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Bilingual teaching: a modern educational need

A theoretical framework and a didactic proposal

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Special thanks

I would like to dedicate this thesis…

To all my family, especially to my parents, who were always there for me, and they always encouraged and supported me.

To my friends, near and far, who make every day my life more beautiful and fun.

To my classmates and my Spanish friends, who accompanied me on this trip making it special. I probably wouldn't have made it without you!

To the children, schools, and teachers with whom I have collaborated and to those with whom I'm going to work in the future.

To my thesis supervisor, who with her experience and tips guided me during this experience.

To myself, to my dreams, my career, and my future.

Resumen: La educación, a lo largo de la historia, para poder responder a las nuevas necesidades, siempre se ha ido modificando. Sin embargo, hoy en día, debido a las profundas transformaciones del mundo globalizado, esta ha cambiado de forma aún más radical. Actualmente, la educación intercultural y la adquisición del lenguaje se han convertido en unas de las principales prioridades. En respuesta a estas nuevas necesidades educativas, los enfoques metodológicos, los sistemas de enseñanza y los educadores se han tenido que adaptar en consecuencia, y durante las últimas décadas, se ha producido una expansión de proyectos bilingües. En esta nueva realidad, la educación bilingüe es una moderna necesidad educativa; por lo tanto, el objetivo de este TFG es llegar a comprender mejor este fenómeno. Comenzaremos presentando el concepto de bilingüismo, de adquisición del lenguaje y de aprendizaje temprano del idioma. Es esencial considerar los últimos aspectos, ya que están directamente relacionados con el concepto analizado. Además, presentaremos políticas europeas en este ámbito y describiremos brevemente el contexto español. Finalmente, propondremos también una unidad didáctica en la que intentaremos poner en práctica todos los conocimientos analizados en el marco teórico.

Palabras claves: Educación bilingüe, aprendizaje temprano de idiomas, políticas europeas, CLIL, educación primaria.

Abstract: Education has always been modified throughout history in order to respond to the new necessities. However, nowadays, due to the profound transformations of our globalized world, it changed even more radically. Currently, intercultural education and language acquisition have become a real priority. In response to these new educational needs, approaches, teaching systems, and educators adapted accordingly, and during the last decades, an expansion of bilingual projects occurred. This new reality transformed bilingual and plurilingual education in modern educational needs and the goal of this thesis work is to get to understand these phenomena better. We will start by introducing the concept of bilingualism, language acquisition, and early language learning. It is essential to get to consider the latter aspects as they are directly related to the analyzed concept. Besides, we will present European policies in this area and briefly describe the Spanish context. Finally, we even propose a teaching unit in which we will try to put into practice all the knowledge analyzed in the theoretical framework.

Keywords: Bilingual education, early language learning, European policies, CLIL, Primary Education.

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- Students' characteristics

Abbreviations

The abbreviation used in this thesis work are:

L1 = First language

L2 = Second language

ZPD = Zone of proximal development

EU = European Union

CEFR = Common European Framework of Reference for Languages

CBI = Content-Based Instruction

CLIL = Content Language Integrated Learning

PLB = Project-learning based

1. Introduction

This introduction briefly introduces the thesis work that we have been writing. In order to do so, we explain how it is structured, we present the main presented matters and topics, we justify the content and we list the five main general objectives.

This thesis work is divided into two parts: the first section in which we present and justify the thesis, a theoretical framework, and a methodological framework.

The first part is formed by four chapters and is dedicated to the theoretical knowledge acquired on the topic. First of all, to better understand what bilingual education is, in chapter number two we introduce the concept of bilingualism. We explain what bilingualism is, we present the types of bilingual people, we explain how we learn the first language (L1) and the second language (L2), how the L1 can influence L2, and how bilingualism or plurilingualism can affect our brain and our lives.

In the third chapter, we present bilingual education, and we explain the importance of starting a foreign language acquisition from childhood. Afterward, in the last sections, the European bilingual situation is analyzed, and we introduce the official regulation on the matter. We are also going to offer an overlook of the most used approach: CLIL.

Furthermore, we are going to present the Spanish bilingual context, the types of bilingual schools, and laws governing bilingual education in the country.

The last part of this document is made up of one chapter (chapter six) in which we suggest a possible bilingual education implementation. It is a bilingual educational project for Spanish school and sixth-grade students. Unfortunately, due to the state of alarm by COVID-19, and to the peculiar situation that we are going through at the moment, our project has not been implemented.

Finally, in the last section, we present all the extra elements that can better explain and show our thesis: some documents, the pictures of the school, the description of the activities of the teaching unit, and also some of the used materials.

1.1 Objectives

For the creation of the following thesis work and educational project, we have set a series of objectives:

- Carry out a study on bilingualism and bilingual education
- Learn more about the CLIL educational approach
- Analyze the Spanish bilingual educational situation
- Lay the foundations on bilingual education for a good didactic proposal for a Spanish school with bilingual sections
- Plan a bilingual educational project to have a successful bilingual education using CLIL methodology

1.2 Justification

The main themes of this thesis work are bilingual and plurilingual education. This thesis arises from a personal interest and from the desire to learn more about this topic, which we consider highly current and fundamental for all the professors of the twenty-first century.

We live in a globalized and multi-ethnic world, we are continually exposed to multiple cultures and languages, and we live in a fluid society without stable borders that requires us to be increasingly flexible and to be able to speak in at least two languages. Consequently, nowadays almost nobody can really be considered as a real monolingual and monocultural person. Moreover, International and European institutions boost bilingual and plurilingual education, and they seek to create a broader and more inclusive sense of community in their citizens.

This current worldwide situation obviously affects education and schools that are called to be able to respond to new educational needs and challenges.

Precisely for these reasons, the main objective of this thesis work is to get to know more about bilingual education. We will do so proposing a theoretical framework on the topic (the European situation, official regulation, methodologies, etc.) and to provide a methodological proposal to exemplify how the whole theoretical framework can be applied in a primary school with bilingual sections. The latter represents a possible implementation of the theory learned and has been designed to teach English in a concrete school context through the CLIL method.

Investigating these realities from a theoretical and practical point of view, we try to contribute to a responsible assumption of commitment as a future teacher in improving the teaching of languages.

II. Theoretical Framework

Through this thesis work, we want to provide a bilingual methodological proposal. However, before developing and describing our teaching unit for a primary education sixth-grade class, it is necessary to approach the theoretical framework. Obviously, we cannot move towards the development of a bilingual project without getting to know better what bilingualism and bilingual education are. Moreover, in the theoretical framework, we are even going to see how bilingualism is implemented in Europe and Spain.

2. Approaching bilingualism

2.1 What's bilingualism?

The word bilingualism is a problematic term to define because it contains in itself a broad concept; it is actually considered as an "umbrella term". Many experts have become interested in bilingualism and proposed their definitions. However, all these explanations move along two opposing ideas of bilingualism.

On an extreme pole of this series of explanations, we find, on one side the linguist Bloomfield (1974), defines bilingualism "as having native-speaker skills in two languages" (p. 64).
Furthermore, the Cambridge Dictionary writes that "Bilingualism is the fact of being able to use two languages equally well." Considering these claims, the number of bilingual people drops dramatically; indeed, these definitions exclude all those who speak two languages but do not have the same proficiency level in both of them.
On the other hand, Edwards (1994), believes that in our days anybody can be considered a bilingual person because practically everyone knows at least few words in a foreign language and has minimal competences in L2 in at least one of the four linguistic fields: listening, speaking, reading and writing (Bhatia and Ritchie, 2004).
There are also less extreme positions, and now we will see some of them. The Real Academia Española (RAE) defines bilingualism as "the habitual use of two languages in the same region or by the same person." The American linguist Weinreich (1974) in *Languages in Contact* defined bilingualism as "the alternative use of two languages" (p. 3). We can, therefore, notice how the last two definitions do not specify the level of knowledge of L2.

Reading these quotes, it is possible to immediately notice that there are a lot of different and sometimes opposing perspectives. As a consequence, everyone may have some inevitable questions: What is bilingualism? What level of knowledge of the language must an individual have in order to define himself as a bilingual person?

We can probably conclude saying that there are as many definitions of bilingualism as bilingual people in the world. However, despite the difficulty in establishing exactly what this phenomenon is, nowadays, according to the recent research, it has been shown that, even in simultaneous bilinguals, the two idioms never develop perfect synchrony (Weinreich, 1974). Therefore, it would be better to consider bilingualism as a daily life communicative ability rather than a linguistic proficiency competence.

According to new scientific and neurological studies, we even know that there are different types of bilingualism, and they take into account various factors.

1. First of all, depending on the age of acquisition of L2, we can speak of early, consecutive, or late bilingualism. In the case of early bilingualism, we include all children exposed to two L2 between 0 and 3 years of age. Furthermore, as regards early bilingualism, the exposure of languages can even be simultaneous. In order to be considered simultaneous L1 and L2 must occur from birth at the same time. Instead, language learning can be consecutive if the child is exposed to L2 after three years old (Weinreich, 1974). Finally, late bilingualism concerns those children who learn the second language after the age of 8 or during puberty. In fact, according to Fabbro (2004), after eight years, the most critical elements of a language are no longer stored and organized in the same structures as L1. The plasticity of the brain decreases, and with it also the ability to acquire a foreign language.

2. Subsequently, we can even talk about a compound, coordinated, and subordinate bilingualism. This second classification is in some way related to the previous one. In the case of compound bilingualism, the child uses two systems of linguistic codes ("Perro" and "Dog") and organizes them in the same system of meanings. These are usually children with early and simultaneous bilingualism. The coordinate bilinguals, instead, store each linguistic code in a different unit of the system of meanings. This usually happens for learners who were exposed to L2 after three years old. Lastly, subordinate bilinguals refer to all those who approach L2 through L1, and this usually happens to late bilingual learners (Weinreich, 1974).

3. Finally, if we focus on the language competence of a person, we have another possible classification: balanced or dominant bilingualism. In the first case, the child presents quite a

good level in both idioms; in the second case, one of the languages is stronger than the other. The proficiency level is usually determined by the quantity and quality of the inputs and by the importance of the social status that a language presents in a given learning context or society (Weinreich, 1974).

2.2 How do we learn languages?

For teachers and educators knowing the process of acquiring a language is very important. That is why, in this chapter, we are going to analyze how kids learn L1 and to comprehend if the acquisition process of the first language is related to L2 or not and in which way they are.

According to the American linguist Chomsky (1957), language is "a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements" (p. 13). In order to successfully acquire a language, we know that we need a really long time and effort, but we are not really sure how this happens. The psycholinguistic science and the scientific studies on languages developed in the 1950s and since then, many scientists try to respond to the question: "How do we learn languages?", but there are several positions in this regard. Now we shall proceed to introduce the three main approaches of language acquisition (Martín Bravo, C. et al., 2016):

1. Behaviorism: The greatest exponent of this approach is Skinner. According to him, infants learn how to speak through the general mechanisms of learning: association, imitation, repetition, and reinforcement. In his opinion, what really matters for language acquisition is the number of inputs and reinforcements given by parents and society during the learning process.

2. Innatism: The best-known exponent is Noam Chomsky. According to him, the acquisition of a language is a creative and complex process; therefore, the child does not limit himself to imitating adults. The infant continually searches for the general rules of language by himself, and he does it through the hypothesis testing process. All this is possible because language acquisition is due to the Language Acquisition Device (LAD), which is a sort of universal biological program that allows us to learn potentially all the languages of the world. Furthermore, according to Chomsky, every human being since birth has an innate knowledge of the universal grammatical (UG) principles and the nature of languages. Consequently, "thanks to this innate knowledge of the language, LAD is able to actively extract the

grammatical rules of a particular language only by exposing itself to it" (Martín Bravo, C. et al. 2016, pp. 91-92).

3. Constructivism:

- Vygotsky is the greatest exponent of social constructivism. His approach is based on the idea that cognition develops through social interaction. Therefore, the socio-cultural experience is fundamental because thanks to a series of "tools" (such as the language), it provides stimuli for the learner. In fact, the others are responsible for the educated guided learning that takes place working in the proximal development area of the child. According to Vygotsky, the second key element in the development of cognition is language. Communicative competence plays a fundamental role because thoughts are mediated through internal language. Thus, we can say that between cognitive and linguistic development, there are continuous interactions.

- Piaget is the greatest exponent of cognitive constructivism. He dealt with two main topics: the first study on a child's cognitive development stages that predicts us at what age a child is able to understand certain concepts and a study on how learners develop cognitive skills. In the second one, Piaget supports the interdependence between cognition and language. Language is not merely an innate device but develops as a complement to cognitive processes. So the development of language is subordinated and conditioned by cognitive development.

- Bruner is an American psychologist who combines the last two theories previously presented. In the analysis of learning processes, Bruner started from Piaget's research and then developed it emphasizing the influence of socio-cultural factors. Indeed, Bruner hypothesizes that all mental processes, including language, have a social origin and that cognition is influenced by culture. Furthermore, according to him, the children learn languages thanks to their innate predisposition and mainly through the Language Acquisition Support System. LASS corresponds to the role played by adults and the context.

As we can see, there are many theories. Despite the differences, we can be sure that the acquisition of a language reveals the active participation and interaction of different kinds of aspects, including biological, psychological, and social factors. The importance of this last aspect, the social one, was then confirmed and strengthened through studies on the so-called

"wild children". These are infants who, for various vicissitudes, had practically no contact with people and, having received no inputs, never acquired a language.

What we know for sure about first language acquisition is that it is really a long and complex process and that kids go through fixed stages before acquiring a proficiency level. The stages of development of the child's language production are divided into two main stages: the Pre-linguistic stage and the Linguistic stage.

During the Pre-linguistic first phase, infants mainly exercise their accommodation skills and collect information from the outside, and they carry out these mechanisms really fast. A few hours after birth, the baby is already able to recognize the mother's voice. After six months, he discriminates between the sounds of different languages and recognizes his/her mother tongue. During the first months of life, babies also demonstrate to have L1 skills, which are necessary for the development of language and allow them to express their needs. These include crying, gestural, and expressive communication. The actual communicative intention appears between 6-8 months with the babbling phase emerges during which the child repeats the same syllable in sequence. The first significant words (one-world stage) usually appear between 11 and 12 months. The two-word issue phase starts around 18 months. Besides, around 24 months, the so-called "language burst" usually takes place, in which the acquisition of new words becomes much faster, and the emissions become more complex. Finally, between 3 and 4 years old, children have already acquired a great mastery of language and master the essential aspects of their language, and its language is very similar to that of adults (Martín Bravo, C. et al. 2016).

The Linguistic stage starts from 6-7 years of age when the child presents fluent and rich language. Particularly noteworthy is the beginning of education, because starting from primary school, there is a great increase in vocabulary and understanding of words. According to Pinter, "an average eight-or-nine years old knows between 4.000 and 10.000 words, and it is estimated that about 800 to 1200 words are learned at school every year from this age onwards" (Pinter, 2006, p. 22.). In addition, the child comes into contact with different written and oral linguistic registers and phonetics, syntactic, and grammar are also enhanced. The whole process of language acquisition continues into the years of secondary schooling.

Researches say that there are parallels between children's first language and second language development, and according to Pinter (2006), "depending on the starting age of the acquisition of L2, these two processes can be more or less closely intertwined. The younger the child is, the more similar the two processes will be because very young children lack the ability to manipulate and think about language in a conscious way" (p. 17).

According to many scholars, if the learning of L1 and L2 is simultaneous, the acquisition process is practically identical and can be considered as multiple first language acquisition. In fact, a bilingual infant learns the two languages following the same procedures as a monolingual child without showing too much difficulty or effort and without the need for external help. On a phonological, grammatical, and lexical level, the process used by the bilingual and the monolingual are the same and follow the same phases. Furthermore, the mistakes made by the two also seem to be similar.

However, the bilingual infant, having a more high cognitive load than that of a newborn who learns only one linguistic system, appear to develop more slowly in linguistic terms; indeed, bilinguals usually start to say their first words at letter later than their monolingual peers: the one-word stage usually starts at 12 months instead of 11.6 months (Bhatia, Ritchie 2004). Nonetheless, all these are not true for every single bilingual infant, and there are examples of kids who start talking just at the same time as a monolingual.

Moreover, they could present errors for a more extended period and mix the two linguistic systems. In fact, "bilingual children go through a phase of mixing the languages in the first two years. Then around three years of age, they start to separate the two languages and will begin to address people in different languages depending on their relevant language background" (Pinter, 2006, p. 28). At the age of 4-5, this phenomenon spontaneously completely disappears. As the child acquires the languages and their own vocabulary, he/she no longer needs to resort to help from L2 and stops developing and mixing them. Furthermore, slowly, interacting with people, he is able to distinguish between the two linguistic systems. "Particularly striking is the similarity between the order of acquisition by an English mother tongue and a naturalistic English as a second language learner, i.e., those who learned the language immersed in an English environment" (Pinter, 2006, p. 19). On the other hand, learners who learn in a regular class at school may present a different process. In fact, they receive less linguistic inputs, produce fewer outputs, and they are not immersed in a natural context; obviously, all these factors can alter the acquisition process and its phases.

However, knowing the natural order of acquisition of a native can still help to understand the timing and the cognitive needs of students; in fact, "researches show that there are many universal aspects of language development whatever language (first or second) and whatever type of learner (adult or child) we consider" (Pinter, 2006, p. 18).

Krashen (1982), an American expert in the field of linguistics, believes that the grammar of a language is always acquired spontaneously according to a natural order, that is, from the most simple to the most complex structures. So it is especially important to know what is easier or

more difficult for young learners. In his book *Principles and Practice in Second Language,* he stated that "the acquisition of grammatical structures proceeds in a predictable order. Acquirers of a given language tend to acquire certain grammatical structures early, and others later. The agreement among individual acquirers is not always 100%, but there are clear, statistically significant, similarities" (Krashen, 1982, p.15). Typically at the beginning of the English language acquisition and learning, all students (young learners or grown-up) firstly present more or less the same difficulties, make the same mistakes, and follow the same process. For example, everyone at the beginning forgets the final "s" of the third person singular present, or they tend to omit the auxiliaries in the interrogative form (they usually say: "You speak English?" instead of "Do you speak English?").

Krashen (1982) believes that we always need to follow the natural order of acquisition if we want our students to improve in L2. Furthermore, according to his Input Hypothesis, he states that students progress in a natural order only if they receive the second language comprehensible inputs. That means that the inputs should also be one step beyond the pupils' linguistic competence. That is why the American linguist proposes the equation "i+1" in which the letter "i" stands for the information and the linguistic competences that pupils already have acquired. The "+1" represents the new knowledge or structure that the students are going to receive. The new content presented must be a content that follows the natural order of acquisition, the student must be able to understand and learn it.

2.3 Advantages of bilingualism

There have always been false myths about bilingualism, and these are mainly the result of studies conducted in the first half of the last century. As a matter of fact, "for a long time, it was believed that learning two languages at the same time was detrimental to children's development. However, research in the last 30 years, especially in Canada, has now convincingly demonstrated that this is not the case" (Pinter, 2006, p. 28). It was thought that this phenomenon could be disastrous for an infant, and it was believed that the kid could suffer negative consequences on a cognitive, psychological, linguistic, cultural, and social level.

Only from 1962 with the studies on IQ and with results of the investigation of Peal and Lambert false beliefs will begin to change. In Fabbro's (2004) book we can see how Peal and Lambert's research was conducted in Canada in six Montreal French schools. What differentiates this investigation (1962) from the previous ones is the form of organizing the two types of students (bilingual and monolingual); in fact, they were rigorously grouped based on socio-economic

class, gender, age, educational opportunities, and degree of bilingualism. This was one of the first well-controlled studies in which bilinguals scored better than monolinguals.

Through the results, it is shown that bilingualism did not alter the pupils' IQ and that there are no correlations between this phenomenon and some psychological dysfunctions related to personality.

In addition, tests showed that bilingual children had numerous cognitive advantages. First of all, the students who spoke French and English presented more divergent and creative thinking, a superiority in the formation of concepts, and a more diversified set of mental skills. Furthermore, they demonstrate superior cognitive flexibility which seems to derive from the ability of bilinguals to communicate regularly in L1 and L2 and to switch quickly between the two acquired languages. Among the cognitive advantages that bilinguals seem to have, there is also the ability to switch from one task to another and the ability to inhibit and executive control. This is due to the fact that they are used to continually change between linguistic systems by inhibiting one of the two languages.

Moreover, according to a study by the Proceedings of the National Academy of Sciences, if children practice bilingualism throughout their lives, they may suffer less of neurodegenerative diseases such as Alzheimer's disease and dementia. This is because bilingualism is a gym for the mind and constitutes a so-called cognitive reserve that acts as a defense against the advance of these diseases and the onset of the disease can delay up to 5 years (Pini, 2017).

Bilingual students also achieved significantly higher verbal and extraverbal results and "they usually present metalinguistic awareness, as they have had much experience in translating from one system to another linguistic" (Martín Bravo et al., 2016, p. 109). Many investigations point out that the bilinguals, having to be able to carry out a cognitive separation of two different languages, present a particular linguistic awareness, a kind of better understanding of the language that their peers do not have.

They as well "are less self-centered in understanding language and more sensitive and empathetic with others. Finally, bilingual children are more motivated and sensitive towards cultural and linguistic diversity" (Martín Bravo et al., 2016, p. 110).

Finally, in this new globalized and international world, we can also say that bilingual people may present work advantages and social prestige. Nowadays, it is fundamental to interact with the majority of people, and languages are the key to success.

3. Bilingual education

3.1 What is bilingual education?

As we saw in the first chapter, it is not easy to define the word Bilinguals. This is due to the fact that it is a complex, broad, multifaceted, and often very subjective term (see section 2.1). We face a similar problem in the very moment in which we try to define a phenomenon related to it. In fact, when looking for a definition of bilingual education, we find a considerable amount of diverse ideas and understanding of what this concept is.

With the term bilingual education, we attribute to a lot of different kinds of students, realities, and contexts. Sometimes we refer to the education of those students who learn at least one other language different from L1. Sometimes, however, it is used to identify any educational approach directed toward bilingual students (Baker, 2001). Moreover, the wide variety of educational approaches further complicates any attempts to ascertain the features necessary for successful bilingual education. We are going to take into consideration Mwaniki, Arias, and Wiley (2003) definition which states that bilingual education is "any attempt to strategically employ two languages in instruction for either the purpose of linguistic accommodation for students who do not speak the language of instruction or to promote the learning of more than one language to achieve individual, community-based, societal, or political goals" (García, May & Hornberger, 2009, p. 25).

The concept of bilingual education is not at all new; in fact, since ancient times, men of culture used to study and learn more idioms. In Roman times it was customary to know Latin and Greek, since the fall of the Roman Empire and throughout the Middle Ages, usually the wise men besides knowing the various European vulgar languages, also studied and wrote in Latin. Furthermore, in the eighteenth century, the children of wealthy European bourgeois used to travel to Europe and learn at least one foreign language. However, in ancient times, the teaching method was based on the Traditional Grammar Model. Students were used to read classic literature books and concentrated on translation, grammar, and memorization.
Today, the teaching methodologies have changed a lot; however, it is essential to understand that the concept of bilingual education remains basically the same: to teach and learn in a foreign language.

In the 20th and 21st centuries, we experienced a great social change, and today, bilingual education has become an essential educational need for society. Globalization began in the early

90s of the last century with the end of the cold war and the communist blocs and produced major changes in the economic, social, and cultural spheres. Modern society is more open and interdependent. It has greater access to information and communication, thanks to the development and growth of new technologies that have eliminated space-time barriers. The world is changing and relating rapidly, and for this reason, we are asked to be flexible and to be able to communicate with as many people as possible. Consequently, the educational system is facing a great challenge responding to these modern needs and should be able to allow all its students a quality and bilingual education.

Schools are also increasingly facing the challenge of integrating and welcoming pupils from a wide range of linguistic and cultural backgrounds in all the academic grades. Moreover, all the pupils, generally speaking, are consciously or unconsciously, plurilingual since many linguistics inputs surround them. Wandruszka (1979) believes that monolingual speakers do not actually exist anymore. In fact, according to this author, we are all unknowingly multilingual because in modern society we are immersed in multilingual and multicultural contexts. Furthermore, we constantly use many foreign words in our daily speech (we do not translate them) and we intrinsically know how to interact, what to say, and what kind of strategies to use depending on the interlocutor we are facing and on the given situation. All these realities involve an extra effort for both teachers and students, and the school system needs to know how to face the current social situation better.

Furthermore, bilingual education even responds to another modern need: peace and tolerance. Bilingual teaching is nowadays based on a philosophy of education that emanates from the belief that linguistic proficiency in more than one language, provides a richer understanding of realities and cultures. Consequently, this kind of education is related to the development of positive attitudes such as cultural respect, the development of multiple identities, and the ability to travel through multilingual and multicultural environments.

3.2 Early language learning

Various studies conducted reveal that learning a foreign language at young ages is a decisive factor for the successful development of communicative competence, not only of their mother tongue but also of other languages. Most scientists believe that children who acquire a foreign language at an early age will learn it faster, easier, and with a good chance of having a native level and pronunciation. In this section of the thesis work, we will explain why children have

advantages in the process of acquiring language skills compared to an adult and, consequently, why it is important to improve young L2 learning.

First of all, it is also fundamental to know the difference between learning and acquisition. According to Krashen (1982), there are two primary processes through which we can develop L2 competences: learning and acquisition. The American linguist considers that in the first case, we develop L2 skills through an unconscious process, while, in the second case, we go through a conscious process. Consequently, the acquisition process is a more in-depth process, and it leads to more stable linguistic knowledge. Furthermore, it generates understanding and linguistic production with automatic processes; in fact, "the result of language acquisition, acquired a competence, is also subconscious. We are generally not consciously aware of the rules of the languages we have acquired. Instead, we have a feel for correctness. Grammatical sentences "sound" right, or "feel" right and errors feel wrong, even if we do not consciously know what rule was violated" (Krashen, 1982, p.14).

Instead, learning is a rational and voluntary process, and it has a relatively short duration. Usually, this is how we learn in the school and adult process. Learning in this sense is conceptualization: instead of learning a language itself, students learn an abstract, conceptual model of a language, a "theory" about a language. It can lead to near-perfect abilities; however, it does not stabilize in the same way as acquisition. Therefore, the acquisition process brings us to real linguistic competence, and it is the typical process of when we develop language competences at young ages.

Furthermore, as we have already seen in chapter one, when we talk about the language learning process, many factors intervene, such as biological, social, and psychological factors. One of the most important biological aspects to take into consideration when we talk about young language acquisition is the concept of plasticity of the brain. By brain plasticity is meant the ability to form a large number of synaptic connections and specific neuronal groups in relation to learning experiences. According to the latest research, the period of maximum plasticity is during the first years of life until adolescence. In fact, the number of neuronal synapses varies above all according to the age of an individual (Bear et at., Bear., Connors, & Paradiso, 2003).

Lenneberg, a German linguist and neurologist, made a study in 1967 on the first language acquisition process. According to this author, L1 cannot be learned in the same way by a kid or an older learner. This idea was later confirmed also by the cases of "wild children", who are kids estranged from society and social relations who have not received foreign stimuli and consequently have not acquired their mother tongue. But the important thing to underline is that

"wild children", although once they returned to society, tried their best to learn their mother tongue, never reached a perfect linguistic level.

According to Lenneberg (1967), there is a lifetime window called the critical period for language acquisition. The critical period seems to end at the beginning of the brain's lateralization process. He believes that after adolescence, the ability to acquire a language diminishes because the mind divides into two hemispheres with different functions and specialized lobes. Generally, starting from puberty, the hemisphere that will deal mainly with communication and language is the left one.

These investigations will then also subsequently be applied to the L2 acquisition process. All these theories presented are still much debated by this linguist because it is not clear at what age this lifetime frame ends and what the difference between the first and second languages is. According to Lenneberg (1967), the critical period begins at 2 years and ends during puberty. Instead, according to Krashen (1982), the critical period is over with 5 years old. According to Fabbro (2004), as we saw in chapter one, it ends with 8 years. Finally, Salinger (1978) and Knudsen (2004) cited by Arabski & Wojtaszek (2009), proposed multiple critical periods. They believe that there are three periods: a first period ranging from 0 to 3 years, a second one ranging from 4 to 8 and finally the last one ranging from 9 onwards. From a linguistic point of view, the children of the first two periods show that they have perfect pronunciation and excellent linguistic and grammatical skills. While the third critical period is characterized by children with a foreign accent who usually make syntactic and grammatical errors. On the other hand, from the neurological point of view, we know that the children of the first critical period memorize L2 in implicit memory[1], while the children of the other two groups store in the explicit memory[2]. Then as well, thanks to studies carried out through functional magnetic resonance imaging, it was possible to observe that depending on the age and type of linguistic learning (natural or at school), languages are organized in different areas of the brain. Investigators noted that if L2 was learned from 0 to 8 years, it is mostly held in the same brain areas as L1. By contrast, late bilinguals mostly organize the new language in areas other than their mother tongue. For example, if we take into consideration the grammatical components of

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[1] Procedural or implicit memory is used when we have to provide performance and we access unconsciously to this kind of memory. An example of implicit memory is knowing how to ride a bicycle. The moment we learn how to do it, we no longer have to start from scratch, it remains etched forever. As soon as we get on the bike we unconsciously and immediately access our memories and we perform the action automatically.

[2] The declarative or explicit memory contains our personal memories and our encyclopedic knowledge: names of things and people, definitions, etc. It is called declarative because we do not access unconsciously to this kind of memory; in fact, the contents inside of it must be recalled voluntarily, verbally and non-verbally.

L1 and L2, we can see that, depending on the age of acquisition of these linguistic elements, they are represented in the same neuronal substrates or not.

In fact, if the second language is learned before the age of 8, the grammatical elements of L1 and L2 are both organized in the frontal lobe of the left hemisphere. On the other hand, if the foreign language is learned after the age of 8, the grammatical elements are organized in different brain structures. This does not happen only for the grammatical components, but it also happens for other linguistic features. Therefore, it seems that in general, the late bilingual child uses neuronal networks different from those of L1. Generally speaking, it seems to be sure that as children grow, their L2 acquiring ability decays and the way of developing linguistic competences change.

Finally, kids may be better in language acquisition even because "young learners are less anxious and less inhibited and, overall, they can spend more time the forwarded language appears with those who start later. In the long term is a longer period spent learning may have positive effects" (Pinter, 2006, p. 29).

However, it is important to underline that these theories do not exclude the ability of adults to acquire language skills and to learn new languages. In fact, it can be seen that even old learners can reach a proficiency level in L2, but it requires an extra effort, much dedication, and a lot of exposure to authentic material. Adults learn languages thanks to the fact that older learners can manipulate and consciously think about language. According to Pinter (2006):

> Adults can learn languages using more efficient strategies, adults have a more mature conceptual world to rely on, a clearer sense of discourse, and more importantly, have a clear sense of why they are learning a new language. Adults and all learners are more analytical and give attention to detail, which helps with language learning (p. 29).

However, there is an area that is difficult to compensate for, and it is pronunciation. Indeed, it can be seen that the vast majority of those who begin to study a language after puberty are unable to eliminate their accent. Instead, young learners are more likely to acquire a native accent.

Finally, even if adults can achieve a proficiency level in a foreign language, kids learn faster and easier an L2 and consequently, it's important to start learning foreign languages early. It is evident that not all children have the opportunity to be immersed in a natural foreign language environment staying in their normal familiar context. That is why international and European institutions and schools try to make up for this lack and to guarantee all children to be exposed to one or more languages from an early age, allowing them to reach a linguistic and

phonological proficiency level. In fact, all over the world, educational systems started to introduce one or more foreign languages in their syllabus from very young ages. Nowadays, a lot of schools since kindergartens and primary education offer bilingual sections or bilingual projects.

Investigations show that between 1998 and 2002 in the EU

> The number of young English learners increased. In Spain and Austria, this number jumped from the 1999 levels (already high at over 70%) by yet another 10 and 20 percent, respectively. In Italy, the number of young English learners increased by 30%, due to a younger starting age. There is also an upward trend for English in several Central and Eastern European states: In Lithuania, Poland and Bulgaria the number of young learners doubled; in Slovakia, which had the lowest figures in 1999, there was a six-fold increase. (Edelenbos, Johnstone & Kubanek, 2006, p. 21)

Furthermore, the European Commission, in 2004-2006 promoted an action plan called *Promoting Language Learning and Linguistic Diversity*. The project talks about the concept of lifelong language learning and has expressed its intent to extend, consolidate, and develop the early learning of one or more foreign in each of the EU member states.

4. The European framework

4.1 Bilingualism in the European Union

As we have seen in chapter 3, the need for learning foreign languages is almost as old as human history (see section 3.1); however, modern languages did not become part of the curriculum of European schools until the 18th century.

Furthermore, up to the mid-19th century, the educational situation was very different from the current one: L2 was not widely taught, and mainly traditional non-effective methods were used to teach languages. Moreover, until the seventies of the last century, in Europe, bilingual education and integrated learning of a foreign language and content, were usually not part of the Member States syllabus. There were only isolated projects and usually intended for countries with multiple official languages and/or border regions.

In any case, in recent years, internationally and at a European level, things have been changing a lot, and we can observe how now a high number of students learn at least one language at school. Moreover, bilingualism and plurilingual education are really valued.

First of all, we can generally detect that the general opinion on the languages of people has changed. Particularly important are the data of the Eurobarometer of February and March 2012 on languages in the EU, which presents a comprehensive picture of the current situation in our continent. First of all, it is particularly significant that:

> The large majority of Europeans (84%) think that everyone in the EU should speak one language in addition to their mother tongue, and most (72%) that people should speak more than one foreign language. Moreover, 88% of Europeans think that knowing languages other than their mother tongue is beneficial, and 69% are also in favor of people in the EU being able to speak a common language. (European Commission, 2012, p.109)

Moreover, according to Eurostat (2019), in 2017, the majority of pupils in the EU studied one L2, and a clear majority of pupils learn English in the vast majority of EU Member States. Since primary education, in the majority of the EU nations, the number of learners studying English is close to 90%, as shown in appendix 1. On the other hand, in secondary general education, 94,7% of European students (including 2016 data for Belgium, excluding the United Kingdom) have been studying English as a second language at school (Appendix 2).

All these changes are mainly due to the technological (especially internet) and economic changes experienced in the last decades worldwide. Obviously, the globalization process has

had a powerful impact because it makes cultural and geo-political barriers weaker and weaker and, consequently, it is creating a fluid, inter-complex, and multi-ethnic society. All these changes, therefore, require plurilingualism and intercultural communication. Consequently, this rapid change comes mostly in response to globalization, but not only.

EU policies and the many agreements signed at the European level have also led to significant changes and new language needs. First of all, the single market was completed in 1993, and the four freedoms of movement (of goods, services, people, and capital) were authorized. Furthermore, in 1995, the Schengen Convention entered into force, and the land and sea border controls were removed. Since 30 March 2008, they have also removed the airport controls.

All these agreements have led to a free movement of citizens who can study, work, trade, live, and travel in any EU member state. Obviously, this leads to the need to learn and know as many European languages as possible because, European citizens with greater acquired linguistic knowledge, have more opportunities to take advantage of these numerous opportunities and to communicate effectively with others.

Finally, the changes are even due to European linguistic and cultural diversity and the need for building a shared house for all European citizens. Indeed, currently, the EU is formed of 27 countries, 24 official languages, many cultures living together, and many immigrants from all over the world permanently live in the various member states. For this reason, EU citizens, especially nowadays, must acquire language skills so that we can communicate and understand as many people as possible. Therefore, the European Union encourages change in the education field and towards language acquisition also because it also seeks to promote respect for the diversity of the European continent, peace, tolerance (European Union, 2020).

That is even why, since 1997, the European Union persuades a new comprehensive project now known as plurilingual education. This means that the goal is no longer just bilingual education or multilingualism but it is moving towards a new conception of language learning.

We can define multilingualism as the coexistence of different languages in the same society and/or the communicative ability of an individual in multiple foreign languages. In multilingual education, we, therefore, try to offer students the acquisition not only of an L2 (which is usually the English) but also of other languages. Instead, according to the Council of Europe (2014), plurilingual competence is:

> The ability to use several languages (to differing degrees) and permits contact with other cultures, which means that relations between citizens of the member states do not have to be conducted only in an international *lingua franca*, but via all possible

linguistic resources. If there is one language that Europe needs, that is plurilingualism. (p.14)

Therefore plurilingualism can be defined as the simultaneous development of multilingualism and interculturality and this approach is now becoming a priority in the education systems.

This is a significant change because, plurilingual education, underlines not only the need for linguistic abilities, but also other important goals, such as integration, intercultural abilities, the promotion of the development of democratic citizenship, and the construction of collective cultural identities respecting diversity. This advance is crucial for the history of the European Union and for all its citizens who will finally be able to feel part of a bigger Nation.

Finally, it is however important to underline that, even if nowadays realities have been changing so much and an incredibly high number of pupils study at least one L2, according to the toa European Commission (2012) investigation on languages in the EU, in 2012 "just over half of Europeans (54%) can hold a conversation in at least one additional language, a quarter (25%) can speak at least two additional languages, and one in ten (10%) are conversant in at least three" (p.5). Furthermore, 44% of the European respondents declare that they are able to understand at least one foreign language well enough to be able to follow the news on radio or television, and 43% states that they can read a newspaper or a magazine article. These statistical data make us understand that, compared to a few decades ago, nowadays, many European citizens have improved their language skills; however, it even shows that there is still a lot to do in order to get all EU citizens to know at least one foreign language and to reach a plurilingual society (European Commission, 2012).

4.2 Official regulation

We shall now present the European politics on language learning and teaching and the evolution that bilingual education has undergone in recent years in the EU.

In 1957, in the city of Strasbourg, the first intergovernmental conference on European cooperation in language teaching started designing policies and educational tools.

In 1963, the first major project in the modern language teaching field was launched. The latter encouraged international cooperation, the use of the Audio-visual method, and the development of applied linguistics. Furthermore, it intended to promote foreign language learning in European schools and the mobility between European cities and their citizens (Council of Europe, 2014).

It should be remembered that in the same years, the European Union began to take its first steps. Therefore, on March 25, 1957, the so-called European Economic Community (EEC) was established. The six states who took part were the same states belonging to the European Coal and Steel Community: Belgium, France, Germany, Italy, Luxembourg, and the Netherlands. Moreover, there is another factor that stimulated the first EU bilingual educational projects. Starting from the 70s of the last century, in Canada and then in the United States, governments started proposing the first projects of linguistic immersion. These first experiments in bilingual teaching gave excellent results. Since then, many other countries in the world, including those of the EU, started to invest in policies and projects aimed at teaching foreign languages in schools.

One of the first most important initiatives to report is undoubtedly the publication of the Threshold Level specification for English in 1975. It consists of the first educational tool able to give us references on what a student should be able to know in L2 and specifies the educational objectives of the foreign language. Initially, it was established only for the English language, but then it was used as a model for 30 foreign languages. This instrument had a significant influence on the communicative approach, on the national linguistic syllabus of many countries, and on L2 textbooks.

Furthermore, in 1994, the European Centre for Modern Languages (ECML) was established in Graz. From then on, the Unit in Strasbourg promulgated the educational policies and designed educational instruments, and the ECML sought to promote the implementation of language policies and innovative approaches in L2. In general, from 1994 onwards, the various European institutions and the Council of Europe have always tried to promote many new educational projects aimed at the learning of one or more foreign languages in all the EU countries.

On the other hand, David Marsh and Anne Maljers in 1994 first defined the CLIL methodology, a methodology nowadays used at the European level. In fact, starting from 1995, the European Commission, in the *White Paper: Teaching and learning. Towards a learning society* (1995) started promoting the methodological approach CLIL (Content and Language Integrated Learning). This approach, as we will see in the next paragraph in more detail, it does not focus its attention exclusively on L2 acquisition, but rather on a contextualized linguistic immersion, a balanced focus between the foreign language and the new contents of non-linguistic subjects, and seeks intercultural education (Council of Europe, 2014).

As we have already seen in paragraph 4.1, the European Union is moving towards plurilingual and intercultural education. This type of education began to stimulate between 1997 and 2001 when the medium-term project called *Linguistic Policies for Multilingualism and Multicultural*

Europe started. The program was designed to guide individual national governments and their authorities towards multilingual and multicultural education. Furthermore, he tried to make all European citizens understand the importance of studying foreign languages and knowledge of cultural diversity in the formation of European identity.

The *Linguistic Policies for Multilingualism and Multicultural Europe* project ended in 2001 with the European Year of Languages. During the European Year of Languages, the final and official version of the *Common European Framework of Reference for Languages: learning, teaching, assessment* (CEFR) was launched. The CEFR is not a standard-setting instrument but it is "a reference framework. It was designed to provide a transparent, coherent, and comprehensive basis for the development of language syllabuses, the design of teaching and learning materials, and the assessment of foreign language proficiency. Therefore, CEFR is a policy instrument serving plurilingualism" (Council of Europe, 2014, p.18).

Its main function is to create a reference base in the field of foreign languages common to all EU Member States so that it can overcome the barriers and difficulties produced by the numerous and diverse European education systems and thus promoting international cooperation and recognition. In fact, the presentation of training objectives and evaluation criteria common to all will facilitate the mutual recognition of the qualifications obtained in different countries and learning contexts and, consequently, will contribute to mobility in Europe. The CEFR assumes that the ultimate goal of all language students is to achieve language skills similar to that of a native person. The framework divides foreign language proficiency competence into six different levels: A1, A2, B1, B2, C1, and C2 (Council of Europe, 2001). These levels described above represent a scale from the lowest to the highest level of linguistic competence and each level has some characteristics that are described in the CEFR Reference Levels and Descriptors Grid (Appendix 3).
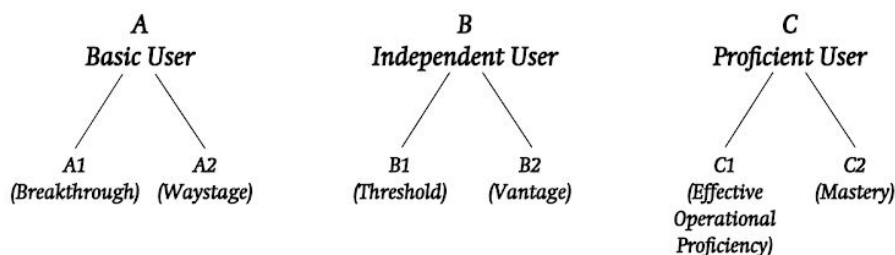

Figure 1: CEFR Level Chart (Council of Europe, 2001, p.23)

There is also a CEFR Self-Assessment Grid which helps students identify the level they belong to (Appendix 4).

As we have already said, the CERF was not the only instrument created, in fact, they even proposed the *European Language Portfolio* (ELP). This tool was designed to make the CEFR directly useful to learners, and according to the Council of Europe (2014) The *European Language Portfolio* is:

a personal document divided into three parts: a language passport, a language biography, and a dossier. The ELP allows its owner to document linguistic knowledge and competences already acquired and to confirm that self-assessment by means of official qualifications. It invites learners to set learning targets, always with reference to CEFR competence descriptors. It is, therefore, a key instrument for reflective learning and for fostering learner autonomy. (Council of Europe, 2014, p. 23)

All the tools and educational projects mentioned above have been promoted by the EU institutions to foster a plurilingual education. All the European Member States have decided to adopt and implement the EU guidelines and instruments, and consequently, they had to modify their education systems and their national curricula. However, this is not always a simple process. This is why, in 2002, also the Linguistic Political Unit was developed. Through this initiative, a system of expert assistance has been made available to individual European nations. In addition, in 2003, a framework document was produced: Guide for the development of language education policies in Europe: from Linguistic Diversity to Plurilingual Education. Moreover, a resource platform for multilingual and intercultural education was launched in 2010.

Finally, the EU institutions even launched two projects for immigrants integration: in 2006 the project on *Linguistic Integration of Adult Migrants* (LIM) and in 2009 the project on Linguistic Integration of Children and Adolescents from Migrants Background (Council of Europe, 2014).

4.3 Content and Language Integrated Learning (CLIL)

Traditionally, the language teaching and learning process were based on the classical and academic methodology of Latin language (see section 3.1), which requires students only to learn by heart grammatical rules, do some exercises, and translate abstract sentences; therefore, oral work was minimal. However, the Traditional Grammar Model was not always very effective and, consequently, from the second half of the 19th century, new methodologies for foreign language acquisition started developing. It can be said that, currently, there are two main general approaches for L2 teaching: the Comprehension Approach and the Communicative Approach. Now we shall focus on the second method. Ellis, Girard, & Brewster (2002), defines this approach like this:

The Communicative Approach, developed in the mid-1970s through the Council of Europe, is based on the social-interactionist theory, which emphasizes the social nature of language learning and interaction. Recent work in second language acquisition has emphasized the importance of learners producing output to show that intake has taken place. For children, this approach means language teachers engage learners in drawing, acting out, listening, talking, reading, or writing based on meaningful and contextualized tasks using language which has been carefully prepared for. [...] This approach is often referred to as activity-based and commonly involves the use of three types of activities: problem-solving activities, interactive activities, and creative activities. All of these aim to develop learners' communicative competence while catering to children's needs and enthusiasm (p.45).

Therefore, the Communicative Approach was presented as an attractive and innovative approach to language teaching since it focuses not only on the structure of the language and on accuracy but on the communicative function of a language and ensures that students can communicate in real contexts. The Communicative Approach provides the basis for the development of a variety of methods (the Lexical Approach, the Task-Based Learning, etc.). Among the different methodologies, we can find the Content-based Instruction (CBI) and Content Language Integrated Learning (CLIL) approach.

The CBI emerged in Canada and the United States, respectively, in the 1960s and 1970s. It is considered a methodology within the Communicative Approach, but it is not a program focused exclusively on language teaching. In fact, the latter also integrates the learning of L2 with new content. Pupils learn a topic using the language they are trying to learn, rather than their native language. Nowadays, many experts believe that this approach represents a more natural way of acquiring an L2, as it looks more like the way we learn L1 (Cameron, 2001).

It can be said that Content Language Integrated Learning (CLIL) is a readjusted European version of the CBI methodology. Currently, as we have already seen in 4.2, its implementation and use are extended in all the European countries.
Coyle, Hood, and Marsh (2010) defined CLIL as:

A dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language. Each is interwoven, even if the emphasis is greater on one or the other at a given time. CLIL is not a new form of language education. It is not a new form of subject education. It is an innovative fusion of both. (2010, p. 1)

Therefore, as we can see, CLIL should not be considered simply as an approach to teaching language learning as it is also based on learning new knowledge. However, in reality, this

approach is much more, and it does not focus only on two elements: Content and Communication. Indeed, CLIL is actually built on four building blocks, which are: Content, Communication, Cognition, and Culture. The 4Cs Framework (Figure 2) shows graphically how all the different components of the methodology should interrelate with each during the learning process and how they are related.
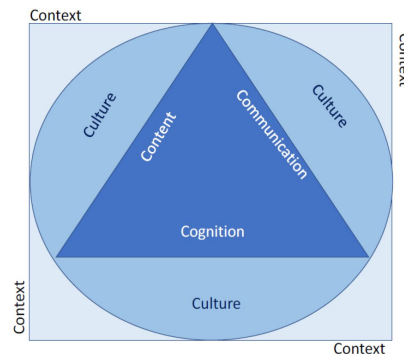

Figure 2: The 4Cs Framework (Coyle, et alii, 2010, p.41)

Coyle et al. (2010), describe CLIL's 4 Cs Framework as follows:

1. Content: Content is the subject or the CLIL theme. [...] The theme does not have to be part of a discrete curriculum discipline such as maths or history, it can be drawn from alternative approaches to a curriculum involving cross-curricular and integrated studies. It is useful to think of content in terms of the knowledge, skills, and understanding we wish our learners to access, rather than simply knowledge acquisition. (p. 53)

2. Communication: Language is a conduit for communication and for learning which can be described as learning to use language and using language to learn. Communication in this sense goes beyond the grammar system, but at the same time does not reject the essential role of grammar and lexis in language learning. [...] It is perhaps useful here to differentiate between language learning (often with an emphasis on grammatical progression) and language using (with an emphasis on the communication and learning demands of the moment). (p. 54)

3. Cognition: For CLIL to be effective, it must challenge learners to create new knowledge and develop new skills through reflection and engagement in higher-order as well as lower-order thinking. CLIL is not about the transfer of knowledge from an expert to a novice. CLIL is about allowing individuals to construct their own understandings and be challenged. (p. 54)

4. Culture: Culture is a thread which weaves its way throughout any topic or theme. [...] For our pluricultural and plurilingual world to be celebrated and its potential realized, this demands tolerance and understanding. Studying through a different language is fundamental to fostering international understanding. It could be argued that in the CLIL classroom the use of appropriate authentic materials and intercultural curricular

linking can contribute to a deeper understanding of differences and similarities between cultures, which in turn impacts discovering "self". (pp. 54-55).

Therefore, CLIL can be defined as an integrated approach that takes into account all four of the building blocks described, which, however, should not be considered as separate and isolated aspects, but as elements with a symbiotic relationship. Consequently, this approach seeks that children learn new contexts through L2 (not in L2) and that students build their own knowledge. Furthermore, to maintain long-term knowledge, it is essential to test new knowledge and apply it in a meaningful context. From a linguistic point of view, in CLIL, the language is used as a tool of communication and learning; in fact, the main goal is using language to learn. In addition, a better linguistic competence is also sought, since by learning the non-linguistic content through a foreign language, students are offered greater exposure to L2 and, therefore, more opportunities to listen to it, use it and acquire it. However, it is essential always to link Content and Communication with Cognition; in fact, this approach seeks to encourage the pupil's cognitive engagement by developing high thinking skills (according to Bloom's Taxonomy) and problem-solving skills. Finally, throughout the entire learning process, the teacher must always try to foment the latest C: Culture. CLIL seeks to foment intercultural education and to promote values and attitudes of tolerance and respect.

As we can see, Communication acquires a double function. Indeed the communication in this approach goes beyond the grammatical system and the form, and, through L2, pupils learn new content and integrate it with the cognitive and cultural aspects. To do this, students need appropriate language skills and knowledge. To better analyze the linguistic needs, Coyle et al. created a representation called "Triptych of languages" (Figure 3). The triptych provides the means to analyze linguistic needs in CLIL contexts. The three related perspectives are: the language for learning, the language of learning, and the language through learning.
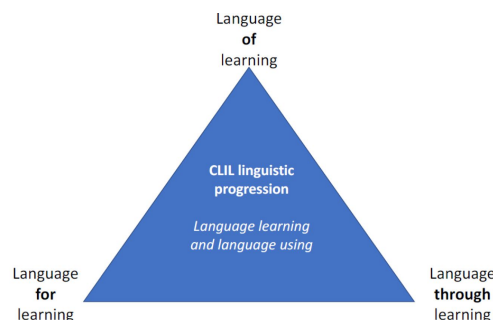

Figure 3: The Language Triptych (Coyle, et alii, 2010, p. 36)

Coyle et al. (2010), describe the three form of language as follows:

1. Language for Learning focuses on the kind of language needed to operate in a foreign language environment. In CLIL settings the learners will need to be supported in developing skills such as those required for pair work, cooperative group work, asking questions, debating, chatting, enquiring, thinking, etc. Developing a repertoire of speech acts that relate to the content, such as describing, evaluating, and drawing conclusions is essential for tasks to be carried out effectively. (p. 37)

2. Language of Learning is an analysis of the language needed for learners to access basic concepts and skills relating to the subject theme or topic. For the language teacher, this means shifting linguistic progression from a dependency on grammatical levels of difficulty towards functional and notional levels of difficulty demanded by the content. (p. 37)

3. Language through Learning is based on the principle that effective learning cannot take place without the active involvement of language and thinking. When learners are encouraged to articulate their understanding, then a deeper level of learning takes place. The CLIL classroom demands a level of talk, interaction, and dialogic activity which is different from that of the traditional language or content classroom. (p. 37)

Thanks to all these characteristics, CLIL really improves the learning process. Indeed, according to the European Union (2014), CLIL increases significantly language competences and content learning. Moreover, it gives the students many benefits, such as cognitional development, multilingual interests and attitudes, motivation and confidence, and intercultural awareness and understanding and intercultural communication skills.

Taking into account and integrating all these elements in a classroom can be hard; indeed, a successful CLIL practice is likely to require teachers to engage in alternative ways of planning for effective learning, and it can be challenging. Therefore in order to encourage an appropriate and adequate integration of the four building blocks and to help educators throughout the session planning process, Coyle et al. (2010) propose a Tool Kit. The latter offers essential principles to guide teachers in transforming the theory into practice, and it involves six steps for creating a custom CLIL plan.

- First stage: A shared vision of CLIL
The first stage requires the collaboration of all the school staff involved interested in CLIL (language teachers, subjects teachers, program managers, etc.) The goal is to share ideas on the topic, organize the implementation of CLIL in the school environment, and establish global goals. However, goals are never static but can change as needed. During this step, techniques such as brainstorming or discussion can be used. During this process, the collaboration between a language teacher and a subject teacher is especially important.

- Second stage: Analyzing and personalizing the CLIL context

During this step, it is essential to reflect and analyze the context in which CLIL will be applied to conduct effective and personalized planning. Several variables must be considered, including the country's educational policies, the type, and structure of the school center, available resources, etc.

- Third stage: Planning a unit

The planning of a CLIL sequence includes and takes into account the four components of the 4 Cs Framework previously presented and explained. As we already know, the CLIL teacher must integrate all the elements of the Framework, and each of the four components of the 4 Cs model cannot be analyzed individually, they must be worked on in an integrated way. In order to efficiently integrate all the building blocks of the CLIL approach, Coyle, Hood, and Marsh recommend the use of visual schemes. In Figure 5, we can give an example of a mind map that we can use for planning our teaching unit or sessions.
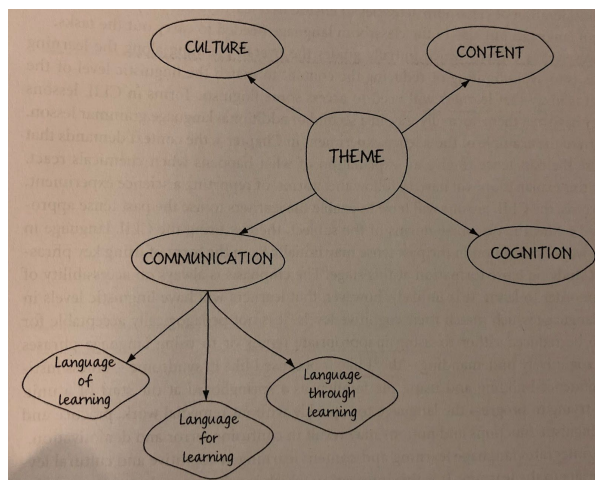
Figure 4: Mind map template (Coyle, et alii, 2010, p. 56)

- Fourth stage: Preparing the unit

The preparation of an educational unit or session with CLIL requires the creation and selection of materials and activities, taking into account all the elements analyzed. Therefore, in phase 4, the mind map is transformed into content, resources, tasks, exercises, and activities. Coyle, Hood, and Marsh also recommend the use of questions, because they consider it one of the most important resources in order to activate High-order thinking, integrate Cognition with Communication, and link Content.

- Fifth stage: Monitoring and evaluating CLIL in action

In this step, we first apply CLIL in a real context and then monitor and evaluate the implementation of it. We will not assess the students and their learning but rather if the approach is applied correctly, if the expected objectives are being achieved and if the proposed activities are accessible to the students. In fact, the latter aspect is one of the most important elements of CLIL planning. The sessions and tasks must be designed following a progression of the difficulty at a cognitive and linguistic level. In Figure 5, we can see a model proposed by Cummins in 1984, which shows a path of increasing difficulty.
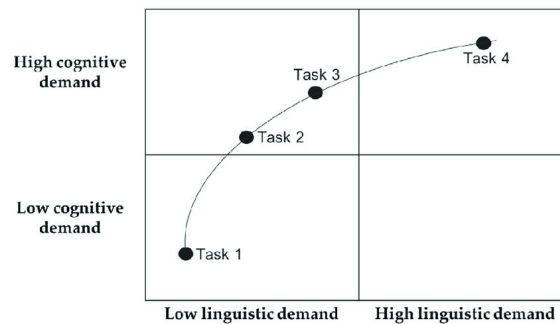
Figure 5: Auditing tasks using the CLIL matrix (adapted from Cummins in 1984)

It is, therefore, necessary to start from task 1 until gradually reaching task 4, which is the most complex one. In the beginning, we try to increase students' confidence, and we propose family activities or tasks based on already acquired knowledge. Later, the cognitive question gradually increases, and subsequently, also the linguistic level.

- Sixth stage: Towards inquiry-based professional learning communities

In this last step, the school context is required to meet in professional learning communities where all teachers are willing to learn and, at the same time, to teach to the rest of their colleagues. Besides, Coyle et al. (2010) propose the use of the LOCIT (Lesson Observation and Critical Incident Technique) approach. This collaborative technique encourages reflection on teaching practice intending to improve the quality of education. During the process, a video of a CLIL activity is recorded, and the professional learning community comments it, and they look for the strengths and weaknesses. Sometimes, in addition to the teachers' impressions, we can also ask for the student's opinions.

5. The Spanish framework

5.1 Bilingualism in Spain

In Spain, for most of the 20th century, foreign language learning at the non-university level was restricted to the Baccalaureate students, and pupils began learning foreign languages at around twelve years old. This was mainly due to the fact that for the entire duration of the government of Francisco Franco (1939-1975), there was a tendency to oppress any other language different from Castilian and to translate any foreign word.

However, with the end of Francoism, the process of globalization, and the entry of Spain into the European Union, new training needs emerged and the country introduced innovative projects and strengthened language teaching in its schools. Indeed, nowadays, the Spanish reality is really different, bilingual education is an increasingly frequent phenomenon, and in most of the Spanish's educational centers, the study of L2 is compulsory already from the age of six.

Until the 70s of the last century, the most studied L2 was French, however, currently, in the Iberian peninsula, according to Eurostat (2019), in 2017, the most studied language is English and almost 100% of Spanish students study it. In addition to English, Spanish schools also teach French, German, Italian, and Portuguese, but with much lower percentages (Appendix 1).

It is also important to report that according to the latest Eurobarometer 386 investigation, 46% of respondents in Spain state they can speak at least one foreign language well enough in order to be able to have a fluent conversation. Furthermore, 18% affirm they can speak at least two languages and 5% at least three (European Commission, 2012). This means that nowadays, almost half of the Spanish population knows at least one L2.

In response to this new educational demand, lately, the number of centers with bilingual education increases every year. In Spain, there are different types of bilingual schools; we shall now present their main features.

- Non-bilingual schools: These schools are regulated by the Spanish core curriculum, and all the subjects are learned and taught in Spanish. In the students' timetable, there are some hours dedicated to L2 acquisition.

- International schools: This kind of educational structure promotes international education. They do not adopt the national curriculum from that of the school's country of residence; indeed,

these schools usually follow an international curriculum (such as that of the International Primary Curriculum or the International Baccalaureate), or a curriculum of another country.

- Bilingual schools:

● Bilingual Programs or British programs: These schools are ruled by an agreement called "the MEC-British Council Agreement" between MECD & British Council. The accord between institutions was developed in 1996, and it was updated in 2013. By means of this treaty, a new bilingual program was activated and affected students from pre-primary education to 4th year of ESO. Furthermore, an Integrated Curriculum (contents of both the Spanish and the British Education system) was established, and the pupils' timetable includes apart from English, at least 40% of the content is taught in English. This kind of program works only in Spanish public schools and the school teachers are usually native speakers or people with an English proficiency level.

● Bilingual Sections: On the other hand, schools with bilingual sections are not ruled by any agreement, and they only need to apply for it by submitting an application form to the Ministry/Local governments and present an innovative bilingual project. All kinds of schools (private, half private, or public school) can apply and require to become an educational center with bilingual sections. These programs are developed from the 1st year of Primary education to 4th year of ESO. The aim of it is to teach the contents of several subjects through a foreign language. L2 can be used in two areas of the non-linguistic curriculum, with the possibility of expanding the number to a total of three. Contents can be taught in English, French, German, Italian, or Portuguese. The curriculum is the Spanish core curriculum, and student assessment is carried out following the provisions of the Spanish curriculum. Assessment documents will also certify that the students have been involved in a bilingual section. The school teachers are asked to have at least a B2 level of language command.

In Spain, the most implemented methodology approach for bilingual language teaching is CLIL (Content Language Integrated Learning). The latter was introduced in Spain in 1996 initially only in schools with a British program through the implementation of the integrated curriculum. However, now it is also used in the bilingual sections.

CLIL teachers are required to have a very high language level. Therefore, according to the European Commission, CLIL teachers must be professionals who are characterized by at least a B2 level according to the Common European Framework of Reference for Languages of the

foreign language. Furthermore, they must demonstrate their knowledge on the content of non-linguistic subjects and that they are familiar with the CLIL methodology. In addition, they must have a wide domain concerning the possession of knowledge in several of the elements that influence the acquisition of any language (cognitive, sociocultural, etc.)

As we have seen in section 4.3, cooperation and coordination between generalist and specialist teachers (foreign language teachers) can be very beneficial in carrying out the CLIL teaching method; however, collaboration is not always enough. Consequently, in response to these new needs and situations, it was necessary to create the figure of the Specialized Foreign Language General Basic Education Teacher. For all these reasons, the Spanish institutions and the different provincial directorates of education of the country's autonomous communities, have started to invest in teacher training. Above all, there have been changes at the university level, and significant efforts are being made to try to obtain more and more prepared educators in the field of new teaching methodologies, foreign language learning, and intercultural education. In addition, teachers can also take advantage of ongoing training courses for their linguistic and/or methodological improvement.

Furthermore, starting from the academic year 1997/1998, there is also the "*Aulas Europeas*" program. This project is for all those educators who want to improve their language skills, make a cultural exchange, and get to know more about bilingual education (Gómez Parra & Johnstone, 2017).

5.2 Official regulation

Since Spain began to form part of the European Union, there have been several educational reforms and efforts have been made in order to implement the EU directives on plurilingual education. In this section of this thesis work, we will describe some of the most important bilingual projects and the last educational laws of the Spanish Ministry of Education.

The Ley Orgánica 1/1990 de Ordenación General del Sistema Educativo de 3 de Octubre (LOGSE), pursued improvement in teaching and learning L2 and encouraged the study of English as a preferred foreign language.

Since the LOGSE educational law, various educational reforms and bilingual programs have been implemented in Spain and in all its autonomous communities. One of the first bilingual projects implemented on the Iberian Peninsula was the Linguapax Project. This project has been internationally developed by UNESCO and its main goal was to promote peace and cooperation between people through language acquisition and intercultural education. In Spain, the project

was programmed between 1991-1992 by Professor Miguel Siguán, of the University of Barcelona. It lasted 8 years and included 42 public and concerted schools.

Furthermore, as we have already seen in section 5.1, in 1996, another important bilingual project started. Indeed, in that year, the first collaboration agreement was signed between the Ministry of Education and Science and the British Council, in order to carry out a bilingual project and a Spanish-British integrated curriculum. This curriculum was initially implemented in 42 public elementary schools with the collaboration of 44 British teachers. This was the first large-scale bilingual projects proposed in the country, and since then, many Spanish educational centers have subscribed to the MEC-British Council Program. Moreover, in 1997 a mixed Spanish-British commission was created to oversee the project, and they decided to launch it also in secondary general education.

Subsequently, the Ley Orgánica 10/2002, de 23 de Diciembre, de Calidad de la Educación (LOCE) was promulgated and established that learning English is an instrument that provides students with the linguistic and socio-cultural aspects necessary as a citizen member of the new modern society.

Furthermore, the Ley Orgánica de Educación (LOE) was promulgated by the government in charge in 2006, and among its main principles was the commitment to the educational objectives established by the EU at the beginning of the 21st century. As we already know from section 4.1, one of the main goals of the linguistic policy of the European Union is that each of its citizens should master at least one foreign language. Thus, this need also turns into one of the main objectives of the Spanish educational policy.

Finally, the current educational law, Ley Orgánica 8/2013, de 9 de Diciembre, para la Mejora de la Calidad Educativa (LOMCE), manifests the importance of acquiring the knowledge of more than one foreign language, in order to be able to function effectively in the globalized world.

III. Methodological Framework

In this second part of the thesis, we propose a bilingual didactic proposal for Spanish school with bilingual sections and ruled by the Spanish core curriculum and more concretely, for two sixth-grade primary education classes. We will try to put into practice all we have been analyzing and studying until especially using the CLIL methodology in order to carry out a successful bilingual teaching unit planning. The main purpose of this teaching unit is to show how we can apply and adapt the theories to a specific and concrete context, consequently this proposal is only an example and represents one of the possibilities.

6. A bilingual didactic proposal

6.1 Presentation and justification of the teaching unit

The Teaching unit is designed for sixth-grade students in Primary Education (children 11-12 years old), in order to teach them Natural Sciences through the target language: English. During this Teaching unit, we study the contents of block two of the Castile and Leon curriculum (Decreto 26/2016): Nutrition and healthy life. Unfortunately, due to the state of alarm by COVID-19 and to the health situation, our project has not been implemented.

In this teaching unit, pupils learn about the digestive and the respiratory systems and how to look after their bodies avoiding illnesses since they should also know how to avoid some prejudicial facts for their health (such as smoking, junk food, sedentarism, etc.). Moreover, they learn about the necessity of doing physical exercise frequently, the nutritional pyramid, and about hygiene and healthy habits.

The main purpose of this Teaching Unit and this project is to make students aware of the importance of acquiring healthy habits and including them in their daily routine. Sixth-graders are in a critical period of their lives because they move from childhood to adolescence and puberty. Young boys and girls, during puberty, develop their cognition and gradually discover that their bodies change and transform themselves. This may be a difficult transition, and during this delicate moment, some wrong choices could affect their health. For all these reasons, pre-adolescent students need to get better to know their bodies, to learn how to prevent illnesses and to understand which are the healthiest choices. Consequently, all these contents are really important for our pupils because when kids are healthily, emotionally, and physically fit, they

are better able to face life's challenges, make good choices, develop positive self-esteem, and build strong relationships.

6.2 Context

As we saw in section 4.3, it is essential to examine the context in which CLIL will be applied and analyze the resources we have before planning. Therefore to a continuation, in order to better understand the teaching-learning processes and the didactic proposal, it is important to first get to know and to understand the socio-cultural context of the school's neighborhood and the reality of the learning center. We start presenting the school (the Cristo Rey school in Valladolid, Spain), its environment, and its structure. We also make a physical and functional description of the sixth-grade classrooms, and we highlight all the elements and resources that are present in the class. Finally, we present the students.

- **School's characteristics:**

The Cristo Rey school in Valladolid is a half private school whose ownership belongs to the Society of Jesus and was founded by Padre Cid SJ in 1938. The Center is located in the western area of the city of Valladolid (in the Girón neighborhood), specifically in the Avenida de Gijón, 13, 47009 (Appendix 5). This neighborhood was, in the past, one of the first neighborhoods of Valladolid and was designed by the Spanish National Housing Institute during the postwar period between 1950-1951. It is located next to the Pisuerga river and its first inhabitants had to face many problems such as marginalization, bad coexistence, and lack of electricity, drinking water, and transport. The geographical and social context had a great influence on the history of the school. Initially, in fact, it emerged as a boarding school and a professional training center especially for children and adolescents with family and social problems. Later it was reoriented towards students mainly from rural areas destined to be qualified labor.

Instead, today, the Girón neighborhood is currently a fairly quiet residential neighborhood that is relatively close to the historic center of the city and is very well connected by bus with the other neighborhoods. Furthermore, it is an integrated teaching school that has the following stages: Preschool and kindergarten, primary education, middle school, high school, and vocational education. Most of the students from the school come from the neighborhoods of "La Victoria" and "Huerta del Rey". The socioeconomic situation of the students is medium-low.

The school complex is very large (80,000 m2) and antique and is made up of several buildings: one for the kindergarten and primary classrooms, another for the middle school and high school

classrooms, a school canteen, and the Assembly Hall. It also consists of different workshops and vocational education classes, a gym, athletics tracks, and a chapel.

The primary education's building has an office for teachers and for level and inter-level coordinators, a classroom for the special education needs, a warehouse, bathrooms for teachers and children, and some laboratories: music, computer, and a science laboratory in which we carry out some of our activities of this didactic unit (Appendix 6). The building also has an outdoor patio, a large playground, and sports areas (soccer, basketball, volleyball, fronton, etc.); in an annexed area there also is a psychomotricity room.

The school has two groups of students per year (A) and (B). There are 23 primary education teachers, among them level and inter-level coordinators, in charge of coordinating the teaching practices between the levels and of reinforcing the educational process of the students, an academic counselor, and two native teachers. The center also has specialist teachers for the areas of Music, Catholic Religion, Physical Education, Special Education, Hearing and Language, English, and French.

The Cristo Rey School tries to provide all its students with the best comprehensive education. Like all the schools of the Society of Jesus, it bases its life and educational action on the vision of Ignacio de Loyola and educates from faith in God. The Cristo Rey school, in addition to focusing on the teaching of Saint Ignatius, also seeks to renew itself and be in line with educational needs. To this end, it carries out the following projects (obtained from the school website):

- Starting in the 2008-2009 academic year, it offers its students an excellent bilingual section project from kindergarten to secondary general education (ESO, started having the bilingual classes since 2014-2015), which gives the school and its students a competitive advantage. During the 2008-2009 academic year, the planned non-linguistic disciplines were: Physical Education and Arts and Crafts (Plastic), while from the 2015-16 academic year the Primary Education stage includes the non-linguistic subjects of Natural Sciences, Social Sciences, and Physical Education (Appendix 7). The type of methodology used for non-linguistic subjects in English is the most widely used at the European level: CLIL (Content and Language Integrated Learning).

- In addition, from the academic year 2013-2014, an educational innovation project has been promoted with the objective of improving and developing it every day more.

  A. Implement cooperative work: The Cristo Rey School uses a methodology based on collaborative learning, which seeks to develop the faculties and capacities of people

through working among equals. Furthermore, this kind of teaching methodology improves motivation and also appears to improve school results.

B. Project-based learning (PBL): The school proposes to its students 6 projects a year: usually three in Spanish and three in English. The projects last two or three weeks and work in an interdisciplinary way.

C. They introduced: the Science-Pro innovation project.

D. Finally, it is assessed by competencies and at the end of each trimester, there is an entire week of competency tests (one exam for each subject).

● **Classroom's characteristics:**

All the classrooms of the Cristo Rey school (Appendix 8 and 9) are similar and quite spacious, they have three large windows that provide light and allow you to take advantage of the natural light from the outside. The sixth-grade classrooms are on the second floor of the primary education building and they are provided one desk per student, a large table for the teacher, and a coat rack at the bottom of the classroom. In addition, there is furniture for the students' material (notebooks, colors, pencils, papers, cardboard, etc.), a small library with children's books, and the Bible. Along with a traditional whiteboard, the classroom has a smart-board, equipped with a wide range of functions that facilitate the search for information and interaction with students. Additionally, ICT (Information and Communication Technologies) are used constantly and for this reason, all classes have many interactive resources: a projector, a whiteboard, speakers, a computer, internet access, as each student has a tablet to connect to the virtual classroom and Google Classroom. Finally, each student also has a Natural science book in English[3] that can guide and help the students through the learning process of this teaching unit.

● **Students' characteristics:**

The two sixth graders (6th A and 6th B) are made up of 28 students between 11-12 years old. The students are never sitting alone, but in a group of four or five students and help each other. In fact, one of the methodological principles of the school is based on cooperative learning. Each child has their own seat, according to a provision decided by the teacher at the beginning of the year, although small changes are made from time to time. Among the two groups there are students with special educational needs:

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[3] Quinn, R. Quincy, C. Roana, J. (2019), *Natural Science. Learn Together* (6º de Primaria), Zaragoza, Ediciones Bilinges S.L. (Macmillan y Edelvives).

-   In 6th B, children D., H., and N. need more attention because they have behavioral and, in addition, D. and N. have had to repeat one of the previous courses. Instead, student M. needs an adapted exam (the teacher usually gives him an exam with slightly simpler exercises).

-   In 6th A, student J. is a child at risk of social exclusion, he also has a lack of attention and needs adaptation when taking the exam (the teacher usually gives him a slightly easier exam).   The pupil D., needs the support of a PT for the subjects of Language and Mathematics and had to repeat one of the previous courses. The child Da. is a highly gifted child in Mathematics.

6.3 Methodology:

The principal methodology that we use in order to carry out this teaching unit is the **Content and Language Integrated Learning** (onwards CLIL) theoretically addressed in section 4.3. In order to activate this method adequately, we try to develop the four communication skills according to the European Framework of Languages: listening, speaking, writing, and reading, using non-linguistic contents, more specifically, Natural Science. Furthermore, the teacher prepares a planning mind-map and develops the 4Cs of the CLIL framework. Now we shall describe how we planned the teaching unit using CLIL:

-   Content: Through the use of English the students are going to learn non-linguistic contents which are:
    -   The human digestive system, its organs, and its role
    -   Types of healthy and unhealthy food
    -   The organs of our respiratory system and how it healthy
    -   Types of illness and prevention of harmful habits

In order to teach this topic, the teacher tries not to provide the pupils with definitions and structured information because the new content should not be learned by heart. In fact, students must construct their knowledge through investigation and deductions, through the realization of meaningful and contextualized tasks, and using and analyzing authentic materials. Consequently, children should learn the contents through activities that allow them to work as a team and to acquire through the famous Learning by doing. This last idea is a concept of cognitive psychology developed by the psychologist and pedagogue J. Bruner. He believes that students should learn through a scaffolding learning that takes place during a guided discovery motivated by curiosity (Cameron, L. 2001). Therefore, the teacher, instead of explaining the

problem and giving the fixed content, should provide the appropriate material and stimulate the children to discover how something works actively. The teacher, during scientific experiments and tasks, guides the students towards the correct answer and the new knowledge.

Moreover, CLIL methodology suggests that the level of content language and cognition has to increase gradually and should always be a little bit higher than the pupils' knowledge level. For this reason, we will carry out an initial brainstorming activity in which the previous knowledge of the students is going to be analyzed. Based on the data selected through this first analysis, the educator planes different activities according to their level and adjusts the exercises and the level of the teaching unit according to the pupil's needs. This kind of level test is decisive for understanding what kind of knowledge our students have and for the subjects to be able to operate in their zone of proximal development.

- Communication:

In the CLIL class, the target language becomes the method of transmission of new knowledge. That is why in our teaching unit, we decided to teach Natural Science to native Spanish pupils through English.

According to the CLIL methodology communication in the class should always be in the target language, and the learners should be receptive and should not be scared to try to use L2. Furthermore, we focus more on fluency and lexis than on grammar; this helps pupils to acquire more confidence not only in the grammar but especially on the speaking competence. For better communication, the educator will be really visual and will talk using gestures. He/she also tries to promote and improve language learning through motivation and using the target language in a real and meaningful context and using authentic material because, if learners are interested in a topic, they are motivated to acquire language to communicate.

In the 4Cs CLIL framework, as we already know, the part of the communication invites teachers and students to concentrate and develop three kinds of language: the language of learning, language for learning, and language through learning. During this teaching unit, the educator tries to develop all of them, and they are going to do so in a structured and organized way, planning all the communicative learning processes.

- Language of learning. The pupils will learn:
  - ➢ Key vocabulary and phrases
  - ➢ Modal verbs
  - ➢ Conditional tenses
  - ➢ Language of explaining, defining, hypothesizing, and describing

➢ How to agree and disagree

The language of learning is based on an analysis of the language and the grammar needed for pupils to access concepts relating to the subject topic. Nevertheless, we always need to keep in mind that CLIL is not an English lesson and language is not the first goal; in fact, in this kind of methodology, we have to create a balance between the linguistic abilities and the new knowledge that the students need to acquire.

First of all, pupils need to learn the key vocabulary, and the teacher should guide the learners in the concept-building in the target language, and this at the beginning can take a long time. The students have to grasp the relationship between the linguistic sign and the cognitive concept. That is why we teach them a song with much essential vocabulary, we go through all the different words in the target language and propose a vocabulary game and a "Who am I?" game that allows us to review vocabulary.

In order to develop the theme of the teaching unit, we decided to concentrate on the conditional tenses. The main structure that they need to use is going to be: "if you don't eat vegetables, you will not acquire the correct amount of vitamins" in order to express all the new contents and to analyze the causes and effects of everything.

The use of the modal verbs is also important; for example, during the teaching unit, pupils should do a jigsaw and a flipped class methodology activity, and the learners must be able to talk about illnesses and say which are the healthy and unhealthy habits. Consequently, during several tasks, pupils should use this kind of structure: *"if you don't want to have health problems you should, you need or must…"*

Finally, in order to learn and practice how to agree and disagree and exchange opinions, we decided to use a brainstorming activity, to work in cooperative group work, to use a jigsaw activity, and to create several discussions and debates.

- Language for learning. Children are going to get in contact with:
  ➢ Formal and informal language registers
  ➢ Language to build arguments and disagreements
  ➢ Writing a simple report rules
  ➢ Language for the oral presentations and the final project

We also try to link culture and language using many different registers and vocabulary in the target language. Every language, according to the culture, has got different rules and social registers/strategies depending on the contexts. And the teacher should help the students to go through all these registers. In order to do this, we decide to use authentic material such as videos

and documents in the target language and, moreover, the teacher uses an adequate and specific language according to the educational situation, to the context, and to the studied topic. Moreover, some of the videos also present part of the American society culture and habits, especially regarding nutrition and food disorders.

- Language through learning. The children need to:
  - ➢ Use feedback
  - ➢ Extend presentation skills
  - ➢ Recycle discussion skills at a higher level

The language through learning is about building in students' metacognitive skills through the analysis of a language as a system. According to Coyle et. al. (2010) "the challenge for teachers is how to capitalize, recycle and extend the new language so that it is incorporated into the student repertoire" (p.63) and this is what we try to offer to our pupils with our activities. The teacher should research which is the best way to develop high order thinking skills because only with this kind of work we will create in the students a reflection on languages. In other to do so, the educator must include in his annual planning activities, which can help to promote cognition.

- Cognition: the students should be able to:

  - Connect knowledge
  - Make hypotheses
  - Understand the cause and effect
  - Analyze and understand information and results
  - Apply the learned contents
  - Use assessing skills

This teaching unit aims to bring kids to achieve high thinking skills, that according to Bloom's taxonomy, are the most difficult to achieve and even the most necessary and useful for kids. Kids are wanted to be "cognitively engaged," which means that they have to think, and in order to think, they must be active. For this reason, we want to make them think of solving the next problems: "What does being healthy mean? Are you healthy? How can we be healthier?". Consequently, learners have to avoid memorization and do not need to have a brain full of definitions, but they must arrive at metacognitive knowledge.

The teacher should try to promote meaningful learning (according to Ausubel theories) connecting old and new content. In order to do so, we will use different strategies and activities

that can better guide and help our pupils: We will start our teaching unit with the first brainstorming activity in which pupils need to explain their initial ideas. In this way, we see their previous level, and we try to link it with the new knowledge. We will also provide a warming-up activity that reviews the studied topics, and introduces the next one.

Furthermore, it is important to underline that the new contents, in this teaching unit, will not be proportioned directly by the educator or by the book. However, the students will have to get there through a scaffolding learning process. The child will start from the knowledge already possessed and from his hypotheses, and finally, little by little will verify the truthfulness of his ideas and will arrive at the new knowledge through guided learning. Therefore the teacher is no longer the one who proportionates concepts and definitions but, he/she is the one who accompanies the child towards discovery, who plans targeted and suitable activities, who helps to relate all the concepts learned and who, if necessary, corrects and solves doubts. Some good examples of this kind of activity are the brainstorming activity of session 1, the egg experiment activity of session 5, and then climbing the food nutritional pyramid activity.

We also want students to understand what they are learning; consequently, they should analyze the situations and understand the cause and effect relation between our actions. That is why we will study not only our human body functions and structures but also the good and bad habits and how we can prevent illnesses and keep our body healthy and strong. For instance, if a woman is running, they will understand that as a consequence, she will have a healthy life. So they associate the idea of practicing sports with a healthy habit.

Moreover, pupils should also be able to analyze and understand the authentic resources, the information, and the results of the experiments. That is why we will propose a lot of different activities that help children develop these cognitive skills: The flipped class activity, the Jigsaw, the videos on content learning, the journalist mini-project, and the three experiments.

We also want our students not only to understand the contents, but they should transform the theory into action: that is why we will try to put into practice a lot of the knowledge through experiments and tasks. Consequently, pupils need to use all the knowledge learned, searched, and analyzed in order to create something new and to apply it in a real situation, for this purpose we ask them to create their health lifestyle schedule on session 8.

The educator also asks the pupils to evaluate, and they should assess them-self, the teaching unit, and the teachers' work during sessions 8 and 9. These exercises help the young learners to feel responsible for their learning outcomes, make them reflect, and allow the improvement of the teaching process; in fact, the teacher, through the advice of his pupils, can better understand what to change, promote, and correct.

Finally, the educator should also teach the students to acquire learning strategies in order to let them work autonomous or with others successfully. Students need to learn and develop these kinds of strategies to make learning easier, faster, more enjoyable, more productive, and more transferable to new situations. To this end, the educator gives the students a lot of freedom and proposes self-directed tasks. He/she also tries to guide their learning processes towards more effective results and the acquisition of learning strategies.

- Culture: Through different activities, gets in contact with other perspectives and cultures. In this teaching unit, pupils will need to:
  - Debate and share their ideas on the topic with their classmates
  - Carry out the journalist mini-project, get to interview people, and get in contact with different perspectives
  - Listen and analyze authentic material in the target language
  - Acquire a critical perspective on healthy habits

Students must discover deeply how they can foster their health following up the proper wellness habits (balanced nutrition, daily physical exercise, hygienic costumes, resting times, etc.). Nevertheless, we do not want them only to focus on their own understanding and conception; we want to promote their curiosity about the existence of other opinions and cultures (coming from their peers, teachers, parents, neighbors, etc.). For this reason, we have designed activities that promote this goal, such as giving them different points of view, using a brainstorming activity, proposing a Jigsaw dynamic, using authentic material and videos, and primarily through the journalist mini-project. The purpose is to develop in students a critical perspective about the topic through the adoption of other different realities and perspectives creating a holistic conception of health. In addition, students will create their personal opinion about health, they will also develop a sense of acceptance and respect towards different views.

The second principal methodology that we will use in order to carry out this teaching unit is **Project-Based Learning** (onwards PBL), and that means that the design of the sessions is oriented as a project. The PBL is an educational approach that puts more emphasis on learning from complex experiences, oriented towards the achievement of a specific goal. This kind of methodology, as opposed to the traditional academic approach promoting the mechanical memorization of many notions alienated from their concrete, used in the real world.

Our Natural Science teaching unit will form part of a bigger project that will last about three weeks and will deal with the topic of nutrition and health, and the healthy project motto will be

"Let us grow-up healthy and strong!". The topic will be treated from different points of view and multiple subjects:

- *Two non-linguistic subjects taught in English: Natural Science and Physical Education.*

During the Natural Science classes, the students will learn the contents of block 2 of the Bocyl (Decreto 26/2016): Nutrition and healthy life. Pupils will get to know more about the digestive system, the respiratory system, healthy habits, and the prevention of illnesses through the target language. Moreover, at the end of the teaching unit, they will need to carry out two final tasks: a healthy lifestyle schedule and a journalist mini-project.

Instead, the Physical Education teacher is going to teach all the knowledge related to block 6 of Bocyl (Decreto 26/2016): Physical education and health. He/she explains how daily exercise is essential, how to take care of our bodies, and how to avoid sedentarism. Furthermore, students not only learn theoretical knowledge, but they also learn relaxation routines and how to warm-up. Finally, the educator can even teach a lot of fun exercises and games that the children can perform in their daily lives.

- *A linguistic subject taught in the target language: English.*

During the English lessons, the educator focuses on all the four learning skills: reading, listening, speaking, and writing. First of all, the children are going to review the already known knowledge linked with the new topic studied. Moreover, the pupils are going to reinforce the language of learning needed in the teaching unit: the vocabulary, the modals verbs, how to ask questions, the conditional tents, how to compare things, and the new phrasal verbs (take in, combine with, etc.). Furthermore, the students will practice how to write a final report.

- *A non-linguistic subject taught in Spanish: Arts and Crafts.*

During the Arts and crafts laboratories, the students are going to work on block 1 of the Bocyl (Decreto 26/2016): Audio-visual education. In order to do so, the sixth-grader students are going to produce audio-visual material that can help them explain to first-graders the importance of having a healthy lifestyle. They have to do a sort of advertising campaign that urges other students to have the right hygiene and habits. Students should realize a video, a billboard, and flyers. Finally, they are going to produce fake money needed for the final activity of the project: the health day.

All the different teachers are going to work together and to collaborate for a common goal: get the students' to become healthier people!

Moreover, they will also need to organize the final activity of this project: The open-air health day. This activity will be carried out by all the teachers involved in the educational proposal and

the sixth-graders. During the healthy day activity, we will propose a healthy educational snack, a lot of games, exercises, and sport and finally the presentation of all the audio-visual material produced by the children during the art and crafts sections.

The Healthy day snack activity will be done in the school playground. The educators, with the help of the school, of the students and the parents, organize a healthy snack. The children help the teacher prepare a healthy snack, and as soon as everything is ready, the educational snack begins. Each child uses fake money made during the art classes. In order "to buy" the snack, the pupils will have to ask for food in English. This activity tries to simulate real-life so that children, as soon as they go abroad, know how to handle this type of colloquial dialogue. They also have to check if the educator gives them the correct change.

During the rest of the day, the pupils are going to perform a lot of fun games and sports. Through the audio-visual material produced by the students, the sixth-graders are going to explain and present to the first-grader classes their project and the importance of having a healthy lifestyle.

The last methodology that we will use in order to carry out this teaching unit is **Cooperative Learning.** This type of methodology is based on the theories of social constructivism and, in particular, also on the theories of Vygotsky (1978). The author does not consider learning as an individual activity but considers it possible only through the interaction and the comparison with others. Cooperative Learning is a learning modality that is based on the interaction within a group (big or small) of students in order to reach a common goal. Consequently, the teacher will continuously propose cooperative activities, it fosters interaction and works among equals, and the students are always going to seat in groups (Appendix 10).

The teacher assumes the role of facilitator and organizer of activities and groups in which the students work, favoring a positive relational climate. In order to do so, the educator, at the beginning of the scholastic year, decides the pupils' groups and always observes the students' needs and relations, and if needed, makes some adjustments. In general, the disposition of the students is not accidental; it must be evaluated and organized by the educator, who tries to mix the levels of his students to guarantee mutual help between the children and cooperation during the whole learning process.

We chose this type of methodology first, because it is the work methodology used by the educational center, and also because cooperative learning represents an innovative methodology that offers many advantages: increases emotional and cognitive participation improves relations between students and generally presents higher educational results.

6.4 Teaching unit: Nutrition and Healthy life

The teaching unit has nine sessions, a duration of three weeks, and it takes place during the two and a half hours per week of Natural Science according to the Cristo Rey pupils' timetable (Appendix 11). The description of the sessions, activities, and experiments is in appendix 12.

In the first seven sessions, there will be theory and practice activities; during session 8, the students will review what they have learned and will carry out a self-evaluation activity. Finally, during session 9, the evaluation of the children will be carried out and, during the last 10 minutes, the teacher even asks his/her students to evaluate the UD and the teacher's work anonymously.

Each section will have more than one activity, and all the sessions have more or less always the same structure:

- We organize the activities according to the attention curve of the students. According to the curve, students' performances are much better at the beginning of the lesson and weaker at the end of the class.
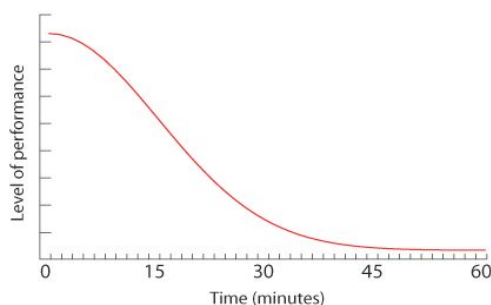
Consequently, we first try to carry out activities that require more considerable attention and concentration. In the end, we propose more dynamic and interactive activities. For this reason, during the last 5 minutes of class, when attention is low, the children are going to perform a TPR activity using the English song called "The Healthy Song".

- During the first 5/15 minutes, the children and the teacher review what they have already learned and introduced the new topic (the activity will be explained in more detail in the activities section). These first activities are introductory and routine tasks and serve to attract the pupils' attention, to install student confidence, to refresh the contents, to solve any possible doubts, and especially to connect the knowledge.

- In order to make learning significant, to transform theory into practice and motivate kids, the educator proposes three experiments (at least one for each content): *The tooth decay*

experiment (session 1, activity 2 and session 5, activity 3), *the lung capacity experiment* (session 6, activity 3) and *the cigarettes experiment* (session 7, activity 2). We also request the pupils to apply the new knowledge in order to produce their personal lifestyle Healthy lifestyle schedule (session 8, activity 1).

- We also consider it beneficial for their awareness to compare their habits with other people, which may help them to be critical and to choose the best lifestyle. For this reason, we propose to our students' tasks that let them always work in groups or pairs. Finally, during the journalist mini-project activity, we give them the opportunity to interview and interact with other people with different backgrounds.

Throughout this didactic proposal, we carry out 28 very different activities such as routine and review activities, introductory and relaxation activities, content-based learning tasks, and exercises for evaluation and self-evaluation. We also propose games, a TPR activity, scaffolding activities, and cooperative tasks. Moreover, three experiments will also be conducted. All the activities and tasks will be organized following de CLIL matrix proposed by Cummins in 1984 (see section 4.3), that is, following a progressive order of difficulty on a linguistic and cognitive level.

In order to carry out these activities, the teacher uses varied material, authentic, and appropriate to students' level documents. For example, we will use ICTs, stationery, audiovisual material (such as videos and presentations), online games, quizzes, flashcards, self-evaluation and evaluation material, etc. We will always try to also implement the use of the Natural Science textbook as support during the different activities so that the children do not stop having a reference resource at their disposal.

The main objective of the teaching unit is to bring students to understand what they are learning and to be able to apply the theoretical contents to a real context in search of meaningful and lasting learning, promoting cooperation among children.

Level:	Activities:	Objectives:	Timing:
Primary Education	The total number of activities: 28	In this unit, pupils will learn:	Nine sessions
The two classes of the sixth grade of Cristo Rey school	I will use different types of activities: - Routine activities - Introductory activities	-How the digestive system extracts nutrients and eliminates waste.	Two and a half hours per week.

6th A and 6th B	- Content focus activities - Reinforcement activities - Experiments - Assessment activities -Relaxation activities	- How the respiratory system exchanges gases -How to have a healthy lifestyle.	
Contents: - Nutrition - Respiration - Healthy Habits	**Evaluation criteria:** - Identify the organs and processes involved in nutrition. - Describe how the digestive system extracts nutrients from food. - Outline how the lungs exchange oxygen and carbon dioxide. - Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	**Learning standards:** - Differentiate key organs and their functions in nutrition. - Paraphrase the process of digestion and discuss its importance. - Describe the process of respiration and discuss lung's health. - List of habits maintaining health and preventing illness. - Outline how to look after the various organs in the body.	
Key competences:	The main Key Competencies are: - Competence in linguistic communication (LIN) - Competence in mathematics, science, and technology (MST) - Competence in the use of new technologies (DIG) - Competence in autonomous Learning and personal initiative (AUT) But we can also see some other Key Competencies, in fact, for example: - Competence in social awareness and citizenship (SOC) → List habits maintain health and prevent illness and outline how to look after the various organs in the body. - Competence in learning to learn → List habits maintain health and prevent illness and outline how to look after the various organs in the body.		
Transversal competences:	- Digital competence: It is one that involves the creative, critical, and safe use of information and communication technologies. This competence is worked on in many of the activities of this teaching unit, in fact, many times the use of tics is used to improve and help the learning process. - The competence to learn: It requires knowing and controlling the learning processes themselves to adjust them to the times and demands of the tasks and activities that lead to learning. The competence of learning to learn leads to increasingly effective and autonomous		

	learning. For this reason, in this teaching unit, the teacher is a guide and lets students build their learning.
	- Social and civic competences: Involves knowledge of social norms and skills to participate effectively in the professional world and in civic life. We work on this competition through working in a group or pairs and the journalist mini-project because through these activities and with cooperative learning, children will learn to listen and respect the opinions of their classmates and of people.
Kids with special educational needs:	- The teacher will try to pay more attention and give more help to those children with more learning difficulties and attention deficits (individualized education). - The teacher is going to create entertaining classes that can attract the attention of the students who present a lack of attention and interest. - The evaluation and the final exam will be adapted to the students' needs and levels and the pupils with special needs will have an adapted version of it.

6.5 Assessment

According to DECRETO 26/2016, of July 21, which establishes the curriculum and regulates the implementation, evaluation, and development of Primary Education in the Community of Castile and Leon in Spain, and according to the school evaluation methodology; the evaluation will be continuous, global and by competences. Learning standards will be introduced in each of the areas, and the grades will be decided by the teachers (the results will be expressed with numbers from 1 to 10).

The teaching process and evaluation are extremely intertwined, and there must be an absolute correlation between the two: our way of teaching must determine our way of evaluating because, inevitably, our way of evaluating the learning condition of our students. Moreover, we also value evaluation as an essential part of our teaching unit, and it is as fundamental as the learning process itself because it tells us if the learning outcomes have been achieved or not. Moreover, we recognize the assessment activity as a continuous and complex work, and the educator should try to make it as fair and equitable as possible and to understand the real progress and achievements of our students. That is why the teacher must always observe the pupils' activity and their entire learning process in order to better understand their needs and difficulties and even their improvements. Consequently, assessment should be formative and not summative.

The teacher is going to use different instruments in order to consider the real students' progress and if they achieved the required learning outcomes. The evaluation instruments of this teaching unit are:

- Evaluation of all the tasks, experiments, and activities by observation and with the help of a diary → 10%
- Evaluation of the pupils' behavior and attitude using a rating scale (Appendix 16) → 10%
- Evaluation of the journalist-investigation mini-project → 20%
- Evaluation of the Jigsaw, the flipped class, and the healthy lifestyle schedule activity by the oral presentation rubric (Appendix 15) → 30%
- Final evaluation using an exam. The teacher even prepares an adapted exam for those students with special needs (Appendix 13 and 14) → 30%

Furthermore, during session 8, the students are going to carry out the Quizlet activity and a self-evaluation (Appendix 17). These two activities can help the kids to review all the concepts learned and let them understand what they should study harder or review before the final exam of session 9. We will carry them out of them because we want students to become aware of and responsible for their learning process.

Since the students' perspective and opinion are one of the essential elements to take into account in the educational process and in CLIL evaluation, during the last session (session 9), the teacher also asks the students to evaluate the teaching unit and of the teacher's work (Appendix 18). This last assessment activity can be beneficial because the educator gets to know if his/her project has been efficacious, the pupil's opinions, impressions, and suggestions in order to get better.

The educator, after the pupils' evaluation, also carries out a self-evaluation in which he/she analyzes his educational practice, if the learning outcomes and general goals were achieved, and assess CLIL in action (Appendix 19). Moreover, the teacher will also use the LOCIT approach (see section 4.3) for a group evaluation with his/her colleagues.

Finally, according to Coyle and al. (2010), it is important to let the students know how we are going to assess them and what we are going to learn, this is the reason why during the second activity of lesson one, the teacher shares the objectives and the success criteria with the students and presents all the assessment instruments and criteria. Furthermore, during the first activity of each session, we will introduce the topic and present the learning outcomes.

Conclusion

The modern world is changing, and with it also the educational system innovates in order to meet the new learning objectives. Among the new priorities, there is bilingual education, which turns into one of the most important modern educational needs and challenges. Given this new reality, teachers, methodological approaches, and schools had to adapt and reinvent themselves to guarantee the best possible education and to respond to new objectives.

With this thesis work, we tried to answer the question: "what is bilingual education?" and we did it by analyzing the topic from a theoretical and practical point of view.

To better understand bilingual education and have a holistic understanding of the phenomenon it is essential, first of all, to understand the concept of bilingualism and the theories of language acquisition. The word bilingualism is considered an "umbrella term" because with it we refer to a wide range of uneven realities. Indeed, it includes a large number of people with different levels of language acquisition and with very varied characteristics. Because of these peculiarities, it is not always easy to define the term bilingualism; consequently, it is also challenging to define what bilingual education is.

Recent studies even showed that the acquisition process of L1 and L2 are closely related (especially if the person who comes into contact with L2 is particularly young); ergo, to better understand how to teach L2 in an educational context, it is also important to know children's and adults' stages of learning a language. There are several psycholinguistic theories (Behaviorism, Innatism, Constructivism) that can guide us towards the discovery of the L1 acquisition process and show us how we must take into account numerous aspects (linguistic, cognitive, social, and cultural) related to it.

According to Mwaniki, Arias, and Wiley (2003) bilingual education is "any attempt to strategically employ two languages in instruction for either the purpose of linguistic accommodation for students who do not speak the language of instruction or to promote the learning of more than one language to achieve individual, community-based, social, or political goals" (García, May & Hornberger, 2009, p. 25); and as we have already said, knowing at least one foreign language is a necessity today. The European Union has long recognized the need to promote the learning of foreign languages and with its educational policies aim towards multilingual and intercultural education. It even tries to promote early language learning because recent studies show that children have ease in acquiring one or more different languages before puberty.

By promoting bilingual education, the EU intends to provide students with a tool that they use to communicate with the largest number of people, move more easily between different countries, access study programs, and work activities. Furthermore, it also tries to stimulate cultural knowledge, tolerance, and peace. The EU, since 1995, through the "White Paper: Teaching and learning. Towards a learning society" document, began to promote the CLIL (Content and Language Integrated Learning) methodological approach. It is based on the integration between linguistic and non-linguistic content or proposes to study curricular subjects through L2. CLIL does not only focus on communication and content; in fact, it also helps develop the High thinking skills necessary to generate meaningful and profound learning. Moreover, it focuses on the cultural aspect and promotes intercultural education. This methodological approach, if well used, allows to improve the training process and offers numerous advantages. Despite all the above, we have to remember that using CLIL correctly can be challenging. In fact, a good CLIL teacher needs to have an excellent knowledge of the foreign language, the CLIL methodology, and also non-linguistic subjects. At the moment, despite the improvements and the initiatives undertaken, there are unfortunately few teachers sufficiently prepared in the three categories, and few are those who can promote their training.

Spain applied CLIL in its schools since 1996 and, currently, promotes bilingual education and invests in this sector and on the training of its teachers.

Subsequently, in this thesis work, we attempted to put the learned theories into practice. It is for this reason that we have presented a proposal for a didactic unit for a Spanish half private school with a bilingual Spanish-English section. The purpose of this teaching unit is to show how the theories of bilingual education can be applied in a real context. For the realization of this project, we mainly used the CLIL approach, and the non-linguistic subjects are perceived as vehicles that facilitate the acquisition of the English language in a more natural context.

Ultimately, we tried to propose an innovative and dynamic project that could motivate students and improve L2 learning, despite all the difficulties of the moment that prevented us from deepening further.

This work leaves several opportunities for investigation and research open, and we are aware that there are still many aspects that may be examined and that need to be solved.

Firstly, it would be undoubtedly interesting to deepen the study on the CLIL method and bilingual education. Furthermore, it might be interesting to put into practice the proposed educational project, subsequently to analyze the emerging data, and to share them with experienced teachers. Finally, it could even be useful to survey L2 teachers and get to know their opinion on bilingual education and CLIL.

Bibliography and Webography

Arabski J. & Wojtaszek A. (2009*). Neurolinguistic and Psycholinguistic Perspectives on SLA*. Salisbury: Multilingual Matters Ltd.

Bear, M. F., Connors, B. W. & Paradiso, M. A. (2003). *Neuroscienze: esplorando il cervello*. Milano: Masson.

Baker, C. (2001). *Foundations of Bilingual Education and Bilingualism* (3rd ed.). Clevedon: Multilingual Matters LTD.

Bathia, T. K. & Ritchie, W. C. (2004). *The Handbook of Bilingualism*. Oxford: Blackwell.

Bloomfield, L. (1974). *Language*. Milano: Il Saggiatore.

Cameron, L. (2001). *Teaching Languages to Young Learners*. Cambridge: Cambridge University Press.

Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.

Council of Europe (2001). Common European Framework of Reference for Languages: Learning, Teaching Assessment. EUR: Cambridge University Press. Retrieved May 5 2020, from: https://rm.coe.int/1680459f97

Council of Europe (2014). Languages for democracy and social cohesion: Diversity, equity, and quality. Retrieved April 13, 2020 from: https://bit.ly/2YfXeMr

Coyle, D., Hood, P. & Marsch, D. (2010). *CLIL. Content and Language Integrated Learning*. Cambridge: CUP.

Cristo Rey Valladolid (2020). Official page. Retrieved 12 of April 2020, from: https://cristoreyva.com/

Edelenbos, P. Johnstone, R. Kubanek, A. (2006). The main pedagogical principles underlying the teaching of languages to very young learners. European Commission: EUR. Retrieved April 22, 2020 from: https://bit.ly/3fEuIKk

Ellis, R. (1997). *Second Language Acquisition.* Oxford: Oxford University Press.

Ellis, G., Girard, D. & Brewster, J. (2002), *The Primary English Teacher's Guide* (New

edition). Brewster: Penguin.

European Commission (2006). Aprendizaje Integrado de Contenidos y Lenguas (AICLE) en el contexto escolar europeo. España: Eurydice.

European Commission (2012). Special Eurobarometer 386. Europeans and their Languages. Retrieved May 25, 2020 from: https://bit.ly/3eqsaPN

European Commission (2014). Improving the effectiveness of language learning: CLIL and computer-assisted language learning. Retrieved May 14, 2020 from: https://bit.ly/3dqsr3U

European Union (2020). The history of the European Union. Retrieved 20 of May 2020, from: https://europa.eu/european-union/about-eu/history_en

Eurostat (2019). *Foreign language learning statistics*. Retrieved May 8, 2020 from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Foreign_language_learning_statistics#Primary_education

Fabbro, F. (2004), *Neuropedagogia delle lingue: come insegnare le lingue ai bambini*. Roma: Astrolabio.

Fabbro, F., Crescentini, C. & Marini, A. (November 2012). Competenza e disturbi di linguaggio nel plurilinguismo. *EL.LE* Volume number 1, Num. 3. Retrieved on 5 of April 2020, from: https://edizionicafoscari.unive.it/media/pdf/article/elle/2012/3/art-10.14277-2280-6792-36p.pdf

García, O., May S. & Hornberger N., (2009). *Bilingual and multilingual education* (3º ediction). New York: Springer.

Gómez Parra, M. E. & Johnstone, R. (2017). Educación bilingüe: tendencias educativas y conceptos clave. España: Ministerio de Educación, Cultura y Deporte. Retrieved on 15 of May 2020, from: https://bit.ly/37LzQJG

Krashen, S. (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon Press.

Keaveney, S. & Lundberg, G. (2014). *Early language learning and teaching: A1-A2*. Lund: Studentlitteratur AB.

Lenneberg, E. H. (1967). *Biological Foundations of Language.* New York: John Wiley & Sons Inc

Martín Bravo, C. et al. (2016), *Psicología evolutiva en educación infantil y primaria,* Madrid: Ediciones Pirámides.

Pinter, A. (2006), *Learning their first language at home and at school, In Children learning a second language*. Oxford: Oxford University Press.

Pini, V. (03 of february 2017). Il bilinguismo protegge il cervello dall'Alzheimer. *Repubblica*. Retrieved April 1, 2020 from: https://bit.ly/2YPe2cn

Quinn, R. Quincy, C. Roana, J. (2019). *Natural Science. Learn Together* (6º de Primaria), Zaragoza: Ediciones Bilinges S.L. (Macmillan y Edelvives).

Vygotsky, L. S. 1978. *Mind in society. The development of higher psychological processes.* Cambridge: Harvard University Press.

Wandruszka, M. (1979). *The plurilingualism of the human being*. Stuttgart: Kohlhammer.

Weinreich, U. (1974). *Languages in Contact: Findings and Problems*. Torino: Boringhieri.

- **Laws**

Ley Orgánica 2/2006, de 3 de mayo, de Educación. Boletín Oficial del Estado, núm.106, de jueves 4 de mayo de 2006. Madrid: BOE.

Ley Orgánica 8/2013, de 9 de diciembre, para la Mejora de la Calidad Educativa. Boletín Oficial del Estado, núm. 295, de 10 de diciembre de 2013. Madrid: BOE.

Real Decreto 126/2014, de 28 de febrero, por el que se establece el currículo básico de la Educación Primaria. Madrid: BOE.

Real Decreto 26/2016, de 21 de julio, por el que se establece el currículo y se regula la implantación, evaluación y desarrollo de la Educación Primaria en la Comunidad de Castilla y León. (BOCyL, núm.142, de 25 de julio 2016).

Appendix

- Appendix 1: Proportion of pupils in primary education learning selected foreign languages in the EU in 2017

Proportion of pupils in primary education learning selected foreign languages, 2017
(%)
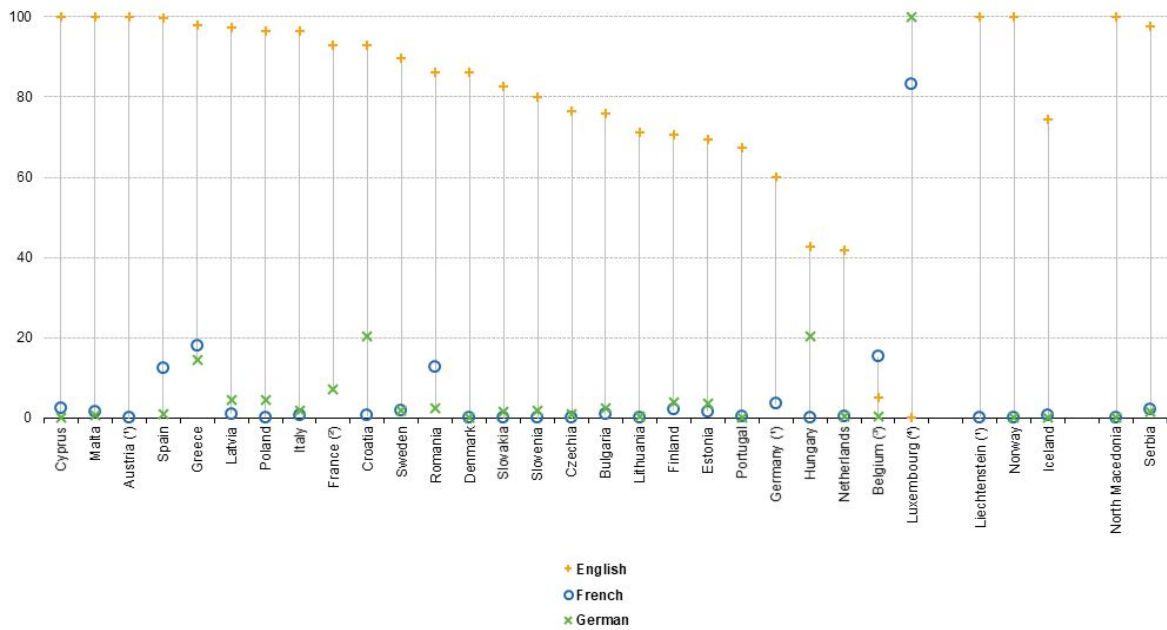
Note: ranked on English. Refer to the internet metadata file (http://ec.europa.eu/eurostat/cache/metadata/en/educ_uoe_enr_esms.htm). Ireland and the United Kingdom: not available.
(¹) German: not applicable.
(²) French: not applicable.
(³) The official state languages of Belgium are Dutch, French and German.
(⁴) Although the official languages of Luxembourg are French, German and Luxembourgish, for the purpose of education statistics, French and German are counted as foreign languages.
Source: Eurostat (online data code: educ_uoe_lang01)

eurostat

- Appendix 2: Proportion of pupils in general upper education learning selected foreign languages in the EU in 2017

Which are the foreign languages studied most commonly?
(% of pupils in general upper secondary education)

EU

Language	%
English	94.7 %
Spanish	22.3 %
French	18.1 %
German	17.4 %
Italian	2.8 %
Russian	2.6 %

Hello

Salut

Hallo

EU Member States with the highest share of pupils learning selected languages
(% of pupils in general upper secondary education)

English
- Sweden
- Romania
- Malta
- Netherlands 100.0 %
- Finland
- France
- Czechia 99.9 %
- Austria 99.8 %

Spanish
- France 73.5 %
- Sweden 41.5 %
- Germany 20.6 %

French
- Luxembourg* 100 .0%
- Romania 82.0 %
- Ireland 56.3 %

German
- Luxembourg* 100.0 %
- Slovenia 67.9 %
- Croatia 64.1 %

Italian
- Malta 35.6 %
- Croatia 22.5 %
- Cyprus 14.8 %

Russian
- Estonia 66.4 %
- Latvia 57.5 %
- Lithuania 29.4 %

Upper secondary education typically begins at the end of full-time compulsory education. The entrance age to this level is typically 15 or 16 years.

Only foreign languages studied as compulsory subjects or as compulsory curriculum options are included; the study of languages when the subject is offered in addition to the minimum curriculum are excluded.

Belgium: data for 2016; the official state languages are Dutch, French and German.

* Luxembourg: although the official languages in Luxembourg are French, German and Luxembourgish, for the purpose of education statistics, French and German are counted as foreign languages.

EU: excluding the United Kingdom.

Data for 2017.

Source: Eurostat (online data code: educ_uoe_lang01)

ec.europa.eu/**eurostat**

- Appendix 3: CEFR Reference Levels and Descriptors Grid

PROFICIENT USER	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
INDEPENDENT USER	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
BASIC USER	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

- Appendix 4: CEFR Self-Assessment grid

Common European Framework of Reference for Languages - Self-assessment grid

		A1 Basic User	A2 Basic User	B1 Independent user	B2 Independent user	C1 Proficient user	C2 Proficient user
Understanding	**Listening**	I can understand familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages and announcements.	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.	I can understand extended speech and lectures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalled explicitly. I can understand television programmes and films without too much effort.	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.
	Reading	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters.	I can read articles and reports concerned with contemporary problems in which the writers adopt particular attitudes or viewpoints. I can understand contemporary literary prose.	I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.	I can read with ease virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.
Speaking	**Spoken interaction**	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).	I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language flexibly and effectively for social and professional purposes. I can formulate ideas and opinions with precision and relate my contribution skilfully to those of other speakers.	I can take part effortlessly in any conversation or discussion and have a good familiarity with idiomatic expressions and colloquialisms. I can express myself fluently and convey finer shades of meaning precisely. If I do have a problem I can backtrack and restructure around the difficulty so smoothly that other people are hardly aware of it.
	Spoken production	I can use simple phrases and sentences to describe where I live and people I know.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes and ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.	I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	I can present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion.	I can present a clear, smoothly-flowing description or argument in a style appropriate to the context and with an effective logical structure which helps the recipient to notice and remember significant points.
Writing	**Writing**	I can write a short, simple postcard, for example sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can write short, simple notes and messages. I can write a very simple personal letter, for example thanking someone for something.	I can write simple connected text on topics which are familiar or of personal interest. I can write personal letters describing experiences and impressions.	I can write clear, detailed text on a wide range of subjects related to my interests. I can write an essay or report, passing on information or giving reasons in support of or against a particular point of view. I can write letters highlighting the personal significance of events and experiences.	I can express myself in clear, well-structured text, expressing points of view at some length. I can write about complex subjects in a letter, an essay or a report, underlining what I consider to be the salient issues. I can select a style appropriate to the reader in mind.	I can write clear, smoothly-flowing text in an appropriate style. I can write complex letters, reports or articles which present a case with an effective logical structure which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.

Common European Framework of Reference for Languages (CEF); © Council of Europe

- Appendix 5: The neighborhood of Cristo Rey School in Valladolid

- Appendix 6: Science lab at the Cristo Rey School in Valladolid

- Appendix 7: Non-linguistic subjects studied in English at the Cristo Rey school in Valladolid

DISCIPLINA LINGÜÍSTICA IMPARTIDA EN LA LENGUA EXTRANJERA

1º EP	2º EP	3º EP	4º EP	5º EP	6º EP
ENGLISH I-2h	ENGLISH II-2.30h	ENG LISH III-2.30h	ENGLISH IV-3h	ENGLISH III-3h	ENGLISH IV-3h
Alicia González García	Alicia González García	Alicia González García	Alicia González García	Michael Brandon Pinegar	Michael Brandon Pinegar

DISCIPLINAS NO LINGÜÍSTICAS IMPARTIDAS EN LA LENGUA EXTRANJERA

1º EP	2º EP	3º EP	4º EP	5º EP	6º EP
NS- 1.30h Nuria Calatá Uña	NS- 1.30h Nuria Calatá Uña	NS- 1.30h Ana Velasco Gil	NS- 2.30h Ana Velasco Gil	NS- 2.30h Laura Samaniego Carrasco	NS- 2.30h Michael Brandon Pinegar
SS-1.30h Nuria Calatá Uña	SS-1.30h Nuria Calatá Uña	SS-2h Ana Velasco Gil	SS-2.30h Ana Velasco Gil	SS-2.30h Laura Samaniego Carrasco	SS-2.30h Michael Brandon Pinegar
PE-2.30h Fausto Calvo Escobar	PE-2.30h Fausto Calvo Escobar	PE-2h Fausto Calvo Escobar	PE-2h Laura Samaniego Carrasco	PE-2h Laura Samaniego Carrasco	PE-2h Laura S. (A) David González (B)

- Appendix 8: The photographs of 6th A class at the Cristo Rey school in Valladolid
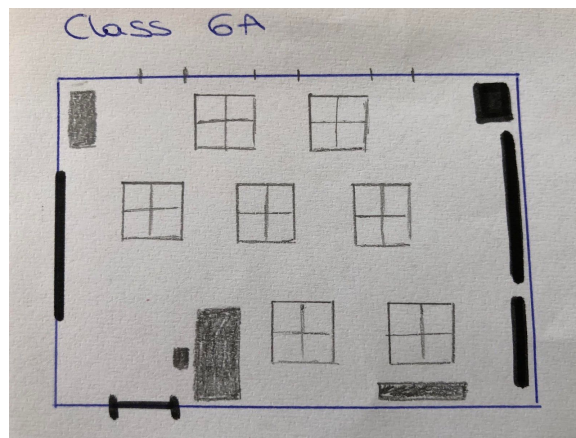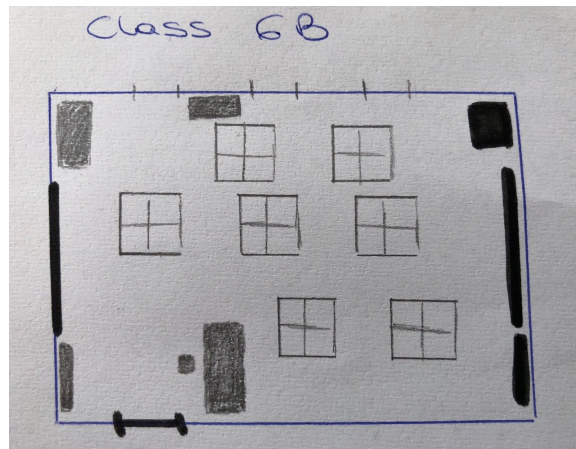
- Appendix 9: The photographs of 6th B class at the Cristo Rey school in Valladolid

- Appendix 10: The groups of class 6th A and 6th B

- Appendix 11: 6th A and 6th B student's timetables at the Cristo Rey school in Valladolid

EP6A: E. PRIMARIA 6ºA

Horas	Lunes	Martes	Miércoles	Jueves	Viernes
De 09:05 a 10:05	MAT - PLEN0	ING - MPBR	FR6 - CUNU	PE - DGON0	ING - MPBR
De 10:05 a 11:05	MUS - PMUS1	SS - MPBR	MAT - PLEN0/ PE - DGON0	SS - MPBR	MAT - PLEN0
De 11:05 a 11:35	LEN - PLEN0	NS - MPBR	PT - PLEN0	LEN - PLEN0	SS - MPBR
De 11:35 a 12:05	RE - MPBR	RE - MPBR	RE - MPBR	RE - MPBR	RE - MPBR
De 12:05 a 13:05	REL - PLEN0	MAT - PLEN0	NS - MPBR	LEN - PLEN0	LEN - PLEN0
De 13:05 a 14:05	ING - MPBR	LEN - PLEN0	LEN - PLEN0	MAT - PLEN0	NS - MPBR

EP6B: E. PRIMARIA 6ºB

Horas	Lunes	Martes	Miércoles	Jueves	Viernes
De 09:05 a 10:05	PE - DGON0	REL - PLEN0	LEN - PLEN0	LEN - PLEN0	MAT - PLEN0
De 10:05 a 11:05	MAT - PLEN0	LEN - PLEN0	PE - DGON0/ ING - MPBR	MAT - PLEN0	ING - MPBR
De 11:05 a 11:35	NS - MPBR	MAT - PLEN0	SS - MPBR	ING - MPBR	PT - PLEN0
De 11:35 a 12:05	RE - PLEN0	RE - PLEN0	RE - PLEN0	RE - PLEN0	RE - PLEN0
De 12:05 a 13:05	SS - MPBR	ING - MPBR	MAT - PLEN0	SS - MPBR	FR6 - CUNU
De 13:05 a 14:05	LEN - PLEN0	MUS - PMUS1	NS - MPBR	NS - MPBR	LEN - PLEN0

- Appendix 12: Sessions, timing and activities of the Teaching Unit proposed

❖ **Session 1: Let's start learning together!**

Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Brainstorming (15 minutes) - Introduction (15 minutes)	0,30 minutes
Contents:	**Evaluation criteria:**	**Learning standards:**
- Healthy Habits	- Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	- List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ <u>Activity 1</u>: Brainstorming

TIMING: 15 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Introductory activity.

MATERIALS: A projector, a computer, whiteboard, markers, Wordle App, tables notebooks, images, pencils, or pens.

CONTENTS and STANDARDS: All the contents and standards of the Unit.

DESCRIPTION: First of all, the teacher uses the app Wordle and asks the students: "What is the first thing that comes to mind when you hear the words "health or healthy?" Through the application, we will notice which words are the most common and we will learn about the general idea of the pupils.

Then the educator projects some images related to the teaching unit: a person eating, a picture with healthy food and junk food, a boy drinking, a lady exercising, contaminated air, and a teenager smoking. Consequently, he/she asks the students if they know what they are and demands them some questions for each picture. The students, after seeing the images projected on the whiteboard, using their previous knowledge and creativity, they should try to answer or guess. In the end, the students should write their ideas on a sheet in order to then be able to make a comparison between their initial hypotheses and what we will study during the teaching unit. The questions are:

- Pic 1:

"What can you see?"

"What is the person doing and why?"

"Is he taking in nutrients?"

"Do you remember anything about the digestive system?"

"Do you know how many times per day we should eat?"

- Pic 2:

"What is it?"

"Do you know which food is healthy and which food is not? Why do you think so?"

"What kind of food do you usually eat?"

"Is sugar healthy? Do you eat a lot of sugar?"

- Pic 3:

"What is he doing?" What can you see?"

"Why does he drink? Is it important for our body?"

"Do you know how much we should drink every day?"

"What kind of drinks do you usually drink?"

- Pic 4:

"What can you see? What is she doing?"

"Is she using energy?"

"How many times per week should we exercise?"

" Is sport good for us?"

"When we exercise, do we breathe faster? Why?"

"How many times do you exercise?"

- Pic 5:

"What can you see? Is it fog or contamination?"

"Is it good for us to breathe contaminated air? Why?"

- Pic 6:

"What can you see? What is he doing?"

"Do you know if it is good for your body or not? Why?"

RELATION WITH THE EVALUATION: It is an important activity because it shows us the previous knowledge of our students and their starting level. Thanks to these pieces of information we can better understand how to help the pupils, what to study harder and we are able to better control the students' learning process progresses from the beginning to the end. The teacher even assesses the pupils' behavior with a rating scale (Appendix 16).

➢ Activity 2: Introduction

TIMING: 15 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Introductory activity.

MATERIALS: A projector, a computer, final task questions, white eggs, cups with liquids (water, milk, orange juice, soda, coffee), experiment chart.

CONTENTS: Healthy Habits

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: First of all the teacher explains how he/she is going to evaluate the students and tells them that she/he is going to upload all this information on your google classroom and is also going to send them all the evaluation instruments in order to let the pupils know how and when they are going to be assessed.

Moreover, the teacher explains two important activities (the journalist mini-project and the flipped class activity) and introduces the eggshells experiment.

● The final task that the pupils need to do is an activity that they should carry out individually at home and must be done in English. The kids are going to do an investigation mini-project in which they will act as journalists and interview people. The idea of being a journalist is that they understand the different points of view of other people and cultures about health, so they have to be open-minded and aware of the existence of different kinds of lifestyles. Consequently, the children should ask questions to different people, then they will analyze their data and the people's answers and finally they need to write a report. In the report, they should tell: who they interviewed, if it has been an easy activity, what they liked about the activity, if they learned something new, if they changed their idea on something, and if they liked being a journalist. The pupils need

to hand it the final task on google classroom virtual campus the day of session 9 and the final report cannot be longer than 2 pages. These are the questions:

- Do you think you have a healthy lifestyle? Why?
- Why do many people try to have a healthy lifestyle? Is it something important?
- What is healthy food?
- Do you pay much attention to what you eat?
- How many times per day do you eat? Do you try to at a certain time every day?
- Is obesity a great problem?
- Why are there so many obese people in the world?
- What are the most efficient ways to lose weight?
- Do you think diets are useful or not?
- Have you ever tried to go on a diet? Did it work?
- Is physical activity (jogging, going to a gym, swimming pool) an important part of a healthy lifestyle?
- How many times do you exercise?
- What is your attitude to smoking? What about passive smoking?
- Do you know someone who gave up smoking? Is it hard?
- How many hours of sleep do you need daily?
- Do you try to go to bed and get up at certain hours every day?

And finally, the educator introduces the other two activities that the pupils are going to perform at school:

- The flipped class methodology activity will be done during session number five, but the students need to get ready for it at home. It is going to be an activity based on the Flipped Class Methodology and the teacher wants the kids to be educators for one day and they should research, read, and learn something by themselves and teach it to the class. Each student needs to study two topics: body and teeth hygiene and healthy habits.

- Finally, the teacher introduces the tooth decay experiment with eggshells that they are going to do during session 5. The educator and the children are going to put five white eggs into different five different caps and they will fill up the caps with different liquids: water, milk, orange juice, soda, and coffee. The pupils need to start completing a chat using the data they already have and making hypotheses.

Data	Eggshells before the experiment		Eggshells after the experiment	
Liquid	Color	Eggshells' aspect	Color	Eggshells' aspect
Water				
Milk				
Orange juice				
Soda				
Coffee				

What will happen?	
What actually happened to the eggshells? Why?	
What happens if you brash the eggshells?	
Is it important to daily use the toothbrush?	

RELATION WITH THE EVALUATION: The teacher explains the assessment process and introduces three important activities that the teacher is going to evaluate. It is important for the pupils to know how they are going to be evaluated and to receive clear information because it makes the pupils feel more confident.

❖ Session 2: Discovering nutrition

Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Warming-up (5 minutes) - Introducing the digestive system (25 minutes) - Climbing the nutritional pyramid (25 minutes) - Song time (5 minutes)	1 hour
Contents:	**Evaluation criteria:**	**Learning standards:**
- Nutrition	- Identify the organs and processes involved in nutrition. - Describe how the digestive system extracts nutrients from food. - Recognize healthy habits in relation to diet and exercise.	- Differentiate key organs and their functions in nutrition. - Paraphrase the process of digestion and discuss its importance. - List habits that maintain health and prevent illness.

➢ Activity 1: Warming-up!

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Routine/ Review/ Introductory activity.

MATERIALS: No material needed.

CONTENTS: Healthy habits, Nutrition.

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

DESCRIPTION: The majority of the sessions of this teaching unit are going to start with a quick review of the contents and topics already studied. This kind of activity gives the teacher the opportunity to connect the new information with the previous cognitive structure, promoting meaningful learning. Furthermore, this kind of routine also gives the educator the opportunity to know if the students are studying day by day, if they misunderstood something or if some contents are not clear and to know the general level of the class.

During this first activity, the teacher introduces the new topic and reviews with the kids the contents and the activities of session 1, and the teacher does so asking the students questions.

The teacher says: "Good morning! Today we are going to start studying the digestive system, but we already started talking about this topic in session number 1. Let's review it together!"

- "What have we been doing during the last session?"

- "Which activities did we do? Tell me all that you remember!"

- "Do you remember how the human body gets nutrients?"

- "Do you remember anything about digestion? Is it an important process?"

- "How many times per day do we eat and how much do we eat?"

- "How long does it take for food to be digested?"

RELATION WITH THE EVALUATION: It is an important routine activity. Firstly, all routine activities are fundamental because they make children safer, live them with pleasure, they know what to expect, and participate more actively. In addition, this type of routine is particularly useful because it allows us to introduce the new activities of the day, to review what was done previously, to connect the knowledge, and to know the needs of the students.

➢ Activity 2: Introducing the digestive system

TIMING: 25 minutes.

ORGANIZATION: Individually and in groups of 4 or 5 students.

TYPE OF ACTIVITY: Content focus activity.

MATERIALS: Nine meters of string, whiteboard, markers, notebooks, pens, online game (https://www.sheppardsoftware.com/health/anatomy/digestion/digestion_game_1.htm.), and videos:

- https://www.youtube.com/watch?v=ZBZWgrfZFbU

- https://www.youtube.com/watch?v=Og5xAdC8EUI

CONTENTS: Nutrition

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

DESCRIPTION: The educator shows to the children a 9 meters long piece of string and lets the pupils hold it and shows its full length; then he/she asks them:

- "What do you think this string represents? (The answer is: it represents the length of the digestive system)"

- "How long do you think it is?"

Then the teacher provides the pupils with different videos in English (it is all authentic material made for native speaker kids) in which they need to analyze the new pieces of information and

they should take notes in their notebook. The educator shows the videos twice. Later, with the help of their natural science and of their notes, the pupils will try to answer some questions in small groups. The questions are:

- "Why is it important to eat and drink regularly?"
- "How many Kg of food do humans usually eat per day?"
- "What happens to food when it enters our bodies? How does the digestive system work step by step?"
- "Why is saliva important in the digestion process?"
- "What happens to food in the stomach ?"
- "How long does food stay in the stomach?"
- "What do pancreas, liver, and Gallbladder do?"
- "What happens to food in the small intestine?"
- "What happens to food in the large intestine ?"
- "Do we digest all types of food in the same place?"
- "How long does it take to digest food?"

Once the children finish, each group shares their idea with the rest of the class and with the teacher that corrects them and explains all the difficulties.

At the end of the activity the students, with the teacher's help, are going to write a mind map. The pupils should copy it in their notebooks.

The kids can even practice a bit more using this online interactive and fast game: https://www.sheppardsoftware.com/health/anatomy/digestion/digestion_game_1.htm.

RELATION WITH THE EVALUATION: The evaluation of this activity will be done by observation. The educator is also going to assess the behavior of the pupils (which is equivalent to 10% of the final mark) using a rating scale (Appendix 16).

➢ Activity 3: Climbing the nutritional pyramid

TIMING: 25 minutes.

ORGANIZATION: Students will place all the desks in a circle for better interaction.

TYPE OF ACTIVITY: Content-based activity.

MATERIALS: A mural of the nutritional pyramid, a computer, a projector, pens, notebooks, and a video: https://www.youtube.com/watch?v=0KbA8pFW3tg.
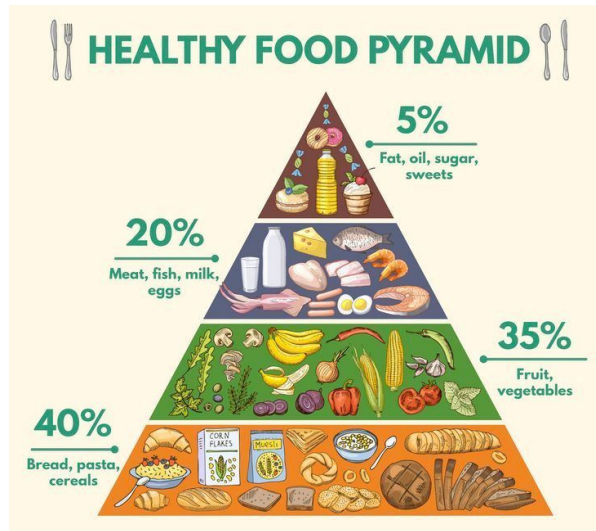
CONTENTS: Nutrition, Healthy habits.

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

- Outline how to look after the various organs in the body

DESCRIPTION: The Teacher projects the nutritional pyramid on the wall.

The teacher asks the students to observe it for a while and then he/she will make them analyze the different levels of the nutritional pyramid and the main aspects of it (such as the order, the frequency of eating products for each level, its reasons) through asking several questions. Pupils make hypotheses and the educator slowly builds the students new knowledge:

- "Do you know what it is?"

- "Why are all the food items placed at different levels in the pyramid?"

- "Why is the basis of the pyramid bigger and wider? Why are some sections smaller and thinner than others?"

- "Which two categories of food are placed on the second level? How often should you eat vegetables and fruit? How many pieces of fruit do you recommend to eat per day?"

- "Which kinds of items can you find in the third level of the pyramid? When do you usually eat milky products? Why are they beneficial for our bones?"

- "In the fourth level, we can find... (leave a blank silence for students to complete the sentence). How often should we eat animal meat and eggs?"

- "Which products can we find at the highest level (the fifth one)? Are they beneficial for our body?"

The teacher should leave the students free to say their opinion in order to try to get to the new content starting from the previous knowledge, but at the end of the activity, the educator does a final explanation and describes the nutritional pyramid. He/she must describe all the qualities of the products and how much we should eat them. When we arrive at junk food the teacher must

insist on the fact that we should not frequently eat them, although they are yummy. Subsequently, the teacher lets the kids design a food pyramid on their notebooks. The educator can even show this Youtube video: https://www.youtube.com/watch?v=0KbA8pFW3tg (it is an authentic material made for native speakers kids).

RELATION WITH THE EVALUATION: It's a scaffolding activity that guides students through the new learning. The educator is especially going to assess the behavior of the pupils (which is equivalent to 10% of the final mark) using a rating scale (Appendix 16).

➢ Activity 3: Song time

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Relaxation activity / routine activity.

MATERIALS: Lyrics (Appendix 21), and music video:

- https://www.youtube.com/watch?v=osbf0fc6x88&feature=youtu.be

CONTENTS: Healthy habits.

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: Since lesson number two, almost every session, during the last five minutes of class, the educator is going to play the Youtube video "The healthy song" in the class with the students. In session 2 the children receive the lyrics of the song and they read it out loud and try to get familiar with the text and the vocabulary. The teacher should explain the meaning of all the difficult words. Finally, the pupils sing and act out all the action verbs and vocabulary. Since the song is short, the teacher can even play the song twice.

RELATION WITH THE EVALUATION: The aim of this activity is to motivate the students and to make them relax before the next lesson. Furthermore, the song helps the pupils learn and reinforce part of the vocabulary of this teaching unit.

❖ Session 3: Food and illness

| Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Who am I? game (15 minutes) - Jigsaw (40 minutes) - Song time (5 minutes)	1 hour
Contents:	**Evaluation criteria:**	**Learning standards:**
- Nutrition - Healthy Habits	- Identify the organs and processes involved in nutrition. - Describe how the digestive system extracts nutrients from food. - Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	- Differentiate key organs and their functions in nutrition. - Paraphrase the process of digestion and discuss its importance. - List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ Activity 1: "Who am I?" game

TIMING: 15 minutes.

ORGANIZATION: In pairs.

TYPE OF ACTIVITY: Routine /Review.

MATERIALS: Flashcards, scotch tape.
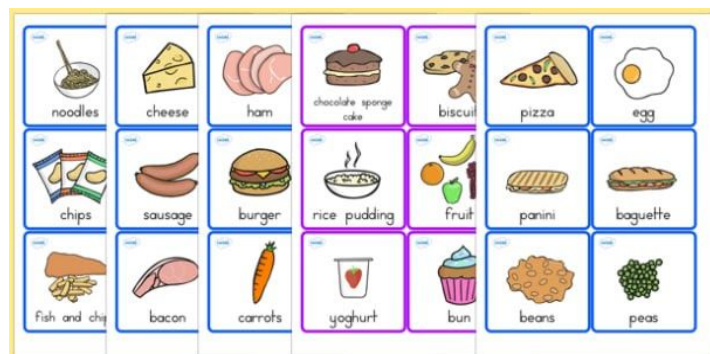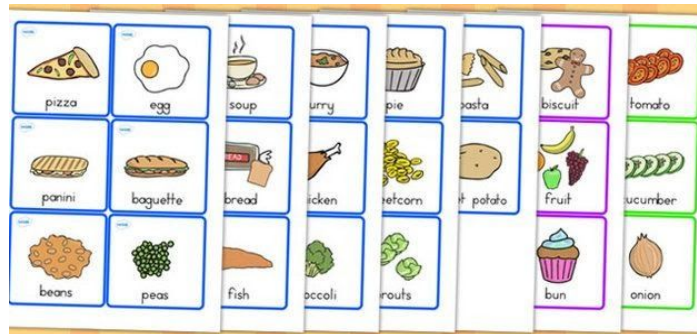
CONTENTS: Nutrition, healthy habits

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

- Outline how to look after the various organs in the body

DESCRIPTION: During this first activity of session number 3 the teacher reviews with the kids the contents and the activities of sessions 2 and 1. In order to do so, the teacher reviews with the kids the contents of all the previous sessions with the game "Who am I?". The teacher needs to: explain the rules of the game, should divide the class into pairs, and has to hand out a deck of cards per group. During the game, he/she can check students' level and can help those needing extra help. During this activity, each kid has to stick with tape one card on his/her head and should play a guessing game with his/her pair. Each student has to use the interrogative form: "Who am I?" and should even ask more questions ("Am I a candy?" "Am I part of the highest level of the food pyramid?") in order to guess his/her card. Sometimes pupils can even act out some actions or elements if they don't know the word in English.

RELATION WITH THE EVALUATION: This kind of routine is useful because it allows us to review what was done previously, to connect the knowledge, and to know the needs of the students. Furthermore, if we use games, reviewing exercises will be fun for the students and will motivate them.

➢ Activity 3: Jigsaw

TIMING: 40 minutes → 20 minutes for the research and the jigsaw, 20 minutes of exchange of ideas between different experts.

ORGANIZATION: In groups of 5 students.

TYPE OF ACTIVITY: Content focus activity.

MATERIALS: Computers or tablets, books, notebooks, and pencils or pens.

CONTENTS: Nutrition, healthy habits.

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body.

DESCRIPTION: The teacher asks the kids to look for some information using the Jigsaw methodology. This method was developed by the psychologist Elliot Aronson in the 1970s and is a cooperative learning technique where students work in groups to teach each other something. The students have to look for some information using books and/or tablets and they should look for it in English. During the next session, the students should look for the data, analyze authentic material, discuss with their groups. Finally, they need to write down all the info collected. The educator says: "Now I am going to divide the class into five groups and each group member will be given a number (from 1 to 5) and to each number a theme. All the students with the same number will come together forming the "expert group" (the person who has the number 1 with the other ones that have the same number, and so on) and have to investigate and search for all the information related to a specific issue. Each group should investigate obesity, diabetes, dental decay, high cholesterol, and vitamin deficiency.

The children should use authentic material and the educator will provide part of it and will help them to select it properly. After the research, each "expert group" should write down some short sentences in English about the info they found. After collecting as much information as possible, they will go back with the initial group, and they will put in common all the new knowledge. At the end of the activity, they need to write down all the info collected and they need to hand it in. During the next lesson, there will be a small debate.

RELATION WITH THE EVALUATION: The teacher is going to assess every task and all the experiments that the students are going to perform in class. This is one of the tasks that the teacher is going to evaluate and is going to do so by observation. During this part of the activity, in particular, the educator is going to evaluate the capacity of researching and analyzing the material and the final report that they will hand-in. The teacher will even assess the pupils' behavior with a rating scale (Appendix 16).

➢ Activity 3: Song time

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Relaxation activity / routine activity.

MATERIALS: Flashcards and music video:

- https://www.youtube.com/watch?v=osbf0fc6x88&feature=youtu.be

CONTENTS: Healthy habits.

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: Since lesson number two, almost every session, during the last five minutes of class, the educator is going to play the Youtube video "The healthy song" in the class with the students. In session 3 the educator proposes a TPR activity. The teacher hands out some flashcards with different elements that will appear in the song (healthy food, the human body, decay...etc), and then he/she plays the Youtube video. When the video shows one of the elements represented on the flashcards the owner of that flashcard stands up in order to represent the element by mimicry. Since the song is short, the teacher can even play the song twice.

RELATION WITH THE EVALUATION: The aim of this activity is to motivate the students and to make them relax before the next lesson. Furthermore, the song lets the pupils learn and reinforce part of the vocabulary of this teaching unit.

❖ Session 4: Becoming experts

Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Warming-up (5 minutes) - Jigsaw (15 minutes) - The effects of sugar on our body (10 minutes)	0,30 minutes
Contents: - Nutrition - Healthy Habits	**Evaluation criteria:** - Describe how the digestive system extracts nutrients from food. - Recognize healthy habits in relation to diet and exercise - Understand the ways in which lifestyle choices can affect health.	**Learning standards:** - Paraphrase the process of digestion and discuss its importance. - List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ Activity 1: Warming-up!

TIMING: 5 minutes

ORGANIZATION: The whole class together

TYPE OF ACTIVITY: Routine/ Review/ Introductory activity

MATERIALS: No material needed

CONTENTS: Nutrition, healthy habits

STANDARDS:

 - Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: During this first activity of session number 4 the teacher reviews with the kids all the contents and the vocabulary studied in the previous sessions. In order to do so, the teacher is going to ask some questions and introduces new activities and topics. The educator says: "Today we are going to finish the Jigsaw activity and we are going to talk about the effects of sugar on our body. But first let's review a bit what we have been doing:"

   - "What is the topic covered over the past few weeks?"

   - "What did we learn?"

   - "Do you remember what we've been doing during the last session?"

   - "Which activities did we do?"

   - "What do we already know about sugar?

RELATION WITH THE EVALUATION: It is an important continuous evaluation activity that gives to the teacher the possibility to better follow the kids' learning process and review and connect contents.

➢ Activity 2: Ending the Jigsaw activity and oral presentation

TIMING: 15 minutes

ORGANIZATION: In groups of 5 students

TYPE OF ACTIVITY: Content focus activity

MATERIALS: The students need to hand in their final document.

CONTENTS: Nutrition, healthy habits

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: During this session, the students are going to ultimate the Jigsaw activity. The educator asks them to hand in their final report with all the info researched and asks them to present and share all the learned knowledge. In the end, there will be an oral debate.

RELATION WITH THE EVALUATION: During this second part of the activity, the educator is going to evaluate the student presentation during the debate by the oral presentation rubric (Appendix 15). The teacher will even assess the pupils' behavior with a rating scale (Appendix 16).

➢ Activity 3: Talking about the effects of sugar on your bodies

TIMING: 10 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Reinforcement activity.

MATERIALS: The whiteboard, markers, pens, notebooks, and video:

- https://www.youtube.com/watch?v=Yda8RtOcVFU

CONTENTS: Nutrition, healthy habits.

STANDARDS:

 - Differentiate key organs and their functions in nutrition.

- Paraphrase the process of digestion and discuss its importance.

- List habits that maintain health and prevent illness.

- Outline how to look after the various organs in the body.

DESCRIPTION: Through the Jigsaw activity the students get to know how dangerous can be food for our body if we don't eat it correctly. During this activity, the teacher talks about the bad effects of sugar on our body and shows them a video (it's an authentic material). Finally, the educator first asks:

   - "Do you know the effects of sugar on our body?"

   - "Did you ever think that we are addicted to sugar?"

   - "How much sugar do you usually eat? Is it good for you?"

In the end, there will be a fast debate, and the teacher and the students will write a short summary.

RELATION WITH THE EVALUATION: The evaluation of this activity will be done by observation. The educator is also going to assess the behavior of the pupils (which is equivalent to 10% of the final mark) using a rating scale (Appendix 16).

❖ Session 5: Healthy lifestyle

Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Warming-up (5 minutes) - Flipped class activity on hygiene and healthy habits (30 minutes) - Tooth decay experiment with eggshells (20 minutes) - Song time (5 minutes)	1 hour
Contents:	**Evaluation criteria:**	**Learning standards:**
- Healthy Habits	- Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	- List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ Activity 1: Warming-up!

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Routine/ Review/ Introductory activity.

MATERIALS: No material needed.

CONTENTS: Nutrition, healthy habits.

STANDARDS:

- Differentiate key organs and their functions in nutrition

- Paraphrase the process of digestion and discuss its importance

- List habits that maintain health and prevent illness

DESCRIPTION: During this first activity of session five, the teacher reviews with the kids the contents and the activities of session 4 and 3 and introduces the new topic, and the teacher does so asking the students questions.

- "What have we been doing during the last two sessions?"

- "Which activities did we do?"

- "What did we learn about food?

- "How can we take care of our digestive system and of our body?" Do you know any good and healthy habits?"

RELATION WITH THE EVALUATION: This type of routine is particularly useful because it allows us to introduce the new activities of the day, to review what was done previously, to connect the knowledge, and to know the needs of the students and their difficulties.

➤ Activity 2: Flipped class activity

TIMING: 30 minutes.
ORGANIZATION: Individually at the beginning and then the whole class together.
TYPE OF ACTIVITY: content-based activity
MATERIALS: a computer, markers, whiteboard, pens, notebooks. The pupils can also use a PowerPoint presentation.
CONTENTS: Healthy habits
STANDARDS:
- List habits that maintain health and prevent illness
- Outline how to look after the various organs in the body
DESCRIPTION: The educator already introduced this activity to the kids during session 1, but now the pupils are going to be the protagonists: they need to be the teacher and they are going to present all that they have been studying at home. They should talk about: Body and teeth hygiene and healthy habits. The teacher listens to them and, if needed, will add some other information or explain some notions. In the end, all the children and the educator are going to write a short summary.
RELATION WITH THE EVALUATION: The teacher will evaluate this activity using the oral presentation rubric (Appendix 15) and will focus on the kids' speaking competence, on the presentation skills, and on the information researched. Moreover is going to evaluate their behavior by a rating scale (Appendix 16).

➤ Activity 3: Tooth decay experiment with eggshells

TIMING: 20 minutes.
ORGANIZATION: The whole class together in the science lab
TYPE OF ACTIVITY: experiment/ reinforcement activity
MATERIALS: Eggs, cups with liquids, experiment chart (see session 1, activity 2)
CONTENTS: Nutrition, healthy habits
STANDARDS:
- Paraphrase the process of digestion and discuss its importance
- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: The teacher in session 1 poured five liquids in five different cups and felt in each of them an egg. During this session, the educator and the students examine what happened to the eggshells and are going to write everything down on the chart already used in lesson number one. They will notice that some substances, with their sugar and acids, deteriorated the shells and changed the color of the egg. The pupils should identify those eggs and should try to brush them with toothbrushes in order to see what happens. Through this activity, kids understand how awful some substances can be for teeth and bones, and the importance of brushing our teeth. Finally, the teacher finalizes the activity explaining the process, talking about teeth hygiene.

RELATION WITH THE EVALUATION: This is one of the tasks that the teacher is going to evaluate and is going to do so by observation. During this part of the activity, in particular, the educator is going to evaluate the capacity of analyzing, observing, and getting notes of the students. The teacher will even assess the pupils' behavior with a rating scale (Appendix 16).

➢ Activity 3: Song time

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Relaxation activity / Routine activity.

MATERIALS: One big flashcard (Appendix 20) per each student, music video:

- https://www.youtube.com/watch?v=osbf0fc6x88&feature=youtu.be

CONTENTS: Healthy habits.

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: Since lesson number two, almost every session, during the last five minutes of class, the educator is going to play the Youtube video "The healthy song" in the class with the students. In session 5 every student receives a big flashcard with some keywords and images referred to the song and they should follow with their finger the song on the paper. The teacher can even print a bigger flash card that he can stick on the floor and the students can follow the song jumping on the images of the big flashcard.

RELATION WITH THE EVALUATION: The aim of this activity is to motivate the students and to make them relax before the next lesson. Furthermore, the song lets the pupils learn and reinforce part of the vocabulary of this teaching unit.

❖ Session 6: Getting to know the respiratory system

Teaching Unit:	Activities (Appendix):	Timing:
- Nutrition and healthy life	- Warming-up (5 minutes) - Introducing the respiratory system (25 minutes) - Lungs capacity experiment (25 minutes) - Song time (5 minutes)	1 hour
Contents:	**Evaluation criteria:**	**Learning standards:**
- Healthy Habits	- Outline how the lungs exchange oxygen and carbon dioxide. - Recognize healthy habits in relation to diet and exercise.	- Describe the process of respiration and discuss lung's health. - List habits that maintain health and prevent illness.

➢ Activity 1: Warming up!

TIMING: 5 minutes

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: content-based activity

MATERIALS: No material needed

CONTENTS: Healthy habits

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: Through this first activity the teacher reviews the contents studied and introduces the new topic: the respiratory system. He/ she will do so asking questions:

   - "What have we been doing during the last session?"

   - "Which activities did we do? What did we learn?"

   - "Do you know what humans need the most in order to survive? We need nutrition and..."

   - "How do we get oxygen inside our bodies?"

   - "What do we already know about the respiratory system?"

   - "How can we take care of our lungs?"

RELATION WITH THE EVALUATION: This type of routine is particularly useful because it allows us to introduce the new activities of the day, to review what was done previously, to connect the knowledge, and to know the needs of the students and their difficulties.

➢ <u>Activity 2</u>: Introducing the respiratory system

TIMING: 25 minutes during the break time

ORGANIZATION: Individually and in groups of 4 or 5 students

TYPE OF ACTIVITY: Content focus activity

MATERIALS: Natural science book, notebook, pens, whiteboard, markers an online game (https://naturalsciences.didactalia.net/resource/respiratory-system-easy/918260d6-d8f7-442e-95ab-e9de0410f2be) and videos:

- https://www.youtube.com/watch?v=mOKmjYwfDGU

- https://www.youtube.com/watch?v=X2YVt16Kxak

CONTENTS: Respiration, Healthy habits

STANDARDS:

- Describe the process of respiration and discuss lung's health

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body.

DESCRIPTION: The teacher, introduces the topic with some exercises and questions:

- "Everyone takes a deep breath and holds it for ten seconds. Now let's take the air out. Was that difficult? How long do you think you can hold your breath for? Why can't we hold our breath for a long time? Why do we need oxygen?"

- "Now we jump for 1 minute and we focus our attention on the respiration. Do we breathe faster? Why?"

- "Finally, we are going to put our hand on the chest and we will slowly exhale and inhale. What happens to our chest? Does it move? Why?"

Then, the educator provides the pupils with different videos in English (it is all authentic material made for native speaker kids) in which they will be analyzing the new data and they should take notes in their notebook.

The educator shows the videos twice. Later, with the help of their natural science and of their notes, the pupils try to answer some questions in small groups. The questions are:

-   "How many times do we breathe per day?"

-   "Why do we breathe? Why do our cells need oxygen?"

-   "What gases are exchanged when we breathe? Where does this happen and how?"

- Describe the respiratory system and its functions with your own words.
- "What is the diaphragm?"

Once they finish the activity they will share their idea with the rest of the class and with the teacher that corrects them and explain the difficulties.

At the end of the activity the students, with the teacher's help, are going to write at the whiteboard a mind map. The pupils should copy it in their notebooks.

The kid can even practice a bit more using this online interactive and fast game: https://naturalsciences.didactalia.net/resource/respiratory-system-easy/918260d6-d8f7-442e-95ab-e9de0410f2be.

RELATION WITH THE EVALUATION: The evaluation of this activity will be done by observation. The educator is also going to assess the behavior of the pupils (which is equivalent to 10% of the final mark) using a rating scale (Appendix 16).

➢ Activity 3: Lungs capacity experiment

TIMING: 25 minutes

ORGANIZATION: Individually and in groups of 4 or 5 students and in the science lab.

TYPE OF ACTIVITY: Reinforcement activity

MATERIALS: One meter of flexible plastic tube, 5 liters plastic bottle, measuring jug, water, a large plastic box, tape, antiseptic wire, a pen, and a notebook

CONTENTS: Respiration, healthy habits

STANDARDS:

- Describe the process of respiration and discuss lung's health

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: The teacher asks:

- "Do you think that a person's size affects their lung capacity?"
- "Do you think that doing a sport can affect a person's lung capacity? Why and how?"

Then the educator asks the pupils to perform an experiment. He/she gives the children different items and written instructions:

- Stick a long strip of tape on the bottle from top to bottom.
- Pour 250 ml of water into the bottle and mark the water level on the tape with the pen.
- Repeat until you have marked the bottle at each 250ml level all the way up to the top of the bottle.

- Fill the box with about 10 cm of water. Put a hand over the mouth of the bottle and put it into the box upside down. Keep your hand covering the mouth until it is completely underwater.

- Put one end of the tube into the mouth of the bottle and hold the bottle so it does not move. One pupil blows into the tube until there is no more air in their lungs.

- Now, calculate how much air there is in the bottle by measuring how many 250 ml marks you can see in the empty part of the bottle. Multiply the number of marks by 250 and divide the result by 1000.
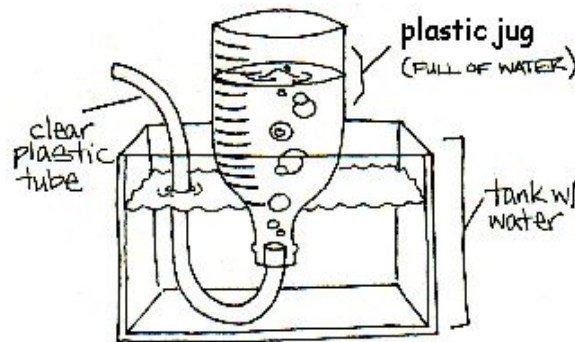
- Refill the bottle up to the top mark. Repeat the experiment for everyone in your group.

- Then answer these questions: "What is your lung capacity?" "Who has the biggest lung capacity in your group?" "Do you think the amount of sport you do or your size affected your result? Why?"

The pupils must carry out the exercise by their-self and in the end, the teacher checks the answers and the results.

RELATION WITH THE EVALUATION: The teacher is going to assess every task and all the experiments that the students are going to carry out. This is one of the experiments that the teacher is going to evaluate and is going to do so by observation. During this activity, the educator analyzes the students' capacity to read and apply instructions and the capacity for analyzing and expressing the results of the experiment. The educator is also going to assess the behavior of the pupils (which is equivalent to 10% of the final mark) using a rating scale (Appendix 16).

➢ Activity 3: Song time

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Relaxation activity / routine activity.

MATERIALS: Flashcards and music video:

- https://www.youtube.com/watch?v=osbf0fc6x88&feature=youtu.be

CONTENTS: Healthy habits.

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: Since lesson number two, almost every session, during the last five minutes of class, the educator is going to play the Youtube video "The healthy song" in the class with the students. In session 8 the educator proposes the same TPR activity of session 3. The teacher hands out some flashcards with different elements that will appear in the song (healthy food, the human body, decay...etc), and then he/she plays the Youtube video. When the video shows one of the elements represented on the flashcards the owner of that flashcard stands up in order to represent the element by mimicry. Since the song is short, the teacher can even play the song twice.

RELATION WITH THE EVALUATION: The aim of this activity is to motivate the students and to make them relax before the next lesson. Furthermore, the song lets the pupils learn and reinforce part of the vocabulary of this teaching unit.

❖ Session 7: Lungs and illnesses

Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Vocabulary game (10 minutes) - Cigarettes experiment (20 minutes)	1 hour
Contents:	Evaluation criteria:	Learning standards:
- Healthy Habits	- Outline how the lungs exchange oxygen and carbon dioxide. - Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	- Describe the process of respiration and discuss lung's health. - List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ Activity 1: Vocabulary game

TIMING: 10 minutes.

ORGANIZATION: In groups of three students.

TYPE OF ACTIVITY: Routine/ Review/ Introductory activity

MATERIALS: Flashcards with images, definitions, and all the vocabulary studied

CONTENTS: Respiration, healthy habits

STANDARDS:

- Describe the process of respiration and discuss lung's health

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: During this first activity of session number 7 the teacher reviews with the kids the contents and the vocabulary studied using a vocabulary game. The teacher will select it according to the students' necessities and difficulties. In order to carry out the game, the teacher divides the class into three groups and each group receives different elements. The students of the first group receive images, the second some words, and the third some flashcards with the description of each element. The pupils have to move all around the class to find the threesomes: the picture must match with the appropriate word and with its definition. As soon as the students have found all the threesomes, they have to sit down together and wait. As soon as all the groups end the activity, all the groups show to the class the results.

RELATION WITH THE EVALUATION: This kind of routine is useful because it allows us to introduce the new activities and tasks of the day, to review what was done previously, to connect the knowledge, and to know the needs of the students. Furthermore, if we use games, reviewing exercises will be fun for the students and will motivate them.

➢ Activity 2: Cigarettes experiments

TIMING: 15/20 minutes.

ORGANIZATION: In groups of four or five pupils.

TYPE OF ACTIVITY: Experiment/ reinforcement activity

MATERIALS: Computer, projector, pens, notebooks, videos (it is authentic material):

- https://www.youtube.com/watch?v=HD__r66sFjk

- https://www.youtube.com/watch?v=Y18Vz51Nkos

CONTENTS: Respiration, healthy habits

STANDARDS:

- Describe the process of respiration and discuss lung's health

- List the habits to maintain health and prevent illness

- Outline how to look after the various organs in the body.

DESCRIPTION: First of all, the teacher asks the students:

- "How can we take care of our lungs and of our respiratory system?"

- "Does pollution help our lungs?"

- "Do cigarettes help our lungs?"

Then the teacher shows the students a video that shows how the lungs look like after 30 cigarettes: https://www.youtube.com/watch?v=HD__r66sFjk. After seeing the video the educator then asks:

- "What happened? What did we see in the video?"

- "Did you expect this result?"

- "Why does this happen?"

Afterward, the educator provides a video suitable for primary school children that explains the effect of cigarettes and of smoking on the human body and on lungs: https://www.youtube.com/watch?v=Y18Vz51Nkos. Finally, there will be a discussion and the teacher will present the possible different lungs' illnesses.

RELATION WITH THE EVALUATION: The assessment of this activity will be done by observation. The educator is also going to assess the behavior of the pupils (which is equivalent to 10% of the final mark) using a rating scale (Appendix 16).

❖ Session 8: Reviewing and solving doubts

Teaching Unit:	Activities (Appendix):	Timing:
Nutrition and Healthy life	- Healthy lifestyle schedule - Quizlet activity and self-evaluation - Song time	0,30 minutes
Contents:	**Evaluation criteria:**	**Learning standards:**
- Nutrition - Healthy Habits	- Identify the organs and processes involved in nutrition. - Describe how the digestive system extracts nutrients from food. - Outline how the lungs exchange oxygen and carbon dioxide. - Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	- Differentiate key organs and their functions in nutrition. - Paraphrase the process of digestion and discuss its importance. - Describe the process of respiration and discuss lung's health. - List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ Activity 1: Healthy life schedule

TIMING: 30 minutes.

ORGANIZATION: Individually or in pairs if not every student has a tablet.

TYPE OF ACTIVITY: Reinforcement activity.

MATERIALS: Pens, healthy life chart (the table is on the next page), notebooks with notes, and Natural Science books.

CONTENTS: Nutrition, respiration, and healthy habits.

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: During this activity, the students must produce their "healthy habits schedule".
The teacher asks the students:

   - "Do you think that you have a correct lifestyle?"

   - "Should you change some of your habits related to health?" "How can you do so?"

So the educator asks each student to put into practice all the knowledge acquired during the teaching unit and to create their own healthy lifestyle schedule. In the chart they need to explain which meals and which types of food they should eat day by day, along a whole week, building a correct balanced diet. In order to have a correct lifestyle, they should also include in their schedule some physical exercise, healthy habits, and correct hygiene. The teacher gives them a chart with all days of the week and the different parts of the day and the kids have to fill it up.

	Morning	Break	Lunch	Evening	Dinner	Night
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

When they have done their own schedule, they should make a video where they present their project and they can talk about the different advantages and disadvantages of their planning. They should use expressions such as:

- *I need to eat… rather than…*
- *I should do more exercise in order to…*
- *If I don't eat… I will not...*

Then the students need to hand it the final task on Google Classroom virtual campus and the presentation cannot be longer than 5 minutes.

RELATION WITH THE EVALUATION: It is an important final activity that reviews all the studied contents and lets the student put into practice all the theory studied. This kind of exercise lets them see if they interiorized the knowledge and know-how to apply and use it. This

is one of the tasks that are going to be evaluated using the oral presentation rubric (Appendix 15).

➢ Activity 2: Quizlet activity and self-evaluation

TIMING: 30 minutes.

ORGANIZATION: Individually or in pairs if not every student has a tablet.

TYPE OF ACTIVITY: Reinforcement activity.

MATERIALS: A computer, a projector, tablets, and the Quizlet application.

CONTENTS and STANDARDS: All the contents and standards of the teaching unit.

DESCRIPTION: During this activity, the teacher reviews with the kids all the contents of the teaching unit. The teacher prepares a fun quiz with the application Quizlet. Each student, according to the tablet number, individually or in pairs, answers the questions. At the end of this evaluation, the teacher goes through all the questions and reviews all the wrong questions with the aim to solve all the possible difficulties. The activity is not going to be evaluated, it will be used in order to clarify and solve doubts and the pupils get to revise and refresh all the concepts of the teaching unit with the purpose of getting ready for their final exam of session 9.

The teacher, after the reviewing activity, asks the pupils to self-evaluate using a ranking scale. The students should be able to self evaluate their-self and to analyze what content they should reinforce and study more. The pupils need to hand in the self-evaluation, but it will be an anonymous exercise, so they can feel free to say the truth.

RELATION WITH THE EVALUATION: It is an important revision activity that the teacher does in order to help the kids with their final exam because it gives the pupils the opportunity to review everything and to auto-evaluate themselves. The teacher even assesses the pupils' behavior with a rating scale (Appendix 16).

➢ Activity 3: Song time

TIMING: 5 minutes.

ORGANIZATION: The whole class together.

TYPE OF ACTIVITY: Relaxation activity / Routine activity.

MATERIALS: One big flashcard (Appendix 20) per each student, music video:

- https://www.youtube.com/watch?v=osbf0fc6x88&feature=youtu.be

CONTENTS: Healthy habits.

STANDARDS:

- List habits that maintain health and prevent illness

- Outline how to look after the various organs in the body

DESCRIPTION: Since lesson number two, almost every session, during the last five minutes of class, the educator is going to play the Youtube video "The healthy song" in the class with the students. In session 8 the educator proposes again the TPR activity of session 5. Every student receives a big flashcard with some keywords and images referred to the song and they should follow with their finger the song on the paper. The teacher can even print a bigger flash card that he can stick on the floor and the students can follow the song jumping on the images of the big flashcard.

RELATION WITH THE EVALUATION: The aim of this activity is to motivate the students and to make them relax before the next lesson. Furthermore, the song lets the pupils learn and reinforce part of the vocabulary of this teaching unit.

❖ Session 9: Conclusion

Teaching Unit: Nutrition and Healthy life	Activities (Appendix): - Final test (50 minutes) - Evaluation of the teaching unit by pupils (10 minutes)	Timing: 0,30 minutes
Contents: - Nutrition - Healthy Habits	Evaluation criteria: - Identify the organs and processes involved in nutrition. - Describe how the digestive system extracts nutrients from food. - Outline how the lungs exchange oxygen and carbon dioxide. - Recognize healthy habits in relation to diet and exercise. - Understand the ways in which lifestyle choices can affect health.	Learning standards: - Differentiate key organs and their functions in nutrition. - Paraphrase the process of digestion and discuss its importance. - Describe the process of respiration and discuss lung's health. - List habits that maintain health and prevent illness. - Outline how to look after the various organs in the body.

➢ Activity 1: Final exam

TIMING: 50 minutes.

ORGANIZATION: Individually. The kids will put the tables and chairs in 4 rows of 7.

TYPE OF ACTIVITY: Assessment activity.

MATERIALS: The final exam (Appendix 13) and an adapted final exam (Appendix 14), a pen, a pencil, a rubber, and a timer.

CONTENTS and STANDARDS: All the contents and standards of the teaching unit.

DESCRIPTION: The teacher assesses the pupils using a final test. The teacher prepares two types of tests: one for the majority of the students and an adapted version for the special education needs students. The educator asks to move the tables and chairs and to get in 4 rows of 7 students. Moreover, he/she reminds the pupils, the rules they should follow: no talking and no chatting is admitted.

In the first ten minutes of the next session, the teacher can explain the common mistakes made by students in the final assessment.

RELATION WITH THE EVALUATION: It is a really important part of the evaluation because it corresponds to 30% of the final mark.

➢ Activity 2: Evaluation of the teaching unit

TIMING: 10 minutes.

ORGANIZATION: Individually.

TYPE OF ACTIVITY: Assessment activity.

MATERIALS: Pens or pencils and a rating scale (Appendix 18).

CONTENTS AND STANDARDS: No contents and standards needed.

DESCRIPTION: The last 5 or 10 minutes of session 9, the teacher asks the pupils to evaluate the teacher's work and the teaching unit using a rating scale. The test will be anonymous and in Spanish.

RELATION WITH THE EVALUATION: It is an important evaluation of teacher work. The educator must evaluate his/her work and should consider what to change next time he/she uses this teaching unit again.
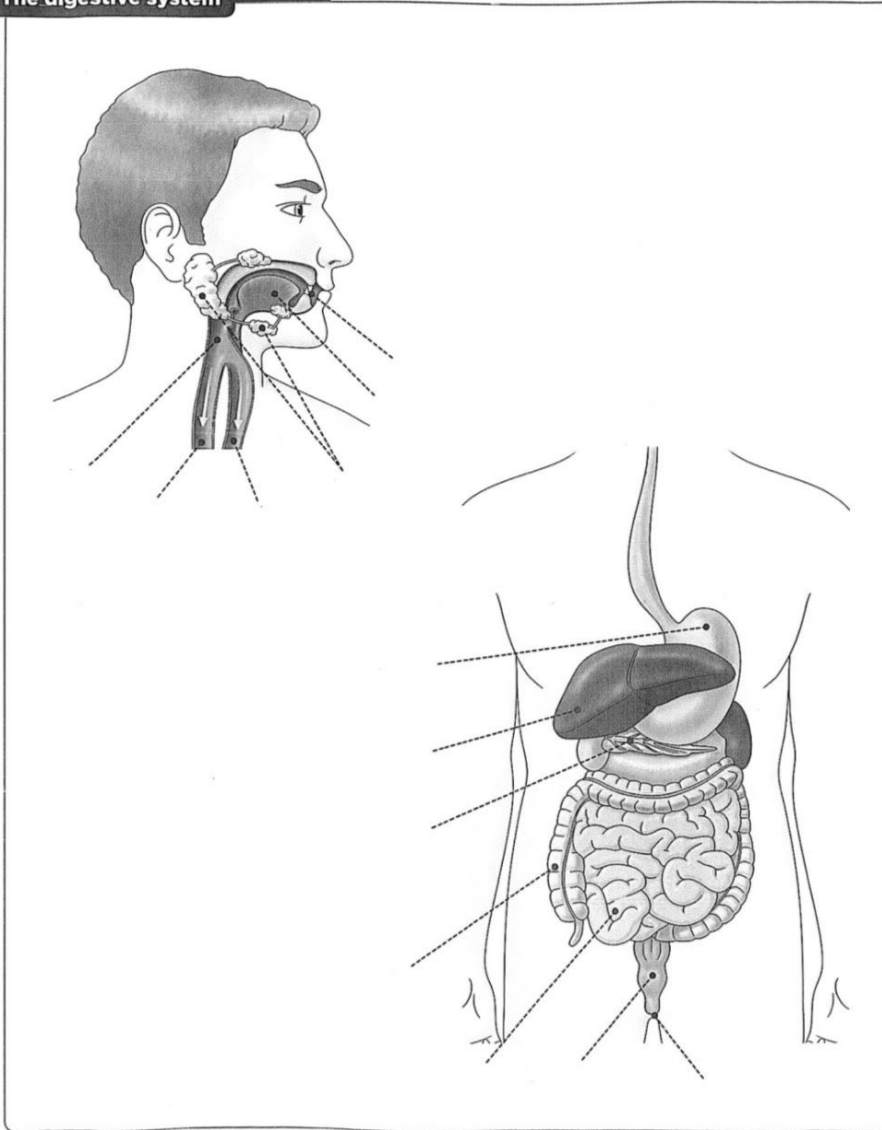
- Appendix 13: Teaching Unit's final exam

➢ Page 1

UNIT 2 END-OF-UNIT TEST   Name: _____

Class: _____

The digestive system

● match the words related to digestion to their definitions.

ⓐ saliva ❶ a flap of cartilage that keeps food out of the lungs

ⓑ chyme ❷ the last part of the human digestive system

ⓒ bile ❸ a liquid that makes food easier to chew and swallow

ⓓ anus ❹ a ball of food that travels from the mouth to the stomach

ⓔ bolus ❺ a thick, liquid mixture of food and gastric juices

ⓕ epiglottis ❻ a liquid that helps break down food in the small intestine

● How do we digest food?

ⓐ Water is removed from the waste in the large intestine.

ⓑ The stomach produces gastric juices to digest the food.

ⓒ The food is chewed and mixed with saliva in the mouth.

ⓓ Solid waste goes to the rectum and out through the anus.

ⓔ The food passes from the mouth and down the oesophagus.

ⓕ Basic nutrients are absorbed in the small intestine.

● Complete the text about the digestive system.

Humans need (a) _____ to live and grow.
The (b) _____ organs extract energy from
nutrients and eliminate (c) _____.

● Match the parts of the digestive system to their functions.

a. the mouth

b. the oesophagus

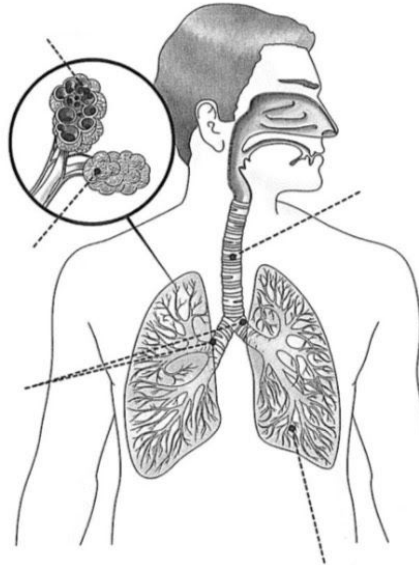c. the stomach

d. the small intestine

1. breaks down food and mixes it with gastric juices

2. crushes food and mixes it with saliva

3. works with the liver to dissolve and extract nutrients from food

4. a long stretchy tube that transports food

he respiratory system

- Are the sentences true (T) or false (F)? Correct the false ones.

  ⓐ Air passes from our nose and mouth to the lungs via the oesophagus. ☐

  _____

  ⓑ Air passes from the bronchi to the bronchioles and then to the alveoli. ☐

  _____

  ⓒ There are about 5,000 alveoli in each lung, covered with a network of capillaries. ☐

  _____

  ⓓ Carbon dioxide passes from the alveoli to the blood and oxygen is passed back. ☐

  _____

  ⓔ Carbon dioxide is expelled through the anus. ☐

  _____

- I Identify the odd one out. Explain your answers.

  mouth, lung, stomach, tongue

  water, oxygen, carbon dioxide, air
  proteins, fats, tissues, carbohydrates
  breathe, fat, beat, digest
  nose, kidney, pharynx, trachea

- In your notebook, copy and complete the flow chart for respiration.

  mouth / nose → ..... → ..... → lungs

  ..... → ..... → capillaries

- Describe the difference between inhalation and exhalation. What happens to the diaphragm, the lungs and the ribcage during each process?

- What happens in the alveoli? What nutrient goes into the blood? What waste product goes out?
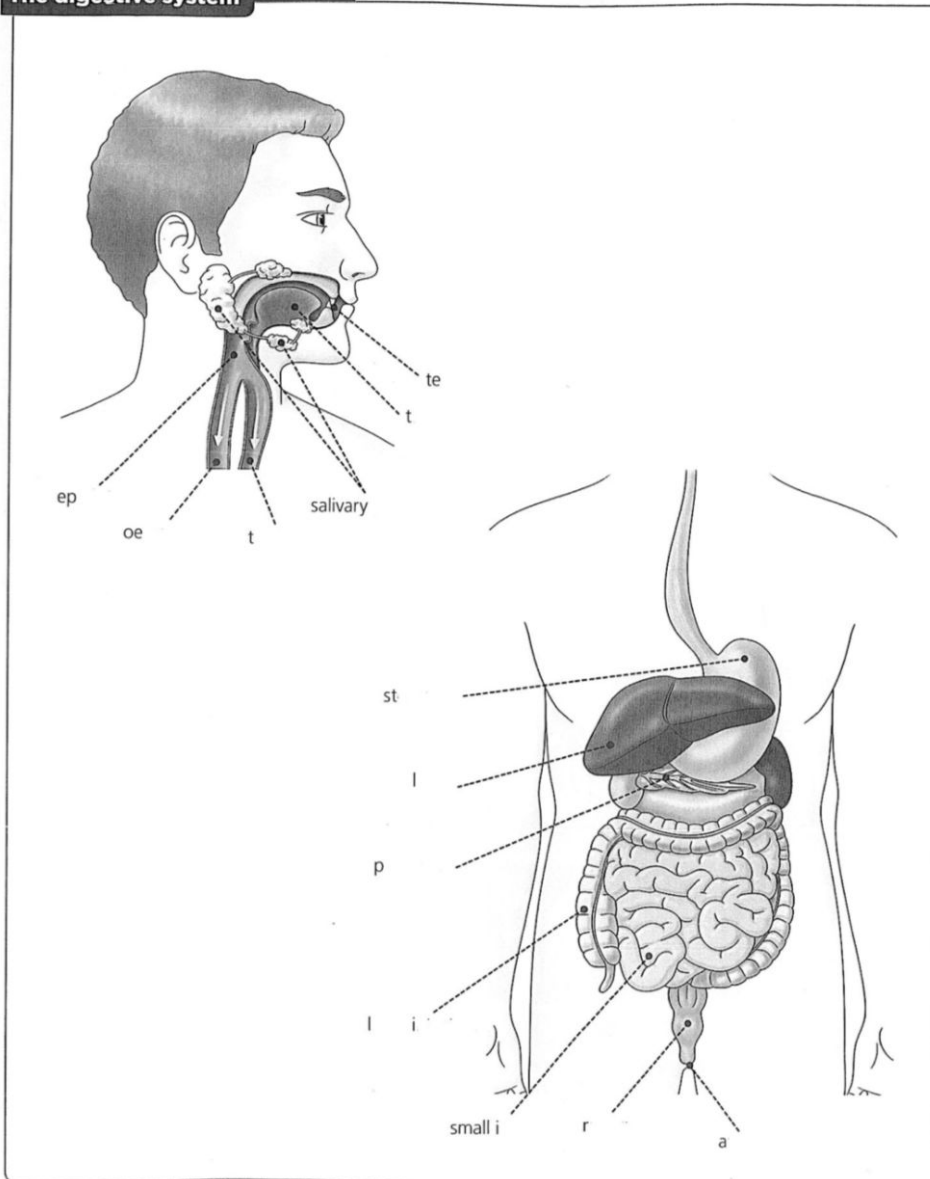
- Why should we exercise regularly?

- Appendix 14: Teaching Unit's adapted final exam

➢ Page 1

UNIT 2 | END-OF-UNIT TEST

Name: _____
Class: _____

• **The digestive system**

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• match the words related to digestion to their definitions.

ⓐ saliva		① a flap of cartilage that keeps food out of the lungs
ⓑ chyme		② the last part of the human digestive system
ⓒ bile		③ a liquid that makes food easier to chew and swallow
ⓓ anus		④ a ball of food that travels from the mouth to the stomach
ⓔ bolus		⑤ a thick, liquid mixture of food and gastric juices
ⓕ epiglottis		⑥ a liquid that helps break down food in the small intestine

• How do we digest food?

ⓐ Water is removed from the waste in the large intestine.
ⓑ The stomach produces gastric juices to digest the food.
ⓒ The food is chewed and mixed with saliva in the mouth. **1**
ⓓ Solid waste goes to the rectum and out through the anus.
ⓔ The food passes from the mouth and down the oesophagus.
ⓕ Basic nutrients are absorbed in the small intestine.

• Complete the text about the digestive system.

Humans need (a) __N_____ to live and grow.
The (b) __D_____ organs extract energy from
nutrients and eliminate (c) __W_____ P_____.

• Match the parts of the digestive system to their functions.

	1. breaks down food and mixes it with gastric juices
a. the mouth	
	2. crushes food and mixes it with saliva
b. the oesophagus	
	3. works with the liver to dissolve and extract nutrients from food
c. the stomach	
d. the small intestine	4. a long stretchy tube that transports food

he respiratory system

ca

t

a

b

b
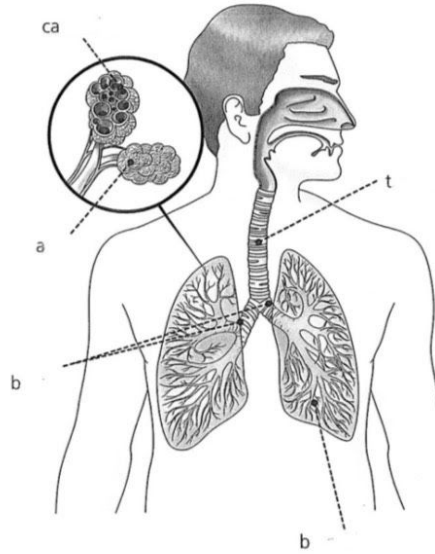
● Are the sentences true (T) or false (F)?

ⓐ Air passes from our nose and mouth to the lungs via the oesophagus. ☐

_____

ⓑ Air passes from the bronchi to the bronchioles and then to the alveoli. ☐

_____

ⓒ There are about 5,000 alveoli in each lung, covered with a network of capillaries. ☐

_____

ⓓ Carbon dioxide passes from the alveoli to the blood and oxygen is passed back. ☐

_____

ⓔ Carbon dioxide is expelled through the anus. ☐

_____

- Identify the odd one out. Explain your answers.

  mouth, lung, stomach, tongue
  water, oxygen, carbon dioxide, air
  proteins, fats, tissues, carbohydrates
  breathe, fat, beat, digest
  nose, kidney, pharynx, trachea

- In your notebook, copy and complete the flow chart for respiration.

  mouth / nose →   .....   →   .....   → lungs

       .....   →   .....   → capillaries

- Describe the difference between inhalation and exhalation. What happens to the diaphragm, the lungs and the ribcage during each process?

- Why should we exercise regularly?

- Appendix 15: Oral presentation evaluation rubric

Oral Presentation	Excellent	Good	Basic	Needs to improve
Content	The student deals with the topic adequately using precise and correct information. The vocabulary used is specific and appropriate.	The student deals with the topic adequately using precise and correct information. The vocabulary used is not really specific and appropriate.	The student approaches the topic using fairly correct information. The vocabulary used is not really specific.	The student approaches the topic using partially or entirely incorrect information. The vocabulary used is not specific.
Originality	The presenter sustained the interest of the audience in clever ways and the purpose of the presentation was achieved.	The presenter kept the audience's attention for the whole time and the purpose of the presentation was achieved pretty well.	The presenter kept the audience's attention for the most part. The purpose of the presentation was mainly achieved.	The presentation was not really interesting and the purpose of the presentation was not achieved.
Organization	The speech is organized sequentially and is really well done, it's easy to get the ideas and the message is completely understandable.	The speech is organized quite well. Not many difficulties to get the main ideas. The message is most of the time understandable.	The speech is organized but not in a logical order: first the main ideas and then the rest. The message is quite understandable.	The speech is not well organized. Difficulties to get the ideas and most of the time the message is not understandable.
Language	No problems with grammar or vocabulary. Highly effective and understandable message.	Few problems with grammar or vocabulary. Pretty effective and understandable message.	Many problems with grammar but not many in vocabulary. Understandable massage.	Many problems observed with grammar and vocabulary. The message is not comprehensible.
Pronunciation	Speaks clearly and distinctly all the time. Highly effective intonation. Distinctive and audible sounds pronounced.	Speaks clearly and distinctly. Slight problems in intonation. Word sounds with slight pronunciation problems.	Speaks clearly and distinctly most of the time. Some problems in intonation. Lots of pronunciation problems.	Doesn't speak clearly most of the time. Serious problems in intonation. Lots of pronunciation problems.

- Appendix 16: Rating scale of the students' behavior

Teaching Unit nº: **Student name:**				
(1 not achieved, 2 in process, 3 achieved)	**1**	**2**	**3**	**Extra comments**
The student has a participative and active attitude in the development of the lesson.				
The kid is involved in the activities.				
The pupil has appropriate behavior and respects the norms of each activity and respects his/her classmates.				
The student uses the target language during the lesson and the activities.				
The kid shows an interest in learning.				
The student respects speech turns.				
The kid listens carefully and responds to the tasks.				
The pupil has an active listening attitude.				
The student demonstrates an improvement.				
The pupil cooperates in the class group and with his/ her group.				
The student uses time wisely.				
The pupil always has the required material.				

- Appendix 17: Rating scale of students' self-evaluation

Students' self-evaluation				
(1 not achieved, 2 in process, 3 achieved)	**1**	**2**	**3**	**Extra comments**
Was I participative?				
Did I improve?				
Did I respect the rules?				
Was I noisy?				
Did I use the target language during all the activities?				
Have I promoted cooperative work?				
Did I carry out all the activities and tasks?				
Can I identify the organs and processes involved in nutrition?				
Am I able to describe how the digestive system extracts nutrients from food?				
Can I describe the food pyramid?				
Can I explain the structure of the respiratory system?				
Can I outline how lungs exchange oxygen and carbon dioxide?				
Do I understand the way in which lifestyle choices can affect my health?				
Do I know how to adopt healthy habits in relation to diet and exercise?				

- Appendix 18: Rating scale teaching unit's evaluation (assessed by the students)

Alumno/a:	
Criterio	Valoración
¿Te ha parecido interesante esta Unidad Didáctica?	😠 😦 😐 🙂 😃
¿Esta Unidad Didáctica te ha resultado divertida?	😠 😦 😐 🙂 😃
¿Crees que lo que has aprendido te servirá para algo?	😠 😦 😐 🙂 😃
¿Se ha explicado con claridad el/la profesor/a?	😠 😦 😐 🙂 😃
¿Has entendido todos los temas y todos los contenidos de la Unidad Didáctica?	😠 😦 😐 🙂 😃
¿Esta Unidad Didáctica te ha resultado fácil?	😠 😦 😐 🙂 😃
¿Te han gustado las actividades?	😠 😦 😐 🙂 😃

¿Qué actividad te ha gustado más de esta Unidad Didáctica? y ¿Por qué?
¿Qué actividad te ha parecido más aburrida de esta Unidad Didáctica? y ¿Por qué?
Comentarios y sugerencias:

- Appendix 19: Rating scale teacher's self-evaluation

Teacher self-evaluation				
(1 not achieved, 2 in process, 3 achieved)	**1**	**2**	**3**	**Extra comments**
Did I manage to develop the CLIL Framework 4Cs effectively?				
Have I achieved all the objectives and transmitted all the contents that I intended?				
Were the evaluation criteria selected adequate?				
Were the activities and the tasks adequate for achieving the selected objectives, contents, and evaluation criteria?				
Were the activities and the tasks appropriate to the linguistic and cognitive level of the students as they were planned?				
Were the students sufficiently aroused and interested?				
Have I used varied material?				
Have I managed to help children with special educational needs? Did I make the correct curricular adaptation?				
Did the learning environment and activities encourage more active learning?				
Has cooperative work been promoted?				
Has the use of the foreign language been promoted?				

- Appendix 20: "The Healthy song" big flashcard

- Appendix 21: "The healthy song" lyric

Go go go! Go go go!

Food keeps you healthy, food makes you grow, food gives you energy to go go go!

Go, The healthy song! Go go go! Go go go!

Sport keeps you healthy, sports makes you strong, sports exercise your body to keep you young!

Go, The healthy song! Go go go! Go go go!

Hygiene keeps you healthy, Hygiene stops decay, hygiene kills germs and keeps illness away!

Go, The healthy song! Go go go! Go go go!

Food keeps you healthy, food makes you grow, food gives you energy to go go go!

Go, The healthy song! Go go go! Go go go!

Go go go! Go go go! Go go go!