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**ONLINE LEARNING FOR CLIL LESSONS IN PRIMARY
EDUCATION: TWO CASE STUDIES OF TELECOLLABORATION
AND VIRTUAL EXCHANGES**

**APRENDIZAJE EN LÍNEA PARA LAS CLASES DE AICLE EN
EDUCACIÓN PRIMARIA: DOS ESTUDIOS DE CASO SOBRE
TELECOLABORACIÓN E INTERCAMBIOS VIRTUALES**

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OUTLINE

1. Introduction.....	5
2. Theoretical framework	7
2.1. Content and Language Integrated Learning	7
2.1.1. Definition and implementation	7
2.1.2. The shortage of materials in CLIL and the importance of scaffolding.....	9
2.2. The CLIL approach and the use of ICT	12
2.3. Telecollaboration	14
2.3.1. Telecollaboration and the development of the intercultural communicative competence.....	16
2.4. Virtual exchanges.....	19
2.4.1. Virtual exchanges for teacher trainees	20
2.5. Project-based learning.....	22
3. Two case studies	25
3.1. Telecollaborative exchange through eTwinning: the development of the intercultural competence.....	26
3.1.1. Description.....	26
3.1.2. Analysis.....	28
3.2. Virtual exchange through CLIL4YEC: Environmental education as a suitable cross-curricular topic for the CLIL project.....	38
3.2.1. Description	38
3.2.2. Analysis.....	40
3.3. Comparing both experiences of online learning	51
4. Conclusion.....	56
5. References.....	58
6. Appendices.....	63

Appendix 1: Lesson plan ‘Green Sources’ created within the CLIL4YEC Project

Appendix 2: Assessment rubrics filled in by the teacher trainees

Appendix 3: Piloting report of the virtual exchange

ABSTRACT

Online learning is part of the Content and Language Integrated Learning (CLIL) educational approach as it addresses the current demands of society with a focus on the content, language and learning skills. The role of the ICT in CLIL has been stressed since it supports globalization and the development of some 21st-century skills such as collaboration and intercultural competence. In order to analyse the inclusion of this competence-based learning into CLIL course programmes for Primary Education, this MA dissertation reports on the analyses two concrete piloting sessions conducted in a Primary school in Spain: an international telecollaborative exchange implemented in the framework of the eTwinning network and a virtual exchange between local partners carried out within the EU-funded project ‘CLIL for young European citizens’ (CLIL4YEC)’. A comparison between both exchanges is carried out taking into account materials, scaffolding, teachers’ cooperation or assessment, among other features.

Cooperative work was emphasized in both experiences of online learning and students were more motivated than in their traditional lessons. Furthermore, the telecollaborative exchange was focused on language-driven CLIL because the specific topics of Social Science subject were included in the English lessons. While the virtual exchange was based on subject-led CLIL as it was specifically related to content areas and cross-curricular competences developed in the bilingual section programme. Therefore, the use of online learning suits a diversity of CLIL models and provides an authentic context for meaningful learning.

KEY WORDS: CLIL, telecollaboration, virtual exchanges, Primary Education.

RESUMEN

El aprendizaje en línea forma parte del enfoque educativo de Aprendizaje Integrado de Contenidos y Lenguas (AICLE), ya que aborda las demandas actuales de la sociedad centrándose en los contenidos, la lengua y las habilidades de aprendizaje. Se ha destacado el papel de las TIC en AICLE, puesto que apoyan la globalización y el desarrollo de algunas habilidades del siglo XXI, como la colaboración y la competencia intercultural. Con el fin de analizar la inclusión del aprendizaje por competencias en las programaciones AICLE para la Educación Primaria, este Trabajo Fin de Máster analiza dos sesiones piloto concretas llevadas a cabo en un centro de Educación Primaria en España: un intercambio de telecolaboración internacional implementado en el marco de la red eTwinning y, un intercambio virtual entre compañeros a nivel local llevado a cabo dentro del proyecto financiado por la UE "AICLE para jóvenes ciudadanos europeos" (CLIL4YEC). Se lleva a cabo una comparación entre ambos intercambios, teniendo en cuenta los materiales, el andamiaje, la cooperación de los profesores o la evaluación, entre otras características.

En ambas experiencias de aprendizaje en línea, se enfatizó el trabajo cooperativo y los alumnos estaban más motivados que en sus clases tradicionales. Además, el intercambio de telecolaboración se centró en un tipo de AICLE centrado, fundamentalmente, en la lengua porque los temas específicos de la asignatura de ciencias sociales se incluyeron en las clases de inglés, sin embargo, el intercambio virtual se basó en un AICLE impulsado por el contenido al estar relacionado específicamente con las asignaturas y las competencias transversales de la sección bilingüe. Por lo tanto, el uso del aprendizaje en línea se ajusta a la diversidad de modelos de AICLE y proporciona un contexto auténtico para el aprendizaje significativo.

PALABRAS CLAVE: AICLE, telecolaboración, intercambios virtuales, Educación Primaria.

1. Introduction

The idea for this MA dissertation came from my degree which was in Primary Education within a bilingual strand. My degree offers CLIL training for teachers to cater to the current demands of education, including methods or didactic resources. Thus, as a CLIL teacher, I became competent in planning and teaching lessons in subject areas such as Natural Science, Arts and Crafts, Music or Physical Education, among others, through English as the additional language. From this competency-based approach, I decided to enrol in this master to deepen my knowledge, skills and attitudes regarding CLIL. Then, during the COVID 19 pandemic, I realise even more of the relevance of online learning.

The main objectives of this dissertation are the following:

1. To provide a theoretical framework concerning CLIL, and some of its most relevant features such as scaffolding, the shortage of materials and the use of ICT.
2. To report on telecollaboration and virtual exchanges to implement them in CLIL lessons, developing an identity of open classrooms and a culturally embedded learning environment as a part of the teaching and learning process.
3. To carry out online learning within the CLIL approach in Primary Education.
4. To assess the implementation of telecollaborative practices and virtual exchanges in the CLIL classroom and to reflect on their integrativeness within the CLIL approach.

This MA dissertation consists of two main parts which are the theoretical framework and the analysis of two case studies. The theoretical framework reviews the concept of CLIL, paying special attention to key features for this piece of work such as the lack of quality CLIL materials, the use of scaffolding and the integration of the ICT. This last section is stressed since it relates to CLIL on an online learning environment which involves the development of different types of online exchanges. First, telecollaboration as a wider concept is addressed, including a subsection concerning the development of intercultural communicative competence because it is an inherent part of the concept that arises from contact with people of heterogeneous backgrounds. Then, virtual exchanges as a model of telecollaborative exchanges are added, taking into account their relevance for teacher trainees who need to be trained according to the CLIL approach and become aware of current necessities of education that could be related to this kind of learning. The last point deals with PBL as a methodology that could be included

within CLIL and virtual exchanges because the learner is the centre of learning and active tasks are commonly used. In the second part of this MA dissertation, two case studies are analysed according to the same criteria, resources, scaffolding and assessment. The telecollaborative exchange was developed through the eTwinning platform and the virtual exchange, on its part, was carried out within the framework of the 'CLIL4YEC' project. In each exchange, an additional proposal for the lesson plan is added. Finally, a comparison between the two case studies is presented to illustrate similarities and differences, and strengths and weaknesses of both online experiences.

2.Theoretical framework

2.1. Content and Language Integrated Learning

2.1.1. Definition and implementation

Content and Language Integrated Learning (CLIL) is an educational approach that is based on the integration of both content and language from a double and flexible perspective in which a second or foreign language is used as a vehicle for instruction to learn disciplinary contents. A well-known definition of CLIL is offered by Coyle, Hood and Marsh (2010) “Content and Language Integrated Language, CLIL, is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language” (p.1). According to this definition, both features are interconnected by taking a joint function, the content is driven through a vehicular language that is different from the native one, and language learning is embedded in the subject area.

Moreover, CLIL is not only supported by content and language but also by learning skills, the third element that creates opportunities to improve subject-specific development, functional proficiency, metalinguistic awareness and intercultural competence, contributing “a lifelong process requiring continued use and ongoing investment” (Mehisto, Marsh and Frigols, 2008, p.12).

In this regard, long-term expectations are set to cover CLIL realities that extend over primary, lower secondary and vocational education. Consequently, the main aims are developing a ‘can do’ attitude, a change of the teaching practice and socially-oriented learning would be achieved gradually (Marsh, 2008).

Secondly, CLIL is an umbrella term because it addresses a high variety of models and learning styles and at the same time it differs from other methodologies due to its 4Cs constituents that are “the planned pedagogic integration of contextualized content, cognition, communication and culture into teaching and learning practice” (Coyle et al, 2010, p.6).

Concerning its origins, the term was coined in 1994 by David Marsh who claimed that CLIL emerged from a European need to encourage language learning. Language teaching is added to knowledge construction, and thus, CLIL has become a globalisation force that caters to the

demands of contemporary education and provides accessibility to all students (Coyle et al, 2010). This European phenomenon has expanded significantly in recent years all throughout the continent (Euridyce report 2006, 2012; Pérez Cañado 2012) and in other parts of the world, and its visibility and development has been promoted by the different initiatives that include EU-funded projects aimed at developing and analysing best practices in CLIL.

For example, ‘CLIL for Children -C4C’ (Strategic Partnerships (Key Action 2) - Erasmus + Program - Project number: 2015-1-IT02-KA201-015017) ¹ offers materials and resources, methodologies and recommendations that have established the core of flexible teaching programmes for CLIL primary teachers since 2015. Furthermore, C4C created a web comprising 90 Open and Educational Resources to teach the additional language, English, through the CLIL approach, as well as a guide for teachers and series of lesson plans for Science, Mathematics, and Geography in primary schools. The C4C consortium also developed a survey of the state of art regarding CLIL in terms of methodology, good practices, challenges for teachers, and a review of OERs to be employed in CLIL lessons with children from 5 to 12 years old. Moreover, quality training for teachers was provided by their E-course about specific CLIL methodologies.

From this project, it derived ‘CLIL for Young European Citizens – CLIL4YEC’ (Project No. 2019-1-IT02-KA201-063222 Erasmus+ Program – Call 2019 – Key Action 2 Strategic Partnership – KA201) ², CLIL4YEC is focused on CLIL development through three main cross-curricular lines: European citizenship, Environment Preservation and Basic Financial Education. The innovative integration of the areas fosters intercultural and transversal competencies, stressing the role of the stakeholders and the use of digital resources to promote collaboration as occurring with virtual exchanges.

A proposal for online learning developed within CLIL4YEC will be analysed in the second case study. For this purpose, a lesson plan called ‘*Green Sources*’, which belongs to the 18 lesson plans designed within the project, was implemented in two schools in Extremadura, including a virtual exchange carried out between the *María Inmaculada Salesian* semiprivate school and *Las Vaguadas* state school, one of the partners of the CLIL4YEC consortium.

¹ For further information, please, visit <http://www.clil4children.eu/>.

² For further information, please, visit <https://clil4yec.eu/>.

A key feature that would be emphasized in this globalised environment is the use of Information and Communication Technologies, ICT, which are linked to the dynamic nature of CLIL and it is, thus, considered an essential resource within the approach to supply current necessities. In Mehisto's et al. (2008) words:

globalization has made the world interconnected in ways not seen before. New technologies are facilitating the exchange of information and knowledge. Mobility, both physical and virtual, is becoming an ever-increasing reality and this is having an impact on languages. The reality of life in a mixed global society is having an impact on how we teach-and this concerns language education. (p. 10)

The accessibility that is pursued connects with virtual exchanges, achieving a greater integration of learning by covering meaning, and establishing relationships to participants' daily life. Therefore, the concept of telecollaboration, that is analysed below, could be understood as an authentic scenario in which students interact and develop certain kinds of competencies concerning the immediacy and interconnectedness of the digital medium with the aim of "learning while using and using while learning" (Mehisto et al., 2008, p.11).

2.1.2. The shortage of materials in CLIL and the importance of scaffolding

Two key elements in CLIL are: on the one hand, materials, that is, appropriate resources that support learning outcomes, making them visible to construct knowledge and deeper understanding; and, on the other, scaffolding techniques, that is learning strategies that facilitate the assimilation and integration of the content, language, and learning skills through collaboration.

Referring to CLIL learning materials, it is important to emphasise that qualified CLIL teachers need to be familiarised with the creation or adaptation of specific CLIL resources which should be content-rich and cognitively challenging. As a result, extra preparation time and further cooperation between content teachers and language specialists are some of the steps that have to be followed to provide CLIL students with adequate materials (Mehisto et al., 2008, p.22).

Designing materials involves several implications as Ball (2018) points out: “sociolinguistic contexts and the culture of their specific disciplines, to adapt and create materials, as well as to evaluate those that already exist, with reference to an easily-applicable set of criteria” (p.223).

Therefore, the design of adequate CLIL materials involves a careful selection of multimodal resources as realia, digital support, language skills to supply a communicative demand and the application of some thinking skills (e.g., matching or classification).

Some general bases for the creation of materials are taken into account by Ball et al. (2015) that emphasise the interrelationship between the task and the text, focusing on the task, the use of embedded scaffolding or thinking sequences (cited in Ball, 2018, p.228).

More specifically, Mehisto (2012, p. 17-25) provides specific criteria for the development of quality CLIL materials that include:

- Make learning intentions (language, content, learning skills) and process visible to students.
- Systematically foster academic language proficiency.
- Foster learning skills development and learner autonomy.
- Include self, peer and other types of formative assessment.
- Help create a safe learning environment.
- Foster cooperative learning.
- Seek ways of incorporating authentic language and authentic language use.
- Foster critical thinking.
- Foster cognitive fluency through scaffolding of content, language, learning skills development helping students to reach well beyond what they could do on their own.
- Help to make learning meaningful.

Regarding scaffolding, it could be analysed within designing models of materials by adding visual clues, graphic organizers, or leading input and supporting output with ICT (Ball, 2018, p. 225).

Accordingly, a clarification of the concept of scaffolding in CLIL is provided by Mehisto et al. (2008): “learning through a second language is cognitively demanding (...) they [scaffolding techniques] can be used systematically to support the achievement of content, language and learning skills” (p.138). Scaffolding is required as a learning support based on

collaboration through which a more capable peer or an adult helps the learner to obtain better achievements, which Vygotsky (1978) named the Zone of Proximal Development: “it is the distance between the actual developmental level as determined by independent problem solving and the level of potential development determined through problem solving under adult guidance” (p. 86).

Scaffolding in CLIL can be divided into three types: verbal, content, and learning processes scaffolding. Language has to be scaffolded in terms of learners’ proficiency from receptive techniques as modelling, using the mother tongue carefully or supporting it with gestures or movements, to output-oriented strategies, offering key vocabulary, or guidelines to expand students’ responses. At the same time, content needs to be condensed and related to students’ previous knowledge, using visual support or the integration of learning-by-doing tasks. Giving a model, first, or using examples are other ways to illustrate the content. The third element of CLIL, learning skills, could be scaffolded by creating mnemonics or graphic organizers (CLILforChildren, 2016, p. 23-26).

Besides, it might be convenient to know the advantages of scaffolding. It develops learning strategies that foster cognition, through innovation and experimentation which enhance the fusion between the understanding of knowledge, the use of the language and the application of learning skills. As examples, charts, diagrams, experiments, multimodal, visual or manipulative materials facilitate the teaching-learning process (Mehisto et al., 2008).

Steps within scaffolding techniques should consider learners’ daily context and needs and associations to their previous ideas to classify and categorize new meanings. Some well-known scaffolding techniques are using brainstorming, visual organizers to recognize content’s relationships, or providing synonyms or chunks to offer comprehensible input.

Furthermore, attitudes and other affective factors need to be taken into account because emotional links are effective to store knowledge and language in the long run. When scaffolding is used, the role of the teacher, the classmates and other stakeholders is essential since it is a social process that could be developed from offering sequenced assistance. For instance, learners would know how to deal with long texts and create smaller bits of information by chunking or employing analogies which are functional strategies that could be expanded by themselves (Mehisto et al., 2008).

In the third place, students would be empowered when they are engaged in a variety of cooperative tasks, and therefore, they will be able to monitor their own learning progress and critical thinking.

A well-known framework for promoting thinking skills is Bloom's taxonomy in Anderson's updated version which consists of a classification list between Low Order Thinking Skills which are remembering, understanding and applying, these kinds of skills could be developed with more ease, and High Order Thinking Skills, analysing, evaluating and creating. (Anderson et al, 2001, p.15). HOTS depend on prior knowledge and require effort to face new tasks, problems or situations linked to background information. As a result, learners would create deeper learning and transferability between thinking skills due to its focus on the cognitive processes (Anderson et al., 2001, p. 264).

On the other hand, learning styles have to be dealt with in CLIL, a selection of preferred language learning styles could be useful in order to share with our learners what is beneficial for us: "we are most likely to teach the way we learn the best" (Mehisto et al., 2008, p. 168), then adapting sources of information and texts to give learners more opportunities to consider their own learning style.

Learning styles have been related to the theory of multiple intelligences. Gardner (1995/2011) state that each kind of intelligence (Visual-Spatial, Linguistic-Verbal, Logical-Mathematical, Musical, Bodily-Kinesthetic, Naturalistic, Interpersonal and Intrapersonal) is ideally combined with students' needs and preferences, and associated with the application of personalized strategies for meaningful learning.

The last phase of scaffolding could be expanding students' comfort zone by building own strategies to control and be aware of the progress of their learning process, and even transfer it to other situations, in other words, applying knowledge. (Mehisto et al., 2008, p.169).

2.2. The CLIL approach and the use of ICT

CLIL arises from a European need and it has been closely linked to ICT: the knowledge of digital tools should be considered in order to ensure learning through real tasks and the use of familiar resources.

Besides, as Mehisto et al (2008, p. 11) point out: “Those born after 2001, belonging to the cyber generation will be even more influenced by their early, personal and manipulative integrated experience with technologies”. Thus, this digital medium with which learners are comfortable, also serves as a facilitator to improve linguistic shortcomings. The shortage of resources and the accessibility provided by ICT support not only language learning, but also CLIL implementation. CLIL as a European phenomenon is supported by the European Commission which has taken into account the promotion of linguistic diversity since 2003 with the aim that “every citizen should have a working knowledge on at least two languages in addition to his or her mother tongue” (2003, pp. 3-4).

As far as digital accessibility is concerned, UNESCO (2008) stresses the role of ICT for a proper development in today's knowledge society, which must be integrated into the curriculum to expand learners' knowledge which is cyclically generated. In particular, it is a call for the holistic development of all people in relation to competencies acquisition that support autonomous and collaborative learning (pp. 2-6).

The above-mentioned objective is increased by UNESCO's (2019) communication which gives greater significance through its linkage with innovation and inclusion, as well as linguistic and cultural associations, considered to be essential to the nature of ICT.

For these reasons, ICT should be included into learning experiences to foster understanding as well as to offer several chances for the transformation of information into a more critical knowledge on the part of the students. Moreover, communication is pursued, and then, more possibilities of collaboration exist through the implementation of telecollaboration within virtual learning environments.

In a nutshell, global change is guided by changeable modes of technological improvements and adaptations to CLIL education which present greater challenges for the teaching and learning of additional languages or the simulation of real contexts. This last assumption is important due to the fact that ICT is essential for learners' usual experiences. Coyle (2010), for instance, puts forth that “one change that brought about by the new technologies and lifestyle change concerns the learners' mindset (...) are been increasingly exposed to advance technology at a very young age in the form of game consoles, mobile communication” (p.9).

As a consequence, the integration of ICT and CLIL cater the necessities of those involved, learners, teachers and other stakeholders as the families or the administrators that share a clear set of purposes that are significant when learning by doing in a current and contextualized way.

2.3. Telecollaboration

The evolution of the phenomenon of telecollaboration is linked to the effective function of the online technologies that are appreciated in pedagogical lessons delivered in the context of formal instruction. Telecollaboration is a demanded resource in 21st-century society that has to be conceptualized by its application to the teaching-learning process through a set of definitions:

Ospina (cited in Robles and Díaz, 2017, p.58) defines telecollaboration as “a mediation tool that provides a space for interaction, communication, and simulation of learning activities that, thanks to its virtuality, eliminates physical barriers, allowing distance education”. It could be even more empowered by adding the following components: the facilitator, the teaching plan, the evaluation and the resources that can vary in formats, audio-visual, textual, etc (Robles and Díaz, 2017).

Besides, O’Dowd, Müller-Hartmann, Guth, Helm and Lewis (2019) state that telecollaboration is employed “in foreign language education to describe an approach to online learning which involves engaging learners in interaction and collaboration with classes in distant locations through online communication technologies under the guidance of teachers or trained facilitators” (p.33).

Focusing on the linguistic nature of telecollaboration as the most employed, it is noticeable that the concept was especially used to refer to foreign language education. Not only bilingual exchanges are contemplated, but also monolingual ones that can be carried out through a lingua franca, a language for communication between participants that speak different ones, such as the case with the English language (García, p.234, 2015).

Therefore, the practical focus of telecollaboration is inherently shifted to the social sphere, with the aim of joining the development of culture, an essential element in language learning (O' Dowd, 2007).

Likewise, for Guth, Helm and O'Dowd (2012), telecollaboration is:

a powerful tool for the development of students' language skills because it is motivating and semi-authentic in nature, provides ample opportunities for spoken and written communication with speakers of other languages, and provides a relatively inexpensive form of elaborated contact with other cultures (p.6).

Moreover, regarding the benefits of telecollaboration, it should be mentioned that it facilitates contact between learners, in an interactive environment, which can even be compared with synchronous immersion in the versatility of the electronic medium. Other key elements are the affective component and motivation, as well as the feedback provided between members which allows improvement and meaningful learning (Robles and Díaz, 2017, pp. 57-59).

O'Dowd et al. (2019, p.4-5) mention some key characteristic of telecollaborative exchanges in 'A training Manual on Telecollaboration for Teacher trainers':

- They are carried out in a specific period of time, between 6-8 weeks to allow genuine communication between the participants.
- A sequence of tasks that is relevant for students' needs and interests is proposed. Its main thread is shared in relation to a topic and the syllabus of the programme.
- The tasks require collaboration to advance into more difficult experiences.
- Discussion and reflection are crucial elements to value the innovative learning experience (O'Dowd et al., 2019, p.4-5).

One of the most important features is the progressive development of the set of tasks, so that the EU-funded project 'EVALUATE' (Project number: 582934-EPP-1-2016-2-ES-EPPKA3-PI-POLICY) Erasmus + Key Action 3 (EACEA No 34/2015))³ exposes a plan that is based on

³ For further information, please, visit <https://www.unicollaboration.org/index.php/evaluate-2/>.

three stages. In the first place, the Information Exchange consists of introductory activities that help learners to know each local reality. It depends on creative communication on a social level from the engagement of all the participants to develop international learning.

For this reason, it is necessary to highlight that: “The impact of virtual exchange was seen to be particularly significant on students who came from homogeneous backgrounds and who were not accustomed to interacting and collaborating with members of other cultures” (The EVALUATE group, 2019, p.107).

The next phase is called Comparison and Analysis concerning a study of similarities and differences between the cultures. Students are asked to convey meaning at the same time they foster intercultural sensitivity.

The last task is the Collaborative Product which engages pupils in producing something new from their collaboration, a creative result that represents the progress of the exchange (O’Dowd et al., 2019, p.8-9).

Finally, a telecollaborative exchange is an umbrella term that collects many other types of online exchanges such as intercultural exchanges and virtual exchanges. The last type of exchange is analysed in the next section with the aim of differentiating both by providing a clear-cut description of each method.

2.3.1. Telecollaboration and the development of the intercultural communicative competence

In view of the above, the cultural associations to the different languages needed are reflected on telecollaboration, especially on the development of intercultural competence which enables learners to communicate appropriately with interlocutors that do not share the same culture, and even for teachers that are involved in the exchanges as agents of international communities.

The Intercultural Communicative Competence (ICC) is developed when learners are engaged into a telecollaborative exchange and they are forced to interact and achieve certain communicative objectives that are inherent to the intercultural conversation.

O'Dowd, on his part, clarifies the meaning of this specific competence: "the intercultural competence refers to the students' ability to work and collaborate effectively with members of other cultures" (O'Dowd, 2017, p.40).

Furthermore, Portalla and Chen (2010) study the effectiveness of the ICC which "corresponds to communication skills, including both verbal and nonverbal behaviors, which enable individuals to attain their communication goals in intercultural interaction through an appropriate and effective performance" (p. 22).

Also, an exponential model for the development of Intercultural Competence for Professional Mobility, ICOPROMO, is addressed as an integrated approach to language learning since 1995, subordinated by the European Centre for Modern Languages of the Council of Europe, ECML. Its primary aim is to promote collaborative and training practice for teachers. Consequently, social cohesion through languages would be promoted, an important aspect of our multicultural society. This project in question was funded by the European programme, Leonardo da Vinci, which promotes lifelong learning.

In short, ICOPROMO presents:

theoretical grounding and a large number of training activities which reflect a rich understanding of a complex phenomenon. It is dynamic, demonstrating the role of the different elements in the change which follows from reaction to the challenge of what the team calls "the new world order". (Council of Europe, 2007, p.7)

Byram's (1997) research, in comparison to his collaboration with the previous model, indicates the relationship with foreign language teaching and provides guidelines for its assessment, emphasizing the observation of the individual's ability to communicate and overcome cultural boundaries in a process of adaptation. Byram refers to an Intercultural Communicative Competence (ICC) perspective that comprises elements of linguistic, sociolinguistic, discursive, and intercultural characteristics. Every component takes place with the knowledge and its interpretation which makes the learner competent in knowing how to interact and be closer to the final goal of becoming an intercultural communicator.

The ICC is a compositional competence that is made of cognitive, affective and behavioural dimensions that formed the CAB paradigm Harmer (2015) highlights that this holistic approach

is based on personal characteristics and their reflection to other comprehensible patterns of cultural manifestations such as status distance, similarities and differences, or collectivism. He examines the CAB paradigm focusing on the following individual patterns: “expectations, initiative/self-confidence, intercultural skills, non-verbal behaviors (e.g., direct/indirect eye contact), conversational management behaviors (e.g., asking questions), abilities in managing stress, communicating effectively and developing relationships in a foreign culture, cross-cultural attitude” (Harmer, 2015, p.12).

This broader framework of study has its origins of the Developmental Model of Sensitivity, (DMIS) taking into account applying intercultural competence by improving sense making or moving to higher levels of the ICC.

Then, Portalla and Chen (2010) collected the following features that are integrated with the intercultural competence: message skills, interaction and identity management, behavioural flexibility and relationship cultivation (p.p.22-24).

In short, Harmer (2015) recommends further research and practice are needed within a mainstream perspective to foster the educational community's abilities to value and respect cultural aspects of our changeable society.

The development of intercultural communicative competence is analysed since it emerged in telecollaborative exchanges, as participants who were in touch with each other through the virtual medium had to communicate effectively, even though their cultural backgrounds were different. Regarding the intercultural competence relationship to communication, not only the linguistic dimension is addressed, but also the non-verbal responses or the socio-pragmatic perspective are presented as part of the same meaningful exchange.

Moreover, CLIL is composed of 4Cs, one of them is related to culture, so that, subjects and cross-curricular topics deal with the ICC through their integration with this approach which fosters cultural awareness and expression. Therefore, the intercultural competence that was previously analysed also arises in virtual exchanges due to its integrative nature that comprises different cultural manifestations.

2.4. Virtual exchanges

Virtual exchanges are closely related to telecollaboration, however their range of application refers to a variety of methods for students' involvement in their subject-specific syllabus.

O'Dowd and Lewis (2016) note that virtual exchanges differ from Collaborative Online International Learning (COIL) since VE is a comprehensive term that includes several methodologies which are learner-centred to be accomplished in the course programmes under the assistance of teachers. Students would be participating in online intercultural collaborative studies based on providing instruction through a mediated action that is sequenced during a process that is equally followed by the international partner classes.

Furthermore, according to O'Dowd et al. (2019), the term of virtual exchange "is used in subject areas beyond foreign language education and often carries with it a different set of objectives" (p.34).

Thus, for example, in the EVALUATE project (2019), competencies development is treated on an integrative basis and virtual exchanges are used as part of some educational programmes that employ technology to allow geographically-separated people to interact and communicate with the aim of increasing mutual understanding, global citizenship, digital literacies and language learning. The essential characteristics of virtual exchanges are focused on the role of the student as the centre of the learning and teaching process, and the holistic perspectives of collaboration that requires interaction and negotiation of meaning through an international and intercultural exchange.

Nowadays, the application of virtual exchanges in CLIL contexts has been recommended. For example, the EU-funded project CLIL4YEC promotes the use of virtual exchanges that develop the main transversal topics (Citizenship, Environmental and Financial education) enhanced by the project. Virtual exchanges promote online peer-to-peer collaboration, including stakeholders' participation and intercultural competence.

Secondly, a sequence of stages needs to be addressed in terms of careful planning for virtual exchanges, according to the CLIL4YEC consortium:

1. The virtual exchange is supported in a Virtual Learning Environment (VLE) to collect the digital resources and interactive activities that will be accomplished during the study.

2. An agreement should be followed with the partner teacher according to a common set of objectives and students' familiarization with the tools.
3. Age, linguistic awareness, pedagogical-digital skills and intercultural communication are taken into account from the integration of competencies within a multidisciplinary perspective (CLIL for Young European Citizens, 2021).

Additionally, transversal skills are also developed due to their interrelatedness to “a broad set of knowledge, skills and work habits, and character traits that are believed to be critically important to success in today's world. Generally speaking, these 21st century skills can be applied in all academic subject areas” (O'Dowd et al., 2019, p.33).

In conclusion, a virtual exchange is not only a well-known resource but also an effective tool for educational purposes concerning meaningful opportunities for the whole educational community. The global nature of the open classrooms fosters innovation as well as the use of active methodologies such as task-based or project-based learning that are closely related to the CLIL approach and as such it will be a practical application of it will be assessed in this MA dissertation.

2.4.1. Virtual exchanges for teacher trainees

Virtual exchanges have been transferred to several fields specially in foreign language education, business studies and initial teacher education. Within teacher education, the telecollaborative experience is often followed regarding the next steps:

1. Teacher trainers who are geographically distant present a curriculum agreement that it added to the courses.
2. Then, teacher students cooperate together with a focus on pedagogical materials and tasks.
3. Teachers reorientate teacher trainees' discussions and empower them to reflect from interactions with the other partners.
4. The virtual exchange finishes when the teacher students submit a final product that collects data of the process. As a result, students obtain academic credit and a meaningful learning experience in collaboration with their international partners (The EVALUATE Group, 2019, p.2).

Therefore, this area of application is dealt with taking into account the following competences:

- Will telecollaboration have a positive impact on future teachers' digital pedagogical competence?
- Will telecollaboration have a positive impact on future teachers' intercultural competence?
- Will telecollaboration have a positive impact on future teachers' foreign language competence?
- How do socio-institutional factors in each of the participating countries shape and affect the impact of telecollaboration in ITE? (O'Dowd, 2017, p. 39).

Once teacher training on virtual exchanges is covered, Technical Pedagogical Content Knowledge, TPACK, has to be explained because it is a kind of knowledge required for them to use technology appropriately in the context of a teaching area. As the EVALUATE group (2019) clarifies "teachers have an intuitive understanding of the complex interplay between the three basic components of knowledge (content knowledge, pedagogical knowledge, technology knowledge) by teaching content using appropriate pedagogical methods and technologies" (p. 17).

In order to reach a more comprehensible understanding of the TPACK, Bueno-Alastuey, and Esteban (2016), reflect on its importance from a reflective model in the experience they prompted, the solution of technical problems leads to the reinforcement of pedagogical content such as microteaching episodes, activation of prior knowledge, motivation, and scaffolding.

In conclusion, teacher students have to be trained to supply contemporary demands of education and its adaptability to the innovative methods and resources for meaningful learning. For this reason, future teachers need to be competent in terms of ICT usage, especially virtual exchanges to foster their pedagogical preparation and open new possibilities to their students.

During the virtual exchange to be discussed below, two teacher trainees worked cooperatively with in-service teachers in the authentic context of both CLIL primary classrooms within their placement period, developing competency-based learning which is necessary for CLIL teacher training to respond to current methodological requirements.

2.5. Project-Based Learning

Project-based learning (PBL) is presented as an appropriate learning environment within the CLIL approach and in the development of virtual exchanges due to some of its main features such as the promotion of engagement and motivation as well as the improvement of knowledge's understanding.

Krajcik and Bkumenfeld (2006) state that Project-Based Learning “allows students to learn by doing and applying ideas. Students engage in real world activities that are similar to the activities that adult professionals engage in (...) they actively construct their understanding by working with and using ideas” (p.317).

PBL implies learning in a specific context through which pupils have to solve a real problem by investigating, answering questions or making hypotheses, so that students learn by doing, developing competencies during a specific period of time they spend to resolve the initial challenge. The emphasis of PBL is placed on the process itself, a real-life situation that is problematic, open-ended and reflective. As the Edmonton Regional Learning Consortium (2017) recalls that “the focus is more on the process of learning and learner-peer-content interaction than the end-product itself” (p.4).

This type of learning situation emerges from a need for further understanding of science subjects in the early 1990s a substantial change was needed to improve learning results. Thus, students would be encouraged to give explanations, discuss and even be aware of real-world problems.

For this reason, Krajcik and Bkumenfeld (2006) collect the main principles of science: active construction, situated learning, social interactions and cognitive tools which are interrelated with the main characteristics of PBL:

Generating a genuine question to treat an issue and develop learners' curiosity. The driving question is the starting point that gives a clue to students to be familiarised with the aim, the practices or the technical vocabulary of the subject-specific area. In other words, the basis of the learning performance, how it could be developed, and what they can do with what they have already learnt. Students' background information and interests are also taken into account to deal with an authentic phenomenon.

The purpose is set from this question which provides learners with an ample range of possibilities to discover multiple responses and prompting their own questions (Edmonton Regional Learning Consortium, 2017).

The second phase consists of processing information, searching and applying the knowledge of the area in order to solve the problem. The cognitive tools and strategies used by the learners could be improved by the role of the learning technologies that allow accessing to a variety of data and visual resources, creating information analysis and sharing. Then, collaboration would lead to their creation of multimedia presentations that represent mutual understanding and promote assessment.

Furthermore, these kind of presentations as an artifact of the participants could be shared through virtual exchanges to provide students with a visual aid or to support their ideas. Multimedia presentations are also used to outline the main purpose of the exchange and give students autonomy to speak to an audience.

Bramwell-Lalor, Ferguson, Hordatt Gentles, Roofoe and Kelly (2020) claim the improvement of “strategic competencies (developing and implementing actions), (...) critical thinking (questioning norms, practices and opinions) and integrated problem-solving competencies (applying problem-solving frameworks to complex problems and developing solutions)” (p.60).

Then, students and stakeholders participate in collaborative tasks, develop interpersonal skills and employ scaffolding to respond. In this step, since it is a social process, “students collaborate with others in their classroom and with their teacher to ask questions, write explanations, form conclusions, make sense of information, discuss data, and present findings. (...) to critique and provide feedback to each others’ explanations” (Krajcik and Bkumenfeld, 2006, p.326).

Also, learners become familiar with different configurations of groupings, heterogeneous organizations that have to face conflicts, take different roles, be responsible and communicative apart from delving into the analysis of the content to find possible solutions (Bramwell-Lalor et al., 2020).

Finally, learners elaborate a final product that characterizes the whole process of inquiry with the aim of conveying meaning, assimilating and transferring learning in the long run. The artifacts such as games, reports or digital presentations, are shown at the end of the project. The

product would be publicly shown to an audience in a sharing event, so, the main outcome should be illustrated creatively and it could include technology use.

Students as the authors of their project have to acquire some degree of voice and choice in order to demonstrate their implication and self-learning, an explanation of the whole process would be included to increase the sense of belonging regarding their final result (Edmonton Regional Learning Consortium, 2017).

Concerning evaluation, PBL is equally effective because it promotes formative assessment, considering feedback as a key element provided also in previous phases and the last result which builds a significant exposition of mutual understanding and the illustration of the process of learning (Krajcik and Bkumenfeld, 2006).

Moreover, PBL promotes an interdisciplinary and cross-curricular culture that has to be encouraged by school administrators and other teachers with their participation and cooperation in the careful design of the project and its implementation. With this regard, Bramwell-Lalor et al. (2020), address the development of sustainability competencies from the cross-disciplinary nature of PBL, the application of competencies in several situations and areas to confront complex community problems thanks to its research and action-oriented approach.

To conclude, it is important to recover the gist of Project-Based Learning:

(it) has the potential to transform learning environments, where the role of the teacher shifts from knowledge dispenser to that of a facilitator of learning. The teacher supports students in asking complex questions and then finding, choosing, understanding, synthesizing and communicating solutions to their questions. This kind of learning builds students' skills and competencies to experience success in an increasingly complex society (Edmonton Regional Learning Consortium, 2017, p.2).

Project-Based Learning is studied due to its implementation within the CLIL approach as an active, collaborative and learner-centred methodology that is also suitable for online learning since PBL gives students opportunities to foster their curiosity, create their ideas and show a final product through the VE that illustrate the learning process.

3. Two case studies

The previous theoretical framework sets the basis for analysing the following case studies that illustrate different CLIL realities, a description of both is given in the following lines. The two projects which are based on online exchanges are carried out in *María Inmaculada Salesian school* in Puebla de la Calzada, Badajoz.

The Salesian Congregation fosters its religious ethos that recognizes the main pillars: faith, life and culture, and emphasizes the role of Don Bosco in young children's education. Regarding education offer, the school provides free positions from Pre-primary Education to Compulsory Secondary Education, including a Bilingual Section in English and the brand of Education Quality since the year 2007.

The Bilingual Section comprises two areas: Social Science and Art which are taught through the English language for grades 1 to 6 of the primary school. Two sessions of each subject are developed in English while the other weekly session of Social Science is given in the official language, Spanish. These two subject-specific areas are chosen for the CLIL program due to their suitability for the integration of content and language. Social Sciences construct worldwide, objective knowledge that apart of being accessible and interesting for students, promotes the relationship with their close, real and experiential environment. Art education familiarises learners with a cultural and artistic dimension through which they are immersed in English language usage in a simple and direct manner. In both areas, not only the content is addressed before the foreign language, but also it is stressed over the foreign language, so full integration between the field and the language is not reached. Fluency is considered more relevant than accuracy, and, thus, linguistic aspects and errors are treated specially by the English teacher.

The use of the official language, code-switching, in each area approximately corresponds to 60% for English language use or even 70% in Arts education because of the repetitions of all the instructions and the routines in English, and between the 30-40% is devoted to the Spanish language. It is employed to clarify meaning when promotion of further comprehension is needed. A significant improvement would be to rationalize and reduce the application of the official language to be just used if other previous scaffolding techniques have not worked such as employing visual aids or gestures.

On the other hand, students are also exposed to three sessions per week of English language which are combined with soft CLIL, in other words, they own resources that deal with different areas such as History, Science or Mathematics within the FL subject.

The most widely used teaching resources in the CLIL classes are the textbooks *Explore and more!*, *I wonder* that have been created by Express Publishing and *Social Science* and *Arts and Crafts* by Edebé. The human resources are two teachers specialised in English Language in Primary Education with a B2 certification in English and a native English language assistant from USA, granted by the Junta de Extremadura for the Bilingual Section programme.

In order to progress on the fulfilment of the objectives' proposal of the CLIL programme, throughout projects' implementation they expect to be able to apply an appropriate methodology so that the pupils use the contents of the curricular area to develop language skills and at the same time the target language is employed to learn curricular contents in a meaningful and motivating context for the pupil. Moreover, language development would be linked to the improvement of cognitive flexibility, metalinguistic awareness and communicative competence that are best acquired when it is used for learning by doing.

Lastly, another objective of the programme is to involve the school in a plurilingual and pluricultural action, in which the processes of exchange of experiences are integrated through ICT, and favour the development of the knowledge society of the 21st century. According to this aim, *María Inmaculada* school has just started their participation in different online exchanges that will be explained in further detail in the following lines and that correspond to the concrete objectives of this MA dissertation.

3.1. Telecollaborative exchange through eTwinning: the development of the intercultural competence

3.1.1. Description

A classroom of 25 pupils in the 5th grade of Primary Education enrolled in the Bilingual Section took part on a telecollaboration session in the framework of the eTwinning programme.

The eTwinning initiative ⁴ is based on an educational platform that encourages European schools to cooperate and take a role in a community of young citizens. It is supported by Erasmus+, and the main aims of the programme are the promotion of collaboration between teachers, students and other stakeholders that foster meaningful learning in a social context. Besides, it is centred on teachers' training through team teaching with other teachers around several topics that are prepared in distant locations, sharing good practices and highlighting the action in open classrooms.

The specific activity '*Europe Day 2021*' that was carried out and is analysed here as a case study was an activity to commemorate Europe day, the 9th of May, as a part of an Erasmus + KA229 project which is called '*You (th) enjoy to be active and healthy- Yeah*' within five partnered schools in different countries: Slovenia, Italy, Denmark, Lithuania and Spain.

The main objectives of the project are to increase pupils' awareness about being healthy and responsible and encourage them to make environment-friendly choices, to develop European citizenship and promote collaboration with local stakeholders, to foster good practices and to improve teachers' competences. The direct beneficiaries are 100 students in mobility who are 12 and 13 years old; 1,300 pupils on local level and participators in virtual exchanges, between 40 to 50 teachers and 15 staff members. Moreover, approximately 100 families take part of the project, including other stakeholders that participate indirectly. Some of the principles of the methodology used are PBL and hosting schools also promote students-centred learning, teamwork and peer-to-peer collaboration.

The partner schools are the following: *OS Valentina Vodnika* in Ljubljana from Slovenia, *ICS di Manerbio* from Italy, *Højby Skole* in Odense S from Denmark, *Alytaus Volunges progimnazija* from Lithuania and *Ciudad de Mérida* stated school from Spain.

This case study consists of analysing one of the project's proposals for local activities, virtual collaboration through eTwinning. I was directly involved in the activity as a teacher trainee as, *Ciudad de Mérida* state school, one of the partner schools in the project, invited the *María Inmaculada Salesian* semiprivate school local school, where I was doing my placement at the time, to participate in this telecollaborative exchange.

⁴ For further information, please, visit <https://www.etwinning.net/es/pub/index.htm>.

It is classified as a telecollaborative exchange because the English language is employed to communicate and interact with other students in distant places and share their own cultural features. For this reason, this exchange prompts foreign language learning and the development of intercultural competence and digital competence.

Regarding its implementation, the activity plan was designed by my mentor teacher, following some common general guidelines with the partnered teachers in terms of content, format and timing. Thus, he created a PowerPoint presentation to show other partners the information required concerning Extremadura's symbols. The points addressed were the flag of the region, the coat of arms, the anthem and the gastronomy. Once the knowledge was organized, each section was shared between the learners to become the speakers of the telecollaborative session. The time required was approximately 2 hours on the part of the teacher to complete the slides and ask for collaboration with other teachers, each class of Primary Education was in charge of elaborating designing models as flags of the different countries that participate, thus, the whole school was involved in the activity. Students spent 1 hour, first they listened to the presentation and then, they coloured little flags. Four learners who are 11 and 12 years old became the speakers and devoted extra time to prepare the speech at home and rehearse the presentation. They were also supported by the English specialists and the language assistant, taking into account pronunciation, stress, intonation and body language. Evaluation was not emphasized during the activity development.

3.1.2. Analysis

The preparation stage was based on the CLIL teacher's recommendations and his cooperation with the teaching staff. From the common outcomes established with the online partners that participate in the project, the school started to plan the session and collected the resources. The Spanish collaborators, *Ciudad de Mérida* state school and the *María Inmaculada Salesian* semiprivate school aimed to fulfil the agreements followed by the rest of the meeting members and carry out good practice. In this case, the Spanish team added the participation of the *María Inmaculada Salesian* school to broaden the cooperation links to celebrate Europe Day. *Ciudad de Mérida* school illustrated Spanish symbols and asked the *María Inmaculada Salesian* school to include a presentation about our regional identity since both schools belong to Extremadura. As a result, the cultural awareness and self-identity of the learners were

fostered by showing our symbols to the other countries, since they recognised them as a representation of the own culture, and the place we live in.

The space for interaction was supported by 'Google Meet' and the telecollaborative exchange took an hour. It consisted of a learning activity that was carried out through the virtual medium where the teacher is the facilitator and the students developed skills integrated into their educational programmes by keeping in touch with students in different locations. The resources' formats were audio-visual and textual because we shared a PowerPoint presentation, the anthem and the video were reproduced at the same time subtitles in English were added to promote understanding. Concerning the language, it is a monolingual exchange because it is carried out through a lingua Franca, in this case, English which allows communication between the participants that speak different languages.

During the presentation, students were motivated and engaged in the activity because they became real collaborators. Pupils provided feedback to their international peers but they could not make some questions since the telecollaborative exchange was time-limited, each country had 5 minutes to present the main points of their local reality. Thus, the activity exchange integrates both spoken and written communication in the chat to make more detailed comments and offer positive reinforcement ('very interesting presentation', 'thank you', 'well done!') in a conversational mode, it has also been employed to inform about technical problems.

I consider that the core element of the exchange was the promotion of contact with other cultures through intercultural dialogue. For example, they showed us the Lithuanian coat of arms which is called Vytis, we sang together the memorable anthem of Italy, we knew about the little mermaid in Denmark and Slovenia's flag. The impact of the different cultures was significant and thus, students met their expectations because they developed initiative and self-confidence when facing other realities and valued their own customs and traditions. Also, pupils used non-verbal behaviours such as gestures and movements, they shake the flat expressing enthusiasm, and especially, they looked for eye contact since they wore the mask. Conversational management behaviours need to be taken into account by students in future exchanges that would be more focused on interaction to ask questions or answer appropriately.

The phases of the EVALUATE project for telecollaboration exchanges are analysed in the following lines:

The Information Exchange was addressed through the introductory activity through which students were informed about the participation in the exchange. The driving resource for this

experience was the digital presentation. Learners were in an open-classroom environment to share our typical cultural elements. However, students were not sufficiently familiarised with the main cultural features of the different countries until they were in the exchange session. It is not until then when the real enrichment was produced since each partner showed the essential characteristics of their local reality. This first category task has been predominant in the telecollaboration exchange because more time is needed to develop intercultural competence and reflect on one's own and others' cultures.

The comparison and analysis were the processes that define the next phase that impacts students' learning, even more, when we deal with their homogeneous background. They became part of an international community where the development of intercultural communicative competence is embedded because they needed to communicate appropriately even though they do not share the same culture. As a result, they were able to know other cultures and compare them in terms of similarities and differences. This complex task helps learners to develop a cross-cultural attitude and realise that diversity favours us. Nevertheless, this stage requires further development in practice to develop critical reflection.

Lastly, the unique collaborative product was the recording session of the telecollaboration in which each group exchanged information and the co-production of a cultural adapted document where the digital presentations are added in a blog entry.⁵

It should be pointed out that in future exchanges the role of the cooperative product has to be stressed and involved the student participants and the stakeholders. The project will be expanded over time in order to address all the stages in greater depth.

Regarding the characteristics of the telecollaborative exchanges, it should be mentioned that they are carried out in a specific period of time, with a minimum duration of 6-8 weeks. Although the case study has just covered the specific activity '*Europe Day 2021*' that lasted one week, it was part of the longer project that has been developed since October.

The main aim of this particular activity was to share cultural elements and promote genuine communication regarding students' needs and interests. For this reason, a sequence of tasks was developed within the syllabus of the programme. Pupils coloured Spanish and Extremadura flags in Arts and Crafts and they rehearsed a digital presentation regarding the English subject. Finally, they participated in the telecollaborative exchange and obtained more information

⁵ To access the blog entry, please, visit <https://yeaherasmus.blogspot.com/2021/05/europe-day-2021.html>.

about the symbols of different countries that could be related to the Social Science content area. This task sequence advanced from simple requirements to more difficult experiences that could be followed through collaboration with other teachers that dealt with the same teaching plan with their learners.

According to the resources, multimodal learning material with sounds, texts and visuals were used thanks to the visual support and they supplied communicative language demands such as expressing likes and dislikes, agreement or improving comprehension of the text. Furthermore, the PowerPoint presentation facilitated discussion for the following sessions and the application of thinking skills as a classification through the different symbols.

Scaffolding was employed mainly to deal with the language by using the mother tongue carefully and making gestures and movements to illustrate procedures (decorating the classroom and the creation of the flags) and cover meaning (understanding of the colours of our flags and the significance of the coat of arms). Moreover, since learning was embedded in a context, cooperative work as a social process was an important scaffolding technique in which other learners have become facilitators of the knowledge. They also supported other classmates from a small group that allowed several opportunities for rehearsal to an international community that provided feedback to improve and foster meaningful learning. Such as output-oriented strategies, the speakers had guidelines that scaffolded their speech and visual support, a learning tool that favoured the audience' interpretation.

Pacing the task and sequencing it from easier to more complex activities to cater to the content that is Extremadura's symbols has been another learning strategy. It is partly related to Social Science and the more technical vocabulary and dense information were condensed by the teacher in order to be exposed by the students with more ease.

Competences are also included, communication in the foreign language is one of the most developed since the whole exchange promotes the use of the target language to interact and belong to an international community. Linguistic competence is also fostered by employing code-switching to promote further comprehension and debate or to deal with discipline problems. Social and civic competence is encouraged due to the promotion of cooperative work and the sense of belonging to a virtual partnership. It is linked to cultural awareness and expression regarding the development of intercultural competence and the dynamic of open classrooms. Moreover, digital competence is promoted by the essential use of ICTs to create the learning material and carry out the telecollaborative session. On the other hand, the sense

of initiative and entrepreneurship and learning to learn competence are not developed because learners did not have the possibility of researching or organising knowledge by themselves.

Another main point is the assessment which could not be sufficiently addressed in the telecollaborative exchange. It has only been considered on the part of the teacher by informal assessment, in the common scenario of the classroom, taking into account engagement or participation of the students. However, I believe that more tools for assessment are needed such as rubrics to obtain evidence, peer and self-assessment as alternative ways to reach holistic results and even a portfolio including data of every task of the project. This procedure that fosters ongoing formative assessment should be also graded for the final summative assessment as an important part of the teaching and learning process. Teachers need to evaluate their own teaching performance that could be done in collaboration with the associated teachers in order to improve the quality of the telecollaborative exchange. For this reason, it is necessary to establish clear intended objectives at the beginning with the partner teacher to compare with final outcomes and redesign the program.

Finally, I would like to emphasise the effectiveness of this telecollaborative exchange to foster the use of the foreign language, and thus it was a suitable project for the English subject. It also fostered students' motivation and engagement as well as their cooperation and meaningful learning since they were immersed in a real context thanks to the virtual medium. The analysed exchange could be related to language-driven CLIL because culture as a particular topic for English lessons is softly integrated with specific topics of an area as Social Sciences regarding the symbols of a country. Nevertheless, there is a huge range of opportunities to develop virtual exchanges through the eTwinning platform because it shows a great offer not only to participate in an activity but also in projects that are more extended in time and could correspond particularly to content areas and cross-curricular links, and thus, developing content-driven CLIL for bilingual schools or schools with a bilingual section.

Finally, I include my lesson proposal to develop increase students' participation. The aims of the lesson and the sequence of the tasks which is divided into warming up, main and post activities are added taking into account the previous contextualization.

Table 1. Proposed lesson plan '*Friends across cultures*'.

Title: ' <i>Friends across cultures</i> '
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Context: This proposal is aimed at a group 25 pupils in the 5th grade of the *María Inmaculada Salesian* school and it includes a telecollaborative exchange.

Prompt: Which are the main symbols of our Autonomous Community?

How can you decorate our class to express cultural awareness?

How do you show our local reality to international partners?

Could you respect and value other schools and realities?

a) CONTENT:

-Our Autonomous Community and its symbols.

-Social differences and respect to other schools and cultures.

-Extremadura's gastronomy.

b) LANGUAGE & COMMUNICATION

Vocabulary	Community symbols (flag, anthem, coat of arms, waves, silver, identity...), and vocabulary related to Arts (colour, wood stick, glue, design, brushes, cut...).
Skills	-To follow instructions to develop the different tasks.
Listening:	-To understand the videos of the partnered school. -To understand and respond to other classmates' opinions
Speaking:	-To talk about our customs (spoken production) -To communicate with other classmates (peer-activities) (spoken interaction)
Reading:	-To read texts and select relevant information.

	-To read the information presented in the document and the PowerPoint.
Writing:	-To write short sentences to present Extremadura's cultural elements. -To provide feedback to their classmates. -To give detailed self-assessment.
Mediation:	-To convey meaning from the telecollaborative exchange and express it with their own words in the later discussion.
Function	Sharing information about Extremadura and its culture, learners speak to an international audience.
Communication	Learners listen and interpret different cultures to become aware of others' realities to provide feedback that results in common enrichment.
<p>c) COGNITION:</p> <p>-Read, recognise, comprehend (LOTS)</p> <p>-Interpret, classify, evaluate, create (HOTS)</p>	
<p>d) CULTURE: Students will be familiarized with other schools' realities and reflect about their own competence of cultural expression and awareness.</p> <p>-To respect and value different cultures.</p> <p>-To commemorate Europe Day.</p>	

KEY COMPETENCES
Linguistic competence: The foreign language is used to interact with international partners, to understand instructions and to provide feedback to other classmates. Moreover, code-switching is employed to clarify meaning when is required and to sing the Extremadura anthem.
Learning to learn: It is developed when learners are expected to research and represent shared knowledge with other students.




Social and civic competence: It is presented due to the global character of the project when pupils learn with distantly located partners as a result from the previous cooperation with their classmates to work in groups.
Sense of initiative and entrepreneurship: It is treated because learners are asked to think critically and analyse the more important elements that define their culture and need to adopt different roles in groups in order to create a final product.
Cultural awareness and expression: It is one of the most cultivated competences since the main topic is culture and customs sharing to show the identity to other open classrooms.
Digital competence: It is employed through ICTs use and the development of a telecollaborative exchange.

SEQUENCE OF ACTIVITIES

Duration	
For the development of this mini-project, approximately 4 hours in class are needed, they are divided into several tasks to be developed in different lessons over a period of one week.	
SESSION 1:	DEVELOPMENT
Warming up activity Timing: 20 minutes Resources: digital blackboard, pencil and paper.	A brainstorming is carried out and it is focused on ideas about what the most relevant traditions of Extremadura are, cultural aspects that could be of interest for our European partners. It lasts 10 minutes, and then, during the following 10 minutes students vote and select the preferred customs to be exposed in the telecollaboration session.
Main activity Timing: 35 minutes Resources: students'	It consists of researching in groups about Extremadura's location and symbols, which are the flag, the coat of arms and the anthem, and gastronomy. Moreover, the last feature that has been selected by the pupils is also shared with another group.

computers, Internet connection, Google Drive document.	<p>There are 4 groups of 6 people that work with their computers and share the information found while the teacher is solving doubts around the classroom. They have to find visual support such as maps and flags. The last 5 minutes are employed to foster peer assessment because groups change their roles and check other sections.</p> <p>Lastly, the written production is revised by the teacher and he/she provides positive and detailed feedback, so students will be prepared to develop the following activity.</p> <p>The teacher has previously created a shared document in Google Drive to assess the complete text in a cooperative and interactive manner.</p>
SESSION 2:	
<p>Warming up activity</p> <p>Timing: 10 minutes</p> <p>Resources: Internet connection, Google Drive presentation.</p>	<p>Students will create an outline of the PowerPoint presentation to organize their ideas and include it in a slide. It will be developed orally to review the information and discuss the main points that have been treated previously. Next, the teacher will write the shared outline.</p>
<p>Main activity</p> <p>Timing: 30 minutes</p> <p>Resources: Internet connection, Google Drive presentation.</p>	<p>Groups are changed in order to deal with all the information, then students in their groups have to create their design for the presentation and establish the language format on their own to obtain a final product created totally on their part. Thus, students will develop a higher sense of autonomy and responsibility, and show their choice and voice in creating an artifact that will be shared with an audience.</p>
<p>Follow up activity</p> <p>Timing: 10 minutes</p> <p>Resources: Internet connection, YouTube.</p>	<p>Students have to rehearse the anthem within the whole group. They know Extremadura's anthem but the first time, they should listen carefully in order to be even more familiarised with the rhythm and the intonation. Then, learners will sing it twice and they select a part of the anthem to be presented in the final session of telecollaboration.</p>

SESSION 3:	
<p>Main activity</p> <p>Timing: 30 minutes</p> <p>Resources: coloured pencils, scissors, glue, etc.</p>	<p>Students are in charge of the decoration of the classroom as an identity place that is going to be shown in the exchange. First, the teacher gives them some drawings of flags to be coloured and glue to a wood stick to move and show them during the telecollaborative session. Next, they will collect the flags of the other classrooms and the <i>María Inmaculada Salesian</i> symbol and the logo 'Yeah' to be integrated into their mural. At the end, the speakers will rehearse and present the PowerPoint to their classmates.</p>
<p>Main activity</p> <p>Timing: 50 minutes</p> <p>Resources: Internet connection, Google Meet.</p>	<p>Classrooms from the different schools in Spain, Italy, Slovenia, Denmark and Lithuania have a telecollaborative exchange to display their digital presentations. Pupils ask questions and discuss with their international partners at the end of the presentation.</p>
SESSION 4	
<p>Follow up activity</p> <p>Timing: 15 minutes</p> <p>Resources: Evaluation rubric</p>	<p>Students in peers have to complete the following rubric. It consists of making questions and answers between them to express what they have already learnt on their own.</p>

Self-assessment			
I can express my opinion about the exchange.			
I can show likes and dislikes.			
I can understand my partners' customs.			

I can say which are the symbols of the countries that collaborate in the telecollaboration exchange.			
I can use graphic organizers to structure the information.			
I can say which flat corresponds to each country.			
What do you know about the little mermaid?			
What does the Slovenian coat of arms look like?			
I would like to participate in future exchanges.			

Finally, it should be mentioned that the telecollaborative exchange was an introductory activity that enabled the school to get to know the eTwinning platform and its usefulness which will allow it to participate and cooperate in even more challenging initiatives over longer periods.

3.2. Virtual exchange through CLIL4YEC: Environmental education as a suitable cross-curricular topic for the CLIL project.

3.2.1. Description

The virtual exchange was carried out in the framework of CLIL4YEC Project (No. 2019-1-IT02-KA201-063222 Erasmus+ Program - Call 2019 - Key Action 2 Strategic Partnership – KA201), which fosters the implementation of CLIL in Primary Education⁶. The European initiative consists of the integration of content subjects and language around three main cross-

⁶ For further information, please, visit <https://clil4yec.eu/>.

curricular topics that are European citizenship, Environmental Preservation and Basic Financial Education. Furthermore, it promotes the use of digital resources such as virtual exchanges to give learners new opportunities for authentic language use, the development of intercultural competence and basic skills. CLIL4YEC addresses the versatility of the virtual medium to encourage the participation of the stakeholders and further connections between students in different locations that cooperate actively through experiential learning.

CLIL4YEC has been expanded from CLIL for Children (2015-2018), a previous Erasmus+ project⁷ derived its partnership to CLIL4YEC consortium which is composed of 7 members from Italy, Portugal and Romania and Spain. The Spanish institutions are the *University of Extremadura* and *Las Vaguadas* state school from Badajoz, our town in which the approach has been employed since 2011. The following project was conducted thanks to their important collaboration between tertiary and primary education.

Students of the 2nd grade of Primary Education from the *María Inmaculada Salesian* semiprivate school and *Las Vaguadas* state school took part in the virtual exchange, held on the 14th of May, that is analysed in the following case study. It consisted of a virtual exchange due to its interrelationship to the cross-curricular topic of environmental education related to other areas within the curriculum that are Natural and Social Science, Arts and Crafts, English and Official Language areas. Thus, content is integrated with language learning according to students' academic programmes, taking into account several intended goals that are set by the associated teachers.

The lesson plan used is one of the 18 lesson plans that were originally created by CLIL4YEC. It was developed from 4th to 14th of May during my placement period in the Master's in *Bilingual Education for Primary and Secondary school Teachers* in Badajoz. Another teacher trainee and her mentor teacher from *Las Vaguadas* state school were the collaborators.

One of the main features of the lesson plan is the development of the virtual exchange to foster online learning and digital skills. Project-based learning is also included since virtual exchanges promote the use of learner-centred methods through which pupils can be engaged in problem-solving tasks and participate actively. Therefore, authentic use of the target language is embedded in the cooperative context.

⁷ (Strategic Partnerships (Key Action 2) - Erasmus + Program - Project number: 2015-1-IT02-KA201-015017). For further information, please, visit <http://www.clil4children.eu/>.

However, it consisted of a local virtual exchange since the CLIL4YEC project was developed in terms of the first phase in which the lesson plans are being piloted to be refined and improved for their international implementation. Furthermore, due to the situation of the pandemic, not all schools were carrying out the sessions at the same time, and thus, the international VE is expected to be conducted in the second phase of the project.

According to the virtual exchange's development, the flexible guidelines given on the lesson plan called '*Green Sources*' (See appendix 1) have been adapted to each school's reality, taking into account students' needs and interests. It had a duration of approximately 5 hours in class during two weeks, adding 1 hour for activities at home. It consisted of six phases starting from dealing with the driving question, presenting clean and dirty energies, encouraging students to become responsible to do responsible actions in their daily life, promoting discussion and storytelling, making an experiment, and sharing activity through the virtual exchange. Students had to decide because they were aware of the criteria of the project, and they showed choice and voice in asking for the time and the participation of the parents to make their recycled toy. Furthermore, the recommendations for fast-finishers and remedial students were followed in order to adjust the activities for their adequate learning process, there were three fast-finishers that complete the quiz called 'How green I am' and remedial students actively participated in the creation of the poster by making drawings about how to save energy. Furthermore, assessment was emphasized to increase the quality of learning by a variety of informal measurements from observation, participation and effort, level of engagement or worksheet and formal tools to the final rubric for the students and the teachers.

3.2.2. Analysis

Getting to know the partner teacher was the starting point for the project's development. The University of Extremadura and *Las Vaguadas* state school are members of the CLIL4YEC consortium and as a teacher-student I had the possibility of developing the lesson plan and the virtual exchange included in it during my placement period. The mentioned partnership required coordination not only with the teacher in charge of giving the lesson plan but also with a classmate of my Master's programme that provided me with more information about the methodology used in each activity. Coordination is certainly a key feature in CLIL. We also shared pictures of the students' work to keep a balance between both groups. Regarding the

options provided in the lesson plans for the steps of the tasks, we have chosen the easier modality in which students have to make drawings for dirty and clean energies, we used more verbal scaffolding, we changed the model for the windmill's craft, and we carefully sequenced the activities during the virtual exchange. Thus, in each classroom's group before the exchange, we displayed the photos of every toy to vote the four toys they liked the most from the other school instead of developing voting in live.

In relation to the lesson plan, some observations in terms of each activity are added to illustrate its development by the *María Inmaculada Salesian* school:

The warming up activity started with some of the driving questions that had been formulated in Spanish because they are part of a Bilingual Section through which students received fewer hours of exposure to English than the students enrolled in the CLIL school. For this reason, code-switching was an unavoidable practice for the CLIL project at the beginning to get them familiarised with the topic. Furthermore, as a scaffolding technique I introduced the use of movements and gestures and students could respond in a wide variety of ways (e.g., we promoted the relationship between thumbs up for clean energies and thumbs down for dirty energies).

I would like to point out that pupils especially enjoyed the first task in which an authentic resource is used, the song called 'Save the planet'. Visual support, rhythm, and intonation were used to scaffold the content. It clearly motivated students, so it was practiced in more sessions, including the virtual exchange.

Moreover, we made our collaborative poster using students' drawings, they created in groups symbols to represent different sources of energy in a simple manner. As a result, it was a more time-consuming task that helped students to internalise the information. In this particular activity, remedial students present a high level of engagement through cooperative work and the support of other classmates.

Another modification was accomplished in task two, which was based on recording videos about green actions at home, however it was developed in the school. After all, teachers of the *María Inmaculada Salesian* school decided not to send it as homework. Due to time limitation teachers determined to finish most of the work at school. Once more, students presented their ideas by drawing and naming renewable and non-renewable energies.

In the second place, students identify with ‘Max the monster’ and they became even more aware about how we can save the planet by daily actions. Digital storytelling has been an adequate resource and I checked their comprehension by making oral questions, e.g., ‘what does he do to save the planet?’ This task perfectly matched the Superhero worksheet they filled in at home.

For the school campaign, some photos of the pupils doing responsible actions were taken at the school. Then, the whole class saw the videos of the students who took them at home and those that had been taken at school. Thus, the following discussion dealt with the photos and videos but also the drawings they made in the previous session.

An effective scaffolding technique was used thanks to the recommendation of the partner teacher. It consisted in a thinkers’ cloud that was filled with useful words and expressions as well as phrases of positive feedback to promote fluency, communication and a safe learning environment. For instance, ‘It’s amazing!’ ‘Good job!’ ‘What is it?’ ‘Did you colour it?’

The next step is characterized by the experiment, students learnt by creating a windmill during the Arts and Crafts session and they transferred it to science by doing an experiment. Students made hypotheses about what will happen to the windmill and discussed them with their classmates. Then, pupils discovered through observation and experimentation what kind of energy made its movement possible. For this purpose, learners spent a whole session of 50 minutes instead of the 25 minutes considered in the planning. Furthermore, the craft proposal was not followed by the students because it was difficult for them in terms of cutting the plastic bottle or inserting the metal stick. As a result, an easier recycled windmill was done according to the video⁸ in which the procedure is illustrated. Pupils used a milk carton, wooden sticks and plasticine rather than a rubber band to support the axes of paper and it spined thanks to wind energy.

Three students were fast-finishers and they did a quiz about how green they are, they did not present difficulties, and since three learners were developing the same activity, they helped each other when they had any doubt.

An extra session was employed to scaffold language (e.g. greetings, farewells, use of the present simple ‘This is my toy. It is a...’, emphasising pronunciation and stress) and content related to the name of the materials. Once, students brought their recycled toys, they had a

⁸ To access the video, please, visit <https://www.youtube.com/watch?v=sUVZekaLATY>.

rehearsal opportunity before the virtual exchange to present them to their classmates. Each student had sentence starters for support, they wrote their own notes, so the learners had the language in advance to use them during the presentation: 'My toy is...', 'It is made of' (plastic, cork, cardboard...), I did it with my older brother, etc. Furthermore, I emphasized language preparation to greet and farewell their partners, 'Good morning!' 'How are you?' 'Nice to meet you', 'Bye!' See you soon! Students also were able to express likes and positive feedback, (e.g., 'It's amazing', 'great!' 'Your toys are very nice', 'Well done!' 'Good job!').

The special feature of the lesson plan is the implementation of the virtual exchange to conclude with the lesson plan sharing common learning outcomes and products. The recycled toys students designed at home with their parents were presented to their online partners. Every pupil presented him/herself and told the audience the name of his/her toy, using the PowerPoint presentation⁹ as a visual support.

What is more, the selected toys from the 'small competition' were shown and their authors developed orally a procedural recount by including information about what materials they had used or how they could make the toy.

Regarding technical difficulties, the sound needed to be adjusted with a connected speaker and then, students were not able to see their partners while the screen was shared. In future implementations, it is recommended to establish the exchange without using such a longer PowerPoint presentation or trying another platform as 'Zoom' or 'BigBlueButton' that allows videoconferencing even with the screen sharing because adding the song and some visual support is important for the students to follow the order of the activity more clearly.

Once, videoconferencing finished, 20 minutes were taken to complete the can-do statement rubric for students, most of them reported positive results, they used the green happy face to express that they could say the sources of energy, understand short stories or make a windmill. However, one of the points in which they presented more difficulties is related to written production because they considered that they were not able to write a short message about saving the Earth. Finally, pupils received a green award and they felt proud of their learning.

⁹ To access the PowerPoint presentation, please, visit <https://docs.google.com/presentation/d/1ZU8icQu6HASxe-PqsMURSpKYkE1z7PVxuk2ofohMaMk/edit?usp=sharing>.

As is mentioned above, assessment has been developed on the part of the students in several activities regarding students' responses, participation, and own checking of their knowledge which is also more standardised through this last peer-self-assessment rubric.

On the part of the teachers, teaching performance is assessed by an objective rubric (*See appendix 2*) that includes a grading score for each step of the lesson plan. In most of them, active participation and involvement of the students, and use of English score the highest grades. On the other hand, weak points for the *María Inmaculada Salesian* school are related to stakeholders' participation which needs to be promoted in future collaborative experiences.

Furthermore, piloting reports (*See appendix 3*) were filled in by the teachers who participate to obtain feasible evidence from the lesson plan's development and to improve and redesign the steps needed. Some data have to be pointed out in comparison between the two schools. In '*Las Vaguadas*' state school, families had an important role during the whole process. This engagement could be even more promoted since the primary school belongs to the CLIL4YEC consortium. However, in the *María Inmaculada Salesian* school, families' participation was limited to the cooperation with their children in creating the toy and they were just informed when the project was finished. In future implementations expanded on the appropriate time, the use of letters and more contact to with parents should be fostered.

Regarding activities' development, in the beginning, the partner teacher used little cards with the driving questions which is a reinforcement strategy to present the challenge visually, but in my case, it was necessary to employ code-switching in order to promote students' understanding and participation in the initial discussion. Then, as a recommendation, the associated classroom employed different flashcards to show renewable and non-renewable energies, although we made a collaborative exercise through which students' own drawings were used to make the poster.

The extra activity of colouring the monster and filling in the gaps for comprehension was developed by our counterparts, however, the students of the *María Inmaculada Salesian* school did not have sufficient time to accomplish the worksheet, so that the use of the foreign language was promoted, mainly in oral production in this step.

Other interesting suggestions given on the part of the partner teacher that should be followed in the forthcoming exchanges are: showing students' videos and photos as a part of their morning routines in an integrative manner and presenting pupils' different works of art made with recycled materials to establish cultural links.

Finally, as common points, the suitability of the topic and the higher level of motivation achieved by the students because they become superheroes and the relevance of scaffolding to develop a virtual exchange with very young learners should be emphasised.

Concerning the CLIL4YEC project, a sequence of steps to carry out a virtual exchange is followed, so that, a retrospective analysis of its practice during the case study is given:

A Virtual Learning Environment that is the CLIL4YEC project supported the virtual exchange since one of the 18 created lessons plans is employed. The lesson plan used has been originally created by CLIL teachers to be shared and implemented in schools. Another main function of the proposed lesson plans is to rate its success and thanks to the virtual exchange more teachers from their genuine collaboration can assess and improve it for future usages. Moreover, social networks are required to promote communication between the partner teachers and the 'Google Sites' is employed to create a shared PowerPoint presentation and 'Google Meet' to allow videoconferencing. These resources were more used by the teachers because they had to control and predict students' needs since they are very young learners.

Once the digital space for the teachers was established, they followed an agreement. The common objectives had been set as well as the resources and the timing in terms of the progress of the lesson plan and the date for the virtual exchange because careful preparation is necessary to obtain good results by both groups. The last phase was based on adapting the virtual exchange implementation to the course programme, taking into account different schools' realities and students' needs and interests. For instance, more scaffolding techniques as the thinkers' clouds or the visual support are added and some activities, the 'experiment time', and 'meet friends around the world' are changed in order to cater to students' age and linguistic awareness. As a result, learners developed transversal skills, collaboration with digital partners, computer skills and intercultural competence that enabled them to communicate effectively with children with different cultural backgrounds.

Furthermore, as a teacher trainee, I had the opportunity of carrying out a virtual exchange with in-service teachers that orientated its development through cooperation. Although, it has not been a virtual exchange for a pre-service teacher I consider that it has been even better because I took part in an authentic context for teachers in a classroom of Primary Education. Moreover, I could cooperate with another pre-service teacher with a focus on CLIL materials and scaffolding techniques that have been put into practice. The last step has also been reached because I designed part of this MA dissertation as a final product to collect data and analysis of

the whole process. As a result, the virtual exchange was a meaningful learning experience that has increased my professional and personal competencies as a CLIL teacher.

Besides, the virtual exchange requires TPACK because it integrates content knowledge, I had in-depth knowledge of the topic and about how to work with it in terms of adaptation of materials and activities that is pedagogical knowledge. These methodological considerations are at the same time interrelated to the technological skills to work cooperatively with other teachers through technological devices and I used them for videoconferencing and fostering digital learning.

What is more, Project-based learning methodology was implemented and sequenced from driving questions such as ‘do you want to be a superhero for the Earth?’ It motivated students, fostered their curiosity, and provided them with opportunities to learn and create their own learning. Also, the questions illustrated the final outcome, and pupils felt engaged and were willing to participate in the activities, they especially enjoyed the virtual exchange.

Pupils constructed knowledge by working cooperatively, observing and making hypotheses, and learning by doing through the experiment, creating a windmill. The initial challenge has been solved gradually from several stages which are focused on the process itself (e.g., understanding other stories or decorating green schools).

Learners also created a final product that could be understood as a result of common learning between both classrooms. The artifacts were the recycled toys that have been shown by them to an audience, and thus, it gave students voice and choice to know and express what they have learnt and done through this worthwhile project.

Finally, I would like to add a proposal for an extra step for the lesson plan called ‘*Renewable and non-renewable energy*’

Table 2. Proposed lesson ‘*Renewable and non-renewable energy*’

STEP 4.1	<p>RATIONALE: An extra session of 50 minutes is added to reinforce the content knowledge between the following steps of the lesson plan: phase 4, ‘school campaign-be green!’ and 5 which is called ‘experiment time! ‘Once students get familiarised with the topic and have taken action in their daily life, it would be recommendable to</p>
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encourage them to assimilate the content and work in it more deeply.
It can favour them before doing the experiment.

The integration of the following activities is included because it works the key competences addressed for the students to become aware of human responsibility, to promote sustainable energy development and to apply new knowledge through English as a target language that allows them to understand and communicate the subject-specific contents.

THE 4Cs FRAMEWORK:

Content:

-Renewable and non-renewable energy.

Communication:

Language analysis:

-Language of: renewable and non-renewable energy, resources, waste, coal, oil, gas, fossil fuels, wind, hydroelectric, sunlight, create, come from, made by...

-Language for: there are (two) types of, examples include..., look up, log in, select, compare.

-Language through: consequences of the use of the resources (heat, cooking, etc), substances, plants, ...

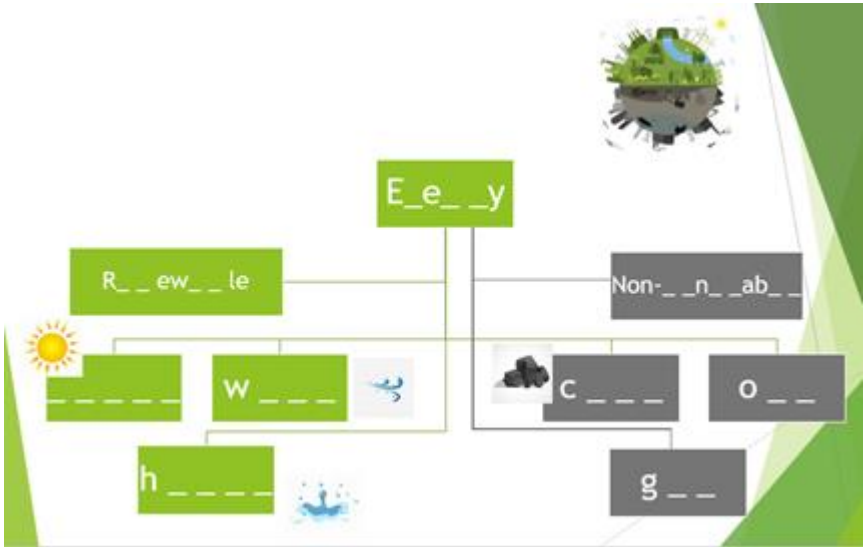
Cognition:

-Read, recognise, comprehend (LOTS).

-Interpret, classify, evaluate, create (HOTS)

Culture:

To consider the relevance of sustainable use to the environment and humans' life.

<p>Warming up activity</p> <p>Timing: 20 minutes</p> <p>Resources;</p> <p>What is renewable and non-renewable energy? - BBC Bitesize (webpage) and digital resources, and notebooks.</p>	<p>Students will review their knowledge about the topic, first by watching the video and taking their own notes, taking into account their previous knowledge, and they will share them with their peers.</p> <p>The teacher will observe the process and offer help when it is needed.</p> <p>The goal is to review knowledge and vocabulary about renewable and non-renewable energy. Then, changing the pairs, they will read the short text in order to complete correctly the following filling the gaps activity. Finally, they will have to choose the correct option, one member will assess the other's choice and vice versa, and the results will be considered by the teacher.</p>
<p>Main activity</p> <p>Timing: 20 minutes</p> <p>Resources: digital blackboard, model of a graphic organiser, and notebooks.</p>	<p>The teacher will provide an empty model of an outline that classifies clean and dirty energy. Visual aids support pupils' responses. Then, students will complete the scrabble words by themselves and establish relationships between the concepts. They can personalise the graphic organisers to promote their autonomous learning. Pupils especially develop learning to learn competence because they have to apply learning skills and create their own organiser to represent knowledge.</p> 

<p>Follow-up activity</p> <p>Timing: 10 minutes</p> <p>Resources:</p> <p>https://quizizz.com/admin/quiz/606b50218a2b42001db39f25</p> <p>(Quizizz) and digital devices.</p>	<p>Students will log in Quizizz and enter the code to complete the test. Once all the pupils access it, they will start the quiz and they will obtain immediate feedback. Pupils will be aware of what they have already learnt and they also will be able to improve their learning. On the other hand, the teacher will get their pupils' results to promote objective assessment. Moreover, digital skills are developed through the use of ICTs which also foster learners' motivation.</p>
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<p>ASSESSMENT</p>
<p><u>Tools:</u> Direct observation, results of the interactive activity (filling the gaps), students' notebook (portfolio), Quizizz.</p>
<p><u>Procedure:</u> Using direct observation continuously in every activity not only to check understanding but also to consider students' participation and effort in tasks' development. Other classmates will also assess their peers during the filling the gaps activity by providing comments and details about their choices. Finally, objective assessment is obtained through Quizizz results. Students are expected to classify renewable and non-renewable energy and provide examples of sources of energy.</p>

Finally, an analysis of the piloting report is provided taking into account pre-service and in-service teachers' feedback, the main outcomes, and suggestions for improvement. On the one hand, it could be observed that teachers emphasized the role of the families because they highly appreciated their collaboration in the project. Nevertheless, piloting was different in each school in terms of stakeholders' participation. In *Las Vaguadas* school every family was informed beforehand and received letters during the ongoing process which could be fostered since the primary school is a member of the CLIL4YEC consortium. However, in *María Inmaculada Salesian* school, the teaching staff preferred learners not to overload students with tasks to be done at home, although there was not a large amount of homework assignment if the estimated time would be taken. Thus, for future projects, this type of requirement on the part of the parents would strengthen cooperation with the school.

Furthermore, both teachers recognized the suitability of this cross-curricular project to their classroom because it promotes the development of the CLIL approach within different areas. Students' motivation and engagement with the tasks were also considered as an essential feature for their learning. Moreover, the chance of carrying out the virtual exchange has been positively valued because it was an especial opportunity to share students' toys and provided them with an authentic environment for interaction. This last part of the project was understood as one of the most important because all the learning process has been illustrated and concluded through the virtual medium between the two classrooms.

The experience of the in-service teachers needs to be addressed because they had adapted the lesson plan according to the different learning styles with more ease. In *las Vaguadas* school, cards with the driven questions were created, different flashcards were used to present clean and dirty energies or a worksheet about the story was done, and in the *María Inmaculada Salesian* school, Spanish was employed to ask the driving questions orally or the own drawings of the students were collected to create a poster. In contrast, both teachers were more concerned about technical difficulties that could appear during the VE.

Regarding teachers' recommendations, I would point out some of the more relevant suggestions that should be taken into account to improve the lesson plan: making cultural references to works of arts made with recycled materials, using thinkers' clouds to provide students with language support, or creating a multimedia presentation to be reproduced during the VE.

On the other hand, teacher trainees also participated in this piloting experience. The participation of two teacher trainees has favoured their training, and the cooperation and coordination links between both schools. Fluent communication between the teachers were facilitated through the contact with the teacher students that informed each other continuously. It was also possible to offer better planning for the lesson plan taking into consideration common objectives and guidelines between both schools. Although, the *María Inmaculada Salesian* school started the project later, students had the chance of developing all the activities in an adapted way from the reporting of the teacher trainee from the other school.

The assessment was also carried out by teacher trainees which emphasized observation as an essential tool to complete a final rubric and fill in the piloting report including qualitative

comments that allow to improve the lesson plan for its implementation with the international peers. However, the teacher trainee at *Las Vaguadas* school could not attend all the sessions.

Moreover, not only the more practical considerations such as scaffolding or multimodal resources have been considered by the teacher trainees but also theoretical aspects that give meaning to the whole piloting experience (e.g., ‘How does the diversity of CLIL models influence the development of the project?’ ‘What is a VE?’ or ‘What does PBL consist of?’).

Another main conclusion is that virtual exchanges promote students’ development of competencies, participation, and cooperation with the online partners that result in higher levels of engagement and motivation on the part of the learners.

3.3. Comparing both experiences of online learning

As has been explained above, the lesson plan called ‘*Green Sources*’ created by the CLIL4YEC consortium includes a local virtual exchange that was carried out by the 14 students of the 2nd grade of Primary Education at the *María Inmaculada Salesian* a semiprivate school in Puebla de la Calzada and their 25 counterparts at *Las Vaguadas*, a state school in Badajoz.

Furthermore, a particular activity was developed within the eTwinning framework for the 25 pupils of the 5th grade of this primary school. It consisted of an international telecollaborative session between the following different countries: Italy, Slovenia, Denmark, Spain. Regarding Spanish representation, *Ciudad de Mérida* state school represented Spain culture and invited the Salesian school to show Extremadura reality.

A reflective analysis is provided to compare telecollaborative and virtual exchanges in their implementation in the 2nd and 5th grade, respectively.

According to their similarities, both exchanges promote communication with other students in distant locations and share the identity of the open classrooms, although the VE was actually only carried out locally in this first phase of the project. Besides, the two cases are highly valued by the *María Inmaculada Salesian* school because they have just started an innovative way to implement these kinds of exchanges in the future.

The participation of the school was possible thanks to the close cooperation, both exchanges could be developed through the partnership with local schools from the region we live in. Nevertheless, the eTwinning project allows our students to be in touch with international partners while the virtual exchange was accomplished with children of our local community. In future exchanges, further collaboration links could be set regarding the CLIL4YEC consortium where other schools from different countries take part. These are *Direzione Didattica di Todi* and *Direzione Didattica Aldo Moro di Terni* from Italy, *Agrupamento de Escolas Gardunha e Xisto* from Fundão in Portugal, and *Scoala Gimnaziala Alexandru Davila* from Pitesti in Romania.

Another important feature to be addressed is that the collaborative classrooms correspond to the same grade, in other words, primary two students were with pupils of the 2nd grade of Primary Education and likewise for the other classroom.

In both cases, the starting point was the cooperation with the associated teacher in order to set common outcomes, including timing or materials. It is necessary to recognize the relevance of this stage to obtain good results since exchanges have to be carefully planned and improved through an action-oriented approach.

According to technical devices, during the two exchanges, we have used the digital blackboard, a computer, a tablet and a speaker to improve sound quality. ‘Google Meet’ was used to allow videoconferencing and a PowerPoint presentation was shared in both activities.

Regarding differences, I consider that one of the most important points is to differentiate between the two types of exchanges. This eTwinning particular activity, ‘*Europe Day 2021*’, is an example of a telecollaborative exchange due to the fact that it encourages the knowledge of cultural elements as a part of foreign language learning and the development of the intercultural competence to cooperate appropriately with other participants. There is not a driving force on the part of the content, so the focus is on the language itself and its use to communicate and improve fluency in the target language. However, the CLIL4YEC project culminates with a virtual exchange because subject areas such as Social Science and Arts and Crafts cover a cross-curricular topic, environmental education that matches specifically with CLIL. At the same time, language learning is embedded because English as an additional language is a vehicle to go through the knowledge. It consisted of a part of the learners’ educational programme since it was integrated within the curriculum as a lesson plan in which even stakeholders could participate actively.

In relation to the age of the students, the pupils that are in the 2nd grade of Primary Education could take part in this telecollaborative exchange and older students could participate in the virtual exchange. Both activities would suit both age groups if adapted to their needs. The young children who are 7 and 8 years old would be able to understand the presentations of such cultural aspects of the different countries since they are familiarised with this kind of global topics. However, those students who are 10 and 11 years old present other cognitive abilities and strategies to learn and produce the formal information of the slides, taking into account the context. Students of the 5th grade develop higher levels of comprehension and maturity, and they are more proficient in the foreign language which allows them to carry out this telecollaborative task without a higher amount of scaffolding that would be needed by younger students.

On the other hand, the youngest learners are more familiarised with the description of concrete objects, even more, when they create them. They felt more confident when applying the language, they used for daily routines and enjoyed dancing and singing with other partners. The requirements of each exchange are adjusted to the types of learners, age and classroom environment.

Concerning its implementation, the telecollaborative exchange required remembering information to be shared with other students. The four speakers had to talk about their specific points in terms of Extremadura's symbols.

In contrast, in the virtual exchange, every student participated and the whole class interacted with the online partners to demonstrate what they have already done. Thus, meaningful learning is reached because they learnt gradually and became aware of its relationship even with their daily life. The interest of the students was also considered, so the song was included and the criteria for voting were decided with them. Moreover, they were supported by other stakeholders as their families and other teachers. It should be recognized that it is a worthwhile project because it engages the educational community.

As a result, the eTwinning activity could be related to the development of the Low Order Thinking Skills because during the telecollaborative exchange students had to present slides that had been previously studied and applied the knowledge when they are shown to the audience. However, the virtual exchange reflected the promotion of HOTS due to the fact that students have just designed their recycled toys and then evaluated their own learning in cooperation with other students. In this case, even though students are younger they were able

to analyse their reality to develop responsible consumption and transfer it to their daily life because they have become superheroes to save the planet.

Regarding scaffolding, it is a key feature for the success of this kind of online activities. This supportive measure in terms of language and learning skills were employed in both cases although content has only been scaffolded in the virtual exchange since telecollaboration is most focused on language. The teacher gave them a model first and through repetitions and rephrasing, the language issues were treated. Students were exposed to visual aids and graphic organisers that helped them to organize the information and produce it more accurately, especially on the part of the older learners.

Offering key words, relating the new content of renewable and non-renewable energies with students' background information or highlighting and condensing main ideas are some of the scaffolding techniques used for content during the virtual exchange.

Furthermore, a productive or output activity was done to be presented in the telecollaboration session meanwhile a project-based learning approach was applied within CLIL and the virtual exchange. Students had to solve a challenge from driving questions, draw meaning from observation in their daily life, make hypotheses and check them while they were learning by doing an experiment with their own windmill. Their curiosity was fostered and a can-do attitude was developed because they worked cooperatively immersed in a social process. Lastly, students created a final product, the recycled toys which represented their understanding and what is more, they presented it to the audience.

Evaluation has been included as a part of the teaching and learning process in the virtual exchange through direct observation, daily work, participation and peer-self-assessment rubrics on the part of students as an objective tool that provides relevant data for assessment. Also, the teachers who collaborated have filled in a piloting report that includes strong points and recommendations to assess their performance and to improve future projects and virtual exchanges. Nevertheless, direct observation and the presentation are the unique tools used to value the telecollaboration project. I believe that the criteria and more tools for assessment have to be added as well as the procedure should be more detailed in order to improve the quality of the following telecollaborative exchanges.

Finally, I would like to mention that as a teacher trainee, I had the chance to participate in the telecollaborative and the virtual exchanges, and it was a very enriching experience to enhance my professional and personal competencies as a CLIL teacher. I had to cooperate with

other teachers and partnered schools to establish a common agreement and I had to work daily to fulfil each outcome. For this reason, I considered that it was a unique experience that should be included in all educational programmes of every teacher student to cater necessities of 21st-century education.

Table 3. Comparison: overview

Telecollaborative exchange	Virtual exchange
International	Local (members)
Particular activity	Lesson plan
Output activity	Project-based learning
5 th grade of Primary Education	2 nd grade of Primary Education
Verbal scaffolding	Content scaffolding
Families were not involved	Families' participation
LOTS	HOTS
Lack of tools and procedure for assessment	Emphasis on assessment

4. Conclusion

Online learning has opened opportunities for students in different locations that follow the commitment of developing competencies together thanks to the virtual medium, and the dynamicity of the contexts.

Regarding the objectives, it should be mentioned that they have been partly achieved through the implementation of the two case studies that are analysed in this MA dissertation. The theoretical framework has been provided in terms of defining and implementing CLIL, taking into account some of its more relevant characteristics as scaffolding regarding content, language and learning skills, quality CLIL materials and the use of ICT which is closely related to online learning. Then, reporting on telecollaboration and VE was the starting point to carry out the two case studies during my placement period in the *María Inmaculada Salesian* semiprivate school. Both experiences were implemented within the CLIL approach with students of the 2nd and the 5th grade of Primary Education. Besides, online learning could be assessed through its implementation mainly by observation, so its suitability to students' different learning styles, ages and variety of CLIL realities has been demonstrated. However, it should be recommended to measure the satisfaction levels of all students participating in the following experiences of online learning.

Therefore, CLIL approach has been studied in terms of its main characteristics that are related to their development in different models of online exchanges that have also been assessed through its implementation in a Primary Education school. What is more, it is necessary to point out that this MA dissertation provides comprehensible data to distinguish between telecollaboration (case study 1) which is a broader umbrella term that emphasizes language learning and virtual exchanges (case study 2) that are more related to subject-specific areas.

These kinds of online learning have been analysed theoretically and practically implemented. As a result of their implementation, students felt motivated as it was corroborated by observation for the telecollaborative exchange and for the VE, rubrics were also used.

Globalisation has also given rise to the use of English a lingua franca to communicate and develop cultural awareness and the promotion of CLIL programmes that expand language learning to content and their integration to cross-curricular topics, and this is clearly reflected in the two case studies analysed in this MA dissertation.

From the analysis of both cases, it could be inferred that the key points for the successful implementation of both learning experiences have been the development of cooperation and coordination between the partner teachers because online learning requires even more careful planning in terms of technical difficulties, the development of tasks' sequences or cooperative work. Timing has been limited in order to participate in more activities of both projects, to obtain a more holistic vision of the initiative and to complete the lesson plans in two weeks during my placement period.

Another important area is the extent of the interrelatedness between the participants. Concerning the telecollaborative exchange, international peers from Lithuania, Italy, Slovenia and Denmark were in touch with the Spanish counterparts. However, the virtual exchange was just developed between local partners. For future virtual exchanges, further links of associations between Italy, Portugal and Romania could be established from the CLIL4YEC consortium to keep contact with more heterogeneous backgrounds. Moreover, new contributions of participants' schools from other cities of Spain could be enriching since there are only two members from Badajoz, the *University of Extremadura* and *Las Vaguadas* state school.

Furthermore, reporting piloting sessions in different schools or developing virtual exchanges within the eTwinning framework would provide evidence to obtain more detailed data about this broader phenomenon of online learning. It also addresses lifelong learning because it could be adapted to different ages, levels and necessities or interests of the students who are the centre of the teaching and learning process. Through the virtual exchange it has been demonstrated that even very young learners could participate effectively in online learning.

Finally, the collaboration forces between pre-service and in-service teachers have been strengthened through the online exchanges which have resulted in teacher training to cater to the necessities of the students.

This MA dissertation has demonstrated the importance of online learning and CLIL since the flexibility of the approach especially matches with the digital medium through which students are embedded in a new learning environment. Collaboration and stakeholders' participation were also strengthened through this kind of learning. Moreover, the integration of the CLIL constituents is reached with more ease due to the use of cross-curricular topics that are related to different subject areas and authentic language usage with their digital peers.

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6. Appendices

Appendix 1: Lesson plan 'Green Sources' created within the CLIL4YEC Project.



LESSON PLAN 10

GREEN SOURCES

Project Title: CLIL for Young European Citizens

Project No. 2019-1-IT02-KA201-063222

Erasmus+ Program - Call 2019 - Key Action 2 Strategic Partnership – KA201.

1. CONTEXTUALISATION

This lesson plan is designed for CLIL groups aged between 5 and 8 years old and is planned to be developed in the 2nd/3rd term. The cross-curricular topic is Environmental Education, more precisely, Energy. It can be implemented in a state school, with classes making up to 25 students.

Students need the teacher's guidance even if they feel quite confident studying/working in English. They can understand and produce simple sentences. However, when the language is too complex for students, teachers can use code switching (use L1 partially to support students) and also encourage the use of body language to support communication (see The Teacher's Guide for more information).

Cross-curricular area		Topic / Subtopic (Lesson Plan 10)		Age	
Citizenship Education		Topic (tick one option): <input type="checkbox"/> Environmental Disasters <input type="checkbox"/> Energy		5-8 years old	X
Environmental Education	X			8-10 years old	
				10-12 years old	

Basic Financial Education		Animals and plants		Green sources	x
		Pollution and environmental disasters		Transportation	
		Environmental Disasters		Fair Trade and responsible consumption	
		Subtopic Title (Lesson Plan 10):			
		Green Energy			

What you need: Materials

- Materials: Handouts, images, flashcards, pencils, colouring pencils, crayons, felt pens, rubbers, scissors, glue, sheets of paper, activity sheets, cardboard, adhesive tape and reusable sticky tack, plastic bottle, plastic caps, steel/wood stick skewer or a steel knitting needle, some paintings, recycled materials, computer and webcam, cell phone for recording the audios/videos.
- Resources: international forum. For example: Trello (<https://trello.com/es>)/Padlet: <https://es.padlet.com/>
- Internet connection.

Does it include a Virtual Exchange with another class?

Yes	X
No	

Does it require parental involvement ? Yes

Duration

For the development of this **project**, you will need approximately 2 hours in class divided in several tasks to be developed in different lessons over a period of 6 weeks. Besides, this lesson plan will require **parental involvement** as it includes homework tasks (1 hour at home).

Content subject(s)

Subject areas: Natural Science, Social Science, Arts and crafts, Official language and English.
Cross curricular areas: environmental education, citizenship education, personal development.

Introduction

This lesson plan has been designed to encourage education on environmental issues, focusing on green energies, and citizenship through different activities using project-based learning, CLIL learning and virtual exchanges with international students from different home countries.

The aim is to raise awareness in our young students about environmental issues such as the use of clean and dirty energy (renewable and non-renewable energy), the importance of the 3Rs (reduce, reuse and recycle), pollution and share personal experiences related to these topics. It will encourage children to think about what they can do to save energy and take care of the Earth. It will promote good behaviour in a multicultural context.

Relying on a task-based approach, it aims to provide the children with the opportunity to investigate and to contribute to the development of their school and local community. This will be carried out through an intercultural perspective, encouraging active participation and **parents' involvement** throughout the process, bringing the opportunity to learn from other cultures, and foster values such as solidarity, personal responsibility and empathy.

Key competences

Communication in mother tongue	✓
Communication in foreign language	✓
Learning to learn	✓
Social and civic competence	✓
Sense of initiative and entrepreneurship	✓
Cultural awareness and expression	✓
Digital competence	✓
Mathematical, scientific and technological	✓

2. AIM OF THE LESSON

Prompt: Can we make a cleaner planet? Do we recycle? Do we reuse things? How can we reduce waste and pollution? Do we care about using renewable energy? Is there a benefit for the Earth when we use recycled materials?

a) CONTENT: To learn and understand about caring for the Earth. To encourage children to think about what they can do to save energy and to reduce pollution. To create more sustainable homes, schools and communities. To make them aware and responsible.

b) LANGUAGE & COMMUNICATION

Vocabulary	To learn words about clean and dirty energy, pollution, reducing, reusing and recycling, environment and vocabulary related to actions to save energy and care about the Earth (turn off the light/TV, have a shower instead of a bath, go up and down the
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	stairs instead of using the elevator, ride a bike, walk to school, use the public transport...).	
Skills	Listening	To listen to teacher explanations and questions. To follow teacher instructions. To understand short stories. To listen to their classmates during group discussions and to other students during the virtual exchange.
	Speaking (-Spoken production -Spoken interaction)	Spoken production: To describe in simple words their pictures and photos. To explain things they do at home to be green and care about the Earth. To talk about the materials they use for the experiment and explain the different steps. Spoken interaction: To discuss the topic (brainstorming, photo activity). To communicate and compare facts about their own experiences and habits with classmates and the teacher. To discuss and vote for a competition with classmates and international peers. To communicate with their international peers during the virtual exchange.
	Reading	To read simple texts about the topic (activity sheet and quiz).
	Writing	To write words or simple sentences as captions for their pictures or photographs on the topic. To write simple and short sentences to make different signs for the school (only the older students).
	Mediation	To share their work with other peers giving feedback. To reach agreement.
Function	To express findings and discuss ideas and opinions. To reach conclusions and possible solutions to a problem.	
Communication	To share their opinions and findings on the topic with others. To share different solutions to a problem.	
c) COGNITION: Students become aware of environmental issues. They realize different simple ways to be friendly with the Earth. They develop skills for critical inquiry and analysis. They go beyond the school gate and out into their homes and local community to learn and make a change.		
d) CULTURE: Students become aware of their habits in different contexts (at home, at school and in their local community). Students take part in a virtual exchange to learn about other experiences. They show respect for diversity.		

3. SEQUENCE OF STEPS

STEP 1: WARM-UP (+/- 30 minutes) week 1	
Description	Introductory and brainstorming activity to set up the scene for the project.
Procedure	<p>The teacher establishes the driving questions for this lesson plan:</p> <p><i>Do you want to be a superhero for the Earth?</i></p> <p><i>Would you like to make a cleaner planet?</i></p> <p>T can use these extra questions as a lead in:</p> <p><i>How do you come to school? Walking, by bus, by car...? Do you usually have a shower or a bath? Do you grow plants? Do you love animals? Do you recycle at home? And at school? What do you recycle? Paper, carton box, plastic bottles, cans, organic waste? When you go to a supermarket with your family, do you take your own canvas bags? Do you enjoy using carton boxes, plastic bottles...to create something new to play?</i></p> <p><i>Do you know that we use energy in practically everything we do?</i></p> <p><i>Did you know that there are both clean and dirty energies? How can you help the Earth?</i></p> <p>Students speak about what they know and feel. They share their personal experiences with the whole group.</p> <p><u>Task 1 - Song</u></p> <p>T: <i>Look! We are going to listen to a wonderful song now. It's called "Save the Planet for Kids" (https://www.youtube.com/watch?v=IJToF8D9bdU). Let's dance! We listen to the song and dance together.</i></p> <p><u>Task 2 - Video</u></p> <p>T: <i>Now kids, do you want to watch a video? I have brought a very nice video to learn about energy and how to help our planet. Let's watch it! We will watch the video "Clean and Dirty Energies. How can we help the planet." (https://youtu.be/psoxx38rhL8)</i></p> <p><u>Task 3: Create a poster</u></p> <p>After watching the video together the teacher uses some images or flashcards to make either a poster or a display on the board about clean and dirty energies (renewable and non-renewable). T can use the images or make the different drawings on the board. T asks students for some help.</p> <p>T: <i>Did you like it?</i></p>

	<p>T: <i>Ok! Do you want to help me? Yes? Great! Well, I will show you some pictures and you have to say either “clean/renewable”, with your thumbs up or “dirty/non-renewable”, with your thumbs down, ok?</i></p> <p>T can use this video as a model/resource to create the poster or display: “How to draw renewable energy and non-renewable energy” https://www.youtube.com/watch?v=yZSvHcOPx3w</p> <p><u>Task 4: Project for an activity for the weekend:</u></p> <p>Explain the project to do at home with parents</p> <p style="padding-left: 40px;">T: <i>We’re going to DETECTIVES at home this week. Let's investigate at home what “dirty energies” and “clean energies” are. Explore when and where we use them (e.g.: using gasoline/petrol for our car is an example of dirty energy).Then think about things we can do to save energy (e.g.: Turning off the light or having a shower instead of a bath).</i></p> <p>Now two different options:</p> <ul style="list-style-type: none"> ● <i>Bring pictures, photos or drawings, 3 for dirty energies and 3 for clean ones. Write their names. (Ages 5-6)</i> ● <i>Write 3 things on a piece of paper and say why clean energies are better than dirty energies. (Ages 7-8)</i> <p><i>Ask your parents to help you. Take this letter home and show it to your parents.</i></p> <p>See letter for families to be sent / given to students to take home.(Appendix 2)</p>
Resources and materials	<p>Reusable sticky tack, cardboard for the poster, felt pens, colouring pencils, internet connection</p> <p>Flashcards of renewable energies and non-renewable energies: Appendix 1</p> <p>Handout - Letter for families explaining what parents need to do: Appendix 2.</p>
STEP 2: STORY TIME (+/- 20 minutes) week 2	
Description	<p>The aim is to present and discuss their work as “little detectives” at home and to listen to a story about how we can save the Earth.</p>
Procedure	<p>Warm up-Discussion:</p> <p>Two different options depending on the age of the group.</p> <ul style="list-style-type: none"> ● Students present their photos/drawings and describe them to the whole group. (Ages 5-6). ● Students read the 3 things they have written at home explaining the reasons why clean energies are better than dirty energies. (Ages 7-8).

Students discuss the topic, finding differences and similarities among their pictures or writings. Afterwards students discuss things we can do to save energy.

Task 1: Listen to a story

T reads the story "I can save the Earth" by Alison Inches and Viviana Garofoli. T can also use the video in which the story is read aloud by a kid:

<https://www.youtube.com/watch?v=2Mkwhe6LOBo>

T: Look! Today I've brought a lovely story about a monster. His name is Max, Max the monster. He is a different monster, a really special one. Do you want to know Max? Yes? Ok, I'll tell you the story, but you have to listen to it carefully...

After listening to the story, we ask the students if they liked it.

T: Did you enjoy the story? Do you like Max the monster? What does he do to save the Earth?

Task 2: Project for an activity for the weekend:

Explain to the children "I'M A SUPERHERO" project.

Children will learn how to make changes to their lifestyle.

T: Ok kids! Do you want to be a SUPERHERO? I'm sure you want to. Then, this week we will check how green we are. But do you know what it is to be green? If you care about the Earth and do good things for the environment, you are green.

T gives them an activity sheet to investigate at home. Students will tick on the things they do. They colour the pictures.

T: I give you this activity sheet to investigate at home. Colour and tick the things you do. You will see how green you are.

T tells them to make a short video/audio (1 minute) saying and/or showing what actions they are going to take to be green and send it to the teacher to upload it to a site to share with their classmates.

T: I want you to make a short video/audio to share with your classmates. You have to say and/or show 3 actions you are going to do to be green.

Students watch the videos or listen to their classmates' audios at home. They choose the one they like the most.

T: Ask parents to help you.

See Letter for families with instructions on what to do at home (Appendix 4)

Resources and materials	Internet connection, Handout "I'm a Superhero": Appendix 3 Letter for families Appendix 4 .
STEP 3: HOW GREEN I AM (+/- 10 minutes) week 3	
Description	<p>The next step consists of a "small competition". (It's important that they understand that all of them are great.) We have a whole class discussion, share opinions and vote. We watch the top three videos together.</p> <p>We have a whole class discussion to decide whether our school is green and sustainable or not.</p>
Procedure	<p><u>Warm up</u></p> <p>Discussion to vote for the video/audios they like the most. Students share their opinions and vote for one. We watch/listen to the three top videos/audios together.</p> <p><i>T: Did you watch the videos? Did you like them? Which one did you like the most?...Ok kids, I think all of them are lovely. Let's watch together 3 of them!</i></p> <p>Then, the teacher will ask them to think about their school and how green they think it is. T can write the question and three possible answers on the board and use colours to exemplify the different answers.</p> <p><i>T: Would you say that your SCHOOL is...?/ Do you think our school is...</i></p> <ul style="list-style-type: none"> ➤ <i>A little green.</i> ➤ <i>Green.</i> ➤ <i>Not green at all.</i> <p>We listen to the different answers.</p> <p><u>Task 2: Project for an activity for the weekend: "BE GREEN".</u></p> <p><u>Explain the home activity</u></p> <p>T hands out a sign to each student. They get different shorts statements with drawings to cut out, colour and decorate as they want to make big signs for their school. The aim is to make all the students more conscious and create a more sustainable school.</p> <p><i>T: Now, I'm going to give you these big signs. We're going to decorate our school with them to make together a better school. You can colour them as you want, using colouring pencils, crayons and felt pens. You can decorate them with little stickers, drawings...Be creative! Then, cut them out and bring them to school, OK?</i></p>

	Children are given the Letter for Families Appendix 6
Resources and materials	Internet connection, Handouts with the big signs: Appendix 5 Letter for families: Appendix 6.
STEP 4: SCHOOL CAMPAIGN - BE GREEN! (+/- 10 minutes) week 4	
Description	The aim of this step is to make something visible for the whole school. Besides, the teacher will encourage pupils to participate in a virtual event: The Toy Competition. This will be a collaborative international work.
Procedure	Students will decorate the school with all the signs they have brought. The teacher helps them. <i>T: Let's see the different signs! They are very cool!! Our school is going to look great now! And all the students will care about the Earth! Thank you for your fantastic work!! You're all incredible artists!!</i> T tells the students that they're going to plan an international event: "THE TOY COMPETITION". T explains the students that they will define the rules for the competition, deadlines and criteria together with another class. Teacher collects ideas from students: rules, materials that can be used and a deadline. Partner teachers share criteria by email.
Resources and materials	Scissors and adhesive tape or reusable sticky tack, and internet connection.
STEP 5: EXPERIMENT TIME! (+/- 25 minutes) week 5	
Description	The aim of this step is to carry out a science experiment with our pupils as a learning experience to explore nature with them. They will develop different skills. T will encourage students to hypothesize results and discoveries, discuss (talking about what they see, think, need...), observe, predict, ask questions to develop curiosity, follow steps and solve problems among others. We want to develop scientific minds from an early age. Besides, the aim of this step is also to show them what we can do with recycled materials. The class reads the criteria for the toy competition shared by their partner school and accepts them.
Procedure	Warm up Teacher tells the students that they are going to undertake an experiment. T tells them that they are going to see/prove how clean energy (wind) is so strong that it can make things move (the windmill).

T: *Well kids! Would you like to be a famous scientist? Yes? Great! Let's make an experiment today! We are going to make a beautiful windmill together.*

Task 1- Making a windmill

T: *Ok, let's start! Do you know what clean energy we are going to use? / What energy will move our windmill? Is it clean or dirty energy? / What will happen to our windmill when the wind blows?*

Students discuss their different hypotheses.

T shows them the different materials he/she has brought. Recycled materials will be used. T will ask them if they know the name of some of the objects.

T: *Well, let's see what materials we are going to use! They're all recycled materials. Do you know the names?*

(Students can say "We need a plastic bottle, scissors, a stick...").

T provides them with the language. T says and writes on the board:

"We need...".

Once the windmill is done, the teacher can take the students outside, to the schoolyard and see how the windmill moves when the wind blows.

T: *What's happening to our windmill? Look at how it spins! Do you know what makes our windmill spin?*

Students will see the results and arise to a conclusion: the windmill moves because of the wind.

T: *Did you like the experiment? Did you enjoy it? Science is amazing!! Now you're cool little scientists!!*

Task 2: Project for an activity for the weekend: "CREATE A TOY/GAME

T explain the home activity .

T tells the students that this week they will create their own toy or game at home using recycled materials. T tells them the toys or games will be brought to school for a big display and shared with their peers at school and with their international peers during virtual exchanges.

T: *You know now that recycling is very important to help our Planet and very easy to do. But it can also be really cool! Like we have done for our experiment today. Do you know that many artists also use recycled materials?*

T: *So, now you're little artists. This week at home you will make a toy or game using only recycling materials. Be creative!! Then, bring it to school and we will*

	<p><i>make a big display to share all the toys with other students at school and in other countries.</i></p> <p><i>See Letter for families Appendix 7</i></p>
Resources and materials	<p>A plastic bottle, 3 plastic caps, 1 stick (it can be a steel/wood stick skewer or a steel knitting needle), some paintings, internet connection Letter for the families: Appendix 7. Link for the teacher to follow the steps for the experiment: https://youtu.be/FPgXmmMa8kc. Steps to create a windmill.Appendix 8</p>
STEP 6: FRIENDS AROUND THE WORLD! (+/- 25 minutes) week 6	
Description	<p>Classrooms from different schools get together and have a virtual meeting to share their big displays. They can use photos or a short video with a virtual tour to show the toys and games they have made with recycled materials. They share their opinions with the help of the teacher.</p> <p>TOY COMPETITION: Toys are also shared on Padlet. Each class chooses one toy from the other class.</p> <p>Then, as a final step the teacher will give the students a green badge as a little award for their work.</p>
Procedure	<p>Warm up</p> <p>T provides students with the language before the virtual meetings. T writes different expressions on the board and practice them orally:</p> <p>Greeting expressions: Hello! Good morning! Good afternoon! How are you? Nice to meet you.</p> <p>Likes: I like.../ I love.../ It's great. / The (robot) is great! / The (doll) is very nice.../ My favourite toy/game is the...</p> <p>Farewells: Good bye! / See you soon!</p> <p>Classrooms from different schools get together and have a virtual meeting to share their big displays.</p> <p>Once the virtual meetings have finished the teacher students will choose one toy from the other class.</p> <p>Finally, T congratulates students for their work.</p> <p><i>T: Now, with your help, THE EARTH FEELS HAPPIER AND CLEANER.</i></p>

	<p>T gives the students a little award: A GREEN BADGE.</p> <p><i>Explain</i></p> <p><i>We are going to organize an award ceremony and your families/ parents are invited Please give them this letter of invitation. We want your parents to know that you are real superheroes of Sustainability</i></p> <p>Appendix 11.</p>
<p>Resources and materials</p>	<p>Internet connection.</p> <p>International forum (e.g.: Trello: https://trello.com/es).</p> <p>Padlet: https://es.padlet.com/</p> <p>Template with awards: green badges : Appendix 9</p> <p>Letter of invitation for parents Appendix 11.</p>

Some suggestions for:

-Fast finishers: Quiz “How green I am” :**Appendix 10.**

-Remedial students: Make a collaborative poster for the school with the top 10 tips to save energy. Each student makes a drawing and sticks it on the poster. Teacher takes a photo of the poster and shares it on the school website.

4. ASSESSMENT

Different assessment tools:

- A rubric for the teacher (Appendix 12).
- Can-do statement rubric for students (for self-assessment and peer-assessment) (Appendix 13).

Appendix 2: Assessment rubrics filled in by the teacher trainees.

Lesson Plan 10 - Green Sources

ASSESSMENT

Assessment tool: rubric for the teacher.

María Inmaculada Salesian semiprivate school

	0	5	10
STEP 1: WARM-UP	No participation or interest in the topic of green sources of energy.	Little participation in the discussion.	Active participation in the discussion, showing interest in the topics of energy, recycling and climate changes.
STEP 2: STORY TIME	Does not bring any photos to the class. Little participation when sharing ideas about saving the world as a superhero.	Brings photos to the class. Participates in the discussion of how to save the Earth, climate pollution, clean or dirty energies using the mother tongue.	Brings photos about himself/herself trying to save energy. Active participation when discussing how to become a superhero that saves the planet and the energy.
STEP 3: HOW GREEN I AM	No participation in the project "Green School".	Participates using only his/her mother tongue in the project.	Involvement and active participation using accurate language for the project.
STEP 4: "BE GREEN"-SCHOOL CAMPAIGN	Did not make the video at home. Does not participate in decorating the school with Green campaign signs.	Made a video recording at home. Participates in the decorating campaign, Tries to use English as much as possible even if	Made 3 or more video recordings at home Participate actively in the decorating campaign Tries to use English at all times and is fairly accurate

	Makes no effort to use English or vote	pronunciation and structure is not always accurate.	language for the signs.
STEP 5: EXPERIMENT TIME	No participation or interest in making a windmill.	Little participation in the experiment.	Active participation in the experiment, showing interest in making a windmill from a plastic bottle.
STEP 6: FRIENDS AROUND THE WORLD!	No participation or interest in the virtual exchange.	Little participation in the virtual exchange.	Active participation in the virtual exchange, showing interest in getting to know other cultures.

Lesson Plan 10 - Green Sources

ASSESSMENT:

Assessment tool: rubric for the teacher.

Las Vaguadas state school

	0	5	10
STEP 1: WARM-UP	No participation or interest in the topic of green sources of energy.	Little participation in the discussion.	Active participation in the discussion, showing interest in the topics of energy, recycling and climate changes.
STEP 2: STORY TIME	Does not bring any photos to the class. Little participation when sharing ideas about saving the	Brings photos to the class. Participates in the discussion of how to save the Earth, climate pollution, clean or	Brings photos about himself/herself trying to save energy. Active participation when discussing how to

	world as a superhero.	dirty energies using the mother tongue.	become a superhero that saves the planet and the energy.
STEP 3: HOW GREEN I AM	No participation in the project “Green School”.	Participates using only his/her mother tongue in the project.	Involvement and active participation using accurate language for the project.
STEP 4: "BE GREEN"-SCHOOL CAMPAIGN	<p>Did not make the video at home.</p> <p>Does not participate in decorating the school with Green campaign signs.</p> <p>Makes no effort to use English or vote</p>	<p>Made a video recording at home.</p> <p>Participates in the decorating campaign,</p> <p>Tries to use English as much as possible even if pronunciation and structure is not always accurate.</p>	<p>Made 3 or more video recordings at home</p> <p>Participate actively in the decorating campaign</p> <p>Tries to use English at all times and is fairly accurate language for the signs.</p>
STEP 5: EXPERIMENT TIME	No participation or interest in making a windmill.	Little participation in the experiment.	Active participation in the experiment, showing interest in making a windmill from a plastic bottle.
STEP 6: FRIENDS AROUND THE WORLD!	No participation or interest in the virtual exchange.	Little participation in the virtual exchange.	Active participation in the virtual exchange, showing interest in getting to know other cultures.

Appendix 3: Piloting report of the virtual exchange.



PILOTING REPORT

Lesson 10: Green Energy

Country: Spain

Piloting period: 14/04/2021 – 14/05/2021

Schools: *Las Vaguadas* state school

Class Profile: Students have a high level of English, they are willing to participate and there are a few students who find the L2 difficult.

- **number of students:** 25
 - **school year:** 2nd grade of Primary Education
 - **type of English class (CLIL, immersion, Foreign Language, Bilingual, etc.):**
Bilingual school, CLIL
-

Country: Spain

Piloting period: 04/05/2021 - 14/05/2021

School: *María Inmaculada Salesian* semiprivate School

Class Profile:

- **number of students:** 14
- **school year:** 2nd grade of Primary Education
- **type of English class (CLIL, immersion, Foreign Language, Bilingual, etc.):** CLIL, Bilingual Section and English class

If you piloted in several classes, please fill in one piloting report for each class

Statement	Agree	Disagree	How? /Why?
My piloting followed a CLIL approach.	X		<p>-The CLIL approach is used because of the integration between the language, the content and the learning skills.</p> <p>-It is also followed in English lessons.</p> <p>-The emphasis was placed on the process itself using scaffolding, collaborative work and feedback.</p> <p>-Students created and represented their own learning in a meaningful manner because they became engaged in the designing of recycled toys and adopted responsible measures in their daily life.</p>
My piloting followed the lesson's Project-based learning (PBL) approach	X		<p>-Project-based learning approach was implemented and sequenced from driving questions that illustrate the outcome.</p> <p>-The VE was developed in the last phase of the PBL to show the final artifact.</p> <p>-Students learnt by doing and were motivated since PBL gave them opportunities to create their own learning environment.</p> <p>-Students became aware of clean energies through the creation of a windmill and recycled toys.</p>
I could finish the whole lesson plan during my piloting.	X		<p>-It fulfilled the time periods in both classrooms.</p> <p>-The lesson plan is carefully planned and designed.</p> <p>-It has to be developed more intensively than usually because of the period of placement of the teacher trainees that participate in the piloting.</p> <p>-However, we would prefer to develop this piloting session according to the established timing in order to</p>

			<p>promote stakeholders' participation and sequence learning more effectively.</p> <p>-We found difficulties to finish in the reduced time, taking into account that the duration established for the lesson plan is not sufficient, more time is needed for each activity. It was the first virtual exchange implemented in both schools.</p>
<p>I was able to involve families and other stakeholders during my piloting.</p>	X		<p>-The important role of the stakeholders is recognised by both schools.</p> <p>-The CLIL teacher from <i>Las Vaguadas</i> state school: I have been in contact with them through different letters. We have also involved other members of our school by making a big display with all the games and toys and inviting them to visit our big exhibition.</p> <p>-<i>María Inmaculada Salesian</i> semiprivate school:</p> <p>-CLIL teacher: we expected our students to finish all possible tasks at school in order to help their parents.</p> <p>- Teacher trainee: families collaborate in the piloting; however, I consider that their involvement was not sufficient. Some of the activities have to be developed in the school, and thus, even though it has been an intensive implementation of the project, extra time was needed to complete some homework activities at school.</p>
<p>I worked together with families and other stakeholders, engaging their help.</p>	X		<p>-In <i>Las Vaguadas</i> school: families collaborated in the piloting by helping their kids with the different project activities for home, including talking about energies at home.</p> <p>-In the <i>María Inmaculada Salesian</i> school: all parents were engaged to create the toys and some families have actively participated, by taking photos and videos.</p>

I completed the Virtual Exchange in my lesson plan (if included)	X		-We completed the virtual exchange as an essential phase of the project that fostered students' motivation and active participation.
I used OERs during my piloting.	X		
In my opinion, the initial (driving) questions met students' interests	X		-The driving question clearly orientated project development and it is successfully adapted to students' needs and interests. -The role of superheroes for students was motivating for them. Learners were encouraged to do a lot of green actions in their daily life to save the world.
In my opinion, the final product gave answer to the driving question.	X		-The final products are the recycled toys that were shown during the VE, and they clearly answered the driving question. Each toy was a source of joy and creativity for all children that helped them to become aware of all the possibilities they have and how important is their contribution to save the planet.
My students did not have any trouble to complete the project.	x	x (teacher trainee from <i>María Inmaculada Salesian</i> school).	-Teacher trainee from <i>Las Vaguadas</i> school: Students participated actively and did most of the task with the teacher's support. -Teacher trainee from <i>María Inmaculada Salesian</i> school: Students found some difficulties in terms of the language and I had to scaffold it by repeating, using synonyms, visual support and gestures and movements. Code-switching was also used when it was needed (e.g., to clarify meaning).

			Furthermore, Covid19 restrictions make the piloting project's implementation was more difficult regarding cooperative work. For example, groups were not changed as much it was preferred.
I was able to stimulate student participation and active learning in English to the language level of students.	X		<p>-Teacher trainee from <i>Las Vaguadas</i> school: Students were supported in different ways in order to use de L2 such as providing them with different sentences adapted to their level.</p> <p>-<i>María Inmaculada Salesian</i> semiprivate school:</p> <p>-CLIL teacher: Using English, they communicated and met other students from <i>Las Vaguadas</i> state school.</p> <p>-Teacher trainee: Students used the English language more times than they usually had done. Students also responded with their thumbs up when they refer to clean energies and down to dirty energies.</p>
I was able to adapt lesson plan activities and tasks to diverse learning styles of students	X		<p>-The students had in advance the language needed.</p> <p>-<i>María Inmaculada Salesian</i> semiprivate school:</p> <p>-CLIL teacher: The lesson plan is adapted to students' needs and interests.</p> <p>-Teacher trainee: This piloting project was easily adapted to different learning styles. I had followed the recommendations for remedial students and fast-finishers. Support from other teachers and peers' help was given to facilitate its development.</p>
I was able to assess my students' performance.	X		<p>-I assessed them by daily observation and tasks' development, effort or attitude.</p> <p>Furthermore, I employed other tools that promote formative assessment on the part of the learners as self-peer-assessment worksheet, and the teachers that considered the role of the resources, ICT or the</p>

			difficulties during the implementation which led to the improvement of the lesson plan.
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<p>Please add any suggestion that you may have to improve this lesson plan...</p>	<p>STEP 1: WARM UP</p> <p><i>Las Vaguadas</i> state school:</p> <ul style="list-style-type: none"> • I made little cards with the driving questions. • I used a different set of FLASHCARDS to create the POSTER of dirty and clean energies. I tried to use pictures I considered more attractive and suitable for their age (7-8 years). • We didn't watch the video "How to draw renewable energy and non-renewable energy"https://www.youtube.com/watch?v=yZSvHc0Px3w <p>I thought it would be more suitable for older students.</p> <ul style="list-style-type: none"> • Project activity for the weekend: "DETECTIVES". I asked them to bring pictures, photos or drawings, 2/3 for dirty energies and 2/3 for clean ones and just write their names. I considered that the other option would be too hard for this age (Write 3 things on a piece of paper and say why clean energies are better than dirty energies.) <p><i>María Inmaculada</i> semiprivate school:</p> <ul style="list-style-type: none"> • Some driving questions are asked in Spanish since they belong to a Bilingual Section, they received less exposure to the English language, so I consider it as a starting point to be familiarised with the topic. Then, students understood that we would use English to learn and communicate. • Concerning the song, pupils love it and we decided to include it in the virtual exchange. • We saw the video in task two and we used the thumbs to distinguish between clean and dirty energies.
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- We made a poster using students' drawings in groups. They had to draw the different symbols to illustrate different sources of energy and present them in a personalized way.
- In task 4, students made drawings during the lesson at school instead of doing the task at home.

STEP 2/ STORY TIME:

Las Vaguadas state school:

- Listen to the story "I CAN SAVE THE EARTH". I added an extra activity after watching the video: colour the monster and complete the information. I considered it was a good way to recap the main ideas of the story and learners loved colouring Max, the little monster.

STEP 3: HOW GREEN I AM

- "I'M A SUPERHERO" I considered that it was better not to do it as a competition. The most important thing was to have them all involved in the activity and I thought that the message should be that all of them were great. All their videos are watched in the classroom since it is integrated into their morning routines.

María Inmaculada Salesian school:

- We took some photos and videos of pupils doing responsible actions at school. Then, the whole class saw the videos of the students who took them at home and those that have been taken at school. Thus, we discussed not only the photos and videos but also the drawings they made in the previous session.

STEP 5: EXPERIMENT TIME

- We made an easier windmill:
<https://www.youtube.com/watch?v=sUVZekaLATY>

It was a more appropriate option because we followed this video and students were able to do it on their own using a milk carton and wooden sticks. In the end, I decided to use plasticine (because we did not have an elastic rubber band) and the windmill worked.

Las Vaguadas school:

- Project for an activity for the weekend: “CREATE A TOY/GAME”. When we explained the activity to our pupils, we could also show them the works of different artists made with recycled materials.

STEP 6/ FRIENDS AROUND THE WORLD!

(Students voted previously because we considered that we did not have enough time for all students to present his/her toy during the 30 minutes we established for the virtual exchange. Therefore, each teacher showed the photos of the toys of the other students and asked her class to vote for the toys they liked most. We decided to present 4 toys in detail, naming the materials and explaining the procedure (for the 4 toys selected by the partnered classroom).

It was one of the most enriching activities because students kept in touch with other students that had already done the same project and shared their toys. First of all, students talked about their schools and classes. Then, all the students show their recycled toys to the partnered class. We believed that all students needed to show their toy, so each learner presented him/herself and then, he/she showed it. An important point of the exchange was to recognize that all toys are great. At the end, the two classes together sang and danced.

However, we could not see the other classmates while the screen was shared to present the PowerPoint and reproduce the song. Therefore, other resources such as Zoom or BigBlueButton should be used to allow students to see each other during the whole virtual exchange.

Additional items

Main Outcomes of piloting:

- Intercultural competence is developed.
- PBL was adapted to the CLIL approach.
- The use of the English language is fostered, mainly oral production, and it has also raised awareness in the students about environmental issues, promoting personal responsibility.
- Motivation and collaboration on the part of the families are promoted.
- Parents' involvement has to be further encouraged because teachers in the *María Inmaculada* school prefer to devote time during other school sessions instead of engaging parents in students' homework. Some photos and videos are taken in the school.
- Communication with the partnered teacher was essential. For instance, the difficulty to create the windmills has been solved by using an adapted version to their age (provided by the teacher). Moreover, linguistic features have been rehearsed to promote interaction and to give feedback during the toy exhibition such as 'It's amazing!' 'Gob job!' 'It's great!' 'What is it?' 'Did you colour it?' or 'What materials did you use?'
- Common outcomes are shared with the learners.
- Positive feedback and different types of assessment are used to enrich the teaching and learning process.
- Implementation of the VE with the partnered classroom.
- Development of skills as group work and cooperation, and the project was adapted to students' different learning styles and interests.

Key Questions

Were the lessons integrated into the curriculum or were they used in extra-curricular activities?

The lessons were integrated into the curriculum:

- Social Science (and Natural Science in *Las Vaguadas* school): warm-up and make the experiment, learning about green energies, the 3 R's ...
- Arts and Crafts: taking photos and videos, drawings and creating the windmill.
- English: monster's story and students' discussion.
- Other activities were added (Official language, Social science "save water", Arts and Crafts "recycled flowers" (dishes), Natural Science in Spanish "plant our seeds and the parts of the plants").
- The development of digital skills.
- The extra-curricular topics are environmental education, citizenship education and personal development.

Did the children in the class demonstrate higher/ lower engagement than usually?

They demonstrated higher engagement than usually because they have to experiment and create by themselves. Students felt motivated because they have to take action in their daily life.

The quality of the multimodal resources and the adaptations for fast-finishers and remedial resources need to be positively valued because it allows the participation and engagement of the whole class, including those students with special necessities. This project catered to students' different learning styles due to the variety of tasks and materials.

Do you have feedback from students?

I received feedback from every activity because students not only were able to develop them but also had to respond to the teacher's questions, assess other classmates, give their opinions and interact with the partnered classroom. It has been made through direct observation and the assessment rubrics.

The top activities have been: the Song, Story Time, Experiment Time, Create a Toy/Game and Friends around the World.