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FACULTAD DE CIENCIAS HUMANAS, SOCIALES Y DE LA  
EDUCACIÓN

*GIZA, GIZARTE ET HEZKUNTZA ZIENTZIEN FAKULTATEA*

Graduado o Graduada en Maestro en Educación Primaria  
*Lehen Hezkuntzako Irakaslean Graduatua*

Trabajo Fin de Grado  
*Gradu Bukaerako Lana*

# ***Teaching EFL through ICT and CLIL in Primary Education***

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**Campo/Arloa: English**

**Mayo, 2023**

## **Resumen**

El auge de las Tecnologías de la Información y la Comunicación (TIC) significa su importancia y necesidad en el campo de la educación. Este trabajo destaca las ventajas y aplicaciones prácticas de las TIC en el sistema educativo, específicamente en la enseñanza y el aprendizaje de materiales curriculares en inglés como lengua extranjera para estudiantes de primaria. En primer lugar, el trabajo profundiza en el uso de las herramientas TIC en la educación, en el análisis del programa de Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE) y en el uso de las herramientas TIC (Blog, mapas mentales digitales, podcast y Canva) en la educación. Mientras que en el segundo apartado se desarrolla una propuesta práctica mediante los apartados mencionados en el marco teórico. A través de las actividades propuestas, los alumnos desarrollarán principalmente la competencia digital y la competencia lingüística.

*Palabras clave:* Tecnologías de la Información y la Comunicación (TIC); Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE); enseñanza del inglés como lengua extranjera; educación primaria; herramientas digitales.

## **Abstract**

The rise of Information and Communication Technologies (ICT) signifies its importance and necessity in the field of education. This paper highlights the advantages and practical applications of ICT in the educational system, specifically in the teaching and learning of curricular materials in English as a foreign language for primary school students. Firstly, the dissertation examines the use of ICT tools in education, the analysis of the Content and Language Integrated Learning (CLIL) programme and the use of ICT tools (blog, digital mind map, podcast and Canva) in education. In the second section, a practical proposal is developed through the sections mentioned in the theoretical framework. Through the proposed activities, students will mainly develop digital competence and linguistic competence.

*Keywords:* Information and Communication technologies (ICT); Content and Language Integrated Learning (CLIL); Teaching English as a Foreign Language (TEFL); primary education; digital tools.

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## INTRODUCCIÓN

La sociedad en la que nos encontramos se ha caracterizado a lo largo de su historia en crear herramientas que le han ayudado en su constante desarrollo. Actualmente las herramientas que nuestra sociedad genera y demanda son las Tecnologías de la Información y Comunicación (TIC). Las TIC han revolucionado la manera en la que la sociedad convive, cambiando la forma en la que nos relacionamos, interactuamos, trabajamos y educamos. Esto conlleva que la generación que ha crecido en la era tecnológica tenga nuevas necesidades para la que el ámbito de la educación debe estar preparado.

De esta forma, la competencia digital adquiere un rol esencial en la formación del alumnado, preparándolos para el futuro ámbito profesional y vital. En consecuencia, el rol del profesor y del alumnado ha evolucionado, cambiando la manera en la que se aprende y enseña. El profesor adquiere el papel de guía, ayudando a los estudiantes mientras que estos adquieren un rol más activo, siendo los protagonistas de su propio aprendizaje.

Por otra parte, vivimos en un mundo afectado por la globalización en el que el aprendizaje de lenguas extranjeras se ha vuelto imprescindible. La educación actual requiere, particularmente en el marco europeo, la adquisición de habilidades en un idioma extranjero, especialmente el inglés. Su desarrollo en la escuela proporciona un aprendizaje intercultural y desarrolla las habilidades comunicativas y sociales.

La enseñanza del inglés como lengua extranjera se está convirtiendo en una parte cada vez más importante del plan de estudios en España, y en Navarra en particular. Tanto es así que los Programas de Aprendizaje de Inglés (PAI) están siendo implantados en numerosos centros educativos, no solo con el objetivo de aprender inglés sino también de aprender contenidos curriculares en inglés. En este contexto la metodología AICLE (Aprendizaje Integrado de Contenidos y Lenguas Extranjeras) ha cobrado protagonismo, donde se combina el aprendizaje de la lengua extranjera con el aprendizaje de contenidos de otras áreas de aprendizaje.

Este trabajo de fin de estudios está formado por dos apartados principales: el primero con un carácter teórico y el segundo con una aplicación práctica. En el apartado teórico se presenta la metodología AICLE, se abordan las premisas teóricas que sostienen el uso de las herramientas TIC en la educación, y en particular del blog, mapa

mental digital, podcast y Canva, y finalmente se lleva a cabo una justificación del porqué de este análisis. Mientras que en el segundo apartado se desarrolla una propuesta práctica mediante los apartados mencionados en el marco teórico. A través de las actividades propuestas, los alumnos desarrollarán principalmente la competencia digital y la competencia lingüística.

## **1. THEORETICAL FRAMEWORK**

### **1.1. ICT IN EDUCATION**

#### ***1.1.1. Introduction***

Today, in the digital era in which we find ourselves, new technologies provide the primary means of communication between human beings, providing us with the opportunity to communicate without the need for proximity, something that was unthinkable in the past. Not only are they assumed to be the biggest communication tool, but they have become the main tool for information retrieval, providing up-to-date data in almost real time (Moya, 2009).

Information and Communications Technology (ICT) involves a collection of techniques, developments and sophisticated devices that integrate data storage, processing and transmission functionalities, a rather broad concept that encompasses a number of simple yet complex concepts (Palomar, 2009).

According to Ghasemi & Hashemi (2011), ICTs are meant to represent a “diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony” (p. 3098). Moreover, they point to the growing awareness of the use of computers and the internet in the last few years, stating that ICTs are more than just technology and that they represent combinable resources rather than single, isolated delivery mechanisms.

The change that has taken place in society must in some way be transmitted to 21st century education, corresponding to the existing social changes. These accelerating changes in technology indicate that they, in turn, will lead to accelerating changes in the role of ICT in education. This will have an effect on what, how, when and where learning takes place, for which educational authorities must be prepared. Specific teaching strategies must be implemented to support the teaching and learning process, adding value to the instructional process and improving the effectiveness of learning (Henderson, 2020).

There are three ICT categories for educational purposes that complement each other (Assar, 2015):

- Digital Learning Resources. Specific materials intended to assist learning in the classroom for teaching and evaluation purposes may include video clips, photos, simulations, and interactive assessment materials.
- Communication and information resources. Tools that facilitate classroom teaching and learning through communication features, although they are not specifically designed for this purpose, such as blogs, Wikis, peer-to-peer file sharing, and social networks.
- Learning Management System. Educational software packages for managing and delivering online classes include content organization and presentation, student monitoring, classroom activity management, teacher-student communication, and evaluation facilities.

The ICT tools used in the practical part of this paper correspond to the category of communication and information resources, supporting the teaching-learning process.

Emerging changes involve a new teaching model that is gradually being put into practice in schools, involving a transformation in the teaching and learning process, educational objectives, school centres and didactic content (Moya, 2009). Consequently, teachers need to adjust their didactic process to the new ICT environment, leaving aside their traditional role as transmitters of knowledge so that students become the protagonists of their own knowledge, playing an active role while the teacher accompanies them as a guide (Ghasemi & Hashemi, 2011).

“Fast development in Information and Communication Technologies (ICT) is shaping a new world in which education at all levels can no longer be assimilated to a group of learners in a classroom listening and watching a teacher with a textbook following a fixed curriculum. [...] shifting from teacher-centered to learner-centered and can potentially be undertaken anytime and anywhere (Assar, 2015, p. 1).

One highly valuable distinction Prensky (2001) presents is that between "Digital Natives" and "Digital Immigrants". The term 'Digital Natives' refers to today's learners, the first generations who have grown up surrounded by technology and are therefore

native speakers of the digital language. Differentiating them from the "Digital Immigrants", referring to the entire population who have grown up before that era and who have learned to adapt to the environment, preserving their "accent". Highlighting how learners have undergone a fundamental change, which implies they are no longer the target audience for the educational system. As Prensky (2001) states "the single biggest problem facing education today is that our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language" (p.2).

### **1.1.2. ICT and language learning**

The language learning sector has been significantly enhanced by the use of ICT in education, having undergone a major transformation in the way language teachers have been adapting, generating creative approaches all over the world. The use of ICT has not only provided the necessary resources to meet the current language development needs of learners, but it also offers teachers the ability to engage learners in a deeper language development pathway (Motteram, 2013).

The interest of teachers and researchers in the use of new technologies for second language development has been growing, providing new options and challenges for teachers and learners, but bearing in mind that what determines a quality teaching-learning process is not ICT but language teachers (Ghasemi & Hashemi, 2011).

Students benefit from unlimited authentic language resources, providing them with real-life contact and exposing them to cultures, people and countries where the target language is the predominant one, leading them to communicate using the language in a real-life context. Learners can develop an interest in the culture of other nations thanks to ICT as it brings them closer and accessible to students (Ghasemi & Hashemi, 2011). Interactive learning takes a leading role, promoting more creative learning opportunities, stimulating learners' curiosity about how language works, raising their cognitive level and reinforcing their ability for independent language development.

Speaking, listening, reading, and writing skills may be integrated through the use of tools that were not created specifically for language learning but that enhance linguistic development and better understanding such as tools as Blogs and Wikis, and applications like Skype, among others (Motteram, 2013).



As mentioned previously, the role of language teachers also needs to change since in traditional language teaching educators taught the book content, being the source of knowledge. However, with ICT implementation, the methodology changes, providing learners with information selection strategies and allowing them to choose and evaluate the relevant information (Ghasemi & Hashemi, 2011).

### **1.1.3. Benefits**

According to Palomar (2009), the advantages (and difficulties) provided by ICT should be analysed from three points of view: those of learning, students, and teachers. The following advantages can be highlighted:

- The motivation and interest of pupils increases when using ICT resources, being motivation the driving force for learning, encouraging action and thinking. Moreover, if learners are motivated, they are more likely to spend more time working, so learners are likely to learn more.
- Pupils are constantly interacting with the computer, as it is relatively new, which means that they are highly involved in the work, maintaining a high level of attention.
- Pupils develop the ability to take initiative through continuous participation, since they are constantly making new decisions, promoting autonomous work and decision making.
- The available internet communication tools facilitate teacher-student communication, through email, blogs, forums, chat, and more. Giving the opportunity to share ideas, ask questions and exchange resources.
- Cooperative learning is increased, facilitating group work, and increasing social skills, exchange of ideas and cooperation. Students are required to engage in dialogue to find solutions and organise the task, besides fatigue appears later on.
- The large amount of information available on the internet implies that learners employ information selection strategies using evaluation and assessment criteria, enhancing the development of decision-making skills.
- The possibility of visualising simulations of physical, chemical, social or 3D phenomena allows pupils to experiment and understand the concepts more effectively.

- Students with special needs are provided with more adaptations, including adapted equipment, which means inclusive facilities for all types of students.

Through active student participation in, for example, gamification activities, virtual field trips and other online resources, the same content can be taught in different ways, making learning more enjoyable, which improves student knowledge retention (Henderson, 2020). In addition, the author points out that students can develop useful life skills arguing that “modern learning is about collaborating with others, solving complex problems, critical thinking, developing different forms of communication and leadership skills, and improving motivation and productivity [...] develop many practical skills, including creating presentations, learning to differentiate reliable from unreliable sources” (p. 53).

The internet offers an infinite number of resources updated on a daily basis, which can be accessed in a matter of seconds, which, for the teaching-learning process, means access to endless authentic language resources, providing the students with quality and real content for their learning environment (Ghasemi & Hashemi, 2011).

Considering the relevance for learners to acquire digital competence and taking into account the advantages mentioned above, different ICT tools have been used to develop the didactic proposal of this paper.

#### **1.1.4. *Difficulties***

Despite all the aforementioned advantages, it is essential to bear in mind that, especially when it comes to young, developing students, caution must always be present, as one of the main concerns is the possibility of the appearance of addictive behaviours that may be detrimental to their optimal development. Inappropriate use of available resources can lead to negative effects such as addiction and isolation, as well as exposure to inappropriate and violent content (Moya, 2009).

For an adequate use of the resources, training and familiarity with the resources is indispensable, being the teaching staff, on occasions, part of the handicap, showing a lack of practice and/or knowledge of pedagogical practice through ICT, which provides added stress to the teachers. (Henderson, 2020).

The abundance of resources available on the internet leads to distractions and dispersed learners. Students find themselves in a variety of spaces full of interesting

features and resources that can distract them from their objectives and can sometimes lead to play rather than work which, at the same time, leads to a time-wasting problem (Palomar, 2009).

A relevant aspect that Palomar (2009) highlights is the teacher's role in providing information selection strategies. Unverified, unreliable, and poor-quality materials can be found by students, which leads to incomplete or even erroneous and superficial learning. Searching for online content leads to the immediacy of information, so students do not spend the time required to consolidate learning, confusing knowledge with the accumulation of data.

Digital equipment and facilities are required. Classrooms need to be equipped with the appropriate tools available, in addition to the fact that not all students have access to them outside the school, creating a gap among learners. Even if the necessary tools are available, any unanticipated incident that may arise in them may hinder or even impede their didactic development (Henderson, 2020; Palomar, 2009).

As previously mentioned, ICTs in education present numerous advantages, however, inappropriate use or lack of knowledge and training, instead of facilitating and enhancing the educational process, may result in detrimental effects.

## **1.2. CLIL**

### **1.2.4. Definition and characteristics**

The term CLIL stands for *Content and Language Integrated Learning*, or AICLE in Spanish which corresponds to *Aprendizaje Integrado de Contenidos y Lenguas Extranjeras*. The term refers to the educational programme in which a foreign language is used as a vehicular language to teach other school subjects other than the language classes themselves (Gallardo del Puerto & Gómez Lacabex, 2013).

The implementation of CLIL programmes has been increasing exponentially in recent years as educational authorities have introduced foreign language learning to pupils earlier than ever before, giving foreign language learning a major role in the educational system (Lasagabaster & Sierra, 2009). However, the previous studies carried out in early school foreign language instruction in Spain revealed that the early introduction of language was not as effective as expected, consequently CLIL acquired a greater role, increasing the exposure to the language rather than bringing it forward in

time, using the foreign language as a medium of knowledge rather than an object of knowledge (Gallardo del Puerto & Gómez Lacabex, 2013).

The main objective is to develop both content and language knowledge, working through a dual approach to achieve the European Commission's requirements for multilingual education, in order to foster communication and social cohesion between European citizens (Fernández, 2012). In this context, the learning of non-language subjects is not carried out in the foreign language but through it, paying equal attention to language and content so that students are immersed in a language environment (Begimbetova et al., 2022).

The focus is on the 4Cs framework by which content, communication, cognition and culture are integrated as well as the three types of language intervening: language of learning, language for learning and language through learning (De Smet et al., 2018).

According to Begimbetova et al. (2022), CLIL is divided into "hard" CLIL, referring to the content of non-language subjects being taught in the foreign language, and "soft" CLIL being the opposite, meaning the role of the teacher using soft CLIL to learn the foreign language using content from other subjects. Additionally, they point out that the interaction of the 4Cs (content, communication, cognition and culture) are in continuous connection with each other, leading to a combination of theoretical learning, language learning and intercultural understanding.

#### **1.2.5. Research outcomes about CLIL**

One of the major concerns of this approach is how learning through a foreign language affects content learning, however, the overall results obtained indicate that CLIL students learn the same amount of content as students taught in their mother tongue (Dalton-Puffer, 2008; Seikkula-Leino, 2007). Nevertheless, there is concern about the conceptual simplification through the foreign language, not obtaining the maximum outcome of content learning.

The results of language learning are positive, with CLIL students achieving higher levels of language proficiency, leading to better communicative competence in the language (Dalton-Puffer, 2008). The areas where agreement exists on where CLIL students achieve the greatest proficiency are vocabulary and fluency (Dalton-Puffer, 2008; Gallardo del Puerto & Gómez Lacabex, 2013; Lasagabaster & Sierra, 2009).

Lasagabaster & Sierra (2009) conducted a comparative analysis between CLIL and traditional foreign language learning groups where CLIL learners demonstrated greater proficiency in pronunciation, vocabulary, grammar, fluency and content. On their part, Gallardo del Puerto & Gómez Lacabex (2013) emphasise that additional CLIL exposure provides students with improved oral production, proving to be more fluent in the language and less reliant on their mother tongue, resulting in more efficient and independent speakers of the foreign language.

Dalton-Puffer (2008) draws a significant connection between the outcomes, noting that the content instruction is carried out through almost no writing activities, which is reflected in the students' optimal oral production results, but less profit in writing skills.

The results of the research carried out in numerous studies agree with their conclusions, showing that a great deal of effort and a significant change in how educational authorities approach the methodology is still needed to obtain positive language and content outcomes, by establishing a consolidated educational approach (Dalton-Puffer, 2008; Fernández, 2012; Gallardo del Puerto & Gómez Lacabex, 2013; Lasagabaster & Sierra, 2009).

According to Dalton-Puffer (2008), the objectives of using CLIL in language learning seem to be unspecific, creating a need to be more concrete, so that teachers can adjust their didactic proposals, achieving classes that are content and language rich, since what is optimal for language will also be appropriate for content.

#### **1.2.6. *Integrating ICT in CLIL***

The Council of the European Union establishes key competences that future citizens are expected to develop, in which multilingualism and digital competence are highlighted. The integration of ICT in CLIL has been a consequence of the exponential significance that Information and Communication Technologies have been acquiring in different areas of education, as well as the increasing trend of bilingual programmes has resulted in the implementation of CLIL (Content and Language Integrated Learning) programmes. (Martínez-Soto & Prendes-Espinosa, 2023).

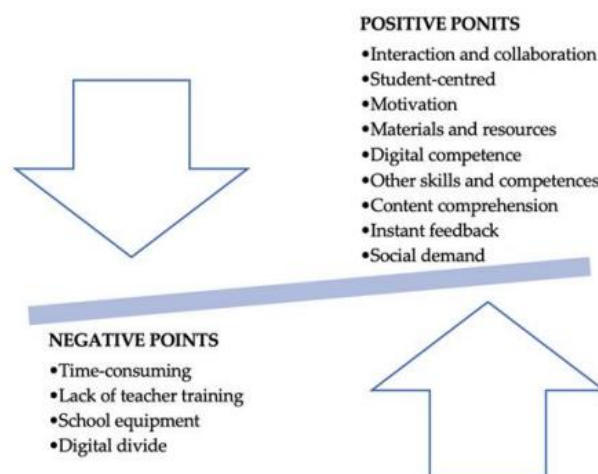
In this context, the evidence of the integration of ICT in CLIL is positive, demonstrating a beneficial relationship in the learning of content and foreign language through interaction and collaboration: "ICT may provide more in-depth explanations

through visual aids. Thus, ICT in the CLIL classroom can be a learning facilitator” (Martínez-Soto & Prendes-Espinosa, 2023, p. 3). Visual and auditory aids ensure adaptation to different types of learners improving equal access to knowledge.

The use of ICT in CLIL education is also effective since they both focus simultaneously on the learning process and the tasks, besides ICT contributes to the integration of the 4Cs (Begimbetova et al., 2022).

The creation of own materials eradicates the CLIL teachers' problem of not finding appropriate resources for their lessons as CLIL books are usually at a lower level than those of the mother tongue. Self-made materials through ICT provide specific, rich, and authentic content, the resources available are countless, facilitating teachers' task of creating appropriate materials for their CLIL classes (López Pérez & Galván Malagón, 2017).

Some of the most remarkable features of ICT integration in CLIL are synthesised by Martínez-Soto & Prendes-Espinosa (2023) in the following image.



**Figure 1.** Synthesis of positive and negative aspects of ICT integration in CLIL. (Martínez-Soto & Prendes-Espinosa, 2023, p.10).

In addition, Schietroma (2019) conducted a study where data showed that students’ attitudes towards chemistry classes positively improved when using ICT resources, enhancing their interest and motivation towards a subject that they initially described as boring and difficult. Consequently, learners interacted through the foreign language by searching for information and producing their own multimedia products.

Having reflected on the satisfactory results of the integration of ICT in CLIL, it is noteworthy the lack of materials available to CLIL teachers and, secondly, the fact that

ICT is not fully integrated in CLIL programmes, according to my experience during my school placement. Having considered the positive aspects, the didactic proposal of this paper develops some activities in CLIL using ICT.

### **1.3. ICT TOOLS**

#### **1.3.4. Blog**

##### *Definition*

Blogs, initially known as weblogs, could be broadly defined as an “easily created website that can be used for learning in different disciplines and in various levels” (Kuimova & Zvekov, 2016, p. 157). More specifically, in the field of education, blogs created with an educational purpose can be referred to *edublogs*.

Thanks to this tool in the classroom, it is possible to create meaningful content for the students, as they create posts that can be read by the whole class and family members. In addition, "members of the group can publish their drafts immediately and receive comments from each other" (Amir et al., 2011). This tool allows EFL learners to “use their language knowledge in various situations, discuss their opinions with their peers, transfer their knowledge from one basic skill to another, and create a social learning environment that facilitates collaborative learning” (Aydin, 2014, p. 245).

Moreover, creating a blog for educational purposes stimulates classroom discussion, brings up new chances for language learning, and encourages students' autonomy. (Kuimova & Zvekov, 2016).

##### *Types of educational blogs*

According to Campbell (2003), we can find "three possible ways that weblogs could be put to immediate use with ESL classroom learning". The three types of Weblogs for Use in ESL Classrooms are *The Tutor Blog*, *The Learner Blog* and *The Class Blog*.

##### *The Tutor Blog*

In this first type of weblog, it is the teacher who manages the blog for the students. This type of blog provides a reading approach to students, giving them daily reading practice through short posts. In this blog the teacher is the one who creates the posts, which can be adjusted to the students' interests, use vocabulary used in class and even use casual and natural vocabulary so that the students become even more familiar with the language patterns. On the other hand, “It encourages online verbal exchange by use of

comment buttons. [...] Ask your students questions, give them riddles, challenge their views; whatever it takes to encourage them to comment” (Campbell, 2003). Finally, this type of blog is particularly useful for students to have a place for revising at home, so that the teacher can leave links to websites that provide exercises, educational games or interesting content in the area so that, autonomously, students at home can reinforce or expand on the content.

#### The Learner Blog

This second type of blog is characterised for being managed by the students (assisted by the teacher). This can be done individually or in groups with few members working collaboratively or autonomously in an individual way. It can be used as a diary, as creative writing and personal expression, in order to practice writing and the creation of different types of texts (Campbell, 2003).

In addition, the highlight of this type of blogs is the possibility of creating comments, written by students, and published instantly. They create meaningful content that people can then read and add a comment. This allows the exchange of ideas among the students, so that everyone may read what the others have written and can write and receive comments on the different pieces of work.

#### The Class Blog

A class blog stands for a blog created for discussion and exchange of classroom ideas managed by students and teachers. This way, the whole class works together to collaboratively create the product. Students can exchange opinions, upload images, write messages and even share it with students from other countries as a cultural exchange:

“The walls of the classroom tumble down and the world becomes a virtual room, where a student in Brazil, for example, can interact with a student in Japan. [...] they can not only practice their foreign language skills but also, and most importantly, share cultural knowledge, feelings and thoughts” (de Almeida Soares, 2008, p. 4).



Edublogs can be implemented in a variety of ways in the classroom, such as using them to communicate as instructional resources, as collaborative tools or as showcases for student projects (Ray, 2006).

#### *Advantages*

In numerous dimensions, edublogs offer several benefits as an educational methodology. It has been concluded that the most interesting aspect of classroom work with blogs is the meaningful use of language with the aim of creating an authentic product within a real communication space (de Almeida Soares, 2008; Kuimova & Zvekov, 2016).

Reading and writing skills are significantly enhanced through the use of blogging in the classroom. Accordingly, the use of edublogs improves reading and writing processes:

“Results in positive perceptions of reading, encourages classroom discussions, and develops literacy and critical thinking skills. [...] positively affects learners’ writing performance, their ability to monitor writing, their attitudes towards and perceptions of writing, and their interactions and participation in writing” (Aydin, 2014, P. 252).

Studies highlight the positive effects on students' motivation and attitude as a major consideration in this area. Particularly EFL students were perceived to be significantly motivated towards blogging in their learning: “The use of blogs has also been found to considerably enhance learners’ motivation, to affect positively students’ perceptions of learning, and to result in positive attitudes towards learning” (Aydin, 2014, P. 252).

The teacher has a major role being in charge of developing the habit of blogging in the students, for this “The teacher should motivate and keep the interest of learners to blogging, encourage and promote their work, reading and commenting on the posts of their classmates, discuss with them the information in blogs and check their writing” (Kuimova & Zvekov, 2016).

Additionally, Istifci (2011) conducted a study designed to ascertain the opinions of primary school EFL students about using weblogs. A classroom blog was created

where different activities were published every week and after 6 weeks a questionnaire was developed to find out students' perceptions, the results were conclusive as learners considered the use of weblogs as a learning tool to be motivating, enjoyable and encouraging.

#### *Disadvantages*

Once the positive points of the application of blogging as an educational tool in the classroom have been highlighted, it must be emphasized that the potential negative aspects must also be taken into consideration. As mentioned above, the use of blogging in the classroom has clear benefits for students' reading, writing skills and motivation, being a resource towards which children have a positive attitude. However, there is no benefit in terms of fluency, accuracy, linguistic complexity, or pronunciation regarding oral abilities. (Aydin, 2014).

In addition, according to (Ray, 2006) there are two key issues that teachers in particular need to consider as they may impact negatively students' wellbeing. These aspects relate to accessibility and student safety issues and highlight the negative consequences of blogging. First, the need of internet access and a computer is essential, tools that may not be accessible to all students. Moreover, online predators, harassment and bullying are threats that internet use may generate.

Teachers therefore have an essential duty where minors are concerned, so it is necessary to follow the *Kids' Rules for Online Safety* to keep children safe and not expose them to all the dangers that the Internet can bring (Ray, 2006).

Having outlined the effectiveness of the use of blogs in the classroom, in the practical proposal a blog, more specifically the class blog, will be implemented. The whole classroom will work collaboratively for the optimal development of the blog, creating new entries, reading classmates' posts, commenting on each other's contributions, and sharing them with the families.

#### **1.3.5. Digital mind map**

##### *Definition and types*

A mind map is a graphic organizer where a primary item is placed in the centre, and the secondary and additional items that clarify the meaning of the central one are placed around it and connected to each other (Koznov & Pliskin, 2008). The method known

as mind mapping helps pupils organize their ideas through the process of mentally mapping concepts or words (Malekzadeh & Bayat, 2015). Creating a mind map involves “placing a target concept, skill or category in the middle of the screen. This concept or skill is used as a basis for grouping, categorizing and sub-categorizing vocabulary items” (Al-Jarf, 2015, p. 513).

This visual tool might include different images, colours and shapes, being frequently used in the field of education, psychology and business (Koznov & Pliskin, 2008). As several authors conclude, it is a useful tool for teachers as it visually represents concepts or ideas and relates them to each other, creating meaningful content for students (Al-Jarf, 2015a; Bukhari, 2016; Heidari & Karimi, 2015; Koznov & Pliskin, 2008).

Concerning mind map types, (Al-Jarf, 2015b) states that there are five types of mind maps for vocabulary development, introducing morphological, syntactic, semantic or sound-symbol association mind maps, as well as lexical and spelling variants. In the didactic proposal of this paper we concentrate on the syntactic mind maps for the activation of previous knowledge through brainstorming.

#### *Educational use and stages*

According to (Al-Jarf, 2015b), classroom instruction through mind mapping technique involves 6 stages; orientation, presentation and modelling, guided practice, independent practice, extension activities and assessment. Likewise, the educational use of mind maps requires prior preparation from the teacher, including planning strategies, organisation, material preparation, establishing the basis for class discussion, encouraging students to study before attending class, and activating their prior subject-specific knowledge (Heidari & Karimi, 2015).

A primary concern for Al-Jarf (2015a) is the need to integrate mind mapping in EFL students' vocabulary acquisition. In her study conducted with first year students at the Faculty of Languages and Translation, King Saud University, Riyadh, Saudi Arabia it was shown that: “mind-mapping software can be integrated in in-class vocabulary instruction as a brainstorming activity, and as a tool for helping the students organize, compare, group, connect, retain and review their vocabulary” (p. 510).

#### *Advantages*

Regarding the advantages of using mind maps in the classroom, there are several different aspects in which some authors reflect a benefit. On the one hand, the positive

impact of Mind Maps in the acquisition and retention of English vocabulary is argued, as well as a greater accuracy of vocabulary, by relating words, avoiding isolated knowledge of vocabulary, creating a more meaningful content (Al-Jarf, 2015a; Heidari & Karimi, 2015).

Following Bukhari (2016), significant benefits can be found in writing skills: “Mind maps can work as tool to facilitate the learners to plan ideas in the pre-writing process. [...] are good to be applied in the pre-writing stage to explore ideas and generate thoughts on the topic for writing” (p. 62).

In addition, the positive impact on collaborative work is highlighted. Digital mind maps enhance collaborative work between students and with the teacher, additionally, the organisation of collaborative work improves in the classroom, as live collaboration gives the option to edit and create the mind map simultaneously (Koznov & Pliskin, 2008).

The students' attitude towards mind mapping was accurately researched by Al-Jarf (2009). In her study, it was concluded that the attitudes were positive “All of the students found the mind mapping software fun and helpful in generating and organizing ideas and considered it a new way of brainstorming and planning”.

#### *Disadvantages*

The main drawback is the tendency to neglect the purpose of creating a quality and meaningful mind map, focusing on content rather than form, as the design of the map acquires a leading role that it does not have (Koznov & Pliskin, 2008).

The tools selected for digital mind mapping may also present disadvantages as some do not have the capacity for managing large diagrams with efficiency and visual clarity, consequently, teachers spend more time explaining how to work with the digital tool rather than teaching how to create a quality mind map (Koznov & Pliskin, 2008).

The website selected to create the mind map was [Mindomo](#), it allows large diagrams and is a user-friendly tool, being effective to avoid wasting time and creating distractions around different features of the tool.

#### **1.3.6. Podcast**

##### *Definition*

Podcasts are audio programmes that are available on the creators' websites or blogs and can be listened to online or downloaded as MP3s to a computer or iPod (Chacón & Pérez, 2011; Rosell-Aguilar, 2007; Sze, 2006). The term comes from the combination of the words

iPod (portable device for audio recording and listening) and broadcasting (public audio transmission) (Talandis, 2008).

Podcasting began in 2005 and it has now become an absolutely popular ICT resource since it can be listened to when, where and as often as the audience wants. Moreover, a podcast does not need to be created by an expert but by anyone with internet access, making it a widely used tool in education (Sze, 2006; Stanley, 2005).

Stanley (2005) also highlights its versatility as a teaching resource “the appeal is not only in providing additional listening input for students, but that students themselves can become involved in recording and producing the podcast”.

### *Types*

Regarding types of podcasts, there is no consensus, but authors organise diverse types of podcasts according to different criteria.

For Sze (2006) there are two types depending on who produces them. Differentiating between "independent" and "radio" podcasts. "Independent podcasts" are those created by organisations or individuals and are the most suitable for education. Whereas "radio podcasts" are already available radio programmes converted into podcasts (i.e., BBC production).

Meanwhile, Stanley (2005) divides teaching-oriented podcasts into three groups. The first is the “authentic podcast”, recommended for most advanced learners, which is audio recorded by native speakers created for non-educational purposes. Secondly, there is the “teacher podcast”, created by the teacher for their pupils, covering topics discussed in class. Thirdly, there is the “student podcast”, developed by the students themselves assisted by the teacher, developing speaking and listening skills.

In the theoretical part of this paper, student podcast are conducted, audios created by the students with the help of the teacher.

For Rosell-Aguilar (2007) there are two main types of podcasts, those created by teachers and those created by students, nonetheless, the author creates a more precise and complex classification of uses of podcasting for language learning. A distinction is made between own materials created (by the teacher or by learners) and existing materials. In the latter, it also differentiates between authentic material and material created for educational purposes, also separating according to its educational relevance and audiences.



**Figure 2.** Taxonomy of uses of podcasting for language learning (Rosell-Aguilar, 2007, p. 7).

To conclude, Talandis (2008) distinguishes between two main podcasting types; the "short language focused mini-lesson", which may be used as an additional resource for classes and the "teacher-based talk show", which can assist in improving the teaching proposal.

#### *Educational use*

The main characteristic of the pedagogical use of podcasts is their interactivity and authentic content, which is why it has been agreed that teachers should develop their use in the classroom as it fosters students' communication skills (Chacón & Pérez, 2011; Sze, 2006).

In order to develop pupils' listening and comprehension skills, teachers should look for appropriate podcasts for pupils. Sze (2006) proposes three ways of doing this: They can start with "general" podcast directories (a database of links to sites that host podcasts), they can go directly to educational podcast directories (such as the Education Podcast Network), or they can go to specialised ELT podcast directories (created by the current abundance of podcasts).

Chacón & Pérez (2011) and Talandis (2008) conclude that the key to the use of podcasts in education is the endless source of authentic linguistic information available for learners. However, Sze (2006) argues that podcast listening motivates and increases

students' interest but concludes that authentic podcasts are aimed at more advanced learners in order to deepen their understanding of real-life communication.

Overall, the main focus of education is on the creation of podcasts by learners, being this the core topic addressed by authors, discussing all its benefits for the learning experience (Chacón & Pérez, 2011; Lee et al., 2008; Rosell-Aguilar, 2007; Sze, 2006; Talandis, 2008). Students, while working in groups, address planning, design, production, and communication skills developing autonomous learning (Chacón & Pérez, 2011).

To help learners create their own podcasts, teachers can “start a blog that also hosts podcasts for the class, [...] have class share the same username and password, students upload their MP3 files to class podcast on their own, design activities that encourage students to respond to each other” (Sze, 2006, p. 121). This identical process was followed to develop the practical proposal of this project.

On the other hand, when students create the podcast, they collaborate with each other; in the research conducted by Lee and colleagues (2008), students' motivation and self-confidence was boosted when used a pre-class support material. As a result, students, and their peers, attended their classes with greater motivation and self-confidence, encouraging interactivity and collaboration among learners (Chacón & Pérez, 2011).

Motivating and enriching activities can also arise from podcasting, such as an inter-school activity where pupils from different classes or schools communicate by creating and responding to each other, providing real and meaningful content for communication (Sze, 2006).

#### *Advantages*

For Sze (2006), the greatest benefits relate to the following aspects:

- Flexibility: gives the option of re-listening at home, as well as stopping or advancing the audio whenever each student wants. It can also be adapted to different learning levels, assigning different tasks according to level.
- Motivation: students become not only fascinated by the format, but also create accessible content for a real audience.
- Ease: easy to access and operate.
- Practice: learners need to practise the content of the podcast, repeating and improving fluency and pronunciation.

- Collaboration: through group work they learn first-hand how to collaborate.
- Speaking: provides more speaking situations (complex in large classes), individuals or groups can create podcasts.
- Self-confidence: reduces students' stress as they do no longer have to speak in front of their peers.
- Communication: improves language skills.
- Availability: endless free learning resources available.

The benefit of using authentic materials in the classroom is consistently highlighted. “As well as the potential for learning about aspects such as the history, culture, and politics of the areas where the target language is spoken, provide opportunities to notice vocabulary and grammatical structures [...] bring together language learning and use” (Rosell-Aguilar, 2007, p. 8).

In their research, Chacón & Pérez (2011) concluded that the implementation of the podcast as an educational resource improved students' oral skills in the target language and enhanced self-learning and collaborative work.

Despite considering all the benefits, Rosell-Aguilar (2007) clarifies that effectiveness depends on the purpose of use, as the disadvantages should also be taken into consideration.

#### *Disadvantages*

The major drawback lies in the added workload for teachers and students, providing a challenge for the producers, depending on who creates the content (Chacón & Pérez, 2011; Rosell-Aguilar, 2007; Stanley, 2005).

According to Chacón & Pérez (2011) accessibility limitations create a gap between students as some may face difficulties in accessing the internet or electronic devices to develop the activities.

Although the use of podcasts avoids difficulties for dyslexic and literacy learners, it presents an unsuitability for visual learners, challenging and even disengaging them from podcasting (Rosell-Aguilar, 2007).

### **1.3.7. Canva**

#### *Definition and characteristics*



Canva is a graphic design platform that does not require specific technical knowledge as its user-friendly navigation makes it an easy-to-use application. Through a simple editing format that includes different fonts, graphics, templates, and photos, users of this tool create and share their designs (Kong & Hailie, 2023). Users, after logging in, can choose from different design categories to create their own products, including brochures, presentations, logos, social media posts, infographics, posters and more.

Ermy Wahyuni (2018) highlights three of its main characteristics:

- Easy log- in system which only requires creating a specific Canva account or using a Google or Facebook account.
- Appealing functionalities to create complete designs by means of free templates.
- Creation of infographics for presenting teaching materials which result in persuasive and eye-catching materials for students. Infographics being a visual representation of information, including elements such as images, icons, diagrams and more.

#### *Educational use*

Canva is a relatively new platform on which not much research has been conducted; the available articles are of recent publication, but all conclude with positive perceptions, including students, about the pedagogical uses of the tool.

Furthermore, the main focus is on promoting critical thinking, collaboration, creative thinking and communication (4C skills). The application and practice of the 4Cs is fundamental and required for a well-rounded education in line with the needs of the 21st century (Kong & Hailie, 2023). The promotion of the 4c skills is implied in its use since positive results have been found in the use of the application and improvements in students' critical thinking, communication, collaboration and creativity skills Kurniawati & Nugraha (2023).

Consequently, proper implementation could be conclusive considering it includes a wide range of features that encourage students bring their ideas and imagination into reality. The 4Cs appear to be interrelated in taking sensible choices to achieve successful outcomes: "it takes efforts that are not simple, requires cooperation for discussion, and require new concepts and ideas. [...] students can further develop

their potential they are ready to compete in the world of future career” (Kurniawati & Nugraha, 2023, p. 229).

The creation of infographics using Canva seems to be helpful in the development of EFL reading comprehension and writing skills (Kong & Hailie, 2023). Developing infographics in the classroom “helps teacher summarizes and elaborates the materials in a non-monotonous way. Infographic has powerful visual texts which can be personalized to serve the teaching purpose” (Ermy Wahyuni, 2018, p. 282).

Educators can use the web application as a captivating alternative teaching resource, providing a more stimulating and active learning environment for students (Ermy Wahyuni, 2018; Kong & Hailie, 2023). Additionally, Kong & Hailie (2023) found among the students' responses in their research that the most repeated feedback was the suggestion to include more topics outside the textbook, which implies that the use of Canva can mean a deeper exploration of content based on the students' interests, bringing them closer to real and meaningful content.

### *Benefits*

In that same research conducted by Kurniawati & Nugraha (2023), questionnaires were given to students after working with Canva. Based on the results they found 8 relevant benefits of using the tool in the teaching and learning process.

1. Learning is more fun for students, as they can choose from an infinite number of different designs, colours and images that are attractive to them.
2. It is easy to use and requires no specific skills, being very intuitive by choosing the desired features with a simple click.
3. It promotes student creativity through its formatting, photo, template and font editing features, generating unlimited creative interest in students.
4. It is a more engaging alternative writing tool for students, improving their writing skills.
5. Its ease of use simplifies the writing process and students no longer feel tired from writing by hand, making writing practice easier.
6. Through its "create team" option, it facilitates collaboration in group work, participants can edit simultaneously which guarantee better coordination among them.

7. A positive learning environment develops in which pupils feel more motivated and, as a result, their on-task concentration improves.
8. It is a useful tool not only for EFL instruction but for other subjects as well, being able to create poems, science-related posters and more.

Learning becomes more playful thanks to its visual character, which makes it clearer and easier for students to visualise and understand the content (Ermy Wahyuni, 2018; Girgin & Cabaroğlu, 2021). Another advantage to highlight is the fact that “students and teachers can become “design thinkers,” meaning that they can become skilled at imagining and creating solutions to problems rather than identifying existing ones” (Ermy Wahyuni, 2018, p. 280).

#### *Disadvantages*

Students' unfamiliarity with Canva may be a factor that makes some students not feel attracted to an unknown tool (Kong & Hailie, 2023). In addition, some limitations can be found in the free use of the application as not all images offered are free of charge; many photos are locked, as they can only be used by customers subscribed to a paid premium account (Ermy Wahyuni, 2018).

Similarly with other ICT tools a possible drawback is that it requires internet access and can only be accessed online, so teachers need to anticipate the issue and ensure that all students have the required facilities for its use (Ermy Wahyuni, 2018; Kurniawati & Nugraha, 2023).

#### **1.4. JUSTIFICATION**

The benefits of the use of ICT in education are clear, and on the contrary, the educational field must be constantly changing and updating with the current technological era we live in. If education is to address the educational needs of the 21st century, among which digital competence is present, teachers must be in constant training and learning in order to ensure the basic digital competence needed in the classroom..

ICT tools constitute a means of communication that encourages student interaction, improves their motivation, interest, autonomy, and cooperation, among other things. As this paper has tried to demonstrate, the benefits of using ICT in the classroom are undeniable and innumerable. However, during my school placement, I did

not observe a significant use of ICT tools in the period of primary education, leaving this valuable resource for teachers unexploited. Therefore, taking into account its benefits and the lack of use in the classroom, I introduced the practical proposal based on the use of ICT tools for EFL and based on the CLIL methodology.

## 2. PRACTICAL PROPOSAL

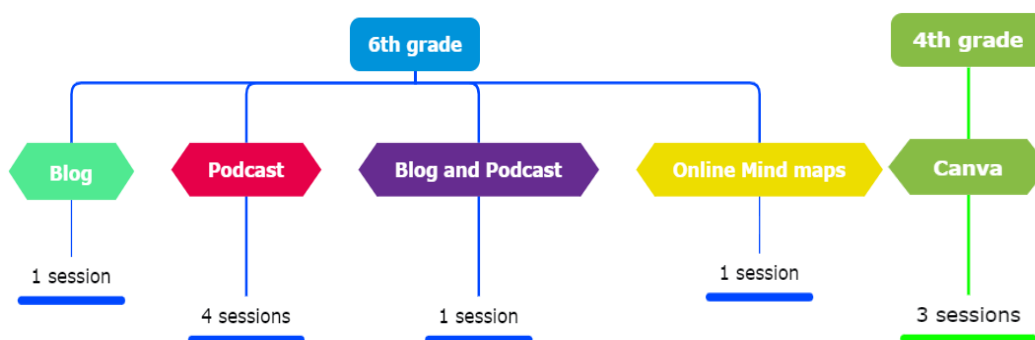
### 2.1. CONTEXTUALIZATION AND PROCEDURE

The practical proposal is based on the theoretical premises presented in the theoretical framework of this undergraduate dissertation. It was developed throughout 10 sessions by means of different activities designed with the tools described in section 1.3: the blog, podcast, digital mind maps and Canva. Furthermore, the activities were implemented using the CLIL methodology for EFL.

The school where the proposal was conducted follows the CLIL methodology and the proposal was designed for English and Science lessons. The activities were carried out in four different classes, two sixth-grade classes and two fourth-grade classes. Each of the sixth-grade classes consisted of 28 students organised in 7 groups of 4 students each. While one class in the fourth year of primary school consisted of 24 pupils and the other 25 pupils, also organised in base groups of 4 students (and one group of 5).

The practical proposal was carried out at specific moments during the school placement based on the needs of the school, the teacher requirements and the students' characteristics. Consequently, the approach is not a unique unit with a common thread in the same class but, specific activities contextualized in different lessons. Moreover, students' attitudes to using ICT tools in the classroom were not only obtained from a specific group, but the responses of 4 different classes and two different courses were controlled. The results of questions to students as well as their positive attitude during the activities demonstrated that the application of ICT resources through CLIL for EFL increased the motivation of fourth and sixth grade students.

The activities were carried out between 7 March and 23 March, contextualising and adjusting to the educational periods of the school and the sessions were distributed as follows (in both classes of each course the distribution was the same):



**Figure 3.** Distribution of ICT tools and their respective sessions for both courses.

The procedure of the activities carried out was as follows:

- For both sixth-grade classes:
  - Firstly I created a Google account and a class blog via [Blogger.com](https://www.blogger.com) (for teacher and pupils' use), giving the username and password to the students (all the same). In the first session we introduced the Blog, pupils created their entries by answering some previous questions in pairs and finally they commented on their classmates' posts.
  - Then, they created an interview based on the information that each group of 4 students had collected about important women in the contemporary history of Spain in the subject of Social Science. The interview was recorded as a podcast using Audacity: one student played the role of the important woman and the other participants performed as interviewers.
  - After uploading the podcast recorder by the 7 groups in each class to their respective class blog, each student listened to their classmates' podcasts and added comments providing feedback. Afterwards, they answered a short questionnaire on how they felt about working using the Blog and Podcast.
  - The last activity was an online mind map via [Mindomo](https://www.mindomo.com) in the EFL subject as an activation of previous knowledge to start the topic "Under the Sea". In this activity each student had to recall a word related to the topic which was added in a collaborative mind map. In order to end up the activity, each student reproduced it in their notebook as the front page of the new unit, allowing them to design it freely.
- As regards both fourth-grade classes, the following procedure and activities were adopted:
  - First, I gave them the username and password of a common Google account created for each class likewise the sixth-graders and. As the final product of an insects-related short project, each group had to use Canva to create a poster explaining relevant information about their insect.

- In the first session students were introduced to Canva and could observe how it worked. Then, the groups started to organise the relevant information previously found to display it on the poster.
- In the next session pupils continued completing the and decorated the poster using the various features provided by the tool.
- Finally, each group presented their poster to their peers.

## **2.2. METHODOLOGY**

The methodology followed was based on the CLIL approach integrating the aforementioned tools to apply them to the subjects of English as a foreign language and Social Science. Likewise, the activities were conducted by developing both language and curricular content simultaneously through a computer-based methodology, enhancing digital competence.

By means of the use of the different ICT tools used, the objective was to create meaningful content for the students, in order to achieve this, the activities were not kept inside the classroom and families and students outside school hours had the opportunity to access the content, creating a real audience and real content. In addition, when working through the class blog, using the option to create comments on blog entries, assessment was not only done by teachers (traditional teaching), but students also provided feedback to their peers by assessing each other (co-assessment).

Scaffolding activities were also implemented, especially when introducing new ICT resources which learners were unfamiliar with. For this purpose, small introductory activities were created through the activation of prior knowledge.

Collaborative learning has played a key role in this approach as well by means of group work. During the activities it could be observed that interaction and collaboration between students proved to be significant. Each working group organised itself, distributing tasks within the group, promoting the autonomous and active learning of learners through their research.

As outlined in the theoretical framework of this dissertation, the introduction of ICT tools in students' learning development has been proved to be a triggering factor for significant learning. The methodology implemented in the didactic part has resulted in

positive results regarding motivation as well. Students' enthusiasm to participate in the activities, interest and commitment increased, indeed some activities were extended beyond the planned time due to the positive atmosphere created in the classroom.

### **2.3. CURRICULAR COMPETENCES**

The key competences addressed in this teaching proposal are part of the key competences established in the Ley Orgánica de modificación de la Ley Orgánica de Educación 2006 (Spain, Cortes Generales, 2020). This rationale responds to the need to link the lifelong-learning competences with the challenges challenges of the 21st century, the principles and aims of the education system established in the LOE and the school context. In general terms, the achievement of the competences set out in the LOMLOE is linked to the acquisition and development of key competences.

Cross-curricularity is an intrinsic condition in the sense that that all learning contributes to its attainment. Thus, the acquisition of each of the key competences contributes to the acquisition of all the others. There is no hierarchy between them, nor can an exclusive correspondence be established with a single educational field or subject, but rather all of them are specified in the learning of all the different fields or subjects and, in turn, are acquired and developed on the basis of the learning that takes place in them as a whole.

In this didactic proposal, the focus is on the following competences:

- Linguistic communication competence. The activities are designed for students to interact orally and in written form with each other. Additionally, through group work learners develop the ability to communicate effectively in a cooperative, creative, and respectful way.
- Multilingual competence. Pupils use both English and Spanish language appropriately and effectively for learning and communication. They recognise individual linguistic profiles to develop strategies to mediate and transfer between the two languages, maintaining and acquiring language skills. They integrate historical and intercultural dimensions aimed at knowing, valuing, and respecting linguistic and cultural diversity.
- Competence in science and technology. Some activities are designed to provide knowledge of facts related to the contemporary history of Spain as well as



relevant women of the time (for sixth grade). And fourth grade students will focus on activities related to the knowledge of relevant information about insects. This competence is implemented through activities focused on research through technology.

- Digital competence. Pupils use digital technologies safely and in a responsible manner for learning, interaction, and collaboration among learners. This is the most relevant competence in this project as it is centred on the appropriate use of ICT resources in the classroom. It is developed through the use of technological resources such as computers, headphones and microphones. Moreover, the activities are focused on the 4 ICT tools implemented which are the blog, online mind maps, podcast and Canva.
- Personal, social and learn to learn competence. Students work on the ability to reflect on themselves in order to promote constant personal knowledge (self-evaluation) by means of reflection questions that are posted on the class blog. In addition, they also give feedback to their classmates (co-evaluation), promoting healthy learning expectations among peers.

## **2.4. OBJECTIVES**

The objectives outlined below are extracted from the Ley Orgánica de modificación de la Ley Orgánica de Educación 2006 (Spain, Cortes Generales, 2020).

### **2.4.1. General objectives**

#### *Social Science*

1. To develop basic technological competences and to initiate in their use, for learning purposes, developing a critical spirit towards their functioning and the messages they receive and elaborate.
2. To know and appreciate the values and rules of coexistence, to learn to act in accordance with them in an empathetic way, to prepare for the active exercise of citizenship and to respect human rights, as well as the pluralism of a democratic society.

3. To develop habits of teamwork, effort, and responsibility in study, as well as attitudes of self-confidence, critical sense, personal initiative, curiosity, interest and creativity in learning, and entrepreneurial spirit.
4. To get to know the fundamental aspects of Social Sciences and Culture, as well as to be introduced to the Geography and History of Navarre and its diversity of languages, cultures and customs.

#### *English as a foreign language*

1. To develop basic communicative competence through the foreign language, enabling them to express and understand simple messages and to cope in everyday situations.
2. To express orally short and simple texts, previously prepared, on everyday matters of relevance for the students, using, in a guided way, verbal and non-verbal resources, and using basic and frequently used forms and structures of the foreign language, with appropriate rhythm, stress and intonation.
3. To select and apply, in a guided way, strategies to produce short and simple messages appropriate to the communicative intentions, using, with help, digital resources and supports according to the needs of each moment.
4. To be interested and motivated in establishing communication through different media with speakers or learners of the foreign language.

#### *Natural Science*

1. To identify and classify animals according to scientific criteria such as diet, reproduction and morphology, explaining their most relevant characteristics.
2. To search, select and contrast information from different safe and reliable sources, using criteria for evaluating sources reliability, acquiring basic scientific vocabulary, and using it in research related to the natural environment.

#### **2.4.2. Specific objectives**

##### *Social Science*

1. To classify and use the different sources (oral, written, patrimonial). To initiate themselves in the use of research and working methods, classifying and using different sources for the realization of projects, which analyse facts, issues and

themes of relevance in the Spanish Contemporary Age, individual and collective roles represented by historical subjects, events and processes.

2. To adopt a critical role to understand the causes responsible for main events in the Contemporary Age in Spain, distinguishing past and present events.
3. To learn about the role of women in history, the main movements in defence of their rights and future challenges in gender equality.

#### *English as a foreign language*

1. To raise awareness about one's progress and stages in the foreign language learning process, recognising aspects that help to improve and carrying out self- and co-assessment.
2. To apply vocabulary acquisition procedures about sea life and insects as well as basic lexical mechanisms for word formation.
3. To present information correctly in oral and written form using correct and appropriate grammatical structures.
4. To apply basic strategies for the planning and production of short, simple and contextualised oral, written and multimodal texts.
5. To use basic communicative functions appropriate to the linguistic domain and context: introducing oneself and others; describing people, objects and places; contextualising events in time; locating objects, people and places in space and asking for and exchanging information.
6. To show interest in establishing contacts and to be aware of the benefits of interculturality

#### *Natural Science*

1. To classify insects following different scientific criteria such as their adaptative capacity to their environment, diet, reproduction and morphology.
2. To identify the most relevant characteristics of insects based on their classification.

#### **2.4.3. Cross-curricular objectives**

1. To use safe and efficient information search strategies on the Internet (assessment, discrimination, selection, organisation and intellectual property)

- and to establish criteria for the reliability of sources (authorship, objectivity, references, etc.).
2. To follow the phases of project development: identification of needs, design, prototyping, testing, evaluation and communication.
  3. To adopt strategies in situations of uncertainty: to adapt and change strategies when necessary, valuing one's own and other people's mistakes as a learning opportunity.
  4. To work actively, respectfully and responsibly in a team, showing initiative, communicating effectively, valuing diversity, showing empathy and establishing healthy relationships based on respect, equality and peaceful conflict resolution.

## 2.5 ACTIVITIES

### BLOG SESSION (6<sup>th</sup> grade)

Activity 1		
<b>Introducing the blog</b>	<b>Timing:</b> 10'	<b>Groupings:</b> whole group
<b>Explanation</b>		<b>Materials and resources</b>
The blog is introduced as an ICT tool. The teacher starts by asking if they know what a blog is, what it consists of and if they know that there are different types. Students answer what they think, creating a kind of small debate. Then the teacher shows the class blog created for the whole class on the IWB and explains how to use it properly.		- IWB. - Class blog with the first activity (Annex I).
<b>Notes</b>	<b>Assessment</b>	
The teacher will write the username and password created specifically for the use of the class blog on the board, everyone will have the same and should write it down for the following sessions.	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well as the interest and motivation shown during the activity.	

Activity 2		
<b>Getting started with the class blog</b>	<b>Timing:</b> 20'	<b>Groupings:</b> Pairs

Explanation		Materials and resources
Students have to answer the questions provided by the teacher (Annex I) on the class blog they answer the questions creating one post per pair. Students must reflect, communicate with their partner, and answer the questions using correct grammatical structures (especially past simple) and appropriate vocabulary.		<ul style="list-style-type: none"> <li>- IWB</li> <li>- Laptops (1 for each pair).</li> <li>- Class blog with the first activity (Annex I)</li> </ul>
Notes	Assessment	
Below each question a model answer is shown, basic prompts on how to answer are provided to help students.	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well as the interest and motivation shown during the activity. The teacher will use a rubric to assess the answers to the questions (Annex II).	

Activity 3		
Peer-to-peer comments	Timing: 20'	Groupings: Pairs
Explanation		Materials and resources
Students will have to find the posts created by their peers, read them and provide feedback through comments saying what they think about their answers, whether they agree or disagree with them and why.		<ul style="list-style-type: none"> <li>- IWB</li> <li>- Laptops (1 for each pair).</li> <li>- Class blog with the second activity (Annex I)</li> </ul>
Notes	Assessment	
The pairs that finish before the time is over may look at the comments that their partners have written to them, the others may do so at home with their families.	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well as the interest and motivation shown during the activity. The teacher will use a rubric to assess students' comments to their peers (Annex III).	

PODCAST SESSION 1 (6<sup>th</sup> grade)

Activity 1		
Interviewing important women	Timing: 50'	Groupings: Work groups

<b>Explanation</b>		<b>Materials and resources</b>
<p>In previous sessions of Social Science, each working group has worked on the contemporary history of Spain and have been assigned an important woman of the time in order to research information about her.</p> <p>Each group will have to create an interview based on the information they have, dividing the characters in the group members: one being the historical woman and the other 3 pupils the interviewers.</p>		<ul style="list-style-type: none"> <li>- IWB</li> <li>- Image with the required information for the interviews (Annex IV)</li> <li>-Students' notebooks and pens.</li> </ul>
<b>Notes</b>	<b>Assessment</b>	
Interviews need to be equally distributed so that all members speak on the podcast. Students are expected to rehearse at home.	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well as the interest and motivation shown during the activity.	

PODCAST SESSION 2,3 AND 4 (6<sup>th</sup> grade)

<b>Activity 1</b>		
<b>Recording the podcast</b>	<b>Timing:</b> 25'	<b>Groupings:</b> Work groups
<b>Explanation</b>		<b>Materials and resources</b>
<p>Taking turns, each group and the teacher will go to the recording room, while the other groups stay in the regular classroom with a support teacher cleaning up their work on a piece of cardboard and hanging it up in the corridors. To record the podcast, the teacher will use the audio recording and editing software called Audacity and each student will have their own microphone to record the audio, with each student pretending to be their character (historical woman or interviewer).</p>		<ul style="list-style-type: none"> <li>-Computer</li> <li>- Audacity (audio recording and editing software)</li> <li>- Microphones</li> <li>- Cardboards and pens.</li> </ul>
<b>Notes</b>	<b>Assessment</b>	
Students with specific needs will be allowed to take their notebook with them so they can read. Each group will	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well	

spend about 25 minutes in the recording studio, taking 3 sessions of time to complete the activity for all groups.	as the interest and motivation shown during the activity. The teacher will use a rubric for the evaluation of the podcast (Annex V).
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BLOG AND PODCAST SESSION (6<sup>th</sup> grade)

Activity 1		
<b>Listening the interviews</b>	<b>Timing:</b> 30'	<b>Groupings:</b> Individual
<b>Explanation</b>		<b>Materials and resources</b>
The teacher will show the blog with the tasks for the session in the IWB. Students individually access the class blog, where the teacher has previously created a post for each group with their respective podcasts. Using their headphones, the students will listen to the interviews done by the other work groups. Once listened to, they will create a comment for each group, providing feedback on what they found interesting, what they learned, what they liked and/or what the group could improve.		- IWB - Laptops - Headphones -The post with the podcast activities (Annex VI)
<b>Notes</b>	<b>Assessment</b>	
Pupils with specific needs will work with a partner to ensure inclusion and the work of the whole class. The interviews may be listened to again at home by the pupils and their families.	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well as the interest and motivation shown during the activity. The teacher will use a rubric to assess students' comments to their peers (Annex III).	

Activity 2		
<b>Answering the questions</b>	<b>Timing:</b> 20'	<b>Groupings:</b> Individual
<b>Explanation</b>		<b>Materials and resources</b>

The teacher will show the questions created for students to answer (Annex III) on the IWB. They will respond individually to get as many opinions as possible about using the blog and podcast in class.	<ul style="list-style-type: none"> <li>- IWB</li> <li>- Laptops</li> <li>- The post with the podcast activities (Annex VI)</li> </ul>
Notes	Assessment
Pupils with specific needs will work with a partner to ensure inclusion and the work of the whole class. Below each question a model answer is shown, basic prompts on how to answer are provided to help students.	Teachers will observe students' learning process, paying attention to their participation, peer collaboration as well as the interest and motivation shown during the activity. The teacher will use a rubric to assess the answers to the questions (Annex VII).

DIGITAL MIND MAPS SESSION (6<sup>th</sup> grade)

Activity 1		
<b>Creating a collaborative mind map</b>	<b>Timing:</b> 40'	<b>Groupings:</b> Whole group and individual
Explanation		Materials and resources
To introduce a new unit in English called "Under the sea", a digital mind map will be created as an activation of previous knowledge. The teacher will use the IWB to show a white board on the website called Mindomo where the title of the topic will be in the middle. the students, one by one, will have to raise their hand, say out loud a word related to the topic and, if it is correct, that student will stand up and add it to the mind map. A digital mind map will be created collaboratively by the whole class. Once finished, students will reproduce it in their notebooks as the front page for the new unit, letting them design it freely (Annex VIII).		<ul style="list-style-type: none"> <li>- IWB</li> <li>-Mindomo website</li> <li>-Students' notebooks and pens.</li> </ul>
Notes	Assessment	
As an activity for activating previous knowledge, it is intended that all students in the class participate. Each one should raise their hand once and say their word,	Teachers will observe students' learning process, paying attention to pupils' participation, peer collaboration as well as the interest	



and until everyone has said one word, a second one cannot be proposed.	and motivation shown during the activity.
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CANVA SESSION 1 (4<sup>th</sup> grade)

Activity 1		
<b>What is Canva?</b>	<b>Timing:</b> 20'	<b>Groupings:</b> Whole class
<b>Explanation</b>		<b>Materials and resources</b>
<p>The teacher will introduce Canva in the classroom by asking the students if they know what it is. It will be used as a tool to create the final product of a mini project in which students in groups have chosen an insect and searched for information about it. The teacher will explain that it is a tool similar to Power Point (which they are familiar with) in which they will create a poster of their insect and afterwards will do an oral presentation in the class. The essential features that students need to know will be shown.</p>		<ul style="list-style-type: none"> <li>- IWB</li> <li>- Canva website</li> </ul>
Notes	Assessment	
Being fourth-grade pupils, they will be helped and reminded of the basic functionalities of Canva throughout the sessions.	Teachers will observe students' learning process, paying attention to pupils' participation, peer collaboration as well as the interest and motivation shown during the activity.	

Activity 2		
<b>Starting with Canva</b>	<b>Timing:</b> 30'	<b>Groupings:</b> Work groups
<b>Explanation</b>		<b>Materials and resources</b>
<p>The students, following their working groups, will create a poster as a presentation of their insect using the Google account created specifically for this purpose. In this first activity they will only begin to see the functionalities and start to put the information they have.</p>		<ul style="list-style-type: none"> <li>- Laptops</li> <li>- Students' notebooks with the information</li> </ul>
Notes	Assessment	

Each group will be helped to prepare their own poster with their respective names so that in the next sessions there will be no confusion between works.	Teachers will observe students' learning process, paying attention to pupils' participation, peer collaboration as well as the interest and motivation shown during the activity.
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CANVA SESSION 2 (4<sup>th</sup> grade)

Activity 1		
<b>Finalising presentation details</b>	<b>Timing:</b> 50'	<b>Groupings:</b> Group works
<b>Explanation</b>		<b>Materials and resources</b>
Students will continue to work with their respective groups, they will have to finish putting all the relevant information and then they will be able to start to decorate the presentations using different images, colours, animations and so on provided by the tool. In this session they will need to finalise the details.		- Laptops - Students' notebooks with the information
<b>Notes</b>	<b>Assessment</b>	
Each group will need to divide the presentation so that all members speak and will be able to rehearse in class (groups that finish on time) and at home.	Teachers will observe students' learning process, paying attention to pupils' participation, peer collaboration as well as the interest and motivation shown during the activity.	

CANVA SESSION 3 (4<sup>th</sup> grade)

Activity 1		
<b>Presenting with Canva</b>	<b>Timing:</b> 50'	<b>Groupings:</b> Group works and whole class
<b>Explanation</b>		<b>Materials and resources</b>
Taking turns, the groups will orally present the created presentation to their peers showing their poster on the IWB. Each time a group ends time will be allowed for questions from peers.		- IWB

<b>Notes</b>	<b>Assessment</b>
Students with specific needs may do the presentation with a piece of paper with information written on it.	Teachers will observe students' learning process, paying attention to pupils' participation, peer collaboration as well as the interest and motivation shown during the activity. The teacher will use a rubric for the evaluation of the oral presentation (Annex IX).

## CONCLUSIONES Y CUESTIONES ABIERTAS

El enfoque principal de este trabajo ha sido examinar en detalle la integración de la metodología AICLE y herramientas TIC puede servir como un enfoque eficaz para la enseñanza de una lengua extranjera, en este caso inglés, además de contenidos curriculares de otras áreas de la educación primaria.

En el marco teórico de este trabajo numerosas investigaciones creadas por expertos y educadores han sido analizadas, evaluando constantemente la eficacia de la metodología AICLE y el uso de las TIC en la enseñanza del inglés como lengua extranjera, así como en la metodología AICLE. Si bien faltan estudios y prácticas concluyentes sobre el tema, los estudios realizados presentan unos resultados positivos de esta metodología. De los artículos de estos autores se puede deducir que utilizar la metodología AICLE junto con las TIC es ventajoso tanto para la adquisición de contenidos curriculares como para el aprendizaje de una lengua extranjera en Educación Primaria, ya que se trata de un enfoque dual. La integración de las TIC en la sociedad ha supuesto un cambio drástico en ésta y, en consecuencia, en el ámbito de la educación.

El desarrollo de la metodología AICLE para el aprendizaje de inglés como lengua extranjera supone un enfoque integral e inclusivo que ayuda en la adquisición de contenidos. Además, promueve el desarrollo de habilidades, estrategias y competencias que permiten la adquisición de las habilidades comunicativas. A su vez, aprender inglés como lengua extranjera es un aspecto vital del plan de estudios educativo.

La incorporación de la metodología AICLE y de recursos desarrollados con las herramientas ha demostrado ser beneficiosa para los entornos educativos. Esta combinación de AICLE y las TIC puede facilitar el proceso de enseñanza y aprendizaje, ya que permite la integración de varias materias y las conecta con las experiencias de la vida real de los estudiantes. Asimismo, este enfoque promueve el aprendizaje a lo largo de toda la vida, lo que lo convierte en una herramienta eficaz para la educación. La metodología AICLE potenciada por las herramientas TIC ha hecho posible que los estudiantes desarrollen la competencia digital, crucial para la participación en la sociedad actual.

Por consiguiente, se puede afirmar que la metodología AICLE y las TIC presentan una gama diversa de oportunidades pedagógicas que, cuando se aplican correctamente,

promueven la adquisición satisfactoria del inglés como lengua extranjera, así como de los contenidos curriculares, las competencias lingüísticas y digitales.

Finalmente, como se ha destacado en el marco teórico, la motivación de los estudiantes se ha visto potenciada. Mediante los resultados del cuestionario llevado a cabo y las actitudes positivas del alumnado, se ha demostrado que la aplicación de herramientas TIC a través de AICLE para el aprendizaje de inglés como lengua extranjera ha mejorado la motivación de los alumnos de sexto y cuarto curso de educación primaria. Además de haber supuesto un desencadenante en el aprendizaje significativo, colaborativo y creativo.

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## ANNEXES

### Annex I. Class blog with the first and second activities

The image shows a screenshot of a mobile application interface for a class blog. At the top, there is a dark header bar with a back arrow on the left, the text "OUR CLASS BLOG 6B!" in white, and a search icon on the right. Below the header, the main content area has a white background. It starts with the word "WELCOME!" in bold, followed by the date "- febrero 27, 2023". A share icon is visible in the top right corner of the content area. The text continues: "Welcome to your class blog. Here we will be publishing new posts every week!!". Then, it says "For today's activity, you have to create a new post answering these questions:" followed by a numbered list of three questions. Each question has a corresponding example answer indented below it. Finally, it says "Then, you need to read the posts of your classmates and add a comment!" followed by another question: "What do you think? Do you agree with them? Why? Why not?".

← **OUR CLASS BLOG 6B!** 🔍

**WELCOME!** 📄

- febrero 27, 2023

Welcome to your class blog.

Here we will be publishing new posts every week!!

For today's activity, you have to create a new post answering these questions:

1. What was the activity you liked the most this week? Why?  
The activity we liked the most was .... because...
2. Which activity did you like the least? Why?  
The activity we liked the least was... because...
3. What have you learned this week? Do you think it is important?  
We have learned... I think it is important because...

Then, you need to read the posts of your classmates and add a comment!

What do you think? Do you agree with them? Why? Why not?

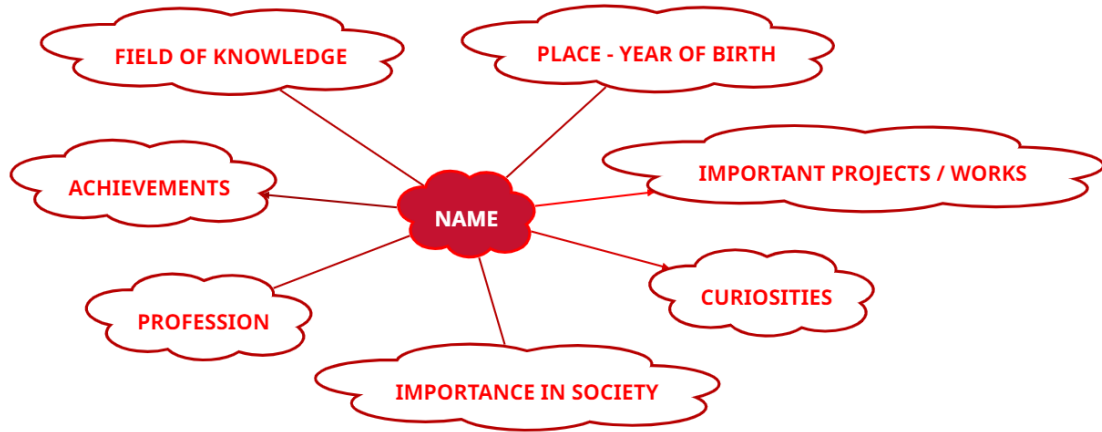
**Annex II.** Rubric for evaluating student answers.

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor (1)</b>
<b>Answers</b>	Answers all the questions.	Answers 2 questions.	Answers 1 question.	Does not answer any questions.
<b>In-depth responses</b>	Provides detailed answers, giving varied and convincing arguments.	Provides a solid argument, giving reasons for it.	Argues without elaborating on the answers.	Provides no argument for the answers.
<b>Grammar</b>	Uses correct and varied grammatical structures, including past tense structures.	Uses some correct grammatical structures.	Uses correct grammatical structures, although some mistakes are found.	The grammatical structures used are very simple and mistakes are made.
<b>Vocabulary</b>	Uses appropriate and specific vocabulary correctly. Use synonyms, avoiding repeating the same words all the time.	Uses appropriate and specific vocabulary correctly, although with word repetition.	Uses basic vocabulary and word repetition.	Uses basic vocabulary and repeats words, using them incorrectly
<b>Spelling</b>	Does not make spelling mistakes.	Makes some spelling mistakes.	Makes many spelling mistakes, making it difficult to read.	The text is full of spelling mistakes, making it unintelligible.

**Annex III.** Rubric for evaluating peer-to-peer comments.

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor (1)</b>
<b>Improvement proposals</b>	Provides detailed proposals, giving varied and convincing arguments.	Provides a solid argument, giving reasons for it.	Argues without elaborating on the proposals.	Provides no argument for the proposals.
<b>Respect</b>	Comments are written in a respectful manner towards peers, offering constructive criticism of the answers.	Comments in a respectful manner towards peers.	Provides judgmental comments.	Comments in a disrespectful manner.
<b>Number of comments</b>	Provides comments to numerous colleagues, focusing on the task at hand.	Provides comments to some partners.	Provides comments to 2 or 3 peers.	Comments only to one or no peers.

**Annex IV.** Required information for the interviews.



## Annex V. Podcast evaluation rubric

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor (1)</b>
<b>Content</b>	All the required information (Annex IV) is included in the interview, and they elaborate more deeply on it.	All the required information (Annex IV) is included in the interview.	Some elements of the required information are absent during the interview.	Many elements of the required information are absent during the interview, being rather sparse in content.
<b>Grammar</b>	Correct and varied grammatical structures are properly used.	Correct and varied grammatical structures are used although with some mistakes.	The grammatical structures are simple, and some mistakes are made.	The grammatical structures used are very simple and many mistakes are made.
<b>Pronunciation</b>	Pronunciation is clear and adequate during the recording making it easy to understand.	Pronunciation is clear and adequate during the recording, although some mistakes are made.	Some pronunciation errors are made which occasionally make the language difficult to understand.	Many pronunciation errors are made and it is very difficult to understand the audio.
<b>Rhythm</b>	The rhythm is fluid, with no unnecessary pauses, making it pleasant to listen to.	The rhythm is fluid although it includes some unnecessary pauses.	The rhythm is slow and there are unnecessary pauses.	Countless pauses are committed which makes it unpleasant to listen to.
<b>Creativity</b>	The questions and answers created are original, they use different resources to catch the listeners' attention, including a singing introduction, a	The dialogue created is original, including some resource to hook the listeners.	It is a conventional interview, not including resources to hook the listeners.	It is a conventional interview that becomes monotonous and flat.

	radio programme name, famous people's names, etc.			
<b>Distribution</b>	All members of the group speak equally, distributing the conversation evenly.	All the members speak, although there is one member who is the main speaking voice.	All members speak, although there is a big gap between some participants and others.	Almost all the interview is produced by a single member while the others participate occasionally.

## Annex VI. Podcast activities

### PODCAST ACTIVITY



- marzo 22, 2023

TWO TASKS:

#### 1. ANSWERING THE QUESTIONS

- Did you **feel comfortable** about recording the podcast?
- How do you feel about the **other students** being able to **listen** to your podcast?
- What did you **like the most** about doing the podcast? 👍

The thing we liked the most was....

- What did you like **the least** about doing the podcast? 👎

The thing we liked the least was...

- Additional comment:

#### 2. LISTENING TO THE PODCAST OF THE OTHER GROUPS + ADDING A COMMENT

It is very interesting because....

We learnt...

We liked how you...

You could improve...



**Annex VII.** Rubric for evaluating student answers.

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor (1)</b>
<b>Opinions</b>	Express their opinion in detail freely, explaining how they have felt.	Express their opinion explaining how they have felt.	Briefly express their opinion.	Responds without delving into their own emotional awareness.
<b>In-depth responses</b>	Provides detailed answers, giving varied and convincing arguments. Moreover, an additional comment is added.	Provides a solid argument, giving reasons for it.	Argues without elaborating on the answers.	Provides no argument for the answers.
<b>Grammar</b>	Uses correct and varied grammatical structures, including past tense structures.	Uses some correct grammatical structures.	Uses correct grammatical structures, although some mistakes are found.	The grammatical structures used are very simple and mistakes are made.
<b>Vocabulary</b>	Uses appropriate and specific vocabulary correctly. Use synonyms, avoiding repeating the same words all the time.	Uses appropriate and specific vocabulary correctly, although with word repetition.	Uses basic vocabulary and word repetition.	Uses basic vocabulary and repeats words, using them incorrectly
<b>Answers</b>	Answers all the questions.	Answers 2 questions.	Answers 1 question.	Does not answer any questions.

Annex VIII. Example of a Mind map designed by a student for their front page.



**Annex IX. Evaluation rubric for the oral presentation**

	<b>Excellent (4)</b>	<b>Good (3)</b>	<b>Fair (2)</b>	<b>Poor (1)</b>
<b>Content</b>	All the insect's relevant information is included and they elaborate more deeply on it.	All the insect's relevant information is included.	Some relevant information is absent.	There is a lack of information, leaving the content very poor and superficial.
<b>Grammar</b>	Correct and varied grammatical structures are properly used.	Correct and varied grammatical structures are used although with some mistakes.	The grammatical structures are simple and some mistakes are made.	The grammatical structures used are very simple and many mistakes are made.
<b>Pronunciation</b>	Pronunciation is clear and adequate during the presentation, making it easy to understand.	Pronunciation is clear and adequate during the presentation, although some mistakes are made.	Some pronunciation errors are made which occasionally make the language difficult to understand.	Many pronunciation errors are made and it is very difficult to understand the presentation.
<b>Rhythm</b>	The rhythm is fluid, with no unnecessary pauses, making it easy to listen to.	The rhythm is fluid although it includes some unnecessary pauses.	The rhythm is slow and there are unnecessary pauses.	Countless pauses are committed which makes it unpleasant to listen to.
<b>Design</b>	The design is creatively presented, they incorporate all the features available in the tool, including different colours, templates, images, formats and shapes.	The design is creatively presented, they incorporate some of the features available in the tool.	The design is creative but they do not take advantage of a lot of different features available in the tool.	The design lacks creativity and they do not make use of the different features available in the tool.

<b>Distribution</b>	All members of the group speak equally, distributing the presentation evenly.	All the members speak, although there is one member who is the main speaking voice.	All members speak, although there is a big gap between some participants and others.	Almost all the presentation is produced by a single member while the others participate occasionally.
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