



FACULTAD DE EDUCACIÓN DE PALENCIA
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Developing Thinking Skills connecting Science and Language in an experiential learning programme.

**El Desarrollo de estrategias de pensamiento a través de un programa que conecta el
aprendizaje de Ciencias y Lengua en un entorno experiencial**

**TRABAJO FIN DE GRADO EN EDUCACIÓN PRIMARIA
(MENCIÓN LENGUA EXTRANJERA, INGLÉS)**

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RESUMEN

Este trabajo tiene como objetivo fundamental realizar una investigación sobre los diferentes enfoques que se siguen en la enseñanza del inglés a través de las ciencias, así como las diferentes técnicas de enseñanza y aprendizaje en un entorno plurilingüe. Los pasos seguidos en la investigación implicaron un primer análisis de las premisas y la organización de la escuela, implementando una unidad diseñada que incluye estas teorías como las bases para el diseño; estableciendo la relación entre: Aprendizaje Experiencial, Método Científico, desarrollo de habilidades de pensamiento, de igual manera que el enfoque adoptado para el aprendizaje del idioma inglés (incluido EAL, inglés como idioma adicional) establecido en el CEFR

PALABRAS CLAVE

Aprendizaje experiencial, la enseñanza del inglés, aprendizaje de las ciencias, habilidades de pensamiento, la enseñanza de las ciencias a través del entorno, método científico, CEFR.

ABSTRACT

The main objective of this work is to carry out a research on the different approaches followed in the teaching of English through the Sciences, as well as the different teaching and learning techniques in a Plurilingual setting. The steps followed in the research implied a first analysis of the school premises and organization, an implementation of a unit designed including these theories as the grounds for the design, establishing the relationship among: Experiential learning, Scientific method, developing Thinking Skills, as well as the approach adopted to English language learning (including EAL- English as an Additional Language) established on the CEFR.

KEY WORDS

Experiential learning, English teaching, Science learning, thinking skills, teaching Science through the environment, Scientific method, CEFR.

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1. INTRODUCTION

The document presented here includes the research carried out on the development of a Sciences Unit following the premises of the development of thinking skills, experiential learning and the Irish curriculum, all using English as the vehicular language for the development of linguistic and communicative skills in a Primary Education classroom.

In the following research, an approach is made to the theories about the different theories focusing on the way of teaching Sciences through English based on experiential learning. We will start analysing the premises established in the official documents: both the Irish National Curriculum and the European Language Policy about the most important lines and approaches to teaching and learning a foreign Language, Literacy and Sciences. Among the theories offered by different authors, we will focus on the theories that link methodology to the development of the thinking skills. From this perspective Assessment would include both purely normative factors about the language but also the communicative aspect and the non-linguistic and textual elements that are part of the communication as well as the importance of following the Scientific Method as a specific methodology in the design of Science lessons.

Based on the conclusions drawn, the design has been made with the elements that must be taken into account when designing a proposal where Science is learnt through English language following a CLIL approach linked to the development of “thinking skills” under the premises of the Scientific Method. As it be otherwise, thinking about the acquisition of a language requires that the proposal would offer a globalizing approach in which the language develops in unison with other learnings from different areas and in everyday situations that promote the practicality of the use of the English language both inside and outside the classroom. All the above said pushed us to emphasize the use of a methodology based on the student's experience as a source of learning as well as starting from the closest environment.

All this process of theoretical foundation that is given in this work is put into practice through various activities designed with the aim of matching Sciences to the classroom of the first grade so that the students are the protagonists.

From the design implementation, the data obtained has been analysed and conclusions drawn in relation to the theoretical analysis, thus carrying out an effective and coherent research process.

On the other hand, the chosen theme has led to reflection on the level of development achieved by the teacher, a series of competencies established in several official documents. The design and implementation of this project has helped to demonstrate the high degree of achievement of these competences, which justifies their choice and development. Competences that we have to specify, differentiated into general competences to all the Degree and specific competences those linked to the requirements of a Foreign Language Specialist, including the competences that must adorn the bilingual education responsible teachers, CLIL.

COMPETENCES OF THE BACHELOR'S DEGREE IN PRIMARY EDUCATION.

1. To know the curricular areas of Primary Education, the interdisciplinary relationship between them, the evaluation criteria and the body of didactic knowledge around the respective teaching and learning procedures.
2. Design, plan and evaluate teaching-learning processes.
3. Design, plan, adapt and evaluate teaching-learning processes for students with specific educational needs.
4. Approach effectively situations of language learning in multicultural and multilingual contexts
5. Design and regulate learning spaces in contexts of diversity and that address gender equality, equity and respect for human rights that conform the values of citizenship education.
11. Reflect on classroom practices to innovate and improve teaching. Acquire habits and skills for autonomous and cooperative learning and promote it among students.
12. Know and apply ITC techniques in the classrooms. Discern selectively audio-visual information that contributes to learning, civic education and cultural wealth.

13. Understand the role, possibilities and limits of education in today's society and the fundamental competences that affect primary schools and their professionals. Know models of quality improvement with application to educational centres.

Basic Training Module:

Learning and Development of the Personality.

- Know and understand the characteristics of primary school students, their learning processes and the development of their personality, in familiar social and school contexts.
- Know, assess and reflect on the problems and demands posed by the heterogeneity in the classrooms, as well as know how to plan practices, measures, programs and actions that facilitate attention to the diversity of students.

Processes and educational contexts.

- To know in depth the foundations and general principles of the primary stage, as well as to design and evaluate different projects and innovations, dominating active methodological strategies and using diverse resources.
- Understand and assess the demands of Scientific knowledge, identifying research methods and strategies, designing educational research processes and using appropriate methods.
- Know the organization of primary education schools, the regulatory and legislative elements that regulate these centres, developing the ability to work as a team and define educational centre projects.

Family and school society.

- Select and use information and communication technologies in the classrooms that contribute to student learning, achieving communication skills through the Internet and collaborative work through virtual spaces.
- Encourage personal training by facilitating self-knowledge, promoting harmonious relationships in the classroom, as well as promoting democratic values and the development of attitudes of respect, tolerance and solidarity, rejecting all forms of discrimination.

Didactic-disciplinary module:

Teaching and Learning Experimental Sciences

- Use scientific knowledge to understand the physical world, developing at the same time skills and attitudes that facilitate the exploration of facts and natural phenomena.
- Transform properly the scientific knowledge of reference linked to the experimental Sciences in knowing how to teach through the opportune processes of didactic transposition, verifying at all times the progress of the students and of the teaching-learning process itself through the design and execution of situations of evaluation both formative and summative.
 - Know the school curriculum related to Experimental Sciences.
 - Promote the acquisition of knowledge and interaction skills with the physical world in primary school children.
 - Develop and evaluate curriculum contents through appropriate teaching resources and promote the acquisition of basic skills in students.

Language Teaching and Learning

- Use language as a tool at the service of communication and understanding of reality while developing the skills and abilities necessary for the interpretation and creation of literary texts.
 - Understand the basic principles of language Science and communication.

Module of Practicum.

Practicum

- Know, participate and reflect on the vine to practice the classroom, learning to collaborate with the different sectors of the educational community, relating theory and practice.
 - Be able to apply the processes of interaction and communication in the classroom, as well as master the skills and social skills

necessary to foster a climate that facilitates learning and coexistence.

- Control and monitor the educational process.

SPECIFIC AIMS.

Foreign Language (English)

→ Know the cognitive, linguistic and communicative bases of language and Literacy acquisition.

→ Use techniques of corporal expression and dramatization as communicative resources in the corresponding foreign language.

→ Plan what is going to be taught and evaluated in relation to the corresponding foreign language, as well as select, conceive and elaborate teaching strategies, types of activities and didactic resources.

-To know the main didactic currents of teaching foreign languages to children and their application to the foreign language classroom in the different levels established in the curriculum.

- To know the curriculum of Primary Education and the curricular development of the area of foreign languages.

- Be able to develop attitudes and positive representations and openness to linguistic and cultural diversity in the classroom.

- Promote both the development of oral language and written production paying special attention to the use of new technologies as elements of long-distance communication in a foreign language.

- Gradually develop communicative competence, through the integrated practice of the four skills in the foreign language classroom.

- Be able to plan the teaching - learning process of a foreign language, selecting, conceiving and elaborating teaching strategies, types of activities and materials depending on the diversity of the students.

2. OBJECTIVES

Main objective

The main objective set in this TFG is the development of a research where different approaches are mixed in the design of the instruction: Learning English through Sciences following the Scientific Method as well as the Content and Language Integrated Learning Approach, within a Linguistic Project designed for a plurilingual and pluricultural school environment. The research includes the design, implementation and evaluation of a Science Unit centring on “Ecosystems or Biomass” for the first two years of Primary Education, taking into account all the members of the class, as well as their interests, needs and personal and family characteristics, following an experiential methodology based on the development of Thinking Skills, the Scientific Method (SESE Irish Curriculum) and the use of English as an additional language (EAL) as established in the CEFR (Common European Framework of Reference for Languages). Nevertheless, the main aim of the present work would focus on finding out the main steps to be followed in order to adapt this design to the Spanish context.

Specific objectives

In order to achieve the general objective that appears above, the following specific objectives are established:

- Deepen in the aspects corresponding to the acquisition of the English foreign language.
- Carry out proposals for the teaching of the English language through Science following the premises laid down by CLIL, at the beginning of the stage of Primary Education
- Assess the importance of the acquisition of English Language at the first stages of Primary Education in a globalized and natural way at the same time that we are encouraging its use and respect and tolerance of its culture.
- Use a methodology based on experiential learning in which observation and experimentation determine and strengthen their knowledge
- Use the English language as the main language
- Promote thinking skills in children

- Set 3 levels of expectations for the planning of the unit according to which all individuals, regardless of their condition, succeed in at least one.
- Use the space and the closest environment as a source of knowledge of the Sciences

3. THEORETICAL JUSTIFICATION

For children scientific activity has to be the process through their knowledge and understanding will be developed, it involves thinking, guessing, testing, changing and confirming ideas.

In the Scientific education children begin from their ideas, they change and develop this prior learning by testing it in practical investigations. This view of learning is based on the idea that children develop and construct their knowledge through their own ideas and experience.

The Science taught in the school must be, according to Maxwell (1986), cited by Echeverría (1995), a "wise" Science that has an objective and value in the student's life. Which implies moving from a scientific problem to a social one, passing on an individual interest to a collective one. Science learning should be focused on relevant problems, without leaving the contents behind.

Children learn a language in different school contexts, this is where the two subjects, Science and Literacy, are connected because we must conceive the teaching of English through useful experiences and with a sense behind, not only the fact of the grammar/code of language but also as a complete perspective from the communication, in such a way that the thought process is included as part of the Process. Therefore, students identify the teaching-learning process as useful, necessary and interesting for their lives. Facilitating that students find the usefulness and motivation necessary to learn.

Following the ideas of Vygotsky, children take the first step towards the formation of concepts when they gather a series of objects or ideas into unorganized piles.

For him thought and language are independent at the genetic level, their origin and development is different, but from two years or so one has influence on the other and vice versa, becoming verbal thought and rational language. For Vygotsky there are a series of

relationships between language and thought, being essential for each other and vice versa because the development of each is not based on the changes of both independently, but to the changes that occur in their relations.

Vygotsky also talks about the nature of language and thought, for him they are not innate in the human being, their nature is social, they are acquired from the relationship of the individual with the environment, being this acquisition and development of socio-cultural character. If we focus on what refers to language, the author states that the individual has a series of structures necessary for the creation of verbal signs that do not develop if there is no interaction with the environment in which this individual lives, being this development a form of adaptation to the environment. This language, understood as social speech, allows the individual to interact with other social beings in their environment and with their own environment.

Why start with teaching Science from a young age?

As Acher (2014) says, the participation of children in Science have to be gradually in the stage in which children try to make sense of the natural phenomena they have in hand, starting from their experience, concerns and previous ideas, developing it through projects and experiences that allow children to express their natural curiosity in school. As Tonucci (1995) argues, that “research exists when faced with a problem that requires a solution/learning: students face a challenge and they work out possible solutions necessary and the research method requires that the problem is solved using previous knowledge in a new, creative way.”

In recent years, the concern for Science education has increased in the early years. Every day is more aware of the importance of a scientific education that awakens in children the interest in Science and research.

Still, Science is still conceived as a subject only for gifted in white clothes locked in laboratories.

Science is often presented to children as something unrelated to everyday life. For Massarani (2004), television programs for children, in general, represent scientists as crazy and careless characters whose job is to invent things without any application or design devices or substances to destroy the world with their inventions.

Sciences Learning in the Irish curriculum: SESE programme.

“Social, Environmental and Scientific Education (from now on we will use: SESE) provides opportunities for the child to explore, investigate and develop an understanding of the natural, human, social and cultural dimensions of local and wider environments; to learn and practice a wide range of skills; and to acquire open, critical and responsible attitudes” This is the definition that appears in the Irish curriculum of Sciences in relation to SESE.

We can find that the SESE basic methodological premises are:

Exploration and investigation.

A key point of the program is based on the involvement of the child in the active exploration and investigation of the environment, Science education enhances children’s knowledge and understanding of themselves and the world in which they live. It involves children in the active construction of their own understanding.

The contribution of a scientific approach to research fosters the development of important skills, concepts and knowledge that children can take advantage of to observe, question, investigate, understand and think logically about their surroundings and poses to them, whether they are living beings and its environments or materials and forces, as well as everyday problems.

In the curriculum the word “environment” is used to denote the surroundings or external conditions with which an individual (human or other living organism) or community interacts.

The document divides environments in two broad groupings. Natural environments and human environments.

Natural environments are formed largely through the interaction of the Earth’s physical features and processes, its flora and fauna. A tropical rainforest, a peatland or a rocky seashore may be examples of natural environments.

Human activity over thousands of years has shaped and changed the landscape considerably. Environments that have been modified in this way are termed human environments.

The subjects, in this case the students, interact with the environment in different ways, there is a physical or material environment, school, town, neighbourhood, with which they interact in a direct and physical way and is the social or cultural environment, experiences and conflicts of everyday life. The environment is seen as a context in which the student lives, learns and develops. There is a direct and bidirectional relationship between the student and the environment, between what is learned outside and inside the school. The student learns from the environment in the same way that modifies it and is affected by it. The social context experiences provided linked to challenges assumed by the students' condition and create a series of expectations that will lead their learning patterns.

Language and Science.

Another key point that appears in the curriculum is the relationship between Language, as thinking pattern provider, and Science, since the process of learning in Science takes place along the interaction among the different actors of the classroom, where language is the vehicle in the communication taking place (either intercommunication, or communication with others, or intra-communication -inner language- in other words, thoughts) whether Irish or English is used but always with the experience as essential background. Though, it is evident that through discussing their ideas and the results of their scientific investigations children will develop their scientific understandings; we could say that we could evidence the evolution of the thinking process: first children use language to name, later they classify things, build up sentences to express and modify ideas, formulate questions and hypotheses, and report conclusions. In this way, language contributes to the expansion of the child's thinking skills.

In chapter 2, Approach adopted, of the CEFR, (2001), communication and learning involve the performance of tasks. These tasks are not solely language tasks even though they involve language activities and make demands upon the individual's communicative competence. Following this line, we see the need to use both tasks and language to select the teaching techniques to be used in the design of Science lessons, in such a way that is, Science is not an isolated object or an outside context, but the experience itself. Through tasks related to the object of study in question, they involve language and make communication necessary, communicative competence. Use of language as a driving path towards learning and the acquisition of concepts.

The exploration of the school and the locality

One of the most important aspects of the Science curriculum and the wider SESE¹ programme is the emphasis placed on the exploration of the local environment of the child and school.

The planning process should involve teachers in becoming familiar with the locality of the school, the range of habitats in the area and other features of the natural environment. Familiarity with the locality should facilitate the selection of topics for inclusion in the Science programme.

Schools differ considerably in the facilities available to them. As part of the planning process some schools may set up a bird table or weather station or lay out a school garden, all of which will provide opportunities for work throughout the different strands.

Experimental learning

“Knowledge results from the combination of grasping experience and transforming it.”
(Kolb 1984)

Learning is the process whereby knowledge is created through the transformation of experience. A vital aspect of the learning process as viewed from the experiential learning perspective. The emphasis on the process of adaptation and learning as opposed to content or outcomes, that knowledge is a transformation process that is continuously created and recreated. Learning transforms experience, to understand learning we must to understand the nature of knowledge as to understand the nature of knowledge we must to understand learning.

Kolb’s experimental learning is a four step cyclical theory, a holistic perspective that involves experience, perception, cognition, and behaviour.

¹ Social, Environmental and Scientific Education, National Council for Curriculum and Assessment, Ireland.

The cycle consists of four steps:

Experience

The first stage, concrete experience, students actively experiences an activity such as a lab session or fieldwork.

Reflect

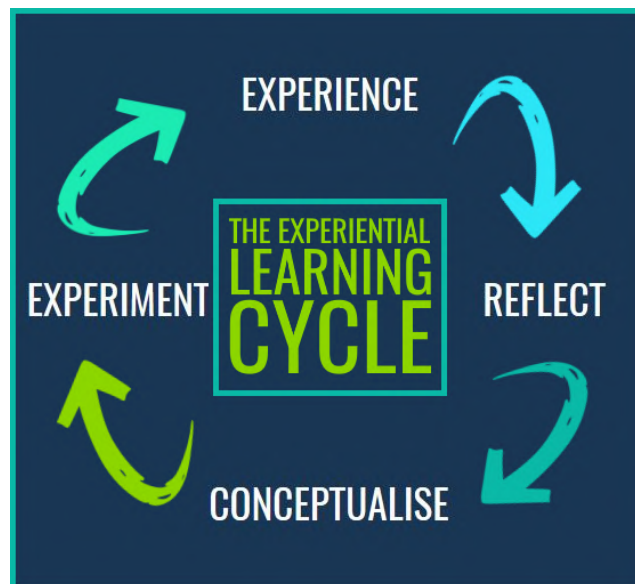
The second stage, reflect, the learner consciously reflects back on the experience.

Conceptualise

The third stage, conceptualise, is where the learner attempts to conceptualize a theory or model of what is observed.

Experiment

The fourth stage, experiment, is the moment when the learner tries to experiment with all they have learned with the previous steps.



Thinking skills

Life cannot be fixed in boxed, is not closed, it requires logical and creative thinkers to interpret and question evidence, and, to use information strategically in order to make wise decisions and solve problems. Thinking ability can be learnt, it can be developed

and improve and we, as teachers, have an important role. Several types of research prove that learning thinking works well when it is supported by a teacher.

A defining characteristic of scientific thinking involves metacognitive knowledge. That is, the ability to reflect on the process of acquiring knowledge and the changes that result from participation in scientific activities (Kuhn, 2011). Metacognitive skills are present in theories about children's mental abilities. Children learn where beliefs about the world around them come from, that others may have different beliefs, that beliefs may be more or less true, and in particular that beliefs may be formed on the basis of inference or from evidence.

With this type of methodology what is pursued is to use children's natural curiosity, thinking skills engages them in a search for meaning, strengthening reasoning and argumentative skills, and enhancing their self-esteem as well as their ability to work as part of a community.

There is a great number of different *thinking tools*.

Habits of Mind; faced with a problem, gathering data through all senses, listening, persisting and thinking flexibly.

Thinking Hats; method of thinking constructively.

Thinking Maps; visual organisers that help them to present the cognitive processes used to make sense of the world, comparison, contrasting, understanding cause and effect and classifying.

But for the development of thinking skills, the first thing we must be clear about is that there is not a single intelligence framework in which all our students enter. Following the theory of Gardner (1993) there is no single unitary mental capability, he proposed eight different intelligences to account for a much broader spectrum of human capabilities. According to Gardner, "we are all able to know the world through language, logical-mathematical analysis, spatial representation, musical thinking, and the use of the body to solve problems or to make things, an understanding of other individuals, and an understanding of ourselves. Where individuals differ is in the strength of these intelligences and in the ways in which such intelligences are invoked and combined to carry out different tasks, solve diverse problems, and progress in various domains."

In the article wrote by Carrillo García & López López of 2014, an analysis is made of Gardner's Theory of Multiple Intelligences focused on language teaching and different activities proposed by other authors on language learning are described. Understanding diversity and the need to develop a certain potential is crucial in the process of teaching / learning languages, the authors also speak of the need for a better school, in which multiple intelligences are integrated and developed in the curriculum.

After reading this article we can get some ideas in clear, for these authors not only the Intelligences are real, but they are necessary within the classroom, according to this article we could say that the Multiple Intelligences, at least in the teaching of languages, they are necessary and feasible.

The thinking process

According to Blag et al. (2003, “*The Somerset Thinking Skills Course*”, in the thinking process we have to differentiate between *cognitive resources* and *cognitive strategies*.

Cognitive resources

The basic tool kit that there are use in order to think and to solve problems. Four kinds of cognitive resources:

1. Conceptual understanding, understanding of concepts (number, size, shape...)
2. Skills and procedures, to solve a problem (focusing and scanning, analysing the stages in a task, describing, information, to distinguish relevant from irrelevant information, and to organise, memorise and retrieve information.
3. Knowledge and experience, knowledge of the world and symbols, conventions and rules that are used (interpret and represent information in different ways, appreciate different viewpoints and work with others.
4. Verbal tools (language, vocabulary, language register and language forms that are needed to communicate in a proper way and express us accurately.

Cognitive strategies

Blag et al.’s sequence of cognitive strategies lay the foundations for solving and strategic thinking. The sequence consists of a cycle of *gathering and organising*

information, using all our senses to explore and clarify information for later *define the problem*. *Generating alternative approaches* entails considering possible procedures used in previous problems anticipating difficulties. *Planning stage*, involving selecting a course of action, planning ways and recording, checking and evaluation work. *Monitoring and checking* come next, involving assessing the efficiency and revising procedures where necessary.

Why should we combine language teaching with thinking skills?

The reason for combining the teaching of thinking skills with the teaching of a language is twofold. To begin with, we must think about the cognitive participation of the apprentice in the task. There is some danger when designing an activity, an attempt is made to eliminate any intellectual challenge in an attempt to make the activity linguistically understandable. Children often feel disenchanting by too simple activities that are designed to adapt to their level of language, but they are often far below their cognitive potential and, therefore, do not offer a challenge. This is why we must present a cognitive challenge, the objective is to keep the students involved in the activity. Students need to be challenged because knowing they are capable of a high level of thinking encourages them to excel and complete tasks.

The idea is to use language for a real purpose in order to solve problems and to think together. They are therefore engaged in meaningful language use which develops their language ability at the same time they learn to think.

4. RESEARCH AND PROPOSAL DESIGN

The proposal that will be presented next consists of a unit designed and put into practice during the Erasmus + traineeship programme experience, Practicum II of the Degree in Primary Education.

Context

This proposal has been developed in a National School located in the town of Sligo, county with the same name. Scoil Ursula is a co-educational primary school under the patronage of Catholic Bishop of Elphin.

It is a double line school in all courses and regarding the language Scoil Ursula is an English medium school, that is, a school in which the main language (L1) is English and the second language (L2) is Irish.

This centre is an inclusive school and among the multiple awards they have, we find that it is the sixth time that they obtain the recognition as Green School, which is a program of education and environmental management in the Irish schools. This means that the environment is a very important axis for the centre and its operation. Environmental education is given a lot of importance. Similarly, for this centre it is very important to promote the autonomy of its students by making them participate in their learning process.

Another important axis for the centre is the idea of cooperative work and peer learning that is why the rhythm of the classroom will be governed by these ideas of self-regulation and cooperative learning and therefore the unit designed will be regulated by all these ideas.

Regarding the class the students have an average age of 6 and 10 years, the class has 29 students. As in all classrooms there are certain students with learning problems, of this students previously mentioned none has a curricular adaptation, only methodological adaptations.

Among all the students of the class we find 3 of them whose nationality of origin is different from the Irish, Poles, and another whose father is Irish and her mother from Spain. These four children speak both languages, English and Polish or Spanish; however, 2 of the 3 children of Polish descent present some problems in reading and writing English.

As it is said above, a main axis of this school is the co-operative work that is why the children are divided into 5 groups of 5 or 6 children, a large part of the daily work, therefore, it is done in a group. So, and following all these premises among many others, I have designed a Science proposal based on the environment, cooperative work and student autonomy.

Once observing several Science lessons taught by the teacher and after reading carefully the official documents on the teaching of Irish curriculum Sciences, the idea of creating a unit child-centred focused the centre of this work, besides we added the experimental

learning perspective (Kolb 1984)², so the design included a comparison of both the Irish and Spanish ecosystems, always starting from their closest environment, following the guidelines presented in the official documents. The result was the unit: "Ecosystems, Ireland and Spain". A unit based on the book they use in the classroom and the SESE³ program proposed by the government.

The unit is composed of seven lessons and the final task was based on comparing both ecosystems through exploration and investigation⁴ with the different members of an ecosystem, flora, fauna and climate.

According to the experiential learning from Kolb for the first lesson I wanted to introduce the children to topic through direct observation of their closest environment, the schoolyard following the first step of experiential learning, "*experience*".⁵ We took a natural walk through the garden of the school and we observed the flowers and vegetation that we found, we tried to identify them as we listened and saw different birds, seagulls, crows, pigeons...

After the walk and back in class we put in common in everything we had seen, heard and smelled with a visual diagram in the whiteboard, then they wrote it on the first page of the booklet. As work for the next day they had to observe and listen to everything on the way home and then they will put it in common first sharing in small groups, then in big group. The former activities belonged to the second step of experiential learning, "*reflect*".⁶ In this part the students dedicated their time to think and reflect on what they had experienced in the previous phase. Following the guidelines of Kolb (1984) in this phase a dialogue among equals should be created, it is time to ask and ask the opinion of others, open and honest communication.

In the third lesson we completed a page of the textbook related to Irish flowers in which the children had to copy the flower and complete a short description of it. We had the

² "Knowledge results from the combination of grasping experience and transforming it." (Kolb 1984)

³ "Social, environmental and scientific education (SESE) provides opportunities for the child to explore, investigate and develop an understanding of the natural, human, social and cultural dimensions of local and wider environments; to learn and practice a wide range of skills; and to acquire open, critical and responsible attitudes"

⁴ Science education enhances children's knowledge and understanding of themselves and the world in which they live.

⁵ The first stage, concrete experience, students actively experiences an activity such as a lab session or fieldwork.

⁶ The second stage, reflect, the learner consciously reflects back on the experience.

opportunity to see that many of the flowers that appeared on that page we had seen during our trip and we were already known. For the following lesson, a second page of the booklet based on the textbook was designed, there were some native flowers from the Iberian Peninsula that do not exist on the island of Ireland. We compared both floras and try to guess why they were so different, we all came to the conclusion that it was because of the sun and the rain. Exploration and investigation with different climates and ecosystems. In the fifth session we made another page of the book, this time about the Irish birds. In addition to that we listened to the singing of the different birds and we put in common if we had ever heard them. We all came to the conclusion that some of those songs we had heard during our walk but we had not identified them because we did not know them. Experiential learning cycle.⁷ For the penultimate session we completed the third page of the booklet that corresponded to the page of the book we did the day before about the birds. Following the dynamics of the previous day we heard the songs of these birds and all agreed that they had never seen or heard these birds. These four sessions are included in the third step of the Kolb cycle, “*conceptualize*”.⁸ This is the time to process the information. We compare the opinion obtained in phase two with the activity we carried out in phase one and thus complete the pages of both the book and the booklet.

In this last session we completed the last part of the booklet in which we compared 3 different animals of the two countries (dog, horse and sheep) races originating from each country though Venn diagrams in order to work with thinking skills,⁹ comparing and contrasting, recognising same and different characteristics explaining and giving reasons as a group task. After making use of the Google Earth platform we observed through the aerial view the island of Ireland and the Iberian Peninsula, finding the great difference of colour, green for Ireland, yellow for Spain. After this we compared the temperature differences between Spain and Ireland at that time.

⁷ Kolb’s experimental learning is a four step cyclical theory, a holistic perspective that involves experience, perception, cognition, and behaviour.

⁸ The third stage, conceptualise, is where the learner attempts to conceptualize a theory or model of what is observed.

⁹ Life is not boxed, is not closed, it requires logical and creative thinkers to interpret and question evidence, and, to use information strategically in order to make wise decisions and solve problems.

To conclude, together we collect what we had discovered after the unit and what had impacted us the most. In this last phase of Kolb's Experiential Learning, "*experiment*",¹⁰ is when the students reflect and put into practice the knowledge acquired.

For the creation of this unit different premises have been valued and several theories as well as official documents have been taken into account.

To determine the difficulty of the activity respect to the language used and the task, I have followed the indications that Nunan (1988) gives in his book "The Learner-Centred Curriculum: A Study in Second Language Teaching".

To determining the contents, three documents were taken into account, namely, The Irish Curriculum for teaching in Primary Education, the Science policy dictated by the school and the decree establishing the curriculum and regulating the implantation, evaluation and development of Primary Education in the Community of Castilla y León.

Methodology

As Arteaga, Armada & Del Sol (2016) said, the group interaction favours the student to take ownership of teaching content being the protagonist of their own learning. In the Science class, we must take into account and take advantage of the communicative processes in a way that respects and strengthens the individuality of the members of the group, stimulating the presentation of new ideas, giving value to what each member expresses. The exchange of information, the group reflections and the interaction between the members of this favour the thinking of each student allowing him to confront ideas, complete them or reach new approaches. Group work contributes to the development of each of its members. This is why I have tried to use a methodology based on group work, whether it is a large group or smaller groups.

In the same way, the teaching of Science content from the environment that surrounds the student favours its acquisition, providing opportunities for the child to explore, investigate and develop an understanding of the natural, human, social and cultural dimensions of local and wider environments.

¹⁰ The fourth stage, experiment, is the moment when the learner tries to experiment with all they have learned with the previous steps.

Working scientifically

Throughout their Science investigations, children should be aware of and encouraged to adopt safe practices. They should observe safety procedures in designing and making tasks, particularly when they are using tools and materials. Working scientifically involves particular forms of reasoning with evidence that is different in detail from reasoning in other areas.

Developing thinking skills

Developing thinking skills¹¹ is very important for the total cognitive development of children since it gives them the opportunity to solve the problems that are presented to them, as well as the use of the information presented to them and the decision making about them. In the development of thinking skills, the teacher plays a crucial role, as teachers we must ensure that children should have the freedom to think without criticism to produce an outlandish or extravagant idea. In fact, creative thinking must be encouraged, and all ideas must be valued. In addition, it is essential to ensure that children do not feel inhibited when expressing an idea because they do not have the language to express it correctly; mistakes are an integral part of the learning process and should not be discouraged, we must leave behind that conception of the curriculum that focuses on error-free learning.

Content Language Integrated Learning

Another important point to follow when programming a unit for teaching English is the CLIL methodology, because it will allow the pupils to explore the opportunities that English provides them so that they are introduced in a broader cultural context, improve the general and specific linguistic competence, develop interests and attitudes, diversify methods and ways of teaching and learning in the classroom and increase the motivation of the student to work starting from their environment using English as a motor language. Focusing, in this way, on the student acquires the language and realize that it is this that guides and enables the learning of the rest. I will use English as a vehicular language, because it is the support of knowledge. Although the proposed units are all of Science the

¹¹ With this type of methodology what is purposed is to use children's natural curiosity, thinking skills engages them in a search for meaning, strengthening reasoning and argumentative skills, and enhancing their self-esteem as well as their ability to work as part of a community.

proposed tasks are Literacy, this means that they will work on the contents of both subjects jointly, using the knowledge of one and the subject of another, learning the contents based on a utility, putting it in context.

What objectives are intended to be achieved with the execution of this unit?

By completing this Science unit the child will be able to:

SCIENCE

- To observe the environment
- To listen and try to identify the bird song
- To identify different types of birds and flowers
- To work in a cooperative way
- Put into practice the knowledge gathered during the previous lessons
- To discover new flowers
- To discover interesting facts about flowers
- To discover new birds
- To discover interesting facts about Spanish birds
- To compare both ecosystems using what was learned in previous lessons
- To study the differences between the climate of Spain and that of Ireland
- To observe the differences regarding fur and use of the native animals of each country

LITERACY

Oral language

- To use subject-specific vocabulary, acquire and use of oral vocabulary
- To use English for communicate with their peers, develop communicative relationships through language
- To share their ideas and experiences on the subject
- To explore and use the language
- To use phonological and phonemic awareness
- To demonstrate the Spelling

- To request and question
- To retell and elaborate
- To use a playful and creative use of language

Reading

- To look for and collect information
- To use strategies phonics and word recognition
- To use fluency and self-correction
- To read vocabulary

Writing

- To look for and collect information
- To use sentence structure and grammar

Further information about the unit APPENDIX I

5. RESULTS

Next, the results obtained from the previously exposed activities, collected through records based on continuous observation, are presented.

Nature walk

The use of the nature walks as a motivating and initial activity of the unit involved an approach to the subject

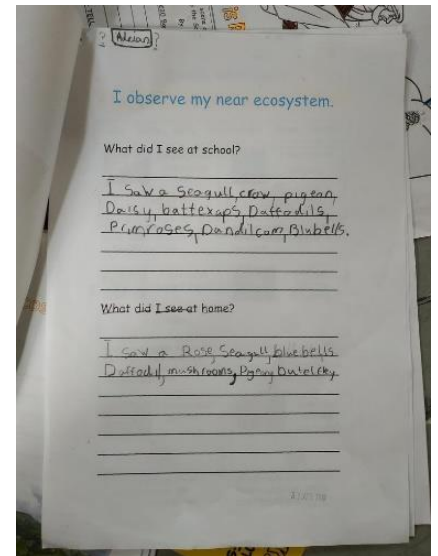
of this very useful, as well as an introduction to

experiential methodology in which children could directly observe their environment and interact with it. Through this activity the children observed the nature present in the school yard, they could hear the song of the



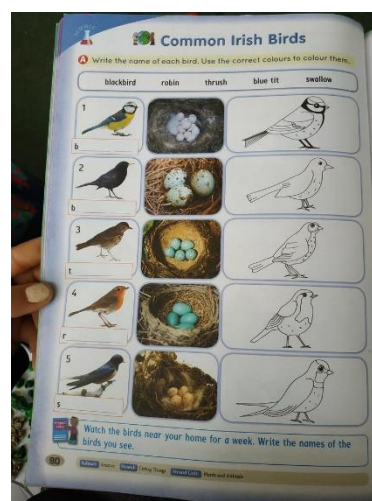
birds, smell the aroma of the flowers they picked, they tried through dialogue between them to guess which bird or which flower he treated and told anecdotes that reminded them. Then, back in the classroom they could share what they had lived, how they had felt, what they had discovered, asking each other questions and showing curiosity to discover more about what we had observed, but, above all, learn what they did not we had been able to identify.

By writing in their booklet they were aware of everything they had observed and reflected on, thus being aware of their own learning. That same afternoon they reused the observation guidelines given in class during the walk to make the observation of the environment at home and similarly in the subsequent session they put everything back together, with a talk relating what they had identified and their feelings about thereto.



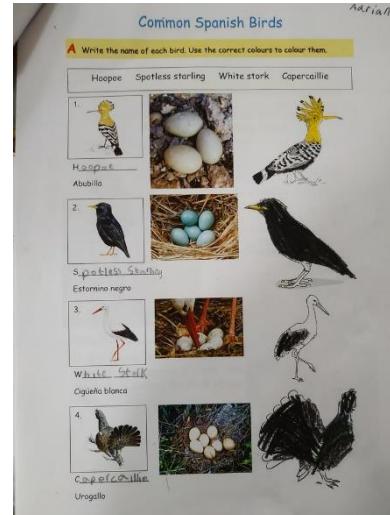
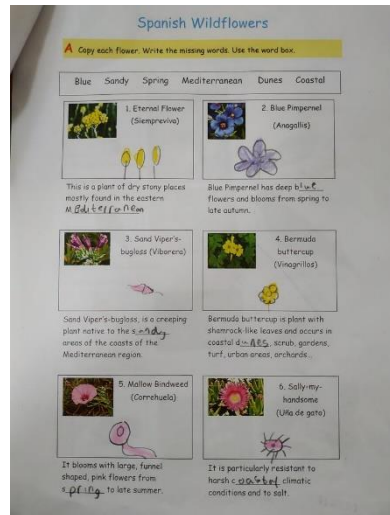
Irish flowers and birds

With the realization of the sessions taken from the textbook about the Irish birds and flowers, the children were able to verify what they had observed during their nature walk, they could verify that what appears in the books has a usefulness and a reason in real life. In the same way, they recovered information about the trip and learned another that they did not know.



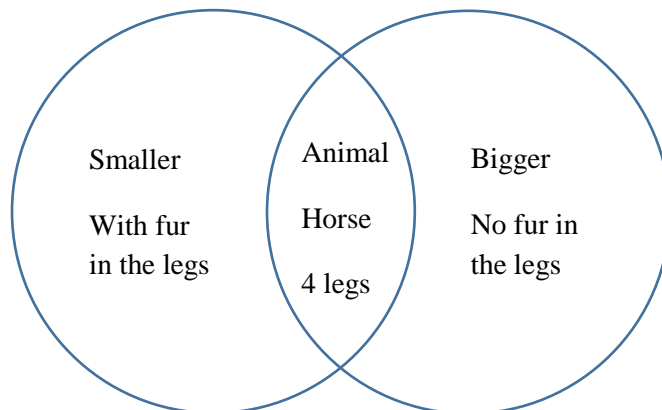
Spanish flowers and birds

When having the possibility to carry out the sessions on autochthonous flowers and birds of Spain, the students had the opportunity to verify that there are different species, both of flora and fauna that originate from one place and do not occur in another ecosystem. They were able to start taking the first steps towards the idea of how weather conditions change the ecosystem and its inhabitants.

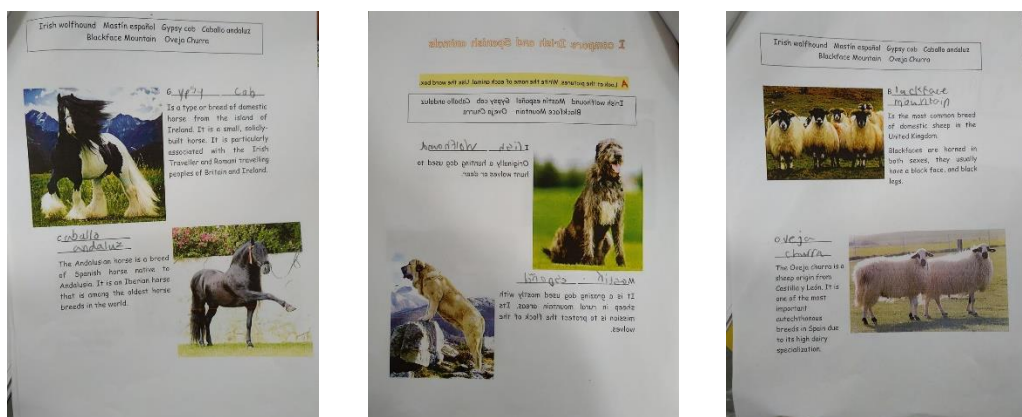


Comparing Spanish and Irish ecosystem.

Through this session they compared different animals from one country and another but from the same family, two sheep breeds, two dog breeds and two horse breeds, one Irish and the other Spanish. With this comparison the first thing that took place is a compilation of physical characteristics of one and the other through a Venn diagram, thus incorporating the thinking skills.



To then make the corresponding pages of the booklet in which they learned some curious facts.



Finally using the internet connection and the Google Earth platform we saw from a spatial view the island of Ireland and the peninsula to which Spain belongs. With this aerial view they could see the first clear difference between one country and another, the colour, observing in Ireland a very green and vivid colour and in Spain a more yellowish tone. After this we saw the difference in temperature and rainfall in one country and another, arriving at the conclusion that the difference in climate influences the flora and fauna of an ecosystem.

6. CONCLUSIONS

After carrying out the activities described above and having established a relationship with the theoretical base exposed on the learning of Science with English as a vehicular language and the relationship between Science teaching, the environment, thinking skills and experiential learning; I have been able to extract some very clear ideas about these aspects and the stage of Primary Education.

The teaching of Science following the theory of experiential learning of Kolb facilitates the acquisition of knowledge in the same way that increases the motivation of the student to see this participant in their own learning. Offering the possibility to experiment directly with the object of study, as it offers a natural walk, enables children to interact with it and understand that what they study is something tangible, something real, thus allowing to

create knowledge through the transformation of the experience, even more if that object of study with which they interact is in their closest environment.

Another important point of this work has been to dealing with Sciences and Language through space as reflected in the Irish curriculum, being able to reach the conclusion that this position is greatly related to experiential learning, offering the student to observe, interact, experiment and most importantly, learn, from your closest environment, a safe and controlled environment. Likewise, their English learning experience also enhanced their thinking skills, working with systematic patterns of thought linked to the Scientific Method used in Experiential Learning. Even more so if we consider how the CLIL methodology allows students to explore the opportunities that English offers them ,when they communicate and interact with the rest of the world that surrounds them, students get the evidence that English language can be used anywhere as a vehicular language.

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8. APPENDIX

8.1 APPENDIX I

About the unit 1 Ecosystems, Ireland and Spain		
<p>This unit is designed to be developed in the month of April; beginning the first day of this month, so that it coincides with the "National Tree Week". What is intended with this unit is, through experiential learning, to present the children the Irish ecosystem, flowers and common birds, and compare it with Spanish. Likewise, it is intended to compare other animals such as the sheep, the horse and the dog, originating in each country. What is sought with this comparison of flora and fauna is in itself the comparison of both ecosystems, including the climate of each one.</p>		
Prior Learning	Language used in the unit	Important Resources
<ul style="list-style-type: none"> • Common trees and other plants • Common birds and other animals • Become aware of animals and plants of other environments • The external parts of living things flower, leaf, stem, root tail, leg, beak, feathers 	<ul style="list-style-type: none"> • Root, leaf, stem of plants • Trunk and branches of trees • Head, leg, wing, tail, skin covering of animal • Hibernation • Migration • Farm animals • Animals and plants that provide food 	<ul style="list-style-type: none"> • Pictures • Videos • Internet connexion • Non-fiction books • Booklet
Expectations		
<p>At the end of this unit all the children must</p>	<p>Science:</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way • Differentiate between different types of ecosystems (Spanish and Irish ecosystem) • Observe, identify and explore a variety of living things in local habitats and environments (difference between Spanish and Irish) • Become familiar with the life cycles of common plants and animals. <p>Literacy:</p> <ul style="list-style-type: none"> • Use words that are used in the topic • Understand specific vocabulary by matching pictures. • Make comments 	

<p>At the end of this unit most of the children should</p>	<p>Science:</p> <ul style="list-style-type: none"> • Follow the instructions of the activities • Appreciate that living things have essential needs for growth <p>Literacy:</p> <ul style="list-style-type: none"> • Participate in shared and reading to identify key words and talk about them. • Answer simple questions
<p>At the end of this unit some of the children could</p>	<p>Science:</p> <ul style="list-style-type: none"> • Understand that seasonal changes occur in living things and examine the changes in plant and animal life during the different seasons <p>Literacy:</p> <ul style="list-style-type: none"> • Shearing ideas clearly. • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others. • Identify key words and talk about them.

<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Observe, identify and explore a variety of living things in local habitats and environments (difference between Spanish and Irish) 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Shearing ideas clearly. • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others.
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Lessons Overview				
Lesson	Learning goals	Learning outcomes	Main activity	Assessment criteria
1	<p>SCIENCE</p> <ul style="list-style-type: none"> • To observe the environment • To listen and try to identify the bird song 	<p>SCIENCE</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> • Experiment an approach to their nearby ecosystems 	<p>Departure to see a nearby ecosystem</p>	<ul style="list-style-type: none"> • Distinguish different types of flowers and birds • Collect different types of flowers

2	<ul style="list-style-type: none"> To identify different types of birds and flowers To work in a cooperative way <p>LITERACY</p> <ul style="list-style-type: none"> To collect information about what happened during the trip in the booklet 	<ul style="list-style-type: none"> Use the observation as a source of information <p>LITERACY</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> Put in common what was discovered during the walk 		<ul style="list-style-type: none"> Participate in the putting in common saying what he has lived and commenting on the others
	<p>LITERACY</p> <ul style="list-style-type: none"> To collect information about what they had observed during their afternoon. 	<p>LITERACY</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> Put in common what was discovered during observing at home 	What did I see at home?	<ul style="list-style-type: none"> Participate in the putting in common saying what he has lived and commenting on the others
	<p>SCIENCE</p> <ul style="list-style-type: none"> Put into practice the knowledge gathered during the previous two sessions 	<p>SCIENCE</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> Identify some of the common Irish flowers and check with what they discovered during the walk 	Common Irish flowers	<ul style="list-style-type: none"> Complete the corresponding page of the book Identify the flowers and relate them to the views during the previous sessions

4	<p>SCIENCE</p> <ul style="list-style-type: none"> ● To discover new flowers ● To discover interesting facts about flowers 	<p>SCIENCE</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> ● Discover new species of different flowers ● Relate the difference between the climate of one country and another with the difference in its vegetation <p>LITERACY</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> ● Infer the meaning of unknown words from context. 	Common Spanish flowers	<ul style="list-style-type: none"> ● Complete the corresponding page of the booklet ● Relate climate and vegetation
5	<p>SCIENCE</p> <ul style="list-style-type: none"> ● Put into practice the knowledge gathered during the nature walk 	<p>SCIENCE</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> ● Identify some of the common Irish birds and check with what they discovered during the walk 	Common Irish birds	<ul style="list-style-type: none"> ● Complete the corresponding page of the book ● Identify the birds and relate them to the views during the previous sessions
6	<p>SCIENCE</p> <ul style="list-style-type: none"> ● To discover new birds ● To discover interesting facts about Spanish birds 	<p>SCIENCE</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> ● Discover new species of different birds ● Relate the difference between the climate of one country and another with the difference in its wildlife 	Common Spanish birds	<ul style="list-style-type: none"> ● Complete the corresponding page of the booklet ● Relate climate and wildlife

7		<p>LITERACY</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> • Infer the meaning of unknown words from context. 		
	<p>SCIENCE</p> <ul style="list-style-type: none"> • To compare both ecosystems using what was learned in previous lessons • To study the differences between the climate of Spain and that of Ireland • To observe the differences regarding fur and use of the native animals of each country <p>LITERACY</p> <ul style="list-style-type: none"> • To use subject-specific vocabulary 	<p>SCIENCE</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> • Visualize the differences between animals in one country and another • Check through images how the difference in climate affects the ecosystem and makes it different <p>LITERACY</p> <p>Children will be able to:</p> <ul style="list-style-type: none"> • Use a specific vocabulary • Infer those words that are unknown by the context in which they are 	I compare Irish and Spanish ecosystems	<ul style="list-style-type: none"> • Complete the corresponding pages of the booklet • Relate climate, vegetation and wildlife

Level: 1st Class of Primary

Unit: Ecosystems, Ireland and Spain

Lesson: 1, I observe my near ecosystem

Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none">• To work cooperatively and individually.• To identify the essential information and main points.• To participate in a simple and a comprehensive way• To observe, identify and explore a variety of living things in local habitats and environments	<p>Children will be able to:</p> <ul style="list-style-type: none">• Work individually and in groups avoiding conflicts.• Become aware of animals and plants of other environments• Use the observation as a source of information	<ul style="list-style-type: none">• Showing an independence when they are working individually or in groups and asking for help when need.• Following simple oral instructions and the meaning of global explanations.• Performing simple tasks like those they have been presented.• Simulating the emblems of the teacher.

Discourse/Text targeted	Language targeted- Non-verbal L Targeted
<p><u>Nature walk</u> We observe our near ecosystem. We are going to take a walk through the school in its green areas to observe the birds and flowers.</p> <p><u>Booklet</u> Using the board and the computer, fill in the booklet all together. Reflect what they have seen in the yard.</p>	<p>Eye contact and gaze, emblems...</p>

Outline of leading activity				
Reflect what they have saw in the yard.				
Timing	Grouping	Pupils	Teacher	Resources
15''	Main group	We go outside and observe our nearby ecosystem.	Ask questions about what they see (birds and flowers)	
15''	Main group	Go back to class and reflect on what we have seen in the yard. Then, make a summary and write it in the booklet.	The teacher will help the children reflect on what they have seen.	Computer and board

Assessment Criteria		
<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way • Differentiate between different types of ecosystems 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Appreciate that living things have essential needs for growth 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Shearing ideas clearly. • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others. • Identify key words and talk about them.

Level: 1st Class of Primary

Unit: Ecosystems, Ireland and Spain

Lesson: 2, What did I see at home?

Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none">• To work cooperatively and individually.• To identify the essential information and main points.• To participate in a simple and a comprehensive way• To observe, identify and explore a variety of living things in local habitats and environments	<p>Children will be able to:</p> <ul style="list-style-type: none">• Work individually and in groups avoiding conflicts.• Become aware of animals and plants of other environments• Use the observation as a source of information	<ul style="list-style-type: none">• Showing an independence when they are working individually or in groups and asking for help when need.• Following simple oral instructions and the meaning of global explanations.• Performing simple tasks like those they have been presented.• Simulating the emblems of the teacher.

Discourse/Text targeted	Language targeted- Non-verbal L Targeted
<p><u>Prior learning activity</u> The activity consists on asking the children what they remember from our nature walk</p> <p><u>Booklet</u> Using the board and the computer, fill in the booklet all together. Reflect what they have seen at home</p>	<p>Eye contact and gaze, emblems...</p>

Outline of leading activity				
Reflect what they have saw at home				
Timing	Grouping	Pupils	Teacher	Resources
5''	Main group	Talk about what they remember from the last day.	Ask questions about what they saw (birds and flowers)	
15''	Main group	Reflect on what we have seen in the yard. Then, make a summary and write it in the booklet.	The teacher will help the children reflect on what they have seen.	Computer and board

Assessment Criteria		
<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Appreciate that living things have essential needs for growth 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Shearing ideas clearly. • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others. • Identify key words and talk about them.

Level: 1st Class of Primary

Unit: Ecosystems, Ireland and Spain

Lesson: 3, Irish common flowers

Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none">• To work cooperatively and individually.• To identify the essential information and main points.• To participate in a simple and a comprehensive way	<p>Children will be able to:</p> <ul style="list-style-type: none">• Work individually and in groups avoiding conflicts.• Become aware of animals and plants of other environments	<ul style="list-style-type: none">• Showing an independence when they are working individually or in groups and asking for help when need.• Following simple oral instructions and the meaning of global explanations.• Performing simple tasks like those they have been presented.• Simulating the emblems of the teacher.

Discourse/Text targeted	Language targeted- Non-verbal L Targeted
<p><u>Prior learning activity</u> The activity consists of asking the children about our nature walk</p> <p><u>Book</u> Using the board and the computer, fill in the page about Common Irish flowers</p>	<p>Eye contact and gaze, emblems...</p>

Outline of leading activity				
Relate the seen in the walk with what appears in the book				
Timing	Grouping	Pupils	Teacher	Resources
5''	Main group	Review what we saw in the previous class	The teacher asks what pupils remember	
15''	Main group	All together fill the book about Irish flowers	Ask questions about what they see the day before	Computer and board
5'	Main group	See pictures about the flowers	Show the pictures	Computer and board

Assessment Criteria		
<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Answer simple questions 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others.

Level: 1st Class of Primary

Unit: Spanish Ecosystem

Lesson: 4, Spanish Flowers

Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none">• To work cooperatively and individually.• To identify the essential information and main points.• To participate in a simple and a comprehensive way• To discover new flowers• To discover interesting facts about flowers	<p>Children will be able to:</p> <ul style="list-style-type: none">• Work individually and in groups avoiding conflicts.• Become aware of animals and plants of other environments• Put into practice the knowledge gathered during the previous two sessions• Identify some of the common Irish flowers and check with what they discovered during the walk	<ul style="list-style-type: none">• Showing an independence when they are working individually or in groups and asking for help when need.• Following simple oral instructions and the meaning of global explanations.• Performing simple tasks like those they have been presented.• Simulating the emblems of the teacher.

Discourse/Text targeted	Language targeted- Non-verbal L Targeted
<p><u>Prior learning activity</u> The activity consists of asking the children what they think about Spanish vegetation</p> <p><u>Booklet</u> Using the board and the computer, fill in the sheet about Spanish flowers altogether.</p>	<p>Eye contact and gaze, emblems...</p>

Outline of leading activity				
Comparison between Spanish and Irish flowers				
Timing	Grouping	Pupils	Teacher	Resources
3''	Main group	Review what we saw in the previous class	The teacher asks what pupils remember	
11''	Main group	Altogether fill the booklet on the page of the flowers	Ask questions about what they see the day before	Computer and board
5'	Main group	See pictures about the flowers	Show the pictures	Computer and board
11''	Main group	Compare what they have seen about Spanish and Irish flowers.	Ask questions about what they saw	

Assessment Criteria		
<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Observe, identify and explore a variety of living things in local habitats and environments (difference between Spanish and Irish) 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Shearing ideas clearly. • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others.

Level: 1 st Class of Primary Unit: Ecosystems, Ireland and Spain Lesson: 5, Irish common birds		
Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none"> • To work cooperatively and individually. • To identify the essential information and main points. • To participate in a simple and a comprehensive way 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Work individually and in groups avoiding conflicts. • Become aware of animals and plants of other environments 	<ul style="list-style-type: none"> • Showing an independence when they are working individually or in groups and asking for help when need. • Following simple oral instructions and the meaning of global explanations. • Performing simple tasks like those they have been presented. • Simulating the emblems of the teacher.

Discourse/Text targeted	Language targeted- Non-verbal L Targeted
<u>Prior learning activity</u> The activity consists of asking the children about our nature walk <u>Book</u> Using the board and the computer, fill in the page about Common Irish birds	Eye contact and gaze, emblems...

Outline of leading activity				
Relate the seen in the walk with what appears in the book				
Timing	Grouping	Pupils	Teacher	Resources
5''	Main group	Review what we saw in the previous class	The teacher asks what pupils remember	
15''	Main group	All together fill the book about Irish birds	Ask questions about what they see the day before	Computer and board
5'	Main group	Listen the song of the birds	Reproduce the song	Computer and board

Assessment Criteria		
<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Answer simple questions 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others.

Level: 1 st Class of Primary Unit: Spanish Ecosystem Lesson: 6, Spanish birds		
Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none"> • To work cooperatively and individually. • To identify the essential information and main points. • To participate in a simple and a comprehensive way • To listen and try to identify the bird song 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Work individually and in groups avoiding conflicts. • Become aware of animals and plants of other environments • Put into practice the knowledge gathered during the previous two sessions • Identify some of the common Irish birds and check with what they discovered during the walk 	<ul style="list-style-type: none"> • Showing an independence when they are working individually or in groups and asking for help when need. • Following simple oral instructions and the meaning of global explanations. • Performing simple tasks like those they have been presented. • Simulating the emblems of the teacher.

Discourse/Text targeted	Language targeted- Non-verbal L Targeted
<p><u>Prior learning activity</u> The activity consists of asking the children what they think about Spanish wildlife</p> <p><u>Booklet</u> Using the board and the computer, fill in the sheet of the booklet about Spanish birds</p>	<p>Eye contact and gaze, emblems...</p>

Outline of leading activity

Comparison between Spanish and Irish birds

Timing	Grouping	Pupils	Teacher	Resources
3''	Main group	Review what we saw in the previous class	The teacher asks what pupils remember	
12''	Main group	All together fill the booklet on the page of the birds	Ask questions about what they see the day before	Computer and board
4''	Main group	Listen to the sounds of the birds and imitate the sounds	listen to the sound of the birds	Computer and board
11''	Main group	Compare what they have seen about Spanish and Irish birds.	Ask questions about what they saw	

Assessment Criteria		
<p>All children must be able to</p> <ul style="list-style-type: none"> • Participate in the activities • Behave in a proper way 	<p>Most of the children will be able to</p> <ul style="list-style-type: none"> • Follow the instructions • Observe, identify and explore a variety of living things in local habitats and environments (difference between Spanish and Irish) 	<p>Some of the children could</p> <ul style="list-style-type: none"> • Shearing ideas clearly. • Understand illustrators • Asking and answering questions in a group setting • Responding to ideas of others. • Identify key words and talk about them.

Level: 1 st Class of Primary Unit: Spanish Ecosystem Lesson: 7, Spanish and Irish animals		
Learning objectives	Learning outcomes	Evidence for Assessment
<ul style="list-style-type: none"> • To work cooperatively and individually. • To identify the essential information and main points. • To participate in a simple and a comprehensive way • Differentiate between different types of ecosystems (Spanish and Irish ecosystem) 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • Work individually and in groups avoiding conflicts. • Become aware of animals and plants of other environments 	<ul style="list-style-type: none"> • Showing an independence when they are working individually or in groups and asking for help when need. • Following simple oral instructions and the meaning of global explanations. • Performing simple tasks like those they have been presented. • Simulating the emblems of the teacher.
Discourse/Text targeted		Language targeted- Non-verbal L Targeted
<p><u>Prior learning activity</u> The activity consists of asking the children what things they know about Spain. Make an scheme on the board</p>		Eye contact and gaze, emblems...

Booklet

Using the board and the computer, fill in the last pages of the booklet altogether.

Outline of leading activity

Compare the animals

Timing	Grouping	Pupils	Teacher	Resources
5''	Main group	Pupils say what they know about Spain	The teacher asks what pupils know about Spain	
15'	Main group	We do the last part of the booklet, the comparison between Irish and Spanish animals	The teacher will show important facts and we talk about if the children ever seen one of them.	Computer and board

Assessment Criteria

All children must be able to	Most of the children will be able to	Some of the children could
<ul style="list-style-type: none">→ Participate in the activities→ Behave in a proper way	<ul style="list-style-type: none">→ Follow the instructions→ Answer simple questions	<ul style="list-style-type: none">● Understand illustrators● Asking and answering questions in a group setting● Responding to ideas of others.

8.1 APPENDIX II

Booklet

Spanish Ecosystem



Name (nombre):

I observe my near ecosystem.

What did I see at school?

What did I see at home?

Spanish Wildflowers

A Copy each flower. Write the missing words. Use the word box.

Blue Sandy Spring Mediterranean Dunes Coastal



1. Eternal Flower
(Siempreviva)

This is a plant of dry stony places mostly found in the eastern M_____



2. Blue Pimpernel
(Anagallis)

Blue Pimpernel has deep b_____ flowers and blooms from spring to late autumn.



3. Sand Viper's-
bugloss (Viborera)

Sand Viper's-bugloss, is a creeping plant native to the s_____ areas of the coasts of the Mediterranean region.



4. Bermuda
buttercup
(Vinagrillos)

Bermuda buttercup is plant with shamrock-like leaves and occurs in coastal d_____, scrub, gardens, turf, urban areas, orchards...



5. Mallow Bindweed
(Correhuela)



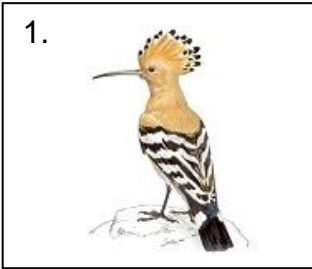
6. Sally-my-
handsome
(Uña de gato)

It is particularly resistant to harsh c_____ climatic conditions and to salt.

Common Spanish Birds

A Write the name of each bird. Use the correct colours to colour them.

Hoopoe Spotless starling White stork Capercaillie



H _____

Abubilla

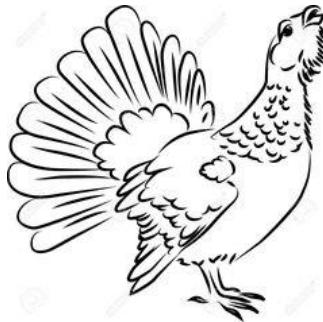
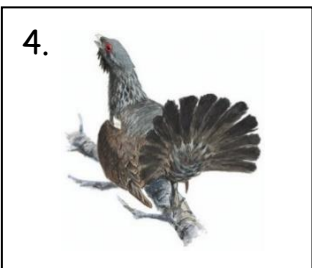


S _____



W _____

Cigüeña blanca



C _____

Urogallo

I compare Irish and Spanish animals

A Look at the pictures. Write the name of each animal. Use the word box.

Irish wolfhound Mastín español Gypsy cob Caballo andaluz
Blackface Mountain Oveja Churra



I _____

Originally a hunting dog used to hunt wolves or deer.

M _____

It is a grazing dog used mostly with sheep in rural mountain areas. Its mission is to protect the flock of the wolves.



Irish wolfhound Mastín español Gypsy cob Caballo andaluz
Blackface Mountain Oveja Churra



G_____

Is a type or breed of domestic horse from the island of Ireland. It is a small, solidly-built horse. It is particularly associated with the Irish Traveller and Romani travelling peoples of Britain and Ireland.

C_____

The Andalusian horse is a breed of Spanish horse native to Andalusia. It is an Iberian horse that is among the oldest horse breeds in the world.



Irish wolfhound Mastín español Gypsy cob Caballo andaluz
Blackface Mountain Oveja Churra



B _____

Is the most common breed of domestic sheep in the United Kingdom.

Blackfaces are horned in both sexes, they usually have a black face, and black

legs.

O _____

The Oveja churra is a sheep origin from Castilla y León. It is one of the most important autochthonous breeds in Spain due to its high dairy specialization.

