results applying the vocabulary given for their teachers in real situations, such as conversations or descriptions because they have difficulties understanding the pronunciation and mix the meanings with similar sounding words, this in the oral and auditory part, while in writing and reading it is difficult for them to use the correct vocabulary because they tend to forget the correct way to write words, so they make many grammatical errors.

The fourth aspect is applying effective methods to improve vocabulary learning for students with dyslexia, according to the results of the observation, it was analyzed how dyslexia manifests in students in terms of applying effective methods to improve vocabulary learning and it was determined that the scholars who present dyslexia maintain good results when the teachers applying effective methods to learn vocabulary usefulness because they can understand better the differences between the sounds and thespelling and in this manner they can apply in correct form the vocabulary, but with the guidance of a qualified teacher.

The fifth aspect is *teaching based on the needs of students with dyslexia*, the observation guide demonstrates that the teaching based on the needs of students with dyslexia help in the successful progress of the scholars and it was determined that the students who present dyslexia maintain very good results with the teaching based on the needs because they feel more comfortable in classes being helped based on their needs which they can develop in a positive direction teachers are not trained enough to develop and resolve all the difficulties involved in teaching students with special needs, so it is noted that more training is needed from the institution.

The sixth aspect is teaching vocabulary based on the learning styles of the students in order to better reach them, according to the observation we can determined that the students who present dyslexia maintain very good results learning vocabulary through their learning styles because teacher know what kind of material use with them and whichare the correct strategies to use with each style, as well teacher know how to evaluate their learning style.

Discussion: In order to effectively teach English, it is necessary to know the weaknesses and strengths of the students to be able to take advantage of them in the most effective and efficient form so that they will be capable of using their knowledge in real life by applying the strategies they have learned in the classroom. Students with dyslexia have more difficulties applying the vocabulary in conversations or writings because they get

confused with the correct order of the letters and words that is why teaching vocabulary to students with dyslexia can be a challenge for both the teacher and the student because students have difficulties reading and writing also in their native language and even more so in a foreign language. However, there are ways in which the student can acquire new vocabulary as Elke Schneider tells us in the text "Dyslexia and Foreing Language Learning" (pg. 13). For this reason, teacher has to be really conscious about the strategies and the resources that they use when they teach vocabulary, it will be useful for the students in the future, since they will apply their knowledge in their daily lives. Students with dyslexia are going to feel more comfortable if they know how to use and apply vocabulary in another language, they are going to have a sense of usefulness and fulfilment because they can read, write and apply their knowledge without any difficulty. If we can also make the language learning process personally meaningful, motivating and fun for the learner, we can truly congratulate ourselves and our students on a successful outcome (Schneider & Crombie, 2012). Which is why be good teachers and being trained is very important for the academic process of our students and also for us asteachers because we are going to know how to act and how to manage the class with these students and their necessities. English needs a lot of practice and effort to be well used in the context in which it needs to be applied. Therefore, teachers who teach the language must be in constant training, innovation, and learning in order to ensure that their students obtain an appropriate level of English to use in the environment they need (Nishanthi, 2018). Learning a new language is demanding because we need a lot of time to practice de vocabulary and the use of the grammar, therefore, teaching a new language to students with dyslexia keep them in constant preparation and practice which will help them feel more confident when interacting with letters. For these reasons, English teachers have to put more attention in their students and their learning process, using in this way the correct material and resources to teach successfully in order to teach effectively so that students are able to understand and use the language effectively and without difficulties, teachers must be trained in all areas regarding special needs and the use of useful teaching tools. Learning vocabulary in a foreign language will help students feel more confident in their knowledge and in their daily life, as they will be able to handle the language easily and effectively, as it will be simpler to communicate and understand English.

CHAPTER V

CLONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

It has become evident that different forms of dyslexia can be expressed in the students in Unidad Educativa "Santo Tomás Apostol Riobamba" such as poor memory performance, difficulties in the auditory or visual aspect, or maybe both simultaneously, problems in reading and organization and difficulties in pronunciation. Other symptoms that students with dyslexia presented, were problems recognizing the main differences between similar sounds, slow learning ofnew vocabulary, difficulty copying or writing fast, difficulty with learning reading or spelling skills, a problem with spatial relationships, difficulty decoding words, difficulty following commands, words missed in the sentences, and trouble finding the correct words to express their ideas. All of these affects the acquisition of new vocabulary.

Through the results it could be noticed that the technological resources are really useful because when applying these resources students with dyslexia were capable to perform academic activities with greater satisfaction, since these materials are very didactic and motivate them to learn and be much more active in class.

Finally, it was possible to verify that the students with dyslexia maintained only regular results learning new English vocabulary, it was evidenced that they are very skillful understanding the meaning when they listen to the words and compare it with the context, nevertheless when they must apply the vocabulary in the writing, they do not know how to do it. It is really difficult for them to use the correct vocabulary because they tend to forget or confuse the order of the letters into a word, so they make not only vocabulary but grammatical errors.

The few opportunities they had for learning vocabulary applying the technological resources were really useful since students with dyslexia were capable to perform academic activities with greater satisfaction.

4.2 RECOMMENDATIONS

It is recommended to have professionals trained in the analysis and diagnosis of these difficulties in the educational institution. In addition to providing informative talks to all those who are part of the educational institution. Teachers and parents must take into account whether students have symptoms related to dyslexia, so it is recommended to apply monthly or quarterly reports which will have important points for both teachers and parents to evaluate the students, and in this way, it can be discarded in a general manner any kind of need or difficulty in learning.

The educational institution must have the necessary technological material for the correct academic development of its students, it is recommended to acquire innovative and useful material for learning and teaching. They should have a minimum of three electronic devices per classroom for the correct and useful use of their students so that they can perform better.

The institutions should organize Courses for training its English teachers on the different strategies for teaching student with dyslexia and how to use technological resources for getting better results.

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ANEXOS

Teacher	
Course	
Topic Date	
Date	
Observer	

The aim is to collect information about technological resources used for teaching English vocabulary to students with dyslexia. There is an evaluation scale with 4 items. Where the letters EX corresponds to Excellent, VG - Very good, G - Good and R - Regular. An X will be placed in the corresponding box according to the case.

Aspects		Eval	uatio	Observations	
To analyze how dyslexia is manifested in students.	EX	$V \\ G$	G	R	
1. Reading fluency.					
2. Pronunciation of words.					
3. Proper spelling.					
4. Shows a good spatial coordination.					
5. Demonstrates motor coordination.					
6. Maintains an active and participatory classroom.					
7. Understand the meaning of the words and sentences.					
8. Students feel confident.					
To understand how important are technological		V	G	R	
resources in teaching English vocabulary to students.		G			
1. Use audiovisual resources to present the vocabulary helps in its comprehension.					
2. The use of technological resources facilitates learning and comprehension.					
3. Employs visual materials that help students understand the meaning and usage of vocabulary.					
4. The usage of alternative tools to promote better writing in students, for example keyboards or electronic whiteboards.					
 Operates more than one electronic device to support teaching in order to make the class interesting. 					
6. Provides students with technological resources for teaching vocabulary helps them to better understand the meaning of words.					
7. The usage of creative and eye-catching resources to encourage interest in learning.					
To describe what is the relationship between dyslexia		V	G	R	
and the teaching of English vocabulary.		G			

1.	How effective is vocabulary learning for students with dyslexia?	х		
2.	Students achieve meaningful vocabulary learning.			
3.	Students are able to apply the vocabulary learned, taking into account its meaning and usage.			
4.	Applying effective methods to improve vocabulary learning for students with dyslexia.			
5.	Teaching based on the needs of students with dyslexia.			
6.	Teaching vocabulary based on the learning styles of the students in order to better reach them.			





























