

**Graduate in Primary Education Teaching Degree  
(International Program)**

**Final Degree Project**

**Bilingual educational programs in  
relation to students with speech  
impediments**

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## **Resumen**

Este trabajo trata de la situación existente en colegios de enseñanza bilingüe y el alumnado que tiene alguna dificultad del lenguaje. Los colegios bilingües, en su mayoría inglés-español, están cada vez más presentes en la Comunidad Foral de Navarra, España. Estos colegios enseñan una segunda lengua de manera que el alumnado consiga llegar a un nivel competente del uso de dicho idioma. Para ello, las horas lectivas en el centro suelen estar divididas de manera que la mitad sea impartida en un idioma y la otra mitad en el segundo idioma. Por otro lado, cada vez vemos más alumnado con dificultades del lenguaje que tienen problemas con la adquisición de un idioma en colegios convencionales. Durante el desarrollo del trabajo, tiene lugar un estudio cuantitativo y cualitativo que nos permite tener una idea más clara de cómo es la situación de este alumnado en centros bilingües. Para ello contamos con el testimonio de profesoras, especialistas del lenguaje y la opinión de personas que han tenido alguna relación con programas bilingües. El objetivo final no es sólo ver cómo este alumnado está pudiendo llevar a cabo su educación en estos centros, sino también proponer alguna medida que favorezca la situación.

### **Palabras clave:**

Bilingüe, colegio, dificultades, lenguaje, soluciones.

## **Abstract**

This project talks about the existing situation in bilingual schools and students who have some language difficulty. Bilingual schools, mostly English-Spanish, are increasingly present in the Foral Community of Navarra, Spain. These schools teach a second language so that the student manages to achieve a proficient level of use of that language. For this, the teaching hours in the center are usually divided so that half is taught in one language and the other half in the second language. On the other hand, we are seeing more and more students with language difficulties who have problems with the acquisition of a language in mainstream schools. During the development of the project, a quantitative and qualitative study takes place that allows us to have a clearer idea of what the situation of these students in bilingual centers is like. For this we have the testimony of teachers, language specialists and the opinion of people who have had some relationship with bilingual programs. The final objective is not only to see how these students are being able to carry out their education in these centers, but also to propose some measure that favors the situation.

### **Key words**

Bilingual, school, difficulties, language, solutions.

## **Laburpena**

Lan honek irakaskuntza elebiduna eskaintzen duten eskolak eta hizkuntzaren zailtasunak dituzten ikasleak aztertzen ditu. Eskola elebidunak, haien nagusitasunean ingelesa-gaztelera, gero eta ohikoagoak dira Nafarroako Foru Komunitatean, Espainia. Ikastetxe hauek bigarren hizkuntza bat irakasten dute ikasleek hizkuntza hori erabiltzeko maila egoki batera irits daitezela. Horretarako, ikastetxeko eskola-orduak zatituta egon ohi dira, erdia hizkuntza batean eta beste erdia bigarren hizkuntzan emateko. Bestalde, hizkuntzaren zailtasunak dituzten gero eta ikasle gehiago ikusten ditugu arazoak dituztenak hizkuntza bat ikastetxe arruntetan eskuratzeko. Lana egin bitartean, ikerketa kuantitatibo eta kualitatibo bat garatu da, aukera ematen dizkiguna ikastetxe elebidunetako ikasle horien egoera nolakoa den hobeto jakiteko. Horretarako, programa elebidunekin harremanen bat izan duten irakasleen, hizkuntzako espezialisten eta pertsonen testigantzak ditugu. Azken helburua ez da soilik ikasle horiek haien hezkuntza ikastetxe horietan nola gauzatzen ari diren ikustea, baizik eta egoerari mesede egingo dion neurriren bat proposatzea.

## **Hitz klabeak**

Elebiduna, eskola, zailtasunak, hizkuntza, konponbideak.

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## Introducción

El bilingüismo o el aprendizaje de una segunda lengua es una prioridad hoy en día en los sistemas educativos de todo el mundo. En Europa, muchos países tienen clases de inglés obligatorias y, en muchas escuelas, hay un tercer idioma disponible, generalmente español o francés. En España es obligatorio que todos los colegios enseñen una segunda lengua, normalmente inglés, pero en los últimos años ha aumentado el número de colegios que se apuntan a programas educativos bilingües, como el programa educativo británico (que pretende copiar el modelo británico). En el caso de la Comunidad Foral de Navarra, según la página web del Departamento de Educación del Gobierno de Navarra, para el curso escolar 2022/2023 hay 31 colegios concertados y 76 públicos que participan en el programa PAI (“programa de aprendizaje en inglés”). Este programa tiene como objetivo enseñar todas las materias tanto en inglés como en español (excepto las clases de idioma propio, porque no se puede enseñar el idioma inglés en español) y el propósito es que los estudiantes aprendan ambos idiomas al mismo tiempo junto con los contenidos de materias como ciencias naturales o artes. Hay algunas escuelas que dividen la cantidad de horas que tienen de una materia en dos, 2 horas de ciencias naturales y 2 horas de “natural sciences”, por ejemplo. Sin embargo, hay escuelas que prefieren enseñar algunas materias en un idioma y otras en otro, como matemáticas y artes en inglés, pero ciencias y música en español.

El rápido aumento de la necesidad del bilingüismo se debe a variadas razones, algunas económicas, pero la mayoría son los múltiples beneficios que tiene aprender y saber dos idiomas (Vinuesa e Izquierdo, 2019). Algunos de estos beneficios son la capacidad de comunicarse en un mundo multicultural con personas de diversos orígenes o desarrollar habilidades cognitivas.

Aunque aprender en dos idiomas y ser bilingüe puede tener muchas ventajas, los estudiantes que tienen problemas de lenguaje y comunicación pueden tener dificultades para aprender tanto en inglés como en español. En Navarra hubo 643 alumnos en el curso escolar 2017/2018 que requirieron medidas educativas especiales como un colegio o clase diferente dentro de los colegios ordinarios (Ministerio de Educación de Navarra, 2018).

Creo que este trabajo de fin de grado va a mostrar cómo se crean programas bilingües como PAI sin realmente tener en cuenta las necesidades de los estudiantes con problemas especiales de comunicación y cómo podemos adaptar el programa para mejorar la situación de todos, no solo de un grupo en particular de alumnos.

## Introduction

Bilingualism or learning a second language is a priority nowadays in the educational systems all around the world. In Europe, many countries have mandatory English classes and, in many schools, there's a third language available, usually Spanish or French. In Spain, it is mandatory for all schools to teach a second language, usually English, but in the last few years there has been an increment in the amount of schools that signed up for bilingual educational programs, such as the British educational program (which is meant to copy the British model). In the case of the Foral Community of Navarra, according to the Department of Education of the Navarra's Government's website, for the school year 2022/2023 there are 31 charter and 76 public schools who participate in the PAI program ("programa de aprendizaje en inglés" or English learning program). This program aims to teach all subjects in both English and Spanish (except the own language classes, because you cannot teach the English language in Spanish) and the purpose is that students learn both languages at the same time alongside the contents of subjects like natural sciences or arts. There are some schools who divide the amount of hours they have of a subject into two, 2 hours of natural science and 2 hours of "ciencias naturales", for example. However, there are schools that prefer to teach some subjects in one language and some in other, such as mathematics and arts in English but science and music in Spanish.

The rapid increase in the need for bilingualism is due to varied reasons, some being economic, but most of them are the many benefits that learning and knowing two languages has (Vinuesa and Izquierdo, 2019). Some of these benefits are the capacity to communicate in a multicultural world with people from diverse backgrounds or developing cognitive abilities.

Even though learning in two languages and being bilingual might have many advantages, students who have language and communication impairments can have a very hard time learning in both English and Spanish. In Navarra, there were 643 students in the school year 2017/2018 who required special education measures such as a different school or class inside mainstream schools (Education ministry of Navarra, 2018).

I believe this final degree project is going to show how bilingual programs such as PAI are created without truly taking into consideration the needs of students with special communication issues and how we can adapt the program to improve the situation of everyone, not only a particular group of pupils.

## 1. Theoretical framework

### 1.1. Myths and benefits of bilingualism

Some people, especially parents, are skeptical about the benefits of learning two languages simultaneously and believe in some myths regarding bilingualism, the main two ones being “learning two languages at the same time confounds the kids and it reduces their cognitive capacities” and “bilingual teaching is not effective. It is only an obstacle to good mother tongue learning and slows down students' academic performance”. These two myths create a certain rejection towards bilingual learning, but there are many studies that prove this to be exactly that, myths.

Regarding the first one, Vinuesa and Izquierdo (2019) tell us some of the cognitive benefits of bilingualism on the brain, such as improving “cognitive flexibility” and allows children to see things from more than one point of view (Wiseheart, Viswanathan & Bialystok, 2015). Kids who are taught and instructed in more than one language also develop more critical thinking skills, they are better at problem-solving tasks and tend to be more creative. (Lauchlan, Parisi & Fadda, 2012). It has been proven, scientifically, that the brains of a bilingual and monolingual person are different since bilingual people use more areas of the brain, specially the left hemisphere, which is the one in charge of language and the executive function (Crinion, 2006). This goes to show that regardless of your personal opinions on bilingualism, there are some cognitive benefits to learning and knowing more than one language.

In terms of the second myth, it could be argued that in a bilingual program that is not correctly implemented and carried out by both the school and the society, students could miss out on some key contents and not learn as much knowledge as they would in a monolingual setting. However, when we look at the studies and results that have taken place over the years, we can observe that students who study in bilingual programs have similar or improved results than those students in monolingual programs. Not only this goes for the second language but also for their mother tongue, in both reading and writing skills (Gallardo del Puerto y Martínez Adrián, 2013). A study carried out in the Autonomous Community of Madrid showed that students in bilingual schools had superior results to students who attended monolingual schools, proving that speaking two languages develops the brain and its academic capacities (Sotoca, 2013).

Aside from these two myths that can easily be proven wrong, there is the belief that in order to fully learn a language, you require many hours and an extensive dedication, something like a long-term exchange program where you immerse fully in a language and its culture. Nonetheless, sometimes quality overpowers quantity, just because we are exposed to a certain language for many hours it does not guarantee that we are going to learn the

target language. This is nicely explained in the Swain Theory (1985, 1993) which tells us about how the students must have opportunities to put in practice the language they are learning so they can develop communicative skills that can be understandable, which he defined as “comprehensible outcome”. This theory was made to complete Krashen’s theory (1981) about the “comprehensible input”, which basically explains that it does not matter how many times someone hears something if they are not capable of interpreting the message. Therefore, when acquiring a new language, we must take into account not only the amount of time we spend learning it but also having the possibility of using it in a real-world context. This goes to show that you do not need a lot of time in order to learn a new language, rather, having a good environment in which to develop the knowledge, and learning it in school can be very beneficial and educational.

In order to fully understand the concept of bilingualism we must take into consideration the different types there are. We can talk about simultaneous bilinguals, where students learn two languages at the same time, and second language learners or sequential bilinguals, where one language is usually the mother tongue and the other language is learned after, most commonly during the educational stage. In these two types of bilingualism, there is always a majority language and a minority language, and the differences are shown below:

	Majority language	Minority language
Simultaneous bilinguals	Both languages are widely spoken and have high status. Acquisition of both languages occurs before 3 years of age.	One or both languages are not widely spoken or high status. Acquisition of both languages occurs before 3 years of age.
Second language learners / sequential bilinguals	First language is widely spoken and has high status. Education through the second language may be the majority or minority language of the community.	First language is not widely spoken or does not have high status. Education through the second language is usually the majority language of the community or wider region.

**Figure 1.** *Types of dual language learners along two dimensions: language status and age of acquisition.* Note the placement of a dotted line between the dimensions to illustrate that there are no definitive boundaries between them.<sup>1</sup>

<sup>1</sup> Figure excerpted from Dual Language Development & Disorders



In this figure we can observe that bilingual children are those who have been exposed to a language equally since they have been born or shortly after and the amount of time dedicated to the learning of each language is fairly long, giving the children enough time to actually learn both languages similarly. However, second language learners are those who have been exposed to one language since birth and have already acquired a fair share of knowledge regarding this first language and then start learning a second language, usually called a L2, having differences in regards to the capacity of speaking and using the first and second language.

Moreover, a majority language is the one the students are going to be exposed to most of the time in their area of residence through the school, magazines or other media, politics and the community in general (Spanish in Spain, English in England). The term majority group could be used as a synonym since it usually refers to the language most people speak inside a particular area. Minority language, on the other hand, refers to a community composed of people who speak a language that might have low social, political or economic power; mostly due to being part of a demographic minority in a certain place. Chinatown in New York, where the residents speak Chinese but it is not the majority language of the city would be an example. Similarly to the term majority group, minority group could be used as a synonym of minority language in this case (Paradis, Genesee & B.Crago, 2011).

The environment in which a bilingual kid grows up drastically impacts their way of learning one or both languages. For example, a child with two parents whose mother tongue is different, and the kid is exposed to both languages at home and outside will have a greater chance of learning it proficiently (A girl from Canada whose parents speak English and French indistinctly and also can practice both in the neighborhood and the school). Other situations could be about a child who speaks a language at home but their environment speaks a different one, maybe due to having immigrant parents (A Moroccan child in Spain whose parents speak Bereber, his heritage language, but everywhere else he speaks Spanish). In this case, the child might acquire both languages proficiently but will surely have some challenges along the way. Lastly, we can see the situation that happens in schools in Navarra, children who speak Spanish, which is their mother tongue, with their family, town and everywhere else except school, where they learn English for half of their school day. These kids will have more challenges learning English and probably will not excel at it without some immersion program or some extra help, that being a student without any learning difficulties.

## **1.2. Students with language impairments**

Typically, the students that we will see at school do not have any type of language impairment and, therefore, they can enjoy the benefits of bilingualism without any clear obstacles. However, there are many kids who have been diagnosed with an illness related to language and communication. Most of the time, when we refer to education, these illnesses can be grouped into 4: late talkers, specific language impairment (SLI), language impairment and language-based learning disabilities (Kohnert, 2010). Late talkers refers to those students who develop their speaking abilities later than the average child; there are many kids diagnosed with autism, down syndrome or even SLI who take longer to start to talk (Rescorla & Dale, 2013). This might affect their language development, but it is not necessarily the case and not every kid undergoes treatment, sometimes when they start to talk, they are simply behind their peers for a bit but eventually catch up without outside help. Children with specific language impairment or SLI tend to take longer than the rest to acquire their first words, they usually have issues learning the lexicon, pragmatics and performing word combinations (Leonard, 2014). Language impairment can refer to any difficulties regarding communication, like hearing disabilities or aphasias, and it does not necessarily affect the academic performance of the students who possess them. Finally, language-based learning difficulties refers to having difficulties learning something due to the language itself, not the content. For example, a student might know how to spell a word but have issues doing so because they have dyslexia.

Primary language disorder or primary language impairment (PLI) is an oral communication disability with persistent difficulties in the acquisition and use of language, speech production, or the social use of verbal and nonverbal communication or any combination (CHI.L.D association, 2013). This term highlights not only the difficulties in the nonlinguistic processing, but also keeps the distinction between this diagnosis and the ones related to sensory, motor or neurological impairments (Kohnert, Windsor, & Ebert, 2009). Moreover, the term primary language disorder may be used in students of all age groups with weaknesses in communication, regardless of how much the symptoms may change during development or since they have been diagnosed for the first time (Tomblin, Zhang, Buckwalter & O'Brien, 2003). This avoids having to give different diagnoses to the same students during different stages of their lives, something that tends to happen with children who are first labeled a "late talker" and then diagnosed with an SLI (Kohnert, 2008).

Although the number of students who present primary language impairment has a high incidence in the student population, it does not depend on whether the students are bilingual or monolingual (Westman, 2008). It is supposed to be related to innate factors that interact with language-learning demands and, for students who speak two languages, both of them

are usually affected. Kids with PLI have trouble with the acquisition and use of language, which usually results in difficulties in the academic, economic and social fields. In order to prevent this, intensive responsive aid is considered essential to cover the needs of the students. These needs go from increasing communication skills, such as language production, to improve their social and educational abilities (Kohnert, 2010).

To enable the professional aid required to improve the situation of the students, it is critical that there is an adequate assessment and diagnosis in the beginning of the intervention. Speech therapists are in charge of the evaluation and treatment of the students with primary language impairment, so it is essential that they are well informed about the student and their needs. In order to ensure the best way to teach bilingual students that are suspected to have PLI or have been diagnosed with it, teachers should support themselves on the roots of typical bilingualism and primary language impairments. For starters, we must keep in mind both typical developing students that are being taught in a bilingual setting and bilingual students with PLI. After evaluating and assessing these two types of students, the speech and language therapists can prepare and organize their services based on the needs of the children with primary language impairment.

Students who have been diagnosed with dyslexia are part of the group of children with communication impairments. Dyslexia is related to the issues with integrating auditory and visual information and hindering the development of language skills in both the oral and the writing aspects of communication (Alsina, 2014). During the early development years, it is common that children confound some phonemes, have issues with the alphabet, creating rhymes and categorizing sounds (Vera & Zanatta, 2019). However, as they grow and learn, they acquire reading and auditory comprehension inside the regular standards of the students' development.

According to Rivadeneira-Ramos and Moya-Martínez (2021), learning the English language is quite important in every person's education, this means the capacity to speak, write, think and express themselves in this language. As English is a foreign language, it has different decodes in the phonology of the language, which means an extra effort in the development of the linguistic skills of the students that have dyslexia. They carried out a study where they talked about three types of dyslexia: phonological dyslexia, superficial or visual dyslexia and mixed or profound dyslexia.

Phonological dyslexia is characterized by having difficulties in the identification of phonemes, specially in words that are uncommon and do not belong in the vocabulary of the student, who tries to transform the graphemes into phonemes and fails at it (Lorenzo, 2012). In this type of dyslexia, the student has difficulties in the whole phonological process where there is not a correct reading comprehension. Superficial or visual dyslexia refers to the problems related to the visual aspect of the reading process where irregular words require a

huge effort and a slow reading pace. This means that the person cannot read the word in a global form even if they have seen it on numerous occasions. Their problem is in the regulation of words where they mistake homophonic words and the main drawback is the interpretation of the meaning (Sánchez, 2017). People with mixed or profound dyslexia present difficulties in both the visual and the phonological aspects. They cannot read pseudowords, have issues with reading and reading comprehension and usually have semantic mistakes with verbs, abstract words and interpreting meanings (Álvarez, 2015).

Language impairments can be distinguished between prenatal, perinatal and postnatal (regarding origin) and between severe, mild and light (regarding intensity or the needs). When it comes to the prenatal disorders we come across the term developmental disorders, which are those that are genetic and the child has been born with, they can be inherited (one or both parents have it) or start during the development of the womb without an inherited compound (Paradis, Genesee & B.Crago, 2011). Some of the developmental disorders that are related to communication and language impairments are autism spectrum disorder (ASD), dyslexia, developmental language disorder (or SLI), syndromes related to intellectual disabilities (such as Down syndrome). Regarding postnatal disorders, we can find those with an environmental origin, which can affect the development of the language and the communication skills. These can include impairments such as acquired neurological damage, hearing loss (due to meningitis).

### **1.3. Assessment and intervention for bilingual students with PLI**

#### 1.3.1. Assessment

Sometimes, learning a first language when you have been diagnosed with PLI can be proven a challenge. However, acquiring a second language will certainly have some difficulties for all students, but especially for those who suffer some type of language impairment. Nonetheless, there is no clear connection between learning in a bilingual program or being bilingual and the presence of PLI. "In the absence of direct evidence, PLI is generally believed to affect monolingual and bilingual children in similar numbers" (Kohnert, 2010, p.7). In both cases, the number of cases of students diagnosed with PLI is around 7%, according to a study carried out in the U.S by Tomblin et al. (1997). With this information we can state that bilingualism does not affect positively not negatively to the development of PLI in students.

For students who speak more than one language, the difficulties connected to primary language impairment affect not only their mother tongue but all the languages they use. That is why, typically, pupils diagnosed with PLI tend to take longer and require a slower learning pace than the rest of the children that do not have any language impairment (Hakansson et al., 2003). The capacity to master and use a language correctly depends a lot on the individual

students, does not matter their cognitive abilities. Just as it is the case with the average bilingual student, in children with PLI we can see clear differences in their first and second languages, both in the development of the language and the skills related to them: writing, reading, speaking and listening (Kohnert, 2010).

Most of the time, when we speak about primary language impairment we think about the lack of knowledge or ability when performing language tasks, without really thinking how these inadequacies cover all cognitive skills beyond language use. There are three main cognitive areas that are affected by language impairments: working memory (Montgomery, 2002), sustained or selective attention focus (Spaulding, Plante, & Vance, 2008) and the speed at which we are capable of processing the incoming information (Windsor & Kohnert, 2009). Working memory, as described by Baddeley (1992), refers to a function of the brain that allows the short-term storage and manipulation of the information required for cognitive duties related to language comprehension, reasoning and the whole learning process. Sustained or selective attention focus refers to the capacity to direct and maintain the attention on a specific subject and it is greatly connected with inhibitory control (Reck & Hund, 2011). Lastly, the speed of processing the incoming information refers to the time required by our brains to understand the information captured by our senses.

Although it is quite clear that there is a connection between these cognitive deficiencies and the existence of PLI, the exact relationship between the brain processes and the language impairments is not completely clear. One possible explanation about the connection between language impairments and the speed required for information processing abilities can be the fact that when people perform complex activities that require a big mental effort, like language comprehension, the people with more developed cognitive abilities will, most likely, perform them better than other people with less developed capacities (Leonard et al., 2007). This means that students who present language difficulties will require a bigger mental effort when completing tasks that are related to communication and language, so their reaction time or speed at processing the information they receive will be longer. According to Kohnert, Windsor, & Pham (2009), the relation between language impairments and cognitive deficiencies is shown not only in students who learn a bilingual education, but also those who only speak one language (monolingual students). This research has been carried out several times but has never actually gone into a clinical practice, so there are no existent results for a physical study.

In a regular bilingual classroom setting we are going to find a big variety of students and these will all have their own learning paces, difficulties and abilities, all within the group of typically developing children. It can be very challenging for a teacher or for a specialist to accurately know the situation of a child, if they have a language or learning disorder or they just have some extra issues with one topic in particular. In order to prevent the wrongful

diagnosis of some students and the lack of aid for those who need it, some studies talk about three ways of comparing communication activities and the performance of the students. The first one could be to compare the execution of a task by a bilingual student compared to the results from the same task but carried out by a monolingual child. A second method could be to compare the language performance of a bilingual student with a lower language level or a possible primary language impairment, and the language performance of a typically developing bilingual student with no communication issues that comes from a similar school and cultural background as the first student. Lastly, you can also make comparisons of the same student comparing the rate and direction of change in execution of a specific activity over time, taking into account the use of external support. These three ways of comparing the execution of tasks work better depending on the activity and they all present some flaws and limitations (Kohnert, 2010).

Specialists and teachers who work with students who present language difficulties must try to be extremely accurate with their assessment and evaluation of the child, in order to rightfully diagnose and provide care for the student. There are many evaluation tools and methods available and one way to ensure a valid assessment is to use a combination of these and take into account all the data results. This way we can effectively evaluate the developmental history, the existing levels of proficiency in both languages and the capacity of the child to learn and use those languages (Caesar & Kohler, 2004). In order to provide the needed actions without having some biased opinions about what to do, the gathered data of each student must be interpreted from the bibliography we can find about typically developing bilingual students and primary language impairment. The student's age, their history (both cultural and language), other classmates with similar situations, community and family background, and the student's communicative necessities must be taken into account at the time of the assessment (Kohnert, 2008).

Bias in assessment, essentially the misrepresentation of the child's communicative abilities, may result in the failure to identify a child who needs language services, the inappropriate identification of a typical language learner as impaired, or in the development of a flawed plan of action that will not serve the child's best interests. Bias in data gathering occurs when methods are not consistent with the child's language, cultural or educational experiences or when insufficient data is collected. (Laing & Kahmi, 2003)

It is essential that we keep in mind all of the child's characteristics in order to avoid having a biased assessment and fail to cover the needs of the students. However, there can also be biased actions during the interpretation of the gathered information, for example when we use a single measure which is not consistent with the student's experiences.

Some of the tools that can provide useful information during a student's assessment are interviews with family members, teachers and other professionals (like a psychiatrist if

applicable), and maybe even the student themselves, to gather qualitative information in depth. The history of the child and the family covering development, education, immigration situation, social setting and medical issues are also necessary tools to avoid any biased diagnosis. It is also key to observe the communication skills of the students in different environments, like the school or the playground, with different people such as classmates, teachers and parents (Kohnert, 2010).

There are two types of language measures that can be used during an assessment: direct and indirect. Direct communication procedures include evaluations of items such as the parent report of vocabulary, language sample analysis and standardized language comprehension tests; all of these procedures allow the examiner to determine the student's existing functional capacities in the mother tongue (L1) and the second acquired language (L2). Observing how a student responds to instruction and how efficient they are in learning various types of information is also a direct communication measure, for this, it is necessary to have the data that shows the level of understanding and expression of the student in both languages. The results of the various tasks performed to assess a child are analyzed in several different ways and the main objective is to understand the language skills that the children possess, such as their strengths and weaknesses in their mother tongue and their second language, taking into account their experience in each language and the opportunities they have had to use the languages in a real-life context. Alongside the researchers or specialists, there are other professionals or people involved in the child's life that will help with the recollection of the information and its interpretation/analysis; these can be the parents, other siblings or family members, bilingual professionals, interpreters and teachers of their school, mostly second language teachers. Once the diagnosis of primary language impairment (or PLI) is completed through a valid and complete unbiased assessment, the proper language intervention will begin. In order to plan a course of action, it is necessary to consider the student's history with both of their spoken languages as well as their future needs and opportunities for both languages in different communicative contexts (Kohnert, 2010).

### 1.3.2. Intervention

The intention behind an intervention plan is to allow the student diagnosed with PLI to achieve their potential as a communication through the necessary help. These plans can include both direct and indirect actions, direct being the ones with specific training of some sort and functions carried out by the language therapist or other communication specialists. Indirect actions are those that involve the parents, teachers, classmates or other person involved in the development of the student who is going to work as an agent of change. Primary language impairment itself is not caused by the environment and possible deficits that may exist within, however, there are some aspects of the medium where the child is that can acquire a facilitative role and can be of immense help to the student and their language

development. Communication specialists work with children in order to improve their language skills in many ways, one can be manipulating the information the students receive by reducing the amount of words, highlighting the important information and simplifying some grammatical structures or swapping complex words for a simpler synonym. Family members and other teachers can be trained to work with the student to help the development of the communication skills, especially with the increase of meaningful vocabulary (Girolametto & Weitzman, 2006). In the case of monolingual students with language impairments, there have been several interventions which have been proven effective in improving communication skills, even those which require computer interfaces or classmates interactions (Cirrin & Gillam, 2008).

When we talk about intervention plans in bilingual students with PLI we can see that, most of the time, they target mainly one of the only languages and this has three main reasons behind it. First of all, there are not a lot of bilingual specialists who can provide help to bilingual children, creating an issue where the specialists' languages and the children's languages are not the same, at least not both languages. The second reason is due to the belief that a student with PLI has greater chances at improving their educational capacities and outcomes is to focus their training solely on one of their languages, most of the time the majority language or the same one as the specialist. Lastly, the third reason is the lack of empirical evidence for this practice, so the specialists do not have a lot of information regarding alternative clinical methods. Even though in the current times there are varied resources that talk about dual-language intervention plans that allow the treatment of bilingual students with language impairments for both of their languages, they are now common or known. These resources can be used even when the specialist does not know both languages of the child (Peña & Bedore, 2009). In reality, the two key considerations to have an effective intervention with bilingual students with any type of language difficulty is to generalize the advantages of the treatment and to structure the support available for the target languages (Kohnert, 2010).

Another possible intervention method would be to use the Universal Design for Learning (UDL) in order to adapt the lessons for every student. "It is an educational approach that aims to enhance educational experiences for students with functional diversity or learning disabilities" (Fernández, 2018). The idea is to develop resources to help the different students and meet the needs of those kids who possess some learning disability. It was firstly developed as a way to teach English to non-native children who have some learning difficulty.



## **2. Practical framework**

### **2.1. Research questions**

Before carrying out a study to find some information about the situation of bilingual kids with PLI in Navarra, I prepared some questions so I could get the information I needed in order to prove my hypothesis.

- a) What is the general opinion on bilingual programs?
- b) What is the opinion of people who work in bilingual schools regarding these programs?
- c) Are these programs beneficial for all students?
- d) What is the general experience of both parents and teachers in these programs?
- e) Which changes could be made in order to benefit the student population?

### **2.2. Methodology**

In order to find out more about the situation of students with PLI in bilingual school and the general opinions there are about a bilingual education, I have decided to develop a study where I gather both quantitative and qualitative information. For the qualitative information I carried out interviews with professionals who work in a classroom setting, 2 of them are speech therapists and 2 are classroom teachers who do their classes in English. For the quantitative information, I have created a questionnaire using the tool of google forms to ask several questions about bilingual education, their views of the matter and the place of children with speech impediments in these bilingual educational institutions. Both methods have been carried out in Spanish, since the people I interviewed and the respondents are all Spanish speaking, but I translated both the interviews and the results from the survey to English in order to analyze them in this study.

### **2.3. The situation in a real school**

#### **2.3.1. Context**

I carried out a study to find out how the situation of students with PLI is in Navarra when they attend schools with bilingual educational programs. To achieve this goal, I created 7 questions for primary teachers in a bilingual program and 7 questions for speech specialists that work with students with PLI in bilingual schools. As the aim of my research was to have quantitative information, I interviewed 2 teachers and 2 specialists with the purpose of getting as much detailed information as possible. Some of the questions were the same for all 4 professionals and some were specific to their practices.

3 of the educators I interviewed have been chosen from the public school in Ermitagaña, a neighborhood in Pamplona, because that was the school where I attended my speech therapist internship. The last teacher works in another public school in Burlada, a town next to Pamplona, called Hilarión Eslava. Both speech therapists work with a variety of students with different impediments, ages and social/family backgrounds. Both classroom

teachers are the English teachers of their school and one works in the first year of primary education and the other one in the fifth.

Bilingual teachers	Speech therapists
In your class, is there any student that requires the aid of a speech therapist (AL)?	What is your opinion on the PAI program?
If so, do they receive said aid only in Spanish or in English as well?	Do you provide aid in both languages, Spanish and English?
Would you say that students who present difficulties in comprehension have a more difficult time during English lessons?	Is there any specialist in the school or any school you know that provides aid in English?
Both types of professionals	
Do you recommend the program to any and every student, regardless of their specific needs? If not, which students are the ones that are more negatively affected by it?	
Do you consider the program takes into account students with speech impediments?	
In your opinion, the fact that the program takes place in almost every school presents an issue for students with speech impediments?	
Do you have any idea/recommendation of what could help improve the situation?	

**Figure 2:** questions asked to all four professionals during the interviews

During all of the interviews, I gathered all the information through a recording I performed<sup>2</sup>. All of the subjects were aware of this and gave me permission to do a voice recording.

### 2.3.2. Results

#### Bilingual teachers

For the first question, asking whether there are any students who require the aid of a speech therapist, both classroom teachers said that there are a few pupils who need the aid directly or others that officially do not need it now but might in the future, since many are still undiagnosed due to their young age. In Hilarión Eslava, moreover, some students are offered a special program to help them learn English so they can learn it fast and join their classmates in a regular classroom. The students who usually attend these programs are immigrant children who just arrived in Spain and come from other countries where the level of English is much lower.

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<sup>2</sup> Annex 1

Regarding the language in which the students receive the aid, we observe opposite answers. In the school in Burlada the aid is provided in English, since the students who receive it are usually kids from Latin America who do not have problems with Spanish, since it is their mother tongue, and only have issues with the English language, not with any other learning process. However, the school in Ermitagaña only offers the aid in Spanish, so students with PLI only work with the specialists with the contents related to Spanish. The teacher says that this issue forces English teachers to do all of the adaptations themselves and if a school offers classes in Spanish and English, they should also offer resources in both languages.

When asked about the level of comprehension of students in English, both teachers agreed that a child who presents difficulties in comprehension has more issues following a class in English. They both highlighted that those students who cannot comprehend their mother tongue cannot follow instructions and lessons in English, a language which most of the time only speak in school. The teacher from Ermitagaña highlights that since there are many students in class that come from various cultural backgrounds, for many of them English is a third or fourth language. Therefore, all the difficulties from the L1 and L2 are transferred to the rest of the newer languages.

#### Speech therapists

The opinions of the specialists about the PAI program, which is the bilingual program currently established in Navarra, are not very defined. One of them argues that due to having classes in two languages, the level of Spanish that is acquired by students is lower than before, and it delays the learning of vocabulary in some areas, if not stopping it. The second specialist states that she agrees that learning English is important for the development of students (specially in higher studies such as university). However, she believes there is a big part of the curriculum that is not being learned in Spanish, so you have students who know the parts of the plant in English but not their mother tongue, and you also have immigrant students who need to learn Spanish to live in this country and do not have so much school time to learn it, since they have to focus on both languages.

Regarding the language in which they provide aid to the students in a bilingual school, both of the speech therapists said that they only do it in Spanish. One of them does not have an English profile, so she can only work in Spanish. The other one, although she has an English profile, she always joins the Spanish lessons because it is the priority, so she does not provide any aid in the English language.

According to the specialists in Ermitagaña, this school does offer some extra resources to favor the learning of English, but they are not related to therapeutic pedagogy or speech therapists, therefore not specifically for students with language impairments. One of them believes that with time there will be specialists who provide support in English, but right now it is not the case. The other one thinks that this issue only adds difficulty to the already existing

language issues. There are some schools where a communication specialist enters an English classroom but they translate the contents to Spanish, so the kid in need does not really have a bilingual class, so the inclusion of these students is much harder.

#### Both types of professionals

When asked about whether they would recommend bilingual programs, particularly the PAI (which is the one established in Navarra), the four interviewed professionals displayed a variety of opinions and reasons. Two of them, a classroom teacher and a speech specialist, clearly stated that they would most definitely not recommend this program to many people, if any at all. One of these two is aware that separating students by language would be a segregating measure and that it is very important nowadays to learn English, but she does not think the program benefits everyone. They both believe that there is a certain population of student who is not considered by the program and these are students that join the school period late, students with special educational needs, students with an academic breach with their classmates, truly any student who has issues during their daily lives, especially if it is related to the academic aspects. Students with speech impediments, both in expression and comprehension (with poor vocabulary or with difficulties with the structure of the language). Basically, every student who has learning difficulties will have issues with PAI, so they consider it best to focus on one language only. The second classroom teacher agrees with the first two in the fact that the program is not for everyone, but she is a bit more optimistic and believes that, with some adaptations, such as creating more individual exercises design for each students' needs and abilities, the program can be a better fit for the whole student population. Lastly, the second specialist said that, taking into account the situation we have now in Navarra and how the few schools which do not offer PAI are a bit of a ghetto, she would advise every student to attend a bilingual school since there is no other option. She also argues that it would be very dangerous to segregate people and how this can affect the pupils, so she would recommend it to everyone, regardless of their needs.

All four professionals agree on the fact that the PAI program does not take into account students with speech impediments. However, two of them highlight that neither do the rest of the educational programs available. One of the specialists talks about how this is yet another barrier for the learning process, because we are taking time away that students could use to be exposed to Spanish further. These bilingual programs are extremely demanding because children must learn and use two languages, learn double vocabulary and different grammatical structures. The other specialist shines light on the fact that these programs are always created thinking about the majority of the students, and the minorities have to adapt to the programs however they can and try. Furthermore, both teachers talk about how everything in school is in English: textbooks, didactic units and contents; and those students who do not understand English are missing out on all of the information and knowledge. One even complains about

how we want multiculturalism and diversity but we never take into account the different levels of the students.

As well as with the question before, all of the interviewees agree that the fact that the PAI program is present in almost all schools in Navarra presents a problem for students with speech impediments. Since there are very few monolingual public schools in Pamplona, many students with difficulties, diverse family situations and poor English level end up attending these educational institutions. This creates a segregation between the schools where only the “worst” students attend these centers, and this process is not even due to their mother tongue. In the rest of Navarra, sometimes families cannot even choose the language in which their kids are going to learn, because their area may only have one public school and this one has the PAI program, as it is the case of Estella. In this situation, the only way to attend a public school in Spanish would be to attend a school many kilometers away from their hometown. One of the teachers, nonetheless, also talks about how the teaching of English is adapted visually and the classes usually include many pictures and support materials, so it is not everything negative about learning in English. Often, the level of competence required in English classes is lower than the one in Spanish so there are some students with language difficulties that can follow the lessons in English and, according to the teachers, not only have an average performance but quite proficiently. So the program also has this part that is there and is beneficial for these students.

There are infinite possibilities we could try to establish in order to improve the situation and all four professionals have different opinions on the matter, some more optimistic and some more similar to the old days. One of the classroom teachers says that, in order to improve the English skills of the students, we must also change as a society. Not only having English classes for a few hours a day but including the language in several parts of their daily lives, such as in movies (watching everything in original version with subtitles). The other teacher believes that the way to improve the situation is to go back to the monolingual programs, where English is just a subject language. She said that this way students can still learn English, like she did, and have a much better understanding and use of their mother tongue. One of the specialists thinks that to have real change we must have methodological changes, active methodologies, work with DUA (universal design of the learning process), guaranteeing the principles of inclusion and having the students in class and participating. However, the second specialist thinks a way to improve the situation would be through providing more aid. Students who need speech and pedagogical therapists in Spanish should get the same hours of aid with an English therapist. However, this would mean a lot of added teachers and human resources which means a lot of money. She believes that making classes more intuitive and using pictograms would help students, not only those with speech impediments but all of them, although this requires extra work from the classroom teachers.

Something they all definitely agree on is that, were the situation to stay the same, there is a need for more resources, both methodological and human.

### 2.3.3. Reflection

After all the information I have gathered from the interviews, we can see some common aspects that the professionals find positive in a bilingual education and some that should be thought of again in order to make this program a better fit for everyone. Similarly to the information we can find in the theoretical framework about the benefits of bilingualism, all 4 professionals agree that learning English is of utmost importance and it is required in this world. However, they mostly do not agree with the methods.

With regard to the difficulties of bilingual educational programs for students with any type of impediments, specially speech impediments, we can see that there are some benefits to learning two languages simultaneously, such as the fact that the L2 is usually taught using several types of visual aids (such as pictograms) and it is very focussed on repetition. It is highlighted by the classroom teachers how, sometimes, students with PLI will have a good or even outstanding performance during English lessons thanks to the many adaptations present in the teaching of English.

However, in order to adapt all of the lessons, teachers must spend a lot of personal time to make it inclusive for everyone and this is especially difficult because, most of the time, English teachers do not have the support or help of specialists, since they mainly work in Spanish. Therefore, they lack both the help and the knowledge of how to adapt the materials and lessons in order to be helpful for students with PLI.

There are many possible ways to improve the situation of children with speech impediments and other learning difficulties in bilingual schools but in order for them to happen we need real change. As a society, we must include English in our daily lives if we want to truly educate students in two languages simultaneously and expect them to achieve the same level of proficiency in both. Otherwise, we risk maintaining and aggravating the actual situation where students who do not attend bilingual schools and students with learning difficulties are segregated from the rest because of having a lower level of English, which is not even their first language (in many cases) and it is not needed in their city.

## **2.4. Opinion of the public regarding bilingual education and PLI**

### 2.4.1. Context

I created an online survey<sup>3</sup> to collect some information regarding the views of the population in terms of bilingualism, bilingual educational programs and how having some

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<sup>3</sup> Annex 2

learning difficulties might hinder learning two languages. The survey consists of twelve questions, 8 being a multiple choice answer, 3 open questions and 1 being a linear scale where 1 meant not being in agreement with bilingual education programs and 5 being highly in agreement with bilingual education programs. The survey has 200 answers from different backgrounds, ages and gender but their personal data shall remain anonymous, since it does not affect the outcome of the study. As the main sample of people is from Spain, the questions in the survey are in Spanish, so more people could understand it and complete it.

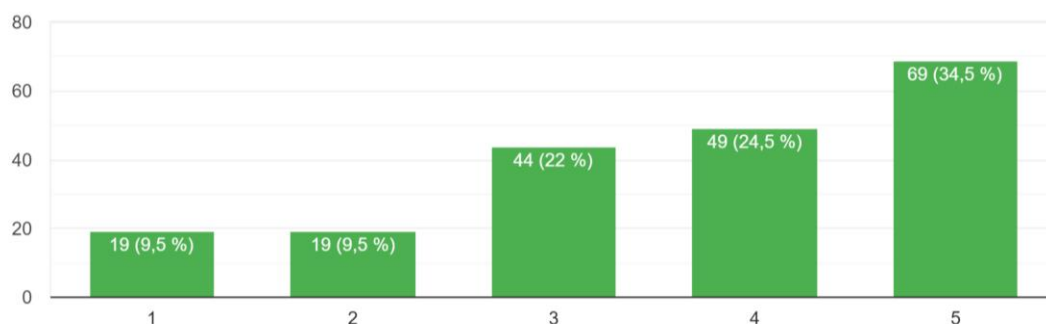
#### 2.4.2. Results

The first question asks about the prior knowledge of the person about a program called PAI, which is the bilingual (English-Spanish) program established in Navarra. We can see that 71% of the people (142) know what the program is, 8.5% have heard of it but do not really know what it consists of, and 20.5% do not know or have never heard of the program.

Secondly, the survey asks about English and if it is important for each person to learn English. There are three possible answers: yes, it is essential; yes, but it is not a priority; or no. There is not a single answer who does not consider learning English important and only 31% of the people (62) believe that, while it is important, learning English is not a priority. Therefore, 69% (138 people) of the answers reflect that people consider it essential to learn English.

When asked about whether they had taken part in a bilingual Spanish-English program, the answers show us the 4 offered outcomes. The main answer was no, with 63% of the responses. However, 20.5% of the people have taken part as a student, 14% as a teacher and a small 2.5% has been in a bilingual school during their internship period.

The fourth question was about their opinion of the bilingual programs. The question was formed using the option of a linear scale and the numbers went from 1 to 5. The lowest opinion was 1 and it meant that people did not agree with bilingual programs while the highest was 5 and it meant that people highly agreed with bilingual programs such as PAI. 19 people (9.5%) do not agree with them at all and another 19 people (9.5%) are partially in disagreement with these programs. 44 people (22%) are neutral regarding their opinions on the topic and do not neither agree nor disagree with them. 49 people (24.5%) partially agree with these programs and the last 69 people (34.5%) completely agree with bilingual education. Overall, we can see that 19% of the respondents have a negative opinion on the programs while 59% have a positive opinion of them; the other 22% are indifferent about them.

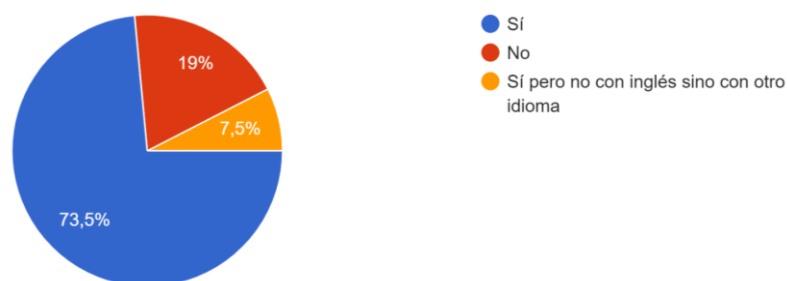


**Figure 3:** graph that shows the opinion of the respondents towards bilingual programs

The next questions asked about their opinions on how well included are all types of students in these programs. The three possible answers were yes, no or depending on the school. 51% of the responses indicate that they believe these programs do not take into account all of the students. 11.5% think they do include everyone and the last 37.5% agree that this inclusion depends on the schools, not everywhere it is achieved in the same level.

Regarding the situation where a student with language impairments should or should not study in bilingual programs, 22% do not think that these students should study in a program to learn two languages simultaneously. On the other hand, 20.5% think they should. The majority of the respondents, however, believe that it depends on their capacities and depth of language impairment. Therefore, some students might benefit from bilingualism and some might not be able to fully learn the contents.

The seventh question inquires about whether each person would take their son or daughters to a school with a bilingual program. Most of the answers (73.5%) show that people would take their child to a bilingual school. On the other hand, 19% of the respondents would not register their kid in a bilingual school. Lastly, 7.5% of the people would like their kids to attend a bilingual school but one where the languages spoken are not Spanish and English but Spanish and a different second language (French, Basque...).



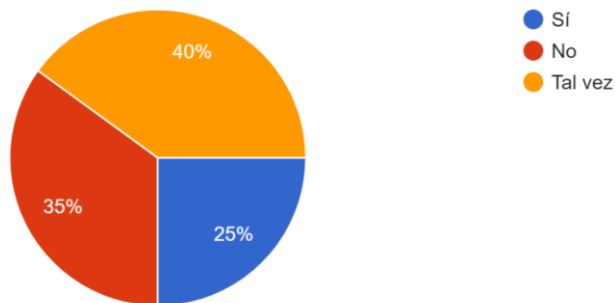
**Figure 4:** graph showing who would or would not like to take their kids to a bilingual school

The following questions simply ask for the reasons as to why the respondents would take their children to a bilingual school. This question did not have a multiple-choice answer so that people could express their thoughts in a more detailed way. Nevertheless, most of the answers reflect the importance of English and the knowledge of many languages. Some



people say that they do not really know English and this way their kids could learn it in depth since they are young. Someone, however, stated that they do not think English is necessary, so I guess they answered no in the question before, and another person simply said model D, which is the one where they speak Basque. A big part of the answers is from parents with children who have some type of learning impediment, such as dyslexia and ADHD, and they believe that their kids only get more stressed and do not really learn the contents nor the language. A few respondents also highlight that the only schools in their areas have these programs so they do not or would not have a choice. To finalize, many answers reflect their worries about how, by learning two languages simultaneously, the students might not acquire the contents well, regardless of difficulties.

The ninth question, similar to the seventh, asks about whether they would take their kids to a school with a bilingual program only this time the kids have some type of language or speech impediment. We can see how now the answers change drastically and the number of people who answer yes is only 25% (as opposed to the prior 73.5%). 35% of the respondents would not take their kids with PLI to a bilingual school and the leftover 40% said that maybe they would.



**Figure 5:** graph showing who would or would not like to take their kids with PLI to a bilingual school

The next question asks about the reasons for their answer in the ninth question. Most of the answers talk about how they would think about it depending on the difficulties the child presents and how adapted the school seems to be. One person says they would seek the advice of a specialist before choosing a school so they can make the best decision. Other optimistic answers reflect on the fact that, even at a slower pace or learning partial information, all knowledge can help us grow. On the other hand, some people talk about how it is already difficult to learn English for a child without specific language issues so it would be too much for someone with language impairments, regardless of the depth of their difficulties. Similarly, many people think that, in these cases, it is more important to focus on the essential, such as the knowledge from the core subjects and their mother tongue (in most cases). A few answers

talk about how they would not like their children to feel different from the rest by attending a non-bilingual school, which is the main option in their areas.

The second to last question asks about a possible way to improve the learning process in bilingual schools for people with PLI through the existence of specialists who work in English. There were four possible answers: yes, no, I do not know enough on the topic to have an opinion, and another 44.5% of the contestants think it could be a solution while 39.5% believe they do not know enough on the topic to have a consolidated opinion. 10% of the answers believe this could not be a possible solution and there are 12 people who chose to explain their answers further on the “other” option. Many of these answers highlight that they think it would be important to have the help of pedagogical therapists instead of English specialists, therefore they did not fully understand the question and they do believe it could be an option. However, other people believe a better option would be to change the way of teaching to have a more significant learning or have more economical and human resources overall.



**Figure 6:** graph showing who thinks having specialists in English might improve the situation

Lastly, I asked about any ideas that might help improve the situation. This question was open so the respondents could answer however they saw fit. Some people stated they would simply eradicate the program so it ceases to exist. Some others believe it is a matter of methodology, having more practical classes and active methodologies (even field trips) instead of exams and other tests. There are some answers that highlight the need for more resources, more teachers, smaller ratios. A few people talk about how it is essential that the teachers are proficient in the second language, because sometimes they lack a bit of knowledge. Finally, some respondents say that a possible solution would be to have core subjects (like science or math) in Spanish and more creative subjects (such as music or physical education) in English, but most importantly the main option they want is the option of choosing the subjects or the schools.

### 2.4.3. Reflection

It is quite clear that the general opinion of the respondents and, therefore, of the population is that English is an essential part of our education and by learning more than one language we not only develop our cognitive skills and knowledge but it also makes us a better fit for a future job that might require the use of more than one language. Generally, we can also see that the overall perspective of the people is that bilingual education programs are good and they can help the students learn a second language easily since youth and achieve a proficient level. Although most of the people have not participated directly in a bilingual program, there is still a third of the respondents who have been either a student, a teacher or doing an internship in one of these schools, and that is not taking into account the people who are parents of children who attend bilingual educational institutions.

However, the results also show that, in general, the opinion that the people have regarding these types of bilingual programs is not always positive, at least not in all of their aspects. Most of them think that these programs are a bit harmful towards certain groups of students, specially those who have more difficulties learning and have to make a bigger effort to follow classes in different languages, since they do not believe it includes all of the students. Some also believe that students with language difficulties should not be enrolled in these schools, therefore creating a segregation between “good” or capable students and “bad” or incapable students.

Moreover, we can see that many people would take their kids to a bilingual school, if the situation were to happen, because they consider that it has plenty of benefits and learning two languages at the same time since the age of three can mean a much faster, complete and smooth development and acquisition of the language. This opinion, nonetheless, charges drastically when the variant of a language impediment is added to the question. Although a big part of the respondents was already weary of the bilingual programs, many more join them when their kids might have speech or communication issues. In this case, many of the answers reflect a fear that their kids might not benefit from learning the English language but rather have a more complicated time learning the basic knowledge if it was provided in English, therefore miss out on essential or key academic concepts.

There are many possible changes or adaptations that can be used to make the program more inclusive for all students, regardless of cognitive difficulties or personal backgrounds. Most of the people agree that an option could be to have more specialists, such as pedagogical therapists and speech therapists, who work with the students not only in their mother tongue but also in English, since students usually require help during lessons in both languages. There are many other options, from methodological changes to changing how English is used in the daily lives of the students, so they do not only use it in the classroom.

### **3. Discussion**

Overall, it is quite clear that people believe that learning English is important, not only for cognitive development but also for growing academically. Most people consider English to be important and would like their kids to have a bilingual education or an education where English receives an important role.

After carrying out the whole study, we can see that there are certain aspects of the bilingual education programs that are not positively viewed and both parents (or other survey respondents) and speech specialists do not agree with. It is also clear that everyone considers the fact that a student has some type of speech impediment an added difficulty to follow a bilingual education and will face many obstacles doing so.

Most of the answers reflect the alarming situation of some areas of cities of Navarra where there is no other possible choice than a bilingual Spanish-English education. This presents a problem for so many families who might not want their kids to attend a bilingual school but it is the only option in their hometown or the rest of the schools are private. Many people complained about it and wished that, in the same school, there were two language models so the students could decide to attend the English model or the Spanish model, similarly to what you can find in some public schools with Spanish and Basque (San francisco or Buztintxuri schools).

Regarding students with language or communication impairments, we can see that the specialists and teachers who work in bilingual schools see how these kids usually have issues following the classes, especially in the higher grades of primary. Similarly, some of the parents who completed the questionnaire express their concerns regarding their child's difficulties and how they wished to remove their kid from a bilingual program so they could learn without all the extra stress of learning two languages simultaneously.

Moreover, most of the answers show that, if the situation in Navarra was different, not the professionals nor many parents would take their kids to a bilingual school if they had any learning difficulty. However, most of them would also decide based on the individual capacities, because a diagnosis does not describe the potential and academic capacities of a child. There are many answers provided that could improve the situation without making it more difficult for the teachers by adding extra work and without segregating groups of students based on abilities.

## Conclusión

Aprender dos idiomas simultáneamente, aunque puede tener varias dificultades, definitivamente tiene muchos beneficios que han sido demostrados a través de muchos estudios. Algunas personas creen en los mitos que escuchan sobre cómo aprender dos idiomas puede hacerte menos capaz porque tu cerebro no se desarrolla de la misma manera y toda la información en tu cabeza está mezclada. Sin embargo, existen varias investigaciones, como la realizada en Madrid (Sotoca, 2013), que demuestran que los niños bilingües no solo se desempeñan mejor en la segunda lengua sino también en su lengua materna, por lo que se favorece el desarrollo del cerebro hablando más de una lengua. idioma.

Todas estas ventajas varían enormemente dependiendo de cómo la persona haya logrado su capacidad bilingüe. Por supuesto, si una persona nace en una familia donde hablan dos idiomas (uno de la madre y otro del padre) o la familia habla un idioma que el resto de su entorno y la escuela no hablan, generalmente una lengua minoritaria, la capacidad de alcanzar un mayor nivel lingüístico crece exponencialmente. Estas dos situaciones permiten que los niños crezcan rodeados de ambos idiomas y el esfuerzo que deben hacer para aprenderlos es mucho menor y alcanzan un nivel competente la mayor parte del tiempo. Sin embargo, no todos tienen el privilegio de nacer en una familia bilingüe o pasar mucho tiempo usando y aprendiendo dos idiomas, y eso sin tener en cuenta las dificultades de aprendizaje.

Los cuatro grupos de impedimentos del habla mencionados anteriormente afectan la capacidad de comunicarse en todos los idiomas que la persona conoce. Sin embargo, no todos los impedimentos afectan de la misma manera a la adquisición de una segunda lengua. Las personas con lenguaje tardío, por ejemplo, pueden tardar más en hablar, pero eso no necesariamente dificulta su proceso de aprendizaje, por lo que podrían estar aprendiendo vocabulario y sintaxis que luego les permitirá hablar ambos idiomas. El resto de los impedimentos (deficiencia del lenguaje, problemas de aprendizaje basados en el lenguaje y deficiencia específica del lenguaje) seguramente dificultarán el proceso de adquisición de un segundo idioma y podrían obstaculizar la posibilidad de alcanzar un nivel competente para algunos y algunas estudiantes.

Al evaluar a un niño que podría tener un problema de lenguaje y comunicación, debemos ser extremadamente cuidadosos para no dar un diagnóstico erróneo y, por lo tanto, crear un plan de acción para satisfacer las necesidades del estudiante que no es el que requiere ese estudiante en particular. Para hacer este proceso correctamente, el evaluador debe utilizar todos los recursos disponibles y no sólo ceñirse al uso de pruebas estandarizadas, sino recopilar información de la familia, los y las docentes de la escuela y el propio alumnado. Una vez que se tiene el diagnóstico correcto, es posible iniciar una

intervención que satisfaga las necesidades del alumno y le permita aprender con mayor profundidad y con menos estrés.

Sin embargo, a veces las situaciones de la vida real no cumplen con los resultados de trabajos de investigación o varios estudios. A través de este estudio podemos ver que, aunque hay muchos resultados positivos tanto del bilingüismo como de ser diagnosticado con un impedimento del idioma, la situación que se ve en las escuelas y por la población en general no es realmente beneficiosa para muchos estudiantes, especialmente aquellos con dificultades del lenguaje. Existe un descontento generalizado por parte de aquellos profesionales y familias/personas que han visto de cerca la situación de un alumno o una alumna con PLI en un colegio bilingüe y consideran que no beneficia al infante ni al programa.

Junto a muchas de las posibles soluciones presentadas en la encuesta y las entrevistas, debemos echar un vistazo al diseño universal para el aprendizaje (DUA), que habla de cambios en la metodología y los recursos que permitirán a los profesores y especialistas planificar clases que darán similares oportunidades a todos los estudiantes. La flexibilidad con la tecnología educativa permite a los docentes diseñar programas de lectura digital donde se pueda mostrar la información de manera consistente y atractiva, así como garantizar el acceso de todo el estudiantado (Fernández, 2018). Se pueden utilizar muchos recursos diferentes, además de los libros de texto, como libros digitales, ejemplos variados, videos y mapas conceptuales para presentar la información de una manera más dinámica y amena. Otra opción sería brindarles a los y las estudiantes la opción de elegir qué quieren aprender y cuándo, para que puedan convertirse en expertos en temas que les parezcan interesantes y que les entusiasme aprender. Lo que está claro es que esta situación no beneficia a nadie y es necesario un cambio para que el programa pueda desarrollar todo su potencial y todo el alumnado pueda beneficiarse de todas las ventajas que ofrece el bilingüismo.

## Conclusion

Learning two languages simultaneously, although it might have several difficulties, definitely has many benefits which have been proven through many studies. Some people believe in the myths they hear about how learning two languages might make you less capable because your brain does not develop the same way and all of the information in your head is tangled in a knot. However, there are several investigations, such as the one carried out in Madrid (Sotoca, 2013), that show that bilingual kids do not only perform better at the second language but also in their mother tongue, therefore the development of the brain is encouraged by speaking more than one language.

All of these advantages vary enormously depending on how the person has achieved their bilingual capacity. Of course, if a person is born into a family where they speak two languages (one from the mother and one from the father) or the family speaks a language that the rest of their environment and school do not, usually a minority language, the capacity to achieve a higher linguistic level grows exponentially. These two situations allow the kids to grow up surrounded by both languages and the effort they must make to learn them is much smaller and they achieve a proficient level most of the time. However, not everyone has the privilege of being born into a bilingual family or spending a lot of time using and learning two languages, and that is not even taking learning difficulties into account.

The four groups of speech impediments mentioned before affect the ability to communicate in all of the languages that the person knows. Nonetheless, not all of the impediments affect the acquisition of a second language in the same way. Late talkers, for example, may take longer to talk but that does not necessarily hinder their learning process so they might be learning vocabulary and syntax that will later allow them to speak both languages. The rest of the impediments (language impairment, language-based learning disabilities and specific language impairment) will surely make the process of acquiring a second language difficult and might obstruct the possibility of achieving a proficient level for some kids.

When evaluating a child who might have a language and communication issue, we must be extremely careful so we do not give a wrongful diagnosis and, therefore, create an action plan to meet the needs of the student that is not the one that particular student requires. To do this process correctly, the evaluator must use all of the resources available and not only stick to using standardized tests but gather information from the family, school teachers and the children themselves. Once you have the correct diagnosis, it is possible to start an intervention that will meet the needs of the student and will allow them to learn in more depth and with less stress.

However, sometimes real-life situations do not fulfill the results of research papers or several investigations. Through this study we can see that, although there are many positive outcomes of both bilingualism and being diagnosed with a language impediment, the situation seen in schools and by the general population is not really beneficial for many students, especially those with PLI. There is a general discontent from those professionals and parents/people who have seen the situation of a student with PLI in a bilingual school up close and consider that it does not benefit the child nor the program.

Alongside many of the possible solutions presented in the survey and the interviews, we should take a look at the universal design for learning (UDL), that talks about changes in methodology and resources that will allow teachers and specialists to plan classes which will allow similar opportunities to all students. Flexibility with educational technology allows teachers to design programs for digital reading where the information can be shown in a consistent and attractive manner, as well as guarantee the access of all the student body (Fernández, 2018). You can use many different resources, aside from textbooks, such as digital books, varied examples, videos and concept maps to present the information in a more dynamic and entertaining way. Another option would be to provide students with the choice of choosing what they want to learn and when, so they can become experts on topics they find interesting and be excited about learning. What is clear is that this situation does not benefit anyone, and change is needed so that the program can be fulfilled to its complete potential and all of the students can benefit from all of the advantages bilingualism has to offer.



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## Annex

### Annex 1: Transcripts of interviews

#### **Classroom PAI teacher 1st of primary Ermitagaña:**

1. In your class, is there any student that requires the aid of a speech therapist (AL)?

We actually have two students that need the aid but there are some who officially do not need it right now but we are seeing if they might need it in the future. As it is first grade many things are still in the air.

2. If so, do they receive said aid only in Spanish or in English as well?

Only in Spanish and that is something that happens with all the aid. In this school we only have the aid in Spanish so if you want to do any kind of adaptation and you are an English teacher you have to do it yourself, which I think is something that they should take into consideration. If there is a PAI school you should have resources in both Spanish and English.

3. Would you say that students who present difficulties in comprehension have a more difficult time during English lessons?

Of course, if they have problems with Spanish, which is their mother tongue in most cases and that they are exposed to it every day everywhere, imagine in English, that they only really use it in class. They have a lot of difficulties specially because we have a lot of multiculturalism now in class. Maybe English is not the second language of some students, it may be the third or even the fourth and the difficulties start to pile up.

4. Do you recommend the program to any and every student, regardless of their specific needs? If not, which students are the ones that are more negatively affected by it?

I really like English and I wish I had this program when I was a kid, but it is not for everyone. We need more English competence in Spain because we are very low compared to the rest of Europe, but this is not the way. Just like we do not do the same kind of exercise for every student because supposedly we have to do an individual education, more focused on the student and not on grades and stuff like that, we should do the same with languages.

Obviously, the kids with difficulties have problems but also the kids that do not receive much help at home, and I think you can tell which families help with things like the homework. Which parents are going to look on the internet for words they do not know, and that way are going to learn more English and those parents who just let the kids alone. This second case usually means that the student has more difficulties in class, especially when contents get more difficult.

5. Do you consider the program takes into account students with speech impediments?

No, but like most programs. We do not take into account, supposedly we want multiculturalism and diversity but we never take into account the different levels of the students, even if they do not have difficulties. Not everyone learns the same way, at the same speed, and we do not

take that into account. We have textbooks, didactic units, English contents that are the same for everyone without looking at the individual student, and this list could go on.

6. In your opinion, the fact that the program takes place in almost every school presents an issue for students with speech impediments?

I think so because there are very few schools with only Spanish, San Francisco among them. These schools, even though it sounds harsh, end up being a kind of Ghettos because all the students with difficulties, diverse family situations and poor English level end up there. So you have students with a very low level all together. I think it was better when we offered the possibility to take classes in English but they also have the Spanish option, the same way we offer Euskera. The issue is that you need more teachers, classes, more resources in general, so it is not likely to happen. However, then you have the “smart” ones that go to English and the “stupid” ones that go to Spanish.

7. Do you have any idea/recommendation of what could help improve the situation?

I think that if we want to teach the students English to a high level (similar to Europe), we have to change as a society. Not only having classes in school but not translating movies, seeing them in English with subtitles. That way students are going to learn more than if they hear me talking in English for one or two hours a day. I think that is the problem, we have to change at a society level more than in an educational one.

#### **Classroom PAI teacher 5th of primary Hilarión Eslava:**

1. In your class, is there any student that requires the aid of a speech therapist (AL)?

Not exactly a speech therapist but there are some students who join the school period late and have some alphabetization lessons in English. This is because they come from their countries of origin without any English level so they cannot reach their classmates' level and diminish the breach among them. So, without any English knowledge and having half of the lessons in English these students cannot learn English nor science, for example. Therefore, they have these special lessons to learn the basics of English.

2. If so, do they receive said aid only in Spanish or in English as well?

The students that I am talking about receive the aid only in English because they come from Latin America and their native language is Spanish. They also do not present any learning difficulties so the issue itself is the English language.

3. Would you say that students who present difficulties in comprehension have a more difficult time during English lessons?

Yes, of course. If you cannot even comprehend well what you are being taught in your mother tongue which is the one you regularly use, then it makes no sense that a big part of your education is in a different language. This adds to the already existing difficulties in comprehensions difficulties in comprehension but in a language that is not even yours.

4. Do you recommend the program to any and every student, regardless of their specific needs? If not, which students are the ones that are more negatively affected by it?

No, I would not recommend this program to any student or only a very few. But doing this is a very segregating measure that can cause many differences regarding English skills, which are very important nowadays. I would not recommend this program to anyone because I think that you are not learning a lot of content because you are giving the English language a lot of added importance. In the end, you do not learn contents nor English because it is a mixture of difficult topics that are very difficult to learn in a language different from your own.

Students that join the school period late, students with special educational needs, students with an academic breach with their classmates, truly any student who has issues during their daily lives, especially if it is related to the academic aspects. Students with speech impediments, both in expression and comprehension. Basically, every student that has a difficulty.

5. Do you consider the program takes into account students with speech impediments?

No, generally classes are completely in English. I perform all the explanations, conversations with them and everything inside the school in English so every student who does not understand English is missing out on all the contents from all the subjects that are not even English language. Therefore, I do not think so.

6. In your opinion, the fact that the program takes place in almost every school presents an issue for students with speech impediments?

Yes, because the schools that do not offer PAI tend to have a bigger number of students with learning and general difficulties. This may be because of their context, their families, their situation. So, in these schools there is an environment that does not make new families want to join them and take their kids to these schools. This is wrong because kids are being segregated because of a language that is not even their own.

7. Do you have any idea/recommendation of what could help improve the situation?

Go back to the old system where English was a subject because we are proof that even though we didn't study PAI we know English and can speak the language. Not only that but we also can express ourselves in our mother tongue much better and we have been able to comprehend the world better.

### **Speech therapist without English profile**

First the verbal consent is given both for being asked the questions and for recording the answers so they can be used in the development of my thesis.

Preguntas especialistas (A.L y P.T):

1. What is your opinion on the PAI program?

Well, it is a program that mixes or has half of the teaching process in English and in many occasions it makes the learning of Spanish complicated compared to the level at which we were used to before. Not that it makes it complicated but that it delays the learning of Spanish and in many areas the learning of the language is not so complete and it ends up lacking some knowledge.

2. Do you consider the program takes into account students with speech impediments?

I do not think there is any program that actually takes into account students with speech. These programs are always made for the majority of the students and the minorities have to adapt the programs however they can and try. So, I do not think so but I also don't think there is another program that does take into account these students.

3. Do you provide aid in both languages, Spanish and English?

No, I only provide aid in Spanish. I also do not have an English profile so I can work in Spanish.

4. Is there any specialist in the school or any school you know that provides aid in English?

There are resources for helping during English lessons and they do take place but not specific to P.T (therapeutic pedagogy) or A.L (speech therapy). However, there are specific sessions of support for the English groups. It is true that right now, because of inclusion with time, probably there will be some time of aid or support as P.T or A.L during English lessons. As of right now I do not know anyone who provides this help.

5. Do you recommend the program to any and every student, regardless of their specific needs? If not, which students are the ones that are more negatively affected by it?

Taking into account the alternative we have nowadays in Navarra, yes, because there is no other option. The schools that do not offer PAI in Pamplona right now are schools that have transformed a bit into ghettos, so I have to recommend it. If the situation was different, I would have to look into it to see if I recommended something else. It is very dangerous to segregate people and how it could affect the students. As of right now I would recommend it, yes.

The students that are the most affected are those that have different needs. Every time we have specific needs the program has holes and is an added difficulty for the student. Not only with speech impediments, any student with cognitive difficulties. If there is a difference, in most of the cases the student will have issues with the program.

6. In your opinion, the fact that the program takes place in almost every school presents an issue for students with speech impediments?

It presents an issue for the students in general, for speech impediments in specific as well. It is also important to highlight that in the PAI program, most of the time, the English part is adapted visually because the learning process tends to be accompanied by many pictures, and the students with language issues are benefited by this support materials. Often, the level of competence required in English is lower than the one in Spanish so we can find students

with language difficulties that can follow the lessons in English and, according to the teachers, not only average but nicely. So, the program also has this part that is there and is beneficial for these students. Nevertheless, as the years go by and the contents get more complicated the students with language impairments have a harder time but in lower grades some students have less issues in English than in Spanish. The visual support benefits them for sure.

7. Do you have any idea/recommendation of what could help improve the situation?

I think every change happens by having methodological changes, implementing active methodologies, making everything DUA (universal design of the learning process), guaranteeing the principles of inclusion and having the students in class and participating. I think that if we made better use of the DUA we could see many changes in education.

### **Speech therapist with English profile**

First the verbal consent is given both for being asked the questions and for recording the answers so they can be used in the development of my thesis.

1. What is your opinion on the PAI program?

I do not have a very defined opinion because I have an internal debate about it. On the one hand I understand that English is a very important language and we must educate our students to have the competence of using many languages, which is something necessary for their futures. In order to be able to perform research in university (in the scientific field) or in some jobs because they will require English bibliography, resources in English and it is the school the one in charge of giving them said tool. On the other hand, teaching all the content in English it's a detriment because we are not teaching them in Spanish, so the students end up not knowing the concepts in Spanish. For example, they may know the parts of a plant in English but not in Spanish, which is the mother tongue of most of them. Furthermore, those students whose mother tongue is not Spanish we are teaching them a third language at the same time we are taking time away to learn Spanish. Let me make myself clear, if we have students whose mother tongue is Moroccan in school, and we are teaching them in both English and Spanish, we are mixing them and as we are using both they are being exposed to them for less time than they would be exposed to if we focus on one. So, we pretend the Moroccan students learn Spanish at school but we only give them half of the lessons in Spanish and we want them to learn a third language. I think it hinders their learning process.

2. Do you consider the program takes into account students with speech impediments?

No, I have a very clear opinion about this. The PAI program is not made for students with impediments and it is another barrier. In the first place you are taking away time where the student would be exposed to Spanish more. In second place because you are forcing them to learn and use two languages, learn double vocabulary, learn different grammatical structures because English and Spanish do not share the same grammatical structure. I think it is



extremely demanding for students who present difficulties and we also do not devote enough time for both languages because the time we spend in school has not doubled, we do not say everything in both languages. Instead, we have divided the time we spend in school to speak half of the time in English and half of the time in Spanish.

3. Do you provide aid in both languages, Spanish and English?

As of right now, I have a profile of A.L (speech therapist) and P.T (pedagogical therapist) and I try to always join the lessons during the Spanish lectures. It is the priority. So as of now I am not providing aid to any student in English.

4. Is there any specialist in the school or any school you know that provides aid in English?

I think in this school we are not providing aid during the English lessons which I think only means more difficulties for the kids that already have difficulties aside from the fact that they do not have any person that can guide them. I do know other schools where the specialist enters the English classes but what they do is translate directly. If they are learning sciences in English then that student gets all the contents in Spanish, and I do not think that helps the inclusion of those students. Basically, by doing this technique what is really happening is that that kid is taken out of the PAI program, being in the same classroom as the other kids who are in the program, highlighting the differences even more. As well as making it more difficult for them to follow a class.

5. Do you recommend the program to any and every student, regardless of their specific needs? If not, which students are the ones that are more negatively affected by it?

No, and I also have a very clear opinion about this topic, no. If a school has both options, Spanish and PAI, and some parents ask me about their child, who has some difficulties with language in any of its dimensions: poor vocabulary, difficulties with the structure of the language, something like TEL (trastorno específico del lenguaje). I would not recommend the PAI program, I think it is better to focus on a language, for the kid to have time to learn it and for all the curricular contents to be learned in Spanish.

We can do some groups regarding the students that are more negatively affected by PAI. First would be those students whose mother tongue is not Spanish, because we are giving them less opportunity to learn Spanish. The second group is composed of students who present any kind of speech impediment, that have issues with the acquisition of vocabulary or with grammatical structure. I also think that those students who do not have any type of help at home, because I think PAI is very demanding and studying vocabulary in English, do homework... And students who do not receive any help at home must have a lot of autonomy to do it themselves, which I believe demands a lot of them at a young age.

6. In your opinion, the fact that the program takes place in almost every school presents an issue for students with speech impediments?

Yes, it is a problem because the educational offer right now in Pamplona is very reduced. If you need or want that your child, for their circumstances, learns in a primary school in Spanish, depending on where you live you may not even have the option to do so. For example, in Estella and the area of Estella the public school has PAI so unless you want to do many kilometers each day your kid will have to learn with the program. So, you don't have the choice to learn in Spanish whenever you want because the offer is small and there are very few schools. No one can ensure that you are going to get in because you may not have preference over the rest because you are not from that neighborhood or you have to go every day to a different one. That is in the case that your area even has an offer without PAI.

7. Do you have any idea/recommendation of what could help improve the situation?

A possible solution could be to provide more aid, those schools that have PAI could have more hours of P.T and A.L. A student who would get 5 hours with the specialists in Spanish could get 10, 5 in Spanish and 5 in English. That could work as a solution. Although it would mean a lot of work for the teachers, they could try to make the English lessons very visual so they are adapted with alternative communication such as pictograms, making it very intuitive. The issue then would be that they do not learn English at the same level, because if you simplify the speech too much then the rest of the class does not advance and continue learning. However, it could be possible to make some adaptations with alternative education. I would have to think about more solutions but something that is clear is that students in PAI require more hours of aid, both in English and Spanish.

Annex 2: Link to survey

<https://docs.google.com/forms/d/e/1FAIpQLScaodsrlfQeQDj7TFgUINMo36puiygDU1H39eIkYJDPNTjMfQ/viewform?usp=sharing>