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TEACHING EFL THROUGH CLIL AND ICT IN EARLY CHILDHOOD EDUCATION

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Resumen

El gran incremento del uso de las Tecnologías de la Información y Comunicación (TICs) en la sociedad demanda su implementación en el ámbito de la enseñanza. En el presente Trabajo de Fin de Grado se aborda el impacto de la metodología de Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE) y la importancia de las TICs en la educación, mencionando las ventajas y desventajas de ambas. Posteriormente se presentan tres herramientas digitales para implementar en un aula de educación infantil y para su posible aplicación a través de una metodología CLIL, exponiendo sus beneficios e inconvenientes. Se propone el uso de historias, tarjetas y juegos, herramientas todas ellas digitales con las que finalmente se plantean una serie de actividades dirigidas al alumnado de 4 años.

Palabras clave: Tecnologías de la Información y la Comunicación (TIC), Educación Infantil, herramientas digitales, Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE), integración de las TICs en el aula.

Abstract

The significant increase in the use of Information and Communication Technologies (ICTs) in society demands their implementation in the field of education. In this work the impact of Content and Language Integrated Learning (CLIL) methodology and the importance of ICT in education are discussed, mentioning the advantages and disadvantages of both. Subsequently, three digital tools are presented to consider their implementation in an early childhood education classroom and for their possible application integrated in a CLIL methodology, exposing their benefits and disadvantages. The use of digital stories, digital cards and games are proposed, digital tools that finally are used to propose a series of activities aimed at 4-year-old students.

Keywords: Information and Communication Technologies (ICT), Early Childhood Education, digital tools, Content and Language Integrated Learning (CLIL), integration of ICTs in the classroom.

ÍNDICE

1. THEORETICAL FRAMEWORK

1.1 ICT IN EDUCATION

Information and communication technologies (ICTs) are a wide range of digital tools and resources that are used to interact as well as develop, distribute, archive, and manage data (Ciroma, 2014).

Educational systems around the world have been encountering the challenge of using ICTs to provide their students with the tools and knowledge needed in the twenty-first century (Gómez & Macedo, 2010).

The incorporation of ICTs in education serves as a means of communication, a channel of communication and exchange of knowledge and experiences. They are tools for information processing and administrative management, a source of resources, a means of entertainment and cognitive development. All this entails a new way of elaborating a didactic unit and, therefore, of evaluating because the systems of teaching and learning change (Gómez & Macedo, 2010).

The school, being the educational agent that it is, should intend to use all these ICT tools to teach and prepare its students. Therefore, when the time comes for them to become active members of society, they must be well prepared, not only to become part of it, but also to be able to modify it in a positive and critical way. Educational institutions must be receptive and flexible to the advances in society, in order to introduce and adapt them to the needs of students (Asorey & Gil, 2009).

The use of ICTs in the classroom provides both the educator and the student with a useful technological tool, allowing the students to be the protagonists and actors of their own learning process. Consequently, we are witnessing a didactic renovation in the classroom where an active and innovative methodology that motivates students in the different disciplines or subjects is implemented. In addition, the different multimedia resources increase the possibility of interaction, and the possibility of adapting the learning process to the student's own characteristics and needs, facilitating meaningful learning (Rubiales, 2009).

In addition, the issue of how to achieve higher quality standards in the teaching practice has determined the search, design and implementation of new didactic materials in virtual environments that support teachers in their work and help students in their learning process (Rubiales, 2009). The new didactic tools must respond to the latest productive and social needs, as a result of a renewed technological culture (Rubiales, 2009).

When the Ley Orgánica de Educación (LOE) was passed in 2006, the new curriculum incorporated a set of new competences. Among them we can find the competence in the processing of information and digital competence, through which we want our students, at the end of Compulsory Secondary Education, to be able to search, obtain, process, and

communicate information, and to transform it into knowledge. Through this competence, different skills are incorporated, ranging from access to information to its transmission in different media formats once it has been processed, including the use of ICT as a fundamental element to get information, learn and communicate (Asorey & Gil, 2009).

1.1.1 ADVANTAGES AND DISADVANTAGES OF THE USE OF ICT IN EDUCATION

The use of ICT entails considerable benefits for students and the teacher (Bonilla, 2014; Rubiales, 2009).

First, ICT makes subjects compelling, entertaining, and engaging; it encourages students to investigate in a simple way using ICT resources and it also allows them to learn by playing. Consequently, the use of ICT increases student's interest (Rubiales, 2009) and motivation.

Teachers who implement a methodology integrating ICT succeed in stimulating learners' interest for their subject, obtaining greater success in the teaching-learning process.

In addition, the use of ICTs increases initiative and creativity. The development of student initiative, imagination and autonomous learning is also an advantage of ICT resources, as the learner is able to think in a more creative way, making our students think beyond what the teacher can transmit in the content (Rubiales, 2009).

According to Bonilla (2014) the transmission of knowledge was provided to a large extent by the teacher until a few years ago. The sources were much scarcer. Nowadays, with the advent of ICT and the help of the Internet, students have a great deal of information at their disposition, transforming them into more autonomous learners. However, it is the teachers' role to teach them to select the reliable and relevant information.

Both authors claim that currently communication is more open and necessary. The use of ICT allows students to interact, communicate and exchange experiences with other classmates from their school or others, thereby providing a more enriching and meaningful learning. In consequence cooperation is also boosted for both students and teachers with the use of ICT. It allows to develop experiences, tasks, or projects in common. It is easier to work together, learn together, and even teach together, regarding the role of teachers. Not only students but teachers can also collaborate with other teachers, use resources that have worked well in certain areas of which the student will be the main beneficiary. This is possible as nowadays many ICT resources include the functionality of sharing or publishing the content creation.

When teachers integrate ICTs in their teaching practices, they need to consider some aspects and disadvantages that they may encounter such as the high cost of ICTs (Bonilla, 2014). This characteristic is a major disadvantage that conditions their use. In addition to the

fact that they are expensive, another significant feature is that they require training and constant learning.

Besides excessive use of technology can lead to disuse of traditional effort, and students may stop using writing (Bonilla, 2014).

As Bonilla (2014) explains, much of the information that appears on the Internet is either unreliable or illegitimate. Therefore, teachers must instruct students to distinguish what is meant by reliable information. As ICTs enable interactivity, teachers can also find themselves saturated, and thus feel prevented from upgrading their teaching methods.

Another disadvantage is that the distance in the access, use and appropriation of technologies, both geographically, socioeconomically and also in the gender dimensions, in articulation with other cultural inequalities, causes the technological skill of our students to be at different levels (Bonilla, 2014). Teachers must be aware of these inequalities and should try to reduce them every time they can.

Adès and Lejoyeux (2003, as cited in Bonilla, 2014) also consider ICTs to be a new addiction and warn about the use of the Internet. They believe that technological progress has never been seen before to produce a pathology so fast. Considering the number of medical publications devoted to it, they conclude that Internet addiction is a serious and, for some, frightening issue. Moreover, the constant use of technological tools in the everyday life of students causes them to become isolated from other forms of communication, which are vital in their social and formative development.

1.2 CLIL IN EDUCATION

1.2.1 DEFINITION

Content and Language Integrated Learning (CLIL) emerged in Europe in the 1990s as the most recent and effective methodological approach to language teaching, with the aim of developing knowledge in both the non-language subject and the language. This approach of content and language learning in France is known as Enseignement par Matière Intégrée en Langue Étrangère (EMILE); in Germany, it is named Content and Language Integrated Learning in German (CLILig); and in Spain, it is called Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE) (Rosario, 2011).

CLIL is a combination of language and content learning. It incorporates some of its ideas and practices from a variety of teaching approaches, such as content-based language teaching or English as an additional language (EAL), and the major element of its methodological approach is that it is content-driven, which differs from previous teaching methods (Coyle, Hood, & Marsh, 2010 as cited in Rosario, 2011).

According to Hurajová & Luprichová (2015) CLIL is a combination of content and a second language. It is about instructing students in a foreign language. This can be accomplished by having a second language teacher use cross-curricular material or having a subject teacher use a second language as the medium of teaching. Both approaches result in learning the subject content and a foreign language at the same time.

It is clear that a competent teacher would understand that in the CLIL framework, linguistic competence is important not only for the teacher, but also for the students. This specifically contributes to the idea of a methodological change. The transition from teacher-centered to student-centered approaches is the key feature of this change (Papaja, 2013).

1.2.2 CLIL TEACHING GUIDELINES FOR EARLY CHILDHOOD EDUCATION

I will now present some guidelines based on Ioannou-Georgiou & Pavlou (2011) which can allow CLIL teachers to respond to the needs of their younger students.

When using vocabulary that is too complicated for their learners, CLIL teachers at the pre-primary and primary/elementary levels are often worried with overloading their students' mental capabilities. As a result, CLIL teachers can oversimplify their language input, use only very simple phrases, or constantly repeat the same structure. This can prevent rather than support language learning.

For this reason, CLIL teachers should avoid reducing the foreign language to the degree where it becomes grammatically incorrect or does not sound natural. Slowing down the pace of speaking, increasing the pauses between sentences, using short phrases, particularly for beginners, or frequently repeating and paraphrasing are both acceptable and beneficial (Echevarría, Vogt & Short, 2010: 103, as cited in Ioannou-Georgiou & Pavlou, 2011).

Students at the early stages of CLIL teaching often respond with single terms, phrases with two or three words, or simply nod their heads. The CLIL instructor is the learners' main and, in many cases, only language model. As a result, the lower a student's foreign language proficiency is, the more likely a CLIL instructor must paraphrase, repeat, rewrite, or extend a child's answer in order to model proper foreign language usage.

In addition to this, CLIL teachers must use miming, gestures, and body language to complement their words, particularly in the early grades, in order to provide positive contextual input and connect abstract ideas with specific examples. This allows students to comprehend what their teacher is explaining.

Ideally CLIL teachers use the second language during the whole lesson. However, it is often essential for educators to use the mother tongue as well, especially during the early stages of CLIL implementation or when they work with students who are only beginning to learn the second language. When teachers and students focus on the results of tests or attempt to generalize learning results, using the mother tongue can be appropriate.

Lastly I wanted to highlight that, as Hurajová & Luprichová (2015) stated, if a material instructor achieves a sufficient degree of linguistic competence, they will have to shift to an approach that encourages the use of exercises that promote students' linguistic competence with a communicative end result, and whose goal is to teach to understand, retain and use.

1.2.3 THE 4CS-FRAMEWORK

Because of its integrative structure, the 4Cs-Framework (Coyle, 1999, 2006, as cited in Meyer, 2010) provides a solid theoretical and analytical basis for preparing CLIL lessons and developing resources. It is founded on the following (Coyle, 1999, 2006, as cited in Meyer, 2010):

1. Content: The subject content intends to offer a personalized learning in which students not only gain knowledge and skills, but they also build their own knowledge, comprehension and skills.

2. Cognition: Learning and reasoning are connected to content. To allow students to construct their own explanations of the content, it must be examined for its linguistic requirements.

3. Communication: It is necessary to study a language that is related to the learning framework, to learn through that language, and to recreate the content and cognitive mechanisms associated with it. Communication in the learning environment is essential for learning; this language must be clear and accessible.

4. Culture: Cultures and languages have a complicated relationship. CLIL highly depends on intercultural awareness, for that reason it has earned its rightful position at the core of CLIL (Coyle, 2006: 9-10, as cited in Meyer, 2010).

All of these four areas should be developed through CLIL in order for the students to have a quality learning experience.

1.2.4 ADVANTAGES AND DISADVANTAGES

Following Calviño (2012) one of the advantages of CLIL in a classroom is that students learn the second language through the content related to a topic, and if they have an interest towards the topic they may be more motivated to learn, as they will be fulfilling a real purpose.

Another benefit that she mentions is that students develop a positive attitude towards learning a foreign language, as they do not only learn grammar, but they also receive meaningful learning. “By having non-disposable contents, it focuses on meaning, grammar is embedded. Some of my students absolutely hate grammar learnt as it, so this will help them cope with grammar in a more meaningful way and help them acquire it more than studying it” (Calviño, 2012, p.3).

CLIL also provides an environment in which students acquire the foreign language unconsciously and naturally, as they need to communicate in the target language in order to achieve some tasks or to understand the contents taught.

In addition, CLIL students learn subject-specific vocabulary, which otherwise would be more difficult to access or acquire. Other authors such as Klimova (2012) explain that CLIL also increases language proficiency and communication abilities.

However, although CLIL can have some benefits Calviño (2012) also highlights its drawbacks.

She states that one of the most important issues concerning CLIL is that some language teachers lack subject knowledge, while subject teachers only have rudimentary knowledge of foreign languages.

The absence of materials is another problem to teach CLIL. As publishing houses would have to create personalized material for each country and subject according to their curriculum and culture, that time-consuming task is handed to teachers, who have to design their own materials.

Furthermore, if a CLIL lesson is not well planned or executed, students will have difficulty understanding the subjects and learning the new language, especially if they have a low level of foreign language knowledge.

In this Final Degree Project, I will present a didactic proposal integrating some ICT tools. The activities designed in this project intend to fulfil the existing lack of materials for teachers in the educative cycle of Early Childhood Education. Now the different ICT tools on which this proposal is based on will be presented.

1.3 ICT TOOLS

1.3.1- DIGITAL STORIES

DEFINITION AND ORIGINS

The concept of Digital Storytelling (DST) has diverse definitions, but they all encompass the idea of integrating the art of storytelling with digital multimedia such as photographs, audio, and video. To present content on a particular subject, almost all digital stories use a combination of digital images, text, voice narration, video, and music. Digital stories, like conventional storytelling, revolve around a specific theme and often have a certain point of view. The stories are usually a few minutes long and can be used for several purposes, such as sharing personal stories, recounting past events, or informing or instructing on a certain subject (Robin, 2006).

Following Brown, Bryan, & Brown, (2005, as cited in Signes, 2010) digital storytelling is a versatile and adaptable tool that can be used for a wide range of purposes and in most of the subjects we teach. Its versatility comes from the fact that, depending on the purpose of the

activity and the level of computer literacy of the students, writers can use a range of resources to elaborate a digital story, ranging from the simplest (e.g. digital images and Photostory[1]) to the most complex (e.g. Flash[2] to create their own animations, etc.). The same can be applied to the linguistic or literary techniques used to develop the story. Digital storytelling is an interesting tool that can help restore established concepts of literacy and can be used in conjunction with more conventional teaching approaches.

Despite the fact that the use of ICT in schools has been for some time now at its peak, digital storytelling was already in place in the 1990s when the Center for Digital Storytelling began providing trainings for those involved in sharing their own tales. (Signes, 2010)

According to Kuan, Shiratuddin and Harun (2012), Atchley began the transformation of Digital Storytelling from a conventional to a modern format. As they explain, he was a multi-disciplined media creator and artist, and through his digital autobiography, Next Exit, he worked with Lambert in using multimedia technology to turn a conventional narrative into a modern one.

The features and structure of digital storytelling are similar to conventional storytelling, but by incorporating the latest multimedia technology it has significantly enhanced the style, presentation, and delivery modes and it has clearly increased its pragmatic dimension (Signes, 2010). According to Rodriguez Ruiz (2007, as cited in Signes, 2010) Digital Storytelling has altered the elements of traditional verbal storytelling (such as the meaning of characters, action and scenarios) and has innovated the set of rules and criteria that had until now formed the pragmatics of the narrative image.

ELEMENTS OF A DIGITAL STORY

The Center for Digital Storytelling (2005, as cited in B. R. Robin, 2006) created and distributed the Seven Elements of Digital Storytelling to be applied in a digital story.

The Seven Elements are: (i) The *Point of view*, and it refers to the perspective that the author has; (ii) *A Dramatic Question,* and it it consists of a question that is answered in the last part of the story; (iii) *Emotional Content,* and corresponds to important issues that have a personal and strong impact on us; (iv)*The Gift of your Voice,* and it is a way to make the plot more personal in order for the listener to comprehend the meaning (v) *The Power of the Soundtrack,* and it consists of music or other sound effects that add to the story; (vi) *Economy*, and it involves simplicity, using only enough information to explain the tale without overburdening the audience with data; (vii) *Pacing*, and it is related to the sixth element, *Economy*, but focuses on how rapidly or slowly the plot advances.

[1] It is an app that allows you to import images and edit them, add text and record the voice.
[2] It is an app that allows to create animations. It allows you to draw the characters or objects that will appear in the story and make them move.

Additionally, Kuan and colleagues (2012) compared and compiled 15 core elements of a digital story based on some experts (Lambert (2006); Porter (2004); Ohler (2008); Salpeter (2005); Paul and Fiebich (2005); Robin (2008) and Schafer (2008) as cited in Kuan et al. (2012).

Each of these experts had their own perception of DST, they provided their own set of elements and Kuan and colleagues proceeded to compare them in order to select the common ones, which were defined as the core elements of DST.

Those 15 core elements of DST were considered as the most important elements proposed and intended to serve as a single guide for the creation of both interactive and non-interactive DST. The following were the elements chosen:

- Perspective
- Intention
- Personal
- Dramatical Question
- Engagement
- Articulation
- Soundtrack
- Minimal
- Tempo
- Story Map
- Expression
- Significant Content
- Collaboration
- Communication
- User Contribution

Considering all this information we can conclude that this second list of elements integrates the initial 7 elements created by the Center for Digital Storytelling (2005, as cited in Robin, 2006) and also adds some other which are essential, from the experts' point of view, in order to create interactive and non-interactive DST.

TYPES OF DIGITAL STORIES

Robin (2006) states that although there are several forms of digital stories, the most common types can be classified into three categories: personal narratives, historical documentaries and stories designed to inform or instruct the viewer on a particular concept or practice.

In the first category, personal narratives, the writer integrated important events of his or her life in the story. This type of narrative can be very beneficial as students can empathize with other classmates, learn about the challenges they have faced and gain appreciation for other cultures.

The second category, historical documentaries, are stories that indagate about historical events allowing us to expand our knowledge of the past. Students can learn from investigating certain information and sharing it with the rest of the class.

The third category, stories that inform or instruct, is reserved for stories that integrate educative content from different areas such as math, science, health education and instructional technology.

ADVANTAGES

Young learners are becoming more technologically advanced, and they are becoming more immersed with activities that occur on a computer screen. Furthermore, young students respond to and are inspired by producing computer-based content, such as digital stories, that help them to demonstrate their understanding of the topics they are learning about in class (Robin, 2016). Actually, this is another advantage of digital stories as younger students can watch or be the authors of their own digital stories.

“In addition to asking students to watch digital stories created by others, digital storytelling can also be used to empower younger students when they use computer technology and multimedia resources to create their own stories that demonstrate their knowledge and understanding of educational themes and concepts” (Robin, 2016, p.19).

One of the most essential features of interactive storytelling is that it can assist students in making learning more meaningful. Digital storytelling can both inspire imagination and give students a voice when they use their stories to share their thoughts and emotions with others (Robin, 2016).

Hillman (1975, as cited in Abdolmanafi-Rokni & Qarajeh, 2014) highlights another advantage related to the linguistic benefits that digital stories can convey to learners:

> While the teacher is reading, he/she can infuse the syntactic order of the written language with pitch, juncture, stress, and other paralinguistic uses that contribute to the interpretation of the passage. Imitation of the sounds has a direct bearing on the increased vocabulary that is a result of hearing stories and poem. (p.2).

In addition, he claims that hearing words in context increases the number of meanings in a learner's receptive vocabulary and provides the listener with more options for expressing himself.

On the other hand, according to the findings of a report elaborated by Ramírez Verdugo & Alonso Belmonte (2007), digital stories can be very helpful in improving children's listening skills if they are carefully chosen. They are generally visual, interactive, and repetitive. In particular, the repetitive aspect of the stories being used could benefit children in learning the foreign language over time.

In addition, linguistic and paralinguistic characteristics such as expressions, actions, and prosody are used in apps to create digital stories for the acquisition of a second language, providing a more meaningful learning (Brett, 1995; Fidelman, 1997; Gassin, 1992; Hurley, 1992, as cited in Ramírez Verdugo & Alonso Belmonte, 2007).

Also, students who engage in the development of digital stories learn to arrange their thoughts, ask questions, share feelings, and create storylines, which improves their communication skills. Students who have the opportunity to present their work to their classmates can acquire valuable experience in evaluating their own and other classmates' work, which can help them improve their emotional intelligence, teamwork, and social learning (Robin, 2016).

A study conducted by Ramírez Verdugo & Alonso Belmonte (2007) investigated the impact of digital stories on a group of 6-year-old Spanish learners' oral comprehension of L2 English. The research was developed in six different schools of Madrid for 22 weeks, with a total of 220 students. The control groups had 112 students and the study participants had 108. The control group received English language classes using textbooks two times a week. The experimental group also receive two English classes a week, however one of them was using textbooks and the other was using digital stories.

They selected 12 stories, based on their difficulty level, to include in the analysis, and the oral input was accompanied with written text in most of the stories.

In addition, pre-computer and post-computer activities were developed in order to revise previous knowledge regarding the themes and aspects in the narrative, and to promote language learning through working in pairs and peer collaboration.

They designed two tests, a pre-test and a post-test, to track the improvement of students in their listening comprehension abilities. The first one was to gather the initial knowledge, and the other one to verify the progress of the students in their comprehension of the linguistic structure.

Data from classroom assessment and teachers' diaries offered very positive feedback on the integration of the project among the students. The findings of the study showed that substantial variations existed between the two groups. The study group's listening comprehension skills increased, and they outperformed the control group.

This study shows that the use of digital stories is beneficial to improve the listening skills in a second language of preschool children.

DRAWBACKS

As Robin (2006) stated, teachers should consider that Digital Storytelling can be very time-consuming as it requires a dedicated time to take into consideration the numerous elements and characteristics integrated in the designing and production of digital stories.

Furthermore, the use of technology is an important aspect to consider in their creation as some technological skills are required. Another factor related to technology to take into consideration is that, as we are talking about early childhood education students, it can be challenging for them to produce a digital story on their own, as not all the students are able to manage equal and effectively with technology. Similarly, most infant education students do not know how to write, especially on their fist years, so definitely asking them to write a story would be excessively demanding.

1.3.2 DIGITAL FLASHCARDS

DEFINITION

In this section firstly I will focus on traditional flashcards, and secondly we will move to digital flashcards.

Flashcards are a useful method for helping people recall things such as math concepts, vocabulary, historical information, and difficult medical concepts (Colbran, Gilding, Marinac, Colbran, S., & Saeed, 2015).

There are several definitions of flashcards. Baleghizadeh & Ashoori (2011) define flashcards as “a cardboard consisting of a word, a sentence, or a simple picture on it” (p.4).

Hung (2015) also defines flashcards as “a set of double-sided cards designed for direct learning of vocabulary that allow learners to practice form-to-meaning and meaning-to-form recall in repeated retrieval of L2 words, by flipping the front and back sides of the cards” (p.107).

Compiling the common aspects of these two definitions I would define flashcards as a cardboard with two sides, which contains text or image, and is used for the acquisition of second language vocabulary.

However, because of the fact that the use of ICT has gained popularity, cardboard flashcards have evolved into interactive digital flashcards, and the latter ones have become common on the internet (Yasin, 2011).

It is difficult to find a definition of digital flashcards but according to Green & Bailey (2010) digital flashcards, are designed to mimic traditional paper-based flashcards. It is certain that their appearance differs from regular flashcards, but they accomplish the same objective by using similar formats and techniques for acquiring vocabulary (Yasin, 2011).

ADVANTAGES AND DRAWBACKS

Flashcards are not only entertaining but also successful as a means of learning English as a foreign language. As a result, language teachers have been using them for a long time. The fact that English flashcards are a very easy and fun method to memorize vocabulary and basic grammar, and that they are equally effective at helping both children and adults, explains their success and popularity as tools (Yasin, 2011).

Furthermore, flashcards can replace the impression of learning with that of playing a game, and they are highly effective at helping students develop a broad vocabulary when used in combination with another linguistic content. Since children find it easier to connect images with words, many flashcards present word-related pictures (Yasin, 2011).

Following Wright (2016) Quizlet is a digital flashcard generator and learning app for computers and electronic devices. He explains that users can produce digital flashcards that include the desired keyword on one side and its meaning on the other. The app allows to record the voice, or listen to the pronunciation, and insert images. It has different study modes: flashcard, learn, speller and test, and it also includes two games to learn the target terms.

In a study developed by Setiawan & Wiedarti (2020), motivation is debated as one of the main factors that determines the vocabulary achievement of a learner. They studied the effectiveness of using Quizlet as the media for increasing the students' motivation in learning vocabulary. There were 65 students in total who were separated into a test group and a control group. The experimental group used Quizlet to learn the vocabulary targeted, and the control group used paper material. Using the observation checklist, the motivation of students was noted during the vocabulary learning process. The final results demonstrated that the use of Quizlet boosted student's motivation compared to the students who did not use it.

In addition, Christanti (2018, as cited in Setiawan & Wiedarti, 2020) conducted a study which showed that Quizlet is a successful tool to promote motivation of learners for acquiring vocabulary. Furthermore, according to another study conducted by Cinar & Ari (2019, as cited in Setiawan & Wiedarti, 2020), Quizlet is able to improve the perception of students toward English lessons.

Although I was not able to find many disadvantages of regular or digital flashcards some authors have noted some negative aspects. Nation (2011, as cited in Hung, 2015) warned against overusing specific vocabulary training in conjunction with teacher-imposed vocabulary activities. He suggested teachers to instruct their students in the use of flashcards in learner-centered ways, among other vocabulary learning strategies. As he argued, "well directed deliberate vocabulary learning using word cards is very effective and much more efficient than teaching and vocabulary exercises" (p.107).

In spite of their several benefits, flashcards could also have a negative impact on student learning. The use of flashcards can lead to a mechanic memorization of concepts

rather than completely comprehending complex ideas. As a result, it is critical that flashcards are developed in order to promote true understanding of key ideas (Colbran et al., 2015).

PAPER FLASHCARDS VS DIGITAL FLASHCARDS

Alghamdi & Elyas (2020) measured the impact of paper and digital flashcards on learning vocabulary in the EFL context. In the study they developed six different packs of flashcards using Quizlet. L2 vocabulary was provided on one side of the electronic flashcards, while L2 definition and a picture were provided on the other. The participants were divided into two groups of less than thirty students; a control group, which used regular flashcards and an experimental group, which used digital flashcards.

First they did a pre-test to analyze the level of both groups, which was very homogeneous. Then the use of digital and regular flashcards was tested for three weeks, and after that period of time a post-test was done, which demonstrated that digital flashcards had considerably benefited L2 vocabulary acquisition of students in the experimental group, as they outperformed the control group.

Furthermore, Ashcroft, Cvitkovic & Praver (2018) conducted a study which compared the effects of digital flashcards, using Quizlet, and traditional flashcards on L2 vocabulary learning at different stages of English proficiency, and also examined if the English proficiency level of students affected the efficacy of either study mode. Both digital and traditional flashcards treatments were presented to the students. The research indicated that digital flashcards were more successful for beginners and intermediate-level students than paper flashcards. This may have been explained by the fact that at starter levels the absence of metacognitive awareness and learning strategies was balanced by the use of digital flashcards. Some elements of the digital application may have helped lower-level participants' absence of those aspects.

In addition, according to the findings of the study, the range of activities offered by Quizlet as well as the high degree of instant feedback, may have helped to improve and maintain the interest and motivation of lower-level students, which traditional flashcards could not.

To conclude and based on the finding presented here we can assume that this is appliable to infant education students, as they are starters in the acquisition of L2 English.

1.3.3 DIGITAL GAMES

DEFINITION

I will first present several definitions of games, and then I will continue to submit different definitions of video game or computer game.

In association with games and their different types we can find the act of playing. It can be defined as an activity that human beings perform and enjoy since birth and at the same time it contributes to the developmental processes that, as social and individual beings need to develop in their environment (Córdoba Castrillón & Ospina Moreno, 2019).

A definition of games by Juul (2003, as cited in Aghlara & Tamjid, 2011) highlights the fact that they produce an outcome, and more specifically he defines games based on six parameters. Rules, outcome, value, effort, player's attachment and negotiable consequences:

> A game is a rule based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable (p.553).

Other definitions such as Alcorn's (2003, as cited in Donmus, 2010) highlights the requirements an activity has to fulfil to be considered a game:

> Games are a kind of sport or entertainment that require participation, competing with oneself and other rivals in order to achieve certain goals and have special rules. In order to an application to be a game, it requires to have rules and certain targets to be followed (p.1498).

Regarding digital games, Gee (2012, as cited in Taghizadeh et al., 2017) provides a clear definition: A digital game, according to him, is a well-designed setting that is focused on play and includes problem-solving exercises that promote motivation, interaction, and imagination.

Games can be both entertaining and educational. Students become more interested when they play games that combine education and the digital factor. Digital games help learners to become more involved in our twenty-first century technological culture. They also benefit from vocabulary learning and memorization by encouraging interaction, motivating learners, and providing more meaningful learning (Shahriarpour & kafi, 2014).

In addition, as they have become a significant part in the lives of many young people these days, it allows the opportunity to motivate people that are not interested in traditional learning. It is a favorable scenario for students and instructors if language learning can be connected to common modes of gaming in a way that does not prevent their enjoyment (Godwin-Jones, 2014).

Following Godwin-Jones (2014, as cited in Taghizadeh, Vaezi & Ravan, 2017) enjoyment and creativity are important elements, particularly in second language learning classes where students become discouraged easily and lose their attention after learning a

foreign or second language for an extended period of time. Language learning games can be effective, especially when students who are stimulated by external factors, such as ICT, use these games in the appropriate context.

Kalaycioglu (2011, as cited in Taghizadeh et al., 2017) explains that since digital games are student-centered, they can be tailored to meet development objectives as well as learners' age and capacity. Children can learn vocabulary, main sentences, or brief conversation sequences by playing digital games in a multimedia environment

Division (2002) suggested that "videogames can clearly consume the attention of children and adolescents. However, it is important to assess the extent that videogame technology had an impact on childhood education" (p.47). As he explains, digital games are very engaging for children, however we need to consider how they have benefited and have integrated in the education field.

Following Read (2015) "the term *edutainment* refers to entertainment games that have the ability to educate players. Such games are also referred to as *serious games" (p.1)*. According to Winn (2008, as cited in Read, 2015) "Serious games combine entertainment with knowledge transfer. They have a purpose beyond entertainment, e.g., education, training, advertising, or supporting social change" (p.2).

Students are frequently driven to play games, which may be a reason why serious games are thought to be helpful to education. Svinicki (1999, as cited in Read, 2015) demonstrated that conventional teaching approaches are ineffective in motivating students. It is often considered that kids who are highly motivated study more efficiently.

PRINCIPLES TO DEVELOP DIGITAL GAMES

According to Edwards, Rico, Curado, Agudo, Paín, & Sánchez (2008) computer-based foreign language learning for pre-school children must integrate 5 fundamental principles which should be considered when developing a digital game that involves second language learning.

The principles are: (i) *Respecting restrictions,* and it refers to how Infant education students can have difficulty on learning abstract concepts, but they are able to recognize visual icons and make connections with familiar items allowing them to expand their understanding and interpretation; (ii) *Choosing and presenting metaphoric concepts with great care,* and it talks about how in general, familiar content is extensively incorporated, while metaphorical content is often ignored, so this type of content needs to be included not from the adult viewpoint but from the young child perspective; (iii) *Favoring visual and auditory components,* and it refers to the fact that early childhood education children do not have good reading or writing skills, for that reason the oral content of the game is fundamental; (iv) *Striving for simplicity,* and it talks about how graphic elements should seek for simplicity by containing

basic commands, including user-friendly directions to encourage children to complete activities in the fewest possible steps, including visually meaningful icons familiar to the child as belonging to his or her environment, and other related considerations of general attractiveness to promote interest for this specific stage of language development; (v) *Providing entertaining tasks to encourage and master mouse dexterity,* and it refers to the fact that small children are also developing and perfecting their motor skills, so manipulating the input device of choice can be challenging at first. They could have difficulties to select specific areas on the computer screen inside the application. They could find holding down mouse buttons difficult at the beginning, and they may need to reflect on developing skills like pressing keys on the keyboard.

As a result, as children begin to use the mouse, the operations demand repetition and thorough practice. In other words, we must increasingly adjust the use of the mouse in activities and games to the agility of which children are capable.

ADVANTAGES AND DISADVANTAGES

Computer games are built on the premise that players must learn, discover, gain new knowledge throughout the game, remember, and collaborate in order to advance forward throughout the game. As a result, playing can be viewed as a learning experience, and one of the key benefits of computer games is that they enable players an environment to make mistakes and eventually to learn (Simkova, 2014).

Furthermore, games are a very useful tool for teachers to monitor and manage the progress made by students through feedback. Computer games can help players strengthen their cognitive, motor, and spatial abilities, as well as their ICT skills. In addition, the principles of complex problem-solving, creativity or some examples and rules are easier learned through playing computer games, as otherwise it would be difficult to explain in the real world (Simkova, 2014).

The following are some advantages exposed by Division (2002):

-Videogames can be used as instruments of research or measurement, as individuals of different age, gender, social class, etc. participate in videogames.

-Establishing expectations, ensuring goal rehearsal, providing feedback, motivation, and maintaining records of behavioral progress are all things that videogames can help with.

-Videogames are useful because they help researchers to measure performance on a wide range of tasks and because they are simple to modify, standardize, and comprehend.

-Specific characteristics such as self-esteem, self-concept, goal-setting, and individual differences can be studied using videogames.

-Participants enjoy and are stimulated by videogames. As a result, obtaining and maintaining a person's undivided attention for extended periods of time is simpler. They can also have an innovative way of learning because of the fun and excitement.

-Learning may be stimulated by elements of interactivity that videogames provide and because participants can experience curiosity, excitement and novelty.

-Videogames can assist in the acquisition of transferable IT skills.

-Experience and practice with video games can improve a participant's performance on specific games, potentially skewing the results.

It was difficult to find any drawbacks of digital games in education. However, Hauge & Gentile (2003 as cited in Taghizadeh et al., 2017) suggested that digital games can cause children to develop addictive attitudes, which can have an adverse impact on academic success if they play the game for an extended period of time.

With regard to digital games, there are high probabilities that infant education students do not have good reading skills, for that reason and as mentioned previously, oral based digital games are needed, or else games which do not integrate many words and sentences.

2. PRACTICAL PROPOSAL

CONTEXT AND JUSTIFICATION

In this section, a didactic proposal will be developed integrating the digital tools that have been previously introduced: digital stories, digital games, and digital flashcards.

The activities explained below have been designed for two classrooms of eighteen 4-year-old students. It should be noted that this didactic proposal will be implemented through a CLIL methodology, as since the moment they start infant education, half of the sessions are taught in English.

However, is important to highlight that there might be sometimes where the teacher will use the mother tongue, as mentioned in the literature research above, to ensure understanding, as the students are beginners in the English language.

The idea of the topic for the proposal appears from the interest of the students towards the topic of dinosaurs. The name of the proposal is “Life before humans” and it consists of 11 activities divided into nine sessions over the time period of two weeks.

SESSION 1	• Activity 1- We create a mind map
SESSION 2	• Activity 2- We watch the story of dinosaurs! • Activity 3- The correct order
SESSION 3	• Activity 4- Which dinosaur is it? • Activity 5- Memory of dinosaurs
SESSION 4	• Activity 6- Playing with dinosaurs!
SESSION 5	• Activity 7- Brainstorm
SESSION 6	• Activity 8- Drawing the characters
SESSION 7	• Activity 9- Let’s create the story!
SESSION 8	• Activity 10- Little narrators
SESSION 9	• Activity 11- What have we learnt about dinosaurs?

OBJECTIVES

In this section I will mention the objectives considered the most appropriate for this proposal. They will be presented in a table which contains the general objectives selected from the "Currículo de Educación Infantil de Navarra" (Decreto Foral 23, 2007) and their specific ones. It must be highlighted that the objectives have been translated into English, as they are originally written in Spanish in the curriculum.

In addition, two objectives of sustainable development will be added in compliance with the guidelines.

AREA	GENERAL OBJECTIVES	SPECIFIC OBJECTIVES
Knowledge of oneself and personal autonomy	3. To identify their own feelings, emotions, needs or preferences, and be able to express and communicate them to others, identifying and respecting, also, those of others.	To respect other opinions in collaborative decision-making and be able to express themselves.
	4. To accomplish, in an increasingly autonomous manner, regular activities and simple tasks to solve daily life problems, increasing self-confidence and initiative, and developing strategies to satisfy their basic needs.	To solve simple problems on their own with confidence and initiative.
	5. To adapt their behavior to the needs and requirements of others by developing attitudes and habits of respect, help and	To make a correct use of ICTs collaborating with the rest of students in a respectful and favorable learning atmosphere.

	collaboration, avoiding behaviors of submission or domination.	
Knowledge of the environment	1. To actively observe and explore their environment, generating interpretations about some significant situations and facts and showing interest in their knowledge.	To be able to compare themselves with dinosaur characteristics and show interest to learn more about them.
	4. To initiate in mathematical skills, functionally manipulating elements and collections, identifying their attributes and qualities and establishing grouping, classification, order and quantification relationships.	To be able to rearrange the sequence of events previously seen.
Languages: communication and representation	1. To use language as a tool for learning, representation, communication and enjoyment, expression of ideas and feelings, and valuing oral language as a means of relating to others and regulating coexistence.	To reproduce orally the names and characteristics of the different dinosaurs and identify them
	2. To express feelings, desires and ideas through oral language and through other languages, choosing	To use the second language in keywords and some expressions in order to communicate and learn about dinosaurs.

	the one that best suits the intention and the situation	
	5. To be introduced to the social uses of reading and writing, exploring how they work and valuing them as instruments of communication, information and enjoyment.	To express knowledge about dinosaurs through words and expressions in the second language.
	7. To be introduced to the oral use of other languages of the curriculum to communicate in classroom activities and show interest and enjoyment in participating in these communicative exchanges.	To have interest in learning L2 vocabulary of dinosaurs in order to integrate it in the activities.

Objectives of sustainable development:

- (4) Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all.
- (16) Promote fair, peaceful and inclusive societies.

COMPETENCES

In regard to the general preschool competences, during the didactic proposal they will go through some of them in a transversal way. The targeted competences will be the following:

- Linguistic communication: Students will have to use the Spanish and English language to communicate and to do the different activities proposed.
- Mathematical competence: They will have to order sequences of events, identify, and match.

- Processing information and digital competence: The whole unit is based on the integration of ICT, it consists of three digital tools, so the students will be in contact with technology the entire unit.
- Social skills: They will have to cooperate with each other, take turns and listen to one another in most of the activities.
- Artistic competence: There will be an activity in which they will have to draw and paint in the digital board.
- Autonomy and personal initiative: They will have to make decisions and work individually in some parts of the proposal.

ASSESSMENT CRITERIA

Due to the fact that this proposal is thought for infant education the assessment will consist mainly of observation and annotation. However, a final rubric (Annex 1) will be created to evaluate the learning through the entire unit.

The following will be the main aspects to be evaluated:

- Identifies the names and characteristics of the dinosaurs.
- Participates in the activities and collaborates with the rest of the students.
- Shows good management with ICTs.
- Understands the explanations of the activities.
- Understands the specific vocabulary of the project.
- Uses the language learnt in the activities.
- Uses the second language to express vocabulary items and key words
- Shows interest and a positive attitude towards the language.
- Shows understanding of the topic during the activities.
- Shows interest about the topic and a desire to know more about it.

ACTIVITIES

SESSION 1

The first activity of the proposal will be developed after the morning routine, which approximately lasts about 20 minutes. The assembly of the routines will be used to start with the first activity of the proposal.

ACTIVITY 1	WE CREATE A MINDMAP

SPECIFIC OBJECTIVES	• To be able to compare themselves with dinosaur characteristics and show interest to learn more about them. • To use the second language in keywords and some expressions in order to communicate and learn about dinosaurs.
GROUPING	Whole group
TIMING	30 minutes
MATERIALS	Interactive White Board (IWB)
DESCRIPTION	They will sit in a circle and the teacher will ask the students what they think the earth was like before humans inhabited it. Once they share their ideas the teacher will explain that millions of years ago dinosaurs lived on the Earth. Then they will discuss what they know about dinosaurs. The teacher will ask them questions to help them such as: • Do dinosaurs still exist? • Where the dinosaurs big? • What dinosaurs do we know? The teacher will create a digital mind map gathering all the information that they know and the information they want to know, that will be completed at the end of the activities.

SESSION 2

The second session is formed by the second and the third activity. These activities will be developed when they return from the playground, after the relaxation time which last about 5 minutes.

ACTIVITY 2	WE WATCH THE STORY OF DINOSAURS!

SPECIFIC OBJECTIVES	• To express knowledge about dinosaurs through words and expressions in the second language. • To reproduce orally the names and characteristics of the different dinosaurs and identify them
GROUPING	Whole group
TIMING	25 minutes
MATERIALS	IWB, YOUTUBE link: https://www.youtube.com/watch?v=zwYgrDnaM7E
DESCRIPTION	The teacher will play a video telling the story of dinosaurs. She can play it twice in order for the students to follow the story. After watching it the teacher will ask them some questions to make sure they have followed it: • What happens in the video? • How did the dinosaurs disappear? • What characteristics did they have? • What did they eat?

ACTIVITY 3	THE CORRECT ORDER
SPECIFIC OBJECTIVES	• To be able to rearrange the sequence of events previously seen
GROUPING	Whole group
TIMING	20 minutes
MATERIALS	IWB
DESCRIPTION	The teacher will show some digital flashcards on the IWB created with the app 'Quizlet' containing events that happened in the video (Annex 2) they have previously watched, and the students will have to arrange them in the correct order.

SESSION 3

Session 3 integrates activity 4 and 5. They will be developed before they go to the playground.

ACTIVITY 4	WHICH DINOSAUR IS IT?
SPECIFIC OBJECTIVES	• To express knowledge about dinosaurs through words and expressions in the second language. • To reproduce orally the names and characteristics of the different dinosaurs and identify them • To have interest in learning L2 vocabulary of dinosaurs in order to integrate it in the activities.
GROUPING	Whole group
TIMING	20minutes
MATERIALS	IWB, Quizzlet
DESCRIPTION	The teacher will present different flashcards (Annex 3), one by one, of different dinosaurs. The students will have to guess the name of the dinosaur. The teacher will ask: *Which dinosaur is it*? The student will have to answer: *it's a....* The teacher will turn the flashcard around and show them the name. Then they will listen to the audio for the correct pronunciation, and after that they will pronounce it all together.

ACTIVITY 5	MEMORY
SPECIFIC OBJECTIVES	• To reproduce orally the names and characteristics of the different dinosaurs and identify them • To express knowledge about dinosaurs through words and expressions in the second language. • To have interest in learning L2 vocabulary of dinosaurs in order to integrate it in the activities.
GROUPING	Whole group
TIMING	30 minutes

MATERIALS	Digital flashcards from 'Quizlet', IWB
DESCRIPTION	The teacher will use the previous digital flashcards created on Quizlet. The students will play the option match to relate the names of the dinosaurs with the correct pictures.

SESSION 4

In session 4 activity 6 will be developed during the time they are playing in corners. This activity will be done at the computer corner.

ACTIVITY 6	PLAYING WITH DINOSAURS
SPECIFIC OBJECTIVES	• To make a correct use of ICTs collaborating with the rest of students in a respectful and favorable learning atmosphere.
GROUPING	Groups of 4 in corners
TIMING	50 minutes
MATERIALS	Computers, the game link: https://www.bbc.co.uk/bitesize/topics/zdp4382/articles/znc3y9q
DESCRIPTION	In groups of three they will play an oral based game in the computer which integrates aspects such as dinosaur characteristics, food they eat, measurements, and many other. Teacher intervention may be needed at some point to explain certain parts of the game. When all the members of the group have played the game, they will swap positions at the corner.

SESSION 5

Session 5 consists of activity 7. This activity will be developed after the morning routines and the assembly will be used to continue with the activity.

ACTIVITY 7	BRAINSTORM
SPECIFIC OBJECTIVES	• To respect other opinions in collaborative decision-making and be able to express themselves. • To have interest in learning L2 vocabulary of dinosaurs in order to integrate it in the activities. • To use the second language in keywords and some expressions in order to communicate and learn about dinosaurs.
GROUPING	Whole group
TIMING	30 minutes
MATERIALS	No materials needed
DESCRIPTION	The students will sit in a circle and the teacher will explain to the students what they are going to do. He or she will explain that all together they are going to create a digital storybook, and that the characters will be dinosaurs. They will decide which dinosaurs will appear in the book, they will choose 4 or 5. If they do not come to an agreement, they will vote among all the dinosaurs they have said.

SESSION 6

In the 6th session activity 8 will be developed. This activity will take place when the students return from the playground after the relaxation time.

ACTIVITY 8	DRAWING THE CHARACTERS
SPECIFIC OBJECTIVES	• To make a correct use of ICTs collaborating with the rest of students in a respectful and favorable learning atmosphere.

GROUPING	Individual
TIMING	45 minutes
MATERIALS	Digital board
DESCRIPTION	In the digital board the teacher will ask them one by one to draw the characters they had previously designed. As there will probably be more students than characters some students will draw the characters and other will paint them.

SESSION 7

In this session activity 9 will be developed. The activity will be done before they go home.

ACTIVITY 9	LET'S CREATE THE STORY!
SPECIFIC OBJECTIVES	• To respect other opinions in collaborative decision-making and be able to express themselves • To have interest in learning L2 vocabulary of dinosaurs in order to integrate it in the activities. • To be able to rearrange the sequence of events previously seen. • To make a correct use of ICTs collaborating with the rest of students in a respectful and favorable learning atmosphere.
GROUPING	Whole group
TIMING	50 minutes
MATERIALS	IWB, Story Jumper
DESCRIPTION	They will choose the background and drag a dinosaur into each page of the book. In each page they will say the characteristics they know about that dinosaur. To help them the teacher can ask them some questions such as:

- What does he eat?
- Is he a carnivore or an herbivore?
- How is his skin?
- Does he have sharp teeth?

They will create very simple sentences, which the teacher will write next to each dinosaur.

SESSION 8

In session 8 activity 10 will take place. It will be developed while they are playing in corners, as it is an individual activity.

ACTIVITY 10	LITTLE NARRATORS
SPECIFIC OBJECTIVES	• To have interest in learning L2 vocabulary of dinosaurs in order to integrate it in the activities. • To reproduce orally the names and characteristics of the different dinosaurs and identify them • To use the second language in keywords and some expressions in order to communicate and learn about dinosaurs.
GROUPING	Individual
TIMING	50 minutes
MATERIALS	We will use the voice recorder of the tool 'Story Jumper'
DESCRIPTION	When the story is finished each student will record their voice telling a sentence of the story. The teacher will read the sentence for the student and then he or she will repeat what the teacher said. If the student is unable to produce the whole sentence the teacher will say part of the sentence and the student will only say the target vocabulary. Once all the audio fragments are completed, we will listen and see the book all together. The digital stories created in both classrooms can be swapped, so that the students can see the story of the other class.

SESSION 9

In session 9 the final activity will be developed. This activity will be developed after the morning routines and the assembly will be used to continue with the activity.

ACTIVITY 11	WHAT HAVE WE LEART?
SPECIFIC OBJECTIVES	• To reproduce orally the names and characteristics of the different dinosaurs and identify them • To express knowledge about dinosaurs through words and expressions in the second language. • To use the second language in keywords and some expressions in order to communicate and learn about dinosaurs.
GROUPING	Whole group
TIMING	30 minutes
MATERIALS	IWB
DESCRIPTION	The teacher will project the mind map that they started at the beginning of the proposal and they will complete it with the information that they have learned. The teacher will ask them some questions to help them such as: • What did we know before? • What do we know now? • How are they born? • What do they eat? • What characteristics do they have? They can also search pictures to include in the mind map.

CONCLUSIONES Y CUESTIONES ABIERTAS

A lo largo de este trabajo se ha analizado la metodología de Aprendizaje Integrado de Contenidos y Lenguas Extranjeras *(*AICLE) y el uso de las Tecnologías de la Información y Comunicación (TICs) en la educación, señalando sus ventajas e inconvenientes, y han sido propuestas y analizadas tres herramientas digitales que pueden ser aplicadas para la enseñanza de una segunda lengua en un aula de educación infantil a través de una metodología AICLE. Finalmente se incluye una unidad didáctica con las tres herramientas digitales seleccionadas: historias, tarjetas y juegos.

Aunque aún quede mucho por investigar a cerca de la enseñanza del inglés a través de las TICs, sobre todo en la educación infantil, muchos de los estudios realizados concluyen en que éstas tienen un efecto positivo si se adaptan a la edad y capacidades de los estudiantes, ya que hacen que las clases sean más entretenidas, interesantes y motivantes.

Al haber analizado el potencial de las herramientas seleccionadas decidí elaborar una unidad didáctica que las integrara para llevarla a cabo en el aula y aprovechar esos beneficios expuestos anteriormente.

El objetivo principal de las actividades propuestas es que el alumnado adquiera los contenidos sobre el tema elegido, y a su vez promover el aprendizaje de una lengua extranjera, en este caso el inglés, todo ello a través de herramientas digitales.

Por limitaciones en las prácticas escolares desarrolladas, lamentablemente no se pudo llevar a cabo la propuesta en un aula real. Aunque no se hayan podido demostrar de forma práctica en este Trabajo de fin de Grado los beneficios que se obtendrían, se pueden comprobar a través de estudios y análisis de otros autores relacionados con estas herramientas digitales.

Al realizar este trabajo he sido consciente de que hay otras formas de enseñanza, en este caso a través de las TICs, que pueden ser más efectivas que otras más tradicionales para el aprendizaje de una lengua extranjera. Al introducir el factor digital los alumnos pueden sentirse más motivados y más interesados por aprender al mismo tiempo que empiezan a desarrollar simultáneamente su competencia digital.

Por otro lado, a través de la metodología AICLE, como se ha comentado al comienzo del trabajo, los estudiantes aprenden la segunda legua de manera integrada con los contenidos curriculares, ya que la necesitan para comunicarse y para realizar las actividades que se proponen y a su vez favorece un aprendizaje más significativo. Por ello pienso que al integrar la metodología AICLE junco con las TICs en un aula de educación infantil los resultados de aprendizaje pueden ser muy favorables para el alumnado.

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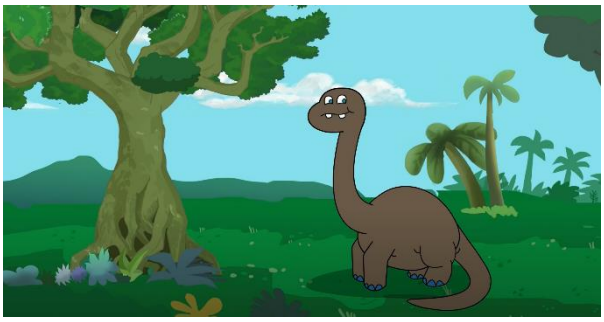
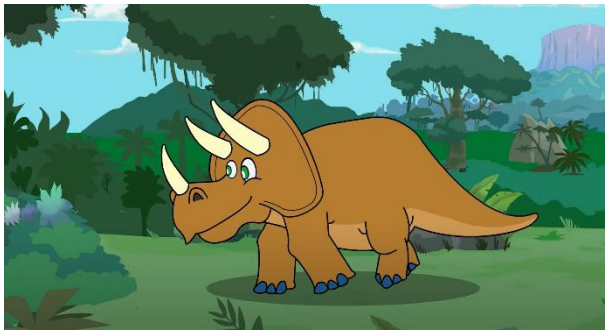
ANNEXES

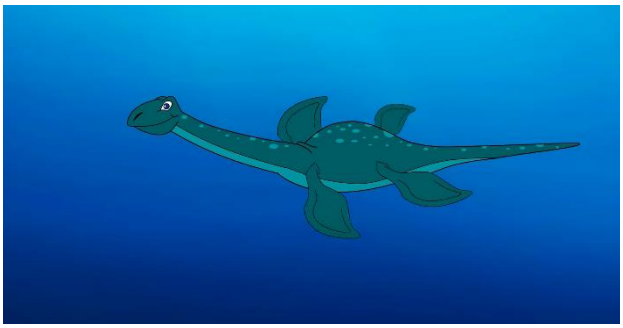
Annex 1. Assessment rubric

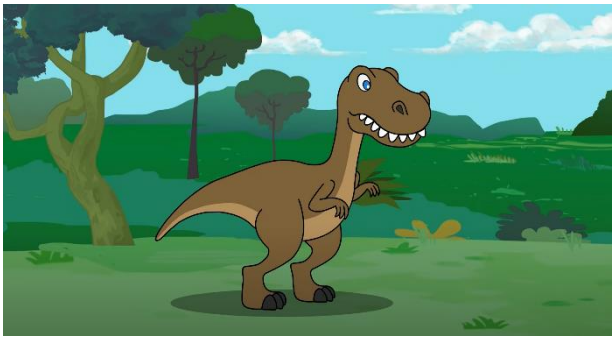
			
Identifies the names and characteristics of the dinosaurs			
Participates in the activities and collaborates with the rest of the students			
Shows good management with ICTs			
Understands the explanations of the activities			
Understands the specific vocabulary of the project			
Uses the language learnt in the activities.			
Uses the second language to express vocabulary items and key words			
Shows interest and a positive attitude towards the language			
Shows understanding of the topic during the activities			
Shows interest about the topic and a desire to know more about it.			

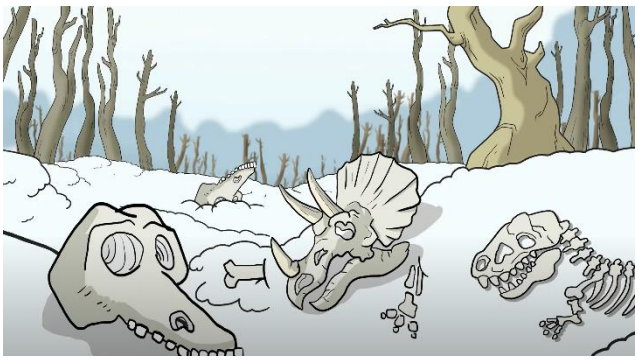
Annex 2. The correct order











ANNEX 3. Which dinosaur is it? / Memory

https://quizlet.com/es/581234936/dinosaurs-flash-cards/