



BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA

FACULTAD DE LENGUAS

LICENCIATURA EN LA ENSEÑANZA DEL INGLÉS

WRITING DEVELOPMENT IN PEOPLE WITH VISUAL IMPAIRMENT

A THESIS SUBMITTED TO THE FACULTY OF LANGUAGES

FOR THE DEGREE OF

LICENCIATURA EN LA ENSEÑANZA DEL INGLÉS

BY:

GUADALUPE MARIANA GARCÍA VALERA

THESIS ADVISOR:

PhD JOSUÉ CINTO MORALES

MAYO, 2024



Writing Development in People with Visual Impairment

This Thesis has been read by the members of the thesis committee of

Guadalupe Mariana García Valera

And is considered worthy of approval in partial fulfillment of the requirement for the degree of

Licenciatura en la Enseñanza del Inglés

Thesis advisor

Ph. D. Josué Cinto Morales

Committee Member

Committee Member

Ph. D. María Amelia Xique Suárez

Ph. D. Benjamín Gutiérrez Gutiérrez

Benemérita Universidad Autónoma de Puebla
Mayo 2024

Writing Development in People with Visual Impairment

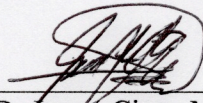
This Thesis has been read by the members of the thesis committee of

Guadalupe Mariana García Valera

And is considered worthy of approval in partial fulfillment of the requirement for the
degree of

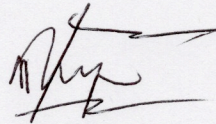
Licenciatura en la Enseñanza del Inglés

Thesis advisor



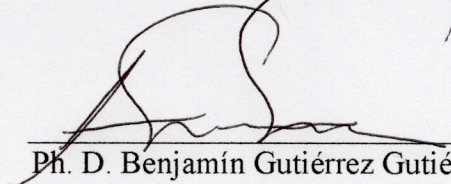
Ph. D. Josué Cinto Morales

Committee Member



Ph. D. María Amelia Xique Suárez

Committee Member



Ph. D. Benjamín Gutiérrez Gutiérrez

Benemérita Universidad Autónoma de Puebla
Mayo 2024

Dedications

I dedicate this project to my family, especially to my mother Magdalena García Valera, my sister, Olivia Herrera Garcia, my brother, Francisco García Valera, and my brother-in-law, José Cisneros Aragón. Thanks for your advice and your emotional and economic support during this process. Without your help, I would not have finished this vital project. You are the best family in the world. Thanks for everything that you have given me.

Acknowledgements

I want to thank my tutor, Josué Cinto Morales. Thanks for your patience, tolerance, and comprehension during this long process. With your support, it was possible to achieve this goal. Thanks for working with me on this difficult challenge. I appreciate your words of encouragement and advice.

I would like to thank PhD. Benjamín Gutiérrez Gutiérrez and PhD. María Amelia Xique Suárez for their support and feedback during the revision of this thesis.

I also thank all the teachers who accepted to work with me even though it implied more work for you. Thanks for sharing your knowledge with me. I will always take your teaching as an invaluable contribution that will be useful for me professionally and personally.

I also thank my best Friends Lorena Paredes, Fátima Aguirre, Vanesa Sanchez and Diego Mora. Thanks for being my Friends, classmates and even teachers. Thanks for your time, support, and patience. I am sure you were the best team to work and laugh with. Every moment that we shared will stay in my mind as the best memories, and they will always make me happy when I remember them.

Abstract

Nowadays, English has become an important language. According to Schmitt and Marsden (2006), it is today's most influential language. English Allows the students to communicate with more people and access different materials such as journals, books, and newspapers. In addition, it is present in the most famous songs and films. For this reason, many schools offer their students to learn English as a second language. They have sometimes been practicing English in their schools since preschool or elementary school. However, in many countries such as Mexico, students take English courses, but they hardly learn. According to Martinez, Killian, and Del Ángel (2016), 79% of English teachers lack knowledge of the English language. In most cases, students pass their English courses with high grades but do not develop language skills such as writing. It is even more difficult for students with disabilities, such as blind students. Although the school's programs affirm that they offer inclusive education, it is not real inclusion because they are allowed to join the school, however, there are no conditions for them to learn, such as the lack materials and resources, but especially teachers who are unprepared to work with blind people and produce an effective process to develop writing skills. Therefore, this research aims to understand the writing development process for blind students enrolled in an English introductory course by analyzing and identifying the strategies that are effective in developing their ability to write. For this research, 5 participants of the project *Enseñanza con Visión de una Segunda Lengua a Personas con Discapacidad Visual en Entornos Virtuales* were observed during their writing process in the course and were provided some strategies and feedback to improve

their writing skills. At the end of the project, they were interviewed about the effectiveness of the feedback they received and the strategies they employed during their writing development process. The results show that accessibility is one of the main factors that must be solved for students to participate, and technological literacy is another condition to be developed so that they can have access to the tools and follow the models provided in the product approach to writing development.

Contents

Dedications	i
Acknowledgements	ii
Abstract	iii
Contents	v
CHAPTER I: INTRODUCTION TO THE PROBLEM	1
1.1 STATEMENT OF THE PROBLEM	2
1.2 PURPOSE OF THE STUDY	3
1.3 GENERAL OBJECTIVE	3
1.3.1 SPECIFIC OBJECTIVES.....	3
1.4 RESEARCH QUESTIONS.....	3
1.5 METHODOLOGY	4
1.6 SIGNIFICANCE OF THE STUDY	4
1.7 RESEARCH CONTENT AND ORGANIZATION	5
1.8 DEFINITION OF TERMS	5
CHAPTER II: LITERATURE REVIEW	7
2.1 DISABILITY	7
2.1.1 DISABILITY HISTORY	7
2.1.2 LEGAL BACKGROUND	8
2.1.3 LEGAL BACKGROUND OF DISABILITY IN MEXICO	9
2.2 CURRICULUM	10
2.2.1 TYPES OF CURRICULUM	10
2.2.1.1 OVERT CURRICULUM	10
2.2.1.2 SOCIAL CURRICULUM.....	11
2.2.1.3 HIDDEN CURRICULUM	11
2.2.1.4 NULL CURRICULUM.....	11
2.2.1.5 CONCOMITANT CURRICULUM	12
2.2.1.6 INTERNAL CURRICULUM	12
2.2.1.7 DELIVERED CURRICULUM	12
2.2.1.8 INCLUSIVE CURRICULUM	13
2.3 CURRICULUM COMPONENTS.....	14
2.3.1 NEEDS ANALYSIS	14
2.3.2 GOALS	15
2.3.2.1 OBJECTIVES	15
2.3.2.2 LEARNING LEVELS	16
2.3.3 EVALUATION	18
2.3.3.1 TYPES OF EVALUATION	18
2.3.3.1.1 OBJECTIVES OF EVALUATION	19
2.3.3.1.2 TESTING.....	20
2.3.3.1.3 ASSESSMENT	23
2.3.3.1.3.1 TYPES OF ASSESSMENT	24
2.3.3.1.4 FEEDBACK.....	26
2.4 MATERIALS	28
2.4.1 TEACHING MATERIALS	29

2.4.2	LEARNING MATERIALS	30
2.4.3	MATERIALS EVALUATION	31
2.5	TEACHING METHODOLOGY	34
2.5.1	APPROACH	36
2.5.2	LEARNING	37
2.5.2.1	LEARNING THEORIES	37
2.5.2.1.1	BEHAVIORISM	37
2.5.2.1.2	COGNITIVISM	38
2.5.2.1.3	SOCIOCULTURAL CONSTRUCTIVISM	39
2.5.3	APPROACHES AND MODELS TO L2 INSTRUCTION	40
2.5.3.1	GRAMMATICAL APPROACH	40
2.5.3.2	COMMUNICATIVE APPROACH	41
2.5.3.3	COGNITIVE APPROACH	42
2.5.3.4	POST-METHOD APPROACHES	43
2.6	LEARNING STRATEGIES	44
2.6.1	L2 LEARNING STRATEGIES CLASSIFICATION	46
2.6.1.1	DIRECT STRATEGIES	46
2.6.1.1.1	MEMORY STRATEGIES	47
2.6.1.1.2	COGNITIVE STRATEGIES	47
2.6.1.1.3	COMPENSATION STRATEGIES	48
2.6.1.2	INDIRECT STRATEGIES	49
2.6.1.2.1	METACOGNITIVE STRATEGIES	49
2.6.1.2.2	AFFECTIVE STRATEGIES	49
2.6.1.2.3	SOCIAL STRATEGIES	50
2.7	CURRICULUM AND TECHNOLOGY	50
2.8	CURRICULUM, TECHNOLOGY, AND LANGUAGE LEARNING STRATEGIES	52
2.9	LANGUAGE SKILLS	53
2.9.1	LISTENING	54
2.9.1.1	LISTENING STRATEGIES	55
2.9.1.2	TYPES OF LISTENING	56
2.9.2	SPEAKING	57
2.9.3	READING	59
2.9.4	WRITING	60
2.9.4.1	WRITING THEORIES	62
2.9.4.1.1	COGNITIVE PROCESS THEORY	63
2.9.4.1.2	SOCIOCULTURAL THEORY	63
2.9.4.1.2.1	SCAFFOLDING	63
2.9.4.1.3	SOCIAL COGNITIVE THEORY AND SELF-EFFICACY IN WRITING	65
2.9.4.1.4	ECOLOGICAL THEORY	65
2.9.4.2	APPROACHES TO TEACHING WRITING	66
2.9.4.2.1	PRODUCT APPROACH	67
2.9.4.2.2	PROCESS APPROACH	67
2.9.4.2.3	GENRE APPROACH	69
2.9.4.2	ASSESSMENT OF WRITING	69
CHAPTER III: METHODOLOGY		73
3.1	SETTING	73
3.2	PARTICIPANTS	73
3.2.1	SAMPLING	74

3.3	METHODOLOGY	75
3.3.1	ACTION RESEARCH	75
3.3.2	DESIGN	77
3.3.3	DATA COLLECTION METHODS.....	77
3.3.3.1	PARTICIPANT OBSERVATION.....	78
3.3.3.2	INTERVIEW	79
3.4	INSTRUMENTS.....	80
3.4.1	PILOTING	81
3.5	PROCEDURE	81
3.6	DATA ANALYSIS	82
3.7	ETHICAL ISSUES	82
CHAPTER IV: FINDINGS.....		84
4.1	BACKGROUND.....	84
4.2	ACCESSIBILITY.....	85
4.2.1	ACCESSIBLE FORMATS.....	86
4.2.2	TECHNOLOGICAL LITERACY	87
4.2.3	GESTURES.....	88
4.2.4	KEYBOARD.....	89
4.2.5	COMPUTER.....	90
4.2.5.1	SCREEN READERS	90
4.2.5.2	INPUT DEVICES.....	90
4.3	WRITING.....	92
4.3.1	PRODUCT APPROACH	93
4.3.2	VOCABULARY	94
4.3.3	SPELLING.....	96
4.3.4	PUNCTUATION.....	98
4.3.5	GRAMMAR STRUCTURES AND COHERENCE	100
4.4	WRITING AS CLASS ACTIVITY AND AS HOMEWORK (READING & LISTENING)	101
4.4.1	EMOTIONAL CONDITIONS	101
4.5	EVALUATION	103
CHAPTER V: CONCLUSIONS.....		105
5.1	RESEARCH QUESTIONS.....	105
5.2	CONCLUSIONS.....	106
5.3	IMPLICATIONS.....	106
5.4	LIMITATIONS OF THE STUDY	107
5.5	DIRECTIONS FOR FURTHER RESEARCH.....	107
REFERENCES		108
APPENDIX 1: QUESTIONNAIRE		120
Excerpt 1	Accessibility with Word Documents.....	86
Excerpt 2	Accessibility with Spelling & Reading	87
Excerpt 3	Problems with Screen Readers.....	88
Excerpt 4	Problems with Electronic Devices	89
Excerpt 5	Assistance to install Screen Readers	90
Excerpt 6	Problems with Mouse and Keyboards.....	91
Excerpt 7	Commands & Shortcuts.....	91
Excerpt 8	The Use of Google Translator.....	95

Excerpt 9	Using dictionaries	96
Excerpt 10	Reading & Devices	97
Excerpt 11	Vocabulary Improvement.....	97
Excerpt 12	Strategies to learn Vocabulary & Spelling	98
Excerpt 13	Punctuation	100
Excerpt 14	Coherence	100
Excerpt 15	Strategies to Improve Writing	101
Excerpt 16	Emotional Distress.....	102
Excerpt 17	Collaborative Work & Scaffolding	102
Excerpt 18	Devices & Stress	102
Figure 1 Example of Problems with Punctuation & Capitalization		99

CHAPTER I: INTRODUCTION TO THE PROBLEM

Nowadays, English has become an important language. According to Schmitt and Marsden (2006), it is the most influential language in the world today. English Allows the students to communicate with more people and have access to different materials such as journals, books, and newspapers. In addition, it is present in the most famous songs and films. For this reason, many schools offer their students to learn English as a second language. They have sometimes been practicing English in their schools since preschool or elementary school. However, in many countries, such as Mexico, students take English courses without successful results. According to Martinez, Killian, and Del Angel (2016), 79% of English teachers lack knowledge of the English language. In most cases, students pass their English courses with high grades but do not develop language skills such as writing.

It is even more difficult for students with disabilities, such as blind students. Although the school's programs affirm that they offer inclusive education, it is not real inclusion because they are allowed to join the school. However, there are no conditions for them to learn, such as teachers who are unprepared to work with blind people and lack materials and resources.

“a process of addressing and responding to the diversity in the needs of all children, youth, and adults through increasing participation in learning, cultures, and communities, and reducing and eliminating exclusion within and from education. It involves changes and modifications in terms of content, approaches, structures, and strategies, with a common vision that covers all children of the

appropriate age range and a conviction that it is the responsibility of the regular system to educate all children” (UNESCO, 2009; in UNESCO, 2021).

Therefore, it is essential that all students, including disabled students such as learners with a visual impairment, be included in courses to learn English as a second language to develop language skills. This way, they could have better job opportunities, travel, and communicate with others.

1.1 Statement of the problem

Writing is a language skill that is not learned naturally; it requires teacher feedback and guidance. In addition, writing is also a process that has different approaches, such as process approach or product approach. In this research, a product approach will be used. It is composed of 5 different stages: thinking, planning, drafting, revising, and editing. It also implies mastery of spelling, capitalization, punctuation, and appropriate word selection. However, in students with visual disability, it is more challenging to develop writing skills. Typically, these students need help with spelling and punctuation. Their teachers need to pay more attention to them, include them in the learning process, or employ appropriate strategies to work with students with visual impairment. This problem disadvantages students with visual impairment because if they do not develop their writing skills, they will be unable to express their ideas and end up consuming what other people write.

1.2 Purpose of the Study

Based on the problem described above, the purpose of this research is to understand the process of writing development for blind students enrolled in an English introductory course by analyzing and identifying the strategies that are effective in developing their ability to write.

1.3 General Objective

Describe the process of writing development for blind students who are enrolled in an online basic English course for blind students.

1.3.1 Specific Objectives

1. Find out how blind students enrolled in an online basic English course learn to write.
2. Analyze the conditions which foster or hinder the process of writing development in blind students enrolled in an online basic English course.
3. Identify the second language learning strategies that are effective for blind students to develop writing skills.

1.4 Research Questions

1. How do students enrolled in an online basic English course learn to write?
2. What conditions foster or hinder the process of writing development in blind students enrolled in an online basic English course?
3. What strategies are effective for blind people to develop their writing skills?

1.5 Methodology

This project is related to qualitative research, an interpretative approach investigating a particular social phenomenon. It is based on the participants' experiences and asks questions like why or how. In addition, qualitative research helps to understand blind people's social and cultural context (Palmer & Bolderston, 2006), and second language learning strategies that are effective for blind students to develop the ability to write will be explored through interviews and observations. Action research focusing on social problems and promoting democratic change and collaboration will be employed (Burns, 2015). Then, methods like participant observation, which is a process that allows the researchers to collect information through observation and participation, will be used when the researcher is exposed to participant's activities in their natural settings (Kawulich, 2005).

In this research, it is necessary to employ the methods and approaches defined before because this investigation is related to a social problem. Moreover, we must observe the participants during their English courses to understand their writing development process.

1.6 Significance of the Study

We have noticed that there is no previous research about second language writing development in people with visual disability. So, this investigation will be useful for teachers who have students with visual impairment. It will help to understand the process of writing development and to help their students to improve writing skills.

1.7 Research Content and Organization

This chapter contains the introduction, the statement of the problem, the purpose of the study, the general objective, the specific objectives, the research questions, the methodology and the definition of terms.

1.8 Definition of terms

Visual impairment is a visual condition that cannot be fixed with any medical treatment or surgery (Naipal & Rampersad, 2018).

Blindness is defined as visual acuity of less than 3/60, or a corresponding visual field loss to less than 10 degrees in the better eye with best possible correction” (ICD-10 visual impairment categories 3, 4 and 5).

Inclusive education is an approach to schooling in which students with many kinds of disabilities and learning needs are educated in classes with non-disabled and typically developing students.” (Kirschner, 2015).

Strategy refers to a general plan of action for achieving one’s goals and objectives. A strategy or general plan of action might be formulated for broad, long-term, corporate goals and objectives, for more specific business unit goals and objectives, or for a functional unit, even one as small as a cost center.” (Nickols, 2016).

Writing is a language skill that is not learned naturally, it requires feedback and guidance from teachers. In addition, writing is also a process that has different approaches such as process approach or product approach. In this research product approach will be used. It is composed of 5 different stages: thinking, planning, drafting, revising, and editing. It also implies mastery of aspects such as spelling,

capitalization, punctuation, and appropriate word selection. However, in students with

Correctness

According to Katinskaia and Yangarber (2021), correctness is a process in which students are observed and their mistakes are corrected during their writing progress. These corrections include grammar structures, coherence, punctuation, spelling, and capitalization. In addition, correctness is related to error correction and corrective feedback.

Assessment is a “process that includes four basic components: measuring improvement over time, motivating students to study, evaluating the teaching methods, and ranking the students' capabilities in relation to the whole group evaluation.” (Llambi, 2020).

Feedback in educational contexts is information provided to a learner to reduce the gap between current performance and a desired goal (Sadler, 1989).

“**Error correction** is a way to develop competence of language learners in a second or foreign language. It can be used to attain conscious knowledge of a second or foreign language, and in learning the language's rules.” (Khansir and Pakdel, 2018).

CHAPTER II: LITERATURE REVIEW

This chapter discusses the main theories, models, and concepts substantiating this research. To make a comprehensive discussion, elements such as curriculum, abilities, assessment, and strategies are presented, analyzed, and discussed from different perspectives on a timeline until they are contextualized and focused on specific needs people with disabilities have to fulfill the requirements of a genuinely inclusive curriculum for language learners to develop their writing skills.

2.1 Disability

First, it is necessary to define what a disability is. A *disability* is a special condition that implies a problem in the brain or a lack of one or more senses. This condition limits the person to do certain activities. Disabilities include different types like health, mental conditions, acquired brain injury, intellectual disabilities, or physical disabilities, such as visual impairment, which is the condition of a person who has a lack of vision, or the loss of vision caused by an accident, disease, or a congenital condition. Blindness can be complete or partial. Complete blindness is the impossibility of seeing, and partial blindness is the limited capacity to see that cannot be fixed with any treatment or glasses.

2.1.1 Disability history

People with disabilities did not appear recently; on the contrary, these people have existed since human apparition. However, the treatment that people with disabilities receive has changed throughout history. In Europe, during the primitive age, people with disabilities were murdered because they could not realize the basic activities by themselves. During this time, human ideas changed, and they stopped murdering

disabled people. Nevertheless, they were seen as pitiful and discriminated against. It means that although they were allowed to live, they did not live in dignity because they were not an essential part of society. In the XVIII century, society started to take the responsibility to assist those with mental or physical problems. In 1786, the first school for blind children opened its doors. Its primary purpose was to make blind people's lives easier; unfortunately, that school was just created for children. At the same time, in Mesoamerica, people with disabilities were related to religion and different beliefs, such as God's fire. Between the centuries XVI and XIX, because of the Spanish conquest, people with disabilities were not related to religion anymore; nonetheless, they were used as entertainment on the streets for commercial purposes and to exploit their natural differences. In the XIX century, business owners such as Taylor and Ringlin employed disabled people as attractions for their museums. That situation was taken as a human treatment because it was the first time that disabled people had a job. Through time, these people started to show their abilities instead of being used as objects. For example, a man showed everything he could do without his arms.

2.1.2 Legal Background

As we can observe, people with disabilities received special treatment. It means that in some cases, they were treated differently from the rest of the people, often humiliated and discriminated against. Due to the religious ideas about love between humans, the interest to create new norms to support disabled people to include them in society and later in the labor environment emerged. However, these advances were concreted internationally until the twentieth century, mainly underpinned by the

United Nations (UN), the World Health Organization (WHO), and the International Labor Organization (ILO). The first legal background was human rights. The Universal Organization of Human Rights established the first on December 10, 1948. In addition, the Global Action Program for People with Disabilities by the UN in 1975 and the Global Action Program for People with Disabilities by the UN in 1982 were some of the reforms that followed later.

In the American continent, the first norms related to disability were the American Convention of Human Rights in 1969 and the Declaration of Human Rights and Obligations in 1983.

2.1.3 Legal Background of Disability in Mexico

The first legal background of disability in Mexico was the national law of social assistance promoted in January 1986. This law allowed people with disabilities such as blindness, low vision, or language problems to receive social assistance. Later, the Mexican government modified some laws to support disabled people, such as the General Health Law in 1984, the Social Assistant Law in 1986, and the General Educational Law in 1993. The following year, laws were modified to stimulate and promote sports, the general law of human settlements, and the organic law of federal public administration. In 1999, the lower house approved laws to give people with disabilities the right to health. Moreover, each state in the Mexican Republic has promulgated its laws for people with disabilities, some with their own rules, such as Puebla. However, even though there are more laws and norms related to people with disabilities, in Mexican schools, there is no appropriate curriculum for people who have a visual impairment.

2.2 Curriculum

Curriculum is an essential part of developing a course. It defines the topics and the goals that the students will achieve. Nevertheless, there are different points of view about curriculum and its definition. First, the curriculum is the document that shows the contents the students will learn. Nevertheless, the curriculum goes beyond a written document; it is present inside the classroom, in the teacher's actions, method, the materials and resources, and how he or she evaluates influence the curriculum.

For this reason, *curriculum* is defined by different authors as a set of objectives. For instance, according to Wen (2012), the curriculum may be seen as a set of objectives. It is a checklist that shows the desired outcomes students must achieve at the end of the course. These objectives should be clear and specific in behavioral and observable terms. Furthermore, this model focuses on products and must be teacher-oriented or administrative-oriented.

2.2.1 Types of Curriculum

Thus, different types of curriculum involve the different environments in which learners interact that are implicit in the curriculum. These types are the following:

2.2.1.1 Overt Curriculum

According to Brady (1996), overt curriculum, or explicit or written curriculum, is the formal document containing the topics covered during the course, the materials used, and the objectives the students must achieve. In many cases, this document affirms that the school works with equity and inclusion, but that needs to be seen in

the hidden curriculum because although the students are allowed to be in the school, they have different opportunities than their classmates.

2.2.1.2 Social Curriculum

According to Cortes (1981), social curriculum is related to students' learning outside the school. It involves family, church, or neighborhood. All the relationships the learners have outside the school influence students' education, values, and how they speak or behave. This type of curriculum may have an essential influence on blind students who have a low socio-economic status because, besides their condition, it means that they have a low level of education.

2.2.1.3 Hidden Curriculum

According to Longstreet and Shane (1993), hidden curriculum refers to the values and perspectives that students learn at school even though they are not written in the formal curriculum. It implies the social and academic messages that students receive in school. Although this curriculum is unplanned, it influences students' learning and development, which means that the behaviors and values of teachers are reflected in the students. It happens with blind students because, in many cases, when teachers show empathy with a student who has a special condition, the rest of the classmates follow them.

2.2.1.4 Null Curriculum

According to Eisner (1985), a null curriculum refers to all these things not taught at school. Teachers give the students the message that those things are not necessary. Null curriculum may include intellectual processes such as visual, auditory, and

metaphoric. Subject matters like politics, economics, psychology, and sociology. It also may affect aspects such as values, attitudes, and emotions.

2.2.1.5 Concomitant Curriculum

Concomitant curriculum refers to all the experiences that the students have with their families. These experiences may be related to religion, values, and family preferences.

2.2.1.6 Internal Curriculum

The internal curriculum is related to all the contents, processes, and knowledge related to actual experiences to create new knowledge. This curriculum is unique for each student, and most teachers cannot control it.

Then, the curriculum is present in the learner's environment, in everything he or she is exposed to, such as family, religion, or the internet.

2.2.1.7 Delivered Curriculum

Delivered curriculum or taught curriculum refers to how teachers teach. For instance, how an educator delivers material varies from one teacher to another and from one moment to another. Taught curriculum is exceptionally critical for students in special education or those who require another kind of specialized support because different processes involved, such as teaching, learning, support, advice, guidance, interaction, mentorship, participative, and collaborative learning, are involved in the delivered curriculum. In addition, elements such as feedback and assessment are essential parts of it as well.

2.2.1.8 Inclusive Curriculum

According to Paavizhi (2018), an inclusive curriculum considers all students' needs and characteristics and gives the students the same opportunities to participate and get the same outcomes. UNESCO (2022) states that inclusive education is based on a curriculum that considers and caters to all learners' diverse needs, previous experiences, interests, and personal characteristics. It attempts to ensure that all students are part of the shared learning experiences of the classroom and that equal opportunities are provided regardless of learner differences (UNESCO, 2022, p. 12).

However, in many Mexican schools, the inclusive curriculum is just written in a formal document. However, it is not reflected in the environment of the school because many students are part of minority groups such as poverty, disabilities, gender, or language are excluded. For this reason, many students leave the school because they do not feel accepted and encouraged to study.

Accessibility is an important aspect to consider in a second language teaching with disabled students to have an inclusive curriculum. ISO (2008) defines it as easy access to a product, service, or environment for people who need more resources. It means that information and services should be meaningful and usable for people with different conditions, such as disabilities or poorness.

The following aspects must be taken into consideration:

- Consider the needs of all the students.
- Ensure all materials and resources are available and accessible for all the students.

- Ensure that all the activities in the classroom are accessible for all the students.
- Ensure all the students feel accepted and included in the school environment and promote values like empathy, kindness, and respect.

Undoubtedly, the inclusive curriculum benefits the students because it helps them connect with the materials and resources used at school to produce knowledge, so they decide to stay there and continue their education.

2.3 Curriculum Components

According to Zorhabi (2008), each curriculum has different components such as objectives, classroom materials, grammar, vocabulary, and assessment. These components are crucial and must be determined and described before making a program, and the teacher's approach does not matter. The curriculum components have an essential influence on the program because they enhance its productivity. For this reason, designers must analyze these aspects individually and determine their role in the program and their implications during and after the course.

2.3.1 Needs Analysis

According to Songhori (2008), a needs analysis is a process to identify the needs of an individual or a group of students. It involves student's interests and particular characteristics, such as learning styles. It must be applied before writing the program.

According to Betti (2021), needs analysis is a process that focuses on the needs of a person or a particular group of students, customers, or employees. It evaluates

what is currently done and what must be done, considering the participant's needs. In addition, it is vital to establish curriculum goals to support the students' language learning needs. Its primary purpose is user satisfaction, which can focus on different domains. According to West (1994), needs analysis helps to get a profile of the students and get useful information to design lessons, syllabi, and materials. According to Al-Seady (2002), teachers can get information from the students through interviews, questionnaires, documentation analysis, and other tools.

2.3.2 Goals

Goals indicate the program's intentions. According to Khan, Hande, and Bedi (2012), goals are general statements that describe the students' competencies to achieve after a specific period. According to Marzano (2010), goals usually include identifying objectives, choosing achievable short-term goals, and then building a plan to achieve them. In addition, goals may be focused on various processes, such as developing skills, adopting attitudes, or understanding concepts. Furthermore, goals never detail the learners' actions to achieve such aims.

2.3.2.1 Objectives

Objectives are an essential part of the curriculum because they determine the goals that the learners must achieve at the end of the course. According to Khan, Hande, and Bedi (2012), objectives determine the language elements or skills the students will learn at the end of the program. Each program establishes its objectives at the beginning of the course. However, the objectives may differ if we consider all the people who are part of an institution, such as students, teachers, and administrators. For example, in many cases, the teacher's expectations differ from the students'. As

Breen (2001a) puts it: "The classroom is the meeting point of various subjective views of language, diverse learning purposes, and different preferences." (p. 129). The problem is that most students need clear goals. For this reason, the teachers must help them establish achievable goals, make decisions based on them, and reach their goals at the end of the course. Unfortunately, many teachers do not know enough about the learners and the course.

When we refer to blind students within an inclusive curriculum, teachers must be willing to discover what needs, lacks, and wants they have to adapt the curriculum and design attainable goals and objectives. These objectives, however, may take more time and effort. However, they should take the learners to meet international standards such as those in the Common European Framework of Reference for Languages (CEFRL) and develop communicative skills based on principles of appropriateness and correctness, for example, in speaking and writing.

2.3.2.2 Learning levels

Setting objectives and assessing them seems arbitrary, but it is not. There are average benchmarks to consider when writing and assessing learning objectives and learning per se. Then, learning levels are defined based on the taxonomy by Anderson and Krathwol (2001), a reformulation of Bloom's taxonomy (1956), which divides learning into six levels: remember, understand, apply, analyze, evaluate, and create. While levels 1, 2, and three refer to lower-order thinking processes, 4, 5, and 6 indicate higher-order processes.

1. Remembering

It is the first level but one of the most important because it is impossible to reach the next level if we do not get the first one. This level consists of memorizing information from specific material to complete theories. The main verbs related to this level are label, list, choose, read, recall, record, relate, review, select, and write.

2. Understanding

Understanding is the second level in which the learners show their learning by explaining different ideas or concepts or interpreting what they learned. The main verbs related to this level are: define, describe, discuss, explain, interpret, classify, and translate.

3. Application

At this level, the learners apply their new knowledge in familiar situations in different contexts such as school or home. This application may include different elements like rules, methods, concepts, principles, laws, and theories, and the principal verbs for this level are adapt, apply, change, compute, construct, generalize, interpret, illustrate, make, show, and solve.

4. Analysis

Analysis is the 4th level in which learners break information into parts to explore it and understand it better to conclude. The verbs related to this level are: analyze, distinguish, deduce, compare, contrast, infer, deconstruct, differentiate, and calculate.

5. Evaluation

At this level, learners should make judgments about the materials and methods used by the teacher.

6. Creation (critical thinking)

At this level, learners produce new ideas or products using their knowledge. The verbs related to this knowledge act as assemble, combine, compose, construct, create, design, formulate, generate, hypothesize, imagine, predict, plan, prepare, and produce.

2.3.3 Evaluation

Evaluation is a critical curriculum component because, depending on how it is interpreted and applied, it may influence the modification of other components, such as teaching methods, teaching materials, and learning strategies the students develop. It is a systematic process that determines if the emphasis is on testing or assessment and the procedures to evaluate curriculum effectiveness. The evaluation process involves the plan's strengths and weaknesses as well.

According to Aboho, Gbamamja, and Aboho (2017), evaluation is a process by which the teachers ensure that the learning experiences produce the desired results. It helps the teachers and the administrators of the schools to know the effectiveness of the curriculum or how they can improve the program.

2.3.3.1 Types of Evaluation

There are four types of evaluation: Placement evaluation, formative evaluation, diagnostic evaluation, and summative evaluation.

Placement evaluation: This type of evaluation aims to fix the students in the appropriate class or group. It includes tests created by the classroom teacher. These tests help the teachers measure the skills the students need to improve.

Formative evaluation: This type of evaluation helps the students and teachers identify students' problems. It consists of a series of tests that are given periodically to monitor the students and see their progress and problems. Appropriate remediations may be applied during the process.

Diagnostic evaluation: Diagnostic evaluation follows up the formative evaluation. It is made to see the learning difficulties that persist in the students after the formative evaluation. This type of evaluation is applied as a diagnostic test that may be an achievement test, performance test, interview observation, self-rating, ETC. This test is very detailed and focused on the students' particular problems. To design them, the teachers must identify the students' problems and their causes.

Summative evaluation: This type of evaluation is used at the end of the course to determine if the goals have been achieved. This test is administered at the end of a course or unit, and its results are used mainly for reasoning grades.

2.3.3.1.1 Objectives of Evaluation

According to Benson, Floyd, Kranzler, Eckert, Fefer and Morgan (2019), the five objectives of evaluation are the following:

1. Determine the effectiveness of educational programs. According to Abohar Gbamamga and Aboho (2017), evaluation helps teachers see the

effectiveness of educational programs in some courses and provides bases to improve them.

2. Provide school's markers. Markers or grades are the results of formal tests such as assignments, laboratory reports, or examinations. These grades must be shared with the children, their parents, and the administrators of the schools (Bearman & Jennifer, 2004).
3. Inform parents about their children's progress. Parents must be informed about their children's academic and behavioral progress. In this way, parents can compare their children's behavior at school with what they do at home.
4. Motivate the students. Students can feel motivated when they succeed in a test and get good grades. Alternatively, if they fail a test, the student may try to improve their results. The teachers must make the evaluation results available to the learners.
5. Produce a criterion for employment. Employers usually require information about their employees. They ask for different aspects such as academic abilities, personality, and comportment in general. Teachers should get this information and have it available to employers or whoever needs it.

2.3.3.1.2 Testing

Tests are valuable assessment tools. They can be defined as standard procedures teachers use to measure a sample of behavior through a set of questions. They are employed to measure quality, ability, knowledge, and skills. In the educational field, tests ensure students can complete specific tasks or show mastery of a skill or

knowledge about content. According to Sheeba (2017), there are eight different types of language tests:

Achievement tests, also known as attainment or summative tests, measure how much the student has learned from a specific course. An example of this test may be listening to a dialogue about a particular situation. Sheeba (2017) affirms that achievement tests have two principal objectives.

1. To help teachers judge their teaching.
2. To identify the weaknesses of the students.

In addition, Brown (1995) defines *achievement tests* as materials covered in a curriculum in a particular period.

Close tests, also known as a close procedure, comprise a set of methods for measuring, for example, reading comprehension. In close tests, words are removed, leaving blank spaces for the students to fill. For close procedures, two types of scores are used:

1. Students must find the exact word that was originally written in the passage.
2. The students can write a different word that could be appropriate in the text.

Diagnostic tests: As its name says, they are mainly designed to evaluate particular linguistic aspects. For instance, a pronunciation test aims to get the phonological features that are more difficult for the students. According to Sheeba (2017), diagnostic tests have three principal objectives:

1. To give learners their program or as it is named in the literature of testing learning paths.

2. To provide learners a way to evaluate their knowledge about the language.
3. To give learners information on their strengths and weaknesses.

Discrete point tests: These tests focus on individual language items. For example, Grammar tests could be divided into different sections such as tenses, adverbs, and prepositions.

Aptitude tests: These tests refer to the natural ability that a learner must learn a language. Aptitude tests include the following aspects:

1. Ability to identify and remember new words
2. Identifying grammatical functions or different parts of a sentence.
3. ability to understand meaning without explanation in the target language.
4. ability to remember to recall word patterns and rules in the target language.

Placement tests: As its name says, they are designed to place students in a program or course at an appropriate level. Several types of tests, such as discrete or integrative, may be used as placement tests.

Proficiency tests: A proficiency test evaluates how much language a student has learned. These tests are not related to any course of instruction but measure the general language level of a learner. Most of these tests are based on vocabulary and general basic grammar.

Progress tests: A progress test is similar to an achievement test. They are based on a specific material or course. They evaluate the students at the end of a unit,

course, or term. These tests help language teachers measure the degree of success of their programs and teaching and identify their strengths and weaknesses.

Bron (1994) states that a test is a way to rate a student's performance, knowledge, and ability. Skill tests evaluate listening, writing, speaking, and reading skills and sub-skills such as comprehension, spelling, punctuation, and capitalization. So, a test is a set of techniques, procedures, and elements to create an instrument to measure student performance.

2.3.3.1.3 Assessment

According to Brown (1990), assessment is a series of measures the teacher uses to determine a complex attribute in an individual or group. In addition, Sheeba (2017) affirms that assessment determines if the goals and objectives of the course have been achieved. It is a crucial component for teachers to make decisions about grades, placement, advancement, and curriculum. Assessment inspires teachers to ask themselves if they are teaching what they think they must teach and if the students are learning what they must. Teachers also use assessments to identify student's weaknesses or learning problems. In this way, teachers can provide them with special education programming or social services. Teachers, universities, or private companies develop those assessments. Assessment is a process divided into four different components:

1. Formulating statements of the intended learning outcomes: These statements describe what students must know and understand at the end of the course.

2. Developing or selecting assessment measures to revise if the expected outcomes have been achieved. It includes direct assessments: projects, thesis, performances, exhibitions, products, case studies, clinical evaluations, portfolios, interviews, and oral exams, which ask students to show their knowledge and what they can do. Indirect assessments, such as surveys, in which students' responses provide teachers with information about what students can do with their knowledge.
3. Creating experiences leading to outcomes: The curriculum must be designed so that students have experiences in and outside their courses that help them accomplish the expected learning outcomes.
4. Discussing and using assessment results in teaching and learning improvement.
5. Students should use the results obtained in the assessment to improve individual students' performance.

2.3.3.1.3.1 Types of assessment

Different types of assessment are the following.

Formative assessment informs the teachers about their student's level and progress. It includes basic quizzes or multiple-choice questions. It also allows teachers to give feedback to the students and make changes in their teaching and teaching materials.

Summative assessment indicates the students' progress in a specific period, for example, at the end of a school year. It is usually presented as tests or exams where

a grade is generated. Teacher feedback lets students know about their strengths and learn from their mistakes.

Continuous assessment consists mainly of assessing activities or tasks during study time. Continuous assessment can be formative or summative. In formative continuous assessment, students receive feedback during the course. In this way, they can improve in these topics that they have not mastered properly. This type of assessment permits teachers to reflect on their teaching materials and evaluate the effectiveness of their teaching strategies. In the case of continuous summative assessment, the students receive a score for continuous assessment that is a small part of their grades in their final discord. That is good for the students because they are not worried about only examinations at the end of the course.

Norm-directed assessment allows the teacher to compare the student's performance with other students. The students are divided into different teams according to their level; these teams go from the lowest to the highest level, and the students compete for limited grades within their teams. This kind of assessment does not compare students' achievements to standards.

Criterion-directed assessment relies on criteria the student must achieve, established by the teacher. If the student fails one of the criteria, he will not be compensated by the highest levels. These criteria should have marks or performance standards such as excellent, good, and poor.

Subjective assessment refers to tests or exams with more than one correct answer. They include essay types, reviews, reports, presentations, and vivas. The teacher

makes decisions about their grades for subjective assessment. Subjective assessment helps the teacher to pay more attention to complex concepts.

Objective assessment refers to tests with a single correct answer. Examiners do not have to exercise judgment when marking questions.

Open book assessment allows students to check their books and useful materials to answer the test. Open-book assessment has proved that students experience less anxiety because it requires less effort than closed-book assessment. However, for open book assessment, students should be trained in critical thinking and know what materials to bring along.

Close book assessments are tests in which the students need the opportunity to revise their reference resources or ask their classmates about the test.

2.3.3.1.4 Feedback

According to Carless, Salter, Yang & Lam (2011), Ellery (2008), Ellis, Sheen, Murakami & Takashima (2008), Higgins, Hartley & Skelton (2010), Nakata (2015), Nicol & Macfarlane-Dick (2006), feedback plays an important role in students' learning. It has been defined in many ways by different authors. For example, it is defined as information provided by the teacher to tell the learner about his or her performance and the skills that he or she has to improve (Dysthe, 2007; Hattie & Timperley, 2007; Joyce et al., 2000), and instruments to improve performance and practice in different educational fields (Archer, 2010; Hattie & Timperley, 2007; Veloski et al., 2006). According to Obilor (2019), feedback is an important part of education because it encourages students to continue learning, allows them to

identify gaps in their learning, and provides information to improve their learning. In addition, Archer (2010) says feedback is essential to promote cognitive, technical, and professional development. Archer (2010) also defines feedback as information related to previous performance to promote positive and effective professional development. According to Hattie and Timperley (2007), feedback is information a person, such as a pair, a teacher, or parents, provides to improve their performance. Therefore, a teacher can give corrective information, a pair can give alternative strategies, and parents can motivate the students. It is also defined as information that the students can add to, confirm, overwrite, or reconstruct information in memory. Obilor (2019) affirms that teachers should be sensitive to the needs of the students, provide useful information without attacking the students, make feedback dynamic and interactive, and encourage students to pay attention to feedback instead of just attending grades.

Elis (2009) has developed a categorization of teacher choices to correct student's lexical mistakes in their texts. The typology includes four strategies to implement writing corrective feedback that are the following.

First, in indirect corrective feedback, the teacher gives the learner the correct forms of knowledge. This feedback may take several forms, such as taking out an unessential word, phrase, or morpheme, adding a missing word or morpheme, and writing the correct form. Second, in indirect corrective feedback, the teacher informs the students about their mistakes without correction. That can be highlighting the mistakes or indicators to reveal the students' carelessness or placing a cross beside the text line about the mistakes. Third, metalinguistic corrective feedback consists of

giving the students some form of precise remarks referring to the nature of code mistakes. The definitive comments should focus on the usage of mistakes, including a breach for different types of errors; these labels can be written on the part of the mistake in the margin or the passage. And fourth, in focused or unfocused feedback, teachers do not correct all the mistakes. They just pay attention to mistakes. It is even more complicated because the students are forced to attend to various mistakes that are unprovable to display. Uncoded feedback was used during this context in the study. Finally, in electronic feedback, written English can be used to support the students in their writing. They can work with different computer programs that help them improve their writing, which is seen as feedback.

2.4 Materials

According to Tomlinson (2010), materials are tools that facilitate second language learning. They include coursebooks, flashcards, games, websites, and mobile phone interactions. They can inform the students about the language, guide them to practice the language, provide the learner with experience of the language in use, motivate the learner to use it, and help the student make discoveries about the language. Materials must be to learn more than to teach, and they must perform the functions mentioned before. He also provides a definition for materials development, a practical undertaking involving the production, evaluation, and exploitation of materials to facilitate language acquisition and development. Writing, evaluation, implementation, and analysis of learning materials must be principles and procedures addressed in academic studies (Galla, 2019). Usually, material

development practitioners and researchers tell each other about meetings related to the topic.

2.4.1 Teaching Materials

Materials are instruments related to grammar, syntax, phonetics, and other elements. Besides, materials are seen as instruments to show the language. They are useful tools that inform the students and help teachers with various aspects of the program. This idea is supported by different input theories, such as Krashen (1981), who affirms that the condition for the target language to happen is that the learner understands the language and teaching materials make learning easy to understand the language. In addition, learning occurs under specific conditions, where the type of input stimulus the learner receives is a crucial factor in acquiring the language.

Moreover, Tomlinson (1998) defines teaching materials as everything teachers and learners use to make acquiring a language easier. At this point, materials are important tools because they stimulate and develop learning linguistic skills. In addition, teaching materials are seen as partial builders of knowledge. Tomlinson (1998) says that These materials may include cassettes, CD rooms, textbooks, workbooks, or photocopied exercises. Similarly, Arsono (2009) says that Teachers should employ different materials to teach a foreign language, such as textbooks, video blogs, applications for educational devices, ETC. However, although most teachers use various materials, textbooks are used most frequently. According to Cruz and Velazco (2016), Materials are classified in different areas. One of those areas is related to authentic materials. These materials effectively motivate students

and provide them with culture and exposure to the real language. However, they also contain complex and unnecessary vocabulary that can provoke difficulties for teachers who work with low levels. Coursebooks are placed in the second area because they play an important role, according to Bonilla Medina (2008), Charalambous (2011), Chou (2010), Issa (2007), and Sohrabi (2011). The coursebooks have several advantages and disadvantages. On the one hand, they state the lesson objectives, explain what is expected for the students to learn, are attractive for the learners because they contain pictures, and have different activities to realize for each module to develop all the skills in writing, reading, speaking, and listening. In addition, coursebooks help teachers follow a repetitive format in which they give instructions, complete exercises, and make corrections.

2.4.2 Learning Materials

Tomlinson (2001) affirms that learning materials are instruments that facilitate the acquisition of the language. *Learning materials* are the resources that learners use to facilitate their learning. They can be in different forms and sizes, but they all aim to support learners in their language development. Similarly, Tomlinson (2001) affirms that learning materials are instruments that facilitate the acquisition of the language: linguistic, visual, auditory, or kinesthetic. They include textbooks and multimedia of all areas in the curriculum. These materials may be instructional, experiential, elicitive, or exploratory. A material is instructional when it provides information to the learners about the language. It is experiential when it encourages the learners to use the language in a real context, Elicitation when it stimulates the use of the language, and exploratory when it looks for discoveries about the

language. Students can use them as part of their classes or independently, and teachers can use them as complements or to replace a textbook. These materials should be applied effectively to help students learn and increase their success.

2.4.3 Materials evaluation

Material evaluation is an important aspect of the process of material development. It is a procedure that involves measuring the value and the effectiveness of learning materials, considering aspects such as the credibility the materials pose on learners, teachers, and administrators, the validity, reliability, and ability of the materials to interest the teachers and the students, the ability of the materials to encourage the students, the value of the materials to help students make a good performance in tests and exams, the value of the materials to help students developing communication skills, the students' perceptions about the materials, teacher's perception about the value of the material, the assistance provided by the teacher in preparation and assessment, the relation to the requirements such as classes, syllabus, and examination (Nurdin, 2018).

Tomlinson (2010) also argues that examination is not an analysis; it may include an analysis, but the objectives and procedures are completely different. Evaluation focuses on revising the effectiveness of materials, and it is mainly subjective. Wille's analysis focuses on the materials and gives an objective analysis of them. It asks questions about the contents of the materials, their objectives, and the activities students have to do with them. Evaluators' Theory of learning affirms the following statements.

1. Learning a second language has more positive effects when it becomes a relaxed and enjoyable experience.
2. Second language teachers are more successful when they enjoy their role and acquire some enjoyment from the materials.
3. Every learner is different in personality, aptitudes, motivation, priorities, interests, needs, wants, and learning styles.
4. Each student varies daily in motivation, attitude, mood, perceived needs and wants, enthusiasm, and energy.
5. The teacher is responsible for generating energy; good materials can increase this energy.
6. Students learn just what they need or want.
7. Some emotions that can promote learning are laughter, Joy, excitement, sorrow, and anger.
8. There are different cultures of students from different countries.

Principles of second language teaching are crucial for developing materials. These principles are the following:

- Materials must be attractive and varied to achieve impact.
- What the teacher teaches should be useful and relevant for the students.
- Give students the responsibility to make decisions.
- Show the students how to use the language in an authentic context.
- The students must pay attention to the linguistic features of the input.

- Allow the learners to use the language to achieve communicative purposes.
- Students differ in effective attitudes and materials. Most offer variety and choice.
- Maximize learning potential by motivating emotional learning that stimulates the right and left parts of the brain.
- Give feedback to the students about their outcomes.
- Help the students to develop cultural awareness and sensitivity.

According to Ferrer, there are three different types of evaluation materials that are the following:

Pre-use evaluation consists of making predictions about the potential value of the materials for their users. It means the teacher should review the materials and ensure they are useful for the class. Pre-use evaluation works better when two or more evaluators conduct it and discuss their conclusions.

The whilst-use evaluation consists of evaluating the materials while they are being used. It can be more effective than pre-use evaluation because it measures the effectiveness of the materials during their use instead of predicting. It can also be dangerous because teachers or observers are misled when the activities seem useful. Whilst evaluation covers different aspects such as clarity of layout, clarity of instructions, of texts, credibility of tasks, achievability of tasks, achievement of performance objectives, practicality of the materials, teachability of the materials, flexibility of the materials, motivating power of the materials, impacts of the materials, effectiveness in facilitating short-term learning.

Post-use evaluation is the most important but less administered. It measures the current effects of the materials on the users. It measures the effect of motivation, impact, achievability, instant Learning, etc. It also measures the actual results of the materials and allows making decisions about materials' use, adaptation, or replacement. Post-use evaluation includes different aspects, such as what has been taught by the materials and criterion-referenced evaluation by the users.

2.5 Teaching Methodology

Kuarm (2022) a teaching methodology is a procedure related to a specific plan. It refers to the principles or methodology employed for classroom instruction. Teachers' choice depends on his or her educational philosophy, subject area, and school mission statement teaching. In addition, Al-Rawy (2013) defines *teaching methodology* as a teacher's mechanism to organize several activities to achieve specific goals. Al-Rawi states that teaching methods become more effective when they cover students' needs. He also says that teachers should know that not all students learn in the same manner, and he or she must apply the method that all the students can reach. Teaching theories are divided into two different categories or approaches that are teacher-centered and student-centered.

1. Teacher-centered approach: In this approach, the teacher is the main authority figure, and students should passively listen and receive information. In a teacher-centered approach, teaching and assessment are two separate entities. Students' learning is measured through objective-scored tests and assessments. Some examples of teacher-centered approaches include group discussion and lecture methods.

2. Student-centered approach: In this approach, teachers and learners play equal roles in learning. Teachers' main role is to coach and facilitate students' learning and understanding of materials. Formal and informal assessments measure students' learning, including projects, portfolios, and class participation. Teaching and assessment are connected, and student's learning is evaluated during teacher instruction. Some examples of this approach are small group discussions, simulations, and projects.

To cover all student's needs and achieve the expected learning outcomes, the teacher should establish a model approach to choose a method. This approach takes into account the following criteria:

1. To what extent the method is suitable for the permitted time.
2. To what extent the method gives the students the opportunity to participate.
3. To what extent does the method allow the students to exchange ideas and expertise.
4. To what extent the method allows implementing real-life experiences.
5. To what extend the method allows the students to develop themselves.
6. To what extent the method gives a chance the students to be cooperative.
7. To what extent the method allows the student to be self-assessed.
8. To what extent the method makes the student more enthusiasm and responsive.
9. To what extent the method allows correlating different topics.

10. To what extent it is possible to organize groups.
11. To what extent it deals with personal differences.
12. To what extent it is flexible in tracing.
13. To what extent the method employs the new educational technologies.
14. To what extent the method employs online teaching.

The most successful method is this that fulfills most of the criteria above. Even though each includes the students in different manners, they have their advantages depending on the information they teach. Knowing the method's differences will help teachers choose the appropriate technique for a particular class and help teachers define their style.

2.5.1 Approach

According to Anthony (1973), An approach is a set of theories about the nature of a second language and language learning. It is a useful source of practices and principles of language teaching. The Theory that is used depends on the level at which it is put into practice, the skill that will be developed, the content that will be taught, and the organization of the content. In addition, he affirms that inside of an approach, there can be many methods. Similarly, Richards and Rodgers (1999) define approach as the assumptions, beliefs, and theories related to the nature of language and language learning that operate as axiomatic constructs or reference points and provide a theoretical foundation for the activities that language teachers relate with their students. In the 20th century, teachers of second languages started using two different types of approaches. The first approach consists of using and

understanding the language, while the second approach is teaching grammar rules and analyzing the language.

2.5.2 Learning

Learning is a process that permits a person to change and improve their performance. In some cases, learning occurs due to teaching a specific activity, but it is mainly based on experiences.

2.5.2.1 Learning Theories

Nevertheless, learning is only sometimes conceived and interpreted in the same way. The emphasis may rely on the objectives, the process, or the outcomes, which are determined by the theory that supports each view. Consequently, it is necessary to review the main learning theories.

2.5.2.1.1 Behaviorism

This theory is based on Skinner's operational conditioning theory, which says that behavior can be changed with positive or negative reinforcements. For example, positive reinforcements such as praise, appreciation, a good grade, a trophy, money, or any other reward may cause the repetition of a specific behavior. On the other hand, we can use punishment to avoid certain behaviors. For example, if the student arrives late at school and always receives negative feedback, the teacher will change an undesirable behavior using an undesirable reinforcer. However, if we use punishment every time, we may create bad feelings and negative attitudes. Moreover, using this technique, we suppress the bad behavior but do not eliminate it. For this reason, positive reinforcement is a much better motivational technique.

When we eliminate the reinforcements, we will also eliminate the motivation to repeat any specific behavior. For this reason, we must not apply the reinforcement technique every time. The reinforcement technique should be applied equitably and satisfy people's needs.

2.5.2.1.2 Cognitivism

As its name says, the cognitive approach is related to internal and invisible processes that permit people to behave to external stimuli. It observes how people acquire knowledge through their senses and how they apply it. Unlike behaviorism, cognitivism looks for the best way for students to acquire the language in their minds. It highlights how mental processes influence students' behavior and their learning. It positively affects those who want to use cognition to improve their learning behavior.

Furthermore, cognitive approaches can be combined with other theories for more positive effects. The cognitive approach facilitates the comparison between the known and acquired information and comprehension of grammar rules, memorization, and use of language; it develops and improves logical thinking and motivates imagination; it also leads learners from passive recipients to active builders of knowledge. However, it has some limitations that affect student's use of the language. The first limitation is that it considers logical aspects but does not focus on emotional variables. However, language is closely related to culture, emotion, and society. So, it undoubtedly has a negative impact on learners' use of language in reality. Language activity is seen as one of the models of cognition, and it is related to other abilities that are not directly related to language but are essential aspects of developing a second language. Langacker (1987) affirms that it is not suggested to

focus on language separated from other cognitive activities such as memory, attention, social contact with people, or experience. Langacker (1987) also says young children learn a language through patterns and categorizations. So, grammar categorizations such as nouns, verbs, and auxiliaries are accepted just at an input level.

2.5.2.1.3 Sociocultural Constructivism

Social constructivism is a learning theory based on learners' interaction, discussion, and knowledge sharing. The role of the teacher is to use learner-centered teaching methods and make the students work in teams and collaborate, sharing ideas, solving problems, or creating something new using their knowledge. It motivates active participation and interaction among the students and makes learners retain the information they discover or create by themselves, which is more than the knowledge the teacher provides. This theory, propounded by Vygotsky (1968), affirms that humans experience and communicate through language and culture. Vygotsky says that language and culture are crucial elements for humans' intellectual development and perception of the world. It signifies that learning concepts are transmitted through language understood by experience and interaction inside a cultural setting. It requires a group of people to have language and culture to construct cognitive structures. However, it is not only social. While constructivism is a theory in which students build knowledge by themselves from their experiences in their environment, social constructivism is the knowledge students get in collaboration with their classmates, teachers, and peers. It highlights the collaborative nature of learning under the guidance of teachers or other learners.

2.5.3 Approaches and models to L2 instruction

The many approaches to second language instruction are grammatical approach, communicative approach, or cognitive approach. We will discuss them to see which approach allows the teachers to employ effective methods that promote strategies and tools in the classroom.

2.5.3.1 Grammatical approach

Earlier research has shown that this approach emerged two centuries ago to teach Greek and Latin, and the teachers who used the grammar approach saw language learning as a mental discipline. This approach is focused on teaching grammar structures. The main methods used in this approach are:

- Grammar translation, which is focused on reading, writing, and translation to the first language.
- The direct method, which is focused on grammar and pronunciation.
- The audiolingual method focuses on error correction and uses minimal L1.

According to Kelly (1976), some strategies related to this approach are drills, rote memorization, dialogue memorization, repetition, and kinetics. In addition, Selinker (1972) affirms that strategies such as mnemonics, rote memorization, and flashcards are good strategies to address L2 learning with this approach. Nevertheless, these strategies are not helpful for advanced students; it means that these strategies can be used only in the first stages of the language learning process.

2.5.3.2 Communicative approach

The communicative approach originated in the 1960s and 1970s; its main principles are communication, constructivism, and social interaction. Students must develop different competencies, such as communicative, strategic, grammatical, and discourse. These competencies are taught through authentic materials, strategies, and activities to allow students to acquire the language significantly.

Herrera & Murry (2011) state that the main methods used in this approach are:

- Silent way (e.g., focus on reinforcement through repetition and signals)
- Natural way (e.g., focus on comprehensible input, acceptance of L1)
- Suggestopedia (e.g., emphasis on relaxed physical setting, minimal error-correction, application of L1 for explanations)
- Integrated Content-Based (e.g., focus on content and language, and L2 development) and Sheltered Instruction (e.g., focus on scaffolded instruction, use of visuals, cooperative learning, and guarded vocabulary)

According to Oxford (2003), L2 educators could select the communicative approach because it involves different useful methods appropriate for all learners' needs in the classroom. Moreover, learning strategies are essential in determining a specific learner's ability.

Oxford documented 62 strategies that are divided into six different categories that are the following: cognitive (e.g., reasoning, analysis, summarizing); metacognitive (e.g., self-planning, arranging, evaluating); memory-related (e.g., grouping, associating, and using imagery); compensatory (e.g., guessing, switching to L1);

affective (e.g., using music, laughter, meditation); and social (e.g., becoming aware of other points of view) (Oxford, 2003; in Herrera & Murry, 2011).

2.5.3.3 Cognitive approach

This approach originated in the 1980s and 1990s when research on learning, functions, memory, and cognition was conducted. The most important part of this approach is using strategies in the classroom. The main method used for this approach is cognitive academic language learning, which consists of cognitive development in L1 and L2, prior knowledge, and explicit instruction in learning strategies. The strategies related to CALA are divided into cognitive, metacognitive, and social-affective strategies.

Cognitive strategies imply different aspects, such as mental and physical manipulation of the material to be learned. Such strategies are known as resources in the hands, and they can be applied to learning a second language through resourcing, repetition, grouping, deduction, imagery, auditory representation, elaboration, transfer, keyword method, inferencing, note-taking, and summarizing. These strategies involve manipulating the target language, which the students use to improve their second language learning and make it easier. Cognitive strategies are used in the classroom and in different activities such as making mind maps, using clues in reading comprehension, underlining keywords, visualization, and association. Metacognitive strategies involve tactics that help L2 students control their learning. Such strategies are known as resources in the head, which consist of planning (e.g., advance organizers, direct attention, functional planning, selective attention, and learning strategies in second language acquisition, self-management),

monitoring (e.g., self-monitoring), and evaluation (e.g., self-evaluation). Social/affective strategies refer to learning a second language through peer interaction. In these strategies, people are resources with their attitudes and beliefs towards L2 learning. These strategies include cooperation and self-talk (Chamot & O'Malley, 1990; Herrera & Murry, 2011).

2.5.3.4 Post-method approaches

A post-method pedagogy is defined by Kumeravaduvelu (2001) as an alternative teachers use to cover students' needs. It allows teachers to act as evaluators, observers, critical thinkers, theorizers, and practitioners. However, they are only partially free to make decisions; they must consider some principles to make their teaching effective. He uses the term pedagogy to include issues related to the classroom, teaching materials, curricular objectives, and evaluation measures. Post-method pedagogy also considers historical, political, and sociocultural experiences that directly or indirectly affect student's education. Context-sensitive language education must be advanced to be more accessible by understanding local linguistic, sociocultural, and political particularities. It also breaks the relationship between theorists and practitioners by permitting teachers to create their theory of practice. It comprises three pedagogic pyramids: particularity, practicality, and possibility. Particularity pedagogy should be sensitive to a specific group of teachers, teaching a specific group of students, and pursuing specific goals. Becker (1986) points out that particularity is something that we do not begin with, so we learn it by repeating. It starts with practicing teachers individually or collectively, observing their outcomes, identifying problems, finding solutions, and putting them into practice to see what

works and does not. It is a continual observation cycle where re-action and action are important prerequisites for developing, appropriate, and extending context-sensitive pedagogic knowledge. Teachers' generic professional knowledge from teacher education programs is very useful in helping them.

A pedagogy of practicality: It is more than everyday practice; it impacts classroom teaching, including the relationship between practice and theory.

Possibility: The method must be appropriate socially, culturally, and politically.

In addition, the post method includes specific frameworks, such as Stern's three-dimensional framework and Kumaravaduvelu's macro-strategic framework. These frameworks were designed to help teachers become aware of and justify their teaching process.

2.6 Learning Strategies

A *learning strategy* is a technique that the learner develops when learning to achieve a specific task. In addition, Chamot (2005) defines *strategies* as procedures that simplify tasks and activities that the student realizes are necessary to achieve a specific goal. These activities require learners to manipulate, understand, and produce the target language. To achieve those tasks effectively, the students must have enough learning experiences and develop learning strategies such as repeating or memorizing. So, learners can only develop the task with these strategies.

Similarly, Ortega (2009) defined *learning strategies* as "conscious mental and behavioral procedures." That means that the student must be aware of his or her

actions to accomplish a task. That consciousness permits the learners to make an effort to get it.

Furthermore, the learning strategies that the student uses must be appropriate for the task. Similarly, Griffiths (2008) says that the students consciously choose learning strategies to regulate their learning. Similarly, the most recent definition by Oxford says that "L2 learning strategies are complex, dynamic thoughts and actions, selected and used by learners with some degree of consciousness in specific contexts in order to regulate multiple aspects of themselves (such as cognitive, emotional, and social) for (a) accomplishing language tasks; (b) improving language performance or use, and (c) enhancing long-term proficiency" (p. 48).

In addition, Brown (2006) affirms that learning strategies are techniques humans use in a specific situation and are often used consciously and that individuals engage in to gain control over their learning process. Nevertheless, Oxford (2011) claims that learning strategies are techniques learners use to manage and control their efforts to learn a second language.

How the teachers work, and their methods also influence the students' learning strategies because these strategies are teachable actions that the learners choose from different alternatives to achieve a specific purpose related to L2 learning. It means that the method that the teacher uses influences the strategies that the student uses to learn. To choose an appropriate method, the teacher must apply teaching strategies such as "analyzing learner characteristics, signing classroom contracts, creating a learner-centered classroom, setting language goals, integrating theory with practice and building learner motivation." (Yang, 2008 p.1).

Although teaching methods may influence the learning strategies used by students, Brown (2006) says that some learners develop their own learning strategies, while others need more help. [What does some mean? Most of them need help, or most of them develop their own LS?]. For this reason, teachers are recommended to use an appropriate method to stimulate the students to develop their learning strategies.

Learning strategies are techniques that students use to accomplish a specific task. These strategies are an important part of a student's autonomy. Learning strategies help students study and learn by themselves. A student who uses learning strategies correctly is more successful. Those students are really interested in communicating in the target language. Moreover, they can analyze, criticize, and observe their progress in the target language learning.

2.6.1 L2 Learning Strategies Classification

According to Oxford, there are 62 learning strategies divided into two categories: direct and indirect strategies. Each category is divided into three different groups.

2.6.1.1 Direct Strategies

Direct strategies involve the target language directly. They require the processing of the language. Their principal objective is to help the students treat their own system of study. Furthermore, these strategies allow the students to comprehend and produce the language. Direct language strategies are subdivided into three groups: memory, cognitive, and compensation.

2.6.1.1.1 Memory Strategies

Memory strategies are applied at the beginning of the learning, and these strategies are based on simple principles such as lying words or phrases out in order, making associations, and reviewing. Although words or phrases can be associated with pictures, connecting them with sounds, motion, or touch is possible. When the students advance to a higher proficiency level, memory strategies are used very little. It does not mean that they do not use them, but they decrease their use. On the other hand, some memory-related strategies are: repeating, analyzing, and summarizing. Memory strategies are divided into four groups: practicing, receiving, and sending messages, analyzing and reasoning, and creating structures for input and output. Practicing is the most important aspect, which can be achieved through speaking and writing. In addition, the tools of sending and receiving messages are used for skills such as reading when the students try to find the main idea through skimming and scanning. It is optional to understand every word if the student understands the main words and phrases. Adult learners usually use analyzing and reasoning strategies to understand the target language's meaning and create new ideas. In addition, blind students use cognitive strategies such as writing or reading strategies that imply.

2.6.1.1.2 Cognitive Strategies

According to Priyadarcihini (2021), these strategies are used for learners to learn more successfully. They involve different activities, such as thinking, reasoning, and understanding. Similarly, Dole (2009) defines cognitive strategies as mental routines or procedures we implement to achieve a cognitive goal. These strategies are

conscious, so we can use them to study for tests, understand what we read, or solve problems. Pressly and Woloshyn (1995) affirm that different types of cognitive strategies are the following:

General strategies: they are used to analyze and solve problems.

Study strategies: These strategies imply activities such as memorizing a timeline or other kinds of events for a test.

Writing Strategies: In these strategies, the learners usually implement other activities such as planning, drafting, reviewing, and revising.

Reading strategies include other aspects such as creating mental representation pictures, activating prior knowledge, rereading the most complicated parts of a text, and predicting or summarizing a text.

All those strategies have one thing in common: They are cognitive procedures that help perform specific cognitive tasks.

2.6.1.1.3 Compensation strategies

When their knowledge of the target language is insufficient, the students use compensation strategies to understand it. They use the target language to produce the language; when they do not know the vocabulary or grammar structures to express something, they look for another way to express it. Compensation strategies are used for skills such as reading or listening, as well as when the student relates the words that he or she knows to understand the topic of a conversation.

2.6.1.2 Indirect Strategies

Indirect strategies indirectly support students' regulation of their process in second language learning through focusing, planning, and evaluating. As Mentioned Above, this category is divided into three groups: metacognitive, affective, and social.

2.6.1.2.1 Metacognitive strategies

Metacognitive strategies help students efficiently plan their learning. When a student does not understand the vocabulary, rules, or writing system confuses the student, these strategies are crucial for language learning success. Metacognitive strategies are subdivided into three groups: centering their learning, arranging and planning their learning, and evaluating their learning. The objective of centering learning is to direct the learner's attention to a specific task while arranging and planning to learn, which helps the student organize and make the best effort to benefit from his or her learning. In addition, evaluating learning supports the students to monitor errors and evaluate their progress.

2.6.1.2.2 Affective strategies

Affective factors such as emotions, attitude, motivation, and values influence student learning. These strategies are subdivided into three groups: Lowering anxiety, encouraging, and taking your emotional temperature. Good second language learners can control their emotions and attitudes. They know that negative feelings retard learning. Teachers can generate more positive feelings in the classroom, giving more responsibilities to the learners or increasing the amount of natural communication.

Anxiety may be good or bad for students. In some cases, anxiety helps students to make their maximum effort. However, too much anxiety makes the students feel frustrated, insecure, and worried. For this reason, students use different techniques to control their anxiety, such as listening to music.

2.6.1.2.3 Social Strategies

Social strategies are very important when learning a second language because learning a language implies communication, which occurs between people. Social strategies are divided into three groups: asking questions, cooperating with other people, and empathizing with other people.

Asking questions is the most helpful strategy because it helps the students to have conversations and develop skills such as speaking and listening. Cooperative learning eliminates competition between the students and increases group spirit. When the students work together, they learn faster and can help each other. Empathy is very important because it helps students understand and respect other points of view and be aware of the thoughts and feelings of their classmates.

Direct and indirect strategies work together and complement each other. Students who develop these strategies are efficient and have effective learning.

2.7 Curriculum and Technology

Even though each school has its program, it is focused on general objectives, and in many cases, it needs to consider students' needs. This situation is notable when there is a student with disabilities with special needs. For people with a visual impairment, it is tough to learn because in most Mexican schools, the materials and

resources they use, such as pictures, keyboards, flashcards, or PowerPoint presentations, are not appropriate for them. In some cases, blind people can use the braille system to read and write. However, it might be tough because the teachers do not always know the system and some blind students use it very slowly.

Technology makes it easier for blind people to study and work. Different resources such as email, WhatsApp, or word allow blind people to realize different activities in their school or job. "Not using any text materials during the lessons and sending homework, vocabulary, and writing exercises by email were considered very successful by the students." (Malinovská & Ludíková, 2017, p.2). Unfortunately, some blind people, especially those who were not born blind but acquired the condition, do not know how to manage technological resources.

On the other hand, many people with visual impairments know how to use technological resources such as computers or cell phones that are useful for learning a second language. Many teachers do not know how to adapt their classes for blind people. Similarly, Malinovská & Ludíková (2017). Say that teachers in mainstream schools usually do not know how to work with visually impaired students, and they do not know how to create or adapt useful study material for them. The school's curriculum is not designed for people with visual impairments. It is important to apply a needs analysis to design an appropriate curriculum for blind people and ask the students about the materials and resources that they manage. In this way, we will know the abilities of our students and how much help they need.

2.8 Curriculum, Technology, and Language Learning Strategies

All the students, blind and low-vision students, use learning strategies to learn a second language. Nevertheless, those strategies have some implications that make them different from students without disabilities, for instance, with memory strategies that are mainly used by the students at the beginning of the learning process. Students usually apply techniques such as associating pictures with their meaning, a common way to remember the vocabulary. However, blind students cannot use pictures. So, they need to translate the vocabulary at the beginning of their process. It seems to be an ambiguous method, but it is the only way for blind students enrolled in an online course to understand the meaning of the vocabulary. In addition, blind students also use cognitive strategies such as writing strategies that imply different aspects such as planning, drafting, reviewing, and revising. However, the writing process is different and longer because the students must have enough knowledge about their technological devices or look for a strategy to read the texts letter by letter and write their first draft as correctly as possible. Blind students also use metacognitive strategies to evaluate their learning progress; nevertheless, as we mentioned before, they must know how to use their cellphones or computers correctly to revise their texts letter by letter and ensure everything is correct. Effective strategies are essential during the writing process for students with visual impairment. They must know how to control their emotions because this process could be long and difficult in many cases so that the students may feel anxious and frustrated. The researcher observed that the participants usually received help from their classmates or asked them about using their technological devices or helpful

strategies during the writing process. These experiences between students are related to cooperative learning and empathy, which are social learning strategies.

2.9 Language Skills

According to Housing (2015), language is a collection of words that make sentences or phrases when we put them together. Nevertheless, each of these words has its meaning. In addition, language is a system. It means that it comprises different structures that are accepted to create meanings. Husain (2015) also says that language is used to interact with people and express feelings, thoughts, and ideas. It distinguishes humans from animals. Moreover, language is essentially a skill; it is not a subject such as science, history, or math that aims to provide information to the students and give them knowledge. Since language is a skill, it comes under the psychomotor domain. Students usually perform When they acquire a new skill because it is an intellectual exercise. Husain (2015) affirms that language is a complex skill composed of four sub-skills: Speaking, Writing, listening, and reading. All these skills are interrelated and classified into two groups: Productive and receptive skills.

On one hand, speaking and writing are used to produce sounds and symbols to communicate. So, they are called productive and passive skills. On the other hand, the learner usually receives information through listening and reading. For this reason, they are considered receptive and passive skills.

2.9.1 Listening

Listening is one of the four skills: speaking, writing, listening, and reading. Tyagi (2013) affirms that it involves an individual's active participation. This skill is composed of three different elements that are crucial to maintaining communication. They are the sender, the message, and the receiver. Tyagi (2013) defines listening as receiving messages and attending to create meaning for verbal messages. In addition, he affirms that listening is a good skill that is different from hearing because listening is a psychological process that may help people in different situations, such as understanding assignments in a better manner and being more productive as workers. Similarly, Tarigan (1983) defines listening as a process in which the listener pays attention to oral symbols with appreciation and interpretation to get information and comprehend the meaning of communication given by the speaker. In addition, Tyagi (2013) affirms that the process of listening is composed of four stages that are the following:

Hearing is the capacity of the ears to perceive sound waves. A person must hear to listen. However, hearing is only one aspect of achieving listening because attention is also necessary.

Understanding refers to the comprehension of the symbols we have heard. In this stage, it is necessary to analyze the meaning of the stimuli we have heard. In addition, it is important to understand the context as well.

Remembering is an essential part of the listening process because it means that the listener has not only received, analyzed, and interpreted the message but also

added it to the mind's storage bank. In listening, our attention is selective. So, what we remember could differ significantly from what we initially saw or heard.

Evaluating occurs when the listener weighs the evidence, classifies the opinions, and determines the presence or absence of bias or prejudice in a message. The listener ensures that he or she does not begin this activity too soon. We will not pay attention to the complete message if we start this stage before. As a result, the listening process ceases.

Responding: This stage requires that the receiver responds to the message through verbal or nonverbal feedback and is the only way the sender can ensure that his or her message is clear.

2.9.1.1 Listening Strategies

Listening strategies are directly related to understanding and recall of a listening input. These strategies are classified into two top-down strategies and bottom-up strategies.

Top-down strategies require the listener to have background or previous knowledge about the topic, such as the context or situation, the type of text, and the language. These strategies also include other aspects, such as listening for the main idea, predicting, drawing inferences, and summarizing.

Bottom-up strategies are based on texts and the combination of sounds, words, and grammar structures that create meaning. In addition, Tyagi (2013) says that bottom-up strategies include aspects such as listening for specific details, identifying cognates, and identifying word order patterns.

Modes of listening: According to Tyagi (2013), three different modes of listening are the following:

Active or reflective listening is one of the most critical listening skills. In this mode, the listener is interested in comprehending what the sender thinks, wants, feels, or the message. The receiver is active in understanding the message before he or she answers. The listener usually paraphrases the message and tells it to the other person talking to ensure that the information the listener understands is correct to makes communication effective. Furthermore, Tyagi (2013) affirms that intensity, empathy, acceptance, and recognizing responsibility for completeness are also crucial in active listening.

Passive or attentive listening: In this mode, the listener is interested in understanding the sender's point of view. The listener usually assumes that his or her understanding is correct, but he or she never verifies it.

Competitive or combative listening: It happens when the listener is more interested in sharing his or her point of view than in understanding the message provided by the sender. The listener either listens for opportunities to take the floor or for flaws or weak points.

2.9.1.2 Types of listening

There are different types of listening; they are based on the objectives and the way in which the listener answers to the messages.

1. Active listening shows interest and encourages the conversation to continue.

2. Appreciative listening includes different ways to appreciate what the other person is saying, such as listening to music.
3. Attentive listening pays special attention to the sender to understand the message.
4. Biased listening occurs when the listener hears or pays attention to the information he or she wants.
5. Casual listening occurs when the listener does not pay attention; actual attention is a lot.
6. Comprehensive listening is intended to understand what the sender is saying.
7. Critical listening is intended to criticize and analyze in order to evaluate or pass judgment on what the other person is saying.
8. Deep listening has a purpose to understand the person, his or her personality, and his or her natural and unspoken motivators.
9. Discriminating listening: In discriminating listening, the listener is interested in something specific, such as a baby crying.
10. Empathetic listening is to understand the feelings of the person talking.

2.9.2 Speaking

Speaking is one of the four skills. It is an essential part of learning and teaching. It is used to communicate ideas, thoughts, and feelings. It implies mastery of different aspects such as grammar, vocabulary, pronunciation, and intonation. Furthermore,

Bafadal and Muslimin (2020) affirm that speaking is used more than other skills, such as reading and writing. In addition, many students measure their learning progress, considering their capacity to speak and express their ideas. According to Cameron (2001), speaking is the active use of language to express ideas understandably for other people.

Furthermore, Speaking is the process of building and sharing meaning through verbal and nonverbal symbols in various contexts (Chaney & Burk, 1998, p.13 in Kayi, 2006). In addition, Nunan (1989) classifies speaking into monologue and dialogue. Monologues include oral presentations, while dialogue focuses on interaction with other speakers. Moreover, Brown (2003) affirms that five types of speaking are the following:

1. Imitating refers to the ability to imitate and repeat words, phrases, or even sentences.
2. Intensive speaking is the second level of the classification. It consists of producing short stretches of oral language designed to show competence in grammatical, lexical, phrasal, or phonological relationships. It implies prosodic elements such as intonation, rhythm, stretch, and juncture.
3. Responsive speaking refers to a limited level of comprehension and interaction. Students can establish a short conversation with simple requests and comments, small talk, and greetings.
4. Interactive speaking means that the conversation includes multiple participants.

5. Extensive speaking is a type of speaking that includes oral production, speeches, and storytelling. Nevertheless, the participation of the listeners is still limited.

2.9.3 Reading

Reading is one of the four skills categorized as a receptive skill to listening. The BNR authors defined it as a process of creating meaning from written texts. Furthermore, they noticed that it is a skill that requires different sources. Similarly, the RAND Reading study group (2002) defines reading as "the process of extracting and constructing meaning through interaction and written language" (p. 11). Moreover, Kirby (2007) says that reading is the process by which the readers understand the text they read. He affirms that understanding is the primary purpose of reading, and it is not different from other skills, such as practicing a sport or playing an instrument, so it requires much practice. It means the more someone reads, the more fluent they will be. In addition, Gates, Duke, and Stouffer (2016) affirm that definitions of reading are related to literacy practices, and it includes other aspects such as beliefs, values, and power relations that identify those practices, such as those related to gender, ethnicity, religion, economics, and geopolitics. Furthermore, this skill occurs in social practices involving listening, writing, and speaking.

According to Palmer (1987), there are two types of reading: Intensive reading and extensive reading.

In intensive reading, the student usually pays attention to the different components of a text, such as the pronouns or the meaning of unknown words, while extensive

reading focuses more on understanding the text's central idea and not just on isolated components.

2.9.4 Writing

Writing has been defined in different ways by different authors. First, unlike speaking, writing is a skill we do not learn naturally. We need a teacher who guides and gives us feedback to develop writing skills. Consequently, many students find writing difficult because it requires much practice (Farris, and Roberts 2001) and proper guidance from teachers or more advanced peers. Moreover, writing is considered one of the most advanced skills in second language learning because it requires developing abilities such as summarizing, analyzing, and criticizing (Rao, 1997; Brown, 1987). Similarly, Boardman and Frydenberg (2008) states that "writing is a continuous process of thinking, organizing, rethinking, and reorganizing (p.4)." Similarly, Maghsoudi and Haririan (2013) claim that writing stimulates students to think, compels them to concentrate and organize their ideas, and cultivates their ability to summarize, criticize, and analyze.

In addition, writing helps the students improve different aspects such as vocabulary, grammar, spelling, punctuation, content, appropriate word selection for the audience, and the like. It is defined by Coulmas (1989) as:

"a set of visible or tactile signs used to represent units of language systematically, with the purpose of recording messages which can be retrieved by everyone who knows the language in question and the rules by which its units are encoded in the writing system." Similarly, Steinberg (1994) defines *writing systems* as "...systems of visual symbols which provide means for writing words". (p. 3)

Also, "Writing is an integral part of a larger activity where the focus is on something else such as language practice, acting out or speaking" (Harmer, 2007, p.33). In addition, Selvaraj and Aziz (2019) see writing as a complex process that involves brain processes that help the students organize their ideas to write. This process promotes imagination and creativity, which means that students must be capable of putting their thoughts into words; therefore, according to Brown (2003), writing results from different processes, such as thinking, drafting, and revising procedures. Similarly, Williams and Jasmine (2003) and Harmer (2004) divide the writing process into four principal stages: planning, drafting, editing, and revising.

Prewriting: the students create the ideas and strategies and organize the information to write the first draft.

Drafting: The student writes the first draft. In this stage, the student must pay attention to aspects such as punctuation, grammar, and vocabulary. It is possible that the vocabulary appropriate in one text may not be appropriate for another.

Revising: Revising is the third part of the process in which the teacher reads the draft and provides feedback to the student to improve it.

Editing: Editing is the final stage of the process in which the teacher must fix the draft, considering the feedback provided by the teacher.

On the other hand, Dissanayake (2020) affirms that writing is a productive skill in which the students rethink and express their understanding of spoken language. In addition, the students must develop receptive skills like reading and listening before they start writing. Students can only develop writing skills with receptive skills

(Dissanayake, 2019). Similarly, Spolksy (1989) states that students develop receptive skills before productive skills. Furthermore, to develop writing skills, students need to understand different procedures of ideas and interaction that need basic or general writing skills as a foundation (Selvaraj & Aziz, 2019).

As mentioned above, students need to develop different elements such as grammar, vocabulary, spelling, capitalization, and punctuation (Selvaraj & Aziz, 2019) since these aspects permit students to develop the ability to correctly structure sentences required to compose writing. Unfortunately, many students have not developed these skills and have problems generating and organizing ideas. For this reason, students cannot write a text with good coherence. According to Selvaraj and Aziz (2019), these problems occur due to different factors. First, it happens because the students employ techniques they need to clarify. Moreover, many teachers need more knowledge to use and rate strategies to teach writing efficiently. As a result, students feel lost, frustrated, and unmotivated to write.

2.9.4.1 Writing Theories

According to Becker (2006), writing researchers have worked hard to develop theoretical frameworks. These researchers have refined different theories to explain writing ideas, concepts, and relationships. The main writing theories are described next.

2.9.4.1.1 Cognitive Process Theory

Flower and Hayes (1981) developed the cognitive process theory, and it is more popular than other theories because it has many benefits. Its principal objective is that students use mental processes to write. In this theory, Flower and Hayes (1981, p.366)) say that "Writers have to go through a process of thinking before writing. This theory is composed of four different stages: a) "writing is a set of thinking processes which writers orchestrate or organized during the act or composing" (Flower and Hayes p.366)

B) the components are organized in a Hierarchical way and may be embedded

2.9.4.1.2 Sociocultural Theory

Sociocultural theory was introduced by Vygotsky. According to Hodges (2017), Vygotsky says motivation, affect, and social influences are essential writing components. In other words, he claims that socialization is crucial in mental process development to acquire writing. Moreover, Vygotsky affirms that collaboration with pairs and scaffolding from teachers are essential elements in developing writing skills.

2.9.4.1.2.1 Scaffolding

According to Wood et al. (1976), scaffolding in education is a technique that adults use to help children do different activities that they cannot realize by themselves. This concept is also related to Vygotsky's sociocultural theory and his concept of the zone of proximal development (ZPD). Vygotsky affirms that there are two developmental levels: the actual level and the potential level. The ZPD denotes the

distance between the actual and potential levels. The actual developmental level determines the solution of problems independently, while the potential level determines the solution of problems under the guidance of parents or more capable pairs. So, scaffolding refers to the temporary and dynamic support in the ZPD. As mentioned above, it is related to sociocultural theory that aims to become self-regulating for children.

In the 1970s and 1980s, scaffolding was extended from parent and child interaction to teacher and student interaction. In classroom contexts, it refers to the support teachers provide to their students to make their learning easier and improve their knowledge and skills. Scaffolding techniques have been researched in different fields of second language learning. For instance, Aljaafreh and Lantolf (1994) investigated the provision of corrective feedback that promotes interaction between tutors and learners. Moreover, L2 language teacher education research focused on how scaffolding could be included in different second language teaching approaches.

Furthermore, the application of scaffolding in scholarly work has suffered different changes until the early 1990s. Investigators focus more on a teacher who is seen as a competent speaker interacting with a student who is a less competent speaker. Nevertheless, scaffolding can not only happen asymmetrically between a student and a teacher. It may occur symmetrically between people with the same level, such as a pair of students. However, symmetrical scaffolding is different: the role of the teacher is bilateral. In addition, Donato (1994) determined this situation as collective scaffolding. So, collective scaffolding includes collaboration between students. It

includes pair work and group work; students produce better results than when they work individually.

2.9.4.1.3 Social cognitive theory and self-efficacy in writing

On the one hand, according to (Bandura (1993), social-cognitive theory in writing refers to how Environmental, behavioral, personal, and cognitive factors influence the determination of motivation and behavior. This theory highlights three main aspects: Observational learning, imitation, and modeling. On the other hand, Bandura (2001) says that self-efficacy is related to the student's capacity to accomplish any task. He affirms that students will choose a task based on their past experiences. Students will choose a task they feel prepared to achieve and avoid tasks with low efficacy. In addition, this theory emphasizes four-goal generalization keys: self-observation, self-evaluation, self-reaction, and self-efficacy.

2.9.4.1.4 Ecological Theory

According to Bronfenbrenner and Morris (1998), Human development occurs through interaction with people, objects, and symbols in their environment. Accordingly, writing development depends on the learners' interaction with others. In other words, writing involves cognitive as well as social interactions. This theory states that learners are influenced by their relationships with different people. These relationships start with their family and continue in the academic, social, and professional fields. However, Bronfenbrenner affirms that students are most influenced by their family because they spend more time with them and their friends, which becomes very important in adolescence. In addition, they are also influenced by outside social environments such as the government, but to a lesser degree than

their closer social relationships. (Bronfenbrenner & Ceci, 1994) In summary, ecological theory says cultural factors and social relationships could be part of students' writing experiences. Graham, Harris, and Santangelo (2015) argue that associating writing with students' daily lives can help them learn academic content more easily and faster.

2.9.4.2 Approaches to Teaching Writing

Writing approaches are an essential part of writing teaching. According to Selvaraj and Aziz (2019), teachers must determine the approach they will apply in teaching writing. This approach depends on the teacher's goal. If the teacher chooses the incorrect approach, it could demotivate the students and the teacher as well. The teacher should know the student's needs and second language level to determine the correct approach.

Writing approaches are important because they "describe the relationship between the beliefs that writers have about writing and the patterns of writing strategies that they employ" (Lavelle and Bushrow 2007, p. 808). Therefore, writing approaches are the rules and ideas that teachers use in the classroom during writing teaching (Selvaraj & Aziz, 2019).

According to Selvaraj and Aziz (2019), there are five main approaches that teachers employ to teach writing. The main approaches include the product approach, the process approach, and the genre approach.

2.9.4.2.1 Product Approach

According to Gabrielatos (2002), the product approach consists of imitating a model text given by the teacher. This means that the students must follow the structure of the example to write a similar text. According to Steele (2004), this approach is divided into four stages.

Stage 1: During this stage, students must read the teacher's example and pay attention to important aspects such as the structure and vocabulary. For example, if the teacher gives the students an informal letter, the students must read the letter and pay attention to the structure and language used to write it.

Stage 2: In the second stage, students must practice the most essential features of the text. For example, they should practice the language used in a letter, such as greetings.

Stage 3: in this stage, the students organize their ideas to perform a similar text.

Stage 4: This is the end stage, in which the students write the final task using the vocabulary and patterns in the model text. According to Selvaraj and Aziz (2019), this approach has the advantage that "students start learning how to use particular pattern-product methods in writing composition systematically, especially in writing narrative descriptive and persuasive essays."

2.9.4.2.2 Process approach

Kroll (2001) claims that the "process approach" serves today as an umbrella term for many types of writing courses The term captures the fact that student writers engage in their writing tasks through a cyclical approach rather than a single-shot

approach. They are not expected to produce and submit complete and polished responses to their writing assignments without going through stages of drafting and receiving feedback on their drafts, be it from peers and from the teacher, followed by revision of their evolving texts." (pp. 220-221). According to Steele (2004), the process approach is composed of eight stages that are the following:

Brainstorming is the first stage where the students discuss their ideas about the topic that they will write about.

Planning is the second stage in which students exchange ideas to write the first draft.

Mind mapping helps students organize their ideas into a diagram, which may be a mind map, a spider diagram, or a linear form. These strategies help students organize their ideas and improve the structure of their texts.

Drafting: during the drafting stage, the students write their first draft. Drafting usually occurs in class, and the students frequently work in pairs or groups.

Peer feedback: In this stage, students must exchange their drafts and provide feedback to their classmates.

Editing: In this stage, the students correct their mistakes, considering feedback from their classmates.

Final draft: in the final draft stage, the students must write a final draft of their text.

Evaluation and teacher feedback: During this stage, the teacher evaluates and gives feedback on the student's writing. According to Maarof et al. (2011), teacher feedback is one of the most important aspects of improving students' writing.

According to Selvaraj and Aziz (2019), the process approach allows students to improve their writing skills using feedback from the teacher and peers. Furthermore, it promotes creativity when the students write their own texts. Although the process approach has advantages, it also has disadvantages. It takes much time because it focuses on processes instead of grammar structures.

2.9.4.2.3 Genre approach

According to Badger and White (2000), the genre approach is considered a social and cultural approach, so it relates to the context in where the writing occurs. As Paltridge (2004) says, this approach highlights teaching a particular genre that students must communicate. It focuses on language and the context in which the text is used. Elashri (2013) affirms that students must be exposed to many examples of the same genre to develop the ability to write in a particular genre. According to Selvaraj and Aziz (2019), the genre approach is suitable for beginners because they use a model text to improve their learning, and it reduces their anxiety.

One advantage of this approach is that students learn how to use language patterns to achieve coherence. However, it also has disadvantages, such as the lack of knowledge of language structure and grammar to reach the target audience and the students' focus more on the product than on the process.

2.9.4.2 Assessment of Writing

Salmani Nodoushan (2014) says that the main objective of writing assessments is to support and improve students' learning. It assesses what teachers do, what students really learn, and what they can do. In addition, Peha (2011) argues that all

the information collected to improve future instructions is called assessment. A good assessment considers two principal aspects.

1. Appropriate language must be used to describe the data gathered and the patterns observed.
2. It is based on authentic data and in an authentic context.

Salmani Nodoushan (2014) also affirms that for any assessment, it is necessary that teachers think about how they will use the data obtained to guide their instructions. Moreover, assessment is related to what students do, what they can do, and the values they have when they leave school. Assessment is related to evaluation. *Evaluation* is defined by Peha (2011) as the decisions made by the teacher, considering the information collected through assessment. So, Salmani (2014) defines evaluation as an instrument teachers use to judge a teaching program. It is also used to assess if the objectives and goals of the program are being achieved. In addition, evaluation permits teachers to analyze how they teach, think about the learning results of their students, and look for strategies or ways to improve the curriculum or teaching methods. Coming back to assessment, Salmani Nodoushan (2014) says that there are different types of assessment, such as the performance criteria, that are described next:

1. Performance criteria: this method develops a performance continuum. One of its characteristics is that students use correct grammar, punctuation, and spelling. It can range from well-written texts with good transitions and few errors to texts that are difficult for the reader to understand and have many mistakes. Feedback is crucial in this type of assessment; teachers should

provide clear feedback and tell the students what they must do to get higher results. If performance criteria are well applied, the student should understand what he or she must do to improve. According to Salmani Nodoushan (2014), the performance criteria process includes the following steps:

2. Listing the knowledge and skills that students are expected to gain after completing a task. Every task should begin with an objective established, and these tasks must be similar to situations that students encounter in their daily lives.
3. Designing tasks in which students show these knowledge and skills. These tasks should encourage students, they must be challenging too, and designed in a way that students can complete them successfully.
4. Developing good performance criteria will measure students' progress in their knowledge and skills. It is suggested that teachers have a scoring system for every performance task. The performance criteria consist of a set of escorts that indicate what the student should do to improve. It also gives teachers a guide for evaluating student work. Teachers must provide their students with examples that allow them to observe what they should do to master and get better results.

In this project, essential aspects of writing are punctuation, spelling, capitalization, and coherence. At the time of the class, their texts were read loudly, and the learners were asked about their spelling mistakes to determine if there was a problem with their technological devices or if they did not know how to write words correctly. In

addition, they were told where every mistake was located in the text and how to correct them.

CHAPTER III: METHODOLOGY

In this chapter, a detailed description of the method and design used to develop the research is presented. As stated in Chapter I, the primary purpose of this study is to describe the process of writing development for blind students who are enrolled in an online introductory English course for blind students. In this chapter, relevant information about the participants, instruments, and procedures is outlined. Then, the description of the technique, instruments, and data analysis procedure are described.

3.1 Setting

This research took place in a project led by Ph.D. Josué Cinto Morales, researcher of the Benemérita Universidad Autónoma de Puebla. The project offers English online courses for visually impaired people. It is part of a *servicio social—social work—program called Enseñanza con Visión de una Segunda Lengua a Personas con Discapacidad Visual en Entornos Virtuales*. So, elements such as internet connection and use of different platforms such as Microsoft Teams and WhatsApp play an important role. In addition, the creation of digital materials was necessary for this project.

3.2 Participants

For this project, five students with visual impairment were observed through their process of writing. The participants were students from 9 to 47 years old, a child, a man and 3 women that were studying basic English in a project called *Enseñanza con visión de una segunda lengua a personas con discapacidad en entornos virtuales*. Those students were from different countries in Latin America. Two of them

were from Mexico, two from Perú, and one from Honduras. All of them are blind; three of them were born blind, and the rest of the participants became blind when they were adults. One of the students was still in elementary school, another had just completed elementary school, another woman went through secondary school but did not complete it, and two of them got bachelor's degrees. Only two of them could use Braille because they were born blind, so they had to learn Braille in elementary school as their conventional way of writing. On the contrary, the other participants lost their sight when they were adults, so they had to learn how to use technological devices because they were more beneficial for them, and learning Braille was a great challenge.

All the students had a smartphone, but three were still learning how to use it. That happened because the two students who knew how to use their cell phones had the opportunity to take more courses to learn about it. Everybody had a computer, but just two of them knew how to use it. The students who did not know how to use their computers did not consider it necessary. So, even though they had a computer, they did not use it because it was enough with their cell phone to do the most basic activities.

3.2.1 Sampling

Convenience sampling, also known as accidental sampling, which is a type of nonprobability sampling, was used for this research. In convenience sampling, the participants are chosen because they meet certain aspects, such as easy accessibility or availability at a given time. For this research, the participants of a project called *Enseñanza con Visión de una Segunda Lengua a Personas con Discapacidad Visual en Entornos Virtuales* were selected. The teacher chose the

participants who had more problems writing, she observed and evaluated their progress for six months and implemented strategies to improve their writing skills. All the participants were available at the time of the class to receive feedback from their texts, and they were willing to participate in the research.

3.3 Methodology

In this qualitative project, second language learning strategies that are effective for blind students to develop the ability to write were explored through action research.

3.3.1 Action research

Action research is a process that focuses on social problems and promotes democratic change and collaboration (Burns, 2015). Furthermore, Kemmis and McTaggart (1998) say that any action research is characterized by three principal requirements that incorporate its goals and improvements:

1. The subject of the project is a social practice that needs improvements.
2. The project goes through a spiral of cycles that include the following aspects: Planning, action, observing, and reflecting. Moreover, all those elements are interrelated.
3. The project involves the participants for each stage of the activity, and the researcher can gradually include more participants affected by the problem, but the researcher keeps control of the process.

In addition, Parsons and Brown (2002) define *action research* as a way of investigation made for teachers to solve problems and refine professional practices in the classroom. Action research involves observations and data collection that teachers can use to make better decisions and reflect. It also helps teachers to develop effective classroom strategies. Therefore, Miller (2007) affirms that it is a

natural part of teaching because teachers usually observe the students, collect information, and use it to change their practices and improve the environment in the classroom and school.

According to Hult and Lennung (1980), one of the main characteristics of this methodology is that it involves the participants who are part of the practice and the participants who are part of the research process. Similarly, Stinger (1996) states that practitioners and researchers act as partners and work with and for people affected by the problem and its solution.

Action research was the most helpful method for this project because the researcher was the teacher of the blind students, and she could observe them to verify the results of the implemented strategies on their English learning process. Planning, action, observing, and reflecting were, therefore, activities that comprised the primary research cycle based on the need to find an appropriate method to genuinely teach blind students to write in English so that they can interact with normally visual people through the text they produce instead of just producing Braille texts for other blind people.

So, the teacher and her students worked collaboratively to attain the social goals. The students could really develop their writing skills, which could be tested based on international standards, and the teacher could refine her professional teaching practices by systematically observing her learners' progress to collect data. This allowed her to reflect on the impact the chosen strategies produced and make better decisions for the following activities.

3.3.2 Design

According to Caruana et al. (2015), longitudinal studies may offer numerous benefits, which include:

“identifying and relating events to particular exposures, and to further defining these exposures with regards to presence, timing, and chronicity; establishing the sequence of events; following change over time in particular individuals within the cohort; and excluding recall bias in participants, by collecting data prospectively and prior to knowledge of a possible subsequent event occurring” (p.1).

Therefore, this design was chosen because it allowed to identify the problems that prevented learners from writing appropriately in English and relate their learning to specific exposures or strategies implemented by the teacher and variables such as the presence, time, and persistence of the problems or emergence of the changes.

This study collected data from a particular group of students who were taking English as a foreign language within a social project called *Enseñanza con Visión de una Segunda Lengua a Personas con Discapacidad Visual en Entornos Virtuales* in a period of 6 months from January to July in 2022. So, this longitudinal study involved repeated observations of the same variables over a prolonged period. Accordingly, learners' writing development was periodically observed and evaluated to detect any problems or changes that may occur during their participation in the course.

3.3.3 Data collection methods

Data collection methods play an essential role in research. These methods allow the researcher to answer the questions stated during the evaluation process. They permit testing hypotheses and evaluating outcomes. Data collection is the most

critical aspect of research; it is possible to have the best research, but you need to select the correct data collection method to be able to finish the project.

This study was developed based on a qualitative approach; that is, non-numerical data was collected in the form of words and sentences, which referred to information about feelings, emotions, and subjective perceptions about writing development.

Two methods of data collection were used: participant observation and semi-structured interviews. The researcher got information from different sources, such as videos from classes recorded in Microsoft Teams, notes, and interviews.

Therefore, in this qualitative research, the participants were observed for 6 months in their writing development process. The teacher planned classes and focused on those that dealt with writing, recorded the classes, analyzed the classes and made notes about problems experienced by the learners, and designed strategies intended to solve the problems, following the cycle of action research. At the end of the course, students were interviewed to complement data about the process they had experienced.

3.3.3.1 Participant observation

Participant observation includes improving memory, active looking, writing detailed notes, informal interviews, and patience, which is one of the most critical aspects (Dewal and Dewal, 2002). Participant observation allows the researcher to learn about the activities of the participants through observing and engaging in the activities. Schensel, Schensel, and Lecompte (1999) say that participant observation is “Learning through the exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting.” (p. 91). In this research, the researcher observed the students during their process of writing development; she

paid attention to the problems that they had and implemented strategies to solve those problems, including the lack of knowledge about technological devices and grammatical mistakes that involved spelling, punctuation, and capitalization. The teacher gave them feedback at the time of the class and checked their progress during the whole semester.

3.3.3.2 Interview

According to Abawi (2017), an interview is a method that the researcher uses to collect data by a set of questions; the researcher can write or record the answers from the participants to keep the information. Abawi (2017) says that there are four types of interviews:

1. Structured interview: the questions must be already organized. However, the interviewer can clarify the questions if necessary, or he or she can ask the participant to provide more information if the answer needs to be completed.
2. Semi-structured interview: A quasi-structured interview is also scheduled. Nevertheless, it is possible to change the in-depth interview to something less structured and more informal. This kind of interview does not have predetermined questions. It is the most appropriate method to collect more complex information.
3. Focus group discussion: a conversation between the participants and the researcher created to talk about a specific topic. In focus group discussions, the researcher prepares questions, and the participants express their opinions and thoughts. This kind of interview allows the investigator to compare the opinions of all the participants. For focus group interviews, the

questions should be well-prepared to be an honest discussion instead of a set of questions and answers. One of the advantages of this method is that participants are usually more open, and they provide more valuable information for the research. According to Abawi (2017), the ideal number of participants for this method is eight to ten people. In addition, it is necessary to have a note-taker and a facilitator to prepare a focus group discussion. The investigator must identify the purpose of the research and the participants, develop the questions, run the focus group, open, manage, and close the discussion, and follow up after the focus group.

In this qualitative research, semi-structured interviews were used to get information about the students' experiences regarding writing.

3.4 Instruments

For this research, the researcher used a questionnaire as an instrument to get information from the participants. This interview was composed of 16 open-ended questions, and it was divided into three different sections. In the first section, the participants were asked about their previous English knowledge and their first experiences during the writing process. In the second part, they were asked about the resources, text editors, and materials that they employed to write correctly, the effectiveness of corrective feedback, and their current experiences in writing texts. Finally, in the third section, there were questions about strategies that were effective for them to write correctly. Even though this project is being written in English, the interview was originally written in Spanish because the participants had a basic English level, so the answers were translated for this project.

3.4.1 Piloting

For this research, the researcher used an interview as an instrument to get information from the participants. In the beginning, the questionnaire used for the interview was divided into two different sections. The first section had questions about their writing process and their first writing experiences. The second part had questions about the learning strategies that they employed during their writing process and the resources that they used. However, after the interview was applied to a participant of the program who is not part of the research project, the researcher noticed that questions about text editors and corrective feedback were missing, so she added them to the interview. She also considered that it was more convenient to change the organization of the interview. Consequently, the final instrument had 16 questions, and it was divided into three parts.

3.5 Procedure

The problem with this investigation was that visually impaired students needed help developing their writing skills correctly. The researcher observed that her students had many problems writing, so she decided to start an investigation to provide practical strategies to teach visually impaired students to write as accurately as possible. At first, the researcher read about all the topics that were related to the investigation to define essential concepts such as writing, learning strategies, and curriculum, and defined the research problem. The literature review continued all along the process to understand better the phenomenon of writing and other related constructs such as learning, teaching, and assessment. Then, the research design was addressed, and data collection started by observing the students during their writing process and taking notes about the problems they had to write. Classes were

analyzed to detect problems and make decisions about the implementation of strategies to solve those problems and help the participants improve their writing skills.

Regarding the interview, the questionnaire was designed, the interview was piloted, the questionnaire was modified, and then applied. The interviews were analyzed and processed. No software was available for blind researchers, so data was processed manually. All the information was organized and revised from both observation and interviews. Finally, the research report was written.

3.6 Data analysis

A blind researcher developed this research. For this reason, data analysis understood as a process of cleaning, transforming, and modeling data to discover useful information for decision-making, was performed differently from conventional methods. Text analysis was used to examine data and derive patterns by reading the information repeatedly. It was not possible to employ visual strategies for coding data, such as coloring, underlining, or highlighting information with different colors or inside of different shapes. So, she recorded her classes in Microsoft Teams; then, she observed her classes and made notes about the problems that happened in her class and the results of the strategies she employed to solve these problems.

3.7 Ethical issues

All the participants of this project agreed to take part in this research voluntarily. They were informed about the topic of the investigation and the information that they would provide. Furthermore, they were asked to be interviewed and recorded with their permission so that their responses could be safely and ethically used for the research results. The information given by the students was not shared with any

person not involved in the research, and their names were not shown in the paper to protect their identity.

CHAPTER IV: FINDINGS

This chapter presents the results obtained in research about writing development in basic English students with visual impairments. During this process, the conditions and knowledge of the students were noticed to play an important role in their learning. These conditions include the devices that they use, their knowledge of technology, and their mastery of the language.

This study departs from the assumption that writing is a skill in which learners need a teacher who guides and gives them feedback. Although it is seen as a continuous, complex process of thinking, organizing, rethinking, and reorganizing to summarize, analyze, and criticize information and writing outcomes, the study focused mainly on aspects such as the development of vocabulary, grammar, spelling, punctuation, content, appropriate word selection, and the means used to access linguistic supplies.

4.1 Background

First, no studies were found that deal with teaching writing to blind EFL/ESL learners. It is taken for granted that Braille is the only means blind people need to communicate. However, Braille is only valid with and for other people who can use the system. Tobin and Hill (2015) point out that literacy for blind people takes a long time because Braille is an expensive and highly complex system that is ambiguous and must be learned at early stages as young blind learners of average intellectual ability to master the system, both in reading and writing it. Nevertheless, this perspective results in socially exclusive groups who learn and can use this system, which varies from one language to another and does not allow the production of texts

for both sighted people and blind people. Among the few studies intended to deal with writing for blind people, Feiz, Billah, Ashok, Shilkrot, and Ramakrishnan (2019) state that extant assistive technologies have exclusively focused on reading, with no support for writing, so they introduce WiYG. This Write-it-Yourself guide directs a blind user to the different form fields so that they can independently fill out these fields without seeking assistance from a sighted person. Therefore, the study and results presented in this paper are relevant to the writing process, curriculum design, and educational and social inclusion.

4.2 Accessibility

An inclusive curriculum must regard accessibility as the main principle and condition to fulfill so that students can have the same opportunities to participate and learn. When the project started, writing was seen as the only problem to deal with, however, some conditions, such as accessibility, had been overseen; but they were essential as they directly affected the development of the writing process. Thus, once students had been enrolled in *Enseñanza con visión de una segunda lengua a personas con discapacidad en entornos virtuales*, accessibility was the main challenge to face. The admission or acceptance of blind people into the program, usually interpreted as inclusion, was not the central aspect to consider as it was just part of human rights, but writing was not either.

Even though the teacher was blind, she had taken for granted that her students knew how to use their devices and could deal with the different tasks and activities they were required to do. Accessibility, defined as a product, service, environment, or installation that can be used by people with the broadest range of resources (Ojok,

2018) was the first challenge. Accordingly, the following accessibility problems related to the devices, platforms, and formats used were found.

4.2.1 Accessible formats

As might be logical, reading presented some problems of accessibility. The students were observed needing help working with some formats in which they received the vocabulary and information. They preferred working in Word documents or by WhatsApp because the formats were more accessible for them; however, the teacher observed that this strategy was not completely useful because some of the learners had problems checking the vocabulary in a Word document because they did not have an application to open it, so they depended on someone to help them.

Excerpt 1 Accessibility with Word Documents

"At the beginning, I did not know how to open the document with the vocabulary that the teacher had sent us. So, I forwarded it to my father, and he sent me the English and Spanish vocabulary as a WhatsApp message. " (S 4)

As can be seen, the formats in which blind students receive the information to study are crucial features to consider for language instruction. Formats affect the time invested and immediate access to information, requiring assistance from sighted people to access the learning materials. Therefore, sending information to students was not enough, and materials and formats were designed on the principle of sensibility to make information usable and meaningful.

4.2.2 Technological Literacy

Technological literacy is seen as an individual's ability to adopt, adapt, invent, and evaluate technology to positively affect people's life, community, and environment (Hansen, 2003), that is, their ability to understand, manage, and comfortably use technology to solve problems (ITEA, 2000) effectively and objectively. Technological literacy plays a vital role for people with visual impairment because writing depends on their knowledge of technology and their use of devices. In other words, it is the ability that blind students must use technology to use their devices effectively to solve academic problems.

When the learners received their materials in the appropriate format, another problem appeared. They needed help because they were used to utilizing their devices only for daily activities, such as sending and receiving messages via WhatsApp. They did not know how to use their cell phone or computers appropriately for academic purposes, so they asked someone to spell the words, copy them in a different format, or memorize them.

Excerpt 2 Accessibility with Spelling & Reading

"At the beginning, I received the material that the teacher sent us here in the course, and I asked someone for the spelling of the words. I usually asked my children or someone who was close to me because I did not know how to read letter by letter on my cell phone." (S 3)

"I also asked someone in my house for the spelling of the vocabulary that I received from the teacher." (S 2)

Even though students received the materials in the appropriate formats to be read, they were unable to read them. It is usually assumed that blind students can read, but they usually just listen to what their devices tell them, and they become dependent on other people to do homework and even to participate in class.

4.2.3 Gestures

As mentioned, people with visual impairment were enrolled in an online course, so technological devices such as computers and cell phones were essential tools to study and participate. For this reason, the students wrote on their cell phones. However, they made a lot of mistakes because they did not know the spelling of the words or the gestures - movements visually impaired people use to read letter by letter on their cell phones.

Consequently, students had to be instructed to read, but the main problem they encountered was access to the text and the structure of words. That's why they were asked to install the screen reader and provided with a tutorial to learn the gestures necessary to read words and write them correctly.

Excerpt 3 Problems with Screen Readers

"Now I can read the words letter by letter with my cell phone, but it takes me a lot of time to do it" S1.

"I understood how to read words and letters on my cell phone, but it was slow. My parents help me dictate the word's spelling so I can write faster." (S 4)

Although it is possible to read letters and words on the cell phone, getting access to the text and revising the spelling of the words is a slow process that, in some cases,

could be exasperating for the students, so they prefer employing other strategies that may include other people or devices. In addition, when they read on their cell phones, they must mentally transfer the words to English because their screen reader usually reads in Spanish. Unfortunately, this strategy was ineffective for all the students because it is a slow process that requires time and patience, and they prefer to employ some strategies to check the spelling of the words. These strategies usually implied that someone else had to spell the words for them.

4.2.4 Keyboard

The next problem that emerged when students had to write was their knowledge about their devices. It took them a lot of time to write because it was too difficult for them to find the letters on their cell phone because of the keyboard size, and they did not know the organization of the letters.

Excerpt 4 Problems with Electronic Devices

"The most difficult thing for me was writing on my cell phone because I didn't know how to organize the letters. so I made a lot of mistakes, and it took me a lot of time to write." S4

When the teacher observed that the participants had these problems, she suggested they write on their computers. This would make finding the letters and revising their texts easier. It should not be taken for granted that because blind people use their cell phones to communicate, they can write or know where letters and characters can be found.

4.2.5 Computer

When using their computers, students experience other kinds of problems. First, they needed to have all the tools installed to use their computer, switch from one tool to another, and start writing.

4.2.5.1 Screen Readers

Even though the students knew the position of the keys, the teacher observed that they needed help to do different actions, such as installing the screen reader on their computer. To use their technological devices, visually impaired students use a screen reader, which is software that reads everything on the screen. These screen readers cannot perform some actions such as describing or reading texts in pictures, and sometimes, it is difficult to write in other formats such as PDF. Screen readers will be easier or more difficult depending on the student's knowledge of their devices.

Excerpt 5 Assistance to install Screen Readers

"I talked to my classmate Jerson even at midnight because he was helping me to install the software NVDA, and it was a little difficult" (S 2)

As can be observed, the students had to be assisted in installing screen readers. For example, the Nonvisual Desktop Access (NVDA) is a screen reader that allows blind and vision-impaired people to access and interact with the Windows operating system and many third-party applications. But even with assistance, it would take them a long time to install and understand how to use this new tool.

4.2.5.2 Input Devices

When people can use a computer and peripherals or input/output devices, they usually forget how difficult it could have been at the beginning of the process. Once

more, what seems to be an easy task for sighted people is not for blind students. Students had problems using the mouse because they often accidentally touched it while writing and did not notice it.

Excerpt 6 Problems with Mouse and Keyboards

"I was doing my homework, and my mother came and told me that I was writing on another part of the text, so I had to start again" (S 4)

Because blind students cannot see the on-screen cursor or scan for items on the screen, they need to use a screen reader and keyboard shortcuts to navigate their computer. Therefore, teachers must be empathetic and consider that a simple writing task could take a very long time at the beginning, especially if they cannot control their movements and gestures yet.

4.2.5.3 Commands

Becoming familiar with the shortcuts is essential for any student to complete assignments faster, but it is even more important for blind students because they will be unable to locate the pointer and often get lost. They had problems sending their homework because they needed to learn the commands necessary to perform other actions, such as sending a WhatsApp message or surfing on a website.

Excerpt 7 Commands & Shortcuts

"I wrote directly on WhatsApp. I tried to write in Word, but it was too difficult to copy and paste the text to send it." (S 2)

"I know how to use my computer, but I am taking a course because I need to learn other things, such as WhatsApp or the dictionary." (S 3)

"They just help me to open a Word document to write, and they also help me to send my homework." (S 4)

As observed, the students needed help with simple tasks such as copying and pasting, opening and navigating a document and using WhatsApp on their computers. So, the teacher suggested they take courses, continue practicing on their computers, and be careful with the position of their hands to avoid touching the mouse.

The initial stage of writing in this course involved learning to use cell phones or computers. Each device required training and practice. However, the process of learning to use a computer was complex and slow, necessitating the students' assistance, memorization and repetition strategies, practice, and patience. The students' efforts in this learning journey were commendable, and the teacher's understanding of this complexity was crucial in their progress.

4.3 Writing

Writing is a complex skill that allows the students to express their ideas and communicate with other people and systems of visual symbols that provide means for written words. Nevertheless, even though it is a system of visual symbols, it is necessary that visually impaired students write appropriately to communicate effectively with other people, including people without disabilities. Similarly, *writing* is "a set of visible or tactile signs used to represent units of language systematically, with the purpose of recording messages which can be retrieved by everyone who knows the language in question and the rules by which its units are encoded in the

writing system." (Coulmas, 1989 p. 560) Furthermore, it requires the ability to summarize, analyze, and criticize (Rao, 1997; Brown, 1987). It is a skill that not many people learn naturally, so it requires feedback and guidance from teachers, thinking skills, talent, and effort from learners (Brown, 2003). *Writing* is a comprehensive skill that helps reinforce vocabulary, grammar, thinking, planning, editing, revising, and other elements. It also improves the development of other reading, listening, and speaking skills, as they are all interrelated.

Once more, it could be observed that even though students had and used their devices, academic activities were not usually performed, and students usually produced texts via voice in Spanish. Since students did not write, orthography did not receive attention, so the number of mistakes could be exaggerated. However, once again, students' first problems were related to using their devices.

4.3.1 Product Approach

As mentioned, there are different writing approaches, such as the process approach and the product approach. The product approach was used in this project because it was the most appropriate to work with blind students. In this approach, the students should read the teacher's example and pay attention to the most critical aspects, such as the language and the structures, to create a similar text using the same patterns.

Although the product approach was implemented, some modifications had to be made so that blind students could be supplied with the tools they needed and because of some conditions which will be described in the following sections. Thus, instead of providing the students with the model to produce at the first stage,

students were provided with presentation, practice and production of the most essential communicative language functions to be used in the different texts they would be required to produce. Then, the students had to read the teacher's example and pay attention to important aspects such as the structure and vocabulary.

Students received samples of mails and letters as model texts. At the beginning, they tried to follow the structure of the text, but it was not possible because their reading was actually listening, so they could not see some aspects such as capitalization and punctuation. After receiving direct feedback, and employing some strategies related to their technological devices, the learners improved their texts, However, it was a long process that took a long time, and some of the students had to correct them texts more than one time, and some of them experimented negative emotions like frustration.

After that, the students were guided and scaffolded by means of questions to organize their ideas to perform a similar text. Finally, the students wrote the final task using the vocabulary and patterns in the model text.

Nevertheless, during the learners' writing process students experienced different situations; blind students' language knowledge and skills highly depend on their technological competencies. Consequently, some mistakes in the following areas were vocabulary, spelling, punctuation, grammatical structures, and coherence.

4.3.2 vocabulary

Vocabulary is also essential to writing skills development; it allows students to express more complete ideas and avoid repeating words. For visually impaired

students, the writing development process is more complex because, as mentioned before, visually impaired students use a screen reader that allows them to access their mobile devices. So, revising the vocabulary simultaneously with the class was difficult because they needed help listening to their cell phones and the class on the same device. After all, their reading was actually listening. For this reason, they received the material in advance. In this way, the students could revise the spelling of the words and write them correctly. These materials comprised a list of vocabulary and everyday expressions they could use on their first draft.

As mentioned above, the vocabulary lists were sent in a Word document or as a WhatsApp message, and the teacher translated the vocabulary for the students. At first, students used Google Translate to look for new vocabulary. Unfortunately, it often gave them incorrect words or phrases, so they made many mistakes in their written homework. Students reported that they did not look up vocabulary in a dictionary because they had never used it and did not know the gestures, they needed to do it.

Excerpt 8 The Use of Google Translator

"I do not know how to write some words. So, I use Google translator but it just gives me the pronunciation, and sometimes it does not give me the words that I am looking for" (S 2)

For these students who had problems using the dictionary, the teacher looked for the most accessible dictionary and recorded a tutorial to teach them how to use it on their cell phones and on their computers. The teacher observed that this strategy could have been more helpful because they continued having problems with

vocabulary. Students said that using the dictionary on their cell phones took much work. Nevertheless, it was easier for those students who worked on their computers.

Excerpt 9 Using dictionaries

"I have heard that my classmates who use their computer say that it is easier to look for the vocabulary in the dictionary there." (S 2)

"I understood how to use the dictionary on my cell phone, but it is a difficult and confusing." (S 4)

As many students, visually impaired students usually use Google Translate to look for words and phrases. In their case, this is the only website they know, and it is the easiest way to search for new vocabulary. Nevertheless, this website sometimes makes students use incorrect words. To help students, information about other places that permit them to find words that can be used in different contexts should be provided. In addition, teachers must explore the recommended website or application, and they may ask their students about using their cell phones and screen readers to ensure that the suggestion is helpful for them.

4.3.3 Spelling

Spelling is an important aspect that teachers and students should take into consideration. Visually impaired students must be aware that they will produce text for visual and non-visually impaired people, so the words should be written correctly. For students with visual disability, this is a complex and slow process that may take them much time. In this research, we observed that students had problems writing

words correctly because they did not know the gestures to read the vocabulary letter by letter on their cell phone, and they did not know how to read on their computer.

Excerpt 10 *Reading & Devices*

"I do not know how to write the words because I do not know how to read them letter by letter with the screen reader, and I have problems with my cell phone because it is difficult for me to find the letters and when I write sometimes I make mistakes and I have to delete the letters and write again so, I spent a lot of time doing my homework" (S 4)

The students were taught the gestures to read letter by letter and how to use the arrows on their computer to move from one position to another. They also learned how to ask the Google assistant for the spelling of the words. The teacher observed that students started improving their writing skills using these strategies. In addition, some of the students reported that the strategies were useful for checking the spelling of the words.

Excerpt 11 *Vocabulary Improvement*

"Since I learned how to use my computer, I can look for the words on the internet and read them letter by letter...Now, that I know how to write on the computer, the process is different because I can revise the vocabulary here." (S 2)

In addition, some participants who did not know how to read on their cell phones or computers applied other strategies to revise the spelling of the words. These strategies usually implied other people who assisted the students and dictated the words, but students learned to focus more their attention so that they could

remember the meaning and the spelling of the words. Therefore, an accumulation of words was possible as active lexical repertoire.

Excerpt 12 Strategies to learn Vocabulary & Spelling

"My mother dictated to me the words that I had to write letter by letter, and when I wrote the same words many times, I started remembering them." (S 4)

As mentioned above, different aspects influence the writing development process in visually impaired students. For instance, tasks such as writing or looking for the spelling of the words may take more work. So, teachers must provide practical strategies to help students handle these tasks. Furthermore, visually impaired students usually require assistance from their families. However, this assistance helped the learners to be more independent. For instance, subject four, a child whose mother dictated the words to him so that the learner could memorize the spelling of the words and start being more independent little by little. So, scaffolding plays an important role.

4.3.4 Punctuation

Punctuation is an essential element used in written texts to make them sense and show the endings of sentences, questions, and exclamation sentences. Its main purpose is making texts clear for readers. Hence, it is important that visually impaired students learn how to use punctuation correctly to write more understandable texts. At the beginning of the course, the students did not write periods on their texts. They were taught to write periods during the presentation-practice-production stage, that is, during our focus on sentence production; however, when they started writing

paragraphs, they wrote commas or no punctuation at all. They overused commas, so they had to be guided to write periods at the end of each sentence.

Figure 1 Example of Problems with Punctuation & Capitalization

SATURDEY MARCH 4 202 3.
MY Information personal..
From: LucyM@gmail.com
To: Nellyp@gmail.com
My name is Lucila,
my last name is Fuentes
, I am from Mexico,
I laife in Mmexico city,
am 55yesrs old,
my telephone number is 55 22 13 82 58,
I have 3 brothers,
And 2 children
I am mazagist,
I laik to lisening to miusic and dancing. .
My favorit color is the red,
Rait sun and tel me about your family.
Lucy.

As can be observed in this sample paper, students did not only had problems with punctuation but also with capitalization, spelling and paragraph construction. Therefore, the teacher had to focus students' attention on these specific aspects to start developing writing skills. Punctuation and capitalization, coherence, and specific helpful strategies were promoted.

"The most difficult was writing punctuation signs, because at the beginning I did not know how to use them correctly, and because I had to look for them as well." (S 3)

Although it was not easy for the students to find punctuation signs, they improved their use gradually.

4.3.5 Grammar structures and coherence

Moreover, they did not organize the information coherently, and they did not understand the difference between a written and a spoken conversation. They wrote phrases such as "thank you" at the end of their homework.

"It was very difficult for me to create paragraphs because I wanted to use expressions that I usually use in Spanish, and I did not know how to write them. So I wrote them as I supposed they were correct, but in many cases, my texts did not make sense." (S 2)

So, the students were asked to read the examples given before and observe the organization of the information to correct their texts. They were told that it was unnecessary to give thanks after writing a text, it was enough with a final period. In addition, the students were also provided with feedback during the class. During the feedback, the teacher had to explain to the students where the mistakes were located and how to correct them. The teacher observed that the students started improving their writing skills little by little, and the students reported that the strategies were excellent and helpful for them.

"now I have less mistakes and my texts are more understandable. I also try to reflect on the sentences that I write and use synonyms of words to avoid repeating the vocabulary, I try to use vocabulary in context as well." (S 2)

"I think that I improved the way that I write because I can write longer and clearer texts correctly." (S 1)

In this part of the process, corrective feedback and performance criteria are crucial to help the students improve their texts. The feedback provided must be clear to let the learners know their mistakes and how to correct them.

4.4 Writing as class activity and as homework (Reading & listening)

At the beginning, the researcher tried to give her students writing assignments during the class, but she didn't consider some conditions that affected them, so she had to realize some changes to avoid negative emotions.

4.4.1 Emotional conditions

Emotional conditions are also crucial in writing skills development; students must have the appropriate conditions to feel motivated to write. With visually impaired students, there are specific aspects that teachers should take into account before asking their students to write.

At the beginning of the course, the students were asked to write during the class. However, most made more mistakes because they felt pressured and needed more time to check and correct their texts.

"It was too difficult for me because I had to go to WhatsApp, and it was very difficult for me to manage my cell phone and move to another window. I also felt that there was not enough time for me to write. " (S 2)

"It was so difficult because I usually use my cell phone to take my class. So, I had to disconnect to write something on WhatsApp. I also felt under pressure because sometimes I did know how to write some words and I did not have time to look for the vocabulary. " (S 3)

Nevertheless, it was fine when some participants had someone to help and write for them. Subject 4, who was a child, had an advantage because his mother was next to him at the time of the class and helped him write faster.

"First, my mother dictated to me, but then I just dictated to her because she writes faster than me on the cell phone." (S 4)

Also, students reported that writing was more accessible on some devices than on others, as can be seen in the excerpt below:

"I feel under pressure because of the time. Moreover, it is difficult for me to write on my cell phone, so I prefer doing my homework on the computer, but I never have my computer in the class" (S 1)

After that, the students were asked to write as homework. This way, they had more time to look for new vocabulary and check their texts before sending them.

Understanding the complexity of writing during class and learners' skills in using their technological devices is essential. The teacher's knowledge of the conditions involved in the writing process may prevent learners from getting stressed and anxious. The emotional condition the learner experiences while writing will influence their self-confidence and motivation to address future writing tasks.

4.5 Evaluation

Although it took her much time, the teacher provided feedback to the learners about the written homework at the time of the class. Mistakes were revised individually but also as a group. The primary purpose was that all the students listened to their mistakes and mistakes committed by their classmates and started correcting themselves little by little. The teacher revised the texts in advance and selected only the fragments that had mistakes to save time during the class. The teacher read the written fragments loudly. She emphasized mistakes related to the correct use of vocabulary, spelling, punctuation, capitalization, grammar structures, and coherence. The teacher asked the students about their mistakes to know if they needed to learn how to do it correctly or if they were related to problems with their technological devices. They were also asked to correct their classmates' homework to provide and receive feedback from others.

All in all, problems with technological literacy condition accessibility, and accessibility conditions the development of reading, and reading conditions the development of writing, and writing is conditioned by the assessment provided by the teacher. Blind

students can actually write for sighted people if they are carefully guided and scaffolded during the whole process and provided with effective strategies. Therefore, a real inclusive curriculum for blind people requires a teacher who knows about technology, teaching methods, and assessment but especially someone who is committed to developing skills for communication.

CHAPTER V: CONCLUSIONS

In these sections, answers to the research questions will be presented and discussed, along with the main conclusions, their implications, and directions for further research.

5.1 Research questions

First, the researcher wanted to know about the conditions that foster or hinder writing development in students with visual impairment. She observed that their writing process depends on their knowledge of technology, mainly when it is an online course. Students use a screen reader to read everything on the screen. Their reading is listening, and it was difficult for the students to listen to the vocabulary and the class simultaneously. Moreover, they require more time to check the spelling of the words, mainly when they do not know how to read letters on their computer or cell phone; after observing these essential conditions, those factors influence the writing process of visually impaired students. The researcher employed strategies that were useful for the students. That is the answer to the second question, which is about effective strategies during the writing process of blind students enrolled in an online introductory English course. First, Students must read the vocabulary in advance to have the opportunity to check the spelling and avoid problems during the class. In addition, teachers must provide their students with tutorials about the gestures they need to read letter by letter on their computer and cell phone, as well as tutorials to teach them how to use accessible dictionaries to look for the vocabulary. Finally, the answers to these questions pretend to explain how visually impaired students learn to write. Writing development in visually impaired students

is a long and complex process that requires patience, attention, feedback, and time from teachers and students.

5.2 Conclusions

It is important to say that teachers should know and understand that developing writing skills in students with visual impairment is a long process—longer than with students without visual disabilities.

In addition, Teachers should know the students' abilities and what they can do with their technological devices to avoid giving them complicated activities that frustrate them.

Technology is essential in the writing process of a visually impaired student enrolled in an introductory online course. Using different devices, such as a computer or a Bluetooth keyboard, helps them write faster and more correctly.

In addition, using accessible applications and websites like dictionaries or voice assistants is useful for them to look for the spelling and writing of new vocabulary.

Corrective feedback is also essential for students to improve their writing skills.

Teachers must correct visually impaired students in a very detailed way, telling them their mistakes, asking questions, and explaining how to correct those mistakes.

Furthermore, corrective feedback allows teachers to observe students' needs in terms of technology and writing skills.

5.3 Implications

As can be observed, writing development in students with visual impairment is very different. Furthermore, teachers and administrators of schools must consider these differences to realize changes in their curriculum. For instance, students' screen readers do not read pictures and graphic elements such as diagrams. So, making

activities such as describing pictures or matching columns is impossible. It also means that visual materials usually presented in books and used by teachers must be adapted for these students. For instance, as usual, vocabulary lists must be translated instead of represented by pictures. In addition, Teachers and principals of schools should consider that it takes more time for visually impaired students to develop writing skills. Therefore, courses designed for students with visual impairment must be more prolonged or contain fewer topics than those designed for students without disabilities.

5.4 Limitations of the study

The results presented in this study cannot be generalized because the research was qualitative and included just 5 participants. So, we cannot assume that all visually impaired students have the same characteristics.

5.5 Directions for further research

This investigation could inspire other researchers to write and provide more information related to writing development with people with visual impairment. This research could be done with a different group of students to get information and strategies for working with students with other characteristics. In addition, quantitative research could show different results.

REFERENCES

Abawi, K. (2017). Data Collection methods Questionnaire & Interview. In Training in Sexual and Reproductive Health Research, Geneva Workshop. URL: <https://www.gfmer.ch/SRH-Course-2017/Geneva-Workshop/pdf/Data-collection-methods-Abawi-2017.pdf>.

Al-Seady, Mohammed J. B. and Mohammed K. A. Al-Sehlani (2002). Collocation in Three Texts of the Absurd: A Stylistic Comparative Cohesive Study. *Journal of Al-Qadisiya for Educational Sciences*, 3, 2, 34-44.

Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives: complete edition*. Addison Wesley Longman, Inc.

Badger, R., & White, G. (2000). A process genre approach to teaching writing. *ELT journal*, 54(2), 153-160.

Bafadal, M. F., & Muslimin, M. (2020). An analysis of students' speaking ability on specific purpose of learning. *Linguistics and ELT Journal*, 7(1), 23-40.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist*, 28(2), 117-148.

Becker, A. (2006). A review of writing model research based on cognitive processes. *Revision: History, theory, and practice*, 25-49.

Benson, N. F., Floyd, R. G., Kranzler, J. H., Eckert, T. L., Fefer, S. A., & Morgan, G. B. (2019). Test use and assessment practices of school psychologists in the United

States: Findings from the 2017 National Survey. *J Sch Psychol.* 2019 Feb;72:29-48.
doi: 10.1016/j.jsp.2018.12.004. Epub 2018 Dec 30. PMID: 30819461.

Betti, M. J. (2021). Needs Analysis. *Dept. of English, College of Education for Humanities, University of Thi-Qar.*

Boardman, C. A & Frydenberg, J. (2008). *Writing to Communicate: Paragraphs and Essays.* Pearson.

Boardman, C. A., & Frydenberg, J. (2008). *Writing to communicate 2: Paragraphs and essays.*

Brady, L. (1996). Implementing curriculum outcomes: A case study. *Educational Practice and Theory, 18(2),* 3-16.

Breen, M. (2014). *Learner contributions to language learning: New directions in research.* Routledge.

Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nuture reconceptualized in developmental

Bronfenbrenner, U., & Morris, P. A. (1998). *The ecology of developmental processes.*

Brown, A. (2003). Interviewer variation and the co-construction of speaking proficiency. *Language testing, 20(1),* 1-25.

Brown, D.H. (1987). *Principles of language learning and teaching.* New Jersey: Prentice Hall Inc.

Brown, H. D. (2006). *Principles of language learning and teaching* (5th ed.). Boston: Pearson.

Burns, A. (2015). Action Research. In Brown, J. & Coombe, C. (2015). *Cambridge Guide to Research in Language Teaching and Learning*. Cambridge University Press. pp. 99-104.

Burns, A. (2005). Action research: An evolving paradigm? *Language teaching*, 38(2), 57-74.

Burns, A. (2015). *The Cambridge Guide to Research in Language Teaching and Learning*.

Cameron, D. (2001). Working with spoken discourse. *Working with Spoken Discourse*, 1-216.

Carless, D., Salter, D., Yang, M., & Lam, J. (2011). Developing sustainable feedback practices. *Studies in higher education*, 36(4), 395-407.

Caruana, E. J., Roman, M., Hernández-Sánchez, J., & Solli, P. (2015). Longitudinal studies. *Journal of thoracic disease*, 7(11), E537.

Chamot, A. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25, 112-130.

Chaney, A.L., and T.L. Burk. 1998. *Teaching oral communication in grades K-8*. Boston: Allyn & Bacon.

Cortes, C.E. (1981) The societal curriculum: Implications for multiethnic education. In Banks, J.A (ed.) *Education in the 80's: Multiethnic education*. National Education Association.

- Coulmas, F. (1989). *The writing systems of the world. (No Title)*.
- Daniels, P.T. & Bright, W. (1996) *The world's writing systems*, Oxford, Oxford University Press,
- DeWalt, Kathleen M. & DeWalt, Billie R. (2002). *Participant observation: a guide for fieldworkers*. Walnut Creek, CA: Alta Mira Press.
- Dissanayake, W. (2019). Postcolonial Theory and World Englishes: Toward a Dialogue. *The Handbook of World Englishes*, 557-577.
- Donato, R. (1994). Collective scaffolding in second language learning. *Vygotskian approaches to second language research*, 334-56.
- Dysthe, O., Engelsen, K. S., & Lima, I. (2007). Variations in portfolio assessment in higher education: Discussion of quality issues based on a Norwegian survey across institutions and disciplines. *Assessing Writing*, 12(2), 129-148.
- Eisner, E. (1985). *Curriculum instructions*. England: Apell Press
- Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, 36(3), 353-371.
- Elshirbini Abd-ElFatah Elashri, I. I. (2013). The Effect of the Genre-Based Approach to Teaching Writing on the EFL Al-Azhr Secondary Students' Writing Skills and Their Attitudes towards Writing. *Online Submission*.
- Feiz, S., Billah, S. M., Ashok, V., Shilkrot, R., & Ramakrishnan, I. V. (2019, May). Towards enabling blind people to independently write on printed forms. In

Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (pp. 1-12).

Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College composition and communication*, 32(4), 365-387.

Gabrielatos, C. (2002). EFL writing: product and process. Retrieved on 25 August. 2010 from <[http:// www.gabrielatos.com/Writing.pdf](http://www.gabrielatos.com/Writing.pdf)>

Griffiths, C. (2008). *Lessons from good language learners*. Cambridge: Cambridge University Press.

Hansen, C. (2003). Integrating technology in early childhood literacy education. In *Society for Information Technology & Teacher Education International Conference* (pp. 3277-3280). Association for the Advancement of Computing in Education (AACE).

Harmer, J. (2007). *How to teach English: new edition*. Harlow: Pearson Education Limited.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of educational research*, 77(1), 81-112.

Herrera, S. (2010). *Biography-driven instruction for culturally responsive teaching*. New York: Teachers College Press.

Herrera, S., & Murry, K. (2011). *Mastering ESL and bilingual methods: Differentiated instruction for culturally and linguistically*

Higgins, R., Hartley, P., & Skelton, A. (2010). Studies in Higher Education: The Conscientious Consumer: Reconsidering the role of learning The Conscientious Consumer: reconsidering the role of assessment feedback in student learning. *Studies in Higher Education*, 27(1), 37-41.

Hodges, T. S. (2017). Theoretically speaking: An examination of four theories and how they support writing in the classroom. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 90(4), 139–146.
<https://doi.org/10.1080/00098655.2017.1326228>

House, J. (2015). Own-language use in academic discourse in English as a lingua franca. In Murata, K. (2015). *Exploring ELF in Japanese academic and business*

Husain, N. (2015). Language and language skills. *Maulana Azad National Urdu University*, 1.

International Standards Organization. 2008d. ISO/IEC 10779: Office equipment accessibility guidelines for elderly persons and persons with disabilities. Geneva: International Standards Organization.

International Technology Education Association. (2000/2007). Standards for technological literacy: Content for the study of technology. Reston, VA: ITEA.

Katinskaia, A., & Yangarber, R. (2021, April). Assessing grammatical correctness in language learning. In *Proceedings of the 16th Workshop on Innovative*

Kayi, H. (2006). Teaching speaking: Activities to promote speaking in a second language. *The*

Kelly, L. (1976). 25 centuries of language teaching. Rowley MA: Newbury House.

Kemmis, S. and McTaggart, R. (eds) (1988) *The Action Research Planner*. (Third Edition) Waurm Ponds: Deakin University Press.

Khan, T., Hande, S., Bedi, S., Singh, T., & Kumar, V. (2012). Learning Objectives: "Perfect is the Enemy of Good!". *International Journal of User-Driven Healthcare (IJUDH)*, 2(3), 44-62.

Khansir, A. A., & Pakdel, F. (2018). Place of error correction in English language teaching. *Educational Process: International Journal*, 7(3), 189-199.

Kirby, J. R. (2007). Reading comprehension: Its nature and development. *Encyclopedia of language and literacy development*, (August), 1-8.

Kirschner, S. R. (2015). Inclusive education. *The SAGE encyclopedia of classroom management*, Sage, Los Angeles, CA.

Kroll, B. (2001). Considerations for Teaching an ESL/EFL Writing Course. In M. Celce Murcia (Ed.), *Teaching English as a Second or Foreign Language* (3rd ed., pp. 219-232). Boston, MA: Heinle and Heinle.

Lavelle, E., & Bushrow, K. (2007). Writing approaches of graduate students. *Educational Psychology*.27(6): 807–822.

Longstreet, W.S. and Shane, H.G. (1993) *Curriculum for a new millennium*. Boston: Allyn and Bacon.

Maghsoudi, M., & Haririan, J. (2013). The impact of brainstorming strategies Iranian EFL learners' writing skill regarding their social class status. *International Journal of language and Linguistics*, 1(4-1), 60-67.

Malinovská, O., & Ludíková, L. (2017). ICT in teaching foreign languages to adult people with acquired severe visual impairment. *Procedia-Social and Behavioral Sciences*, 237, 311-318.

Martínez Guevara, J. L., Killian Reyes, M. G., & Del Ángel Cortés, L. (2016). Autonomous learning and metacognitive strategies: its implications on the improvement of English language learning in elementary education. *Revista de psicología y ciencias del comportamiento de la Unidad Académica de Ciencias Jurídicas y Sociales*, 7(1), 63-75.

Marzano, R. J. (2010). *Designing & teaching learning goals & objectives*. Solution Tree Press.

Miller, Christine. Research: Making Sense of Data.” On-line article recovered 11/05/2007

Montaño, Jenny. (2017). Learning Strategies in Second Language Acquisition. US-China Foreign Language. 15. 10.17265/1539-8080/2017.08.001.

Naipal, S., & Rampersad, N. (2018). A review of visual impairment. *African Vision and Eye Health*, 77(1), 1-4.

Nakata, T. (2015). Effects of feedback timing on second language vocabulary learning: Does delaying feedback increase learning? *Language Teaching Research*, 19(4), 416-434.

National Library of Medicine. (02 July 2021). Blindness and vision loss. MedlinePlus Medical Encyclopedia. Retrieved from: <https://medlineplus.gov> > Medical Encyclopedia

Nickols, F. (2016). Strategy, strategic management, strategic planning and strategic thinking. *Management Journal*, 1(1), 4-7.

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies*

Nodoushan, M. A. S. (2014). Assessing writing: A review of the main trends. Studies in English Language and Education, 1(2), 116-125.

Ojok, P. (2018). Access and Utilization of Information and Communication Technology by Students with Visual Impairment in Uganda's Public Universities. *Indonesian Journal of Disability Studies*, 5(1), 65-80.

Ortega, L. (2009). Understanding second language acquisition. London: Hodder Education.

Oxford, R. L. (2003). Language learning styles and strategies: An overview. Oxford, GALA 2003. Retrieved from: <http://web.ntpu.edu.tw/%7elanguage/workshop/read2.pdf>

Oxford, R. L. (2011). Teaching and researching language learning strategies. Harlow, Essex, UK: Pearson Longman.

Paavizhi, K., & Saravanakumar, A. R. (2018). Curriculum for Inclusive Education. In *International Conference on Curriculum and Instructional Designing*

Palmer, C., & Bolderston, A. (2006). A brief introduction to qualitative research. *Canadian Journal of Medical Radiation Technology*, 37(1), 16-19.

Palmer, W. S. (1978). Toward a realistic rationale for teaching reading in secondary school. *Journal of Reading*, 22(3), 236-239.

Paltridge, B. (2004). The exegesis as a genre: An ethnographic examination. *Analyzing academic writing: Contextualised frameworks*, 84-103.

Parsons, R. D., & Brown, K. S. (2002). *Teacher as reflective practitioner and action researcher*. Belmont, CA: Wadsworth/Thomson Learning.

Peha, S. (2011). Assessing writing, assessing writers. Retrieved from

Purcell-Gates, V., Duke, N. K., & Stouffer, J. (2016). Teaching literacy: Reading. *Handbook of research on teaching*, 5, 1217-1267.

Rao, Z. (1997). Training in brainstorming and developing writing skills. *ELT Journal* Volume 61 (2).

Reading, R. A. N. D. Study Group.(2002). *Reading for understanding: Toward an R&D program in reading comprehension*.

Routledge.

Schensul, Stephen L.; Schensul, Jean J. & LeCompte, Margaret D. (1999). *Essential ethnographic methods: observations, interviews, and questionnaires* (Book 2 in *Ethnographer 's Toolkit*). Walnut Creek, CA: AltaMira Press.

Schmitt, N., & Marsden, R. (2006). Why is English like that?: Historical answers to hard ELT questions. *(No Title)*.

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, 10 (2), 209-231.

Selvaraj, M., & Aziz, A. A. (2019). Systematic Review: Approaches in Teaching Writing Skill in ESL Classrooms. *International Journal of Academic Research in Progressive Education and Development*, 8(4), 450–473.

Songhori, M. H. (2008). Introduction to needs analysis. *English for specific purposes world*, 4(20), 1-25.

Spolsky, B. (1989). *Conditions for second language learning* (Vol. 14). Oxford: Oxford University Press.

Steinberg, D. D. (1984). Psycholinguistics: Application• the writing system as a native language for the deaf. *Annual Review of Applied Linguistics*, 5, 35-43.

Stinger, E. T. (1996). *Action research: A handbook for practitioners*. Thousand Oaks.

Tobin, M. J., & Hill, E. W. (2015). Is literacy for blind people under threat? Does braille have a future?. *British journal of visual impairment*, 33(3), 239-250.

Weil, M., Calhoun, E., & Joyce, B. (2000). *Models of teaching*. Allyn and Bacon.

West, R. (1994). Needs analysis in language teaching. *Language teaching*, 27(1), 1-19.

Williams, J. G., & Jasmine, G. (2003). Providing feedback on ESL students' written assignments. *The Internet TESL Journal*, 9(10), 1-5.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of child psychology and psychiatry*, 17(2), 89-100.

Yambi, T. & Yambi, C. (2020). *Assessment and Evaluation in Education*.

Zohrabi, M. (2008). Researching into Curriculum Components. *Journal of Pan-Pacific Association of Applied Linguistics*, 12(2), 49-69.

APPENDIX 1: QUESTIONNAIRE

Previous Knowledge and Writing Experience

1. ¿Qué tanto sabías escribir en inglés antes de ingresar al curso?
2. ¿Cómo empezaste a escribir en inglés?
3. ¿Cuánto tiempo te tomó escribir un párrafo corto al principio?
4. ¿cómo te sentías cuando tenías que escribir durante la clase?
5. ¿Qué fue lo más difícil a realizar durante tu proceso de escritura?
6. ¿Por qué crees que eso es importante para mejorar?
7. ¿Qué fue lo más fácil a realizar durante tu proceso de escritura?

Uso de Editores de Texto, Recursos y Materiales

8. ¿Qué editor de texto utilizabas para realizar tus tareas escritas y por qué?
9. ¿Cuál era el procedimiento para enviar tus tareas escritas mediante WhatsApp?
10. ¿Qué recursos empleaste para realizar tus tareas escritas?

Effectiveness of learning strategies and corrective feedback

11. ¿Qué estrategias empleaste para escribir correctamente?
12. Si utilizaste alguna de las estrategias sugeridas por tu profesora, ¿cuáles fueron?
13. ¿Cómo te ayudaron las estrategias proporcionadas por tu profesora?
14. ¿Cómo te ayudaron las correcciones realizadas por tu profesora durante las clases? ¿por qué?
15. ¿De qué manera consideras que mejoró la calidad de tus textos a lo largo del curso?

16. ¿Te parece que inviertes menos tiempo en realizar tareas de manera escrita actualmente? Explicalo, por favor.

SUBJECT 1

1. To what extent did you know how to write in English before joining the course?

I knew how to write some basic words but I could not structure any ideas.

2. How did you start your English writing process?

I checked the vocabulary sent by the teacher using the gestures of my cell phone to read letter by letter and I tried to memorize the spelling of the words.

3. How much time did you spend writing a short paragraph?

It took me around 45 minutes to write a short paragraph of 50 words.

4. How did you feel when you had to write during the class?

It was so difficult for me because I usually use my cell phone to take my class. so, I had to disconnect to write something on whatsapp. I also felt under pressure because sometimes I did know how to write some words and I did not have time to look for the vocabulary.

5. What was the most difficult part of your writing process?

The most difficult was understanding grammar structures and memorizing different tenses of verbs.

Writing skills?

6. Why do you think that these difficult activities were important to improve your writing skills?

Although it was a challenge, I consider that it was important because it made me practice and improve my level through repetition.

7. What was the easiest activity to do in your writing process?

I think it was reading the vocabulary letter by letter.

8. What text editor did you use to realize your writing homework? Why?

I usually used a text because it is easier and faster to write and revise your text there than in whatsapp

9. What was the procedure to send your written homework by whatsapp?

First, I checked the material that the teacher sent us letter by letter with my screen reader, then, I wrote my homework in a txt, and finally I revised the text letter by letter to make sure that the text was correct and I sent it.

10. What resources did you use to do your writing homework?

I usually did my homeworks on my cell phone and I used a bluetooth keyboard to write faster because it was easier to find the letters and to check the text before sending it.

11. What strategies did you use to write correctly?

I analyzed different grammar structures to create new sentences. I also tried to find patterns to associate the written form of the words with its pronunciation.

12. Did you use some of the strategies suggested by your teacher? What strategies did you use?

I sometimes looked for the words in a dictionary

13. How did the strategies provided by your teacher help you?

Yes, because they helped me to look for new vocabulary

14. How do you think that the feedback given by your teacher in the class was useful? why?

Yes, because they helped me to understand some grammar structures and correct my spelling mistakes too

15. How did you improve your writing skills during the course?

Yes, I think that I improved the way that I write because I can write longer and clearer texts in the correct way. However, I consider that I have to learn a lot of more things to be better at writing because I noticed that a semester is not enough to learn a language.

16. Do you think you spend less time doing your writing homework now?

Now it takes me around 15 or 20 minutes to write a short paragraph.

SUBJECT 2

1. To what extent did you know how to write in English before joining the course?

I just knew the basic things that I learned in secondary school such as the basic questions, colors, and numbers.

2. How did you start your English writing process?

During the first level, the teacher usually spends some words for us during the class.

I also asked someone in my class for the spelling of the vocabulary that I received from the teacher or for the words that I was not sure how to write.

3. How much time did you spend writing a short paragraph?

It took me a lot of time because I wanted to write long and complex sentences as I speak in Spanish, and I had to look for the spelling of the words and expressions that I wanted to write .

4. How did you feel when you had to write during the class?

It was too difficult for me because I had to go to whatsapp and it was very difficult for me to manage my cell phone and move to another window. I also felt that there was not enough for me to write.

5. What was the most difficult part of your writing process?

It was very difficult for me to create paragraphs because I wanted to use expressions that I usually use in Spanish and I did not know how to write them. so, I wrote them as I supposed they were correct, but in many cases my texts did not make sense.

6. Why do you think that these difficult activities were important to improve your writing skills?

Yes, it is important because it is necessary that the reader understand the information that I write. So, I have to write in a coherent manner.

7. What was the easiest activity to do in your writing process?

The easiest part for me were the basic questions about our personal information because I knew how to write some of them and it was also easy to remember the structure because it is almost the same pattern all the time.

8. What text editor did you use to realize your writing homework? Why?

I wrote directly on whatsapp. I tried to write in word, but it was too difficult for me to copy and paste the text to send it.

9. What was the procedure to send your written homework by whatsapp?

I started writing my homework on whatsapp, but I had to stop to check the spelling of the words that I did not know. And finally I sent it.

10. What resources did you use to do your writing homework?

I usually use my cell phone and I use my computer now that I know how to do it.

11. What strategies did you use to write correctly?

Since I learned how to use my computer, I can look for the words on the internet and read them letter by letter. I also ask google assistant on my cell phone for the pronunciation of the words.

12. Did you use some of the strategies suggested by your teacher? What strategies did you use?

Yes, I use google assistant to ask for the spelling and pronunciation of the words. I also took a course to learn how to write on my computer because the teacher told me that it was easier and faster to write there.

13. How did the strategies provided by your teacher help you?

Yes, because in this way I can look for the spelling and pronunciation of the vocabulary and I do not have to look for someone to help me. I can read the vocabulary letter by letter too on my computer and I do not need help to do it.

14. How do you think that the feedback given by your teacher in the class was useful? why?

Yes, because it was the only way to know my mistakes and how to correct them.

15. How did you improve your writing skills during the course?

sure, now I have less mistakes and my texts are more understandable. I also try to reflect on the sentences that I write and use synonyms of words to avoid repeating the vocabulary, I try to use vocabulary in context as well.

16. Do you think you spend less time doing your writing homework now?

Yes, I spend less time doing my homework now because I have more vocabulary, I use my computer and that helps me to write faster, and I think about the ideas that I want to write before. It takes me about an hour.

SUBJECT 3

1. To what extent did you know how to write in English before joining the course?

I knew some words but I did not know how to write complete sentences.

2. How did you start your English writing process?

At the beginning, I received the material that the teacher sent us here in the course and I asked someone for the spelling of the words. I usually asked my children or someone who was close to me because I did not know how to read letter by letter on my cell phone. I usually copy the words in braille to remember them, and have them to do my homework.

3. How much time did you spend writing a short paragraph?

It took me about 20 minutes because I write really fast on my cell phone.

4. How did you feel when you had to write during the class?

It was difficult for me because I did not have enough time to look up the words that I did not know. So, I felt under pressure and I made a lot of mistakes.

5. What was the most difficult part of your writing process?

The most difficult was writing punctuation signs, because at the beginning I did not know how to use them correctly, and because I had to look for them as well.

6. Why do you think that these difficult activities were important to improve your writing skills?

It is important because If we have to take a test we should know how to write correctly and it implies the use of punctuation signs.

7. What was the most difficult thing to do in your writing process?

Actually, I do not know what was the easiest, but maybe it was writing the vocabulary in braille.

8. What text editor did you use to realize your writing homework?

Why?

I used whatsapp because I did not know how to use a different text editor such as word. At the beginning, I sent the message to my husband first, because I was afraid to make a mistake. so, I sent the homework to my husband, I made sure that everything was correct, and I sent it to my teacher.

9. What was the procedure to send your written homework by whatsapp?

First, I wrote the new vocabulary in braille to memorize it, then, I wrote my homework by whatsapp and sent it to my husband. I had to stop to ask someone if there was a new word that I wanted to write. Finally, I sent the homework to the teacher.

10. What resources did you use to do your writing homework?

I just used my cell phone because I did not know how to use the computer or a different keyboard. I had not learned how to use it yet because I did not have an internet connection to take my courses and communicate with my classmates who helped me.

11. What strategies did you use to write correctly?

I just wrote the vocabulary in braille, and I tried to memorize the spelling of the words. I also had to pay attention when I wrote on my cell phone because it sometimes changed the things that I wrote.

12. Did you use some of the strategies suggested by your teacher? ¿What strategies did you use?

I used google assistant to ask for the spelling of the words, I also paid attention to the pronunciation of the words with the screen reader because the teacher told me that when you write something wrong it pronounces differently.

13. How did the strategies provided by your teacher help you?

They were helpful because it was easier to check the pronunciation and they also helped me to make sure that the words were correct in my writing.

14. How do you think that the feedback given by your teacher in the class was useful? ¿why?

These corrections were really useful because in this way I knew the mistakes that I made and that helped me to correct myself and advance in my English learning.

15. How did you improve your writing skills during the course?

I improved the way that I write because now I know how to write more words. I also know how to use punctuation signs. Moreover, I improved the structure of my texts because when I started writing I used to write lists, and now I write paragraphs.

16. Do you think you spend less time doing your writing homework now?

Yes, I spend less time now because I know more words. Even though it depends on the content of the text.

SUBJECT 4

1. To what extent did you know how to write in English before joining the course?

Not really, I just knew basic words such as it, is, or what, but I could not write complete sentences. I learned these words because when I was in first grade of elementary school I had a teacher who spelled the words for me and I wrote them in a notebook.

2. How did you start your English writing process?

My mother dictated to me the words that I have to write letter by letter, and when I wrote the same words many times I started remembering them.

3. How much time did you spend writing a short paragraph?

If I write on my cell phone, I spend around an hour because it was difficult for me to write on my cell phone, but if I write in braille, I spend around 40 minutes.

4. How did you feel when you had to write during the class?

At the beginning I felt a little nervous because I did not know how to do it. First my mother dictated to me, but then I just dictated to her because she writes faster than me on the cell phone and in this way I also made an effort to remember the spelling of the words.

5. What was the most difficult part of your writing process?

The most difficult for me was writing on my cell phone because I Didn't know the organization of the letters. so, I made a lot of mistakes and it took me a lot of time to write.

6. Why do you think that these difficult activities were important to improve your writing skills?

Yes, because although writing a short text took me a lot of time at the beginning, that practice helped me to write faster on my cell phone and to remember the spelling of the words and the organization of the letters on the keyboard.

7. What was the easiest activity to do in your writing process?

The easiest part was the dictation of the vocabulary because my mother helped me, and without my mother it had been very difficult for me to look for the spelling of the words.

8. What text editor did you use to realize your writing homework? why?

At the beginning I wrote directly on whatsapp because I did not know how to use any other text editor, but when I learned how to write on the computer, I started writing in a word document.

9. What was the procedure to send your written homework by whatsapp?

At the beginning, I downloaded the document, then, I forwarded it to my father and he sent me the vocabulary and its translation as a whatsapp message. After that, my mother dictated the words when I had to do my homework. Now that I know how to write on the computer the process is different because I can revise the vocabulary here and they just help me to open a word document to write and they also help me to send my homework.

10. What resources did you use to do your writing homework?

At first I just used my cell phone and then I started using my computer little by little.

11. What strategies did you use to write correctly?

At the beginning I did not know how to open the document with the vocabulary that the teacher sent us. so, I forward it to my father and he sent me the vocabulary in English and in Spanish as a whatsapp message. At first I did not know much about

technology, but now I have learned a little bit more and I can ask alexa or my google assistant for the pronunciation and spelling of the words. I can also open the document on my computer now.

12. Did you use some of the strategies suggested by your teacher? ¿what strategies did you use?

Yes, I started writing on my computer to do it faster. I did not use Google Assistant to ask for the spelling of the words because it was easier for my mother to spell them for me.

13. How did the strategies provided by your teacher help you?

As I mentioned, writing on my computer helped me to write faster and I can also revise the material that my teacher sent. My father does not translate the vocabulary for me anymore.

14. How do you think that the feedback given by your teacher in the class was useful? why?

Yes, they were helpful because they allowed me to know how to write correctly as well.

15. How did you improve your writing skills during the course?

Yes, now I have fewer mistakes when I write. I still have mistakes, but I think that I have improved my writing.

16. Do you think you spend less time doing your writing homework

Yes, now I spend around 30 minutes writing on my computer, although it also depends on how long the text is, and I also think about the ideas that i want to write before.