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SUGGESTIONS FOR THE USE OF ICTs IN AN INCLUSIVE EFL CLASSROOM WITH
STUDENTS WITH HEARING LOSS IN CHILEAN SCHOOLS.

SEMINARIO PARA OPTAR AL TÍTULO DE PROFESOR/A DE INGLÉS

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Resumen

Este trabajo de Seminario de título busca recopilar y sugerir las TIC que promuevan la enseñanza de inglés como lengua extranjera para incluir a estudiantes con pérdida auditiva. Se investigará literatura donde exista relación entre el uso de las TIC para la enseñanza de inglés como lengua extranjera y estudiantes con pérdida auditiva, para así poder comparar los resultados del uso de las TIC de forma inclusiva y poder realizar sugerencias respecto a su uso en aulas de clases chilenas. Nuestro trabajo será de naturaleza cuantitativa y exploratoria. Finalmente, nuestra investigación apunta a establecer sugerencias para un aula inclusiva respecto a la enseñanza de inglés como lengua extranjera y el uso efectivo de las TIC con estudiantes con pérdida auditiva.

Palabras claves: Estudiantes con Pérdida Auditiva Media a Moderada, Enseñanza de Inglés como lengua extranjera (TEFL), Educación Especial, Sugerencias.

Abstract

The aim of this Dissertation is to compile and suggest ICTs that promote the inclusion of students with Hearing Loss in the Teaching of English as a Foreign Language. In order to compare the results on the use of ICTs in an inclusive environment and make suggestions regarding Chilean classrooms, we will consult literature related to TEFL and Students with Hearing Loss. This will be a quantitative and exploratory research that aims to establish suggestions for an inclusive classroom environment for the Teaching of English as a Foreign Language and the effective use of ICTs on students with HL.

Key words: Students with Mild to Moderate Hearing Loss, TEFL, Special Education, Suggestions for teaching students with HL.

Introduction

As EFL pre-service teachers, our main goal is to apply methodologies and strategies that can include every student within the classroom. This is why we have decided to take a further look at the strategies that teachers use, and the experiences that students with Hearing Loss (herein HL) have had regarding the teaching-learning process of English as a Foreign Language (herein EFL) when using Information and Communication Technologies (herein ICT or ICTs). In Chile, the General Education Law (2009) points out that it is mandatory to include students with Special Educational Needs (herein SENs) within the classrooms. However, it does not mention nor provide details on how teachers have to adapt their lessons to cover all of students' diverse SENs. There is great inequality among neurotypical and neurodivergent students within the classroom. As EFL teachers, we have become aware that there is a lack of information about teaching and adapting contents for students with HL in the area of EFL. We strongly believe in the importance of including every student within our teaching practices; thus, students with HL cannot be left behind. They deserve and have the right to share an educational experience with their peers, not only in the subject of English language, but in all other subjects as well.

The World Health Organisation (2021) (herein WHO) determines that HL is a condition that occurs when people experience abnormal hearing functioning, which is determined by the Decibel units that describe the loudness a person with normal hearing is able to perceive (Britannica, 2020). In this research, we decided to gather students with mild to moderate hearing loss' educational experiences, both possessing social implications and difficulties when having social interactions. At the same time, we aim to consider Chilean English and Special Education teachers' experiences regarding this area.

Therefore, people with mild to moderate HL also have disadvantages in the educational field since they need adaptation in the material for the learning process. Educational regulation in Chile states that education must be based on the national curriculum. Specifically, Decree 83/15 establishes that opportunities and adaptations must be provided so that all students; in spite of their condition, can access, participate, and make progress in the national curriculum (Ministry of Education, 2022). Furthermore, the educational system in Chile recognizes people with HL as students with SEN. Accordingly, in order to include students with SEN in common schools,

Chilean education has developed the School Integration Project (PIE) which provides human resources to support students with SEN.

Students with SEN; therefore, students with HL, also need to learn English as a Foreign Language since they follow the same curriculum as common students but with adaptation according to their needs. In terms related to the legal framework, there are three Laws Decrees that ensure the accessibility of English lessons in Chile: Decree 81, Decree 83, and Decree 171. First, The Decree 81 establishes the accessibility to English lessons by the implementation of a legal framework that assures the legal conditions in which teaching English as a second language is taught in the educational establishments within the territory under Law Decree No. 3,166. Second, the exempt Decree N° 83/2015 promotes the diversification of teaching in both Preschool and Elementary schools. It also approves curricular adaptations for those students who need them as a manner to expand the accessibility to education on equal terms. Third, in Decree 171, article number two, authorise both Regional Ministerial Secretaries of education and directors of educational institutions to redistribute the pedagogical hours in their establishments. This article also refers to the curricular prioritisation based on the national curriculum. In short, the implementation of these three Decrees was born out of the need to incorporate curricular modifications for the accessibility to some parts of the community that have been relegated from schooling.

The use of ICTs nowadays is inexorable for humanity, even more so when we talk about teaching strategies. The application of ICTs in education has a positive effect. This technique improves motivation, engagement and learning outcomes (Puspawati & Juharoh, 2021). Indeed, the use of ICTs with students with HL could strongly benefit their learning process. As stated by the European Agency for Special Needs and Inclusive Education, “the essential purpose of using ICT in education for learners with disabilities and special needs is to promote equity in educational opportunities” (2014, p. 12).

The general aim of this research is to suggest teachers strategies for the use of ICTs in the teaching of English as a Foreign Language within Chilean Secondary High Schools that include students with HL. Following, there are five specific objectives within this investigation. Firstly, to collect ICTs application strategies in teaching English as a Foreign Language through bibliography about Secondary Chilean Education and students with HL. Secondly, to design and apply a survey to explore students with HL’ experiences while learning English as a

Foreign Language regarding the use of ICTs. Thirdly, to design and apply a survey to explore Chilean teachers of English's experiences with students with HL. Fourthly, to analyse and systematise the data provided by the surveys. Fifthly, and lastly, to recommend strategies for the use of ICTs in the teaching of English as a Foreign Language based on Chilean educational context with students with HL.

In the 21st century, we have acknowledged the impact that technology has brought into everyone's lives, and consequently, all the benefits that people can get from it. Thus, the use of technology plays a major role within the classroom in order to include new paths to avoid inequality with students with SEN. We must take advantage of all the technological softwares and platforms that are available to be applied in the educational field. This situation motivates our research group to gather the best data in order to suggest the best strategies and methodologies to use ICTs in teaching students with HL. Through this investigation, we aim to make these valuable pieces of information more accessible to most teachers. This is a core aspect that can help spread the word about including strategies for students with HL in our everyday pedagogical practices and increase equality in our future practices.

Our research has an exploratory, descriptive, and quantitative focus/approach. Due to the flexibilities that exist in the current post-pandemic context that allow and facilitate conducting research in a face-to-face format, the research group decided to use online interviews through Google Forms as the main method to gather information. We have created three interviews that cover three distinct groups of people of our interest. The first interview is for Special Education Teachers, the second is for teachers of English as a Foreign Language, and the third one is for students with mild to moderate HL. The research team shared the surveys throughout different groups and channels on social networks to get as many answers as possible.

Upon analysis of the literature reviews carried out by the research team and the answers obtained from the surveys, we have made several suggestions (see Chapter 6) regarding the use of ICTs in the teaching of EFL to students with mild to moderate HL. A sample of these suggestions are, for example: in terms of the use of ICTs, considering that they provide teachers with many resources available to apply in the classroom, we strongly suggest the following ones: a pointer to guide students in the reading of the teaching material, using platforms that allow modifying the setting of the video as the speed of it as well as websites that let teachers

to create catchy ways of delivering the contents, and using a projector to display words so learners can differentiate them.

Regarding classroom organisation, we were able to come up with other suggestions like seating students with HL in the first row or in a semi circle. Similarly, the classroom should have good lightning and quality for the audios in the classes. In the case of audios, having good subtitles would help students with HL as well.

As for teaching strategies, we suggest always considering students' personal preferences. Additionally, paying attention to the pace in which the teaching materials are used is also important to avoid students getting lost. For this same objective we recommend writing the instructions clearly, step by step. In our work, we have acknowledged the importance that the teaching material designs have in the classrooms. Consequently, using colourful and creative materials plays a fundamental role in the teaching process.

In summary and in relation to peer collaboration, we suggest always considering collaborative planning between English teachers and Special education teachers in order to adequate methodology to cover all students' needs.

Objectives

In this section, we can find the general, as well as the specific objectives of this study. They were stated by the authors based on the aim of the research, which is to collect and suggest ICTs that promote the inclusion of students with HL in the Teaching of English as a Foreign Language.

General Objective:

To suggest strategies for the use of ICTs in teaching English as a Foreign Language within Chilean Secondary High Schools that include students with HL.

Specific objectives:

To collect strategies provided by ICTs applications for the teaching of English as a Foreign Language through a bibliographic revision inside and outside the Secondary Chilean Education that include students with HL.

To design and apply a survey to explore the experience of students with HL when learning English as a Foreign Language and the use of ICTs.

To design and apply a survey to explore English Chilean Teachers' experiences with students with HL.

To design and apply a survey to explore Special Education Chilean Teachers' experiences with students with HL.

To analyse and systematise the data provided by the surveys.

To recommend strategies for the use of ICTs in the teaching of English as a Foreign Language in the Chilean educational context with students with HL.

Chapter 1: Hearing Loss

1.1 Special Educational Needs (SEN)

In this chapter we will explore what Special Educational Needs (herein SEN) are and what they mean to different organisations and entities present in the Chilean Educational system.

Although the definition of SEN can be wide, in this research we will select Hodkinson's (2013) who defines it as "(...) a legal definition that refers to children who have learning difficulties and/or disabilities, which make it more difficult for them to learn or access education than most of the children at same age" (p. 4).

Regarding the national context, the right to education in Chile is guaranteed by Article N°19, subsection 10 of the 1980 Chilean Constitution which proposes the principles and concepts that regulate the organisation and management of the educational system. It also describes that the Chilean State has to ensure a free educational system and fiscal financing for preschool, primary, and secondary education. (Chilean Constitution, 1980)

Following this line, there are three other Laws which play a major role when referencing SEN in Chile. They are the General Law of Education N°20.370; Law Decree N°170; and Law N°20.422.

In order, the General Law of Education N°20.370 enacted in 2009 can be considered as the cornerstone of SEN in Chile. It considers and explicitly recognises principles that guide the Chilean Educational System to secure inclusion, flexibility and diversity. Additionally, it provides a definition for Special Education and establishes precise obligations the Ministry of Education has to uphold regarding SEN. All in all, it can be said that the Chilean State explicitly recognises the dynamic characteristics of SEN and the fact that they vary from one student to another, which is at the same time, fair evidence to justify any modification that needs to be made to the Curriculum when a student with SEN forms part of an educational community.

Secondly, Decree N°170 defines what has to be understood as SEN in Chile and classifies them as Permanent or Transitory. Both types of SEN coincide in their fields of application in the

way they make mention to the concept of disability in a general sense, not making any differentiation in any specific kind of disability.

Finally, Law N°20.422 establishes norms regarding the equality of opportunities and social inclusion of people with disabilities, not making a clear differentiation on different types of disabilities but including all people who fit the Law's criteria.

1.2 Hearing Loss

In the following subsection, we will explore what HL is, the characteristics, categories and degrees there are, and the medical conceptualisation of HL. In line with the WHO (2020), people who have HL are people who experience abnormal hearing functioning, which is determined by the Decibels Units (hereinafter dB) that describe the loudness a person with normal hearing is able to perceive (Britannica, 2020). Likewise, the hearing thresholds of a person with normal hearing are established starting from 20 dB or more (considering both ears). In addition, HL can be classified into different categories depending on the quality of hearing that a person can experience. Thus, the WHO categorises the levels of HL as “mild, moderate, severe, or profound” (2021), asserting that it can affect one or both ears, and that can render people undergo difficulties when communicating with others. For the purposes of this research, the levels of HL that the research team will delve upon are Mild and Moderate HL.

1.3 Mild and Moderate degrees of HL

The Centers of Disease Control and Prevention (herein CDC) from The United States exemplifies everyday sounds and noises in dB. In an attempt to offer the reader a context about what dB in daily life noises are like, the CDC (2019) ranks normal breathing at 10 dB, a soft whisper in 30dB, and a normal conversation in 60 dB. Sounds like these do not represent a threat to our hearing. Hence, the noise of a washing machine, ranked at 70 dB, which can be annoying for some people, or the city traffic around 80-85 dB, that can be even more overwhelming. In this way, when a person is exposed to noise levels up to 80 dB or above, damage to hearing is possible after two hours of uninterrupted exposure; the higher the dB, the lower the amount of exposure needed for HL. Over 120 dB, people can experience pain and ear injury.

As stated by the American Speech-Language-Hearing Association (herein ASHA) (2022), Mild HL is characterised as having a HL range from 26 to 40 dB, whereas the range for Moderate HL fluctuates between 41 to 55 dB. Furthermore, ASHA adds that people who can only perceive sounds when they are at 30 dB may have Mild HL, but if the decibels are up to 50 before a person can hear it, then it may probably be that the person has Moderate HL. Moreover, Hear-It, a Hearing Loss Awareness Organisation, states that:

[...] People who suffer from mild hearing loss will normally have some difficulties keeping up with conversations, especially in noisy surroundings.” and “[...] People who suffer from moderate hearing loss have problems hearing in many situations and will have difficulties keeping up with conversations (n.d).

Even though both levels of HL are in the first levels of loss, said levels already possess social implications and difficulties when having social interactions, making it difficult for them to follow a conversation, for example (International Bureau for Audiophonology, 1996). At this stage, if given the chance, people with HL may improve their hearing by trying hearing aids.

1.4 Medical Conceptualisation

As stated previously, HL has been extensively studied and detailed into many characteristics. Apart from measuring levels and degrees of HL using dB, there is a way to determine the type of HL a person has by identifying the affected area (CDC, 2021). Along these lines, there are four types of HL: Conductive Hearing Loss, Sensorineural Hearing Loss, Mixed Hearing Loss, and Auditory Neuropathy Spectrum Disorder. Following, we will describe the four types of HL according to CDC (2021):

1.4.1 Conductive Hearing Loss

When the origin of HL is preventing sounds from passing the outer or middle ear, it is catalogued as Conductive Hearing Loss. People who have this type of HL are commonly treated with surgery or medical treatments.

1.4.2 Sensorineural Hearing Loss

Once the hearing nerve or the inner ear is identified as the source of the hearing issue, it is considered to be Sensorineural HL. People who have this type of HL must seek medical help in order to identify the origin and the most suitable treatment.

1.4.3 Mixed Hearing Loss

When the outer, middle and inner ear, along with the hearing nerve are malfunctioning at the same time, it is reasoned that the HL corresponds to a case of Mixed HL.

1.4.4 Auditory Neuropathy Spectrum Disorder (ANSD)

There is a particular case of HL where, because of damage to the hearing nerve or inner ear, the sound that enters the ear normally, is misinterpreted and does not organise in a proper way inside of our brains. Consequently, the information that reaches the brain may be incomplete or illegible.

1.5 Hearing loss and its implications

Throughout our lives we are exposed to different sounds since we are born. The voice of our mothers, the singing of birds, the gentle sound of waves lapping. Unfortunately, in many cases, there are genetic or environmental factors that may condition our ability to hear. In a world full of sounds, being deaf, at any of their degrees, is certainly a vital disadvantage (Houston, Robertson, & Wray, 2018). Hence, the term *inclusion*, and policies based on the principle of *normalisation* regarding how inclusion should work for people with disabilities, have been improved worldwide during the last 30 years (Henríquez, Hoffmann, Iturriaga, Lissi, Sebastián, & Vergara, 2016). Following, the educational and social implications for students with HL will be reviewed. Additionally, in this section, the term HL will be used exchangeably for both Mild and Moderate grades of HL.

In the Chilean educational context, policies for inclusion, namely Law of Education N°20.370, Law Decree N°170, and Law N°20.422, serve to integrate students with disabilities (in this case students with HL) into schools, institutes and universities, allowing students to share an

educational experience with their peers, who may not have a degree of HL. Conversely, the conditions for the experience for students with HL may not be the most suitable for their learning experience. As Lissi et al. (2016, p.2) depict, factors such as: “(...) financial pressures, parental expectations, technological developments, early detection of HL, efforts aimed to improve conditions for inclusion (...)”, are all factors to be taken into account to explain a persistent upturn of students with HL in public schools and all difficulties that they may encounter along their lives.

Currently, in line with Houston et al. (2018), there is a strong concern about the pivotal deficiency of teachers with the needed expertise to address the special educational needs of students with different types and degrees of HL. Moreover, there is a critical lack of professionals with the necessary formation, lore, and prowess to deal properly with the SEN of students with HL, precisely children and teenagers who are learning English as a Second Language, ideally spoken language (Houston et al., 2018).

Nowadays, new technologies have allowed parents and teachers to anticipate if their children have any degree of HL, and therefore, act beforehand.

Chapter 2: Information and Communication Technologies (ICT or ICTs)

2.1 Definition of ICT

According to Adulkareem and Chouthaiwale (2018) “Information and Communication Technology is defined as a different set of technological tools and resources that are used to communicate, create, spread and manage information” (p. 30). In that way, ICT appears in the so-called technological age in order to help a wide variety of professions. For instance, Education is an area that is using ICTs more and more, in order to approach new technologies to students to encourage and influence their learning process. Also, the pandemic context has influenced the use of ICTs: online lessons have been an adaptation process not only for teachers, but also students. Therefore, new tools were needed to implement them in online classes to approach students to the lessons.

2.2 ICT and Education

As we mentioned before, in past years, society has undergone many transformations. One of them is the increase of the use and quality of technological platforms and devices that are applied in most people’s daily lives. The increase of ICTs has shaped people’s new forms of interacting with themselves and others; although, some of them have been negatively affected as well. Likewise, many people have been positively influenced by these. Education is one of the many areas that have benefited from the evolution of new technological tools in this new digital era. According to Assar “with ICT, learning is shifting from teacher-centred to learner-centred and can potentially be undertaken anytime and anywhere, from classrooms to homes and offices” (2019, p. 2). Within traditional classrooms, there was a single way of teaching students which was teacher-centred; however, these ways did not vary significantly, in terms of methodologies and students' learning styles. ICT came to renew these old conceptions about the teaching and learning processes and provided new ideas to reconsider the core of education.

According to Linways (2017), a web page which provides a cloud based learning platform for various educational institutions, mentioned that there are many different ways in which ICTs can be integrated into the educational field. These may include innovation by adding more technological devices, improving the quality of teaching materials, accessing more easily to digital resources and lectures and finally, using academic platforms for different learning

purposes. These resources have helped to change the core aspect of education. Using ICTs, students' preferences and needs are more considered when planning and designing teaching materials rather than prioritising teachers' own experience.

Adulkareem and Chouthaiwale (2018) stated that ICT tools have helped a wide variety of people with different learning styles to achieve their educational aims. Consequently, these digital tools can make knowledge more accessible to every student in particular.

However, using ICTs by themselves does not solve all the educational problems. An improvement in the quality of education does not entirely depend on using digital tools and platforms within the teaching materials. Assar (2019) stated that an effective implementation of ICTs has to do a combination among teachers' practices, the curriculum and the suitable ICT that the teacher plans to use. Shulman (1987) expressed that "the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented and adapted to the diverse interests and abilities of learners, and presented for instruction" (p. 8). Shulman suggests that having control over the contents, adaptations, students' needs, and preferences, methodologies and ICTs can altogether make the quality of education increase.

2.3 Use of ICT in Classrooms with students with SEN

As stated in the previous sections, researchers have found that the use of ICT can be highly beneficial in several aspects of everyday life, not the least of which is Education. Moreover, teachers and researchers have been encouraging the use of ICT in the classrooms for several years, especially when it comes to maximising the access students with different learning needs and opportunities have to curriculum and materials. As stated by the European Agency for Special Needs and Inclusive Education, "the essential purpose of using ICT in education for learners with disabilities and special needs is to promote equity in educational opportunities" (2014, p. 12). However, equity and inclusion were not always a goal within the educational system; this change in paradigm can be traced back to the idea that an inclusive classroom is one in which curriculum, teacher, and materials are carefully in sync with the special needs of each student and the common needs between them all or, as Masih and Vidyapati put it, "the idea behind inclusive education is that students with special needs will be placed in the same classroom environment as other students their age who do not have special needs" (2018, p.

248). In this manner, materials and methodologies that are good for one student should be good for every student, no matter their differences, aiming towards the inclusion and educational success of the students with SEN in a school for *all*.

Regarding ICT, many researchers have narrowed down the uses of these technologies and have gone as far as to classify the diverse types of gadgets and software within the different gaps that cultural, physical, psychological, and learning differences create. In 2016, Drigas and Ioannidou reviewed several areas of SEN listed among the sensory, motor, and learning difficulties that students might encounter. Along with the description of said areas, the authors also included a detailed comment about how and which ICT can help facilitate students' learning process. Furthermore, the authors concluded that not only can ICT aid in specific classroom performance but that "employ(ing) different ICT strategies (...) might (also) lead to an easier understanding of children's learning differences" (p. 45).

2.3.1 Advantages of Using ICT in Classrooms with Students with SEN

According to Drigas and Ioannidou (2013), "the successful integration of ICT into learning environments has the potential to benefit all students as well as students with special educational needs" (p. 41). Authors usually explore these benefits from the accessibility sphere, for example, Masih and Vidyapati (2018), defend that "ICT cannot only make learning fun and interactive, but also help in making it more accessible" (p. 249). Similarly, Gelastopoulou and Kourbetis (2017) go as far as to affirm that "in the case of students with special educational needs the utilisation of ICT in a variety of cases is the only way to access knowledge, information, the curriculum and learning in general" (p. 3). Moreover, they state that this "access to the curriculum through ICT (...) promotes respect, acceptance of diversity and expansion of differentiated pedagogy" (p. 9). Accordingly, Abed (2018) found through research that the access enabled by ICT "can prove valuable in enhancing levels of motivation and accordingly enhance confidence and self-esteem" (p. 14). In this regard, Gelastopoulou and Kourbetis (2017) write that ICT-based learning "helps to remove obstacles to the education of students with disabilities, meet the objectives of the curriculum, foster a sense of competence and increase self-esteem in students" (p. 9). This, according to Masih and Vidyapati (2018), is because "computer-based instruction can give instant feedback to students and explain correct answers" (p. 251). and "a computer is patient and non-judgmental, which can give the student motivation to continue learning" (p. 251).

Furthermore, Montaña and Vera (2012) add that “students with (...) special needs are likely to benefit from additional educational services such as different approaches to teaching or the use of technology” (p. 79). And this liberty provided by a diversity of approaches “allows students to approach learning in their own way and to move at their own pace.” (Chaidi, Drigas & Karagiannidis, 2021, p. 190). Thus, the authors find that:

Technology is the guarantee for the active participation of the student in the learning process by transforming him from a passive receiver to an active participant, therefore more independent, autonomous and enables him to approach learning according to his own abilities and expectations (p. 187).

In the same manner, Abed (2018) concludes that “ICT could facilitate student independence, enabling e-learning environments and individualised instruction to be used” (p. 14).

2.3.2 Things to Consider when Applying ICT in the SEN Classroom

Nevertheless, although “unquestionably, in considering the domain of inclusion, ICT is recognised as a positive and pivotal factor in relation to the involvement of consistent social inclusion and teaching (...)” (Abed, 2018, p. 14), for this effort to succeed, there are some aspects to be considered while trying to use ICT for special education. Gelastopoulou and Kourbetis (2017) warn us that “regardless of the valuable contribution of ICT to promote inclusive learning, if not used appropriately and (if it) is not accessible to all students the risk of widening social inequalities is evident” (p. 4). Later, they explain that “given the rapid development of technology and its increasing utilisation in schools, conditions must be created to enable every student to have equal access to technological innovations” (p. 9). But it is not all about the availability of the technologies. Abed (2018, p. 15) and Chaidi, Drigas, and Karagiannidis (2021, p. 189) agree that along with access to the equipment, students need knowledge and training in the use of different ICT and time available with teaching staff, so their performance can be aided and monitored.

Finally, Abed (2018) concludes that “there is a need for all teaching staff to place emphasis on ICT when teaching” (p. 14) and for this emphasis to be effective, he finds that “teachers need to be better educated in regard to ICT for SEN, with special education teachers needing to be viewed as teachers’ supervisors” (p. 15). Consequently, instead of special education teachers working individually with each student with SEN, they would support and guide teachers in the preparation and planning of their inclusive class.

Chapter 3: Use of ICT in teaching English as a Foreign Language to students with Mild to Moderate Hearing Loss

3.1 Use of ICT for the teaching of EFL for students with HL: International Context

The process related to teaching EFL for students from the deaf community outside Chile has gone through numerous stages to achieve a correct application in terms of methodology. The main reason related to that has to do with the social conditioning of the deaf community.

Linguistic studies like English Literacy for Students with Hearing Loss by Molina (2020) explain that many people from the community do not contemplate the idea of learning a third language as an option. This may be so, due to the fact that they cannot make a correlation between learning a third foreign language (considering Sign Language as their second) and incorporating it into their daily life; nor do they find a need for it in their academic lives.

In terms of International policies, most governments ensure the main focus of their special programs for the community is, in fact, to raise their level of English language command. In the United States, for example, we find reasons such as the following example:

The Secretary believes it is important that State and local education agencies, in developing an IEP for a child who is deaf, take into consideration such factors as; communication needs and the child's and family's preferred mode of communication; linguistic needs; severity of hearing loss and potential for using residual hearing; academic level; and social, emotional, and cultural needs including opportunities for peer interactions and communication (U.S Department of Education, 2020).

This conclusion is based on the studies about the linguistic abilities inside the community and their lower level of English proficiency in comparison with people outside the community. The results of those studies point to the lack of cognitive and social skills development during childhood, in which deaf people or people with HL were excluded from certain parts of cultural development, making their processes different from the rest and, as consequence, affecting areas such as the development of abstract thinking, the capacity of seeing things from another perspective, and the understanding of some concepts linked to Pop culture as well.

According to Individuals with Disabilities Education Act (IDEA), the term “child with a disability” includes the following parameters:

In general the term “child with a disability” means a child—with intellectual disabilities, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this chapter as “emotional disturbance”), orthopaedic (sic) impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and who, by reason thereof, needs special education and related services (2018).

In the United States, access to inclusive information was not guaranteed by the state until 1975, the year in which the IDEA act was originally founded with the name EHA -Congress enacted the Education for All Handicapped Children Act. IDEA is currently working on the assurance of inclusive methods and strategies for public schools in the United States taking into account the parents' reality and offers a program in which the whole family is in constant help in relation to their child's necessities through public education. Regarding the use of ICTs in education for Deaf students, the U.S government has not mentioned any specific use of them by the community, thus, it does not mean that there is no use of ICTs; it is important to highlight that the scope of IDEA is related to public schools and does not provide any information about private education in the United States.

In relation to Mexico, we have the “General Law for inclusion for people with disabilities”, which consists of a series of laws focused on increasing people's participation in society. According to the website of the government of Mexico, the definition of HL falls under an umbrella term named “Sensorial Disabilities”. According to the General Law for the Inclusion of People with Disabilities, a sensorial disability

is the structural or functional deficiency of the organs of vision, hearing, touch, smell, and taste, as well as the structures and functions associated with each one of them, and when interacting with the barriers imposed by the social environment, can prevent their full and effective inclusion in society, on equal terms with others (2011, p. 2).

It leaves to the context of each municipality the fulfilment and coverage of this series of laws.

Regarding the topic of this seminar, Mexican Sign Language is officially recognized as a national language and is part of the linguistic heritage of the Mexican nation. Mexican Sign Language is officially recognized as a national language and is part of the linguistic heritage of the Mexican nation (Government of Mexico, 2019).

From another perspective, the prime focus of the government on deafness is more clinical than social -in contrast with the view in the U.S. In a paper titled “The teaching of the deaf youth in a bilingual educational context”, from 2017 by Mirna Martinez Solís, a former teacher from Puebla’s University. She is an active member of the Network of teachers from Latin America and the Caribbean and also has a master's degree in Educational Development. Martinez Solis says that the Mexican government wants to take a more rehabilitative role with the students through the reinforcement of five main skills, rather than a more inclusive role. This point is also related to the sense of levelling up the linguistic abilities in the group to achieve the same as the people who do not have HL.

According to the Mexican Educational Ministry, the five main skills include, firstly, processes related to reading and text interpretation. Secondly, processes related to text creation. Thirdly, the production of oral texts and participation in oral skills related to the L1 and L2. Fourthly, the knowledge concerning language: its characteristics, functions, and uses along with the child’s attitudes towards language.

In addition, Martinez (2017) states that deaf children’s parents, who were interviewed to obtain their perspective about their children’s education, claimed that they do not know how to deal with environmental disability. The parents stated that they cannot teach their children because they lack communicational tools, which widens the linguistic gap between their children and other children.

Meanwhile, in Switzerland, the development of inclusive models for the HL community has been through different processes in order to achieve the actual standards. During the last five decades, the Swiss model changed drastically in relation to its public policies in terms of inclusion for the community. The educational model started to consider deaf students a priority just like in the U.S.A in 1970 in order to incorporate them. But despite their good intentions, there were some issues related to the deaf culture that made communication between the

students and teachers difficult. As an illustration, “until the end of the 1970s, the spoken language was, in most countries, the only form of communication accepted in classrooms for deaf children” (Moore, 1987; Power and Leigh, 2000; as cited in Lissi et al., 2012).

The widely accepted explanation for the lack of success in inclusiveness in educational processes for the community has to do with the linguistic barriers inside society. From the beginning of the 70s, the government of Switzerland realised the importance of restructuring their educational models, by that time the concept of *total communication* had been spread around the countries. TC means that the teachers use other ways of expression meanwhile they are talking such as gestures, movements, among other visual elements. By that action, the student would be more in context in relation to the lesson and it is not necessary to explain to them the class topic aside from the rest of the class, in simpler words, you make your students participate in the class as an active agent, not as an observer.

In the next decade, teachers from the community designed the “*Swedish signed*”, which was a communication tool in which the words both speaking and signed join together. The idea did not work as it was expected due to the differences between sign language and its application in a determined context. Also, one of the main characteristics of sign language is the lack of abstract ideas, so the idea of mixing both cultures into one language did not contemplate the deaf community’s reality.

At the end of the 1980s, SL started to be considered an official language. This has to do with a change of perspective respecting SL due to the recognition of the HL and their culture as part of society, and as a consequence, a new perspective was developed. In response to this new paradigm, a new model was born in which sign language is not considered a language outside of people who do not communicate through the language but as an L1 in the deaf community, thus, an opportunity to develop an L2 process.

It is important to highlight that since 1994 the national curriculum has been changed by a new one that estimated that after a certain amount of years (ten) the student with HL is able to communicate in their L1 (sign language) and L2 as well. In this context, English is considered an L3 and is mandatory for all students around the country, independent of their condition.

3.2 Use of ICT for the teaching of EFL for students with HL: The Chilean Context

The first public school for Deaf students in Chile was created in 1852 (Oviedo, 2006). In the beginning, these special schools were focused on oralism as their main approach. Afterwards, in 1997, a group of researchers from "Universidad Metropolitana de Ciencias de la Educación" (UMCE) raised the idea of a bilingual bicultural education for deaf people in Chile. Furthermore, the same researchers assumed that considering sign language in education was an act of respect and acceptance of the cultural values of the deaf community (Adamo, Acuña, Cabrera, & Cárdenas, 1997). Thus, law 20422 recognises Sign language as the official language of deaf people (Ministry of Planning, 2010). In this way, by 2012 researchers established that in schools “there is a diversity of pedagogical approaches, which correspond to different ideologies about education and deaf people: oralism, total communication, auditory oral, bicultural-bilingual” (Lissi, Svartholm & Gonzalez, 2012, p. 305). Nowadays, education for deaf students considers a bilingual approach considering sign language as a first language and Spanish as a second language (Ministry of Education, 2022). Currently, in Chile, there are only 6 schools for deaf people exclusively due to the migration of students to regular schools. Indeed, there are 2227 deaf students in the educational system, 17% study in special schools and 83% in regular schools (Ministry of Education, 2022).

Educational regulation in Chile states that education must be based on the national curriculum. Specifically, Decree 83/15 establishes that opportunities and adaptations must be provided so that all students; in spite of their condition, can access, participate, and make progress in the national curriculum (Ministry of Education, 2022). In this way, deaf people must be included in regular education. Thus, in order to include students with SEN in common schools, Chilean education has developed the school integration project (PIE) which provides human resources to support students with SEN. Furthermore, PIE aims to comply with the general law of education 20370 which establishes that schools must “deliver relevant and significant educational responses to the student body as a whole, regardless of their condition” (Ministry of Education, 2009). However, only 20% of schools with PIE have a deaf educator or sign language interpreter (Ministry of Education, 2022). As a result, it is difficult for deaf students to find the proper school.

English is taught in Chilean Schools as a foreign language. Decree 81/04 establishes that education has the responsibility of including strategies for the development of competences to

enrich the cultural, social, and working life of young people, as it is learning a foreign language, in this case, English. Hence, Learning English as a foreign language (EFL) is present in the national curriculum for education and it is mandatory in public schools from 5 grades of basic education to 4 grades of high school (Ministry of Education, 2004). As a result, as aforementioned, students with SEN also need to learn EFL since they follow the same curriculum as common students but with adaptation according to their needs.

Through the General Education Division (2022), the Ministry of Education (herein MINEDUC) has provided orientations for schools with deaf students, which states that the approach to the learning of the English language is communicative since it aims at the meaningful and contextualised use of the language, in writing, use of vocabulary, and in the use of ICTs. Additionally, it states that the learning of EFL is guided by international standards like the Common European Framework of Reference.

MINEDUC suggests that “the subject must rely on (...) reading comprehension and writing (...). The use of images as well as the language in context to develop written communication is essential” (2022, p. 36). As for the learning objectives, MINEDUC (2022) states that the subject requires the consideration of written English expression only, which means that it is necessary to prioritise and omit some learning objectives. It is relevant to recall that these orientations were designed for deaf students, and although some of the suggested guidelines, such as the use of images can be applied despite the level of HL, there is no evidence of orientations for the learning process in English as a Second Language (ESL) of students with mild to moderate levels of HL, specifically.

Concerning the use of ICTs, from 2012 to 2015, MINEDUC and its Innovation Centre developed a project named “ICT and Diversity”, in which several resources such as interactive boards, laptops, film cameras, among others, were provided to schools with deaf students (Mineduc, 2022). Regarding the project and the resources provided, according to Román (2017), “80% of the teams stated that they eased the visual delivery of the content and motivated students” (p. 67). Nevertheless, “the project has to improve in terms of obtaining evidence or better instruments that allow to show that they (students) are, in fact, learning or strengthening certain competences or cognitive abilities and ICT” (Román, 2017, p. 60) .

In July 2022, MINEDUC made a call to apply to a new project named after “strengthen of conditions to foster the learning reactivation through pedagogical innovation in special educational establishments” whose main objective was to provide technological devices and assistive technologies that could reinforce the teaching-learning processes as well as the participation of students. Special schools that teach students with HL could submit an application to be beneficiaries of the proposal (MINEDUC, 2022).

The aforementioned project and “ICT and Diversity” have been two of the main projects driven by MINEDUC which includes the implementation of ICTs in the education of students with HL. Besides these, there is no evidence of a proposal for this category directed neither to ESL nor to students with mild to moderate HL exclusively.

Chapter 4: Methodology

This research has an exploratory, descriptive, and quantitative approach. Firstly, it is exploratory as it aims to address a specific phenomenon from a new perspective (Singh, 2021). It is also exploratory because one of the objectives is to search for information about ICTs and their implementation in EFL classes for students with HL. Secondly, it is descriptive as it seeks to provide a precise description of the status of a phenomenon (Burke Johnson & Christensen, 2014). In this case, the purpose of this work is to study the subject based on the analysis and measurement of the variables without intervening or controlling the conditions in which this phenomenon occurs, which is inherent to the descriptive research design (Mertler, 2016). Thirdly, it is quantitative because it examines the relationship between variables, using instruments to measure data and statistical analysis procedures (Creswell & Creswell, 2018).

In other words, this research is exploratory because it seeks to inquire about experiences, strategies, and concepts that will help to expand on the studied topic. In addition to this, it is descriptive and quantitative because it aims to describe the research topic rather than explain why it occurs through the collection of numerical data. Thus, this approach allows for discovering new ideas that can contribute to a deeper understanding of the research topic (Swedberg, 2020), taking into account the experiences and opinions gathered from people in relation to this.

4.1 Participants

The research group agreed on three criteria when designing the surveys. These criteria were: English Teachers, Special Education Teachers, and Students from different regions of Chile, and any type of school: public, subsidised, and private.

The final number of participants were three English teachers, twenty-six Special Education teachers who answered the online survey from different types of schools (public, private and mixed), and thirty-one students or former students with mild to moderate HL.

4.2 Instruments

The research group decided to use online surveys as the main method of data collection for this work. Online surveys are the most prevalent in educational research because of their many advantages among the different modes of gathering information. Cohen, Manion, and Morrison (2018) highlight the following qualities: firstly, they are low-cost and quick to distribute and implement; that is to say, they offer real-time information collection and processing. Secondly, they allow access to broader and more diverse populations, which means a greater response rate. Finally, they are convenient for participants, as they can respond at their own time and location.

The research group decided to implement three online surveys in order to obtain information from the different population groups relevant to this work. Hence, the first survey (see Appendix A) was directed to Special Education teachers, the second to teachers of English as a Foreign Language (see Appendix E), and the third was addressed to students or former students with mild to moderate HL (see Appendix I). Each survey was organised and designed according to the characteristics of the participants. Firstly, the survey for Special Education teachers was divided into three sections: Section A comprised questions related to general information about the respondents, Section B gathered information on their academic background and experience with the use of ICTs, and Section C consisted of questions regarding their professional experience and training. Secondly, the survey for EFL teachers was divided into three sections: Section A collected general information about the teachers' place of work; Section B had questions referring to their previous training regarding the management of strategies and ICTs, and Section C gathered information on their professional experience in the matter. Thirdly, the survey for students and former students with mild to moderate HL had two sections: Section A was composed of four questions corresponding to general information about the participants and section B corresponded to ten questions about their experience in the process of teaching and learning English as a Foreign Language.

Another significant aspect to mention regarding the instruments of this research refers to the design and structure of the surveys. Since this work is quantitative, the majority of the questions in the surveys were developed using the same approach. Consequently, the three surveys included Yes/No multiple choice and questions with a Likert scale in their design. According to the Department of Psychology of East Carolina University (2015), the Likert scale is a

measurement method used by researchers with the aim of evaluating the opinion and attitudes of people. The three most widely used types of scales to measure attitude variables are the Likert scale, the semantic differential, and the Guttman scale (Hernández Sampieri, Fernández Collado, & Baptista Lucio, 2014)¹. In the first place, a Semantic differential scale should be used to qualify the object of study based on a set of extreme adjectives, with respondents choosing the one that best suits their opinion, while the Guttman scale is used to gather the views of the respondents on a particular topic or event from hierarchically arranged statements, which show varying degrees of intensity of a given attitude (Hernández Sampieri et al, 2014)². On the contrary, the Likert scale makes it possible to measure an individual's opinion on a subject, the degree of importance they attribute to an aspect, and the probability that they will perform an action in the future, among other things. Equally important, it is an easy-to-apply measurement technique that provides clear and concise information that is easy to interpret.

Alternatively, in accordance with the objectives previously stated regarding the need to explore students' and teachers' experiences on the topic, the research group decided to incorporate three open questions in the surveys addressed to Special Education teachers and students with HL. The data obtained from these open questions were organised into categories and examined using the content analysis technique. Cohen, Manion, and Morrison (2018) identified content analysis as a method that “takes texts and analyses, reduces and interrogates them into summary form through the use of both pre-existing categories and emergent themes in order to generate or test a theory” (p. 675). In other words, this research technique analyses information through meaningful categories and themes to draw theoretical conclusions from a text. This coding and categorization help to measure and compare the information obtained in the data collection, which is why the research group used it in the data analysis for these specific questions.

The instruments used for this research were validated by UMCE professors from the Special Education and English departments (see Appendices C, G, K). Subsequently, the group received comments and suggestions from the evaluators, which were considered in the final design of the instruments (see Appendices D, H, L).

¹ Loosely translated by the research team.

² Loosely translated by the research team.

4.3 Procedure

The research team agreed to conduct the participant surveys using Google Forms, which allowed them to collect efficient and prompt answers from participants from some regions of Chile. Therefore, the team expected to obtain an overview of Chilean Education related to the use of ICTs in an inclusive EFL classroom with students with mild to moderate HL. Additionally, social media platforms like Facebook, Instagram, Whatsapp, and Gmail served as a way to get information from people of many ages, locations, and socioeconomic and educational backgrounds.

The survey was released and shared from August 16th to October 7th. A message inviting respondents to complete the survey was sent along with a brief summary of the study and a disclaimer noting that the research team would only use the information they obtained for academic purposes. The survey's link and message were mostly shared on various TEFL and education-related Facebook pages and groups in Chile. However, there were some individuals who met the requirements, and they were personally contacted via Instagram, WhatsApp, and Gmail.

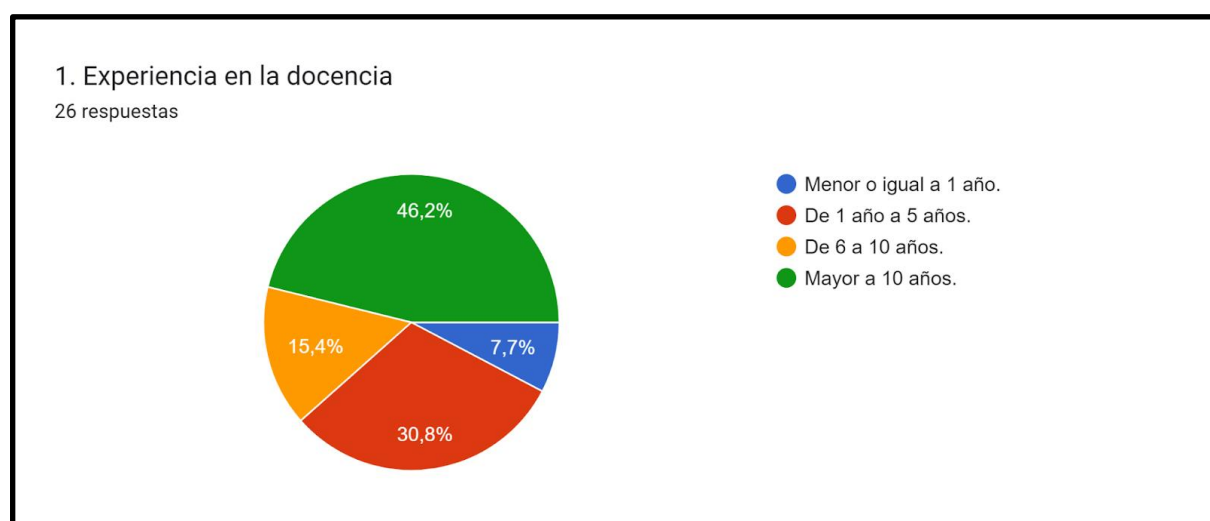
Chapter 5: Data Analysis

5.1 Special Education Teachers' Survey Results

The research group designed a survey for Chilean Special Education Teachers titled “Suggestions for the use of ICTs in an inclusive EFL classroom with students with HL in Chilean schools”. The survey has three different sections: “Section A” that asks for personal information, “Section B” that asks questions about teachers’ academic history and their current contexts. Finally, “Section C” asks questions about the teachers’ professional experiences in this area. It is worth mentioning that every time that the word “student” appears in the survey, it refers to students with HL from mild to moderate. We received a total of twenty six answers.

We decided that this survey would be written in Spanish language for better the comprehension of Chilean Special Education Teachers, who may not speak English. Nevertheless, each question was translated for better understanding of other English-speaking audiences.

1. Experience in teaching

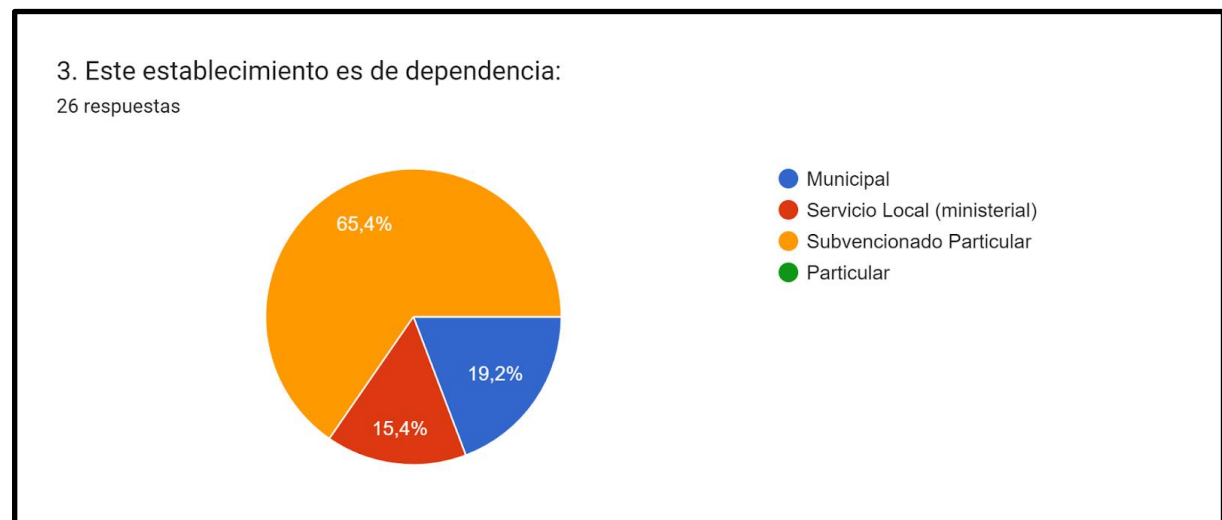


The majority of the teachers have been in the system for ten to more years (46,2%). In second place, we have those who have been in the educational formal system for twelve months to five years (30,8%). In contrast, the minority of the survey respondents can be found between two categories: Between six and ten years (15,4%), and, less than twelve months (7,7%).

2. School/Institute where you work:

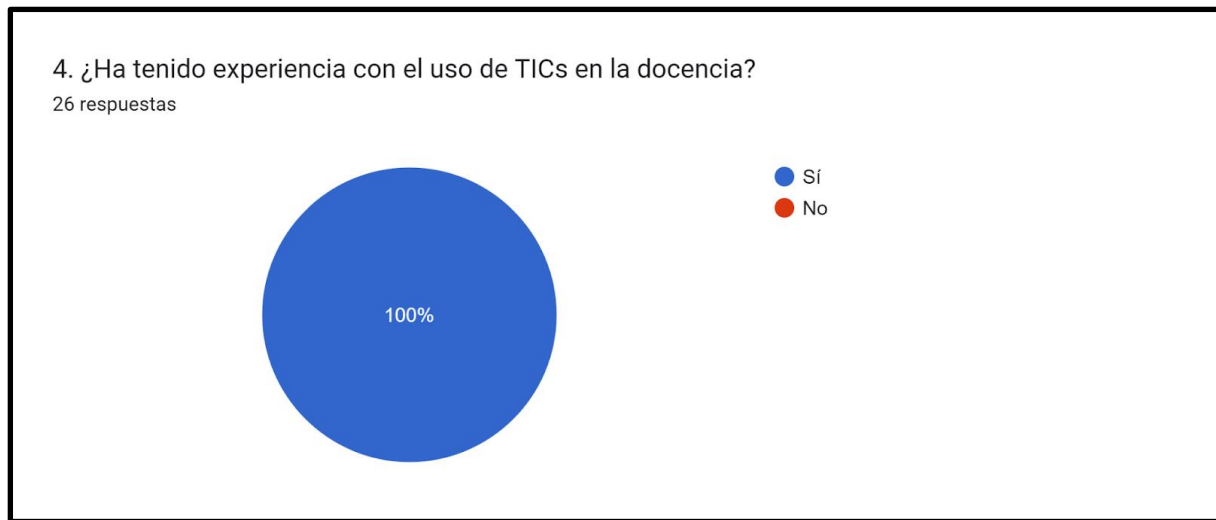
In this question, there are 25 of 26 answers where the Special Education Teachers have to write the name of the school or institute where they work. We obtained answers from 15 different schools. Teachers from Poeta Oscar Castro school provided five answers. Following that, teachers from Piamarta school issued four answers. Next, we obtained three answers from Juan Wesley's School. Lo Hermida school and Nueva Extremadura school registered three answers each. Finally, ten different schools provided one answer each.

3. This establishment is dependent on:



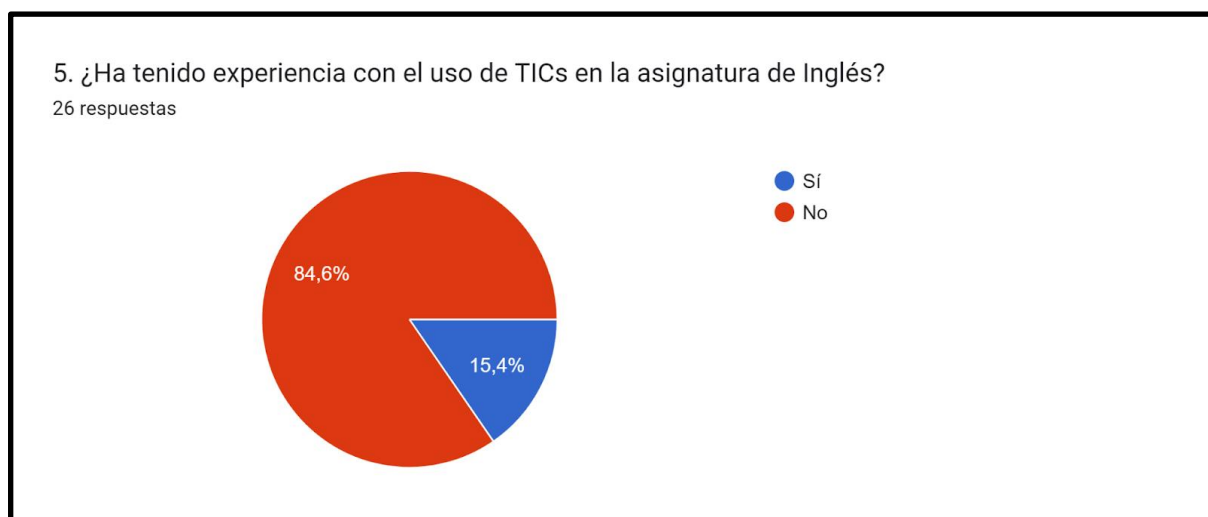
As the graph portrays, the majority of the teachers' workplace centres are publicly subsidised with 65,4% answers. Followed by public schools with 19,2%. Afterwards, local services schools with 15,4%. Finally, we did not obtain any answers from Private schools in this question.

4. Have you had experience with the use of ICTs in pedagogy?



The research group agrees that all the participants have experiences with ICTs since the Chilean educational system has an innovation centre, part of MINEDUC which belongs to the project called “Enlaces”. This project has been running in Chilean schools since 1992 and its main objective is “to integrate ICTs in the school system to improve learning and develop digital skills in school communities” (Centro de Innovación, n.d.). Furthermore, there are other projects like *Aulas conectadas 2022* (Connected classrooms, in English), which complement the ICTs that school already have with internet connection, and *Tecnologías de Acceso Universal para la Educación 2022* (Technologies of universal access for Education) with the objective of provide technological equipment and training actions regarding ICTs for teachers. As a result, Chilean Education offers diverse options to include ICTs at schools, so the majority of the teachers have experience with technologies.

5. Have you had experience with the use of ICTs in English?



In the last question, we can notice the percentages respecting the use of ICT change when it comes to the use of ICTs for teaching EFL. In contrast, the graphic shows that only 15,4% of teachers have experience using ICTs to teach EFL. In a recent research, Osorio and Robles (2021) affirm the following: “English, as a subject, and Special Education coexist in parallel. That is to say, English teachers and Special Education Teachers do not work together in order to facilitate the teaching-learning process” (p. 46). In this way, the research group agrees that the majority of Special Education teachers have no experience with ICTs in the area of English subject because the majority of schools pay more attention to the subjects of language and mathematics which are the ones included in the national evaluation “SIMCE”.

In addition, based on the study Comparative analysis of ICT subjects in initial teacher training in Chile between 2012 and 2018 (Tapia, Campaña & Castillo, 2020) the experience of the use of ICTs varies concerning the use of these technologies related to the subject. Therefore, the use of it is strongly influenced by the discipline and its contexts. Hence, it is also important to highlight the lack of evidence of the use of ICTs by Special Education teachers in the subject of English.

Another reason behind the absence of experiences with English is strongly related to the nature of the School Integration Program (SIP) which responds to a subsidiary state policy that leaves freedom to prioritise the use of resources around the curriculum of each establishment:

Article 96.- The supporters of the establishments, even when they develop a school integration program in collaboration with a special school, will be responsible for the

mentioned program for all purposes before the Ministry of Education and must request the total amount of the subsidy of Differential Special Education and/or special educational needs of a transitory nature (Decree N°170, 2010).

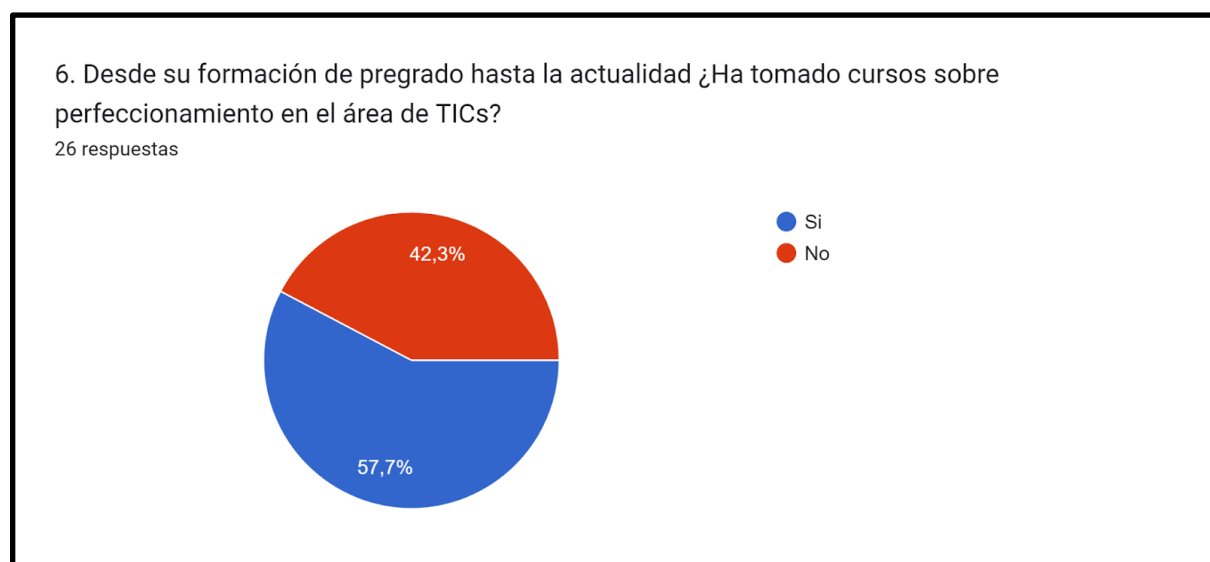
By the given evidence on the use of resources based on the criteria of each establishment, we must also add the bias behind the use of ICT in the classroom with students with SEN. A study carried out by the Ministry of Education in 2021 which consisted of a standardised test called ICT SIMCE concluded that the limitations regarding the use of technologies in students limit their uses and effectiveness within the subject. The study showed that 75% of the students can do work related to basic skills, but only 33,3% can develop complex work related to cognitive skills. If we take into account that most of our surveyed teachers do not work with ICT at the accompaniment in English lessons, we could sense that most of the students would be into the 75% of students who do not develop more complex processes during the use of ICT, affecting their relationship with the subject and decreasing their chances to developing better abilities. As Chávez and Jaramillo stated:

Another dimension of the relationship between ICT and education is related to the skills or abilities that students have to use these tools, called computer literacy, media literacy, or ICT skills in English. This area is related to the development, measurement, and comparison of skills and/or capacities in the use of ICT in teachers and students (2015, p. 222).

The development of skills and materials within the classroom is always supported by a theoretical framework, which means that it is always conditioned to a production context based on a curriculum, whether prioritised or hidden. About the subject of English and how it has been evidenced, there is no interest in positioning it within the subjects that need more support concerning students with special educational needs, regardless of whether it is within a category as important as language. As it is indicated in Characterization of Good Practices in Initial Teacher Training in ICTs by Hepp, Relpé and Severín (2012) they highlight the barriers to integrating ICTs in Initial Teaching Training in Latin America, the absence of incorporation of ICTs as a learning tool for the subjects, the constant need to justify using ICTs during the lessons not only as a secondary instrument, and the disconnection between pairs respecting the use of ICTs in their contexts.

In conclusion, we all can agree that the use of ICT in the classroom is correlative concerning the demand of English on the curriculum, in other words, the importance of the subject has to be for whoever designs the curriculum to prioritise it as a valuable matter to develop.

6. Since you started your undergraduate degree, have you taken programs for the improvement of ICTs?



The graphic depicts that only 57,7% of the people have taken courses to master in the area of ICTs. Meanwhile, the other half (42,3 %) have not taken any course related to mastering the area.

In relation to the improvement of the use of ICTs by teachers, we have that since 1992 and to date, the government launched a project called *Programa Enlaces* which was dedicated to the digital literacy of teachers and students.

About ICTs' impact in education, based on the work carried out by Campaña, Castillo and Tapia (2020), the use of ICTs must also be conditioned by those who use them and their constant over time, under this premise we must take into account the point above mentioned in the analysis (question number five of the present survey) which mentions that each subject and therefore the materials that are occupied in these are under a theoretical framework called curriculum which conditions its application and operation.

Thus, their inclusion in the IPT implies reviewing their role in promoting learning and their contribution to a paradigm shift, where they move from a teaching centred on reproduction and student passivity, to one characterised by the production of students

and focused on teacher-student interaction and between students. In this sense, teacher training for the sole use of technology is insufficient and must be modified towards training that allows them to function in this new context (Cabello, Ochoa & Felmeret, 2020, p. 5).

Concerning the previous point, we must take into account that each context of initial teacher training varies, that is, each university and subject responds to a different reality. Respecting the last point, based on Digital technologies as a pedagogical resource and their curricular integration in initial teacher training in Chile, Cabello et al. (2020), the relation with teachers' use of ICTs is strongly linked to their previous formation. It does mean the way universities take the importance of ICTs in their professional formation impacts teachers' behaviours on ICTs. Another important fact is despite the amount of accessibility to ICTs, there still to be a lack of pedagogical innovation related with the use of ICTs (p.5).

As Silva and Miranda (2020) explain, the implementation of ICTs in educational contexts in Latin America can be subdivided into two categories: Initial and Advanced. The first refers to the application phase within a legal framework and its respective stages along with a series of policies for its assimilation within the curriculum centred on teacher training in universities. While advanced refers to the integration of all the elements from the Initial phase within the initial teacher training and its evaluation mechanisms both during and after the teaching training process.

For the success of ICT in the Initial Teaching Training, Tondeur points out the importance of complementing theory and practice, modelling the use of ICT, reflecting on the role of technology in education, planning of activities and development of digital resources, collaborative instances between peers, integrating technologies into the curriculum, etc.

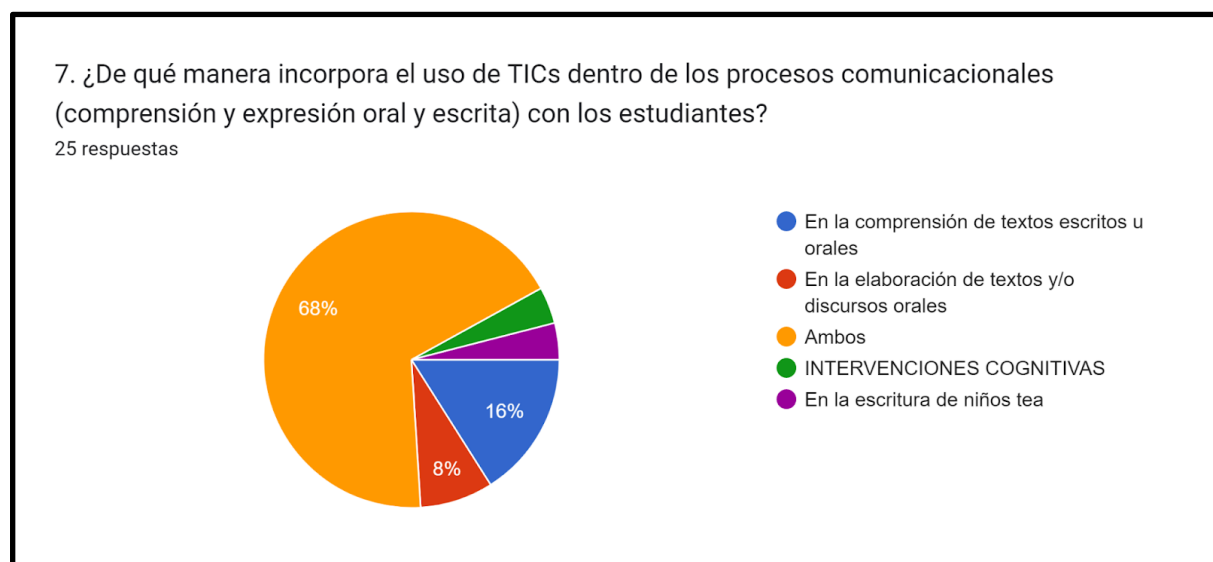
Based on the chart in which 42,3% of the participants admit not having taken any improvement course in ICTs, we could conclude that there is a lack of preparation for ICTs respecting its teaching during and after the initial teaching training at universities.

In order to respond to the lack of preparation in which we were into, the government started to launch programs in a manner to promote the use of ICTs and its development. Those programs can be found on the curricular standards for teaching training and in standardised tests like ICT SIMCE or *Evaluación docente*. Another important element is the existence of a governmental institution such as The National Accreditation Commission (NAC) which certifies both public

and private universities along the country. Furthermore, as it was mentioned by Cabello et al. (2020), Mineduc has been trying to promote the incorporation of ICT training in the Initial Teaching Training programs through policies, such as “Preliminary Report of the Commission on Initial Teacher Training” (2005), “Framework for good teaching” (2008), “Guiding Standards for Graduates of Pedagogy in High School Education” (2012), and “Guiding Standards for Graduates of Pedagogy in Elementary Education” (2012).

Finally, we conclude that the results from the chart number six reflect the current context of teachers’ relationship with ICTs in a context in which there are inconsistencies in relation with the Initial Teacher Training processes related to ICTs and the lack of public policies respecting the assuring of both quality and monitoring of those contents over time.

7. In which manner do you incorporate the use of ICTs within the communicative process (understanding and producing English, both orally and in writing) with the students?



This chart portrays that 100% of the teachers have implemented ICTs in the teaching of English language skills. Then, it shows that 68% of the people claimed that they used ICTs in both communicative processes (oral and written both understanding and expressing) (coloured in orange). Next, it shows that 16% of the people claimed that they used ICTs in the understanding of written or oral texts. (Coloured in blue). After that, it shows that 8% of the people claimed that they used ICTs in the creation of written texts and verbal speeches. (Coloured in red. Finally, it depicts that 4% of the people claimed that they used ICTs in the writing processes

of children within the autistic spectrum (coloured in green) and the other 4% claimed that they used ICTs in cognitive interventions (coloured in purple).

Research has proved the effect of emotions in language learning. Having a safe environment for learning enhances students to be part of their educational process. According to Nouredine (2017), “the use of ICT may provide a learning environment where motivation is maintained and enhanced” (p. 112). Consequently, including ICTs strategies and methodologies are an effective way to keep the motivation last over the lessons, which is considered a key concept within the learning process. Additionally, according to Bećirović, Brdarević-Čeljo & Delić (2021) ICTs can influence students towards self-directed learning in different areas. This situation would also affect students’ emotions regarding their own learning processes that may keep their motivation to keep learning EFL.

At the same time, researchers have proven that using ICTs for producing output is an effective way of oral and written both understanding and production. According to Nouredine, thanks to ICTs English learners can obtain additional and authentic communication input (2017). In a world where globalisation is an important feature, ICTs can help people to keep in contact with different people and their cultures all around the world that can help us diversify the input that students receive.

8. Name the ICTs that you have implemented within the classroom

The following chart portrays different ICTs that Special Education teachers have used within the classroom. In order to classify these answers, we extracted five categories: technological devices; Websites, apps and softwares; gadgets; ambiguous; and irrelevant.

*All the answers were copied verbatim.

Technological devices	● Celular, computador, proyector, páginas web de juegos, YouTube, Spotify ● Computador data programas juegos en línea ● <i>Computardor</i> proyector ● tv, video, radio, audios, caset, cd, data, celular, computador, <i>software</i> educativo ● He utilizado computador, tablet, páginas web, juegos, entre otros.
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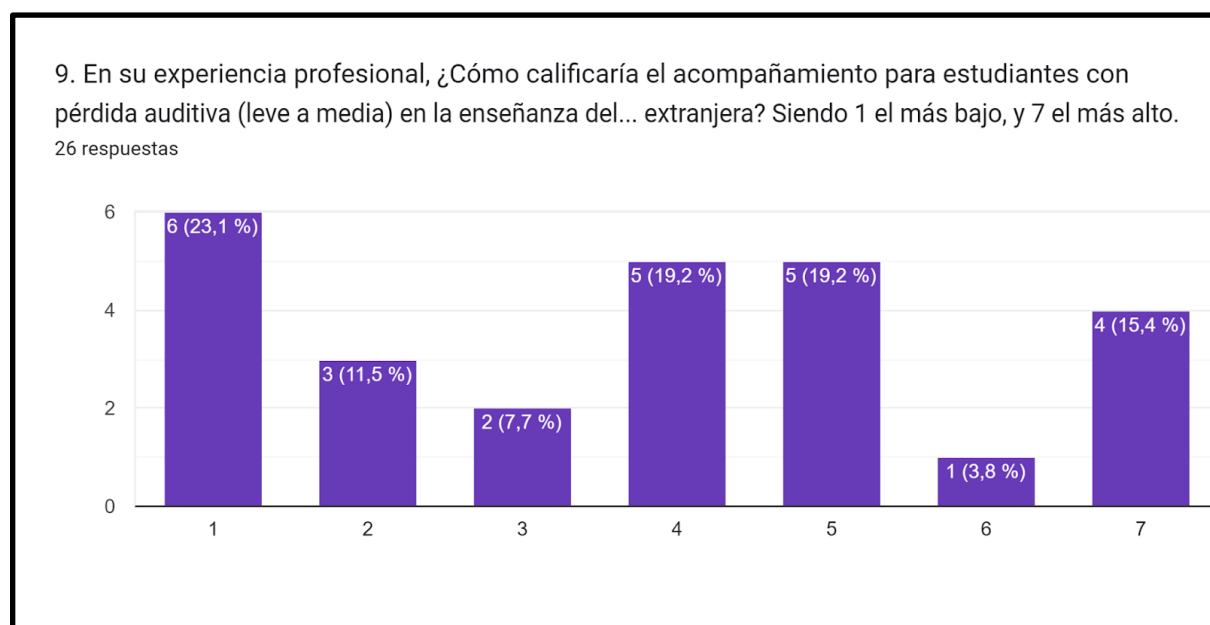
	● <i>Uso.computadoes</i> , tables, <i>power ponit</i>, videos youtube etc ● Tablet, computador, celulares ● Tablet ● PPT, <i>cunta cuentos</i>, <i>proyectación</i> de guías, debates, <i>imagenes</i>, juegos de estrategias, el celular para buscar información, etc. ● computador, pizarra magica
Websites, Apps & Softwares	● YouTube, Kahoot, powerpoint, canva, software de matemáticas (multiplicaciones), ruleta de preguntas, comprensión lectora, juegos en internet dependiendo de la materia.. ● Celular, computador, proyector,páginas web de juegos,YouTube, Spotify ● Recursos Canva - Software interactivos-Pausas activas ● PPT interactivos y actividades en línea ● entre las herramientas y programas informativos que utilizo están las redes sociales, correo electrónico, la nube, juegos en línea, kahoot, etc ● <i>Pawer</i> interactivos, videos, juegos interactivos ● Plataformas online de ejercicios lúdicos, páginas con contenido audiovisual, ● Wordwall ● Ppt ● Programas, videos, juegos en <i>linea</i> ● tv, video,radio, audios, caset, cd, data, celular, computador, <i>software</i> educativo ● He utilizado computador, tablet, páginas web, juegos, entre otros.Redes sociales, herramientas educativa digitales, Classroom ● CANVA- KAHOOT

Gadgets	● Celular, computador, proyector, páginas web de juegos, YouTube, Spotify ● Computador data programas juegos en <i>línea</i> ● <i>Computador</i> proyector
Ambiguous	● Audiovisual ● He utilizado computador, tablet, páginas web, juegos, entre otros.
Irrelevant	● Recursos Canva - Software interactivos-Pausas activas ● PPT, <i>cuentacuentos</i>, <i>proyección</i> de guías, debates, <i>imagenes</i>, juegos de estrategias, el celular para buscar información, etc.

As it was mentioned before, in Chile there are projects to integrate ICTs in schools as *Enlaces* since 1992 and “Universal access technologies for Education” since 2022. Furthermore, special education teachers have affirmed that all of them have experiences with ICTs in the classroom. For this reason, there are several ICTs mentioned in this survey. First, we have technological devices in which the most common are those which are used for the projection of content on the board, for instance: computer, data projector, and cell phones since the majority of the schools offer computers and data projector for the teachers in the classroom. Additionally, the majority of the students bring their cell phones to the class, and it could be a tool to take advantage by using it to work in classes and to search information on the internet. In second place, we have the category of websites and software in which the most common are PowerPoint and Canva presentations, both to share content of the classroom in the board. Furthermore, in the same category we can find YouTube, Kahoot and social media in order to make a more interactive class. Third, we have the category of gadgets in which Data projector is the most common again. Finally, the research group has decided to add the categories “ambiguous” and “irrelevant”. In the category of ambiguous, it was mentioned “audiovisual” and “webpages”. The research group decided to place those answers in the category of ambiguous because they can group all the ICTs mentioned before. Likewise, in the category of irrelevant we can find “active pauses”, “story-telling”, and “strategy games”. The research

group decided to place the above in irrelevant because those strategies can be applied without the use of ICTs.

- 9. In your professional experience, how would you rate the accompaniment for students with Hearing Loss (mild to moderate) in the learning process of English as a foreign language? Being one the lowest and seven the highest qualification.**



The following chart displays the opinion about accompaniment towards students with HL in ESL. The chart displays that 23,1% of people answered 1, the lowest grade, is the most answered followed by the grades 4 and 5 with 19,2% each one. Afterwards, option 7 with 15,4%. Lastly, option 2, 3 and 1 have the lowest answers with 11,5%, 7,7% and 3,8%, respectively.

5.2 English Teachers' Survey Results

The EFL Teachers' Survey was designed with the objective of gathering information about Chilean teachers of English and their pedagogical practices when working with students with mild to moderate HL in the national context. The survey consisted of three sections: Section A addressed the participants' general information regarding their workplace, section B considered their previous training in relation to ICTs and HL, and finally, section C was focused on their professional experience concerning the use of ICTs in classrooms and their management in the matter.

The survey was created on Google Forms and opened to the participants from August 31st to October 7th. During this period, we received a total number of 3 answers, where 1 of the responses came from a Chilean teacher who works or used to work in Spain. Although our research is focused on the Chilean context, for the purpose of future analysis, we have decided to consider the information provided from that answer in the interpretation of the data collected.

Section A: General information.

1. Where is the school you work/worked in located?

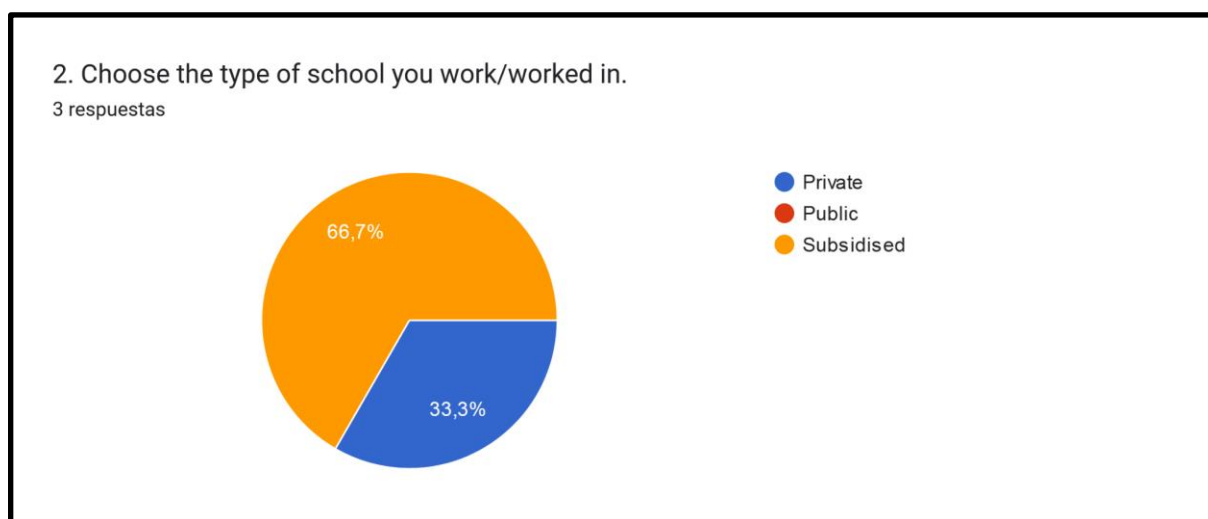
1. Where is the school you work/worked in located? (Ciudad, Región y Comuna)

3 respuestas

- Barcelona, Catalunya, Spain
- San Miguel. Santiago. Región metropolitana
- I was working in the south of chile, O higgings region, San Vicente de Tagua Tagua.

The first question aimed to collect data regarding the location of the school in which the surveyed teachers of English currently work or used to work. As mentioned before, although the survey was oriented towards the Chilean context, a Chilean teacher working in Spain answered the survey. We decided to keep this unexpected answer for the sake of the teacher's time to answer and to make good use of the valuable experience they shared with us. Furthermore, this will serve as proof of the reach that the survey had, which was superior to the number of answers that were below our expectations. Thus, the results showed that the surveyed teachers work or used to work in places like San Miguel, Santiago de Chile; San Vicente de Tagua Tagua, Región de O'Higgins, also located in Chile; and Catalunya, Spain.

2. Choose the type of school you work/worked in.



In question number 2, the surveyees were asked to categorise their workplace into private, public or subsidised. The results showed that 66.7% of the respondents work or used to work in a Subsidised school, while the remaining 33.3% work or used to work in a private school. None of the respondents work or used to work in a public institution since they only marked Private and Subsidised schools. We believe that many teachers of English may work or have worked with students with mild to moderate HL in Public schools unknowingly.

In a recent study, Lavidas et al. (2022), defined six factors that affect the response rates of web surveys with teachers to justify the “teachers’ intention to participate in web surveys with questionnaires” (p. 1). Following, we will contrast the sample we obtained with the factors that Lavidas et al. depicted in their investigation. All this in an attempt to understand the nature of the sample we obtained. The factors we will consider for the analysis are *authority*, *incentives*, *survey structure/form*, *ethical issues*, *reminders and pre-notifications*, and *survey time received*.

In terms of authority, Lavidas et al. (2022) expressed that when prestigious organisations conduct surveys, teachers tend to have a more positive attitude towards answering an online survey. We believe that, even though we are pre-service teachers of a prestigious university, we do not possess the prestige and channels to reach an audience that a university may reach. We suspect this factor may have influenced the reach and visibility of our survey in spite of being spread for the most part in the same channels as the Special Education Teachers and Students with mild to moderate HL surveys.

Regarding incentives, Lavidas et al. (2022) claim that “internal incentives mainly motivate them (teachers) to participate in a web survey”. With this, we can sustain the idea that the surveyee must have an internal motivation to be willing to answer a survey, in our case, has to be internally motivated by SEN, ICTs and HL. We understand this factor as an element that cannot be controlled, and we believe that intrinsic motivations come from life experiences that some teachers who came across our survey may not have or did not motivate them enough to participate.

As for the survey structure and form, Lavidas et al. (2022) affirm that “[...] a high percentage of teachers declared that they mainly prefer to complete questionnaires when it mainly includes concise, closed ended questions [...]”. In that respect, our survey for Chilean teachers of English has 9 out of 10 closed ended questions. The only open ended question in our survey is about where the school is located in which the teachers work or worked. From this perspective, our survey may have a positive aspect considering the Survey Structure/Form factor.

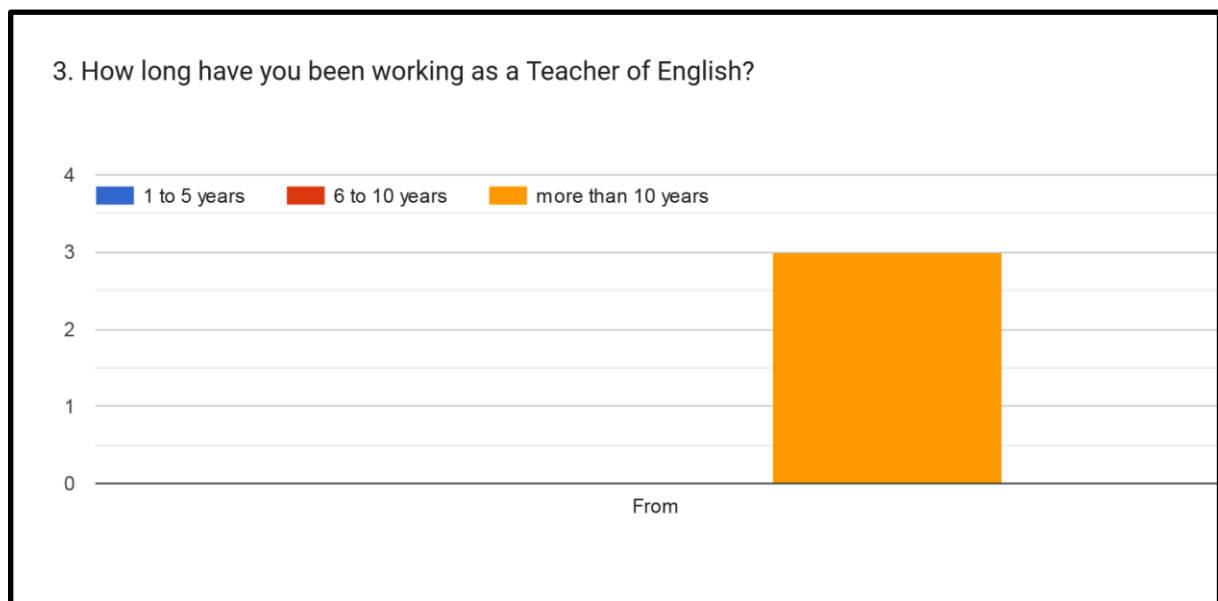
In the matter of survey time received, “[...] overall, 85.9% of the sample participants stated that they prefer to complete questionnaires when the total time does not exceed the 10 min.” (p. 7). In this setting, our survey takes 10 minutes or less to complete. This is another factor in our side that may have helped the respondents to go quickly through the survey. Regarding the deadline, 61.7% of teachers answered in the first week and 24.5% in the second week. We received all answers between the first and second week, which we believe was the peak of the reach of our survey. Probably, after the third week the visibility of our survey diminished drastically.

As for reminders and pre-notification, Lavidas et al. (2022) specify that teachers prefer to answer a web survey when it is sent by mail rather than when they see it on a website. As for our survey, we mostly spread it on channels instead of doing it to targeted teachers. The teachers that we intended to ask to participate in our survey did not comply with the requirements to answer. Finding teachers who fit the criteria was a difficult task; however, we kept looking for potential participants until the deadline.

In the matter of Ethical Issues, Lavidas et al. (2022) gathered information regarding topics such as the approval of a research ethics committee, the assurance of anonymity, the secureness of data and information of teachers, consent and how the teachers were found and sent the

invitations via email. With respect to our survey, it was successfully validated by an English professor who is working on her doctorate degree, with the level to validate the designed instrument. The anonymity in our survey is completely assured since we did not ask for the teachers' names, only the place they work or used to work in. Consequently, their data and information was protected end-to-end. Regarding consent, at the end of our survey, there was a disclaimer that explained that by "clicking send" they consented to the use of the data collected for research purposes only. Finally, how the teachers were found was by posting in different channels with the intention of catching the attention of a teacher who would fit the conditions to answer our survey. In that manner, we did not need to justify or explain how we found them because they voluntarily accessed our survey.

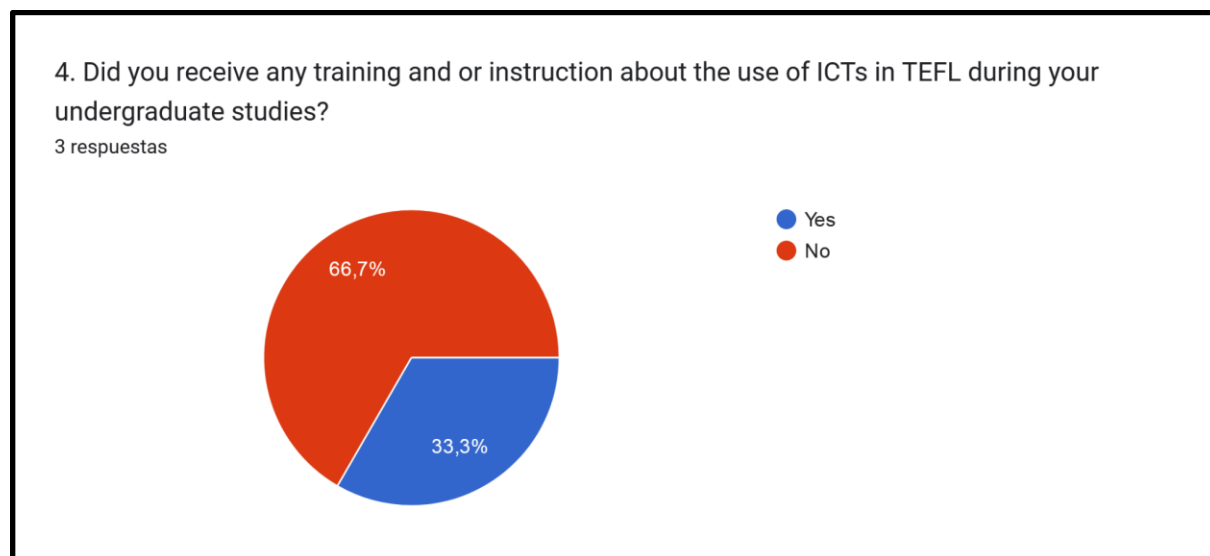
3. How long have you been working as a Teacher of English?



In Question 3, we intended to group the surveyees according to their years of experience working as a Teacher of English. All respondents claim to have more than 10 years of experience as teachers of English.

Section B: Previous training.

4. Did you receive any training and or instruction about the use of ICTs in TEFL during your undergraduate studies?



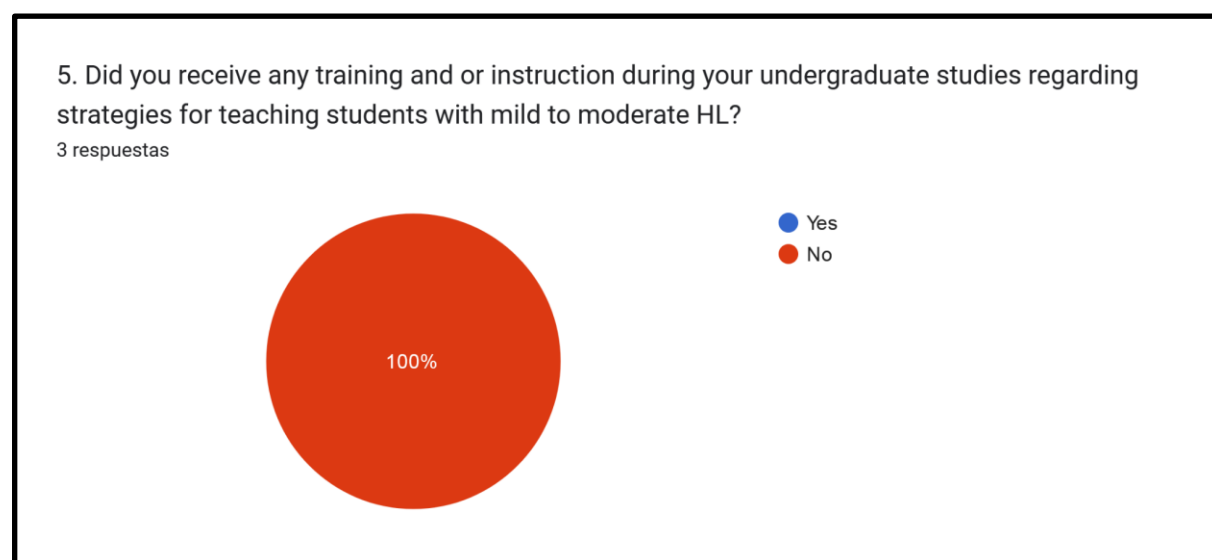
In question 4, teachers were asked if during their undergraduate studies they received any type of training or instruction on the use of ICTs in TEFL. The responses were divided with 66.7% marking "No", and the remaining 33.3% marking the "Yes" option. It is important to point out that the majority of the surveyed teachers did not receive any training on the use of ICT for their classes.

In accordance with the World Economic Forum (2015), Chile has had the adequate infrastructure to enable both teachers and students to access and use ICTs in classrooms since 2006. This positionates Chile as the top one Latin American country with the best use of ICTs with an outstanding 92% of ICTs implementation in public schools.

Although we have not found directions about training and use of ICTs in the Chilean classrooms, we concur with what Sosa and Valverde (2015) have stated regarding the positive attitude that we as teachers should adopt towards ICTs. We believe that EFL teachers, having received ICT use training or not, must embrace a constructive perspective towards them and let ourselves be guided by what we know as professionals regarding ICTs and what students know. Teachers have to be patient, empathic and attend to their students' queries and watch them interact with the different technological devices or resources and, at the same time, learn

from them. As teachers living in an ever-improving technological era, we must believe in ICT classroom integration and show a positive attitude towards them, make as good as possible use of them so our students can experience the effects that different ICTs may have on their learning processes.

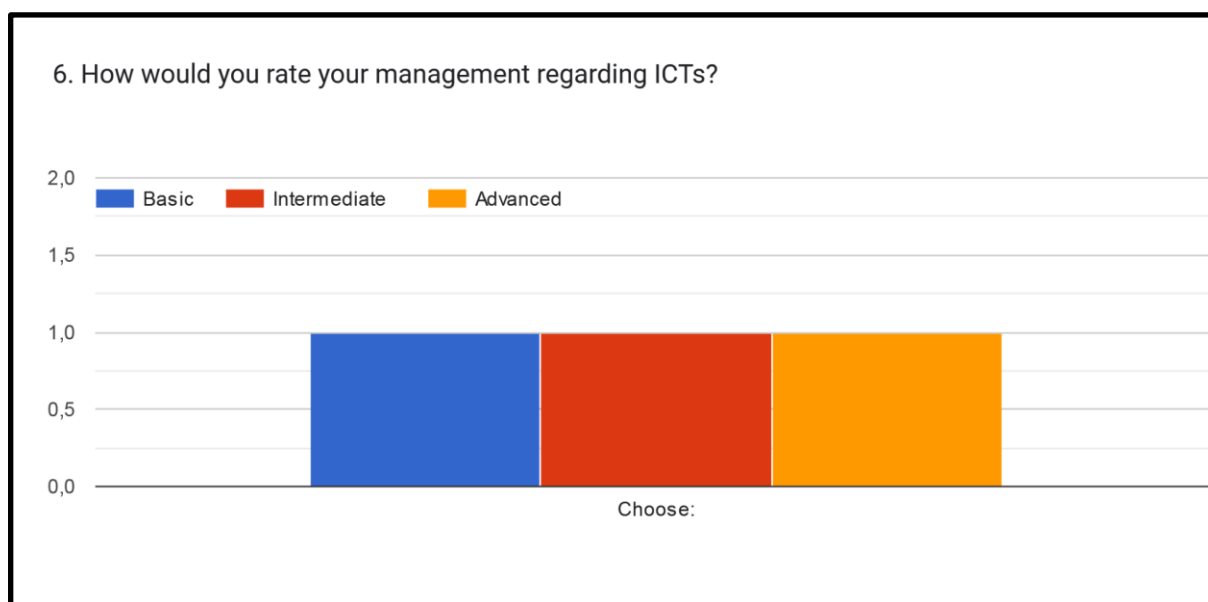
5. Did you receive any training and or instruction during your undergraduate studies regarding strategies for teaching students with mild to moderate HL?



In question 5, teachers were asked if during their undergraduate studies they received any type of training or instruction regarding strategies for teaching students with mild to moderate HL, to which the answers were marked 100% “No”. As the preceding question, there is a noticeable lack of previous instruction. In this case, the 3 respondents assure not having former training on the use of strategies for an inclusive classroom with students with the aforementioned impairment.

As far as we are concerned, there are no strategies described for teaching students with mild to moderate HL in the Chilean curriculum. However, we believe that as teachers, we must constantly adapt the content of our classes to our students’ SEN; we have to surf the internet, search the latest methods, put into practice state-of-the-art strategies, and be up-to-date with new resources that may enhance our students’ language acquisition in an inclusive classroom. All surveyees responding “no” is a delicate sign for us that we interpret as the need for a procedure to properly identify and attend our students with mild to moderate HL in an inclusive EFL classroom.

6. How would you rate your management regarding ICTs?



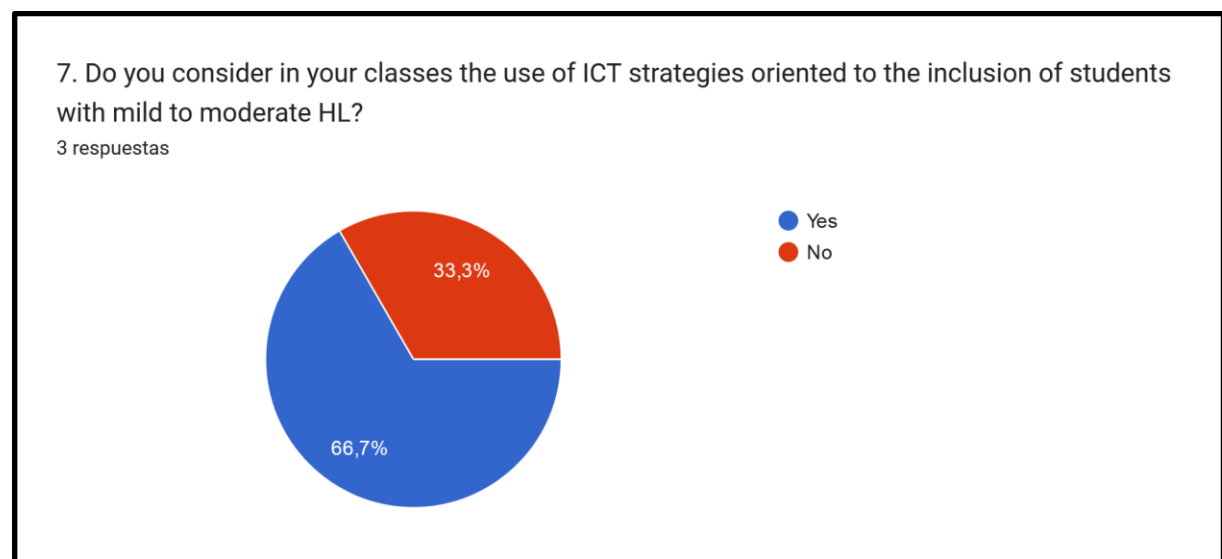
In question 6, teachers were asked how they would rate the management they have with ICTs. The response obtained was that 33.3% of those surveyed thought that they had “Basic” management, the other 33.3% answered that their management was “Intermediate”, and the last 33.3% believed that their management was “Advanced”. Each of the respondents consider themselves in different levels of management.

According to a research conducted by Tapia (2021), there are 3 different groups of Chilean teachers that represent different levels of knowledge and use of ICTs. In the investigation, the author defines each group as *Inicial*, *Asentado y Tardío* (p. 250) which can be juxtaposed to the parameters that we defined in this question as *Intermediate*, *Advanced* and *Basic*, correspondingly. Consequently, in his words, the author states that the Advanced group corresponds to teachers who are in their first years working as teachers with a mid or high knowledge of ICTs, but possess an experience-wise limitation working as a teacher. Intermediate group consists of teachers who have a higher knowledge regarding technology, pedagogy and disciplinary contents, with a higher rate of ICT use. The last group, Basic, is made up of teachers who have a lower level of ICT use and knowledge than the other two groups; they are characterised for having a low frequency use of ICTs and for being close to their final years of teaching or retirement.

Following the same line, we can infer that the teachers who answered this question may coincide with the groups described by Tapia (2021). With the creation of suggestions for the use of ICTs, we aspire to allay the gap between the teachers who have a *Basic* and *Intermediate* knowledge and use of ICTs, and lure them closer to the *Advanced* group of teachers. We sustain the idea that once teachers reach a *Basic* level of use and knowledge in terms of ICTs, they will strengthen their current knowledge and enhance their teaching experience when using ICTs. This may result in an improvement of their technology, pedagogy and disciplinary comprehension, and perhaps, teachers might be able to implement novel suggestions for the use of ICTs with students with mild to moderate HL in an inclusive EFL classroom.

Section C: Professional Experience.

7. Do you consider in your classes the use of ICT strategies oriented to the inclusion of students with mild to moderate HL?

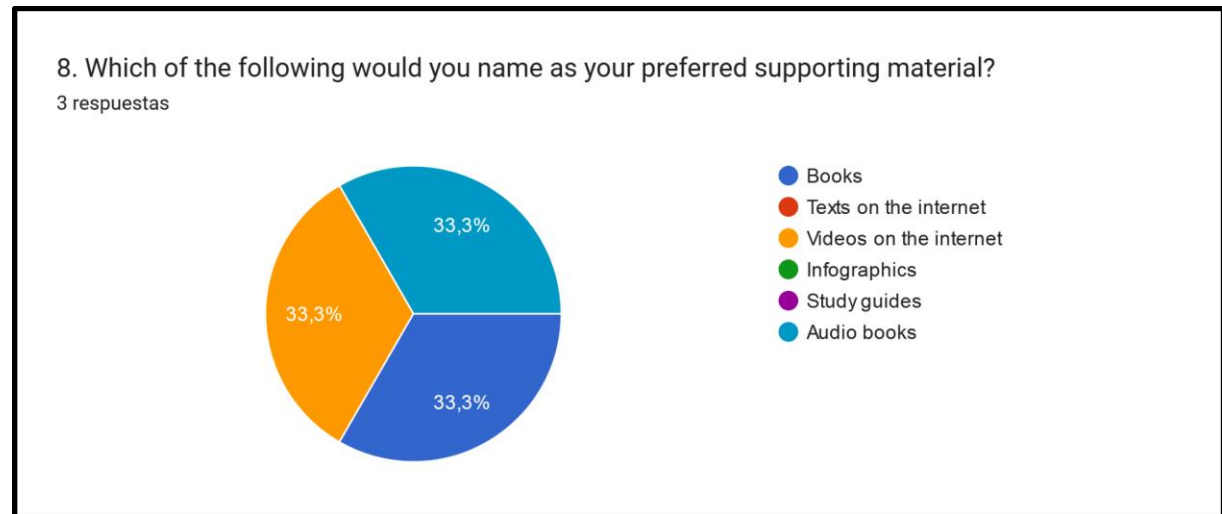


In question 7, in an attempt to know about their in-class experience, we asked the surveyees to answer if they considered the use of ICT strategies to the inclusion of students with mild to moderate HL, where 66,7% answered “Yes”, and 33,3% marked “No”.

We believe that to consider ICT strategies for students with mild to moderate HL, a teacher must know the strategies beforehand. Once teachers acknowledge the strategies, they will use them as they are needed. In that sense, we encourage teachers to use ICT strategies whenever possible. In the case of students with mild to moderate HL, after applying strategies, the

teachers will evidence their effectiveness in class and vary their use to explore different mechanisms for their students with mild to moderate HL to learn.

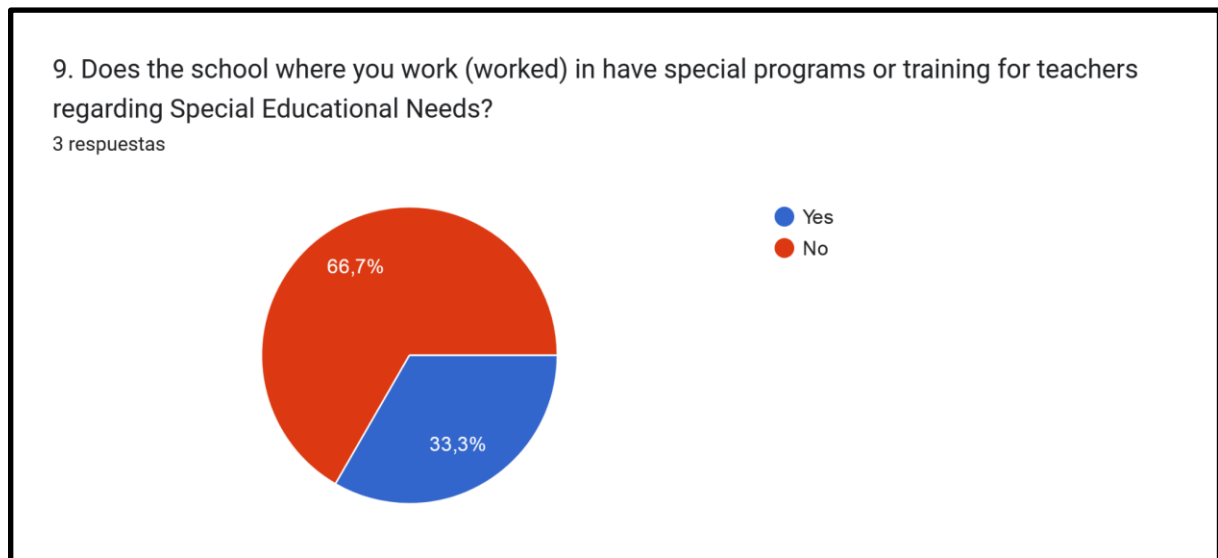
8. Which of the following would you name as your preferred supporting material?



In question 8, we wanted to know about the English Teacher's preferred supporting material for their students with mild to moderate HL. The answers were matched at 33,3% for Books, Audio Books and Videos on the Internet.

In Chile, MINEDUC provides students from public schools with English textbooks for working in class, which is one of the preferred supporting materials that EFL chilean teachers use according to the graphic. Audiobooks are also provided along with the English textbooks and are also a preferred supporting material for EFL teachers. We infer that the remaining supporting materials appearing in this question, such as Videos and Texts, can be easily found on the internet. Infographics, Study Guides and Texts can be made by the teacher, but require more preparation time, so the preferred supporting materials of chilean EFL teachers seem to be the ones that are already designed and prepared to use in class.

9. Does the school where you work (worked) in have special programs or training for teachers regarding Special Educational Needs?

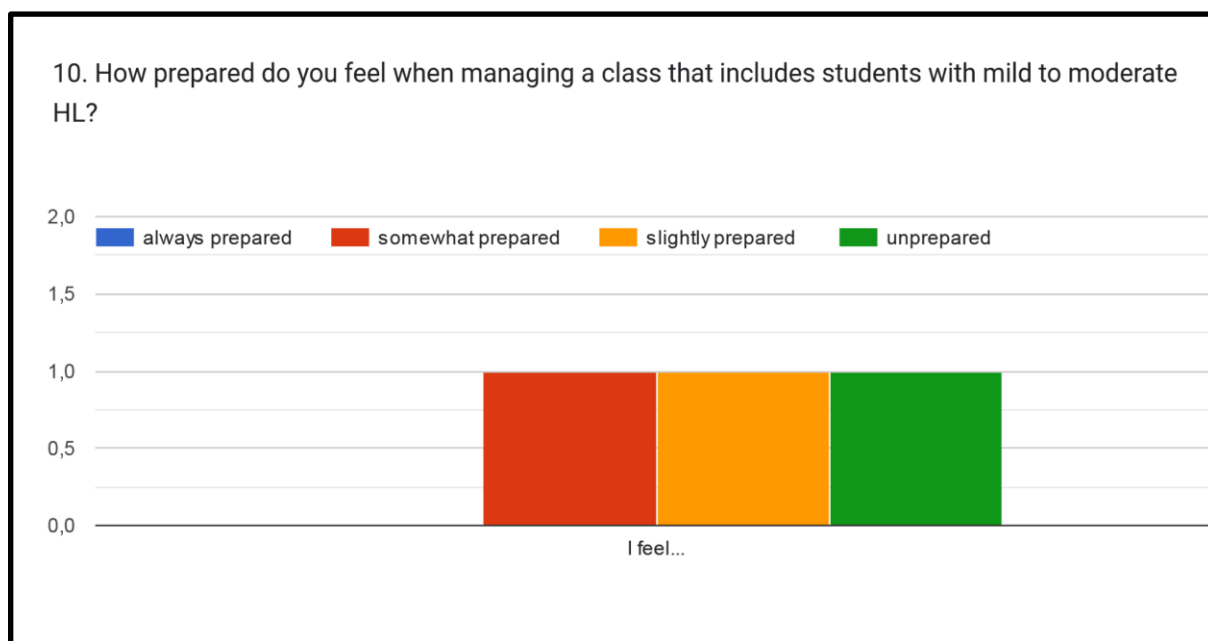


Question 9 aimed to know if the school where the surveyees work or worked have or had special programs or training for teachers regarding SEN, where 66,7% answered “No”, and 33,3% answered “Yes”.

As far as we are concerned, there are no laws or regulations regarding training in the field of SEN for in-service teachers in Chilean schools. However, in 2020, MINEDUC launched “Teaching Plan for the Optimisation of Learning” (Plan de la Enseñanza para la Optimización del Aprendizaje in Spanish), which consists of 20 courses to support education professionals and assistants in recovery of learning. There, teachers can discover different tools for planning, evaluating and strategies that will render teachers to be flexible when adapting contents according to different teaching scenarios. Project-Based Learning methodology and ICTs are some examples of what teachers will experience in order to enhance their pedagogical practice in various scenarios, prompting collaborative instances for interdisciplinary work when facing classes with students with mild to moderate HL.

Hereby, teachers must adopt an active role and make good use of the resources available to enhance all aspects of their teaching experiences; classroom management, use of ICTs, and knowledge of SEN. Everyday we face different classroom contexts and we, as teachers, must be fully prepared.

10. How prepared do you feel when managing a class that includes students with mild to moderate HL?



For question 10, we established four parameters to enable the English teachers who answered to say how prepared they feel when managing a class that includes students with mild to moderate HL. 33,3% answered “Somewhat prepared”, 33,3% answered “Slightly prepared”, and 33,3% answered “Unprepared”. It is worth noting that no surveyee answered “Prepared”, which makes us ponder that the “preparedness” we acquire during our academic training, considering the experience of the surveyees, does not seem to be enough for the surveyed teachers to feel “Always prepared” when attending SEN of mild to moderate HL students.

It is worth noting that no respondent declared to feel “always prepared” when managing a class that includes students with mild to moderate HL.

We hope that these findings will support the fact that this kind of disability may not be as visible as a deeper case of HL (severe or profound HL) can be. Likewise, we infer that only teachers who know the students’ diagnosed degree of HL (medium to moderate HL) beforehand could answer this survey. We can also deduce that other teachers of English who happened to come across this survey either never worked with students with mild to moderate HL or did not know if any of their students had the described degree of HL.

Lastly, regarding the sample obtained, we believe that it may represent a sign that we interpret as an alarming warning for teachers who are not entirely familiarised with students with mild to moderate HL. We suggest that this can contribute to further research regarding the way students are being examined or tested for this kind of disability - if they are, and how that examination process is presumably failing to identify such students and enable English teachers to act accordingly to their needs regarding the use of ICTs when teaching English to students with mild to moderate HL. Additionally, we hope to encourage teachers to adopt an active role and make good use of ICTs available to enhance the teaching and learning experience for everyone in an inclusive EFL class, together with non-diagnosed students who may have mild to moderate HL as well.

5.3 Survey Results: Students with Mild to Moderate Hearing Loss

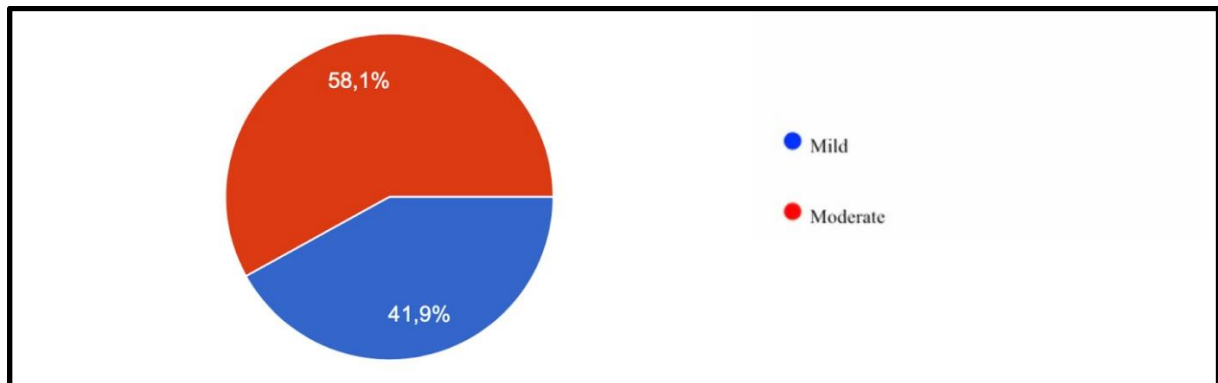
The information presented in this section includes the results of the answers obtained from the online survey sent to former students and/or current students with mild to moderate HL. This survey had two sections: section A gathered general information about the participants and section B comprised questions related to their experiences in the process of teaching and learning English as a Foreign Language.

The link to this survey was shared with participants who study or had studied English while having mild to moderate HL from August 16th to October 7th via social networks, such as: Gmail, Whatsapp, and Facebook. The final number of respondents was 31 former students and current students with HL. The questions posed in the survey are presented below, with their corresponding graphs, descriptions and data interpretation.

We decided that this survey would be written in Spanish language for better comprehension of Chilean students and former students, who may not speak English. Nevertheless, each question was translated for English-speaking audiences.

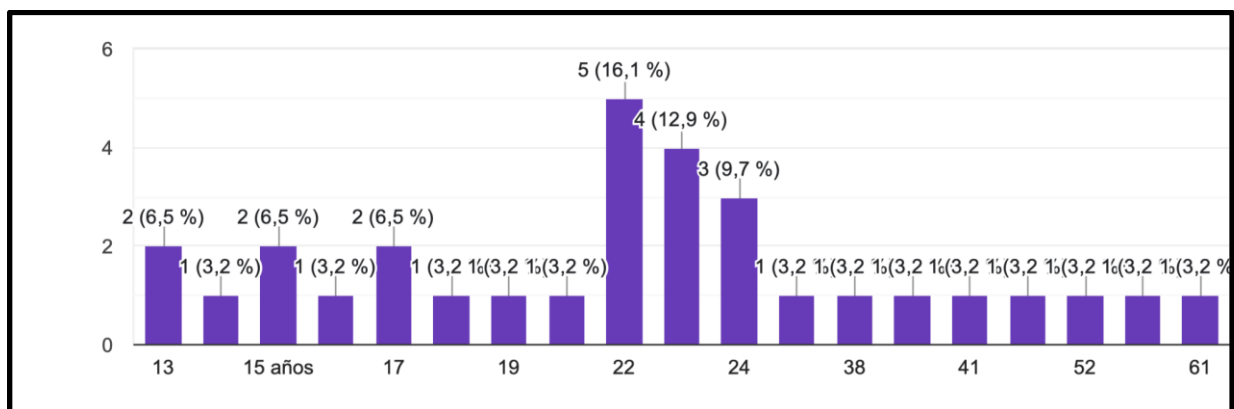
Section A: General information

1. Select your level of Hearing Loss.



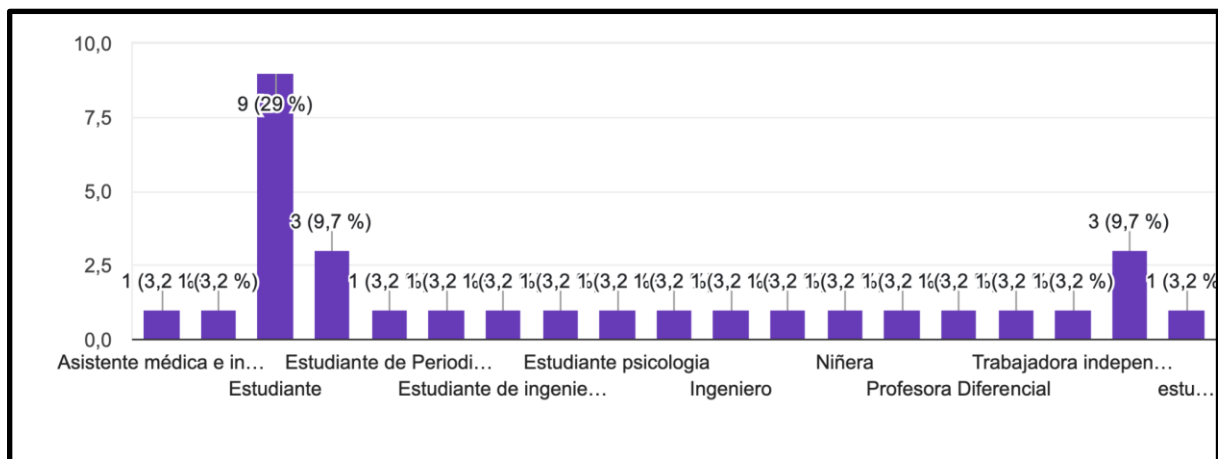
The first chart illustrates the respondent's level of HL. As can be seen, 58.1% of them have a moderate level of HL, while 41.9% have a mild HL.

2. How old are you?



The following graph shows the average age of the participants. According to the information collected, the majority of the respondents are 22 years old, with 16.1%; followed by 12.9% who are 23 years old and 9.7% who are 24 years old.

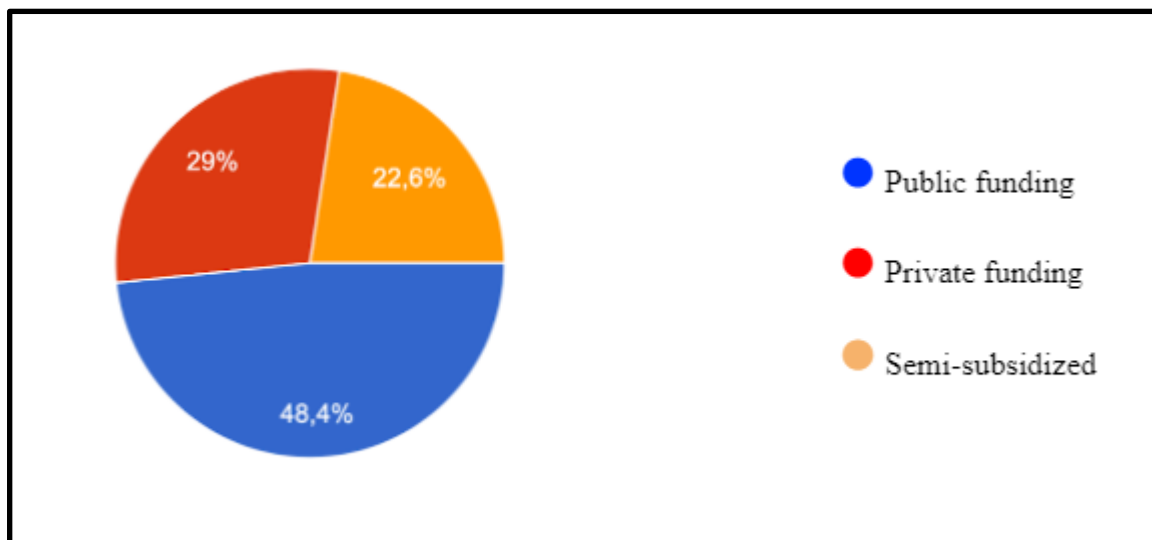
3. What is your occupation?



Occupation	Percentage
Student	21 (67,7%)
Sign Language Interpreter	1 (3,23%)
Cook Assistant	1 (3,23%)
Engineer	3 (9,66%)
Babysitter	1 (3,23%)
Teacher of Chilean Sign Language	1 (3,23%)
Teacher of Special Education	1 (3,23%)
Psychologist	1 (3,23%)
Independent Worker	1 (3,23%)

According to the results shown in the table above, 67,7% of the respondents are students, while 9,66% are engineers. The rest of the participants reported working as Sign Language interpreters, cook assistants, babysitters, teachers of LSC and Special Education, psychologists, and independent workers, with 3,23% per occupation

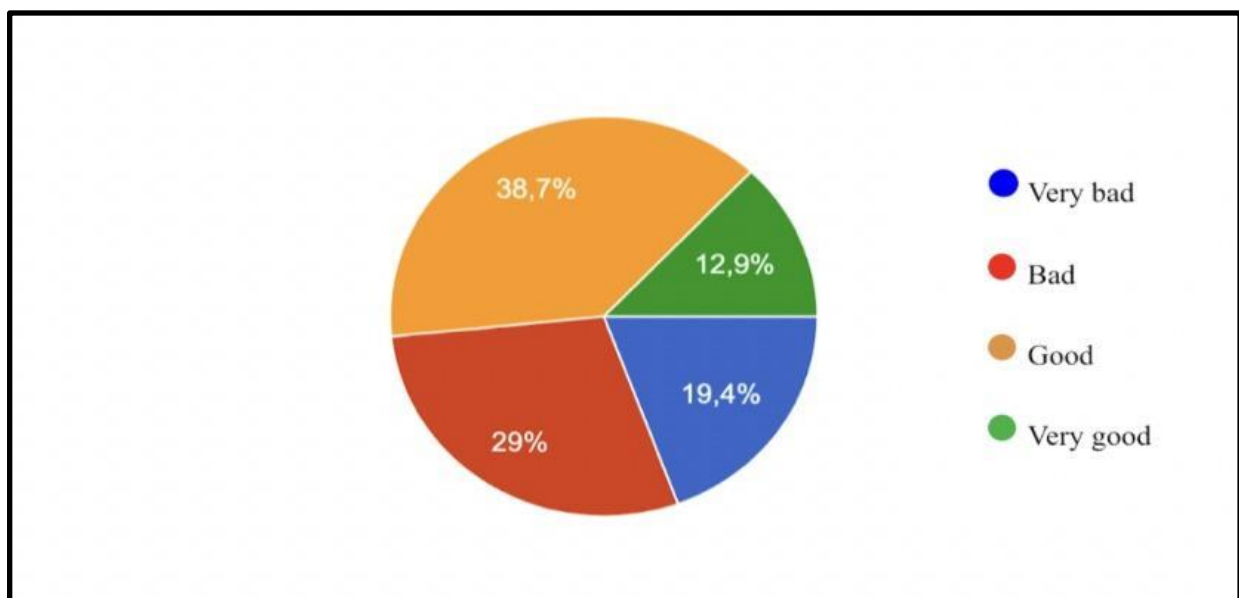
4. Select the type of school where you study or studied.



This third graph shows the type of school where respondents currently study or studied. As can be seen above, 48,4% of them attended a public educational institution, while 29% studied in a private school. The remaining 22,6% attended a subsidised school.

Section B. Experience in the learning process of English as a Foreign Language (EFL)

1. How would you describe your experience learning English in an educational institution?



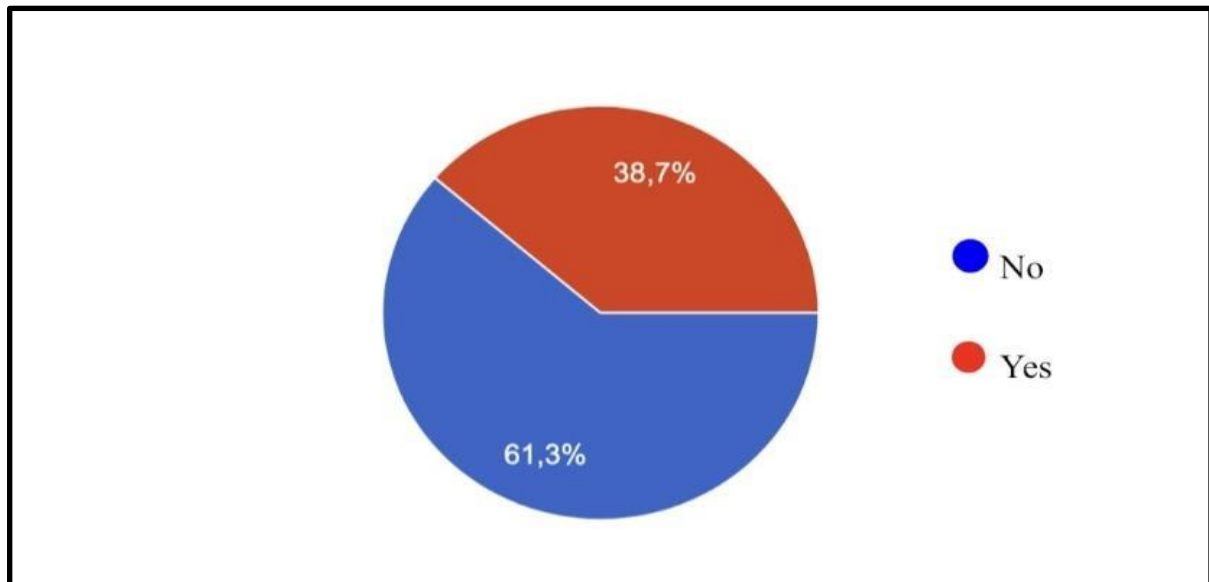
The following chart shows that 38,7% of students rate their experience learning English in school as “good”. Conversely, 29% reported that they had a “bad” experience learning the language, while 19,4% of the participants had a “very bad” experience. Lastly, 12,9% of them evaluated their experience as “very good”.

We believe these results to be a consequence of a certain degree of isolation to which students with HL might be subjected to inside the classroom because of the difficulty it may pose for them to hear and understand their classmates and teachers. It is essential to consider that most students with HL, study in public schools that share the characteristic of organising many students (around 40) in the same classroom, which directly affects levels of noise and the ability of the teacher to pay close attention to each student.

The literature also supports these findings. Larrazabal, Palacios and Espinoza (2021) concluded that “students with HL who participated in the study are indeed integrated into the regular educational system; however, they are not included in it” (p. 87). That is that even though students with HL are allowed into non-specialized schools, they are being taught in the same manner as all of their peers and in worst case-scenarios, they are being completely ignored or delegated to someone else, such as special education teachers. Consequently, teachers are not building a beneficial relationship with the students and are excluding them from the normal development of the class.

Although in Chile there are policies that favour inclusion in the educational context, such as the Law of Education N°20.370, Law Decree N°170, and Law N°20.422, each school offers different possibilities for learning and resources to support students with HL throughout their schooling, which ultimately shapes their educational experience. To ensure that students with HL are active participants in their learning, Henríquez et al. (2016) claim that it is necessary to create an inclusive environment that provides the necessary and appropriate support for the needs of all students and promotes effective and positive communication between students and the teacher. For this reason, the State provides the country's educational establishments with a Special Education subsidy, which provides additional services, resources and support for students with SEN (Ayuda MINEDUC, n. d.). However, this subsidy is available only to students with SEN who are enrolled in specialised schools and regular schools with PIE, which leaves students in non-PIE and private schools without this assistance.

2. Did you receive support throughout the process of learning English?



The above chart displays that 61,3% of the participants did not receive support throughout the process of learning English. On the other hand, 38,7% of the participants claimed that they did receive support during the process.

The participants of this research think that the lack of support evidenced in this part of the survey is a clear indicator of the levels of achievement of inclusion in Chilean schools. From a pedagogic point of view, education and learning is a collective process in which many actors participate, including teachers, students, parents, and other personnel in the schools; therefore, all students should receive support in their learning process.

3. If your answer to the last question was Yes, please indicate who provided said support.

13 Responses

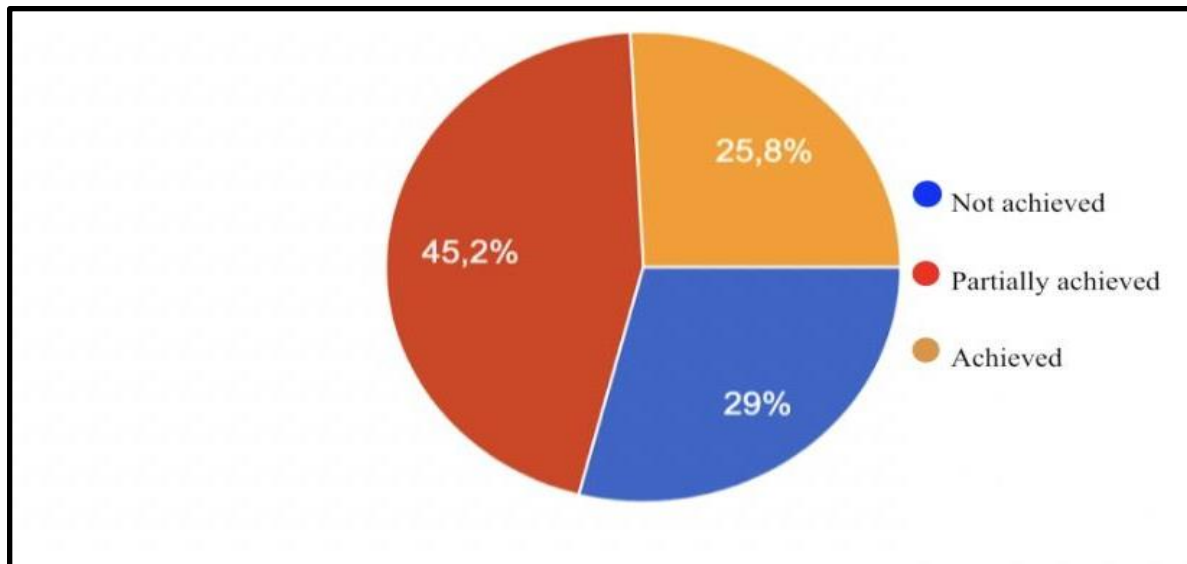
Support	Percentage
Teacher	7 (53,84%)
Department of Inclusion of the University	1 (7,69%)
Family member	1 (7,69%)
Private tutor	3 (23,0%)
Classmates	1 (7,69%)

According to the chart, 53,84% of the participants received support from their teachers. 7,69% of them received it from the Department of Inclusion of the University. Additionally, 7,69% claimed that a family member provided support; and 23% of the respondents received it from a private tutor. Finally, 7,69% of them had it from their classmates.

MINEDUC (2016) defines PIE as an educational strategy implemented in schools whose purpose is to ease the participation and the achievement of learning objectives of all students by giving different pedagogical approaches and strategies, specialised human resources and material, and training for teachers. The school team in charge of implementing the PIE has to install collaborative work strategies and co-teaching among teachers and professionals in and outside the classrooms (Ayuda MINEDUC, n.d.). The answers depicted that most of the respondents did not receive support throughout the process of learning English, despite the fact that one of the main objectives of the project is to provide it.

Although the research team considers the results alarming, it is worth mentioning that most of the 38,7% left stated that they received support from their teachers. Taking both parts into account, we could conclude that educational establishments that have implemented the PIE program must work on the use of the provided resources so students can receive enough and quality support in their learning process. The fact that teachers represent the majority of entities that provide support for the students shows us that they need to be better prepared for the several challenges that SEN and the general classroom pose.

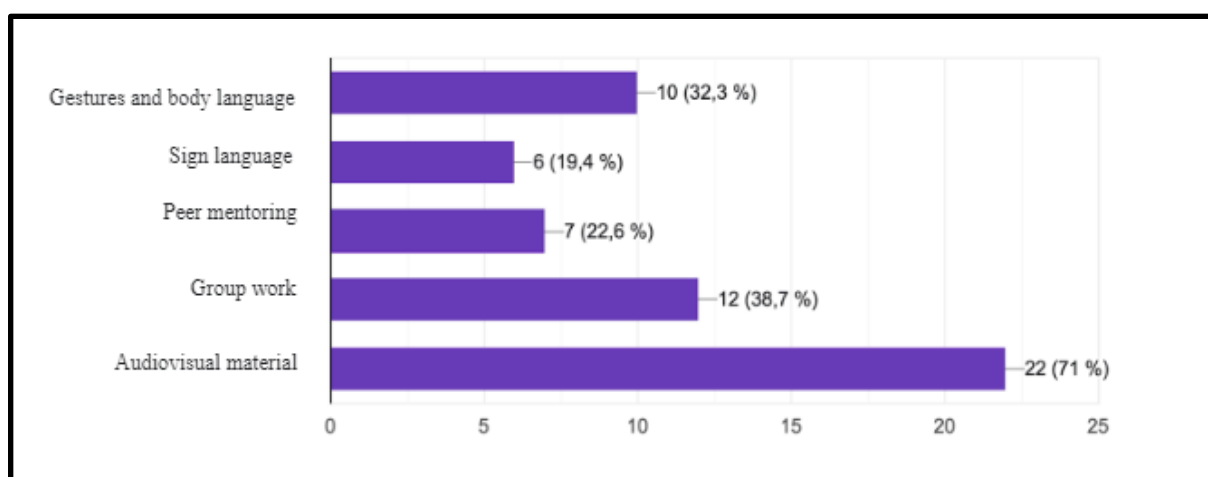
4. How would you rate your level of achievement learning English as a Foreign Language (EFL)?



The chart above shows that 45,2% of the respondents rate their level of achievement in EFL as “partially achieved”. On the other hand, 29% rate it as “not achieved”. Lastly, 25,8% of the participants rate it as “achieved”.

As a team, we believe that these results are mainly caused by the lack of adjustments made by teachers and other people in charge of the education process, in terms of communication with and towards students, explanation of instructions, design of the activities and the setting of the learning and performance objectives. This can also be related to the strategies used by the teachers to motivate students’ participation and overall engagement with the class, which are main factors in the achievement of successful learning. In this line, Rekkedal explained that “participating actively while attempting to perceive communication is challenging, this explains why the students are, to a certain extent, passive participants” (2017, p. 187). Consequently, for students to achieve their goal, which is to learn to communicate in the foreign language, an effort must be made in the creation of a friendly environment and the design of coherent and effective strategies to prompt individual and collective participation.

5. Which of the following strategies were used by your teachers in your English learning process? You can choose more than one option.



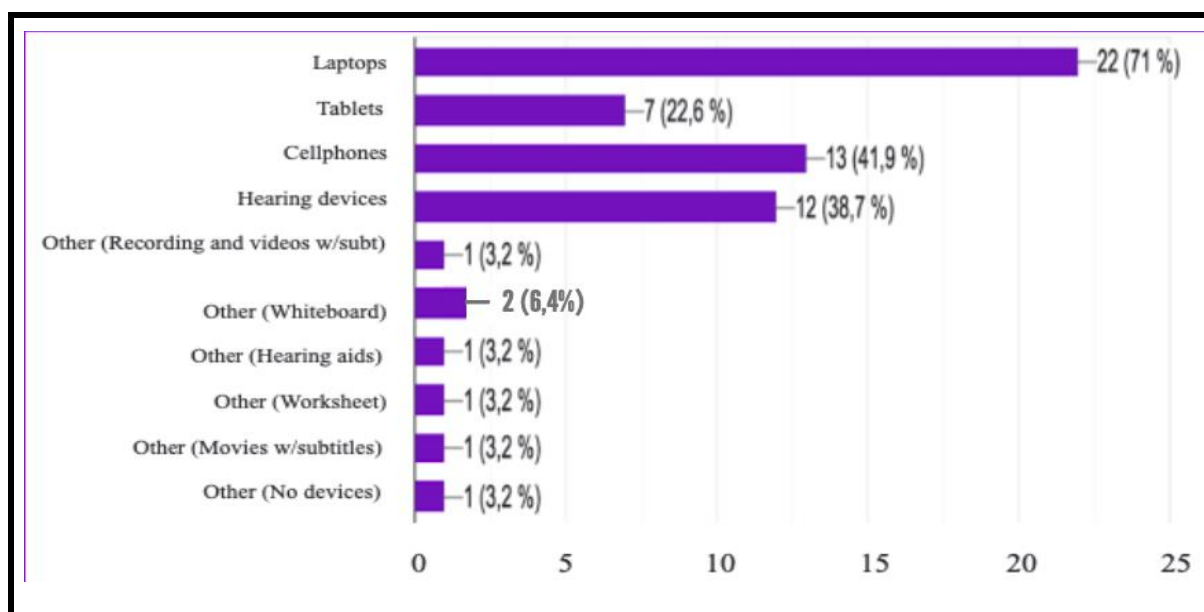
The answers show that 71% of the participants' teachers used "audiovisual material" as a strategy in the English learning process. 38,7% of the teachers used "group work". Conversely, 32,3% of them make use of "gestures and body language". Afterwards, 19,4% of the students' English teachers implemented "peer mentoring"; and finally, 19,4% of them used "sign language" as a strategy.

The research team believes that the vast preference of teachers to use audio-visual material in English classes responds to the need to remain up-to-date in today's increasingly digital age. The two years of online education during the pandemic set a precedent for the use of technology in the classroom, as it was the only way to sustain learning in such circumstances. Since then, it has become an effective tool in lessons, used to bring innovation and engage students, which explains why it continues to be such a popular strategy among teachers.

According to the literature, teachers prefer to adopt digital resources in schools because of their convenience, availability, and easy management (Mumtaz, 2000, as cited in Assar, 2019, p. 3). In the same way, the use of audiovisual material as a teaching method in language classes helps teachers to improve the learning environment in the classroom by stimulating thinking, facilitating content retention, and providing opportunities for effective communication with students (Mathew & Alidmat, 2013). This is beneficial for all students, but especially for those with HL, as audiovisual material allows them to make inferences and actively participate in class discussions, using their experience and the knowledge acquired through this strategy

(Akay, 2021). This is why it is one of the most widely used methods in lessons, especially in English classes, as the answers to this question indicate.

6. Which of the following devices were used during English classes? You can choose more than one option.



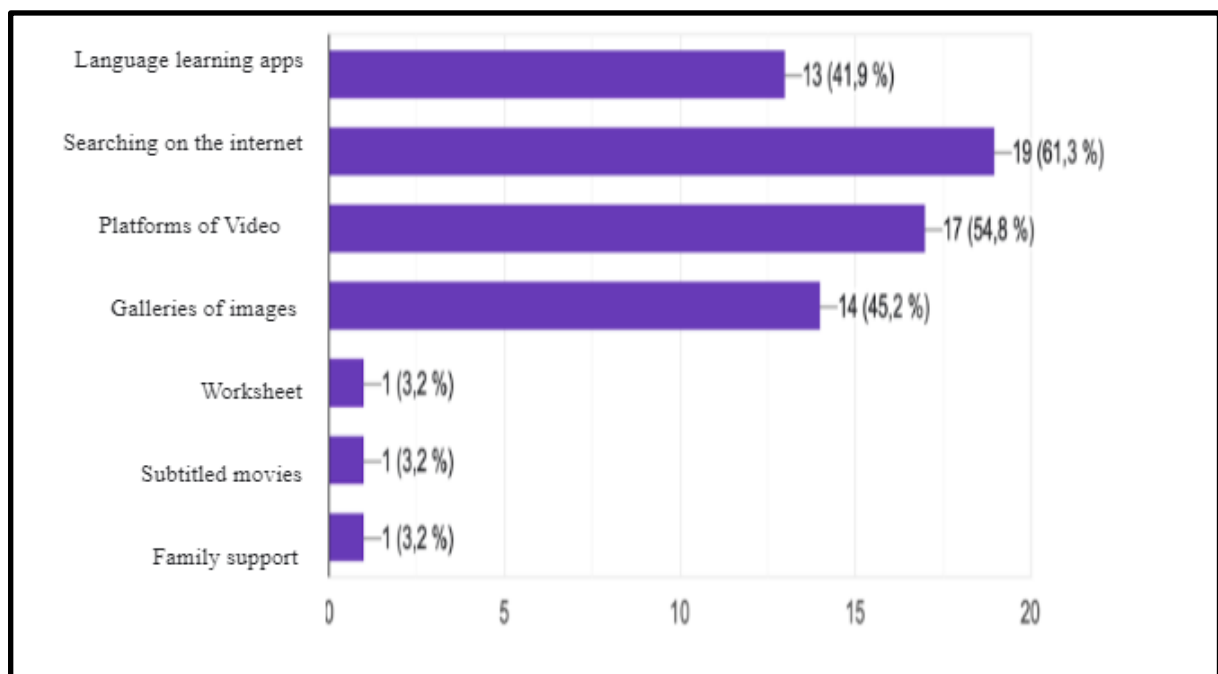
As the chart portrays, 71% of the students claimed that laptops were used during English classes, followed by 41,9% who stated that they use cell phones. Next, 38,7% of the respondents used hearing devices and 22,6% used tablets. Lastly, students reported using other devices in English classes, such as the whiteboard, guides and movies with subtitles, or no devices at all, with 3.2% individually.

Due to the implementation of “Enlaces”, not only the “ICT and Diversity” project was driven, but also online platforms to practise the contents delivered during class, English included (Centro de Innovación, n.d.). About 15 years later, the Ministry of Education carried out the “Technologies for a Quality Education” Plan, which sought to increase the schools’ technological equipment such as computers and projectors, assuring their pedagogical use while providing training in the use of ICT (MINEDUC, 2007).

The research team infers that one of the reasons why laptops are the most used device during English classes is because most of the projects implemented by MINEDUC involved using them: consequently teachers have been more familiar with computers rather than other devices

since, as explained before, MINEDUC provided the equipment and counselling regarding their pedagogical use.

7. When studying or preparing for English classes, which of the following would you choose as your favourite supporting material? You can choose more than one option.

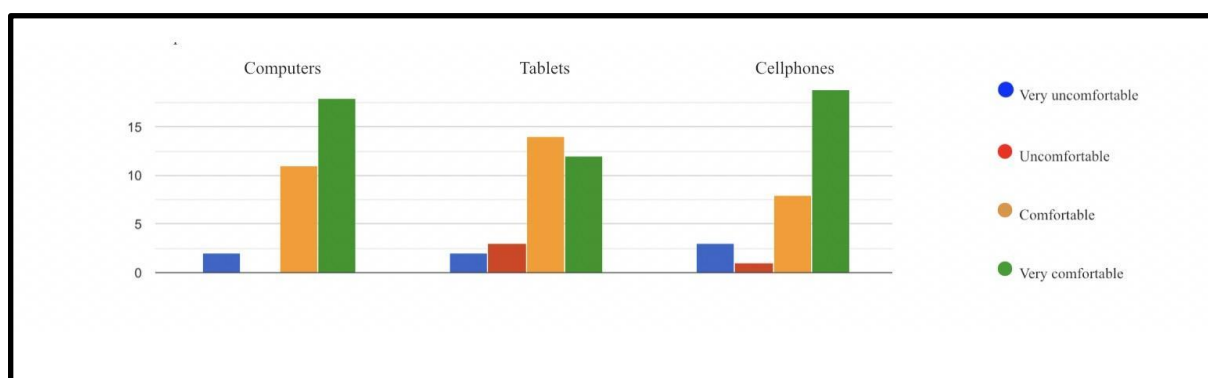


The following chart shows that 61,3% of the participants chose “searching on the internet” as their favourite supporting material to study or prepare English classes; on the contrary, 54,4% of the respondents chose “platforms of video” as their preference. Afterwards, 45,2% of them claimed that “galleries of images” were their favourite material, and 41,9% chose language learning apps. 3,2% of the respondents chose “worksheets” as supporting material, the other 3,2% selected “subtitled movies”, and the last 3,2% of participants picked “family support”.

Students’ perception of how relevant the Internet is in their lives determines how often they will use it as a support material to study or complete assignments since, the more positive the perception, the more learners will choose it as a source of information (Sudiran, 2015). Likewise, the study carried out by Al-Muwallad (2020) stated that “(...) students have constructive attitudes towards all reading activities on the internet. They like internet-based activities and find them fascinating and enjoyable” (p. 30). Taking into account both literature and the answers gathered in this research, the authors infer that most respondents chose

“searching on the internet” as their favourite supporting material due to the overall optimistic thoughts regarding its usefulness.

8. How comfortable do you feel when using the following devices?



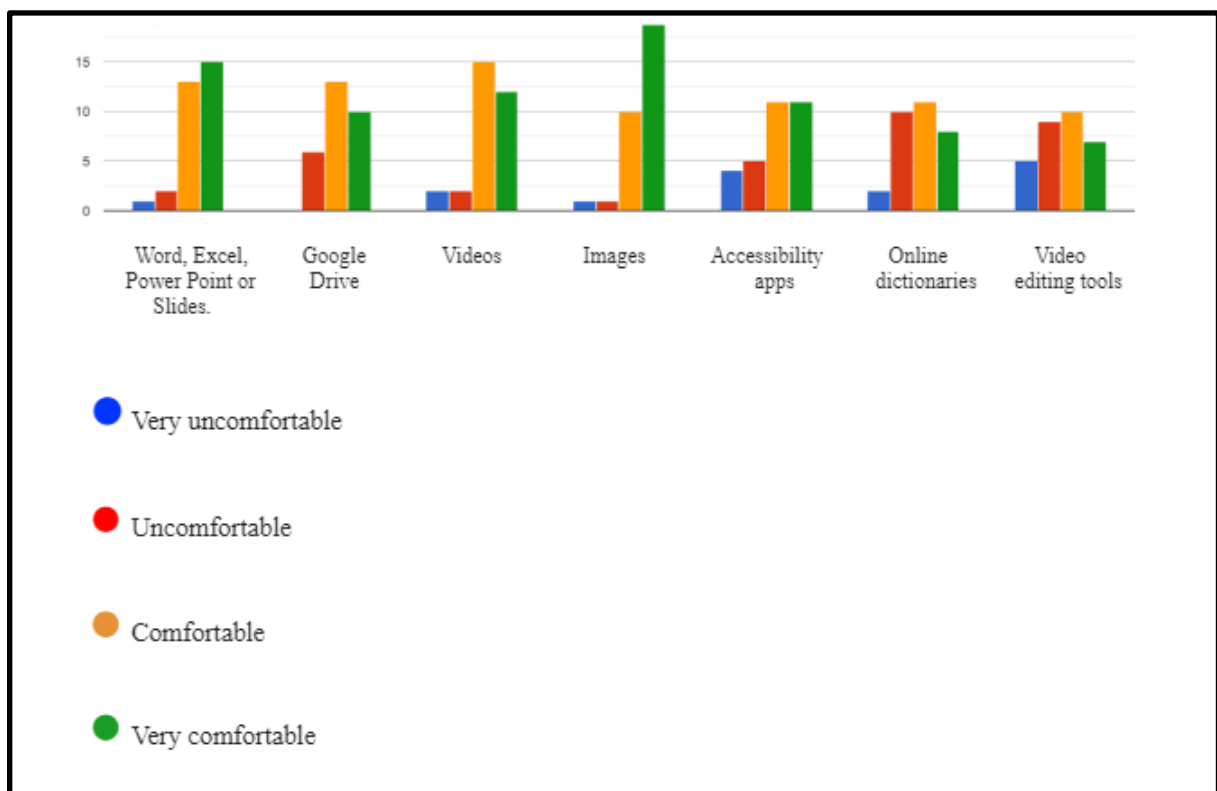
The chart above shows that 18 participants felt “very comfortable” using computers, 12 participants using tablets, and 19 using cell phones. It also depicts those 11 respondents felt “comfortable” using computers, 14 using tablets, and 8 respondents using cell phones. Besides, the chart expresses those 3 participants felt “uncomfortable” using tablets, 1 using cell phones, and nobody using computers. Lastly, 2 participants felt “very uncomfortable” using computers, 2 using tablets, and 3 participants using cell phones.

As can be seen, there is a vast preference for the use of computers as well as cell phones. Regarding the use of laptops, as was stated before, the Ministry of Education has invested in several projects that involve the use of those technological tools more than any other digital device, and since teachers could receive training concerning their implementation, educators can guide students, so they feel more comfortable and familiar with the use of computers. Besides, considering the fact that English is comprises the use and development of four skills, Kurt and Goksun (2016) claimed that computers give “(...) significant opportunities in supporting the reading and writing skills that especially the students with hearing impairment must gain in early ages and minimising the problems encountered during the learning process” (p. 2).

As for the use of cell phones, Ahmad, Fatima, and Malik (2021) stated that these technological tools have become an important part of people’s lives; besides, students with HL who used mobile phones in their daily life agreed that using them for academic purposes would ease the

language learning process. The research team concludes that the respondents feel more comfortable using computers and cell phones due to the closeness and familiarity they feel with these devices.

9. How comfortable do you feel when using the following digital resources?



As the chart portrays, 15 respondents felt “very comfortable” using digital resources, such as Word, Excel, PowerPoint or Slides, followed by 10 that felt “very comfortable” using Drive, 12 using videos, 19 using images, 11 using accessibility apps, 8 using online dictionaries, and 7 using video editing tools. It also shows that 15 respondents felt “comfortable” using Word, Excel, PowerPoint or Slides, 13 using Drive, 19 using videos, ten using images, 11 using accessibility apps, 11 using online dictionaries, and 10 using video editing tools. The chart depicts those 2 respondents felt “uncomfortable” using Word, Excel, PowerPoint or Slides, 6 using Drive, 2 using videos, 1 using images, 5 using accessibility apps, 10 using online dictionaries, and 9 using video editing tools. Finally, it portrays that 1 respondent felt “very uncomfortable” using Word, Excel, PowerPoint or Slides, 2 using videos, 1 using images, 4 using accessibility apps, 2 using online dictionaries, 5 using video editing tools, and nobody felt very uncomfortable using Google Drive.

10. What app, technological device, or online platform do you think would have improved or strengthened your experience as a student?

*All the answers were copied verbatim.

ICT	Percentage
Duolingo	8 (25,80%)
Google Translate	1 (3,22%)
Interactive games (such as Kahoot)	2 (6,45%)
Computers	3 (9,67%)
Online Dictionaries	1 (3,22%)
Youtube	2 (6,45%)
Tablet	1 (3,22%)
Autocorrector	1 (3,22%)
Google Classroom	1 (3,22%)
Tandem	1 (3,22%)
Close Captioning	1 (3,22%)
Not defined	9 (29,03%)

ICT	
Apps	• Duolingo • Tandem, para interactuar con nativos. • Duolingo • Duolingo • Duolingo • Duolingo • duolingo • duolingo • Kahoot

	• Creo que hubiera servido duolingo o alguna app que hubiera enseñado la pronunciación, ya que me costaba pronunciar algunas palabras porque lo escuchaba diferente • Apuntes en vivo y aplicaciones de vocabulario • Juegos interactivos
Technological Device	• una tablet • Computador • Usando computadora como ahora lo hacemos • computadores
Online Platform	• YouTube, por la cantidad de contenido que puede ser del gusto personal, y en un inglés que realmente se habla, no el de los audios tipo escolares • Hoy <i>dia transcripcion instantanea</i> de "Google y Gallaudet" • Classroom • el uso de cambridge • Yo pienso que usando plataformas en <i>línea</i> • Corrector de <i>language</i>
Not Defined	• Los dispositivos tecnológicos que usamos me ayudaron, pero igual es <i>difícil</i> para <i>mi</i>. • Usamos tecnología, pero es muy difícil para <i>mi</i> • Mejoraría en la rapidez de los audio de inglés dificulta mucho entender el idioma y la discriminación al sonido es muy nulo • Chat video • No lo sé • Necesitas para nuevas aplicaciones para móviles para poder ver labios y expresión de idioma extranjero • Que en los vídeos tengan <i>subtitulos</i> o lengua de señas. • Videos con <i>imagenes</i>

	● Tecnología actual
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The previous chart shows that 12 students claimed that “apps” would have helped them. Conversely, 4 respondents claimed that “technological devices” would have done it. Also, 6 participants claimed that “online platforms” would have improved or strengthened their experience as a student , and 9 participants did not define an answer.

The study carried out by Nasir, Hashim, Rashid, and Yunus (2021) pointed out that students with HL“(…) suggested that the interactive English applications which have educational games, videos, translation, sign language, and word with pictures may accelerate their attention and boost their understanding on the language” (p. 59).

Although most respondents claimed that Apps such as “Duolingo” would have helped them, Contreras, Muñoz, and Rubilar (2021) found that teachers did not use them as much as other ICTs since “(…) their use generally requires a mobile device or a computer, as well as good Internet connection; this is something that not all schools have access to” (p. 51). Sefein, Saw, Coad, and Zakaria (2018) addressed the matter by stating that “(…) the effectiveness of any APPs as an educational aid depends on its offline availability to be used any time anywhere” (p. 306).

Despite the fact that using Apps in the teaching-learning process might implicate the well-functioning of external factors, and because of this they are not one of teachers’ favourite ICT, the ones surveyed showed a tendency to the use of them when learning, and as Admiraal, Huizenga, Akkerman, and ten Dam (2011) states “interest in an activity is a fundamental aspect of flow experiences, setting the foundation for continuing motivation and subsequent learning” (p. 1186).

Chapter 6: Suggestions for the use of ICT when teaching English to students with HL

As a result of the analysis that we have carried out considering the literature review and the answers we obtained in the three surveys, we have gathered useful pieces of information that can help and guide teachers when teaching EFL to students with HL regarding the use of ICTs.

6.1. Use of ICTs:

As for the use of ICTs, we have compiled a set of recommendations for the teaching of EFL including students with HL. The use of ICTs provides many benefits for the teaching learning process when teaching students with SEN. In this sense, Puspawati and Juharoh (2021) stated that ICT provides many features to help students with disabilities. For example, in the case of deaf students, this technique can help them learn independently and develop students' literacy and communication skills. As a consequence, ICTs broaden the variety of resources available for the use of ICTs in the teaching and learning processes. One of the most commented strategies consists of the use of a pointer to mark the aspect we are going to guide students to. This strategy helps to clarify and shape the pace of the lesson. At the same time, it directs students' attention to specific points.

In relation to the use of Apps and platforms, it is important to use those that allow us to adjust their settings such as audio speed. For instance, Duolingo or Youtube. In the case of audiovisual material, choose the ones who have both legible and well-written subtitles. Similarly, you can use Canva for creating infographics. At the same time, Canva is one of the websites that some teachers suggest for the creation of catchy and colourful materials for lessons.

	1.- Canva
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	2.- Youtube
	3.- Duolingo

*Images taken from the internet and referenced in the References section.

In the analysis of this important data, we have been able to collect additional strategies and pieces of advice that can also contribute to the teaching of EFL and the learning process for students with HL. An example of this is, Adi, Unsiah and Fadhilah (2017) stated that “hearing impaired students made mistakes in understanding words due to similar lip movement to other words, so they suggested using a projector to display words from a computer” (p. 132). Furthermore, we also recommend the use of all devices that the school has. Namely, computers, tablets, smartphones, smart screens, among others.

6.2. Classroom organisation:

In terms of classroom organisation, based on The Bilingual Approach to Deaf Education: implications for teaching and learning written language by Lissi, Svartholm and Gonzalez (2012) it is vital to work with the available space in the classroom. For this purpose, we suggest sitting students with HL in the first row. The same would work with seating them all together in a semicircle independently if they have or not HL.

The children sit in a circle or semicircle with their gaze directed towards the teacher, while they can alternately observe their classmates. Ways are sought to facilitate

collective work in reading and writing, for example, projecting the written texts and the supporting visual material on the blackboard or a curtain (Lissi et al. 2012. P 306-307).



4.- Sitting all together in semicircle

*Images taken from the internet and referenced in the References section.

Moreover, It is also important to avoid ambient sounds in the audio and prioritise having good lighting within the classroom. It helps to ensure the information we are working with is still being received by our students along with the class pacing.

Some ideas to help out in that matter could be closing all the windows and curtains in order to maintain good lighting and diminish sounds inside the classroom in order to avoid interruptions from outside; keeping the lights on during the lesson, and encouraging the students to maintain a certain level of noise when working.



5.- Good lighting and sound

*Images taken from the internet and referenced in the References section.

Furthermore, another important point is to procure materials with legible and well-written subtitles, due to the lack of input from students with SEN because of their context, so adding

clear and precise information will help teachers to complete the contents for the learners who are currently studying to avoid making them feel apart from the lesson. Some good examples are official streaming services such as Disney+, YouTube videos with Closed Captions [CC], and Apps such as Tik Tok, for example which produces subtitles in their videos, making the teaching experience more dynamic and entertaining.

	6.- Disney Plus
	7.- TikTok

*Images taken from the internet and referenced in the References section.

6.3 Teaching strategies

Regarding teaching strategies, we have collected a set of recommendations for the teaching of EFL including students with HL. We strongly advise you to consider the preferences of students with HL when planning and in decision-making processes. Teachers can always ask students what resources fit them the best and which they like the most. We are almost certain that their preferences are closer to the ones you might normally use. In fact, in the online survey that we designed, there were 19 students who felt very comfortable about using images in the learning of EFL. Similarly, the survey also showed that 15 out of 31 students think that they feel very comfortable using PowerPoint, Word, Excel or Slideshares as digital resources. Consequently, using both at the same time would be very beneficial for the students' learning of EFL.

At the same time, teachers should address the settings in their PPT presentations at a slow pace (for example repeating certain things, making sure students understood, visual transitions at the moment of speaking, etc). The last idea of this strategy is that transitions in the digital resources can appear at the moment the teacher speaks so that students will not get lost with unnecessary pieces of information. According to Bickham (2015) “Guided Reading is also successful in improving reading comprehension skills for students who are deaf or hard of hearing” (p. 58). Consequently, this way, students will be guided at the moment of reading the teaching material and understanding it.

Aiming for this same previous objective, we also recommend writing the instructions clearly and making them visible, step-by-step and written as suggestions, so students do not get lost. For example: when writing the instructions, you may write them through steps such as step 1, step 2, step 3, etc, rather than long and abstract ones.

Another suggestion is to avoid the use of visual barriers near the teachers’ mouth that can impede visual understanding. According to Mpofu and Chimenga (2013)” the teacher should also be aware that moustaches, beards, hands, books or microphones in front of their faces can add to the difficulties of lip reading for the students” (p. 70). It is important to know that not every student uses lip reading in order to comprehend. However, this strategy may help those who do.

When it comes to learning new vocabulary, distribute a specific part of the lesson to help students contextualise it. Using the language in real context situations is more effective than learning it in isolation. According to Wellen (2019) “Effective teachers relate new vocabulary to what a child is likely to already know rather than to a dictionary or glossary definition.” Wellen reaffirms the importance of familiarity in the teaching of vocabulary in a new language to help students incorporate it the best. A strategy that we do not suggest is nominating students to read paragraphs out loud one by one for students with HL. According to Bickham (2015):

“Reading in small groups or taking turns reading, was shown to not support reading comprehension skills in students who are deaf or hard of hearing due to the fact that the students were more focused only on their section they had to read or using the right signs to convey the message to their peers.” (p. 60)

Consequently, using this methodology will not assure student's understanding in the area rather than working only on the selected part.

Finally, we highly recommend designing material using colourful and creative designs that can seem catchy and motivating for students. According to Jalil, Yunus and Said (2012) "the considerations of these factors are due to its important component in supporting student's self-efficiency and motivation in learning process and activity". Consequently, the way teachers design their materials and classes is an important influence when enhancing students' learning. You can find interesting and different templates for lessons at Canva, SlidesGo, Slides Carnival, etc.

6.4 Peer collaboration

Considering the information obtained from the surveys carried out in this research, our team has discovered that 84,6% of the special education teachers do not have experience in using ICTs in the English subject. Furthermore, in a recent research, Osorio and Robles (2021) affirm that English teachers and special education teachers do not work collaboratively.

In Chile the PIE state program mandates special education teachers to accompany students with SEN in order to facilitate access to the regular curriculum. Those teachers work mainly in Mathematics and Spanish language. Unfortunately, English as a foreign language is not a priority in the academic national curriculum. In addition, public schools that are mandated to have a PIE program, sometimes send special education teachers to support students with SEN in the classroom. However, as realised when analysing the information in the surveys, English language is not included in the accompaniment by PIE. According to LeDoux (2011) "when teachers work collaboratively with the special education team, it will build stronger understandings and knowledge of the impact of inclusion on the students they teach and create more positive attitudes toward inclusion" (p. 29). For this reason, we strongly suggest that English teachers and Special education teachers work collaboratively for a better integration of students with SEN. Although we understand that this is not something that teachers can organise on their own, there has to be allocation of resources and the state has to create conditions for this to happen. Considering what is above, we suggest that at the beginning of the year, English teachers should be informed about students with SEN that are in their classes. This with the purpose of knowing what their needs are, in terms of learning processes, and to

adapt the curriculum accordingly. As mentioned by LeDoux (2011) "A collaborative planning and teaching foundation will bridge the gap that is causing the feeling of disconnect between general education teachers and special education" (p. 29). Therefore, we suggest that lesson planning of the English subject should be designed by both special education teachers and English teachers in order to create an appropriate methodology to include all students.

Conclusions

The purpose of this work is to provide teachers with a set of suggested strategies for the use of ICTs in the context of teaching English as a foreign language as a way to create an inclusive learning space that benefits all students in the classroom. While these suggestions focus on students with SEN, specifically those with mild to moderate HL, it is worth noting that they can be implemented in any classroom and with any students, regardless of whether there are students with HL or not. Because these degrees of HL can be difficult to recognize for both the student and the people surrounding them, it is essential that teachers make a conscious effort to adapt their teaching practices to ensure equal opportunities for all students to learn and succeed, regardless of their characteristics.

The motivation for this research is based on our interest in moving towards a more inclusive education for all students.

The general objective of this study was to research literature regarding the use of ICTs in EFL classrooms with students with mild to moderate HL to eventually suggest strategies for the use of these technologies that promote more inclusive environments. The literature review and the Surveys for Chilean Teachers of English, Chilean Special Education Teachers and Chilean Students with Mild to Moderate HL that we applied, provided us with information to offer a set of suggestions that include strategies and techniques to apply in the EFL class in order to enhance the learning process of each and every student, including students with HL.

As a research team, we thoroughly revised bibliographic sources on strategies for the use of ICTs in TEFL in and out Secondary Chilean Education classrooms that include students with HL. We could collect some useful procedures to simplify the learning process of the students. However, it was difficult to find strategies directed especially towards students with the degrees of HL considered in our study. Hence, based on the literature and the recommendations we could find and the different experiences gathered through the surveys, we were able to define a series of strategies to consider when teaching English as a Foreign Language that cover all the students, including the ones with the aforementioned SEN.

In more specific terms, regarding the methodology, the three surveys carried out provided us partly with the needed information in order to accomplish our purposes. In the first place,

students with mild to moderate HL were surveyed to know their experiences learning EFL and using ICTs during the process. The responses of the students elucidated that a slight majority considers their experience as good or very good as they received the necessary support during the process. According to them, that accompaniment mostly came from their teachers of English. The students expressed that their teachers preferred to use audiovisual materials in class such as pictures, videos, and presentations in PowerPoint or Google Slides. On the other hand, laptops and cellphones were the chosen technological devices and the most used by the surveyees as support for their process. Finally, searching on the internet, language learning apps such as Duolingo, and Youtube videos were strategies proposed by the students in order to study and prepare for their lessons. However, and despite their positive appreciations, only 25,8% consider their learning objectives completely achieved. Conversely, the majority of the students agreed that their achievement in the subject was partial. Concerning that, they affirmed that if their teachers had implemented in class those mentioned strategies, their experience would have been better.

Secondly, the experiences of Special Education Teachers regarding the use of ICTs in their classes was also analysed in this research. Based on the answers provided, 100% of the surveyed teachers have had experience using ICTs in the teaching process, where a vast majority declare using mostly mobile phones, tablets and laptops to develop oral and written abilities in class. Special Education Teachers prefer to use audiovisual material as PowerPoint or Canva presentations, along with platforms such as Wordwall, Kahoot, and online games to support their lessons. Additionally, we can mention that a few years ago, the Chilean Ministry of Education implemented innovations for public schools in order to promote the use of ICTs in teaching, such as the “Enlaces” project and the “Aulas Conectadas 2022” project to encourage advances in education from a digital perspective. However, although teachers consider themselves well instructed in the area of ICTs, only 15,4% have had experience using technologies in TEFL.

Osorio and Robles (2021) explain that there is a gap in the relationship between the teacher’s knowledge about ICTs and their use in EFL classrooms. This may occur because EFL as a school subject exists in parallel to the Special Education area, creating a disconnection between both entities as they do not work collaboratively. Furthermore, the prioritisation of EFL as a subject in the curriculum is sometimes minimised. In some cases, subjects as Maths or Spanish are over EFL according to the priorities of the establishment, since they are present in

standardised tests as the Sistema Nacional de Evaluación de Resultados de Aprendizajes (SIMCE) and the Prueba de Acceso a la Educación Superior (PAES), hence they prefer to prepare the students for those standardised tests. Following the same line, although some schools have the School Integration Programme (PIE in Spanish), the financial resources that schools receive for the improvement of their students' quality of education are often used for the enhancement of other areas. In general, teachers agree on the lack of support presented to the students with mild to moderate HL to cover their needs and requirements to learn the language with the same opportunities that their classmates have.

As a research group, we had expected to receive more participation in the survey for Teachers of English, nonetheless there were three people who offered their answers for this research. We consider that it is a piece of evidence regarding the lack of information existing for Teachers of English in the area of the teaching EFL to students with mild to moderate HL, provoking an unfamiliarity with this SEN. As a research team, we assure that there must be many teachers who have had students with mild to moderate degrees of HL inside their classrooms, however they probably did not know it at the time. On one hand, in general terms the surveyed teachers recognise not being one hundred percent prepared to face a class with students with HL as they declare have not received an appropriate training to do so in their undergraduate studies. Besides, only a third of the surveyed teachers declare to have received training in their workplace.

After analysing all the data compiled from the surveyees, we organised the information and realised that firstly, head teachers are the ones who, according to the students themselves, provide most of the accompaniment in the subject. However, teachers say they do not feel well prepared to face the difficulties of teaching a new language to students with mild to moderate HL. Despite using inclusive strategies for all students, there is no specific training for teachers regarding the SEN of our students.

Next, as a research team we believe that the use of ICTs is a topic, on which not enough training has been received, so its use continues to be scarce despite all attempts to promote it. The majority of the students surveyed mentioned they feel comfortable with the use of technologies during their learning process. Conversely, many of the strategies mentioned in this work were not used by their teachers during the process. On the other hand, from the surveyed Chilean

teachers of English, not all consider themselves to have an advanced level in the use of ICTs. This makes it difficult for them to use various strategies, tending to constantly repeating the use of the same ones. Notwithstanding, teachers try to find inclusive strategies that are consistent with all students in the room, including those with SEN and in this case, students with mild to moderate HL.

Special Education teachers are already intrinsically connected with those students with SEN and have a positive response towards the use of ICTs as a teaching strategy in the classroom. In line with the data collected, Special Education teachers reported that they do not work together with teachers of English. Thus, there are no established protocols on collaborative work where both Special Education teachers and teachers of English can contribute to the teaching-learning process of students with mild to moderate HL in an EFL inclusive classroom.

Although the Chilean Government dictates Laws and Decrees that ensure the inclusion of diversity in many fields, in reality, and specifically in the field of Education, we could advert lack of information and lack of resources and training for EFL teachers, specifically, in order to guide them in the process of teaching to those who need adaptations to the curriculum. In Chilean classrooms, education sometimes seems to focus only on the ones who learn with traditional methods, however, it is important to remind ourselves that students have the same right to learn, but not the same conditions to do so. For that reason, we strongly believe that propounding these recommendations as a guide for EFL teachers is going to pose as a useful tool to move toward a more inclusive education in Chilean classrooms.

To conclude, the strategies that we propose consider the appreciations of the groups surveyed and our own interpretations based on what we have read and learned during the research process. This research group has taken into account various aspects of the learning process regarding SEN for both teachers and students to propice an enriching learning experience for everyone where no student will be left behind.

Limitations

As a team, we faced our very first limitation the moment we came together to decide which would be the topic of our research. This limitation was our small or inexistent knowledge of Chilean Sign Language (LSC in its Spanish acronym), which caused us to reduce the scope of our intended study from including students with any level of HL (mild, moderate, severe, and profound) to including only the first two levels (mild and moderate). At the same time, this situation helped us see a bigger picture of the general state of our education system and the insufficiency of not only EFL teachers' preparation but also laypersons in general. The abovementioned limitation, limited our research and shaped our perspective regarding room for improvement as teachers and other people in the community.

Another limitation we faced was the lack of Chilean research about teaching English (TEFL) to students with HL (mild, moderate, severe, etc). When reviewing the literature available we had problems finding studies on the topic that had been carried out in Chile, and it was even more difficult to find anything that included students' own experiences and perceptions. Therefore, most of the literature we used to support our work was pertaining to other countries and usually from educational systems that differ greatly from ours. Still, our survey for students with mild to moderate HL and the participants' disposition to collaborate helped us fill some of those gaps and get a general view of the students' experiences and thoughts.

Finally, the last limitation we faced was the less-than-enthusiastic number of responses we received in our survey for teachers of English. A situation that is coherent with the disinterest we mentioned in the first paragraph of this section. Our inability to collect a bigger amount of responses regarding teachers' experiences, training, and opinions left us having to infer those from the various studies we read and our own experiences as students and pre-service teachers. Although we cannot be a hundred percent sure that this lack of participation was merely disinterest, we can agree that if there is a scale of priorities in the large amount of responsibilities that teachers have, then, according to the participation rate of teachers of English and the general results of our research, students with HL are not among the priorities

Findings

Throughout the different moments of our investigation we, as a team, were able to discover aspects that differed from our beliefs and knowledge, and new facts that we had not even considered before. For the sake of organisation and understanding we grouped them in three different themes: teachers' preparation, pedagogic collaboration, and use of ICTs.

In the case of teachers' preparation, we found that although the number of national decrees and laws regarding the inclusion of students with SEN, and more specifically with HL, is ever growing, universities and other educational establishments in charge of the training of teachers are not necessarily on par with these advancements, which translates into a deficient preparation and a feeling of unreadiness common to many - if not most of Chilean teachers. Consequently, there is an observable relation between all the English teachers stating not to have received training regarding the teaching to students with HL and most of the students with HL claiming that they did not receive support while studying English. The relationship may be that teachers are not providing support because they simply do not know how to do so. Nonetheless, EFL teachers represent the majority of teachers who support students with HL, which brings forth the necessity of teachers, in general, being prepared and trained on how to design classes and provide support that is both adequate and beneficial for students' learning process.

However, when referring to the teachers' ability to make the teaching-learning process a group effort, we realised that teachers of English do not show a very good disposition towards participating in collaborative research nor in sharing their experiences for the improvement of the education process. In our opinion, we venture to state this limitation because in the application of our survey for teachers of English (shared in many platforms) and available for several weeks, we can state that it did not receive half as many participants as we were expecting. In the same manner, we realised that there is an aspect of collective work missing in Chilean schools which is evident by the lack of collaboration between teachers of different fields and other education workers, such as psychologists, technical units, and integration and professionals related to inclusiveness work. We believe that if there were such collaboration, it would be extremely beneficial for all parties involved, especially students of the Chilean educational system.

Moreover, this research allowed us to get a sense of the attitude towards using ICTs inside the classroom and what we found out is positively encouraging. In the first place, students with HL in their vast majority are ready to participate in any instance that may help improve their educational experience. Students with HL want to learn English, they are open to the use of ICTs in the English classroom and are willing to try and experiment with new technologies and strategies that may help them reach their full potential. Similarly, even though teachers are not being properly trained in the use of ICTs with educational purposes, most of them show autonomy and the drive necessary to improve their students' experience using their own resources to teach themselves to apply technologies in the best way they see fit.

These findings show us that there is much to improve in the different levels of education, starting by improving teacher-training programs, directing more resources towards inclusion programs in schools, and by promoting more and better collaboration between all the participants of the educational community. However, they also show us the importance of the final product of this research, which can be extremely beneficial and useful for teachers all over the country, who are currently struggling with their perceived unreadiness and relying on their own abilities to implement technologies no one has taught them how and when to use.

We hope that these findings will support the fact that this kind of disability may not be as visible as a deeper case of HL (severe or profound HL) can be. Likewise, we infer that only teachers who know the students' diagnosed degree of HL (medium to moderate HL) beforehand could answer this survey. We can also deduce that other teachers of English who happened to come across this survey either never worked with students with mild to moderate HL or did not know if any of their students had the described degree of HL.

Further research

The suggestions presented in this work regarding the use of technology in English lessons are intended to improve the learning experiences of students with mild to moderate HL, and promote a more accessible and inclusive pedagogical practice within the classroom. Although there are a variety of resources and platforms currently available, such as those described in this research, there is no guarantee that they will all work in the same way in any given context or with any given student. Therefore, we recommend that future research focus on assessing the effectiveness of these suggestions in a real-world classroom setting in order to move toward a more inclusive learning environment and a better understanding of the topic under study.

Furthermore, we believe that it would be useful for future research to explore the role of the School Integration Program (PIE, in its Spanish acronym) and similar regulations in educational institutions today; particularly, in terms of the implementation of the technical support and resources the program provides and its incidence on the learning process of students with SENs. As noted above, there is not much information in the official educational resource web pages regarding the teaching of students with SENs. We believe it is critical that there can be an established and organised communication and mandatory relationship with experts when designing appropriate strategies and adaptations for students with these characteristics. At the same time, this will help to improve the training of teachers, making them feel more prepared to face the diversity of needs in the classroom.

To conclude, the research group suggests pursuing further exploration of this topic, focusing on finding more strategies and methodologies that can aid the learning process of students with mild to moderate HL. While this work is a good starting point, along with other research done in the past, more studies are needed to expand existing knowledge in this area and contribute to the preparation of current and future teachers.

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Appendices

Appendix A: Survey for Special Education Teachers



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Profesor(a): María Eugenia Hernández V.

Encuesta para Profesores y Profesoras de Educación Diferencial

Estimadas Profesoras, Estimados profesores de Educación Diferencial:

Somos un grupo de estudiantes del Departamento de Inglés de la Universidad Metropolitana de Ciencias de Educación (UMCE), y estamos trabajando en nuestra Tesis titulada “Sugerencias para el uso de las TIC en el proceso de enseñanza de Inglés como lengua extranjera en un aula inclusiva, considerando a estudiantes con pérdida auditiva en escuelas chilenas”. El objetivo de nuestro estudio es sugerir estrategias para el uso de TICs en la enseñanza de Inglés como Lengua Extranjera dentro del contexto de educación media en Chile que incluyan a estudiantes con discapacidad auditiva.

Esta encuesta se divide en 3 secciones: la sección A está compuesta de dos preguntas correspondientes a información personal. La sección B corresponde a 5 preguntas sobre su formación académica y contexto actual. Finalmente la sección C cuenta con 4 preguntas sobre su experiencia profesional. Cabe destacar que cuando se menciona la palabra estudiantes, hacemos referencia a alumnos y alumnas con pérdida auditiva leve a moderada.

Su respuesta a esta encuesta es altamente significativa para nuestra investigación y es por eso que solicitamos su participación. Entendiendo que su tiempo es valioso, le comentamos que el tiempo de duración estimado para responder es de 10 o 15 minutos. Dejamos constancia que la información compartida en esta encuesta será utilizada sólo para usos académicos y de forma anónima.

Sección A: Información personal

Edad: _____.

Marque la alternativa con la cual identifica su sexo:

- Femenino.
- Masculino.
- Intersexual.
- Prefiero no decirlo/ No corresponde.

Marque la alternativa con la cual identifica su género:

- Cis género femenino.
- Cis género masculino.
- Transgénero femenino.
- Transgénero Masculino.
- Género No Binario.
- Otro.
- Prefiero no decirlo.

Sección B: Formación Académica y contexto actual

1. Experiencia en la docencia:

- Menor o igual a 1 año.
- De 1 año a 5 años.
- De 6 años a 10 años.
- Mayor a 10 años.

2. Nombre de Escuela / Colegio / Instituto donde trabaja: _____.

3. Este establecimiento es:

- Público.
- Privado.
- Subvencionado.

4. **¿Ha tenido experiencia con el uso de TICs en la docencia?**

- Sí
- No

5. **¿Ha tenido experiencia con el uso de TICs en la asignatura de Inglés?**

- Si
- No

Sección C: Experiencia Profesional y Capacitación.

6. **Desde su formación de pregrado hasta la actualidad ¿Ha tomado cursos sobre perfeccionamiento en el área de TICs?**

- Sí
- No

7. **¿De qué manera incorpora el uso de TICs dentro de los procesos comunicacionales (comprensión y expresión oral y escrita) con los estudiantes?**

- En la comprensión de textos escritos u orales.
- En la elaboración de textos y/o discursos orales.
- Ambos.
- Otros: ____.

8. **Nombre las TICs que más ha utilizado dentro del aula en orden de preferencia:**

9. **En su experiencia profesional, ¿cómo calificaría el acompañamiento para estudiantes con pérdida auditiva (leve a media) en la enseñanza del Inglés como lengua extranjera? Siendo 1 el más bajo, y 7 el más alto.**

1 - 2 - 3 - 4 - 5 - 6 - 7

Agradecemos su respuesta y participación. En caso de cualquier duda, consulta o sugerencia, puede contactar directamente a cualquiera de los autores a través de los siguientes correos electrónicos:

diego.feijoo2016@umce.cl jennifer.tobar2016@umce.cl fernanda.escandon2016@umce.cl
Rocio.llanos2016@umce.cl valentina.bordones2016@umce.cl paula.gatica2018@umce.cl
luis.gonzalez_r@umce.cl anays.gomez2018@umce.cl isidora.rojas2018@umce.cl
sofia.valdes2018@umce.cl m_eugenia.hernandez@umce.cl .

Consentimiento:

Al hacer clic en “Enviar”, Usted autoriza que la información que compartió de manera anónima y confidencial en esta encuesta sea utilizada exclusivamente para fines académicos.

Santiago de Chile, 2022.

**Appendix B: Letter of Validation Request Survey for Special Education
Teachers**



Universidad Metropolitana de Ciencias de la Educación
Facultad de Historia, Geografía y Letras
Departamento de Inglés
Profesor(a): María Eugenia Hernández V.

Profesor/a

ROSA ISABEL NILO

Departamento de Inglés

Universidad Metropolitana de Ciencias de la Educación

PRESENTE

Nos dirigimos a usted, en nuestra calidad de estudiantes regulares de Licenciatura en Educación con Mención en Inglés y Pedagogía en Inglés, de la Universidad Metropolitana de Ciencias de la Educación para solicitar la validación del instrumento creado. Esto para poder llevarla a cabo en nuestro Seminario de Título que está actualmente en curso en el área de Necesidades Educativas Especiales, la cual se focaliza en estudiantes con Pérdida Auditiva. Nuestra tesis es titulada “*Sugerencias para el uso de las TIC en el proceso de enseñanza de Inglés como lengua extranjera en un aula inclusiva, considerando a estudiantes con pérdida auditiva en escuelas chilenas*”. Esta investigación tiene por propósito sugerir estrategias para el uso de TICs en la enseñanza de Inglés como Lengua Extranjera dentro del contexto de educación media en Chile que incluyan a estudiantes con discapacidad auditiva.

Por este motivo, solicitamos a usted, asistencia en la validación del siguiente instrumento, denominado: ‘Entrevista a Profesores y Profesoras de Educación Diferencial’ el cual adjuntamos a esta carta.

Agradecemos de antemano su disposición y colaboración con nuestro trabajo.

Saludan atentamente,

Valentina B., Fernanda E., Diego F., Paula G., Anays G., Luis G., Rocio L., Isidora R., Jenniffer T. Sofía V. y nuestra profesora guía, M. Eugenia Hernández.

“Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing loss in Chilean schools”

Licenciatura en Educación con Mención en Inglés y Pedagogía en Inglés

Santiago de Chile, 2022.

Appendix C: Validation Letter Survey for Special Education Teachers

Datos del (la) Experto(a)	
Nombre completo	Rosa Isabel Nilo Cea
Título profesional	Educadora Diferencial con Esp. Discapacidad Mental
Grado académico	Magister en Desarrollo Cognitivo
Departamento	Educación Diferencial. DM-DC
Fecha revisión	03.09.2022
Firma	

Appendix D: Final Survey for Special Education Teachers



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Profesor(a): María Eugenia Hernández V.

Encuesta para Profesores y Profesoras de Educación Diferencial

Estimadas Profesoras, Estimados profesores de Educación Diferencial:

Somos un grupo de estudiantes del Departamento de Inglés de la Universidad Metropolitana de Ciencias de Educación (UMCE), y estamos trabajando en nuestra Tesis titulada “Sugerencias para el uso de las TIC en el proceso de enseñanza de Inglés como lengua extranjera en un aula inclusiva, considerando a estudiantes con pérdida auditiva en escuelas chilenas”. El objetivo de nuestro estudio es sugerir estrategias para el uso de TICs en la enseñanza de Inglés como Lengua Extranjera dentro del contexto de educación media en Chile que incluyan a estudiantes con discapacidad auditiva.

Esta encuesta se divide en 3 secciones: la sección A está compuesta de dos preguntas correspondientes a información personal. La sección B corresponde a 5 preguntas sobre su formación académica y contexto actual. Finalmente la sección C cuenta con 4 preguntas sobre su experiencia profesional. Cabe destacar que cuando se menciona la palabra estudiantes, hacemos referencia a alumnos y alumnas con pérdida auditiva leve a moderada.

Su respuesta a esta encuesta es altamente significativa para nuestra investigación y es por eso que solicitamos su participación. Entendiendo que su tiempo es valioso, le comentamos que el tiempo de duración estimado para responder es de 10 o 15 minutos. Dejamos constancia que la información compartida en esta encuesta será utilizada sólo para usos académicos y de forma anónima.

Sección A: Información personal

Edad: _____.

Marque la alternativa con la cual identifica su sexo:

- Femenino.
- Masculino.
- Prefiero no decirlo u otro.

Sección B: Formación Académica y contexto actual

1. Experiencia en la docencia:

- Menor o igual a 1 año.
- De 1 año a 5 años.
- De 6 años a 10 años.
- Mayor a 10 años.

2. Nombre de Escuela / Colegio / Instituto donde trabaja: _____.

3. Este establecimiento es de dependencia:

- Municipal
- Servicio Local (Ministerial)
- Subvencionado Particular
- Particular

4. ¿Ha tenido experiencia con el uso de TICs en la docencia?

- Sí
- No

5. ¿Ha tenido experiencia con el uso de TICs en la asignatura de Inglés?

- Si
- No

Sección C: Experiencia Profesional y Capacitación.

6. Desde su formación de pregrado hasta la actualidad ¿Ha tomado cursos sobre perfeccionamiento en el área de TICs?

- Sí
- No

7. ¿De qué manera incorpora el uso de TICs dentro de los procesos comunicacionales (comprensión y expresión oral y escrita) con los estudiantes?

- En la comprensión de textos escritos u orales.
- En la elaboración de textos y/o discursos orales.
- Ambos.
- Otros: ____.

8. Nombre las TICs que más ha utilizado dentro del aula en orden de preferencia:

9. En su experiencia profesional, ¿cómo calificaría el acompañamiento para estudiantes con pérdida auditiva (leve a media) en la enseñanza del Inglés como lengua extranjera? Siendo 1 el más bajo, y 7 el más alto.

1 - 2 - 3 - 4 - 5 - 6 - 7

Agradecemos su respuesta y participación. En caso de cualquier duda, consulta o sugerencia, puede contactar directamente a cualquiera de los autores a través de los siguientes correos electrónicos:

diego.feijoo2016@umce.cl jenniffer.tobar2016@umce.cl fernanda.escandon2016@umce.cl
Rocio.llanos2016@umce.cl valentina.bordones2016@umce.cl paula.gatica2018@umce.cl
luis.gonzalez_r@umce.cl anays.gomez2018@umce.cl isidora.rojas2018@umce.cl
sofia.valdes2018@umce.cl m_eugenia.hernandez@umce.cl .

Consentimiento:

Al hacer clic en “Enviar”, Usted autoriza que la información que compartió de manera anónima y confidencial en esta encuesta sea utilizada exclusivamente para fines académicos.

Santiago de Chile, 2022.

Appendix E: Survey for Teachers of English



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Profesor(a): María Eugenia Hernández V.

Dear Teachers of English,

We are students of the English Pedagogy Program at Universidad Metropolitana de Ciencias de la Educación (UMCE). We are currently working on our dissertation titled “Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing impairment in Chilean schools. The following survey is presented to you with the objective of collecting information for our research regarding your academic and professional development in the Teaching of English as a Foreign Language (TEFL) in relation to the experience of working with students with mild to moderate hearing loss and the use of ICTs to enhance the teaching-learning process.

This survey is made up of 10 questions divided into three sections. The first one is designed to gather general information about the place you work in. The second section presents questions about your former training to become a Teacher of English, concerning the management of strategies and ICTs to teach students with mild to moderate hearing loss. Finally, in the last section, you will be asked about your professional experience in the matter. *This survey will take no more than 10 minutes to complete.*

The information gathered in this survey will be used for the sole purpose of academic research. The answers will be submitted respecting the anonymity of the respondent's identity. By submitting your answers in the Google Forms survey you will be consenting to voluntarily participating in this survey and accepting the terms and conditions.

Section 1: General information.

1. Where is the school you work/worked in located? (Comuna, Región)
2. Choose the type of school you work/worked in. (Private, Public, Subsidised.)
3. How long have you been working as a Teacher of English? (1 to 5 years, 6 to 10 years, more than 10 years)

Section 2: Previous training.

4. Did you receive any training/instruction about the use of ICTs in TEFL during your undergraduate studies? (Yes/No)
5. Did you receive any training/instruction during your undergraduate studies regarding strategies to teach to students with mild to moderate hearing loss? (Yes/No)
6. How would you rate your management regarding ICTs? (Basic, Intermediate, Advanced)

Section 3: Professional Experience.

Regarding your personal experience working with students with mild to moderate hearing loss, whether currently or not:

7. Do you consider in your classes the use of ICTs strategies oriented to the inclusion of students with mild to moderate hearing impairments? (Yes/No)
8. Which of the following would you name as your preferred supporting material for the teaching of English to students with mild to moderate hearing loss?
Books
Texts on the internet
Videos on the internet

Infographics

Other _____

9. Does the school where you work/worked in have special programs or training for teachers regarding SEN? (Yes/No)

10. On a scale from 1 to 4, how prepared do you feel to manage a class where students with mild to moderate hearing loss are present?

1 always prepared 2 somewhat prepared 3 slightly prepared 4 unprepared

We thank you for being part of this research. In case of any doubts or suggestions, feel free to contact the authors of the research via email at:

diego.feijoo2016@umce.cl

jenniffer.tobar2016@umce.cl

fernanda.escandon2016@umce.cl

paula.gatica2018@umce.cl

luis.gonzalez_r@umce.cl

rocio.llanos2016@umce.cl

valentina.bordones2016@umce.cl

anays.gomez2018@umce.cl

isidora.rojas2018@umce.cl

sofia.valdes2018@umce.cl

Consent

By clicking “Send”, you authorise the information contained in this survey, which you anonymously and confidentially shared, to be used exclusively for academic purposes.

Santiago de Chile, 2022.



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Profesor(a): María Eugenia Hernández V

Profesor/a

Bruno Peralta Gonzalez

Departamento de Inglés

Universidad Metropolitana de Ciencias de la Educación

PRESENTE

Nos dirigimos a usted, en nuestra calidad de estudiantes regulares de Licenciatura en Educación con Mención en Inglés y Pedagogía en Inglés de la Universidad Metropolitana de Ciencias de la Educación, con el fin de solicitar la validación del instrumento a utilizar para la recolección de datos. Esto para poder llevarla a cabo en nuestro Seminario de Título que está actualmente en curso en el área de Necesidades Educativas Especiales, la cual se focaliza en estudiantes con Pérdida Auditiva. El tema del seminario (en curso) se titula “Sugerencias para el uso de las TIC en el proceso de enseñanza de Inglés como lengua extranjera en un aula inclusiva, considerando a estudiantes con pérdida auditiva en escuelas chilenas”.

Esta investigación tiene como propósito sugerir estrategias para el uso de las TIC en la enseñanza de Inglés como Lengua Extranjera, considerando el contexto de educación media en Chile y que incluyan a estudiantes con discapacidad auditiva media a moderada.

Por este motivo, solicitamos a usted asistencia en la validación del ya mencionado instrumento a utilizar, denominado: “Survey for Teachers of English”, el cual adjuntamos a esta carta..

Agradecemos de antemano su disposición y colaboración con nuestro trabajo.

Saludan atentamente,

Valentina B., Fernanda E., Diego F., Paula G., Anays G., Luis G., Rocio L., Isidora R., Jenniffer T. Sofía V. y nuestra profesora guía, M. Eugenia Hernández.

“Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing loss in Chilean schools”

Licenciatura en Educación con Mención en Inglés y Pedagogía en Inglés

Santiago de Chile, 2022.

Appendix G: Validation Letter Survey for Teachers of English



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Estimado equipo de tesis: Valentina B., Fernanda E., Diego F., Paula G., Anays G., Luis G., Rocio L., Isidora R., Jenniffer T. Sofía V

Departamento de Inglés

Universidad Metropolitana de Ciencias de la Educación PRESENTE

Esperando que se encuentren bien, hago entrega de esta carta para validar su instrumento de recopilación de datos.

Saludos cordiales,

Bruno Paulo Peralta González

Santiago de Chile, 2022.

Appendix H: Final Survey for Teachers of English



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Profesor(a): María Eugenia Hernández V.

Dear Teachers of English,

We are students of the English Pedagogy Program at Universidad Metropolitana de Ciencias de la Educación (UMCE). We are currently working on our dissertation titled “Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing impairment in Chilean schools. The following survey is presented to you with the objective of collecting information for our research regarding your academic and professional development in the Teaching of English as a Foreign Language (TEFL) in relation to the experience of working with students with mild to moderate hearing loss and the use of ICTs to enhance the teaching-learning process.

This survey is made up of 10 questions divided into three sections. The first one is designed to gather general information about the place you work in. The second section presents questions about your former training to become a Teacher of English, concerning the management of strategies and ICTs to teach students with mild to moderate hearing loss. Finally, in the last section, you will be asked about your professional experience in the matter. *This survey will take no more than 10 minutes to complete.*

The information gathered in this survey will be used for the sole purpose of academic research. The answers will be submitted respecting the anonymity of the respondent's identity. By submitting your answers in the Google Forms survey you will be consenting to voluntarily participating in this survey and accepting the terms and conditions.

Section 1: General information.

11. Where is the school you work/worked in located? (Comuna, Región)
12. Choose the type of school you work/worked in. (Private, Public, Subsidised.)
13. How long have you been working as a Teacher of English? (1 to 5 years, 6 to 10 years, more than 10 years)

Section 2: Previous training.

14. Did you receive any training/instruction about the use of ICTs in TEFL during your undergraduate studies? (Yes/No)
15. Did you receive any training/instruction during your undergraduate studies regarding strategies to teach to students with mild to moderate hearing loss? (Yes/No)
16. How would you rate your management regarding ICTs? (Basic, Intermediate, Advanced)

Section 3: Professional Experience.

Regarding your personal experience working with students with mild to moderate hearing loss, whether currently or not:

17. Do you consider in your classes the use of ICTs strategies oriented to the inclusion of students with mild to moderate hearing impairments? (Yes/No)

18. Which of the following would you name as your preferred supporting material for the teaching of English to students with mild to moderate hearing loss?

Books

Texts on the internet

Videos on the internet

Infographics

Other _____

19. Does the school where you work/worked in have special programs or training for teachers regarding SEN? (Yes/No)

20. On a scale from 1 to 4, how prepared do you feel to manage a class where students with mild to moderate hearing loss are present?

1 always prepared 2 somewhat prepared 3 slightly prepared 4 unprepared

We thank you for being part of this research. In case of any doubts or suggestions, feel free to contact the authors of the research via email at:

diego.feijoo2016@umce.cl

jenniffer.tobar2016@umce.cl

fernanda.escandon2016@umce.cl

paula.gatica2018@umce.cl

luis.gonzalez_r@umce.cl

rocio.llanos2016@umce.cl

valentina.bordones2016@umce.cl

anays.gomez2018@umce.cl

isidora.rojas2018@umce.cl

sofia.valdes2018@umce.cl

Consent

By clicking “Send”, you authorise the information contained in this survey, which you anonymously and confidentially shared, to be used exclusively for academic purposes.

Santiago de Chile, 2022.

Appendix I: Survey for Students with Mild to Moderate Hearing Loss



Universidad Metropolitana de Ciencias de la Educación
Facultad de Historia, Geografía y Letras
Departamento de Inglés
Profesor(a): María Eugenia Hernández V.

Santiago, 2022

Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing loss in Chilean schools.

Estimados y estimadas, la presente encuesta tiene como objetivo recopilar información respecto a su experiencia en el proceso de enseñanza-aprendizaje de Inglés como Lengua Extranjera durante su paso por la educación formal y el impacto en dicho proceso.

La encuesta se divide en 2 secciones, la primera está compuesta de 4 preguntas correspondientes a información general. La segunda sección corresponde a 9 preguntas sobre su experiencia en el proceso de enseñanza y aprendizaje de Inglés como Lengua Extranjera.

Su respuesta a esta encuesta es altamente significativa para nuestra investigación y es por eso que solicitamos su participación. Entendiendo que su tiempo es valioso, le comentamos que el tiempo de duración estimado para responder es de 10 o 15 minutos. Dejamos constancia que la información compartida en esta encuesta será utilizada sólo para usos académicos y de forma anónima.

Sección A: Información General

1. Seleccione su grado de pérdida auditiva.

- a) Media
 - b) Moderada
2. Indique su edad.
 3. Indique su ocupación.
 4. Seleccione el tipo de establecimiento donde estudia o estudió.
 - a) Público
 - b) Privado
 - c) Subvencionado

Sección B: Experiencia en el proceso de aprendizaje de inglés como lengua extranjera

1. ¿Cómo evalúa su experiencia aprendiendo Inglés en un establecimiento educacional?
 - Muy mala.
 - Mala.
 - Buena.
 - Muy buena.
2. ¿Recibió acompañamiento durante el proceso de aprendizaje de Inglés?
 - Sí
 - No
3. ¿Cómo evaluaría su nivel de logro en el aprendizaje de Inglés como lengua extranjera?
 - No logrado
 - Medianamente logrado
 - Logrado
4. ¿Cuál de las siguientes estrategias fueron utilizadas por sus profesores o profesoras durante su proceso de aprendizaje de Inglés? Puede escoger más de una opción.
 - Gestos y lenguaje corporal
 - Lengua de señas.
 - Tutoría entre pares
 - Trabajo en grupo
 - Material audiovisual

5. ¿Cuál/es de los siguientes dispositivos fueron utilizados durante las clases de Inglés? Puede escoger más de una opción.
- Computadores
 - Tablets
 - Celulares
 - Otro
6. Al estudiar o prepararse para las clases de Inglés, ¿cuáles de las siguientes nombraría como su material de apoyo preferido? Puede escoger más de una opción.
- Aplicaciones de idiomas (Duolingo, Rosetta, Stone, Busuu, o similares)
 - Búsqueda en Internet
 - Plataformas de video
 - Galerías de imágenes
 - Otro
7. ¿Qué tan cómodo/a se siente al utilizar los siguientes dispositivos? (Muy incómodo/a, incómodo/a, cómodo/a, muy cómodo/a)
- Computadores
 - Tablet
 - Celulares
8. ¿Qué tan cómodo/a se siente al utilizar los siguientes recursos digitales? (Muy incómodo/a, incómodo/a, cómodo/a, muy cómodo/a)
- Word, Excel, PowerPoint o Slides
 - Drive
 - Videos
 - Imágenes
 - Aplicaciones móviles de accesibilidad
 - Diccionario en línea
 - Herramientas de creación de videos
 - Aparatos auditivos

9. ¿Qué aplicación, dispositivo tecnológico o plataforma en línea considera que hubiese mejorado o potenciado su experiencia como estudiante? (Pregunta abierta)

Agradecemos su respuesta y participación. En caso de cualquier duda, consulta o sugerencia, puede contactar directamente a cualquiera de los autores a través de los siguientes correos electrónicos:

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rocio.llanos2016@umce.cl

isidora.rojas2018@umce.cl

jenniffer.tobar2016@umce.cl

sofia.valdes2018@umce.cl

Asentimiento - Consentimiento:

Al hacer clic en “Enviar”, Ud. autoriza que la información que compartió de manera anónima y confidencial en esta encuesta sea utilizada exclusivamente para fines académicos.

Appendix J: Letter of Validation Request Survey for Students with Mild to Moderate Hearing Loss



Universidad Metropolitana de Ciencias de la Educación

Facultad de Historia, Geografía y Letras

Departamento de Inglés

Tutora: María Eugenia Hernández V.

Profesora Michelle Paulet Riquelme
Secretaria Académica
Departamento de Inglés
Universidad Metropolitana de Ciencias de la Educación

PRESENTE

Nos dirigimos a usted, en nuestra calidad de estudiantes de Licenciatura en Educación con Mención en Inglés y Pedagogía en Inglés, de la Universidad Metropolitana de Ciencias de la Educación para solicitar la validación de un instrumento. Esto, a raíz de la realización de nuestro Seminario de Título (actualmente en curso) en el área de Necesidades Educativas Especiales enfocado en estudiantes con Pérdida Auditiva, llamado “*Sugerencias para el uso de las TIC en el proceso de enseñanza de Inglés como lengua extranjera en un aula inclusiva, considerando a estudiantes con pérdida auditiva en escuelas chilenas*”. Esta investigación tiene como objetivo recopilar, a través de revisión bibliográfica, estrategias para la implementación de las TIC en la enseñanza de Inglés como Lengua Extranjera dentro y fuera del contexto de educación secundaria en Chile que incluyan a estudiantes con discapacidad auditiva.

Considerando lo mencionado, solicitamos a usted asistencia en la validación del siguiente instrumento que lleva por nombre: ‘Encuesta a estudiantes con pérdida auditiva leve a moderada’, el cual se encuentra adjunto.

De antemano, agradecemos su disposición y valiosa colaboración con nuestro trabajo.

Saludan atentamente,

Valentina B., Fernanda E., Diego F., Paula G., Anays G., Luis G., Rocio L., Isidora R., Jenniffer T. Sofía V. y nuestra profesora guía, M. Eugenia Hernández.

“Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing loss in Chilean schools”

Licenciatura en Educación con Mención en Inglés y Pedagogía en Inglés

Santiago de Chile, 2022.

Appendix K: Validation Letter Survey for Students with Mild to Moderate Hearing Loss

----- Forwarded message -----

De: MICHELLE FRANCOIS PAULET RIQUELME <michelle.paulet@umce.cl>

Date: lun, 8 ago 2022 a las 17:33

Subject: **Validación** Instrumento para investigación

To: María Eugenia Hernández <m_eugenia.hernandez@umce.cl>

Estimada Profesora,

Junto con saludar y esperando que se encuentre bien, envío **validación** de instrumentos. Los comentarios se encuentran en el documento adjunto pero el Instrumento está **validado** para su aplicación.
Saludos Cordiales



PROFESORA MICHELLE PAULET R.
Secretaria Académica
Departamento de Inglés
Fac. de Historia, Geografía y Letras
michelle.paulet@umce.cl
José Pedro Alessandri 774, Ñuñoa
Santiago de Chile

Appendix L: Final Survey for Students with Mild to Moderate Hearing Loss



Universidad Metropolitana de Ciencias de la Educación
Facultad de Historia, Geografía y Letras
Departamento de Inglés
Profesor(a): María Eugenia Hernández V.

Suggestions for the use of ICTs in an inclusive EFL classroom with students with hearing loss in Chilean schools.

Estimados y estimadas, la presente encuesta tiene como objetivo recopilar información respecto a su experiencia en el proceso de enseñanza-aprendizaje de Inglés como Lengua Extranjera durante su paso por la educación formal y el impacto en dicho proceso.

La encuesta se divide en 2 secciones, la primera está compuesta de 4 preguntas correspondientes a información general. La segunda sección corresponde a 10 preguntas sobre su experiencia en el proceso de enseñanza y aprendizaje de Inglés como Lengua Extranjera.

Su respuesta a esta encuesta es altamente significativa para nuestra investigación y es por eso que solicitamos su participación. Entendiendo que su tiempo es valioso, le comentamos que el tiempo de duración estimado para responder es de 10 o 15 minutos. Dejamos constancia que la información compartida en esta encuesta será utilizada sólo para usos académicos y de forma anónima.

Sección A: Información General

1. Seleccione su grado de pérdida auditiva.
 - a) Leve
 - b) Moderada
2. Indique su edad.
3. Indique su ocupación.
4. Seleccione el tipo de establecimiento donde estudia o estudió.
 - a) Público
 - b) Privado
 - c) Subvencionado

Sección B: Experiencia en el proceso de aprendizaje de inglés como lengua extranjera

1. ¿Cómo evalúa su experiencia aprendiendo Inglés en un establecimiento educacional?
 - Muy mala.
 - Mala.

- Buena.
 - Muy buena.
2. ¿Recibió acompañamiento durante el proceso de aprendizaje de Inglés?
- No
 - Sí
3. Si su respuesta a la pregunta anterior es Si, indique quién le otorgó dicho acompañamiento. (Pregunta abierta)
4. ¿Cómo evaluaría su nivel de logro en el aprendizaje de Inglés como lengua extranjera?
- No logrado
 - Medianamente logrado
 - Logrado
5. ¿Cuál de las siguientes estrategias fueron utilizadas por sus profesores o profesoras durante su proceso de aprendizaje de Inglés? Puede escoger más de una opción.
- Gestos y lenguaje corporal
 - Lengua de señas.
 - Tutoría entre pares
 - Trabajo en grupo
 - Material audiovisual
6. ¿Cuál/es de los siguientes dispositivos fueron utilizados durante las clases de Inglés? Puede escoger más de una opción.
- Computadores
 - Tablets
 - Celulares
 - Aparatos auditivos
 - Otro
7. Al estudiar o prepararse para las clases de Inglés, ¿cuáles de las siguientes nombraría como su material de apoyo preferido? Puede escoger más de una opción.

- Aplicaciones de idiomas (Duolingo, Rosetta, Stone, Busuu, o similares)
- Búsqueda en Internet
- Plataformas de video
- Galerías de imágenes
- Otro

8. ¿Qué tan cómodo/a se siente al utilizar los siguientes dispositivos? (Muy incómodo/a, incómodo/a, cómodo/a, muy cómodo/a)

- Computadores
- Tablet
- Celulares

9. ¿Qué tan cómodo/a se siente al utilizar los siguientes recursos digitales? (Muy incómodo/a, incómodo/a, cómodo/a, muy cómodo/a)

- Word, Excel, PowerPoint o Slides
- Drive
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- Aplicaciones móviles de accesibilidad
- Diccionario en línea
- Herramientas de creación de videos

10. ¿Qué aplicación, dispositivo tecnológico o plataforma en línea considera que hubiese mejorado o potenciado su experiencia como estudiante? (Pregunta abierta)

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