

Master's Dissertation/
Trabajo Fin de Máster

THE INFLUENCE OF CLIL METHODOLOGY THROUGH ICT ON STUDENTS' HEALTH AND LIFE QUALITY

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ABSTRACT

The society of the 21st century, in which new generations are said to be digital natives, demands a change. This change has different bases and one of them is education. This Master's Dissertation (henceforth MD) holds that this should be a bilingual and quality education and it focuses on the achievement of the improvement of the physical and motor condition through CLIL methodology and using ICTs, and specifically gamification as the main tool. In the bibliographic review the starting point of bilingual education in Spain and Andalusia will be analysed and the direction in which this MD goes will be established. Afterwards, a didactic proposal will be proposed (specifically a didactic unit of eight sessions).

Keywords: bilingual education, didactic proposal, physical and motor condition, CLIL methodology and ICTs.

RESUMEN

La sociedad del siglo XXI, en la que se considera a las nuevas generaciones como nativas digitales, exige un cambio. Este cambio tiene diferentes bases y una de ellas es la educación. Este Trabajo Fin de Máster (en adelante TFM) sostiene que ésta debe ser una educación bilingüe y de calidad y se centra en cómo se puede conseguir la mejora de la condición física y motriz a través de la metodología AICLE y utilizando las TIC, y en concreto la gamificación como herramienta principal. En la revisión bibliográfica se analizará el punto de partida de la educación bilingüe en España y Andalucía y se establecerá la dirección en la que se enfoca este trabajo fin de Máster. Posteriormente se planteará una propuesta didáctica (concretamente una unidad didáctica de ocho sesiones).

Palabras clave: educación, educación bilingüe, propuesta didáctica, condición física y motriz, metodología AICLE y TICs.

1. INTRODUCTION

Today, education remains a central issue in society. It is a controversial topic and one that raises different opinions. It is not easy to take stock of what has been achieved in the last decade in schools because of how different their objectives and modes of action are. On the one hand it should be so: this indicates that there is no pre-established program to follow, that schools are free to develop, in line with their particular conditions and needs and to express the diverse ideas that each of them has (Leiton et al, 2022). In this context, for some time now, news questioning education in general and bilingual education in particular in Spain have been appearing in newspapers and on television news. Schools refer to the problems associated with this type of methodology and the limited resources available to them. But it is not clear whether this happens throughout the educational reality.

In a globalized context, where people with different interests, languages and cultures coexist, it is necessary to use a common vehicle: language. Specifically, it is necessary to use the same language to communicate. This paper will focus on the development of a methodology that fosters a common communicative vehicle such as bilingual education, which has undergone different changes throughout history and how it can be effectively developed to improve the teaching-learning process.

According to Vila (1983:24), bilingual education has gone through several stages throughout Europe, being non-existent at the beginning, as only language learning was conceived, and even this view of language learning was not so successful: in the early 1920s and 1930s, any kind of influence of a second language was rejected as detrimental to the intellectual and academic development of the learner. After the Second World War and the collapse of the losing countries, and after the social and economic consequences for these nations, there was a certain opening in this aspect, but there were currents that continued to declare that the best way to teach was in the mother tongue, which led to an exaltation of the values of each country such as culture, language, history, etc.

According to Marina et al. (2015), currently, and for several decades, there has been a feeling of educational emergency in all nations. In some cases, the alarm is due to specifically school-related problems, such as illiteracy, school failure or the worrying drop in knowledge levels. In other cases, it is due to pressures from the world of work, such as low qualifications in different subjects or the lack of professionals in different fields. All this has prompted multiple educational reforms to try to alleviate these problems, among which bilingual

education, and specifically Content and Language Integrated Learning (henceforth CLIL) has started being viewed as a necessary methodology.

Other problems must be added to these, such as the physical state and health of adolescents. On the one hand, according to the World Health Organization (2022), since 1975, obesity has tripled worldwide. This disease affects more than 800 million people. According to the Spanish Society of Endocrinology and Nutrition (2021:14), **the prevalence** of overweight in adults in our country is estimated at almost 40%. Its prevalence in childhood and teenagers in Spain is 14.2%, one of the highest in Europe, being only behind Greece, with 18%, and Italy, with 15.2%. The key factors in addressing this problem in childhood are eating habits and sedentary lifestyles (World Health Organization, 2022).

According to Barragán (2021), on the other hand, the mental health of people in general and adolescents in particular has worsened following the pandemic derived from Covid-19. Among these psychological effects are the multiple clinical manifestations associated with anxiety, mental anguish, negative stress, irrational fears, fear of death, paranoia, loneliness, frustration and depression. In the same vein, let us recall that the general strategy in a large number of countries was social distancing through quarantines carried out at home, which could last from one to several months. Other measures were also taken, such as closing of places of socialization (leisure, parks...), social distancing, etc.

These last two problems (both physical and mental health) are aspects that can be addressed in the subject of physical education. Efforts to include quality physical education in the educational context have been made over the last few years: in many autonomous communities the number of hours of the subject has been increased to 3 per week. In Andalusia, in the first year of Secondary School, 3 hours per week are already taught. According to Kapandji (2020), the main reason for tackling the problem of obesity at an early age is the importance of changing it through the adherence of adolescents to active and healthy lifestyles, including the practice of moderate or vigorous physical activity and, -proper nutrition- among other factors. It is fully confirmed that an overweight child is more likely to become an obese adult. Moreover, through exercise, there is an increase in the secretion of different hormones such as serotonin (the happiness hormone) while it allows us to interact with other athletes.

Finally, although it may seem that bilingual education and obesity are unrelated, the former could be used to eradicate the latter in the educative context. This whole process could be

aided by technologies since we live in the age of new technologies. The reality of these schools is permeated by Information and Communication Technologies (henceforth ICTs): online classes, electronic devices... therefore, a key factor in the life of adolescents is digitalization. The latest data from the National Institute of Statistics indicate that access to Information and Communication Technologies is occurring at an increasingly younger age (INE, 2021). As an example of these data, it can be pointed out that teenagers spend 4 hours (per year) more on technologies than on former studies or that 20% of all of them are at risk of addictive use.

All these factors explained throughout the introduction will be developed through this master's thesis. Bilingual education, sedentary lifestyles and digitalization will be the epicenter of this literature review, which aims to address different aspects related to CLIL methodology and the use of ICTs. Thus, before proposing a didactic unit that combines these elements, different important aspects will be developed theoretically.

2. THEORETICAL FRAMEWORK

For a long time it was considered that learning was synonymous with behavioral change, because a behaviorist perspective of educational work dominated. However, it can be stated with certainty that human learning goes beyond a simple change of behavior; it leads to a change in the meaning of experience. Human experience involves not only thought, but also affectivity and only when they are considered together does it enable the individual to enrich the meaning of his or her experience (Ausubel, 1983).

The everyday use of the word "significant", which the Real Academia Española refers to as the importance that something has because of what it represents, can be understood differently in education, as Ausubel et al. in their Cognitive Psychology defined it as a type of verbal learning in which the learner is able to relate new information to what he/she already knows in a non-arbitrational way (Rusinek, 2006).

On the one hand, Ausubel (1983) states that student learning depends on the previous cognitive structure that is related to the new information. Cognitive structure should be understood as the set of concepts and ideas that an individual possesses in a certain field of knowledge, as well as its organization.

On the other hand, meaningful learning is that in which ideas expressed symbolically interact in a substantive and non-arbitrary way with what the learner already knows. It is important to

reiterate that meaningful learning is characterized by the interaction between prior knowledge and new knowledge and that this interaction is non-literal and non-arbitrary. In this process, new knowledge acquires meaning for the subject and previous knowledge acquires new meanings or greater cognitive stability (Moreira, 2019).

Meaning learning is a theoretical approach that establishes that the main protagonist is the student who constructs his knowledge making it part of his cognitive scheme through a dynamic and self-critical learning process (Moreira, 2019). This learning, which implies longer retention than memorizing, occurs when humans relate new concepts to pre-existing familiar concepts. Then, changes are produced in our cognitive structure, concepts are modified and new links are created. It is a useful tool because it enables real learning, it generates greater retention and it facilitates transferences to other real situations (Ballester, 2014). The advantages of meaningful learning in the educational context are varied:

- There is greater motivation in the student body since it is part of the teaching-learning process.
- It fosters the self-esteem of both the student and the teacher.
- The retention of information is more durable since the adolescent constructs his or her own learning.

This theoretical framework and all the work will be based on three pillars: bilingual education (CLIL methodology) as the main tool to achieve the proposed objectives, new technologies (ICTs from now on) as a complement to this education in a second foreign language, and physical education as the backbone.

2.1. ICTs

Teaching, which is currently influenced by the competency paradigm, proposes to acquire key or basic competences, among which are informational and digital competences. Being competent, which, let us remember, is the opposite of being "incompetent", is the ability to mobilize and use all available resources to face and solve problems in real and changing contexts. Thus, digital competence is defined as the sum of skills to search, obtain, process and communicate information and transform it into knowledge. It requires the mastery of different languages (text, hypertext, iconic, visual, sound, etc.) and guidelines for understanding and transferring them (McGarr and McDonagh, 2019).

Among the challenges the school faces is that of new technologies, which have permeated not only the classroom but also society in general. The inclusion of ICTs in the classroom demands new knowledge, competences and skills, (learning differently, learning to be creative and creative and flexible, to process huge amounts of information, to design, to execute collaborative projects...). It challenges us to recycle and reinvent ourselves and it also demands efforts of adaptation and understanding, because this hyper-technified and "mass-mediated" reality leaves us no choice. We cannot decide whether or not we want to use technology: we must decide how we are going to effectively incorporate it into teaching and learning processes (Doiz et al., 2014).

Information and Communication Technologies are those tools that allow people to develop in today's world. It is no longer only a form of leisure and entertainment, but it has become an essential resource in work, social life, etc. Information and communication technologies (ICTs) are of key importance at all levels of the educational system. At each stage of cognitive activity, research and practical applications in all branches of knowledge ICTs perform both the functions of tools and objects of knowledge (Bilyalova, 2016).

Information and Communication Technologies have become one of the most effective agents in promoting change and progress in today's society. Their role as a means of communication and socialization, as well as their functions in seeking to improve processes in the fields of economy, health or leisure, have made ICTs a fundamental element of change, even in everyday aspects of our daily lives. The introduction of ICTs is transforming our society in all areas, including our scientific culture, the foundation on which the development of modern society is built (Colás et al., 2018).

The implementation of ICTs in the educational system is mainly influenced by one issue, which is that the development of technologies in this field depends on political-educational decisions at different levels of responsibility: state, autonomous community and school. We must not forget the fact that Spain has the peculiarity of not having a common, well-coordinated and agreed plan at the state level, but rather isolated actions by each of the autonomous communities (Colás et al, 2018).

The irruption of ICTs in the field of education has not been easy, but it has been positive, since they provide educational environments that considerably expand the possibilities of the system, not only in terms of organization, but also in the transmission of knowledge and the development of skills and attitudes. The key is to transform information into knowledge, and

knowledge into education and meaningful learning. At present, the use of ICTs in the educational environment takes the form of the application of new technological advances such as the Internet, projector, digital whiteboard, etc. (Méndez, 2012).

Also, ICTs fit the students' new needs, as students in the current educational system have changed, as Contreras (2018:1) states: "Today's students are native speakers of the digital language of computers, video games, and the Internet". They belong to a generation that has evolved with technology and developed new skills and perceptions of the world around them. In this sense, the digital natives mentioned by this author are characterized by their ability to face new challenges, set objectives and meet goals, which is connected to next issue in this Master's Dissertation, gamification.

2.2.Gamification

The design and implementation of diverse learning strategies are essential to improve the level of student achievement. Learning strategies that involve the student in his or her own learning process are essential.

However, when they find themselves in the educational context, they often do not recognize the presence of any of these characteristics, since the traditional type of classes do not allow it, the student simply plays a passive role as a receiver of information and learn by repeating the learning based on repetition of the procedure performed by the teacher. Therefore, with the use of traditional learning methods in education, the skills of the modern student are being wasted.

In this context, ICTs are tools available to Gamification. Thus, there have been attempts to gamify activities in very different sectors (education, business, human resources, etc.). In the field of education, gamification refers to a process that incorporates different aspects of the game in areas that have nothing to do with it. As it is the case of the Nike + application to monitor physical exercise. In addition to this other authors have written about this concept specifically in relation to education (Méndez, 2012; Moreira, 2019). These mention that game elements generate a change in people's behavior in a positive way, and motivate them to move through instructional activities to achieve goals.

The fundamentals of gamification according to Werbach and Hunter (2012), are dynamics, mechanics and components. Dynamics is the concept, the implicit structure of the game. The mechanics are the processes that trigger the development of the game, and the components are

the specific implementations of the dynamics and mechanics: avatars, badges, point collections, rankings, levels, teams, among others. The interaction of these three elements is what generates the gamified activity.

Contreras and Eguia (2016:7) define gamification as: "The power of using game elements and game design to improve the engagement and motivation of participants". From this point of view, it is conceived that the use of game elements and game design, not only serves as a support to improve the engagement and motivation of participants in the learning process, it also favors the assimilation of content, the development and acquisition of skills and the commitment and involvement of students in the teaching-learning process.

It should be noted that gamification is not synonymous with gaming, as gaming is limited to the use of video games in the classroom. Contreras and Eguia (2016) state, concerning gamification that rather:

"It is about using mechanics associated with the video game, to present the student with a series of learning challenges, which, when the student has fulfilled them, generate a new learning process. When the student has completed the challenge, a short-term reward is generated the complexity of the challenge" (Contreras & Eguia, 2016:18).

A fundamental part of the game is the stimulation of the participant to become more and more involved in the game. Foncubierta and Rodriguez (2014) consider 6 factors as the stimulants of the gamified activity (Figure 1). The first factor is positive interdependence, which refers to socialization within the game, and since in gamified activities great importance is usually given to teamwork, this factor plays an important role because the progress made in the team depends on all the members of the team, which favors communication among them and generates communication between them. As well as a feeling of belonging to something.



Figure 1. Stimulating factors of the gamified activity (Foncubierta and Rodríguez, 2014).

The second factor considered by Foncubierta and Rodriguez is curiosity and experiential learning, this could be considered one of the most important since it is the curiosity to learn something, the excitement of discovering and exploring is what enhances the fact of gamifying an activity, it could be said that it is the heart of the strategy. Regarding the protection of self-image and motivation, this is encouraged by the selection or creation of an avatar by the participants (Foncubierta and Rodriguez, 2014). This projects an image of themselves that could well be the alter-ego of the student, which generates a sense of identity that can help to reinforce their self-esteem.

As for the sense of competition, being a stimulating element it is a determining factor that may well enhance the involvement of the participant by wanting to win or be better than others, however, it is also a factor that can be counterproductive because, if the student feels lagging behind or unmotivated for not being at a high performance level, instead of increasing his motivation it could decrease it. Autonomy is an important factor of gamification since within the strategy the learner is allowed to make decisions about his own learning, either in terms of deciding the activities he wants to carry out or giving him time options for the completion of the same, by feeling responsible for his own progress the learner develops a sense of autonomy and responsibility which helps him to become more involved in the learning process (Foncubierta and Rodríguez, 2014).

The last factor would be the tolerance to error. Importance of this element lies in giving the learner opportunities to repeat challenges or to or to give them some option in case they do not obtain a favorable result. This is very important because when you are in the game and you lose, this is usually demotivating and by having a tolerance to error with immediate

feedback avoids the desertion of the student from the activity and most importantly teaches him/her to learn from the mistake.

The use of gamified strategies in the educational environment allows for a potential improvement in student learning due to the use of different elements that imply a manipulation in the behavior of students in order to enhance their involvement in the learning process, becoming active participants and not just spectators. Active participants and not limited to being spectators only. Therefore, making use of gamified strategies more than following a formula or a sequence of steps, it is a whole art that is directly related to creativity, planning and commitment of the strategy designer puts into it (Foncubierta and Rodríguez, 2014).

2.3. Bilingualism

The increasing implementation of bilingual education programs in Spain is changing the teaching paradigm in many schools in most of the Autonomous Communities. . But at the same time, this implementation is raising some controversy, mainly because its proliferation is giving rise to different ways of putting into practice the so-called "bilingual education". There is no roadmap to follow guidelines.

Bilingualism is, technically speaking, the ability to express oneself in two languages on a more or less equal footing using the language as a vehicle. What we know as balanced or natural bilingualism is based on the acquisition of both languages through simultaneous exposure, in terms of quantity and quality, to both languages (Meyer, 2010). Bilingual education programs do not advocate bilingualism of this type since students are not exposed to two languages on equal terms. What bilingual education programs are trying to achieve is a type of bilingualism known as functional or additive bilingualism, in which proficiency in one language is clearly preponderant.

A study by Fandiño and Bermúdez (2002) compiles this concept, of which we highlight the following features:

- Ability to speak two languages as native speakers do, pronouncing well-formed, meaningful utterances.
- Quality of a person or population that makes current use of two languages without a marked preference for one over the other.

-The ability of an individual to communicate in two or more codes, in differentiated contexts that require the use of one or the other linguistic system.

-Phenomenon of competence and communication in two different languages.

Bilingual people have to coordinate two linguistic systems. This implies some gains. According to Ardila (2012), among the gains of bilingualism are: greater mental flexibility; a superior development of those cognitive functions related to attention and inhibition; the use of a greater number of cognitive strategies in problem solving; an increase in the so-called metalinguistic awareness; and a greater ability to communicate.

Since 1995, the linguistic policies promoted within the European Union have sponsored the implementation of innovative teaching methods related to second language teaching, among which those related to bilingual teaching stand out. Thus, bilingual education programs have become one of the objectives of the political agenda of the European Union and, in the case of Spain, of all its Autonomous Communities, which in one way or another are immersed in its implementation. Most bilingual education programs in Spain (and in many other parts of the world) have been based, in general, on the results of Canadian and Spanish immersion programs and, specifically, on the so-called Content and Language Integrated Learning (CLIL).

In Andalusia, bilingual education is viewed as an innovative approach that goes beyond the mere teaching of a language and, so it, involves methodological, curricular and organizational changes (Consejería de Educación, 2013). Evidently, the idea that the knowledge and good use of English is essential in the 21st century is not exclusive to Spanish society and its relevant personalities. The penetration of English in countries where it is not a mother tongue is a well-known fact (Méndez García, 2012).

Once the definition of bilingualism has been established, we will go on to establish the objectives to be achieved through the implementation of this method (Mehisto et al, 2008):

-To promote the acquisition and learning of both languages through a content-based integrated curriculum.

-To make students aware of the diversity of cultures.

-Facilitate teacher and student exchanges.

-Promote the use of new technologies for foreign language learning.

In order to implement bilingual teaching and achieve these objectives, the most widely used methodology in Spain is CLIL methodology. In this approach, academic contents are taught through a foreign language so that the learning of these contents and the learning of the foreign language itself are developed in parallel (Pavón, 2018). In the following section, this approach will be discussed in a more detailed way.

2.3.1. CLIL Methodology

One of the bases of bilingualism is CLIL methodology (Content and Language Integrated Learning). According to Mehisto et al. (2008), "CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content and the simultaneous learning of a foreign language". The CLIL approach is characterized by the use of one or more NLA (non-linguistic area) for language teaching. According to Coyle et al (2010), this methodology is a dual educational approach in which an additional language is used for the learning and teaching of content and language alike. CLIL involves studying or teaching content and language through a second language, while learning to use that language and using it as a medium for learning. On the other hand, Mehisto et al (2008) define this concept as "an educational approach where curricular content is taught through a foreign language normally to students in regular primary, secondary and higher education". This approach is constructivist (building learners' knowledge from what they already know) and it influences key competences.

As regards CLIL's methodological principles, Campillo summarizes them as follows:

Acquisition vs. Learning: the acquisition of content in a subconscious way is prioritized.

That is, it is not about learning a task or content in an analytical way but in a natural way.

Input: it is necessary to provide an input to the students, taking into account their needs and interests, so that they can actively participate in the teaching process.

Output : learners should be able to put into practice the knowledge they have acquired by providing them with practice opportunities.

Interaction: it is through interaction that learners can increase their learning possibilities. This aspect is closely related to the previous principle.

Constructivism: this principle reaffirms the idea that students construct their learning based on the knowledge they already have, thus providing meaningful learning.

Significant learning: closely related to the previous principle, it is based on the idea that when constructing new learning we use what we already know.

Socio-constructivism: socio-constructivism is based on Vygotski's theory, which states that students are in a zone of proximal development (ZDP) when performing a task and that if the necessary help is provided to push them to do a task, once this is achieved the student will be able to perform that task autonomously.

Authenticity: the task, language and materials must be realistic and appropriate to the activity and the objective to be achieved.

Dual focus: Language and content: lessons should focus on both the meaning and the way in which the target language is used. There must be a balance between both aspects.

Table 1. Methodological principles in CLIL (Campillo, 2017).

CLIL content can be as flexible as each context requires and it can be implemented in a classroom in different ways. It can be developed through thematic activities, units or projects, or through cross-curricular studies involving different contents of the school curriculum, providing students with opportunities to enhance learning and acquire skills and development.

According to Gómez (2013), CLIL methodology has a number of advantages:

-A second language (L2) is learned.

-Materials and real-life situations are used within a holistic approach, which favors the understanding of the contents.

-It develops and promotes a multicultural and multilingual type of education, which helps to enhance cultural diversity and social interaction.

At the institutional level, the Eurydice Network report (2006) states that the objectives of implementing CLIL methodology in the different educational systems are the following:

To prepare students for life in a more internationalized society and to offer them better job prospects in the labor market (socio-economic objectives).

To communicate to learners the values of tolerance and respect for other cultures through the use of the target language in CLIL (socio-cultural objectives).

To enable learners to develop:

-Language skills that emphasize effective communication by motivating learners in language learning for the use of real and practical purposes (linguistic objectives).

-Content knowledge and skills learning through the stimulation of the assimilation 7 of subject matter content based on different and innovative approaches (education objectives).

Table 2. Objectives of CLIL methodology. (Eurydice, 2006).

In the following sections, some of the bases of CLIL methodology are going to be developed. To start with, CLIL will be based on the 4Cs model of Coyle et al. (2010), which is formed by four basic pillars: content, cognition, culture, and communication.

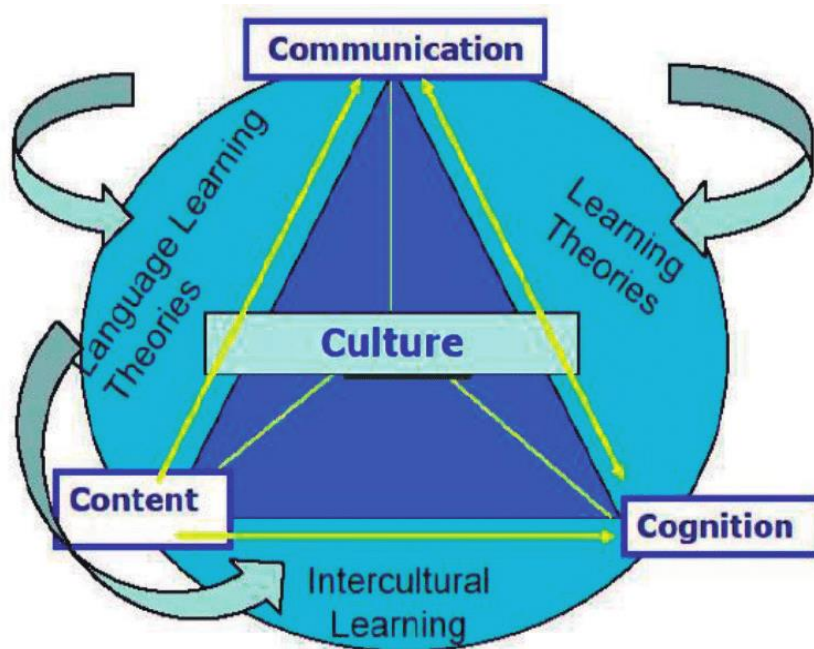


Figure 2. The 4Cs framework of CLIL (Coyle et al., 2010).

2.3.1.1. Content

In Spain, in secondary education, the Royal Decree 1105/2014 defines content as "*set of knowledge, skills, abilities, skills and attitudes that contribute to the achievement of the objectives of each teaching and educational stage and the acquisition of competences. The contents are arranged in subjects, which are classified into subjects, domains, areas and modules*". At the heart of the learning process lie successful content or thematic learning and the acquisition of knowledge, skills and understanding. It is the subject or the project theme (Coyle, 2005). Content in CLIL refers to the thematic learning students are expected to acquire. It is very useful for teachers to think of content in terms of knowledge, skills, and understanding because this idea will guarantee deeper learning Content matter is not only

about acquiring knowledge and skills; it is about the learners creating their own knowledge and understanding and developing skills (personalized learning) (Mariño, 2014).

2.3.1.2. *Cognition*

On the one hand, according to Ruiz and Jiménez (2012), "cognition involves the activation of higher or complex cognitive processes associated with quality learning". Piaget states that cognitive development occurs through interaction with the environment and biological maturation (Piaget, 1976). On the other hand, Coyle et al. (2010) indicate that students should possess both problem-solving skills and a proactive attitude towards creative thinking.

For CLIL to be effective, it must challenge learners to think and review and engage in higher order thinking skills. CLIL is not about the transfer of knowledge from an expert to a novice. CLIL is about allowing individuals to construct their own understanding and be challenged (whatever their age or useful taxonomy to use as a guide for thinking skills is that of Bloom, 1956). Coyle (2005) has created two categories of thinking skills: lower order and higher order. It takes Bloom's taxonomy for a well-defined range of thinking skills. It serves as an excellent checklist. Moreover, content is related to learning and thinking (cognition). To enable the learners to create their own interpretation of content, it must be analysed for its linguistic demands; thinking processes (cognition) need to be analysed in terms of their linguistic demands.

On the other hand, learning a subject in another language involves the activation of superior or complex *cognitive* processes associated with quality learning (Ruiz and Jiménez, 2012). However, in a CLIL program it is necessary to establish a balance between low order thinking skills (Low order thinking skills) and higher order thinking skills (Low order thinking skills) LOTS; for example: remembering, understanding, applying...) and high order thinking skills (HOTS) (High order thinking skills: HOTS; for example: analyse, evaluate...) (Coral, 2012).

2.3.1.3. *Culture*

If our multicultural and multilingual world is to be celebrated and its potential tapped, this requires tolerance and understanding. To study through a foreign language is to foster international understanding. According to Coyle (2005), "is a vital concept and holds the key to self-discovery". *Culture* can have a broad interpretation, for example, through multicultural citizenship. *Culture* (also known as community and citizenship) refers to the learning community of a classroom and school and, more broadly, to local and global cultures.

The relationship between cultures and languages is complex. Intercultural awareness is central to CLIL. It has its rightful place at the heart of CLIL. Learners are encouraged to understand themselves as citizens of the world and to understand both their own and other cultures. It is about understanding our own culture (and language) and that of others, and raising awareness of the responsibilities of global and local citizenship. It is a great opportunity to go beyond the classroom and set up situations where communication is required, e.g., projects between schools in different countries (Meyer, 2010). The ultimate goal is to promote international awareness and understanding.

Language needs to be learned which is related to the learning context, learning through that language, reconstructing the content and its related cognitive processes. This language needs to be transparent and accessible; interaction in the learning context is fundamental to learning. This has implications when the learning context operates through the medium of a foreign language.

The acquisition of knowledge, skills and understanding related to the content is the axis around which CLIL teaching pivots, being the content the one that determines the learning trajectory (Ruiz and Jiménez, 2012). For its part, the inclusion of *culture* favors knowledge and the integration of diverse perspectives that allow for the development of self-awareness and awareness of others. In this sense, sport is considered as a specific part of our social and cultural context. Interpersonal relationships, personal development, the cultural and social cohesion value of sport, are inherent to physical education (henceforth P.E.) (Coral, 2012).

2.3.1.4. *Communication*

Communication is briefly to express themselves effectively, whether in productive skills as spoken or written forms, or receptive skills as listening and reading. According to Coyle (2005), language is a conduit for communication and for learning. The formula learning to use language and using language to learn is applicable here. Communication goes beyond the grammar system. It involves learners in language using in which is different from language learning lessons and as regards this, CLIL does involve learners in learning language too but in a different way.

Finally, *communication* involves using the language to learn and, at the same time, learning to use the language. To this end, it is necessary to make the language accessible for the purpose of learning (Barrios & García, 2006). Thus, below, it is proposed the language triptych in

graphic form so that the three types of languages that must be present for the CLIL methodology to be successful are clear: language related to understanding the subject; functional language for carrying out learning tasks; and new language likely to arise according to individual learner needs during this process (Coyle et al, 2010).

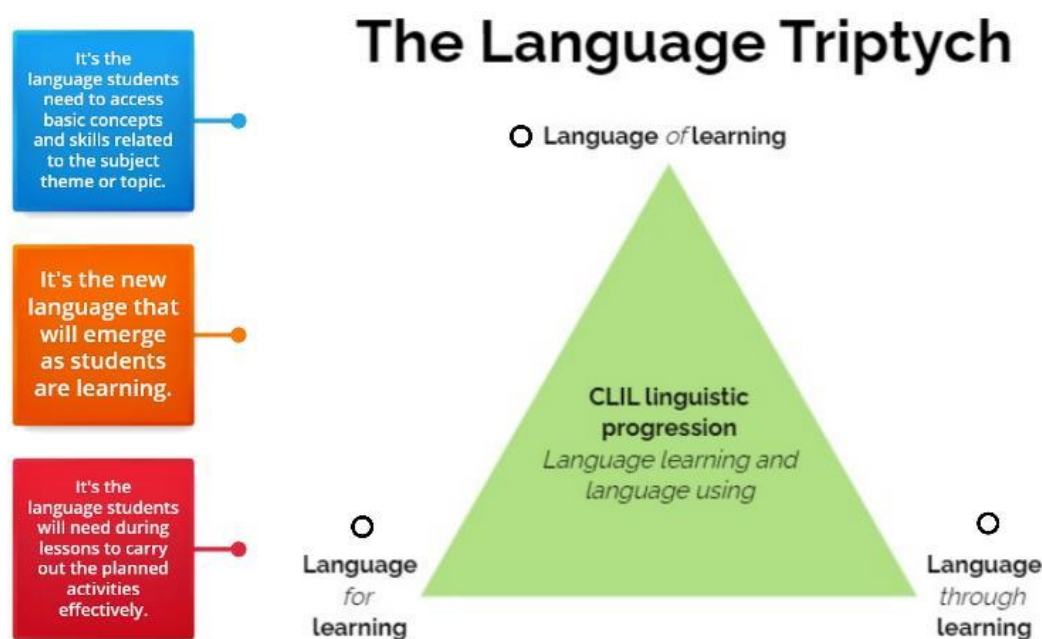


Figure 3. Language triptych (Coyle et al, 2010:36)

2.3.2. Physical education

It is important to know how physical education has evolved throughout history in order to know where it is heading. In prehistoric times physical activities were performed in order to survive. In classical Greece, the objective was to train soldiers to defend the towns. Years later, during the Visigothic era, different sports such as wrestling, athletics, etc. were already practiced. Physical education, as we know it nowadays, was born in the mid-nineteenth century. It went from a physical culture based on preparation for everyday life (hunting, running...) to a physical education based on health and quality of life.

2.3.2.1. Physical education as a subject

In secondary education, physical education is a subject of the block of specific subjects that has a teaching load of 2 or 3 hours, depending on the course. In Andalusia, in the first year of the first grade it has three hours per week and in the rest of the courses, 2 hours per week. Physical education is defined as the use of physical activity and sport for educational purposes. The benefits of this subject are many (Graham et al., 2012).

This area has the main characteristic that cognitive and motor skills act together; therefore, as Ruiz and Jiménez (2010) argue, thought and action remain united. In addition, the experiential nature of the subject is key to promote meaningful learning. In this sense, these authors consider that physical education presents a series of situations that the student perceives as extrapolable to their daily life, which increases their motivation, favoring learning, as we have already said, meaningful. Likewise, there are numerous opportunities to apply cooperative work.

P.E. causes changes at the physical level: bone and muscle (formation of bone cells, improves the amplitude and mobility, increases capillarization, affects the improvement of lung capacity ...), nervous (improves the transmission of nerve impulses, greater neuromuscular coordination, improves sleep, digestion and circulation), while it also causes changes at the psychological level: decreases tension and stress. It has a beneficial effect to relieve states of anxiety and irritability. In addition, it also improves autonomy, self-esteem and self-concept.

2.3.2.2. Physical education in CLIL methodology

Authors such as Sato and Hodge (2016) consider that any area could be used to work on, develop and demonstrate students' linguistic competence in English. PE is a subject frequently chosen to be part of the bilingual context because it is considered optimal for students to develop their linguistic competence in English and in a bilingual context it is considered optimal for students to achieve this linguistic competence (Fernández-Barrionuevo, 2009).

With the development of bilingual programs in Spain, there has been an effort by some institutions, publishers and teachers to apply CLIL methodology to the field of physical education. This impulse has given rise to a series of publications that focus on different curricular elements. Physical education in CLIL is an educational option that presents a great interest, both for the contribution of the area to foreign language proficiency and for the benefits that can be obtained by physical education.

In Andalusia, according to the organizational characteristics of each high school, the different non-linguistic areas to be taught during the academic year are chosen. For this, it is important to know the methodological peculiarities of each subject. Thus, physical education in the context of CLIL is defined as the integrated learning of physical education and English language in a didactic approach in which motor activity and sport are learned, taught and practiced using a foreign language. It is a holistic educational approach, based on the principles of learning by doing, which focuses on motor learning and health that promotes cognitive skills and develops interpersonal and social relationships (Coral, 2012).

PE becomes a subject that, due to its educational potential, can promote the learning of English without diminishing the treatment of the curricular contents. The use of open and participative methodological strategies will allow students to reflect on the process as well as enhance their critical and creative awareness. At this point, it is necessary that English is not used as something externally imposed, but rather that it is used because the methodology and associated evaluation used favours its use as a consequence of the learning demanded. If, in addition, grammatical structures common to other areas are provided (through the sequencing of linguistic competence) that interrelate the use of English as a consequence of the learning demanded), learning will be more effective and meaningful (Hernando et al., 2017).

The application of CLIL methodology entails a series of advantages and disadvantages. Coral (2012) states that physical education is an excellent way to develop motor skills, improve foreign language, cognitive skills and promote the personal and social development of students, and according to Hernando et al. (2017), there are lists four fundamental reasons to justify the choice of PE in a bilingual program: 1. intrinsic motivation, 2. realism, functionality and meaningfulness, 3. relaxed environment conducive to communicative interaction, 4. oriented action and experimentation oriented.

The study conducted by Coral et al. (2016) studied which typology was the most appropriate for CLIL methodology to be successful in physical education. It was concluded that the most effective for the teaching-learning process was a task carried out through groups with a cooperative structure and intentionally incorporating language. Thus, the didactic unit developed below has cooperation and interaction among peers as its central axis. Finally, we will refer to culture, since bilingual education aims to promote not only the acquisition of grammatical knowledge, but also to emphasize the cultural aspect.

In this case, what is really important is to foster autonomy in the learner, both in the development of content and in the oral expression in English. For this purpose, methodological resources are generated that allow each group to organize itself and decide what aspects it wishes to incorporate in their work. The transferability of what has been learned is sought, that the student demonstrates physically and verbally what he/she has learned, and that he/she shares his/her homework through sharing their tasks through active collaboration throughout the process. In addition, English is used in a real, motivating context and under sufficiently flexible initial under assumptions that are flexible enough for the learner to engage, innovate, and be creative (Hernando et al., 2017).

3. DIDACTIC PROPOSAL

3.1 Theoretical aspects

Taking into account some of the principles on which CLIL methodology is based, when designing a physical education session to carry out bilingual teaching, we will try to set open tasks, largely in the form of cooperative challenges. With this we intend not only that students perform physical activities but also that they try to process the information in such a way that they find the best way to solve the problem, all this through the negotiation of different possibilities. This is where communication becomes especially important (Campillo, 2017).

If we observe that bilingual education has been carried out worldwide for a long time, we could think that there is already an established bilingual education system that has been carried out worldwide for a long time, and we could think that an appropriate and accepted methodology is already in place. Nothing could be further from the truth, for a number of reasons, among them the fact that bilingual education is presented as an abstract concept that can encompass a multitude of teaching approaches (Sato and Hodge, 2016). Thus, an attempt will be made to shed light on this aspect by proposing a didactic unit

This didactic unit dedicated to physical and motor conditioning, and it is a gamification. The students are going to carry out, in a virtual way, the ascent to the seven great summits. These are different mountains located on different continents with a great altitude: Mount Everest (8,848 meters): Asia, Aconcagua (6,962 meters): South America, Mount Denali (6,190 meters): North America, Kilimanjaro (5,895 meters): Africa, Mount Elbrus (5,642 meters): Europe, Vinson Massif (4,892 meters): Antarctica and Mount Jaya (4,884 meters): Oceania. The ascent to these seven great summits, as explained above, will be done virtually. For each

repetition or exercise maintained for 15 seconds, one meter will be added. Thus, the groups must achieve the challenge of reaching more than 45,000 meters.

At the end of each class, a person in charge of each group will upload to Google Drive the number of meters they have managed to achieve in the session. Each day, each group will work on one aspect of physical and motor fitness: endurance, strength, speed and coordination. In addition, the range of motion will be worked transversally at the end of all sessions, obtaining 200 extra meters for all groups that perform the stretching and mobility routines.

The implementation of an educational bilingualism program in contexts such as the Spanish one must take into account that, in general, in our environment there are some particularities that condition the model to be chosen. Thus, insufficient linguistic competence on the part of the students can ruin a good bilingual program, which is why it is necessary to carry out a previous work to accurately diagnose the initial competence of the students and thus be able to adjust the objectives of the program.

3.2. Curricular elements

For a correct development of the teaching-learning process, the different educational laws, both at the state and autonomous community level (LOMLOE, LEA...) provide the educational team with different tools. Some of these tools are the curricular elements, which are developed below:

3.2.1. Contents

The term educational content designates the objective of a teaching-learning process, an object that is supposed to have certain educational values. They represent what to teach. The contents constitute the set of knowledge, skills and attitudes necessary to acquire in order to act and react to the environment. They also defined as the set of cultural forms and knowledge (concepts, procedures and attitudes) selected to form part of the different curricular areas/subjects according to their objectives. Indeed, the academic or curricular content comes from the scientific and cultural knowledge of society, which is distorted to a greater or lesser extent to make it accessible to students (Contreras, 1998).

On the one hand, once we are conscious of the contents of each subject, we must consider the type of curricular integration and then decide on the starting point for integration, whether

textual for IC of languages and IC for languages and contents, or in the case of integrated curriculum of languages and contents, linguistic components or content components. On the other hand, contents, in secondary education in Andalusia, are regulated by the Order of January 15, 2021. In physical education 5 blocks of contents are established: physical and motor condition, health and quality of life, games and sports, physical activity in the natural environment and corporal expression.

Thus, related to the didactic unit, for the realization of the documents with the different components of the physical condition, there must be coordination with the following subjects:

- Biology: biological and physiological aspects of physical fitness and the human body.
- Physics and chemistry: the physical manifestation of physical abilities.
- English: own language in which the text is written.
- Spanish language and literature: including different types of texts in the document.

3.2.2. Objectives

The term *Objective* is defined as a statement that describes the behavior that is expected to be obtained from a student at the end of an established teaching-learning period, what the student must do and was not able to do before. The definition of the objective is that of the result sought and not the description of activities.

It should be noted that educational objectives (from educational intentions to operational/didactic objectives) arise from the consideration of three important factors (Delgado Noguera, 1991):

- Society: it determines the value systems, culture and conditions the characteristics required in the student/to be able to be part of it as an active member.
- Person: whose knowledge allows us to take advantage of the information related to the demands of maturational, intellectual, affective and social development, as well as the interests and fundamental needs that will allow us a more effective didactic planning.
- Contents: in terms of their internal structuring, ordering and sequencing, fundamental aspects in each area of knowledge that facilitate their learning and assimilation.

Three types of objectives are distinguished: stage (compulsory secondary education, regulated by Royal Decree 1105/2014 and by Decree 182/2020.), area (specific to physical education, regulated by the Instruction of June 15, 2020.) and didactic/educational (adapted to each level or cycle).

3.2.3. Competences

The subject of physical education contributes, as it cannot be otherwise, to the development and achievement of all the key competences. The body and movement, i.e., motor competence, are key/basic/fundamental in the relationship between human beings and their physical environment. For example, it poses particularly favorable situations for *linguistic communication competence*, not only offering a wide variety of verbal communicative exchanges and specific vocabulary, but also providing other dimensions of communication through body language, artistic expressions and interactions that occur, for example, in cooperative-oppositional sports (Lozano et al., 2019).

In addition, it helps the development of *mathematical competence* by offering situations in which students must apply mathematical reasoning to solve situations associated with quantity (track measurements, quantification of loads), space and shape (shapes of mobiles, scales and courses in orienteering sports), change and relationships (relationship between caloric intake and expenditure, heart rate as an indicator of effort intensity), and the development of mathematical reasoning (determining fitness level from motor tests, game systems in cooperative-oppositional sports) and basic competences in science and technology, providing students with an understanding of physical systems (aspects related to biomechanics and nature conservation), biological systems (aspects related to the functioning of the human body, nutrition, hygiene,...), earth and space systems (aspects related to physical activities in the natural environment) and technological systems (use of instruments used in the field of physical activity and sports: GPS, heart rate monitors,...). It also offers situations in which students become familiar with scientific research and science communication.

It contributes to *digital competence*, addressing aspects such as the following access and management of information that can be found on the Internet in the field of physical activity and sport; the interpretation and storage of this information and its validity; communication and social networks; creation of own content related to health, nutrition, physical activity and sport; and also analysing the risks associated with the use of information and communication technologies and online resources, for example, within contents related to body expression.

It helps achieve the *competence of learning to learn* by the very nature of practical application and experimentation that physical education has. The regulation, planning, organization and execution of their own physical activity. It also develops teamwork skills that transcend the physical and sporting activity itself, and will be applicable to active life as citizens and professionals (Lozano et al., 2019).

It contributes to *social and civic competences* by promoting respect, equality, cooperation and teamwork. Physical education contributes to the establishment of basic psychological needs (autonomy, competence and social relations) and to the control of emotions, essential aspects for the safe integration of students in society. Physical education class rules, the rules established in games and sports, road safety rules, health, injury prevention, first aid, etc., are elements of physical education that, by their very nature, prepare students for life in society.

Physical education helps to develop a *sense of initiative and entrepreneurial spirit* by giving functions and responsibilities in the planning and development of sporting or expressive-artistic events, designing, developing and applying autonomous programs for the improvement of physical condition. This key competence can be fostered in physical education classes by giving students a greater degree of responsibility and capacity for choice. Physical education contributes to the development of creativity, the ability to invent and innovate, proactive capacity, the ability to manage risks, leadership qualities and individual and team work, and a critical and responsible sense.

PE also contributes to *competence in cultural awareness and expressions*. It contributes to the appreciation or understanding of the cultural fact through the recognition and appreciation of cultural and historical manifestations of human motor skills (games, sports, artistic-expressive activities, activities in the natural environment...) and their consideration as cultural heritage of peoples. It facilitates the expression of ideas and feelings in a creative way, through the exploration and use of the expressive possibilities of the body and movement.

3.2.4. Didactic methodology

Considering the definitions contained in article 2.1 of the *Royal Decree 1105/2014*, the didactic methodology is another element of the curriculum. It is defined as the set of strategies, procedures and actions, organized and planned by teachers, in a conscious and reflective manner, in order to enable student learning and the achievement of the objectives set.

Without prejudice to their pedagogical autonomy, bilingual schools will have a methodological, curricular and organizational model that contains the principles of integrated learning of content and foreign language. The bilingual centers will comply with the European recommendations in this matter contained in the Common European Framework of Reference for Languages (2001), developed by the Council of Europe.

The bilingual centers will develop an integrated curriculum of the languages, as well as materials for the languages, as well as materials for the integrated learning of contents and foreign languages within the framework of their educational project, which will contemplate at least the following aspects (Pérez-Cañado, 2011):

- Strategies that promote the learning of foreign language content, within the framework of the curricular objectives established in general for the learning of foreign languages.
- Design of communicative learning tasks to be implemented in the classroom in order contribute to the students' mastery of basic foreign language to master the basic skills of linguistic competence, both oral and written, in coherence with the learning objectives related to each level of competence. In order to achieve these objectives the use of the European Language Portfolio will be promoted.
- Inclusion of the principle of linguistic competence of students for the development of basic competences.
- Incorporation of communicative activities in all languages to promote the development of basic languages to promote the development of basic skills in each of the languages taught in the center.
- Establishment of links between the different languages, unification of linguistic terminology and methodological approaches based on a communicative approach.

3.2.5. Assessment

The relevance of assessment is stressed both in the LOMCE and in the Order of June 28, 2011. On the one hand, LOMCE points out there are two aspects in assessment that must be contained in curricular design: assessable learning standards (optional) and results, and assessment criteria on the degree of achievement of the acquisition of competences and the achievement of the objectives for each stage of education. On the other hand, this general criterium is further developed in the regional orders for each stage of education. Having these

legal regulations as a basis, let's focus on relevant aspects of assessment to be included in our IC:

What is going to be assessed	This general criterium is further developed in the regional orders for each stage of education, where we can find a detailed account of all assessable learning standards for each specific linguistic or content subject.
When we plan to assess	It is important to have a clear idea of the different moments of assessment: initial, continuous, and final assessment.
How is assessment going to be developed	Apart from detailing the tools we are going to use to assess, we should distinguish between formal and informal assessment.
Assessment criteria	These criteria are described in detail in reference to each specific linguistic or content subject in the above mentioned regional orders, and they are detailed for each stage of education.
Appraisal criteria	Apart from the particular decisions on appraisal taken by teachers's teams, we must consider that article 8 of the <i>Orden de 28 de junio de 2011</i> explains tahta that while the achievement of linguistic competences is the core of assessment in the former, in the case of content subjects linguistic achievement must be taken into consideration, but never constitute a negative element in the appraisal of the content itself.
Use of the European Portfolio of Languages (EPL)	The <i>Orden de 28 de junio de 2011</i> also recommends the use of the European Portfolio of Languages in articles 11 and 9.3.b.

Figure 4. Relevant aspects of assessment (Unit 3. PIICD. MIEB).

3.2.6. Materials and resources

Didactic resources and materials are those actions aimed at facilitating the teaching-learning process of students. As the main didactic resource of this unit, the use of mobile phones stands out. As it will be shown below, all students have an electronic device that can be brought to the school. Educational community has confirmed this fact. The use of the mobile phone is the epicenter of this didactic unit since each student will use this device for his own learning.

In addition, a very interesting didactic resource is grouping. In order to individualize the teaching-learning process as much as possible, groups of 4, 5 or 6 people will be formed (depending on the total number of students). This allows for greater interaction among the adolescents, which will have an impact on the acquisition of competences.

Another didactic resource used will be feedback. It is one of the key elements to know if the learning process is being effective or not. Different types of feedback will be given by both the teacher and the students. Thus, there will be immediate feedback (during the activity), concurrent feedback (at the end of the activity) and delayed feedback (at the end of the session). In addition, different materials will be used such as cones, bibs, balls, goals, benches, sticks, etc.

3.2.7. Context

All this didactic unit has to be developed in a specific context. This is the Isbilya secondary school. According to educational project (2021-2022), this educative center, corresponding to the Nervión-San Pablo District, is located in the northwest area of Seville. The building was built in 1989-90, although it began to function as such in the 1990-91 academic year. It is a two-storey building, with a modern design and very good qualities in the materials used, located on a plot with an area of 14,000 m., with sports areas and green spaces.

Among the most important rooms on each floor, we can highlight the following:

1. Ground floor: lobby, janitor's office, management, secretary's office, head of studies, teachers' room, library and guidance department.
2. Second floor: multimedia classroom, Music, Computer Science, Technology, Physics and Chemistry laboratory, classrooms belonging to the formative cycles and the Assembly Hall.
3. Second floor: Biology and Geology laboratory, Drawing classroom and Integration Support.

The twenty-four classrooms, the different departments of didactic coordination, areas of competence, Department of Training, Evaluation and Educational Innovation as well as the departments of the two formative cycles are distributed throughout the different floors of the institute. There is an elevator, three access ramps to the center and toilets adapted for students with motor disabilities. In 2009 the last extension of the school was carried out with the construction of a gymnasium.

The socioeconomic and cultural level of the families of the I.E.S. Isbilya students, in general, is medium, being able to observe diverse family characteristics and conditions: there are medium-high levels as well as medium-low levels. To a very small extent, the previously mentioned levels are low, or as they were in the past, very low. The origin of the students in Compulsory Secondary Education is typical of the area where the school is located.

3.2.8. Time and planning

As regards time and planning to develop this didactic unit, it goes as follows:

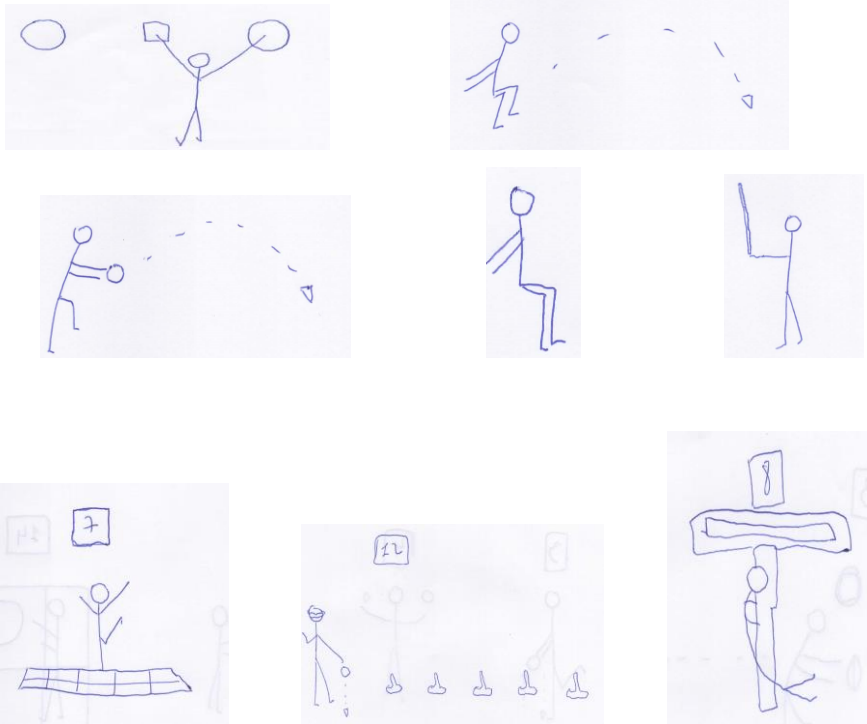
D.U. : “ Ascent to the seven great summits”		UBICATION: 1º QUARTER	COURSE: 4
JUSTIFICATION: physical activity and fitness levels are related to increased academic and/or cognitive performance (Conde & Tercedor, 2015).			
OBJECTIVES. Connection with stage (d, k), subject (1, 3, 5, 11) and course (1, 2, 5)			
-To know the rules of work and dynamics of physical education classes. -To know and value the basic physical capacities. -To improve the physical and motor condition.			
CONTENTS	BLOCKS: Physical and Motor Conditioning// Health and Quality of life	KEY COMPETENCES	
-Systems to develop physical and motor fitness. -The basic physical abilities and motor qualities in the realization of different activities. - Toning and flexibility as compensation for the effects caused by the most frequent inadequate postural activities. - Critical attitude towards life habits detrimental to health such as sedentary lifestyles, consumption of tobacco and alcoholic beverages, eating disorders, etc.		- Social and civic. - Learning to learn. - Initiative and entrepreneurship. - Logico-mathematical competence	
		TRANSVERSAL ELEMENTS	
		- Motor Competence - Coeducation	
EVALUATION (formative, global, integral, summative, criterial, final).			
EVALUATION CRITERIA		ACHIEVEMENT INDICATORS	
Nº 4: Argue the relationship between lifestyle habits and their effects on physical and motor fitness, applying knowledge about physical activity and health. Nº 5: Improve or maintain the factors of physical and motor fitness, practicing physical-sports activities appropriate to their level and identifying the organic adaptations and their relationship to health. Nº6: Design and carry out the phases of activation and recovery in the practice of physical activity considering the intensity of		Nº 4.1 Demonstrates knowledge about the characteristics of physical activities with a healthy approach and the benefits they bring to individual and collective health. Nº 5.2 Regularly, systematically and independently practices physical activities in order to improve health conditions and quality of life. Nº 6.3 Performs exercises or activities in the initial and final phases of a session, in an autonomous way, according to his/her level of motor competence.	

the efforts. Nº 8: To critically analyze the sports phenomenon discriminating the cultural, educational, integrating and healthy aspects from those that promote violence, discrimination or misunderstood competitiveness. Nº10: Assume responsibility for their own safety in the practice of physical activity taking into account the factors inherent in the activity and foreseeing the consequences that can have careless actions on the health and safety of the participants. Nº 11: Demonstrate personal attitudes inherent to teamwork, overcoming insecurities and supporting others in the resolution of unfamiliar situations. Nº 12: To use effectively the Information and Communication Technologies in the learning process, to search, select and evaluate information related to the contents of the course, select and evaluate, communicating the results and conclusions in the most appropriate support	Nº 8.2 Values the different physical activities distinguishing the contributions that each one has from the cultural point of view, for enjoyment and personal enrichment and for the relationship with others. Nº 8.3 Maintains a critical attitude towards unsportsmanlike behavior, both as a participant and as a spectator Nº 10.1 Verifies safe practice conditions using personal equipment and practice materials and spaces appropriately. Nº 11.2 Values and reinforces the enriching contributions of classmates in group work. Nº 12.2 Uses the Information and Communication Technologies to deepen on course contents, making critical critical evaluations and arguing their conclusions.
ASSESSMENT TOOLS	
-Rubric: 80% -Rating scale: 20%	
METHODOLOGY (based on methodological strategies)	
o Teaching Technique: direct instruction (warm-up) and inquiry and search (cooperative G.). o Teaching style: homework assignments (warm-ups and games) and problem solving. o Strategy in practice: global (games) and analytical (warm-up). o Feedback (types): moment (immediate), direction(group), intention(emotional). o Learning situation: group: in pairs and group. Space: classroom, gymnasium and facilities. Time: 8 sessions	
INTERDISCIPLINARITY	MATERIAL RESOURCES: balls, bibs, cones, etc.
-Natural sciences, mathematics and	ACTIVITIES: teaching-learning, reinforcement,

language arts.	extension, explanation, assimilation, application, recovery.
TIMING AND ACTIVITIES (SESSIONS)	
Sessions 1 & 2: Theoretical sessions. Groups are made for each basic physical capacity and motor quality. Session 3: session dedicated to evaluate and measure the physical and motor condition. different tests are performed to know in which initial stage the student is. Session 4: students work on strength. Session 5: students work on speed. Session 6: students work on endurance. Session 7: students work on agility. Session 8: sharing of all the contents worked in the didactic unit.	

3.3. Sessions

SESSIONS 1 & 2. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Aim part	The teacher draws lots in which each student takes a piece of paper. On each piece of paper there are five options: endurance, strength, speed, coordination and agility. When they have been assigned a physical ability/motor quality, they go to a QR code with their mobile phone reader, and this will take them to a text in English that explains everything related to this ability/quality. They will read this text. Then they will make groups of 6 people, where all the components of the physical and motor condition is represented. Then, each one will explain the quality/capacity that he/she has been assigned to.   
Return to calm or final part	Bathroom

SESSION 3. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Warm up or initial part	Joint mobility. Strength and endurance exercises in pairs. Autonomous warm-up. Warm up well, focusing on different muscle groups.
Aim part	To start working on physical fitness, it is first necessary to know the starting point of the students. To this end, this third session is dedicated to measuring physical and motor fitness. Each student will read a QR code with his or her cell phone. This will take them test or quiz to measure a physical ability or motor quality. They must read it and understand it because they will then have to explain it to their group mates. In addition to the tests given by the teacher, each student (during the session) will have to find a test/test that measures and/or evaluates an aspect of physical and motor fitness (endurance, strength, speed...). The tests to be performed will be: 
Return to calm or final part	Bathroom. Give feedback to the students, during the activities and at the end of the session. Emphasize other aspects such as pulse measurement through the karvonen formula), personal hygiene (reward students who wear another T-shirt and deodorant), etc.

SESSION 4. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Warm up or initial part	Joint mobility. Strength exercises in pairs. Autonomous warm-up. Warm up well, focusing on different muscle groups.
Main part	Once we have seen all the capacities and qualities that make up the physical and motor condition, we will carry out a training program to improve it. Thus, each group will carry a cell phone. In different places of the playground there will be cones with a QR code. The whole group must go there, and use the cell phone reader. This will take them to an explanatory video with the exercises to do. This Video will include number of repetitions, sets and rests. Each day a Different quality/capacity will be worked on. Thus, in this session the emphasis will be on Strength.     In each session an aspect of physical and motor conditioning will be explained and all the classmates will work on that capacity/quality each day. This work will be done in groups.
Return to calm or final part	As explained above, performing the stretching routine after the end of the sessions will have an extra bonus: Abductors  Quadriceps  Hamstrings  Triceps  Biceps  Calf muscle  Bathroom. Motivation, feedback, hygiene ... key aspects. Give feedback to the students, during the activities and at the end of the session. Emphasize other aspects such as pulse measurement through the karvonen formula), personal hygiene reward students who wear another T-shirt and deodorant), etc.

SESSION 5. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Warm up or initial part	Joint mobility. Strength and speed exercises in pairs. Autonomous warm-up. Warm up well, focusing on different muscle groups.
Main part	In this fifth session, the emphasis will be on working on Speed. After a good warm-up to avoid injuries, the work dynamics will be the same as in other sessions. The groups will go to the QR codes. The mobile phone reader will take them to an explanatory video (in English) to perform speed exercises and get the highest number of repetitions to reach the goal of 45000 meters. -Two cones 6 meters apart. go from one point to the other and walk back  -Skipping laterally between different cones. Back and forth  -The whole group must hold hands. Without letting go of each other, they must go to the end of the pavilion and return to the starting point  -Circuit. Zig zag between cones bouncing a ball  -In pairs, one partner holds the other partner by the waist with a rope. The one who has the rope on his body tries to go from one cone to the other 
Return to calm or final part	To emphasize the importance of a good return to calmness. Performing the stretching routine after the end of the sessions: Abductors  Quadriceps  Hamstrings  Triceps  Biceps  Calf muscle  Bathroom. Give feedback to the students, during the activities and at the end of the session. Emphasize other aspects such as pulse measurement through the karvonen formula), personal hygiene, etc. As the sessions in which we work on physical conditioning are completed,

	it is important to evaluate the students in aspects such as practice time, motivation, exercise intensity, predisposition towards physical activity, etc.
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SESSION 6. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Warm up or initial part	Joint mobility. Strength and endurance exercises in pairs. Autonomous warm-up. Warm up well, focusing on different muscle groups.
Main part	In this session we will work on Endurance. in particular, cardiorespiratory endurance. the exercises will be simple and of short duration but with a medium-high intensity. 1.Burpees  2. Go from one cone to another from the front and back again without stopping  3.Lateral skipping from one cone to another  4. Do the star. standing, open arms and legs alternately  5. Sprint at maximum speed from one point to another  In this session, the following guidelines will be followed for the performance of all the exercises: -Each student will perform a different exercise. -Each exercise will be done at maximum intensity. -The duration of each activity/exercise is 45 seconds.
Return to calm or final part	Stretching routine: Abductors  Quadriceps  Hamstrings  Triceps  Biceps  Calf muscle  Trapeze 

	To give feedback at the end of the class. to influence aspects such as motivation, performance of exercises, etc. As the sessions in which we work on physical conditioning are completed ,it is important to evaluate the students in aspects such as practice time, motivation, exercise intensity, etc.
SESSION 7. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Warm up or initial part	Joint mobility. Strength, agility and coordination exercises in pairs. Autonomous warm-up. Warm up well, focusing on different muscle groups.
Main part	In this session, the students will work on two motor skills: agility and coordination. -Skipping by bracing, coordinating the arms with the legs  - Zig zag between cones. Firstly, do it normally and then with a mask  - Do a squat leaning on one leg  -Perform a plank with arms resting on a fitball  - Exercise similar to the previous one. Instead of resting the arms on the fitball, the legs are supported, bending the knees  - Support the arms and legs on the floor and raise the trunk. crawl from one point to another  -In a vertical position we rest our body on one foot and with the other leg we make pendulum movements back and forth, as far as we can 
Return to calm or final part	Stretching routine: - Abductors  - Quadriceps  - Hamstrings  - Triceps  

	Biceps	
	Calf muscle	
	Bathroom	

SESSION 8. DIDACTIC UNIT: PHYSICAL AND MOTOR CONDITIONING	
Phase	Description
Warm up or initial part	Joint mobility. Autonomous warm-up.
Main part	After the last session in which agility and coordination were worked and all the basic physical capacities and motor qualities were seen, each group had to count the total number of repetitions (and therefore meters) achieved. Thus, a classification was made in which the first position went to the group that achieved the most meters. In this last session, each group will have to present the conclusions obtained with this didactic unit: -Level of difficulty encountered by the group (according to the difficulty in performing exercises, intensity of the same, level of difficulty in the second language ...). -Whether or not there has been improvement (in general) both physically and mentally. -Feedback to the teacher about all the work done, impressions about the project, the use of a second language by the students, etc.
Return to calm or final part	Bathroom. Return to calm, feedback...

4. CONCLUSIONS

This master's thesis was born with the intention of shedding light on the current state of the CLIL methodology in Spain. Throughout it, the theoretical bases of this methodology have been exposed. There is a large number of scientific papers that support this type of tools for learning both a second language and some type of content. Although there is a great variety of

works that support this type of methodology, it is necessary to continue researching and shed light on some curricular aspects such as, for example, what types of materials are the most suitable in subjects such as physical education.

On the one hand, the importance of physical education in the CLIL environment has also been highlighted throughout the work. It is an eminently practical subject, which uses a simple vocabulary that can be accompanied by representations through gestures. on the other hand, physical education as a subject is the use of physical activity and sport for educational purposes, so it is not only focused on the motor aspect but also on others such as the social (interaction with other classmates) or psychological (improvement of self-esteem, self-image, the perception that others have of myself ...). Moreover, the inclusion of ICTs and gamification in education is a key element. Specifically, in this didactic unit of physical education it is a motivating element since it makes the students get more involved in the teaching-learning process.

It is true that more progress still needs to be made in conducting research with a rigorous scientific character that provides more evidence in diverse contexts, but above all it is necessary that bilingual programs have the necessary elements to ensure that the learning objectives for the language and for the academic content can be achieved, which will determine that it will also ensure, in general, the quality of teaching. Finally, it should be noted that I have tried to put into practice in the teaching unit all the theoretical elements cited throughout this review.

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