

Master's Dissertation/
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**THE IMPACT OF MULTIPLE
INTELLIGENCES AND
PROBLEM BASED LEARNING
ON BILINGUAL EDUCATION**

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ABSTRACT: the following didactic proposal is based on the impact of Multiple Intelligences and Problem Based Learning on bilingual education with the implementation of the CLIL method (Content and Language Integrated Learning that involves teaching of contents by means of a second language). It has been mainly created for students from the sixth stage of Primary Education, particularly in the area of Social Sciences. The topic of the teaching unit will be active population in Spain. The main aim is to enhance the learning of contents in a second language by dint of implementing new methodological perspectives, which favour both the development of all learners' intelligences and their motivation towards the teaching-learning process. The main beneficiaries of this design are pupils and teachers from non-language areas. A huge diversity of resources will be applied, underlining the usage of Information and Communication Technologies (ICT) and the promotion of cooperative work among students. Finally, different kinds of grouping and assessment will be adopted to provide a meaningful and motivational environment.

Keywords: CLIL, contents, language, bilingual, intelligences, skills, resources.

RESUMEN: la siguiente propuesta didáctica está basada en el impacto de las Inteligencias Múltiples y Aprendizaje Basado en Problemas en la educación bilingüe, con la implementación de la metodología AICLE (Aprendizaje Integrado de Contenido y Lenguas Extranjeras). Principalmente, ha sido creada para los estudiantes de 6º de Educación Primaria, particularmente en el área de Ciencias Sociales. El tema de la unidad didáctica será la población activa en España. El principal objetivo es mejorar el aprendizaje de contenidos en una segunda lengua, a través de la puesta en marcha de nuevos enfoques metodológicos que favorezcan el desarrollo de todas las inteligencias múltiples de los alumnos y su motivación hacia el aprendizaje. Los principales beneficiarios de este proyecto son alumnos y profesores de áreas no lingüísticas. Una gran diversidad de recursos será aplicada, en la que destaca el uso de las Tecnologías de la Información y Comunicación (TIC) y la promoción del trabajo cooperativo entre los estudiantes. Finalmente, varios tipos de agrupamientos y evaluaciones se adoptarán, para proporcionar un ambiente significativo y motivador.

Palabras clave: AICLE, contenidos, lengua, bilingüe, inteligencias, destrezas, recursos.

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1. INTRODUCTION

CLIL (Content and Language Integrated Learning) is “a dual- focused approach in which an additional language is used for the learning and teaching of both content and language” (Coyle, Hood & Marsh 2010, p. 1). Consequently, the principal aim of CLIL is the teaching and learning of non-language subjects by means of language. This educational methodology follows “the foundations of constructivism and second language acquisition” (Frigols, 2013, p. 2).

The teaching unit that spins off the rationale of this dissertation is based on the CLIL approach and it is designed for the area of Social Sciences and is directed to pupils from the sixth stage of Primary Education with the main purpose of improving students’ learning of contents through a second language. Indeed, it favours the development of all learners’ intelligences and motivates them towards the teaching-learning process. These contents have been arranged throughout a month in such a way that during three weekly sessions teachers from non-language subjects will be able to carry out them. Regarding the main beneficiaries of this project, this teaching unit is addressed to teachers and students.

Throughout this teaching unit, on the one side, students are going to learn about economy and active population, through the studying of the concepts of primary, secondary and tertiary sector in Spain. On the other side, pupils will ameliorate their language skills of listening, speaking, reading and writing English. All of them will be learned through innovative techniques based on the Multiple Intelligences theory and the Problem-based learning approach.

A rich diversity of engaging activities has been elaborated, such as exhibitions, theatres, handicrafts, designing of graphics and maps, games, diaries, and so on; with multiple resources like presentations, ICT (Information and Communication Technology), as well as a variety of groupings organisations among the learners (small-groups, whole class, in pairs), just to promote the growth of the teaching-learning process.

One of the fundamental characteristics of these activities relies on the evaluation of both content and language not only by the teacher, but learners will also participate in their own evaluation by means of several types of assessment such as rubrics, tests, group assessment, individual assessment, pair assessment, etc.

2. THEORETICAL FRAMEWORK

2.1 CLIL

2.1.1 Legal Framework

In accordance with the law of June 28th 2011 by which the bilingual teaching is regulated in the educational institutions of the Autonomous Community of Andalusia, it is compulsory for Primary Education pupils to acquire the skill to communicate in several languages. As a result, *The Multilingualism Promotion Plan* was created with the aim of promoting bilingual educational programmes by the construction of bilingual centres (*Boletín Oficial de la Junta de Andalucía*, no. 135, 11th July 2011).

In addition, the Royal Decree 1594/2011 of November 4th [...] establishes that educational administrations will regulate the training requirements for civil servants of teachers specialized in Childhood and Primary Education, respectively, to teach in a foreign language the subjects of each stage (a subject distinct from second language in the case of Primary Education), in schools whose education projects entail a regime of multilingual education. (*Boletín Oficial del Estado*, no 270, 9th November 2011).

Later, the law of February 18th, 2013, which modifies June 28th and 29th, 2011 law, establishes that it is important for teachers to get a B₂, C₁ or C₂ level in the Common European Framework to teach the various areas in the foreign language of the bilingual education, or in the case of university degrees, those related to graduate in English Philology or Translation and Interpretation as well. Moreover, it provides the scheme to authorize bilingual education in private education schools. (*Boletín Oficial Junta de Andalucía*, no 44, 5th March 2013).

Relating to all of those above mentioned, there would be a variation in the educational curriculum of Primary Education in which some subjects will be implemented both in Spanish

and English. Beyond this, the number of hours for English lessons will be increased, considering it as an instrumental area of learning that acts as a means of communication too.

To end up, the primary goal of the bilingual education in Spain is to open the path to “multilingualism and linguistic diversity, using linguistic immersion methods based on communication, interaction and prioritisation of the oral code”. (Orden 28th June 2011, which rules bilingual education in Andalusian schools (*Boletín Oficial de la Junta de Andalucía*, no. 135, 11th July 2011)).

2.1.2 CLIL origins

CLIL arose in the 1990s when the European Union was widespread and a multiplicity of languages was arisen by the associations between its members. In relation to multilingualism, there was a necessity to set up a general approach to learn languages, as a consequence of an existing gap between how languages had been furnished in the several countries and their findings, in accordance with their use by citizens in real life.

In addition to the European Union surrounding environment, the language awareness movement has had a great impact on the appearance of CLIL since proponents of language awareness tried to look for a common interest between those involved with first and second language teaching, and promote the curricular concept of languages across the curriculum (Barnes, Britton & Rosen, 1969).

2.1.3 CLIL approach

Experts consider CLIL an ecological approach, due to the fact that “it responds to the new, changing and immediate demands of two fundamental ‘environments’; the wider society, and the schools” (Frigols, 2007, p. 33).

Following the guidelines of CLIL, this project of innovation attempts to help both teachers and students to implement theory about languages teaching. For this to take place, it seems relevant to define what are the basic characteristics that define CLIL.

According to (Coyle, Hood & Marsh 2010, p. 41) the main principles of CLIL are the following ones:

- Content matter: student designs its own knowledge, developing and understanding skills.
- Cognition: the content is related to thinking and learning.
- Thinking processes: learners’ linguistic demands need to be analysed so that, teachers adapt to them.

- Language transparency: language needs to be learned, that is to say, language should be accessible for everyone.
- Interaction: it becomes fundamental in the learning context. Teaching is centred on the learner; therefore, teachers must make students interact with them.
- Intercultural awareness: it is the relationship between language and culture. In this way, culture is not understood without language.

In order to reach the principles mentioned before, Coyle establishes the “4 Cs + 3 As”, which means:

- **Language of learning – Content or Topic – Analyse**: analysis of the content to identify the language pupils needs to reach the objective.
- **Language for learning – Communication – Add**: consists of the students’ language experiences to enable them for an autonomous and effective learning. The language they need to communicate.
- **Language through learning – Cognition – Apply**: the language pupils will need for the comprehension of the content.
- **Culture**: “teacher/student cultural backgrounds and first languages; diverse ways of thinking which arise from age, lifestyle preferences, gender; subject-specific cultural ways of thinking and learning” (Frigols, 2007, p. 35).

2.1.4 CLIL functioning: task-based approach

The syllabus for CLIL is focused on students’ solving of several tasks, which help them to focus on meaning, rather than just on vocabulary or grammar. This method is called task-based approach (Ellis, 2002, 2003). In Prabhu’s words (1987 p. 24), a *task* can be defined as “an activity that required learners to arrive at an outcome from given information through a process of thought, and which allowed teachers to control and regulate that process”. Nevertheless, in consonance with academic research, the term task above cited differs in a number of ways, which are described below.

Concerning that definition, tasks can be classified into two groups: *real world tasks* and *pedagogical tasks*. According to the first ones, one of its goals is “to imitate real communication outside the class”, thus, they are open-ended tasks, focused on meaning; whereas in the second ones, the teacher takes the control over the learner, so they are closed tasks centred on form (Roldán Tapia, 2007, p. 125).

Furthermore, Prabhu (1987) confirms that there is a process to carry out tasks, consisting of three stages. First of all, the “*pre-task*” in which the teacher gives a guide of the work to be developed. Then, the “*task*” itself, characterized by learners’ commitment. And last, the “*checking*”, where work will be evaluated by means of content, not language.

It cannot be denied the huge influence of this expert over the Spanish curriculum, particularly during the nineties in the LOGSE law curriculum, in which “tasks were presented as the new paradigm of curriculum design. *Project work*, or so-called *long-term tasks*, became the key stone in terms of classroom methodology.” (Roldán Tapia, 2012, p. 74).

To conclude, English as a Foreign Language (EFL) teachers must be “Scaffolding” teachers. Scaffolding, a concept developed by Wood, Bruner and Ross (1976), refers to the process that enables a child to solve a task or achieve a goal that would be beyond his unassisted efforts. Scaffolding is said to be an effective way to promote learning in a Zone of Proximal Development (ZPD), (Vigostky, 1978). In this way, teachers should offer a comprehensible input; that is to say, making sure that the message is perfectly understood by learners. At top of that, following Bloom’s (1956) Taxonomy, they must ensure that pupils activate both High Order Thinking Skills (HOTS) such as organizing sequences, creating, describing processes, evaluating or solving problems; and Low Order Thinking Skills (LOTS) like defining, classifying, identifying or recognizing and describing elements.

2.1.5 CLIL proposals

2.1.5.1 CLIL implementation in Europe

In reference to the CLIL situation in several European countries, it cannot be avoided that there is a constant necessity for a “foreign language education in the curriculum” (Madrid and Hughes 2011a, 2011b, in Pérez Cañado, 2012, p. 319). Thence, it is compulsory to provide a second language in the curriculum.

In spite of the divergence between the various educational curricula, frequently owing to their linguistic backdrops (Wolff 2002), several features commonly remained in all of them (Fortanet-Gómez & Ruiz-Garrido, 2009). Firstly, more than a half of the models underline the importance of the target language by which some of the areas will be taught for at least four years. The number of subjects to study will be incremented in Primary Education, though it will happen the opposite at higher levels, because of the different ways of evaluation in order to later enter University. Another of the commonest features relies on English, as the principal vehicle of communication among non-native speakers, that is to say, as a “lingua franca”, together with French and German, by joining national languages of each place with foreign

ones. On top of that, according to the admission criteria for CLIL in general education, whereas some countries (such as the Bulgaria or Czech Republic) keep in mind learners' content knowledge and even, the target language level (like France), others have no criteria of admittance (that is the case of Spain).

2.1.5.2 CLIL implementation in Spain

After knowing how the situation of CLIL in Europe is, we cannot forget the Spanish Educative System adoption of this nearly recent research. At first, the teaching of English has been changing considerably over the years, since exclusively three hours per week as a subject to a variety of other ones, which are implemented in both national and foreign languages. Therefore, now there is a balance among the subjects taught in each language, especially in those named as bilingual schools. This fact is due to the diversity of CLIL programs, which have been spread throughout the country, whose primary aim is to offer content knowledge through a second language (Roldán Tapia, 2012, p. 71).

In the meantime, the huge variety of CLIL models mentioned before is founded on a significant number of programs. Among them, I am going to emphasize two: the Canadian Immersion Program and the Bangalore Project. On the one hand, the Canadian Immersion Program arose from a group of English speaking parents from St. Lambert (Montreal), with the purpose of solving the arguments between English and French Canadians. As a result, they created an immersion program in kindergarten, where “children were expected to become competent in speaking, reading and writing French; reach normal achievement levels throughout the curriculum, including the English language; and appreciate the traditions and culture of both French-speaking and English-speaking Canadians” (Roldán Tapia, 2012, p. 75). In summary, the last goal was “for children to become bilingual and bicultural without loss of academic achievement” (Roldán Tapia, 2012, p. 75).

At last, the terms of BICS (Basic Interpersonal Communication Skills) and CALP (cognitive academic language proficiency) defined by Cummins (2000a), produced the expectation for immigrant children to promote conversational fluency in the L2 in comparison with academic proficiency, which allow them to face his teaching-learning process in the new language.

Whether acquisition of BICS and CALP in an immersion context is compared to the traditional teaching of EFL, it is needed more time to acquire both skills in the second approach, because there are less hours of exposure to the L2. This is the main reason why traditionally EFL students were unable to use the language effectively, as well as the

extensive investigations during Primary and Secondary Education of a unique subject in the school curriculum.

Cummins (2000b) designed the concept of *common underlying proficiency*, where he described how two totally different languages (English and Japanese), might be learnt together, owing to the fact that “all the thinking skills that are activated for the learning of one language are useful for the same process in any other language the learner is trying to acquire” (Roldán Tapia, 2012, p. 76). Thanks to this discovery, the idea of an integrated curriculum emerged, which in turn scaffolds CLIL programs in schools in which the acquisition of non-linguistic contents through a second language, distinct from the L1, prevails. On the other hand, the Bangalore Project that took place in India is based on teaching through communication, being the task the principal element that articulates the syllabus of the project. The core objective of this project is to solve the different tasks proposed, by means of intensified exposure to the second language (Roldán Tapia, 2012).

Nowadays, CLIL approach is spread over the country and experts consider that “the dismal foreign language proficiency usually obtained through its conventional teaching as a school subject has led many primary, secondary and tertiary institutions to put CLIL programs into practice” (Lasagabaster & Ruiz de Zarobe, 2010, p. 290-1). In addition, the lack of successful foreign language experiences greatly influences students’ motivation towards English.

As a consequence, many programs have arisen in order to promote bilingualism and foster innovative education methodologies across the country (Pérez Cañado, 2019, p.7). For instance, *The Spanish Ministry and British Council Project* for pupils from 3 to 16 years old, whose main goal is to promote bilingual and bicultural education. Then, *Programa de Inmersión Lingüística* that presents courses in summer aimed at learners from the third cycle of Primary Education to the first stage of Compulsory Secondary Education. In addition, *European Classrooms* work such as culture and language programs in the UK and France directed towards teachers from Infant, Primary and Secondary Education. Then, language innovation projects called *PILC (Proyectos de Innovación Lingüística en Centros)* where non-university teachers want to put into effect CLIL at school. Finally, *Bilingual Project* takes place in Madrid and *Plan de Fomento del Plurilingüismo* emerged in Andalusia in 2005.

To conclude, besides all the programs mentioned above, it seems very crucial to define teachers’ roles in order to work in a cooperative way within those bilingual programs (Morilla and Pavón, 2018). Thus, we could distinguish between three levels of coordination: mother tongue teachers, content teachers and the language of the CLIL programme. These roles

pursue the aim of facilitating the studying of concepts, giving linguistic support to pupils or strengthening of linguistic structures, among others.

2.1.6 School Curriculum: Functions

In relation with the school curriculum and in order to map out it accurately, it is essential to take into account some functions. Hence, in words of Wolff *et al.* (2011) such functions are the following ones: firstly, curriculum “*defines an educational programme*” (Marsh, 2011, p. 3); in other words, it explains what concepts are necessary for students to learn during a certain timeframe. Secondly, curriculum “*is seen as a source of innovation by education authorities*” (Mehisto, 2011, p. 4). Besides the existing concepts, these can be mixed with new subjects of study, at the same time that they can be enhanced.

On the top of that, curriculum is considered “*a tool for planning and carrying out teaching-learning sequences*” (Frijols, 2011, p. 4); it means that a well-prepared curriculum can be very beneficial for instructors to organise their lessons, choosing the correct activities to reach the objectives, etc.; in other words, it serves as a guide for them.

Additionally, curriculum is used as “*an instrument to evaluate teaching and learning*” (Wolff, 2011, p. 4). That is to say, teachers take references from curricula with the purpose of checking if children have raised the objectives fixed on them. Furthermore, they suppose a way of assessing the development of the teaching-learning process by educational administrations. At last, curriculum provides a “*means for regulating, standardising and comparing teaching and learning at all levels*” (Mehisto, 2011, p. 4). They seem to be crucial for establishing the learning standards throughout the country.

Concluding this section, it would be important to underline that in terms of CLIL curriculum design, probably the harder task for teachers relies on the integration of both content and language inside various subjects that have commonly been taught separately. Finally, teachers must know children’s interests and simplify tasks so they are manageable and motivate children to pursue the instructional goals. At the same time, teachers can provide scaffolding as a help to offer learners the opportunity to learn by themselves. In this way, scaffolds are related to the role of guide and provider of help and resources that the teacher plays in the Communicative Approach.

Once these functions related to school curriculum are described, it becomes necessary to do a deep research on the different methodologies and theories that could be combined with the CLIL approach, in order to provide an innovative successful teaching-learning process. In

particular, this investigation is focused on the Multiple Intelligences Theory and Problem-based learning.

2.2 Multiple Intelligences Theory

One of the elements upon which the 2013 Organic Act on Education Quality Improvement (LOMCE) highlights is treatment of diversity. There is no doubt that the same educational approach employed with a single group of pupils has differing results depending on each learner's previous experience and knowledge, their intellectual capacity and their motivation and preferences regarding teaching.

The interests and needs of the students should drive the creation of any EFL syllabus. By teaching our learners to value their differences, we are developing a truly global classroom. Therefore, attention to diversity should always be taken into account, presenting activities in different ways for each student.

According to Royal Decree 126/2014, which establishes the basic curriculum for Primary Education, we should “provide measures and alternative methodologies in teaching and assessment of foreign languages with students with special needs or learning disabilities, especially those who have difficulties in speaking”.

Additionally, Multiple Intelligences Theory (Gardner, 1983) has been designed to be an exceptional tool to enable EFL teachers to outline appealing ways to provide learners with language learning practice. Second language learning tasks can be carried out around various sorts of intelligences.

In accordance with the Howard Gardner Multiple Intelligences' Theory (1983), there are eight different kinds of intelligences that can be related to several student styles. The eight intelligences are: linguistic, logical/mathematical, visual/spatial, musical, bodily/kinaesthetic, interpersonal, intrapersonal and naturalistic. They are explained below:

- **Linguistic intelligence:** the word player. Learner is good at reading, writing and telling stories.
- **Logical/mathematical intelligence:** the questioner. The student is good at solving puzzles, exploring patterns, reasoning and logic.
- **Visual/spatial intelligence:** the visualiser. Pupil is good at drawing, building, arts & crafts.
- **Musical intelligence:** the music lover. The child is good at singing, listening to music and playing instruments.

- **Bodily/kinaesthetic intelligence:** the mover. Learner is good at moving around, touching things and body language.
- **Interpersonal intelligence:** the socialiser. The student is good at mixing with others, leading groups, understanding of others and mediating.
- **Intrapersonal intelligence:** the loner. Pupil is good at working alone and pursuing own interests.
- **Naturalistic intelligence:** the nature lover. The child is good at nature.

On top of those, a current investigation performed by Karaduman & Cihan (2018) about the effects of Multiple Intelligences on students' academic success in the area of mathematics in Elementary School, reflects how teaching practices founded on the Multiple Intelligence Theory enlarge learners' active participation in the classroom and enrich pupils' fulfilment (Campbell & Campbell, 1999).

Another research carried out by Taspınar & Kaya (2016) highlights the benefits of painting using the Multiple Intelligences Theory (MIT) as a way to ensure students' permanence of knowledge and success in the Arts & Crafts subject. Here, they checked the influence of two different methodologies to teach the concept of "miniature picture"; on the one hand, a control group was taught using a conventional method, and other hand, an experimental group was based on MIT. As a result, pupils from experimental group were more successful in the acquisition of content.

Furthermore, Gündüz & Ünal (2016) study the impact of Multiple Intelligence on the area of linguistics, specifically in the development of the writing skill. In the experiment, learners did some pre-tests and post-tests and it was verified how the use of multiple intelligence activities influence in a positive way students' tests scores, as they had improved more than those pupils taught through a traditional method.

These researches have shown that the difference between learning methodologies based on multiple intelligence theory and traditional teaching methods is relevant and that learning approach founded on multiple intelligence theory has an influence on children's mathematical attitudes, visual skills, writing skills and the development of their different intelligences.

In addition, there is an alternative study that focuses on the improvement of listening skills through Multiple Intelligences, carried out by (Morilla & Pavón, 2018). Here, it is highlight how MI influences positively the comprehension of listening abilities, when teachers try to combine all of them. Indeed, metacognitive strategies like the generation of

ideas, self-monitoring, note-taking, checking, selective attention, evaluating, etc.; are developed through this theory. For example, musical intelligence could help to enhance intonation, stress and tone sensitivity. Moreover, in the different processes of syntactic parsing, sound perception and semantic analysis, linguistic intelligence is necessary. Finally, spatial intelligence might help pupils to transform what they listen into visible images into what is called “inner blackboard”, which seems to be very useful for planning or producing new ideas (Armstrong, 2009, p. 80).

Moreover, Meyer (2010) offers successful strategies for teaching and planning within the CLIL method, stating the following:

Converting information from one mode of representation (a text) into another (map, chart, graph, etc.), and from one mode of representation in L1 into one in L2 fosters both language and content learning and it also takes into account the individual needs of students’ different learning styles and their multiple intelligences. (Meher, 2010: 14)

In addition, he highlights “multi-modal input” (Leisen, 2005) as a core principle to choose the correct materials to pay attention to different learning styles. For instance, visual methods such as mind maps or charts could be helpful for a better understanding of subject content.

To conclude this set of proposals based on the combination of multiple intelligences with CLIL, a research carried out by Korosidou & Griva (2014) underlines the use of games in CLIL lessons, in order to motivate and draw learners’ attention towards learning, activating multiple intelligences and offering opportunities to develop social skills (Orlick, 2006). Activities like presentations, dramatizations or role-plays are examples of how teachers could put into practice a game-based learning.

2.3 Problem-based learning

Problem-based learning (PBL) consists of a form of learning in which students plan, implement and evaluate projects closely related with the real world (Blank, 1997; Dickinson, *et al.*, 1998; Harwell, 1997). It emerges from the idea of promoting an integrative purpose where pupils must resort to different knowledge areas with the main purpose of solving a problem, working since their previous ideas.

In this way, this method has implied a change in the educational system conception over the history, moving from more traditional approaches in which the teacher was simply an instructor of information and the core of the teaching-learning process, towards an open learner-centered methodology that gives importance to the student itself and makes him the real protagonist of the learning and an active participant of its education stage.

Among the several characteristics of the PBL, we could highlight the following ones: First of all, it suggests problems directed to the acquisition of contents and skills during its solving process. Then, it favors active participation of pupils, giving them total prominence. Additionally, this methodology structures the work in small groups in order to promote cooperation among learners.

Furthermore, it departs from students' previous knowledge, fostering the critical thinking towards their own learning environment. In addition, it promotes metacognition, that is to say, the capacity of self regulating the own learning, mapping out strategies, controlling the process, evaluating and acting accordingly.

Then, the steps to follow in the PBL implementation are: 1. Explain what PBL is. 2. Present the problem. 3. Do a brainstorming. 4. Classify previous ideas. 5. Create a list of what I know and what do I need to know. 6. Research information. 7. Put the work in common. 8. Develop the final product. 9. Exhibit the results. 10. Design a reflective diary. (Morales & Landa, 2004, p. 154). Here we are going to describe those steps:

- 1. Explain the PBL:** according to Morales & Landa (2004), it becomes crucial to show in which consists the method to students and detail the several stages of the process. Once they were familiarizing with it, this step could be avoided the next time we work on it.
- 2. Present the problem:** the teacher explains the problem and learners ask doubts about it.
- 3. Do a brainstorming:** some children give ideas to what the topic suggests them and the others write those points on the blackboard to clarify everything.
- 4. Classify previous ideas:** in groups, learners classify all the ideas in several categories.
- 5. Create a list of what I know and what I need to know:** children make a distinction between what they know and what they do not know yet, with the purpose of starting the investigation.
- 6. Research information:** once the learning needs are detected, it is time to organize the work in a way in which all members are in charged of some specific information to look for. Here, the teacher could offer them lots of sources: books, magazines, interviews, Internet, and so on.

7. **Put the work in common:** by the time the data is collected, the role of the learners is to organize, select and interpret it, as well as take decisions about how to solve the initial problem.
8. **Develop the final product:** an strategy should be defined to develop the final product in a creative way, without any set patterns established before by the teacher. Some possible ideas would be: reports, webs, blogs, murals, mock-up, etc.
9. **Exhibit the results:** in this stage, communicative interactions play a crucial role and the active learning where some teach the others too.
10. **Design a reflective diary:** the personal diary offers children the possibility to reflect upon their own learning and express what they understand, identify, experiment, etc. In addition, they might value their goals, strengths, and weaknesses, among other things, which probably would help them to improve themselves every day.

Regarding the benefits of this method, Kim, Belland & Axelrod (2019, p. 1) state that by means of Problem-based learning (PBL) teachers can offer students different challenges, which foster their interest and intrinsic motivation towards learning as well as an improvement in their academic results. These authors suggest scaffolding based on learner-centred approach, as a way to promote pupils' autonomy and competence to solve several problems according to their individual characteristics and needs.

In terms of skills to carry out the before mentioned challenges, students are asked to foster several kinds of skills such as interpersonal skills, flexible knowledge, self-directed learning skills or those for thinking and solving problems effectively (Gallagher, Sher, Stepien, & Workman, 1995).

In addition, the concept of optimal challenge (Soltani, Roslan, Abdullah, & Jan, 2011, p. 2) plays a crucial role in PBL because it seems quite important to adapt the task to the level of the student, in order to maximize learning as much as possible. That is to say, if the level of learners is low teachers cannot require them to carry out a difficult task because they will experience anxiety (Willingham, 2009), or on the contrary, if they are high achieving pupils, the task will not be too easy for them as they might be bored (Rheinberg & Vollmeyer, 2003; Tozman, Magdas, Mac- Dougall, & Vollmeyer, 2015).

Besides this, Self-determination theory explains the effectiveness of optimal challenge in Problem-based learning, "emphasizing the importance of intrinsic motivation on cognitive and social development through active engagement in learning" (Deci & Ryan, 2000, in Kim, Belland & Axelrod, 2019, p. 2). For that to take place, teachers must consider pupils the centre of the teaching-learning process, in other words, being the protagonists of their

learning and give them the chance to work within a context that help them to develop autonomy and competence to solve any kind of problem by themselves. Therefore, education is transformed from a traditional teacher-led instruction to an innovative student-centred teaching.

Another relevant factor in the implementation of PBL is metacognition, which consists of first of all, setting a range of goals; then, selecting strategies to reach them and finally, evaluating the grade of achievement of the different results. Thus, correct solving of tasks does not relies only in learner's previous knowledge but also in the ability to use several problem-solving techniques. (Morales & Landa, 2004, p. 149).

On top of that, Brunning, Schraw, & Ronning (1995) describe some teaching strategies to develop metacognition in class, such as focusing on comprehension rather than learning by heart; promoting the creation of new ideas; motivating students to get involved in the teaching-learning process; and helping them to ask themselves and reflect on what they study.

Moreover, it cannot be avoided the role of social factors as great influencers in pupils' academic performance. Glaser (1991) suggests cooperative work in small groups as an opportunity to share different points of view among learners, together with acquired contents, new ideas and responsibilities for solving problems. In this way, when they are in contact with other classmates, they are stimulated to think about numerous questions and answers for possible solutions.

Last but not least, despite the fact that Problem-based learning is directed to promote group work, the evaluation of the results might be individual, in pairs (peer-assessment), and self-assessment too. In this case, teachers not only take into account the final task but also how students have fostered their social skills in group, their individual contributions and attitude towards learning, among others.

3. TEACHING UNIT

3.1 Justification

The fact of integrating new innovative methodologies inside the complex educational system around us becomes the main reason for the choice of Multiple Intelligences Theory and Problem- based Learning Approach together with the CLIL method, as the best option to foster both content and language in a more attractive way for pupils, offering them the choice of developing all their intelligences and promoting their autonomous learning through solving problems.

Therefore, it provides a unique opportunity to learn about difficult concepts related to the Social Sciences subject and specifically, the active population topic, choosing this subject as the most suitable for promoting social values and facts related to our society and the students' nearest environment.

Ultimately, the age of eleven or twelve has been chosen as the most appropriate period to assimilate both abstract knowledge and linguistic skills into a second language. This happens due to the complexity of the terms used and the higher capacity of learners to understand and relate new information in a foreign language, once they have acquired a minimum of English level in the previous academic years.

3.2 Contextualization

At first, regarding the *socio-cultural environment* that surrounds the school, we would underline two aspects: the location of the school and the socio-economic standard. On the one hand, in reference to the location of the school, the centre is located in a neighborhood in a medium-sized city. Near the school there is a church surrounded by a big square adapted with swings for children to enjoy after school. In addition, the school is medium-sized as well; it has three classrooms in each grade of Primary Education and three in Infants.

On the other hand, by the *socio-economic standard* of the school, generally, the children families' socio-economic level is average-low. Most parents work in the construction and service sectors. Besides this, parents show permanent interest in the teaching-learning process of their children, getting involved in the several activities developed at school throughout the academic year.

Secondly, in terms of *teaching situation*, the grade to be taught is the sixth grade of Primary Education and there will be a total of 25 students in class. Furthermore, the course teaching hours devoted to the teaching unit will be divided into three weekly sessions of 45 minutes for the subject of Social Science during a month, which is a significant factor to be taken into account in the planning of the unit.

Then, bearing in mind the *school's facilities*, besides the classrooms and toilets, the school counts on a library, an audiovisual room and an assembly hall. Likewise, there is a computers classroom where we can work on ICT, two big playgrounds, a canteen, a gym and a multiple-purpose room. Moreover, each room of the school counts with a digital whiteboard to project and use online resources.

To end with the *human resources*, apart from the head teacher and the chief of studies, there are five English specialist teachers; three Physical Education instructors; a pair of

Special Needs teachers; six teachers for the bilingual subjects (Social Science and Natural Science); another two for music and arts & crafts, seven teachers more for mathematics and Spanish and nine tutors. Afterwards, there is a specific personal for other services such as cleaning, administration, canteen, caretaker and secretary. The whole staff works together to meet their students' needs.

3.3 Objectives

3.3.1 Main objective

The purpose of this teaching unit is to improve learners' acquisition of contents through a second language following the CLIL approach, implementing new methodologies within bilingual contexts (English-Spanish in our case), which favour the development of all learners' intelligences and autonomous learning, motivating them towards the teaching-learning process (Lancaster, 2018).

3.3.2 General objectives

The Order of March 17th, 2015 establishes ten general objectives for Primary Education in the area of Social Sciences, from which the teaching unit presented will work on the following ones:

1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life.
2. Initiating the knowledge and implementation of information and communication strategies, fostering processing of information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and texts.
3. Identifying activities related to the different production and economic sectors in Andalusia, Spain and Europe, developing the entrepreneur ability and the study of companies of their environment, adopting a responsible attitude towards consumption, savings, occupational health and road-safety education.

3.4 Competences

Following the guidelines and recommendations of the European Union, the Royal Decree 126/2014 of February 28th develops the concept of Key Competences in the Spanish Curriculum. Indeed, they are presented in the Order of March 17th, 2015, which develops the basic curriculum for Primary Education in Andalusia. This new initiative aims to “permit

students to integrate their learning, relating them to different kinds of contents as well as effectively using them in any situation and context”. Hence, seven Key Competences have been identified:

1. Linguistic Communication Competence: it is the ability to use language as a way of representing, interpreting and understanding reality.

2. Mathematical Competence and Basic Competence in Science and Technology: Mathematical Competence is the capacity to use and relate numbers, operations, symbols and mathematical reasoning. Scientific competence refers to the ability to use the body of knowledge and methodology employed to explain the natural world. Technology competence is seen as the application of that knowledge and methodology.

3. Digital Competence: it is the capacity to search, obtain, process and communicate information, turning it into knowledge.

4. ‘Learning to Learn’ Competence: it aims at lifelong learning and thus education and training need to provide the learning environment for the development of this competence for all citizens.

5. Social and Civic Competence: it is based on the possibility of participate in social, civic and working life.

6. Sense of Initiative and Entrepreneurship: it is the ability to turn ideas into actions, to be creative and innovative, to take risks, to plan and manage projects, to be able to make the most of opportunities for self-development.

7. Cultural Awareness and Expression: it is focused on being appreciative of expression of ideas through music, theatre, literature and other forms of art, as well as being aware of own cultural context and those of others.

3.5 Contents: transversality & interdisciplinarity

Following the Order of March 17th, 2015 which develops the basic curriculum for Primary Education in Andalusia, there are four block of contents in the area of Social Sciences: Block 1. Common contents. Block 2. The world where we live. Block 3. Living in society. Block 4. Time footprints.

In particular, regarding the 3rd course of Primary Education, this teaching unit will work on the following contents:

Block 1. Common contents

1.1. Strategies for developing responsibility, effort and persistence in study.

1.2. Using strategies for enhancing group cohesion and cooperative work.

1.3. Using working materials properly.

1.4. Sensitivity and critical thinking in the analysis and commitment to look for the best alternatives for improving and developing ourselves.

1.5. Using information and communication technologies for researching and selecting information and drawing conclusions.

Block 3. Living in society

3.1. Production sectors: primary, secondary and tertiary. Economic activities and productive sectors in Andalusia, Spain and Europe. Production of goods and services. Consumption and advertising.

Thus, this teaching unit about the active population will be focused on the distinction of the active population sectors: primary, secondary and tertiary sector; the activities related to each sector; how these sectors are distributed in Spain and what are the most relevant in terms of economic prosperity, and finally, the representation of the active population through graphs.

Then, moving towards curriculum integration and the promotion of both transversality and interdisciplinarity, it cannot be avoided that the 2013 Organic Act on Education Quality Improvement (LOMCE) puts special interest on how teaching should play a crucial role in the development of social inclusiveness, providing insights on other disciplines. For this to take place, apart from social sciences, other areas will be implied, such as mathematics for the creation of graphs or arts & crafts, represented in visual projects of the activities related to the Spanish population sectors, among others.

Thus, throughout this unit there will be inter-curricular contents through which students will develop and acquire learning skills, attitudes, values and knowledge that will help them to globalise what they learn and have a global idea of everything. For instance, skills related to personal development; respect for self and others; improvement of coexistence; active and responsible citizenship; and respect and care for the social, cultural and natural environment.

3.6 Methodology

Apart from using the CLIL approach, where the topic of active population will be taught in a second language (English), we will focus our teaching unit on the Multiple Intelligences Theory and the Problem-based Learning, as we have mentioned above. Firstly, regarding the CLIL methodology, there will be pre-tasks, tasks and checking activities. Making reference to pre-tasks, these are initial tasks that will help learners connect previous

knowledge and experience with new content and language. For instance, brainstorming. Then, examples of tasks are presentations, dramatizations and handicrafts. Lastly, checking activities might be portfolios, which foster students' reflection on learning. Besides them, depending of the different activities' goals, these will be experiential activities, readiness activities, development activities, etc. They are explained in a deep way in each session of the task planning.

Then, on the one hand, we will work on each intelligence through multiple activities and on the other hand, we are going to start the unit with a problem that students will have to solve throughout the different exercises proposed, following the nine steps of the PBL explained before.

To begin with, we are going to detail what activities will cover the eight intelligences, which our brain could develop. Firstly, *linguistic intelligence* will be carried out by the students' explanation of an active population sector. Then, *logical/mathematical intelligence* will be developed when pupils design a graphic representing the three sectors of the Spanish active population.

Also, to work the *visual/spatial intelligence*, learners are going to draw a slogan for a publicity company. Furthermore, students will invent a song to advertise a product to implement *musical intelligence*. After that, *interpersonal intelligence* will be worked through cooperative groups where pupils will discover how the Spanish active population is organised by searching for information on the Internet. On top of that, *bodily/kinaesthetic intelligence* will be represented in a theatre in which students are going to announce a product of a specific sector of the active population. Moreover, *intrapersonal intelligence* will be fostered by a students' self-assessment where they are going to evaluate their work and their classmates' roles throughout the cooperative project. To conclude, to promote the *naturalistic intelligence* among learners, they will look for pictures of an active population sector that represents their natal city (Córdoba in our case). Besides all of this, we will combine those activities with the Problem-based learning steps in the different sessions of class explained in the next epigraph.

3.7 Task planning

The present unit for the sixth stage of Primary Education in the area of Social Science will consist of a total of twelve sessions organised in three classes of forty-five minutes per week, arranged during a month. Depending on the type of activity, students' groupings will vary; thus, there will be individual, pair projects, group works and whole-class

sessions. The typology of activities will be varied: pre-tasks, tasks and checking activities, interactive games, communicative activities such as debates, language awareness exercises, etc.

3.7.1 Session 1

The teacher in the first session of class will start the lesson with a readiness activity to get learners' prior ideas about the topic of active population and relate them to their lives. It will consist of a brainstorming (pre-task) with an online resource called *Wordle* (See appendix 1). Here the teacher will take notes about what students already know and what they need to know, to carry out the teaching unit effectively. Then, s/he is going to present the teaching unit through visual support where it will appear a multiple intelligence palette with the explanation of the different activities that students are going to carry out throughout the unit. (See appendix 2).

After that, the instructor will organise the class in six groups of four or five students and s/he will assign a role to each student with several functions, for the better development of cooperative projects. In this way, there will be four different roles: supervisors, speakers, coordinators and environments. First of all, *supervisors* will make sure each member does it part. Besides, *speakers* tell the group's doubts to the teacher and explain the activities done. Then, *coordinators* organise the work and *environments* control the work climate.

Finally, once the groups are organised, it will be time to show the problem to solve in the next several sessions. The problem will be the following one: *we want to open a new shopping mall with different shops where we sell products from the primary, secondary and tertiary sectors, but we do not know how to give publicize it. Could you help us?*

In this way, the first five steps of the PBL methodology would have been carried out: 1. Explanation of what PBL is. 2. Presentation of the problem. 3. Brainstorming. 4. Classification of previous ideas. 5. Creation of a list about what pupils know and what do they need to know.

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 2. Initiating the knowledge and implementation of information and communication strategies, fostering processing of

information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and texts.

- **Intelligence developed:** linguistic intelligence and visual/spatial intelligence.

3.7.2 Session 2

Before beginning with the research, it would be a great idea that the instructor explains and differentiates the three sectors of the active population to make pupils conscious of what they will look for their exhibitions. Thus, firstly s/he will use several manipulative objects such as costumes and tools about distinct jobs and students should guess the type of worker that is represented. After this activity, there will be a brief explanation of the three sectors and pupils will do an experiential activity, playing a game to demonstrate if they have understood the lesson. The teacher will divide the class into two teams and s/he will give them some costumes. Then, s/he will put three hoops of different colours on the floor to represent the three sectors: yellow hoop – primary sector; red hoop – secondary sector; and green hoop – tertiary sector. Each team will have to place the costumes in the correct hoop. The team that does the exercise in less time will be the winner. (See appendix 3). To end up the class with a written task, students will complete a worksheet where they will have to match the sentences halves referred to several jobs and the sectors they belong to. In this case, it consists of an input response activity where they put into practice what they have learnt during the lesson. (See appendix 4).

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 3. Identifying activities related to the different production and economic sectors in Andalusia, Spain and Europe, developing the entrepreneur ability and the study of companies of their environment, adopting a responsible attitude towards consumption, savings, occupational health and road-safety education.
- **Intelligences developed:** linguistic intelligence, bodily-kinaesthetic intelligence, interpersonal intelligence and visual/spatial intelligence.

3.7.3 Session 3

By the time students will have known the problem to solve, the teacher will give each group a sector to work on and they will start to research information on the Internet about Spanish active population, carrying out a development activity. For instance, one group will have the primary sector; especially they will focus on agriculture and livestock farming. Additionally, the data they must look for is the definition and characteristics of the sector, images that represent it in Spain, number of people who work on it, etc. To carry out the research, students will work in pairs. This activity will take place in the computer classroom. Here, we will work on the PBL step 6. Researching information.

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 2. Initiating the knowledge and implementation of information and communication strategies, fostering processing of information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and texts.
- **Intelligences developed:** linguistic intelligence, logical/mathematical intelligence, interpersonal intelligence and visual/spatial intelligence.

3.7.4 Session 4

In this session, both pairs of each group will share the information and they will design a PowerPoint presentation (development activity), where they will post all the gathered information; to show it to the rest of the partners in another session of class. Here, step 7 takes place. It consists of putting the work in common. While the students are working with the computers, teacher will give some explanations about basic steps to follow to do an effective presentation, such as how to insert titles, images or links; to add special effects to the different slides; to change the format and letter size, and so on. Thus, it will be guided work. (See appendix 5).

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 2. Initiating the knowledge and

implementation of information and communication strategies, fostering processing of information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and texts.

- **Intelligences developed:** linguistic intelligence, interpersonal intelligence and visual/spatial intelligence.

3.7.5 Session 5

As one of the blocks of the contents of Social Sciences is focused on geography, it becomes crucial that learners in this class put into practise the location of different activities attributed to each sector of the Spanish active population, by practising experiential activities. Therefore, we will show them a political map of Spain, explaining to them that the country is organised into Autonomous Communities and provinces. After that, the teacher will explain the concept of legend and s/he will select some symbols to represent each sector of active population. In this way, icons of vegetables, fruits, animals, fishing ports, mining or forestry will represent the primary sector in Spain. Another example regarding the secondary sector could be symbols of different industries or aeronautics, among others will take place. To conclude the lesson, in pairs, pupils will locate the several activities belonging to each sector on the map of Spain, following the information they previously have researched on the Internet. (See appendix 6).

- **Objective to achieve:** 3. Identifying activities related to the different production and economic sectors in Andalusia, Spain and Europe, developing the entrepreneur ability and the study of companies of their environment, adopting a responsible attitude towards consumption, savings, occupational health and road-safety education.
- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, naturalistic intelligence and visual/spatial intelligence.

3.7.6 Session 6

Once students have acquired the concept of map, during this lesson they will learn how to represent specific data in different types of graphs such as bar chart or pie charts. For this to take place, the teacher will bring to the class some manipulative objects that better illustrate the explanation and help pupils' understanding. Thus, there will be some play dough to do bar charts and a cake for the pie chart, both will be experiential activities. After the explanation, pupils will have to make a bar chart and a pie chart with the information obtained through the Internet about the three active population sectors in Spain. To finish the session,

all the groups must design and add both charts to their PowerPoint presentations, in order to represent those sectors. (See appendix 7).

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 2. Initiating the knowledge and implementation of information and communication strategies, fostering processing of information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and texts.
- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, logical/mathematical intelligence and visual/spatial intelligence.

3.7.7 Session 7

The whole session will be devoted to the students' presentations of the different sectors of active population in Spain, following step 9: an exhibition of the results. Previously, the instructor will give them some tips to speak in public like the following ones: do not read the text, look at classmates' eyes, use the body language, control the tone of voice and intonation, etc. While one group exhibits the project, the rest of the mates will have several cards with numbers from 1 to 4 that they will use at the end of the exhibition to evaluate their schoolmates' work. For instance, if they think the presentation should improve they will put their cards up with the number 1; then whether the project is OK they will show the number 2 card, in the case of being a very good presentation the number will be 3 and for a brilliant project they will choose number 4. When everybody has shown the work, the teacher will ask the pupils for personal comments and advice about how to enhance future exhibitions and there will be a debate about discussing the ideas altogether. (See appendix 8). In this way, interpretation, awareness and input response activities take place through students' presentations and debate.

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 2. Initiating the knowledge and implementation of information and communication strategies, fostering processing of

information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and texts.

- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, intrapersonal intelligence, bodily/kinaesthetic intelligence, logical/mathematical intelligence and visual/spatial intelligence.

3.7.8 Session 8

By the time students have prepared the PowerPoint presentation, they are going to do a development and language awareness task that consists of elaborating a script of a scene in which they will try to announce a product that belongs to the sector they have previously worked on. It is part of step 8: develop the final product. For example, if they have studied the tertiary sector, they could invent a sketch about a hotel that offers different sales for the summer as well as some free tours around the city of Córdoba. In this scene, some learners will be the tourists and another will be the receptionist of the hotel. Here, they will have to convince the customer of reserving a room. In addition, the clients will make questions about the hotel's facilities; timetables for breakfast, lunch and dinner; entertainment offered for children; transport services, etc.

In the second part of the class, pupils cannot forget to design the slogan of the company. In this case, this should be completely original, eye-catching and handmade. Thus, we will offer them the possibility of using any kind of material they think about, such as cardboards, crayons, pencils, colours, markers, scissors, stick, and so on.

- **Objectives to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life. 3. Identifying activities related to the different production and economic sectors in Andalusia, Spain and Europe, developing the entrepreneur ability and the study of companies of their environment, adopting a responsible attitude towards consumption, savings, occupational health and road-safety education.
- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, bodily/kinaesthetic intelligence and visual/spatial intelligence.

3.7.9 Session 9

To give more emphasis to the learners' announcement and develop their originality, they will invent a song that has a close relationship with the product they want to sell, carrying out an experiential activity. Here, they will need to write some attractive and dynamic lyrics with a repetitive chorus. Later, they will have to think about several musical instruments they could make to produce a melody, such as tambourines, drums or guitars, among others. Materials like coloured papers, cardboards, crayons, markers, scissors or sticks will be given to them to build the handicrafts. (See appendix 9).

- **Objective to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life.
- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, musical intelligence and visual/spatial intelligence.

3.7.10 Session 10

After some weeks of intense work where learners have done their researches, presentations, designing of the announcements with their respective slogans, songs and instruments, it is time to do the performances in the audiovisual room in front of their classmates from the fifth grade of Primary Education. For this day, students will have to bring special costumes, objects and all the material needed to produce their fabulous announcements. On this occasion, the teacher will be the presenter of the show with the help of the other tutors that will decorate the stage for the different performances.

- **Objective to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life.
- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, bodily/kinaesthetic intelligence, musical intelligence and visual/spatial intelligence.

3.7.11 Session 11

At the end of the teaching unit, it seems to be a great idea that teacher checks pupils' progress through a language awareness task, which makes students reflect on their learning. It will be a portfolio or diary where they write all they have learned throughout the several lessons; the terms or aspects about language they have acquired; what they have enjoyed the most; some committed mistakes or things to improve the next time; different drawings to describe their feelings and thoughts, etc.; as well as a self assessment with marks for the different activities carried out in order to know what they deserve according to the work done. Therefore, we will devote the whole session to write all the ideas exposed. (See appendix 10).

- **Objective to achieve:** 1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life.
- **Intelligences developed:** linguistic intelligence, interpersonal intelligence, intrapersonal intelligence and visual/spatial intelligence.

3.7.12 Session 12

Once the unit is finished, it could be wonderful to bring some students' family members to the class, with the purpose of making learners conscious of how they have developed their professional careers; what was their initial vocation or desires when they look for a job; what are the assets and pitfalls of each one, such as the salary, working conditions, indoors or outdoors, etc. In this way, pupils will experience a direct contact with the real world and we offer families the opportunity of participating in the teaching-learning process of their children. Here, we can work previously with students about different types of questions that they want to ask their relatives, serving it as an interpretation task.

- **Objective to achieve:** 3. Identifying activities related to the different production and economic sectors in Andalusia, Spain and Europe, developing the entrepreneur ability and the study of companies of their environment, adopting a responsible attitude towards consumption, savings, occupational health and road-safety education.
- **Intelligences developed:** linguistic intelligence and interpersonal intelligence.

3.8 Attention to diversity

Taking into account that this teaching unit works on the Multiple Intelligences Theory and this indeed, pay attention to different intelligences and learners styles, it cannot be denied that due to the wide range of abilities existing in a class, pupils' needs are different, as some children will require extra support for even the basics; others will require reinforcement of what they have learned, while the more capable will benefit from extension and additional practice.

Therefore, reinforcement and extension activities (see appendix 11) have been designed for this unit. These activities are not planned to be worked on at any particular moment in the lessons; we will work on them just when it is necessary to accommodate the different levels of the L2 proficiency and different learning rates and styles of our students.

On the one side, reinforcement activities aim to consolidate and build on the English that students have already learned. They feature stimulating, topic- based material designed to motivate learners to communicate about matters that genuinely concern them. On the other hand, extension activities are aimed at students who finish early and offer EFL learners a choice of project work, enabling them to consolidate language and topic work in a way which best suits their interests.

In addition, according to the Royal Decree 126/2014, we should “provide measures and alternative methodologies in teaching and assessment foreign languages with students with special needs or learning disabilities, especially those who have difficulties in speaking”. Here, identification, assessment, and programming support for EFL students with special needs is a complex, ongoing process.

For this reason, An Individual Education Plan (IEP) will be elaborated for those students with Special Educational Needs (SEN), based on the child's unique needs, level of performance, educational needs, goals and measurable objectives. IEP's can be classified into: non-significant curricular adaptations (adjustments that do not substantially modify the programming of the regular education), significant curricular adaptations (modification or elimination of contents and objectives of the planning and resulting in repercussion in the evaluation criteria) and access adjustments (modifications or provision of special material or communication resources in order to facilitate access to the regular curricular for students who present motor, visual or hearing deficiencies). Finally, there is an example of IEP in appendix 12.

3.9 Materials & resources

- Table 1. Materials & resources:

ACTIVITIES	MATERIALS/RESOURCES		
1. Session 1	1. Brainstorming: digital whiteboard, computer, projector, www.wordle.net webpage.	2. Explanation: PowerPoint presentation, computer, projector, digital whiteboard, human resources.	3. Role assignment: human resources.
2. Session 2	1. Teaching: human resources, costumes, job tools like wrench, hammer, chalk and rake.	2. Game: hoops and costumes.	3. Written task: worksheet, pencil.
3. Session 3	1. Research: computer, human resources.		
4. Session 4	1. PowerPoint presentation: computer, Microsoft PowerPoint, human resources.		
5. Session 5	1. Instruction: Spain political map, legend, human resources.	2. Location on a map: maps worksheets, pencil.	
6. Session 6	1. Explanation: play dough, cake, human resources.	2. Manipulative charts: play dough, cake.	3. Digital charts: computer, Microsoft PowerPoint.
7. Session 7	1. Tips for presentations: human resources.	2. Students' exhibition & evaluation: computer, Microsoft PowerPoint, cards.	3. Debate: human resources.
8. Session 8	1. Script: paper, pen.	2. Slogan: cardboards, crayons, pencils, colours, markers, scissors, stick.	
9. Session 9	1. Song: paper, pen.	2. Handicraft: coloured papers, cardboards, crayons, markers, scissors, stick.	
10. Session 10	1. Show: costumes, manipulative objects like building materials and tools, cardboard, colours, markers, paper, scissors, pencil, pen, tape.		
11. Session 11	1. Portfolio: paper, pen.		
12. Session 12	1. Meeting with families: human resources.		

3.10 Organization & class distribution

- Table 1. Organization & class distribution

ACTIVITIES	DISTRIBUTION		
1. Session 1	1. Brainstorming: whole class work.	2. Explanation: whole class work.	3. Role assignment: small groups work.
2. Session 2	1. Teaching: whole class work.	2. Game: small groups work.	3. Written task: individual work.
3. Session 3	1. Research: pair work.		
4. Session 4	1. PowerPoint presentation: small groups work.		
5. Session 5	1. Instruction: whole class work.	2. Location on a map: pair work.	
6. Session 6	1. Explanation: whole class work.	2. Manipulative charts: small groups work.	3. Digital charts: small groups work.
7. Session 7	1. Tips for presentations: whole class work.	2. Students' exhibition & evaluation: small groups work and whole class work.	3. Debate: whole class work.
8. Session 8	1. Script: small groups work.	2. Slogan: small groups work.	
9. Session 9	1. Song: small groups work.	2. Handicraft: individual and small groups work.	
10. Session 10	1. Show: small groups work.		
11. Session 11	1. Portfolio: individual work.		
12. Session 12	1. Meeting with families: whole class work.		

3.11 Timing & schedule

- Table 1. Timing

ACTIVITIES	TIME		
1. Session 1	1. Brainstorming: 15 min.	2. Explanation: 20 min.	3. Role assignment: 10 min.
2. Session 2	1. Teaching: 15 min.	2. Game: 20 min.	3. Written task: 10 min.
3. Session 3	1. Research: 45 min.		
4. Session 4	1. PowerPoint presentation: 45 min.		
5. Session 5	1. Instruction: 25 min.	2. Location on a map: 20 min.	
6. Session 6	1. Explanation: 10 min.	2. Manipulative charts: 15 min.	3. Digital charts: 20 min.
7. Session 7	1. Tips for presentations: 10 min.	2. Students' exhibition & evaluation: 25 min.	3. Debate: 10 min.
8. Session 8	1. Script: 25 min.	2. Slogan: 20 min.	
9. Session 9	1. Song: 30 min.	2. Handicraft: 15 min.	
10. Session 10	1. Show: 45 min.		
11. Session 11	1. Portfolio: 45 min.		
12. Session 12	1. Meeting with families: 45 min.		

- Table 2. Schedule

ACTIVITIES	DATE
1. Sessions 1, 2 and 3	Week 1: from 14 th January until 18 th January
2. Sessions 4, 5 and 6	Week 2: from 21 st January until 25 th January
3. Sessions 7, 8 and 9	Week 3: from 28 th January until 1 st February
4. Session 10, 11 and 12	Week 4: from 4 th February until 8 th February

3.12 Evaluation

Following the Order of March 17th, 2015, which develops the basic curriculum for Primary Education in Andalusia, there are some evaluation criteria and performance indicators that fulfill the general objectives for Primary Education in the area of Social together with their related contents, mentioned before. They are described in the following table:

- Table 1. Evaluation Criteria, Performance Indicators, General Objectives and Contents

EVALUATION CRITERIA	PERFORMANCE INDICATORS	GENERAL OBJECTIVES	BLOCK OF CONTENTS
1. To develop responsibility, effort, persistence in study, creativity and entrepreneurship, drawing original conclusions, performing projects and presentations individually, and working in group in a responsible way, by searching, selecting and organising social, historical and geographical texts, accepting differences with respect and tolerance towards others ideas and contributions.	1.1. Carrying out tasks with autonomy and developing projects, presenting them in a organized and cleaned way, using suitable vocabulary and exhibiting them orally, showing self-confidence, critical thinking, personal initiative, curiosity, interest, creativity and entrepreneurship. 1.2. Using strategies to perform projects and participating in group activities, adopting responsible, constructive and supportive behaviour, obeying the basic principles for democratic functioning.	1.1.1. Developing habits that foster the use of strategies for individual and group work in a cooperative way, showing responsible attitude, effort and persistence, critical thinking, personal initiative, curiosity, interest and creativity in the development of knowledge and entrepreneurship, with the objective of planning and managing projects related to daily life.	1.1.1.1. Strategies for developing responsibility, effort and persistence in study. 1.1.1.2. Using strategies for enhancing group cohesion and cooperative work. 1.1.1.3. Using working materials properly. 1.1.1.4. Sensitivity and critical thinking in the analysis and commitment to look for the best alternatives for improving and developing ourselves.
2. To gather relevant and specific information about previously delimited facts, using different sources (direct or indirect), using information and communication technologies to get information, learning and expressing Social Sciences contents.	2.1. Searching, selecting and organizing relevant and specific information, analysing and drawing conclusions, reflecting on the process, communicating it orally and writing, using information and communication technologies and developing projects.	2.1.1. Initiating the knowledge and implementation of information and communication strategies, fostering processing of information strategies for the implementation of implicit competences in the performance of daily tasks, through different methods, sources and	2.1.1.1. Strategies for developing responsibility, effort and persistence in study. 2.1.1.2. Using strategies for enhancing group cohesion and cooperative work. 2.1.1.3. Using working materials properly. 2.1.1.4. Sensitivity and critical thinking in the

	2.2. Using information and communication technologies to develop projects, analysing information found in images, charts, graphics, schemes and summaries, presenting a report or digital presentation.	texts.	analysis and commitment to look for the best alternatives for improving and developing ourselves. 2.1.1.5. Using information and communication technologies for researching and selecting information and drawing conclusions.
3. To explain differences between raw materials and manufactured products, identifying activities belonging to each economic sector, describing their characteristics and recognizing the main economic activities in Spain and Europe.	3.1. Identifying and defining raw materials and manufactured products, relating activities to sales, organising their process and commercialisation and explaining their characteristics, as well as those activities from the three economic sectors, classifying them according to their belonging groups, following their localisation in the environment.	3.3.3. Identifying activities related to the different production and economic sectors in Andalusia, Spain and Europe, developing the entrepreneur ability and the study of companies of their environment, adopting a responsible attitude towards consumption, savings, occupational health and road-safety education.	3.1.1.1. Production sectors: primary, secondary and tertiary. Economic activities and productive sectors in Andalusia, Spain and Europe. Production of goods and services. Consumption and advertising.

The evaluation of the teaching unit presented above will be global, formative and continuous. Therefore, there will be three main stages in the assessment process: *initial evaluation*, *continuous evaluation* and *final evaluation*. First of all, an *initial evaluation* is going to take place at the beginning of the process because the teacher needs to know learners' starting level to design the performance and choose the objectives appropriately.

Consequently, s/he is going to make use of direct observation as a starting point to check students' level and attitude towards learning, among other factors. Furthermore, the teacher will prepare a diagnostic test for getting a general idea of their previous concepts. As it is just a test to check students' initial level, this will not be taken into account in the final evaluation. See appendix 13.

Then, regarding *continuous evaluation*, which is carried out during the whole teaching unit and it allows the teacher to redirect his/her performance to get better results, we are going to design different kinds of tests such as oral tests, written unit exams, recall tests or application tests. Firstly, short oral tests with opened and closed questions will serve us to check pupils' diary study of the different contents taught in class and also their comprehension of them, as well as they will give us an instant feedback on the learning. In

addition, written unit exams will consist of multiple-choice exercises, finding the pairs, true or false statements, identifying vocabulary terms, long answer questions, labelling diagrams, defining concepts, ordering facts, and so on. As far as the variety of activities is higher, we could face as many learners diversity as possible. Texts will be 40% of the final mark. See appendix 14.

Moreover, there will be recall tests where learners will be asked to tackle text-based questions and read information pieces like short tests, and then answer several questions associated with them. Additionally to this, students in application tests will have to apply the contents learned in order to explain the functioning of a specific phenomenon. For instance, why are seaports important for trade? Finally, several types of rubrics such as content rubrics, language skills rubrics or competence rubrics will take place with the main purpose of assessing both content and language. Here, evaluation criteria will be included to clarify what we expect our learners achieve and the grade of achievement of the different goals. Below, we show some examples of rubrics.

- Table 2. Content rubric

Achievement Level	R			1			2			3			4		
Letter Grade		R		D -	D	D+	C-	C	C +	B-	B	B +	A-	A	A+
Score in (%)	Below 50%			50 - 52	53 - 56	57-59	60-62	63-66	67 - 69	70 - 72	73-76	77 - 79	80-84	85-89	90-100
Achievement Level	Remediation			Below			Low			Average			High		
Achievement Level Definition	The student has not demonstrated the required knowledge and skills.			The student has demonstrated some of the required knowledge in limited ways .			The student has demonstrated some of the required knowledge and skills in limited ways .			The student has demonstrated most of the required knowledge and skills.			The student has demonstrated the required knowledge and skills.		
Marks Assigned		0			1			2			3			4	

PERFORMANCE INDICATORS	Mark
1.1. Carrying out tasks with autonomy and developing projects, presenting them in a organized and cleaned way, using suitable vocabulary and exhibiting them orally, showing self-confidence, critical thinking, personal initiative, curiosity, interest, creativity and entrepreneurship.	
1.2. Using strategies to perform projects and participating in group activities, adopting responsible, constructive and supportive behaviour, obeying the basic principles for democratic functioning.	
2.1. Searching, selecting and organizing relevant and specific information, analysing and drawing conclusions, reflecting on the process, communicating it orally and writing,	

using information and communication technologies and developing projects.	
2.2. Using information and communication technologies to develop projects, analysing information found in images, charts, graphics, schemes and summaries, presenting a report or digital presentation.	
3.1. Identifying and defining raw materials and manufactured products, relating activities to sales, organising their process and commercialisation and explaining their characteristics, as well as those activities from the three economic sectors, classifying them according to their belonging groups, following their localisation in the environment.	
TOTAL MARK:	
Comments:	

- Table 3. Cognitive and language skills rubric

Name:	Date:		Course:	
The student is able to...				
	Very well (10-9)	Well (8-7)	With difficulty (6-5-4)	With a lot of help (3-2-1)
1º) COGNITIVE SKILLS:				
➤ Develop responsibility, effort and persistence in study.				
➤ Perform projects and presentations.				
➤ Work in groups in a responsible way.				
➤ Gather information.				
➤ Search, select and organise social, historical and geographical texts.				
➤ Use direct and indirect sources.				
➤ Use information and communication technology.				
➤ Express Social Sciences contents.				
2º) LANGUAGE SKILLS:				
➤ Explain concepts and give reasons.				
➤ Predict possibilities.				
➤ Draw original conclusions.				
➤ Perform oral presentations.				
4º) COMMENTS:				
5º) FINAL MARK:				

- Table 4. Competence rubric

[illegible]

entrepreneurship.										
MATHEMATICAL, SCIENTIFIC AND TECHNOLOGICAL COMPETENCE										
Using information and communication technologies to develop projects, analysing information found in images, charts, graphics, schemes and summaries, presenting a report or digital presentation.										
DIGITAL COMPETENCE										
Searching, selecting and organizing relevant and specific information, analysing and drawing conclusions, reflecting on the process, communicating it orally and writing, using information and communication technologies and developing projects.										
Using information and communication technologies to develop projects, analysing information found in images, charts, graphics, schemes and summaries, presenting a report or digital presentation.										
“LEARNING TO LEARN COMPETENCE”										
Carrying out tasks with autonomy and developing projects, presenting them in a organized and cleaned way, using suitable vocabulary and exhibiting them orally, showing self-confidence, critical thinking, personal initiative, curiosity, interest, creativity and entrepreneurship.										
SOCIAL AND CIVIC COMPETENCES										
Using strategies to perform projects and participating in group activities,										

adopting responsible, constructive and supportive behaviour, obeying the basic principles for democratic functioning.										
SENSE OF INITIATIVE AND ENTREPRENEURSHIP										
Carrying out tasks with autonomy and developing projects, presenting them in a organized and cleaned way, using suitable vocabulary and exhibiting them orally, showing self-confidence, critical thinking, personal initiative, curiosity, interest, creativity and entrepreneurship.										
CULTURAL AWARENESS AND EXPRESSION										
Using strategies to perform projects and participating in group activities, adopting responsible, constructive and supportive behaviour, obeying the basic principles for democratic functioning.										

To conclude, the *final evaluation* will be carried out at the end of the teaching unit and it will indicate the levels reached by learners throughout the whole learning process. Here, final tasks play a crucial role as they seem to be quite useful for put all the knowledge and skills acquired in a cooperative project with small groups, where students need to show leadership, organization and discipline values, among others. For instance, pupils will do digital projects, handicrafts, oral presentations, etc. Final tasks will be 40% of the final mark.

Then, self-assessment tasks like students' portfolios or diary will allow them the opportunity to reflect on their learning throughout the unit. In this way, they will evaluate their progress as well as improve their knowledge, stimulating critical thinking too. Finally, self-assessment tasks will be 10%, together with attitude and participation in class that will 10% of the final evaluation too.

4. EXPECTED RESULTS

Once this teaching unit has finished, it would be a rewarding experience for me to have the opportunity to implement it with the objective of providing a useful tool for teachers which could serve as a way to develop contents and language in a more attractive way for children, at the same time that a huge variety of values are promoted.

In this way, students would experience the opportunity of learning lots of contents related to Social Sciences in a second language (English). Thus, they might acquire a multiplicity of skills concerning this language. Throughout these new teaching approaches, more parts of their brains will be activated, because of the competence in two languages.

To conclude, the fact of combining multiple intelligences and problem-based learning with the CLIL methodology might benefit the great majority of pupils, as teachers could try to pay attention to diversity in class. On top of that, the entire range of activities proposed will help learners to discover what intelligences they enhance, at the same time that they will give them a chance to bring out their best throughout the whole teaching unit.

5. CONCLUSIONS

Finally, as the culmination of my master in Bilingual Education and Content and Language Integrated Learning (CLIL), this project is the result of the combination of all the knowledge acquired from several subjects such as Instrumental English for Social Sciences, What is CLIL?, Student-centred methodologies and ICTs for CLIL teaching, CLIL research and networks, CLIL materials development, Coordination and organization of CLIL programmes and Evaluation and Assessment in CLIL programmes, Principles of Integrated and Intercultural Curriculum Design, among others.

Moreover, apart from the implementation of the theoretical contents learnt, it has helped me to improve my teaching throughout this academic year in the school where I work as bilingualism teacher, as I have experienced the opportunity to put into practice newly acquired skills in Information and Communication Technologies (ICTs), discovering fabulous tools and resources to complement my lessons and draw pupils' attention, as well as working on innovative assessment instruments to evaluate the teaching-learning process in a global and objective way.

In conclusion, it would be necessary to highlight the importance of promoting students a teaching-learning process based on both contents and language, as I have encountered throughout my university studies because it seems to be a key element in their future working

life, due to the fact that we are all immersed in a globalized world where we need to use a foreign language to communicate with people from different nationalities and cultures.

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7. APPENDICES

1. Wordle Brainstorming

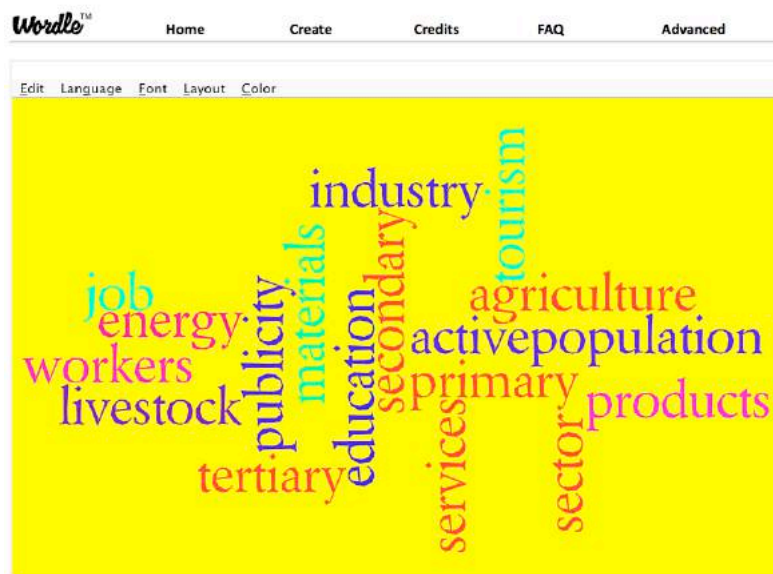


Figure 1. Wordle Brainstorming

2. Multiple Intelligences Palette



3. Costumes and jobs game

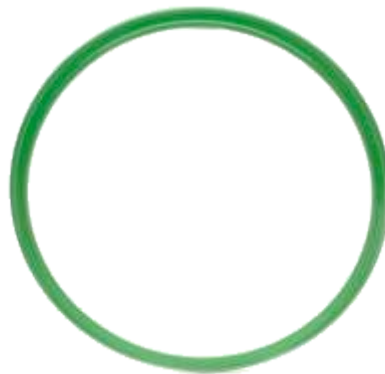
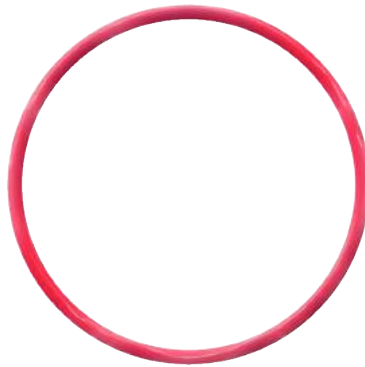
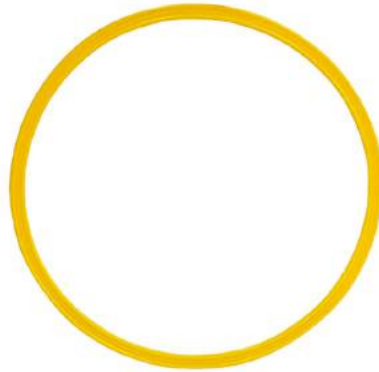


Figure 2. Costumes and jobs game

4. Worksheet: match the jobs with the sector they belong to.

TOPIC: ACTIVE POPULATION

1. Match the jobs with the sector they belong to.

a. Farmer
b. Waiter
c. Receptionist
d. Shop assistant
e. Teacher
f. Doctor
g. Machinist

1. Primary Sector

2. Secondary Sector

3. Tertiary Sector

Figure 3. Worksheet: match the jobs with the sector they belong to.

5. PowerPoint presentations designed by students

PRIMARY SECTOR:

Agriculture, livestock, fishing, mining and forestry.



AGRICULTURE:

Agriculture was the key development in the rise of sedentary human civilization, where by farming of domesticated species created food surpluses that enabled people to live in cities. The major agricultural products can be broadly grouped into foods, fibers, fuels and raw materials (such as rubber). The science that study the agriculture is called agronomy.



50

Dryland farming and dry farming encompass specific agricultural techniques for the non-irrigated cultivation of crops. Dryland farming is associated with drylands, areas characterized by a cool wet season that is followed by a warm dry season. For example: grapes, cereals and olives.

DRY CROPS:



Pablo👍
Isra👍
Diana👍
Julia👍
Maria👍

GROUP 1:



**Secondary sector
in Spain**

BY ANA , BY HUGO ,
BY DARIO , BY
ISABEL



In this sector it works about 30 per cent of the active population of Spain.




Types of industries :

► There are five types of industries in this sector : energy industries, base industries, construction industries capital goods industries and consumer goods industries.




6. Maps about the primary and secondary sectors in Spain

Primary sector



Secondary sector



Figure 4. Maps about the primary and secondary sectors in Spain

7. Bar chart and pie chart

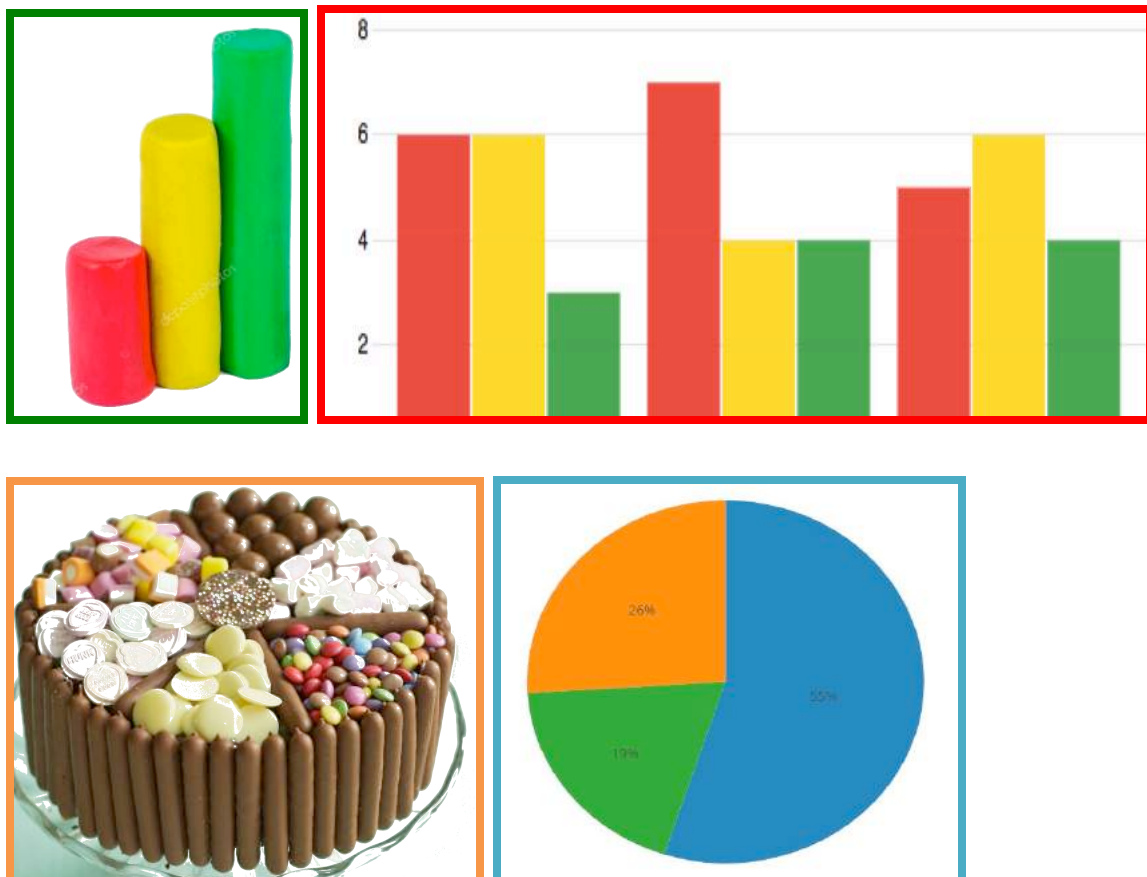


Figure 5. Bar chart and pie chart

8. Self-assessment cards



9. Musical instruments handicrafts



Figure 6. Musical instruments handicrafts

10. Portfolio

MY PORTFOLIO

I can use my diary to reflect on what I have learnt and the language I need for school and for the things I do every day.

It can help me to think about where I can learn language

REFLECTIONS ON THE ACTIVE POPULATION UNIT

During the invention of the announcement I have learnt how to talk about  _____

In the teacher's explanations I hear  _____

With my classmates I shared  _____

Vocabulary I didn't understand  _____

At Social Sciences' lessons I have seen these things written: 

Next time, I could improve: _____

What I have enjoyed the most have been: _____

11. Examples of reinforcement and extension activities

REINFORCEMENT ACTIVITY

1. Place the information into the three active population sectors.

Fishing, livestock farming, tourism, education, healthcare, capital goods industry, retail, arable farming, trade.

PRIMARY SECTOR	SECONDARY SECTOR	TERTIARY SECTOR

EXTENSION ACTIVITY

1. Which activity do these photos show? Write the economic sector they belong to.



Activity: _____
Sector: _____



Activity: _____
Sector: _____



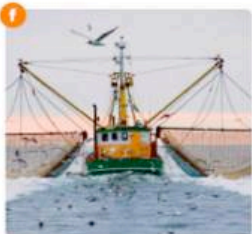
Activity: _____
Sector: _____



Activity: _____
Sector: _____



Activity: _____
Sector: _____



Activity: _____
Sector: _____

Figure 7. Examples of reinforcement and extension activities

12. Individual Education Plan

Individual Education Plan	
PARENT / GUARDIAN	Student: _____
I.E.P QUESTIONNAIRE	Date: _____
To assist in developing your child's Individual Education Plan , you are invited to answer the following questions.	
Please return the form to _____ by: _____	
1. What are your child's strengths ?	_____ _____
2. What do you feel are your child's academic needs ?	_____ _____
3. Does your child follow directions at home?	_____ _____
4. What have you found works best in getting a chore or task at home?	_____ _____
5. Does your child like school? Why or why not?	_____ _____
6. What are some academic goals that you have for your child this year?	_____ _____
7. What steps are you prepared to take to improve or support your child's learning environment?	_____ _____
8. What social gains would you like to see made by your child by the end of the school year?	_____ _____
9. Are there any health concerns/medications your child is currently taking that the teacher should be aware of?	_____ _____
10. Other concerns/comments:	_____ _____ _____
Date: _____	Parent/Guardian Signature: _____

13. Diagnosis test

DIAGNOSIS TEST

Name:

Class:

Date:

1. Circle the correct answer.

- This is not an example of a primary sector activity.

a) Fishing b) Energy industries c) Mining

- This is a secondary sector activity.

a) Manufacturing b) Selling c) Transporting goods

- This is not an example of tertiary sector activity.

a) Healthcare b) Forestry c) Education

2. Correct the sentences.

a. Most industries in Spain are found in rural areas.

b. The primary sector is the larger economic sector in Spain.

c. There are two types of livestock farming depending on the water needed.

3. Answer the questions.

a. What's the difference between import and export? Give some examples.

b. What does cultural tourism mean?

14. Written unit exam

UNIT

5

Name: _____

Class: _____

① Write *primary, secondary or tertiary*.

This sector includes ...

- a. capital goods industries: _____
- b. trade: _____
- c. communication: _____
- d. mining: _____

② Answer the questions about the production of milk chocolate.

- a. What product needs to be harvested to make chocolate?

- b. What tool do farmers use to harvest it?

- c. Which continents does the milk chocolate production happen on?

③ Match the primary sector activities with their definitions.

1. fishing

a. the cultivation of land to produce crops

2. livestock farming

b. keeping or selling animals to produce food

3. mining

c. catching animals from oceans, seas, rivers and lakes

4. forestry

d. taking natural minerals from the Earth's crust

5. arable farming

e. exploiting trees and other greenery

④ Answer the questions about the primary sector in Spain.

- a. What crops are mostly grown in Andalucía? _____
- b. What fruit is mostly grown in Valencia? _____
- c. What kind of farming is the most important in the south? _____
- d. What is the most important forestry product in Spain? _____

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UNIT 5

⑤ Complete the sentences about the secondary sector.

- The secondary sector manufactures _____ materials that are produced in the primary sector.
- Renewable sources of energy are sunlight, _____ and water.
- Non-renewable sources of energy are coal, oil and _____.
- Most secondary sector industries in Spain are found in _____ cities.
- The most industrial regions are Bilbao, Barcelona and _____.

⑥ Classify the words according to the tertiary sector activity they refer to.

supermarket	hospital	university	bus	radio	shop
blog	degree	van	rafting	hotel	medicine

education	healthcare	retail
_____	_____	_____
_____	_____	_____
_____	_____	_____
tourism	transport	media and communication
_____	_____	_____
_____	_____	_____
_____	_____	_____

Figure 8. Written Unit Exam