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**How to implement bilingual methodologies in
Primary Education in order to foster
students' motivation**

Student: Amaro Ruiz, Nuria

Tutor: Dr. Luciano García
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ABSTRACT

This research aims at carrying out an investigation regarding the different results obtained by means of the implementation of **certain methodologies** concerning **bilingual education and CLIL** within a **Primary Education** classroom located in an urban area of Andalusia.

In order to do so, after a process of literature review, we have designed a **Teaching Unit** following the principles we have found more useful and interesting in connection to the previous research when it comes to implementing this kind of programs. This Didactic Unit has been designed and implemented throughout one month for the **third grade of Primary Education** and it is based on **science contents**.

With regards to the above, we have **collected data** from the implementation process of this unit (questionnaires, different writings which contain students' opinion and reflection about their own learning process, and the teacher's observations) in order to carry out a **cross-sectional study** into what kinds of methodologies, activities, students and teachers' roles work well in the classroom, especially in relation to the promotion and acquisition of the student's communicative competence and the increase of the **student's intrinsic motivation**.

To this end, we have **analyzed these results**, both in a quantitative and qualitative way, in order to draw some **conclusions** regarding bilingual education.

1. INTRODUCTION

Throughout this section we are going to clarify what we intend with this study, that is to say: our main objectives and research questions, give some details concerning the justification and relevance of the piece of study we have chosen, and, finally, to name briefly which are the different sections we are going to find within this paper.

1.1. Objectives/Research questions

The major aim of the present research will be to gain more insight into the influence that the implementation of certain methodologies within the bilingual classroom has on its students, in this case those in the third grade of Primary Education, and their motivation towards the learning process. The focus will be on answering the following questions:

1. What is the contribution of **meaningful tasks and activities** to the increase of the students' intrinsic motivation when learning a school subject by means of a foreign language?
2. Do **ICTs and manipulative materials** promote and facilitate the implementation of the principles of constructivism and a learner-centred approach when it comes to engaging students into the classroom?
3. Does the **use of English as a means of communication** for real purposes make the learning process more enriching and successful?
4. Is **interaction** and **cooperative learning** the best way to ensure a meaningful learning of the contents?
5. Do students' and teachers' **roles** play an important part when enhancing students' interest towards learning?

1.2. Justification and Relevance

Firstly, we have decided to draw our attention to the issue of **bilingual education and CLIL programs** since there is no doubt that the possibility to communicate in a foreign language is a pressing need in present-day society. Especially English as it has become a lingua franca of the whole world.

Foreign language education, in line with current innovation trends all over Europe, plays a central role in our primary curriculum development as it has been included in LOMCE and its Royal Decree 126/2014. Indeed, Andalusia represents an example of this current situation. The Ministry of Education has developed a new global linguistic policy for our Autonomous Region based on the theoretical principles of the *Common European Framework* (Council of Europe 2011) The new Bilingual Centres will promote the teaching and learning of some fields of knowledge using two languages at least (an L1 and an L2). The plan that regulates this is *The Plurilingualism Promotion Plan: A language policy for Andalusian society* (March 2005).

This interest in linguistic diversity is justified both educationally and socially. On the one hand, learning meaningful contents in a foreign language by means of motivating tasks helps the students to their cognitive development and facilitates the transmission and acquisition of knowledge in other subjects. On the other hand, it fosters tolerance and respect towards other languages and cultures. Thus, children become more understanding and tolerant citizens in a multicultural society in order to overcome barriers of prejudice and discrimination.

Secondly, we have focused our attention on those methodologies and techniques which work well into the bilingual classroom bearing in mind the most important aspect to ensure a successful learning process: students' **motivation**.

A teacher who is attempting to teach, without inspiring the pupil with a desire to learn, is hammering on a cold iron.

We can use these words by Horace Mann to make sense of what we intend to explain. That is to say, our main aim as teachers is the development of autonomous learners, taking into account that teaching is a creative task, not simply the transmission of information. We have to guide, encourage and involve our students in their own learning process in order to get an integral formation of each student.

In relation to this, we must say that, in the last few years, many researchers have focused their attention on this topic and have carried out different investigations into bilingualism but, although it has become one of the most significant discussions nowadays, there is no real agreement about which methodologies teachers must follow in order to ensure success when implementing these programs. Generally speaking, teachers, students, and families are not very happy with the results since it does not seem to work. For that reason, this study is intended to solve some of these lacunae, and give some responses to those prior investigations, from a practical point of view.

1.3. Sections

To begin with, in the first part of the investigation, a comprehensive picture of bilingual education and CLIL models is drawn to serve as a basis on which our study is based. In line with this, we intend to provide enough background information to ensure a better understanding of this approach. It is important to highlight that, in that section, we are going to focus the attention towards different methodological principles in order to investigate later which ones turn out to be more successful in terms of motivation.

In the second place, before this brief introduction about bilingual education, we will point out some of the most remarkable aspects of the Teaching Unit we have designed following the methodological principles we have found appropriate after our prior period of literature review and using our own experience in this field. Specifically, we will take into account the real context, the methodology followed, the different tasks and activities proposed, and, finally, the means of assessment we have used. It has been designed and implemented throughout one month for the third grade of Primary Education and it is based on science contents.

In the third place, we want to draw the attention towards our piece of research itself. In these sections, data are to be found concerning the methodology followed in this research and a detailed discussion on the results obtained.

Finally, the final section addresses to the principal conclusions, inclusive of the limitations of the study, suggestions for improvement, and lines for future research.

2. LITERATURE REVIEW

After the brief previous introduction, the next main heading is the literature review, which turns out to be crucial in order to contextualize our piece of study. In order to do so, we will relate previous research in this field to the specific objective of our investigation. As we have detailed in another section, the major aim of will be to gain more insight into the influence that the implementation of certain methodologies within the bilingual classroom has on students, especially in relation to motivation. For that reason, we will stress two different points: on the one hand, we are going to critically summarize the main methodologies concerning bilingualism and CLIL according to prior research and, on the other hand, we will study the term motivation itself and what some important authors have to say in connection to this.

Before getting into detail, we think it is important to clarify the definition of the term **bilingualism or CLIL**. CLIL refers to situations where subjects, or parts of subjects, are taught through a foreign language with dual-focused aims, namely the learning of content, and the simultaneous learning of a foreign language (Marsh, 2002).

A CLIL lesson is therefore neither a language lesson nor a lesson transmitted in an L2. According to Coyle (1999:10), a successful CLIL lesson should combine elements of the following:

- Content: progression in knowledge, skills and understanding related to specific elements of a defined curriculum.
- Communication: using language to learn whilst learning to use language.
- Cognition: developing thinking skills which link concept formation, understanding and language.
- Culture: exposure to alternative perspectives and shared understandings, which deepen awareness of otherness and self.

In a CLIL lesson, all four-language skills should be combined. Tasks designed for production need to be subject-oriented, so that both content and language are recycled.

After our research into this matter, we think it is important to extract from all the information which are the **major aims** of CLIL that could be summarize into the following lines:

- Introduce learners to new ideas and concepts in curriculum subjects
- Improve learners' performance in both curriculum subjects and the target language
- Encourage stronger links with the citizenship curriculum
- Increase learners' confidence in the target language
- Make the content subject the primary focus of classroom materials
- Enable learners to access curriculum subjects by adapting lesson plans to take into account students' ability in the target language
- Provide cognitively challenging materials from the beginning
- Provide scaffolding to support learning of content and language

Despite the heterogeneous nature of CLIL models we have found throughout our research process, there are some features which make it a distinctive approach to classroom implementation. The prototypical characteristics which underlie all CLIL programs can be classified in terms of the following aspects: theory of language, theory of learning, learner and teacher roles, language level targeted, use of L2, methodology, and materials.

The **theory of language** underpinning CLIL sees language as a means of communication and emphasizes meaning rather than form. Language is not a system of grammatical rules. The foreign or second language is used as the medium of instruction; it is the vehicle through which the subject matter content is learned. As Dalton-Puffer et al. (2014: 215) put it, "CLIL is timetabled as content lessons". Language is thus employed to teach new information and to communicate, thereby heightening linguistic exposure. In this sense, learners can continue their academic and cognitive development while acquiring language proficiency, thereby learning both BICS (*Basic Interpersonal Communication Skills*) and CALP (*Cognitive Academic Language Proficiency*) (Cummins 1999).

On the other hand, the *theory of leaning* is mainly grounded on constructivism and cognitive theory. Indeed, CLIL provides meaningful learning opportunities by building on the students' previous learning and calling on their prior knowledge, skills,

attitudes, interests, and experiences. It is what Wolff (2002) and Marsh (2006) term education through construction rather than instruction. It is based on the premise that languages are learned more successfully when students are engaged in meaningful activities and when the information they are acquiring is seen as interesting, useful, and pertinent. CLIL thus makes learning appropriate to students' specific cognitive and affective needs and attunes it to their proficiency level.

In line with the constructivist principles on which it is based, CLIL favors learning by doing, something which necessitates an active **role** on the part of the **learner**.

In compliance with the foregoing, **teacher roles** are also redefined. Then, the role of the teacher moves between the traditional role of a controller/instructor and that of a manager, whose function is to create adequate conditions for learning. Overall, teachers need to assume the following roles (Richards & Rodgers 2001:35):

- a) Manager: the teacher plans the lesson, organizes students in the classroom so that they can work in the most efficient way and deals with any problems that may come up during lessons. The teacher as manager tries to set up activities in which students can take responsibility for their learning and learn on their own and in collaboration with other learners under the supervision and guidance of the teacher
- b) Evaluator: the teacher evaluates students and gives constructive advice that can serve to improve their performance
- c) Counsellor: the teacher is sensitive to the students' difficulties and gives advice while being careful not to harm students' self-esteem as learners. The teacher as counsellor tries to develop the students' confidence that they can overcome learning problems and to maintain their motivation
- d) Information source: the teacher is a permanent source of information about the target language and culture and about other sources of information which students can use to become more autonomous learners
- e) Participant: the teacher acts as simply another, although better, language user who interacts with the learners naturally and conversationally
- f) Researcher: the teacher reflects on the teaching/learning process and on the students' behaviour with a view to adapting the teaching to the students' needs and interests. The teacher as researcher investigates the efficiency of the

methods s/he uses, observes what works well on the classroom and what does not, tries out new techniques and evaluates their appropriateness and efficiency

- g) Prompter: the teacher encourages students to participate and gives them suggestions on how they may proceed in an activity if they seem confused about what to do next
- h) Tutor: the teacher gives students guidance and advice on the work students do on their own, such as self-study or project work of their own choosing

Consequently, they must not only master the foreign language, but must also have expertise in the subject content. This requires intensive staff training in pedagogical and theoretical aspects of language acquisition, as Madrid and McLaren suggests (2004:95). CLIL teachers need to be highly committed, enthusiastic, long-term and stable, linguistically proficient, and innovative, as the success of bilingual programs ultimately depends on them. However, unlike other dual-focused programs, CLIL does not require teachers to have a native-like command of the language (e.g., in Andalucia, practitioners who participate in CLIL programs must accredit a B2 level).

This is in harmony with the **language level targeted**: in line with current innovation trends, it is a functional vs. a native-like competence of the language studied which is pursued.

The **amount of exposure** to the L2 can, in this sense, be lower, as age of onset of language learning tends to be pushed back in CLIL contexts. A final trait of CLIL on the linguistic front affects the **languages taught** through CLIL, which are mostly “major or minor international *linguae francae*” (Dalton-Puffer et al. 2014: 215), with English holding a hegemonic position.

When it comes to **methodology**, CLIL is a bid to bring innovation into the classroom, realigning teaching with modern pedagogical practices. It represents an opportunity to move from declarative to procedural knowledge and to minimize the transmission of knowledge model of education, in keeping with the post-methodology era we are currently living. Task-based learning, collaborative work, or meaning- and form-focused processing are all considered pivotal in fostering this transformative pedagogy.

Finally, in terms of the types of **materials** employed, they are usually adapted or originally designed, as opposed to authentic ones. ICTs play an important role within them.

Secondly, as for the term ***motivation***, it may be defined as an internal drive which encourages someone to pursue a goal (Humphreys and Revelle 1984:157). We can make a distinction between short-term motivation and long-term motivation. *Long-term motivation* may be a wish to get a better job at some time in the future. *Short-term motivation* may consist in wanting to pass and end-of-term exam or curiosity to find the solution to a task. *Short-term motivation* is the only motivation that we can rely on in Primary Education as children have no awareness of the importance of English in their adult lives.

From another perspective, motivation may be divided into extrinsic motivation and intrinsic motivation.

According to Gardner (1985) *Intrinsic motivation* is the students' own wish and interest to learn a language. *Extrinsic motivation* is the students' desire to obtain a reward for learning, such as a good mark in an exam or a prize. *Intrinsic motivation* is much more effective as a means of encouraging students to learn than extrinsic motivation.

Another distinction is made between *instrumental* and *integrative motivation*. *Instrumental motivation* consists in wanting to use the knowledge of L2 as an instrument to achieve a result, e.g., to get a good job or to be able to read specialist literature in L2. *Integrative motivation* is the wish to learn a language in order to communicate with the native speakers of the language and get to know their culture.

For most psycholinguistics, either in a language learning situation or in a SLA context, the importance of the learner's attitudes and motivation plays a major role. A quick look at the major theories of language acquisition will suffice to demonstrate this. Krashen's monitor model (Krashen and Terrel 1983) considers attitudes and motivation as influential factors in language acquisition. The learner's motivational level acts as an affective filter on language intake. Ellis (2000), in his Integrative Theory of L2 Learning, states that learning Styles also functions as a filter, and that only learners with a positive affective orientation to L2 are likely to benefit from the instruction. Carroll's (1980) reinforcement model argues that language learning begins when the learner feels motivated to communicate something to someone. Gardner's (1999) socio-educational model considers the learner's intelligence, aptitude, motivation, and attitudes as factors which determine the learner's outcome. Attitudes and motivation play a primary role both in L2 and SLA contexts.

With regards to the above, a detailed knowledge and awareness of the main sources of motivation for our students should constitute the bases of the English curriculum planning and implementation. We should bear in mind these when selecting the topics, contents, and learning activities and try to meet pupils' needs and interests, in a negotiated curriculum, in order to foster their motivation towards learning.

In a learner-centred approach, we should also adapt our teaching styles and methodology to the pupils' different learning styles and levels to stimulate and maintain the motivation and positive attitude of all students, facilitating a successful learning experience.

With regard to young learners, neither of the two traditional concepts of motivations (integrative and instrumental) may be applied. Young learners' need for self-expression is realized through participating in such activities as using manipulative materials, create wallcharts and handcraft, playing games and the like. These activities will be the ways and means that may sustain and increase their motivation for foreign language learning. This view can lead to the concept of activity motivation for young learners. The activity motivation is in line with the general belief that children learn best by doing, and should be taken into account in the curriculum design when planning learning activities.

Thus, even if language students have no personal long-term motivation, teachers can select topics and activities that serve to motivate them in the short term. If an activity can stimulate interest and involvement, it is very likely that students will learn something from it.

In line with this, we have found out that most current pedagogies encourage teachers to implement the so-called ***learner-centred approach***. Learner-centred classrooms place students at the centre of classroom organization and respect their learning needs, strategies, and styles. In learner-centred classrooms, students can be observed working individually or in pairs and small groups on distinct tasks and projects. The transition from teaching the entire group to meeting individual learner needs involves extensive planning and task-specific classroom management. Throughout this paper, we will develop this approach from several angles paying special attention to the redefinition of teacher's and students' roles.

Learner-centred approach redefines learning as individual "discovery". Nunan, D. (2010) offers a useful definition of learner-centred learning. He states that learner-centred learning gives learners greater autonomy and control over choice of subject

matter, learning methods and pace of study. The learner-centred education is the perspective that couples a focus on individual learner's heredity, experiences, perspectives, background, talents, interests, capabilities and needs. It also focuses on the best available knowledge about learning and how it occurs and teaching process that are effective in promoting learner motivation of highest degree.

The humanistic movement in education has always impressed upon the personal and subjective feelings of learners and what learners as 'whole person' go through as they try to learn. Confidence building, creating an anxiety-free atmosphere for learning and emphasizing what learners know, rather than what they do not know, are the things that characterize humanistic teaching.

This approach, therefore, emphasises learners' affective involvement in learning process. Another important trend in the learner-centred approach has been the stress on learning strategies. Learning strategies are used by the learners to develop different types of skills and reflect their attitudes and learning preferences.

The stress on individualization emphasises the need for production of materials that are flexible and responsive to learner needs and pace. The tasks are also more open-ended in that learners should be able to make sense of materials according to their own capabilities. Learners, therefore, have to take more responsibility for their own learning through trial and error. This would mean less teacher mediation and interference and more self-directed learning leading to learner autonomy. However, there is a need for learners to be aware of gaps in their skills and knowledge, weaknesses and strengths and how they could be handled. This does not take away the overall responsibility of the teacher, nor minimize his/her role, in fact it requires a redefinition of the teacher's role. In this case we are talking about the teacher as a **classroom researcher**. In other words, the teacher investigates the efficiency of the methods s/he uses, observes what works well on the classroom and what does not, tries out new techniques and evaluates their efficiency. In line with this, it will be necessary to have a good knowledge of the students in class, the pedagogy and didactics to be applied, as well as the curriculum and the environment.

Learner-centredness assumes that people learn and develop through experiences that involve the exercise of their autonomy, and develop their abilities to become autonomous learners through the very experiences of professing their autonomy. It gives learners a learning context where they can select an area of interest and then cater to the quantity and kind of resources for learning to their own particular learning needs

and motivation of study. The learner-centred approach is not necessarily intended to replace existing methodologies but provide a framework for a variety of teaching methods geared to enhance learning and foster motivation.

After reading several pieces of research of other authors we have drawn some conclusions regarding CLIL and its implementation into the classroom, especially in our context (Andalusia). We must say we have identified inadequacies in the methodologies and materials selected when putting bilingualism into practice. Generally speaking, we think they are quite repetitive, theoretical, product-oriented, and form-focused. In other words, they could be demotivating for students. That is the main reason why we have decided to focus on this matter and provide our own didactic proposal and study the results of its implementation in a real classroom.

3. DIDACTIC PROPOSAL

Once we have studied in detail, and analyzed critically, the main methodological guidelines underpinning CLIL and bilingual education and our research regarding the concept of motivation itself and some practical applications, we will focus the attention towards the characteristics of the specific learning context in which we are going to implement our teaching unit and carry out this study.

3.1. Contextualization

As we said before, this teaching proposal has been implemented within a class in the **3rd grade** of Primary Education in an urban area of Granada. There is a group of 22 students, aged between 8-9 years old. Before planning a lesson, it is important to know our students in order to cope with their interests and needs before deciding which activities are more appropriate for our group of learners. In this case, they **love playing with others** and friends are of great value for them, so cooperative work will play an important role in this class. Generally speaking, it is a cheerful, dynamic and cohesive group, where they are all willing to participate and learn.

When it comes to the classroom, we will remark it is **well equipped** concerning audiovisual technical resources: there is a digital whiteboard and one laptop per couple of students. Besides, online connection is available, which facilitates the resolution of the proposed activities and tasks during the regular lessons.

Finally, it is worth to mention that the seating arrangement changes depending on the task and its characteristics. On a regular basis, the desks stay in a **U shape** since

it allows easy face-to-face with everyone else in the group and it is really useful to foster students' interaction. Besides, it makes it easy to attract and keep students' attention. However, in order to carry out some interactive activities we distribute the desks in groups or in rows of desks in pairs.

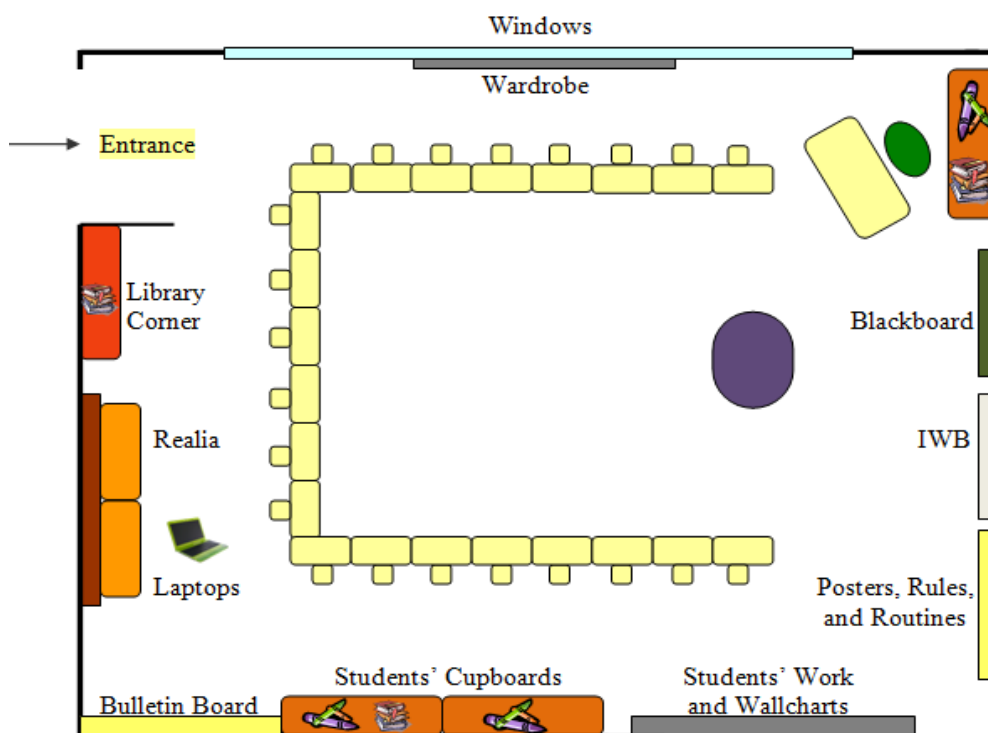


Figure 1. Classroom arrangement.

*Note: It is worth indicating here the source from which we have taken all the figures, tables, charts, and pictures. In this case, all the graphic material in this paper is the author's.

3.2. General methodological guidelines

Firstly, we would like to highlight that teachers must design their own methodology, adopting an active role within the classroom. We have to analyze, interpret, and reflect on the things that happen in our classroom, being aware of the school sociocultural reality and, specifically, of the students' needs, motivations and interests. In that sense, we adopt an **eclectic approach**, in which combinations of different methods are used to meet the demands of particular teaching situations. That is the reason why we, as teachers, have to know the characteristics of the different teaching methods before putting the theory into practice in our class. Gilbert Chesterton exemplified it brilliantly:

That is the one eternal education: to be sure enough that something is true that you dare to tell it to a child.

Next, we shall detail the main Learning Theories and Language Learning Theories we have used in our classroom, their characteristics, and how they are implemented:

LEARNING THEORIES		
Theories	Characteristics	Classroom techniques
Constructivism (Piaget and Dewey)	Children construct their own learning applying their previous knowledge to new situations and integrating the knowledge obtained with pre-existing intellectual construct. Experiential learning (Dewey): learning through reflection and conceptualizing to action and on to further experience.	We use students' previous knowledge to provide them with a significant knowledge . They construct their new knowledge by means of experiencing and discovering. Learner-centred teaching. Students are the real protagonists of their learning process. Their role is completely active and participative.
Sociocultural approach (Lev Semenovitch Vygotsky and Jerome Bruner)	Children learn as they interact with others. Learning is a social phenomenon which takes place in a specific sociocultural context.	Interaction is essential in the learning process and contributes to develop social attitudes and collaborative skills. Problem-solving contexts are crucial. For that reason, we are going to focus on group work.
Multiple intelligences (Gardner)	People can be intelligent in many ways by identifying nine intelligences : visual, spatial, linguistic, mathematical/logical, kinaesthetic, musical, interpersonal, intrapersonal, naturalistic and existentialist	Knowing the type of intelligence which each student owns is important to adapt the teaching-learning process to them and achieve a more personalized instruction and assessment .

Emotional Intelligence (Goleman)	Non-cognitive skills are related to the successful achievements in many aspects of the human's life. These skills are self-awareness, emotional self-management, empathy and social skills among others.	Developing intrapersonal and interpersonal skills influence notoriously the learning achievements and the relationships among students (good learning atmosphere).
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Table 1. Main Learning Theories used in our classroom.

LANGUAGE LEARNING THEORIES		
Theories	Characteristics	Classroom techniques
Communicative Approach (Widdowson, Johnson).	Language is considered a means of conveying meaning where the main function is to allow interaction and communication by using the four skills.	Our main goal is to develop student's communicative competence . All tasks and activities are based on interaction and communication among the students.
Task-based approach	Children carry out tasks which require the use of meaningful language and interaction, communication, manipulation, and comprehension of the target language to achieve a goal .	Tasks are used to achieve a specific goal by using the target language .
CALL (Computer Assisted Language Learning)	Children learn the language using computers and the Internet in the classroom. It is motivating and provides authentic material.	Digital technologies are used to bring variety to the classroom and provide authentic material to work with in order to foster participation and enhancing motivation.

Table 2. Main Language Learning Theories used in our classroom.

Now, it is the turn to focus on the specific **methodological principles** we have selected, after our previous process of research and taking into account the methodological guidelines which are established in LOMCE 8/2013, when it comes to implementing our teaching unit:

- Regarding the language teaching method employed we should remark the Communicative Language Teaching. Some characteristics of this method are:
 - Activities are related to real communication and interaction
 - Activities use language for meaningful tasks
 - Language used is meaningful for the learner
- The use of L1 is limited to a minimum on the part of the teacher. Furthermore, the teacher encourages students to use English into the classroom as much as possible. However there are some situations where it is necessary to introduce some terms or clarifications using the students' mother tongue in order to overcome communication problems. On the other hand, students can use the mother tongue whenever necessary. The Primary curriculum guidelines recommend introducing oral skills (L/S) before written skills (R/W). In the same way, receptive skills (L, R) usually take place before productive skills (S/W), and we should facilitate opportunities for children to practice all of them but they can use their mother tongue whenever necessary at this stage.
- Emphasis of fluency rather than accuracy, realistic and motivating language practice, and development of the four language skills: listening, speaking, reading, and writing.
- Learner-centred: focused on students' needs and interests in order to enhance motivation.
- Development of learning strategies, personal initiative and autonomous learning.
- Teacher's role: the teacher acts as a guide enabling children to construct their own knowledge and as a classroom researcher.
- Students' role: active, participative. Increasing responsibility and autonomy.
- Affective filter: developing self-esteem and create a good classroom atmosphere and giving praise and encouragement when necessary.
- Treatment of errors: Mistakes are a great opportunity to build up the correct knowledge in an active way.

- Great variety of interaction patterns to keep interest and concentration. Giving special emphasis to group work and cooperative learning since the learners can benefit from each other.
- Task-based learning: since they are necessary to use English for effective and real communication and make the contents meaningful and significant for the learners.
- Introduction of ICTs into the classroom since they are highly motivating and demand interaction on the part of the students.
- “Spiral” Approach: previously taught vocabulary and structures are reintroduced in subsequent lessons whenever possible.
- Regarding attention to diversity, we should remark the following:
 - We provide different input levels to respond to the students’ individual needs, so the framework is the same for all of them but with different levels of difficulty.
 - It has also been taken into account that learners possess individual learning styles, preferences and multiple intelligences. Consequently, in the lesson planning we have included different types of input and output such as, videos, language activities, handcraft tasks or communicative activities.
 - Continuous assessment is used to take into account the whole student’s learning process.

3.3. Tasks and activities

As for the activity types, it is worth stressing some kinds of activities divided into the three moments of classroom implementation:

Warming up	Activities based on brainstorms supported by visual materials, debates, watching videos related to the contents which are going to be presented, etc. Thus, we will create an English-speaking atmosphere which makes our students feel comfortable and willing to participate in classroom interaction.
Development of the lesson	Generally speaking, we make use of group and pair work in which students have the chance to interact and benefit from each other to complete a meaningful task and create a final product that they presented orally in front of their classmates

	at the end of the class by using ICTs or by means of handcraft activities. (wallcharts, interactive posters, comics, manipulative materials, different mockups, etc).
Cool down	Classroom reflection and debates with the teacher, completing the student's portfolio in order to reflect on their own learning process and the use of the language, playing a board game to reinforce and revise the contents children had learned in a fun and motivating way, and so on.

Table 3. Types of activities depending on the three different moments of classroom implementation.

Finally, we must mention that **extension and reinforcement activities** are provided to assist different levels of proficiency and ensure the individual development of each student. As for this point, we must say attention to diversity is a fundamental principle which must be taken into account as it is stated in LEA 17/2007 and the Order of 25th July 2008.

Now, in the subsequent lines, we think it is important to indicate which are the objectives and contents that students will work within this Teaching Unit; as well as the key competences we intend to develop by means of the different tasks and activities proposed.

With regards to the above-mentioned, we will present the specific objectives, contents, and competences concerning this unit which have been designed and stated following the guidelines we can find in LOMCE and its R.D. 12/2014 regarding the area of Science.

OBJECTIVES

- Learn the main bones, muscles, and joints which form the human locomotor system, as well as understand how they work.
- Know the different organ senses and associate each one with their specific functions.
- Differentiate healthy habits from those which are not.
- Use the Information and Communication Technologies in a efficient, autonomous, and responsible way.

- Create their own learning materials such as posters, wallcharts, mockups, and so on, by means of different materials in order to assist the effort of understanding the contents of the unit.
- Work cooperatively on specific activities and tasks, respect classmates and value others' opinions.
- Reflect and self-evaluate the work done during the unit.

CONTENTS

- Learning of the human locomotor system: bones, muscles and joints.
- Recognition of the five senses: organs, different parts, and functions.
- Understanding and recognition of different healthy habits.
- Development of students' self-concept and show of respect towards individual differences.
- Reflection on one's own knowledge and learning progress through self-assessment.

COMPETENCES

Royal Decree 126/2014 (article 2) includes the so-called key competences. Each subject contributes to the development of different skills and at the same time each competence will be achieved as a result of working in several areas. Regarding the proposal made by the European Union, there are seven basic competencies which have been taken into account in all the tasks and activities we have proposed:

Linguistic communication. It refers to the use of language as a means of oral and written communication; interpretation and comprehension of reality. This competence will be developed by means of oral presentations, debates, dialogues, oral and written activities, etc.

Mathematic competence and key competences in Science and Technology. They may be addressed indirectly when learning about the human body. We will contribute to the improvement of this competence by way of activities such as sorting and ranking activities and, of course, by knowing the human body and the role it plays on the interaction with the World we live in.

Digital competence. It consists of having the abilities to search, process and communicate information to transform it into knowledge. This is something we will do

throughout all the lessons when carrying out different meaningful tasks since students need to use computers and the Internet in every single lesson.

Learn to learn competence. It involves having the abilities to learn in a more efficient and autonomous way. The students' portfolio is envisaged as a decisive tool to enhance this reflective process as well as the different debates and dialogues we will foster at the beginning and ending of each lesson.

Social and civic competence. It makes it possible to understand the social reality in which we live. activities in which situations children participate in pair and group activities that involve social interaction, expressing their own ideas and listening and respecting the ideas of their classmates.

Sense of initiative and enterprising spirit. As a result of reflection, students will develop this competence. We will contribute to this competence by making the students to take an active role into the learning process. Thus, it will be carried through the following activities: elaboration of their own learning materials, carrying out tasks, decision-making, planning, problem solving situations, etc.

Awareness and Cultural manifestations. We will work on this competence in an implicit way by means of handcraft activities in which students have to use their creativity and develop their aesthetic sense.

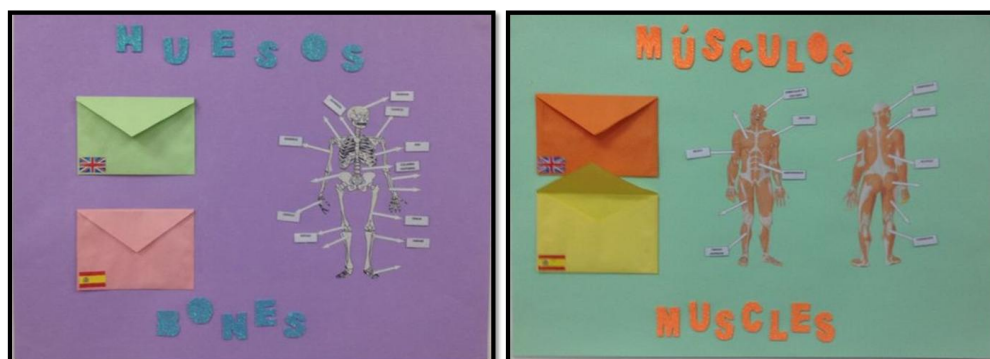
Once we have specified the different objectives, contents, and competences concerning this Teaching Unit, we will present a brief list of examples of the different kinds of tasks and activities proposed:

1. Involving pupils in material design

In the learner-centred approach, students should have an influence on the content and shape of classroom materials in order to adopt an active and participative role within their own learning process. It must be said here that the materials are designed on the basis of:

- Research in child psychology
- The experience of teachers working with the age groups that the materials are designed for
- Direct observation of our own group of students to know their particular interests, needs, and motivations.

As an example, we can use these manipulative wallcharts which students have designed and made in order to learn and practice as many times as necessary the different muscles and bones both in English and Spanish.



2. Meaningful tasks: wallcharts, interactive posters...

They involve children in looking for information, reading, writing and oral presentation. Its benefits have been widely recognized for many years in the teaching of different subjects, especially in Science.

Thus, tasks allow students to use their imagination and the information they contain does not always have to be factual.

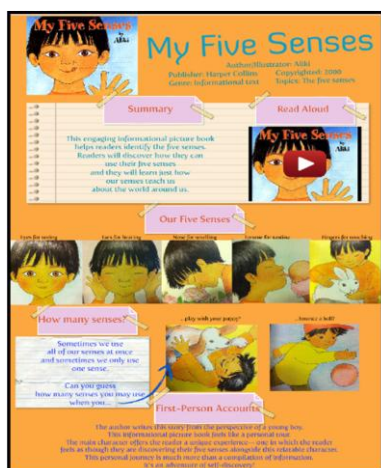
Madrid and McLaren (2004) points out the following characteristics:

- Creative: they are creative in terms of content and language. Each one is a unique piece of communication, created by the students themselves.
- Personal: they make pupils work on a very personal and educative experience.
- Hard work: the authors of the project have to find information about the topic, collect or draw pictures, write down their ideas and put all the parts together to form a coherent presentation.
- Adaptable: it can be used at every level, from beginner to advanced and with all ages.

For all these reasons, tasks captures better than any other activity, the elements of a communicative approach: a concern for motivation, a concern for relevance, and a concern for educational values.

The final results of these tasks are collected into a wallchart that students create by means of different materials.

In this case, we have selected these two examples of tasks. In the first one, students have carried out a research using the Internet to find information and new ideas regarding healthy habits in relation to hygiene, doing sport, adequate body postures, rest, and so on. Once they finished the research process, they reflected the main information obtained and selected in the lapbook we can see in the first picture which they create with different materials and using their own ideas and creativity. In the second picture, students have followed the same process, but this time, the task aims at selecting several measures and advices regarding the care of the different sense organs.



Besides, in some occasions, the information is collected into an interactive poster by means of the following online tool: www.glogster.com which enables them to include all the information they need and visual support in order to assist their effort when facing speaking orally in front of their classmates. They can print it from the internet or play it directly from the whiteboard in the classroom since they can add links, youtube videos, audio recordings and so on.

3. Information and communication technologies

Nowadays computers are present everywhere and most children are getting used to using the computer as a form of entertainment, communication or for school related activities. So, when introducing these new technologies what we are doing is simply bringing the real world into the classroom.

In line with this, some examples of activities are related to videos which turn out to be really useful when it comes to presenting the contents and catch our students' attention, playing with interactive games available on the Internet connected to the topics studied or taking benefits from online software such as the following tool:

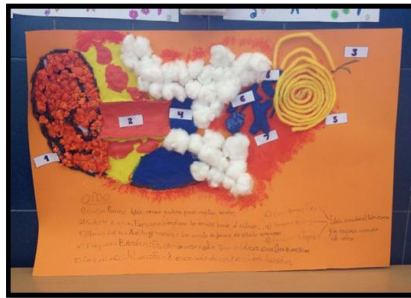
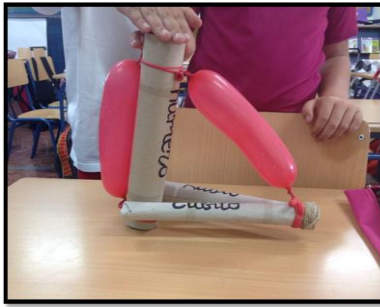
www.voki.es which enables students to practice their pronunciation before every oral presentation of their work in an engaging way. They can create and personalize their own avatar and record their voices. By listening to themselves they can become aware of the sounds of English and practice with suprasegmental features such as tone, rhythm or intonation.



4. Manipulative materials devised by the students

Teaching is not a repetitive profession. Creativity, as one of the basic competences to be promoted through education, must be a permanent feature within the classroom of Primary Education. As we have pointed out in previous sections, students seem to learn better by doing so working with handcraft activities and making their own learning materials could be one of the best ways to assimilate new concepts and motivate students' at the same time since they feel directly involve into the activity.

As can be observed in the following pictures, throughout the process of implementation of the Teaching Unit the learners had the opportunity to study some of the main concepts, structures, and functions by means of creating visual and manipulative models and mockups. As an example, we have chosen these ones in connection to how the muscles of the arm work; the internal structure of a bone; and the structures, elements, and functions of the ear, the skin, and the human eye.



5. Games

We think these kinds of activities could be a good method to reinforce what children have learned about this topic in a fun and motivating way. Furthermore, they may be used as an assessment tool since the results of this game could give us useful information about what students have really learnt.

In this example, students have created the game board with recycled paper, sponges, etc. Game questions are designed trying to include the most important aspects that students have learnt during this unit. It is important to remark that it includes questions both in English and Spanish.



6. Classroom debates, brainstorm, and reflections.

If we want to make our students feel they are the real protagonist of the process they need to be listened. Children should have the opportunity to share their ideas, opinions and feelings throughout the three moments of classroom implementation we mentioned before: warm-up, development of the lesson, and cool-down. Students' opinion can arise spontaneously; take the form of brainstorm at the beginning of one lesson in order to connect with their prior knowledge, or as classroom debates in order to reflect on the learning process.

We should encourage children to reflect on what they have learnt and think if there is something that they like or they do not like. Furthermore, this may be a chance to link the contents with their daily life and personal situations. The purpose is to foster children to self-evaluate their performance and their work, at the same time the teacher obtains valuable information about what things work into the classroom and what does not.



3.4. Assessment

To begin with, it is important to clarify that “assessment” is defined as the process that a teacher conducts to measure how much a student has learned. In this syllabus design is developed taken into account R.D 126/2014 and the Order of 10th August for Primary Education in Andalusia.

Assessment is parallel with other curriculum activities and may occur at various times during the planning and implementation phases, as well as during a specified evaluation phase.

The purpose of assessment is to determine whether or not the objectives of a course of instruction have been achieved. In the case of a failure to achieve objectives, it is the purpose of evaluation to make some determination of why this might have been so.

In a learner centred approach, which is the model we have chosen, evaluation takes the form of an ongoing monitoring, continuous assessment, which is carried alongside the teaching-learning process.

Self-evaluation by both teachers and learners will also be promoted. By providing learners with skills in evaluating materials, learning activities and their own achievement of objectives, evaluation is built into the teaching process.

Furthermore, we intend to develop learners training to identify causes of learning failure and also to suggest remedies. Such consciousness-raising activities can assist learners to monitor and evaluate their own learning processes.

In line with this, we have divided the assessment tools into two sections:

A) Student's assessment tools

- **Teacher's observation sheets.** It provides individual information of the students about particular learning outcomes, especially those involving performance activities, group work, classroom interaction and participation, degree of motivation, attitudes, etc.
- **Students' Portfolio.** The portfolio is a source of information for the teacher and the students. The portfolio shows what they already know concerning the contents studied and keeps a record of their work. Besides, it is a valuable source of information which let us assess students' progress and at the same time, they can self-evaluate their work.
- **Final Tasks.** They give us valuable information about the success or failure of these tasks and also of the level of attainment of the goals by the students.
- **Game:** as we have mention before, the answers students' give when playing the final game and the results obtained at the end of the activity may be used as an assessment tool since the results of this game could give us useful information about what students have really learnt.

B) Tools for the assessment of the teaching-learning process

- **Teacher's self-assessment sheet.** It provides information about the teaching performance and the level of attainment of the proposed objectives in order to improve different aspects.
- **SurveyMonkey software.** Students assess the elements of the curriculum and the teacher's performance by answering anonymously an online questionnaire.
- **Student's portfolio.** It provides information about the level of attainment of the objectives and competences which are used to assess the activities, tasks...

4. METHODOLOGY

Now, we move on to explain in detail which are the main characteristics of our particular piece of research. That is to say, the specific research designed we have followed, our sample, the variables we have established, the different instruments used, and finally, information regarding the data collection and analysis process.

4.1. Research Design

Firstly, we will start by saying this study is a practical one, since is referred to specific methodological principles, tasks and activities used within a selected classroom.

Secondly, we can consider that, according to the source of information, this is an instance of primary research as it involves different questionnaires, written opinions, and direct observation of the participants of this study.

According to the approach, this work is holistic because it allows us to view the separate parts of the learning process as a coherent whole (methodology, learning and language theories, activities, materials, etc.).

As for the purpose, this study is deductive. It begins with some hypotheses or research questions and then we search for evidence to answer or support them.

According to the type of data, this piece of research is intended to be qualitative and quantitative, since it makes use of both types of techniques, although we have given more importance to the qualitative analysis of the data obtained.

When it comes to the time of collection, we can consider this is a cross-sectional study since it is carried out at a single point in time (four weeks).

Finally, regarding the method of analysis, we could say it is both an interpretative and statistical one, as we have said before, since it combines objective and more subjective techniques.

4.2. Sample/Participants

A sample of 22 students (aged between 8-9 years old), belonging to the third grade of Primary Education, was drawn from the population of 198 students of a bilingual school located in an urban area of Granada. In this case we passed a questionnaire to all the students who participated in this study and it was also completed by different teachers who were involve with this group in different subjects (in this case four). On the other hand, students were requested to write a brief personal opinion on

the experience they have lived throughout the weeks of implementation of our teaching unit. Besides, it is worth mentioning we had the opportunity to use direct observation to obtain some important information which can be really useful for the final results of this study.

4.3. Variables

In the quantitative part of this study, the **dependent variables** we should remark are the following:

- The improvement of the students' communicative competence.
- The student's intrinsic motivation towards learning English and Science.
- The students' level of satisfaction with their own learning process.
- The students' consciousness towards their progress.
- The students' involvement into the classroom.
- The students' willingness to participate in the activities and tasks proposed.

Now, it is the turn to point the **independent variables** which are those in connection to the different methodological principles we have put into practice during the implementation phase of our didactic proposal and the traditional methodology which was applied before, as well as the tasks, activities, and materials used.

To conclude, we could mention some **moderating variables** in connection to this study, but we must remark that they have not been taken into account. These could be the following:

- Availability of technical resources outside school
- Exposure to English outside school
- Linguistic competence of the teacher

4.4. Instruments

As it has been mentioned in previous sections, a **questionnaire** was completed among students and teachers in the third grade Primary Education. This same questionnaire was passed before and after the period of implementation of the Teaching Unit proposed. Thus, the results of the first questionnaires can help us to obtain valuable information concerning the effects that a more traditional CLIL methodology have on the students whereas the results of the second one provide us with data in connection to the methodological guidelines we have follow during this research study. In line with this, we can compare both results and draw some crystal-clear conclusions. Besides, we

addressed an **interview** to our students since they were requested to write a personal opinion about their own experience throughout the weeks employed in implementing our teaching unit. Furthermore, we had the opportunity to use **direct observation** to obtain some important information which can be really useful for the final results of this study. In line with this, it could be important to remark that we refer to structured observation since we concentrate the attention on pre-fixed issues, such as teachers and students' roles, interaction and participation in class, the use of the foreign language for real purposes, the kinds of materials used, the activities and tasks proposed, among others.

4.5. Data Collection and analysis

Once we have described the research design, sample, variables, and the instruments concerning our piece of study, we move on to explain briefly the process of data collection and analysis.

For the analysis of the data obtained by means of the questionnaires the techniques which have been deployed are some of the most common statistical operations that involve calculating central tendency measures and techniques concerning data triangulation.

Finally, we have carried out a qualitative interpretation of the quantitative data obtained by means of the previous techniques, raw data, and percentages; as well as the information collected by way of the different interviews addressed to the students and our process of direct observation during the implementation phase.

5. RESULTS AND DISCUSSION

Before getting into detail, we think it is worth remembering which the major aim of the present research is. As we set in the first sections of this paper, it was to gain more insight into the influence that the implementation of certain methodologies within the bilingual classroom has on its students, in this case those in the third grade of Primary Education, and their motivation towards the learning process.

In the second place, we remark the different research questions we intended to answer with this piece of study. These research questions were the following:

1. What is the contribution of **meaningful tasks and activities** to the increase of the students' intrinsic motivation when learning a school subject by means of a foreign language?

2. Do **ICTs and manipulative materials** promote and facilitate the implementation of the principles of constructivism and a learner-centred approach when it comes to engaging students into the classroom?

3. Does the **use of English as a means of communication** for real purposes make the learning process more enriching and successful?

4. Is **interaction** and **cooperative learning** the best way to ensure a meaningful learning of the contents?

5. Do students' and teachers' **roles** play an important part when enhancing students' interest towards learning?

As it has been mentioned in previous sections, we passed a questionnaire to all the students who participated in this study (22 children aged between 8-9 years old) and also it was completed by different teachers who are involve in this group in different subjects (in this case four). In the subsequent line we are going to specify the questions which this questionnaire consists of and the main results obtained organized into different tables.

With regards to the questions of the previously mentioned questionnaire, they are going to be specified in the subsequent lines:

1. At the beginning of each lesson, the teacher tells us what we are going to learn and listen to what we have to say in connection to the topic (what we already know about that, our opinions, personal experiences, etc.).

2. The use of L1 (Spanish) is limited to a minimum on the part of the teacher but he helps us when necessary with some terms and definitions.

3. We feel confident when using English and interacting with my mates and the teacher and I understand the importance and usefulness of using L2 as much as possible.

4. We are not afraid to participate because errors are treated as a part of the learning process and the teacher give us praise and encouragement very often.

5. The teacher guides us while carrying out the proposed tasks and activities but he/she gives us autonomy to work in groups and take our own decisions.

6. We found all the activities and tasks proposed useful and interesting.

7. We think we have learnt a lot and we have done it in a fun and motivating way.

8. We learn by means of manipulative materials and ITCs rather than using the textbook in every lesson.

9. We work in groups and we think is an enriching experience because we can benefit from each other.

10. We feel our opinions, interests, and needs are taken into account on the part of the teacher.

11. The teacher makes us want to learn more about the topic we are studying.

12. The atmosphere of the classroom has been relaxed and fun.

13. We are conscious of what we are learning because the teacher makes us reflect on our learning process at every step we take into the classroom.

14. We have enjoyed this experience and we would love to work following these methodological principles to learn science from now on.

STUDENT RESULTS (22 participants) PRE-IMPLEMENTATION PHASE (TRADITIONAL METHOD)					
Items	Grade of achievement				
	5	4	3	2	1
	Number of participants having selected this grade				
Question 1	8	6	7	1	1
Question 2	5	3	12	3	1
Question 3	-	3	10	6	3
Question 4	1	2	9	6	4
Question 5	-	2	9	8	3
Question 6	-	-	8	8	6
Question 7	-	-	7	10	5
Question 8	-	-	4	8	10
Question 9	-	-	5	8	9
Question 10	1	2	17	1	1
Question 11	1	2	18	-	-
Question 12	-	2	7	8	5
Question 13	-	2	5	8	7
Question 14	-	1	2	10	9

1= never 2= rarely 3=sometimes 4=very often 5= always

Table 4. Students results after answering the questionnaire. It was translated into Spanish for the students.

STUDENT RESULTS (22 participants) POST-IMPLEMENTATION PHASE (LEARNER-CENTRED)					
Items	Grade of achievement				
	5	4	3	2	1
	Number of participants having selected this grade				
Question 1	20	1	1	-	-
Question 2	19	2	1	-	-
Question 3	18	2	2	-	-
Question 4	19	2	1	-	-
Question 5	18	2	2	-	-
Question 6	21	1	-	-	-
Question 7	21	1	-	-	-
Question 8	22	-	-	-	-
Question 9	20	1	1	-	-
Question 10	19	2	1	-	-
Question 11	21	1	-	-	-
Question 12	22	-	-	-	-
Question 13	18	1	2	-	-
Question 14	22	-	-	-	-

1= never 2= rarely 3=sometimes 4=very often 5= always

Table 5 . Students results after answering the questionnaire. It was translated into Spanish for the students.

TEACHER RESULTS (4 participants) POST-IMPLEMENTATION PHASE (LEARNER-CENTRED)					
Items	Grade of importance				
	5	4	3	2	1
	Number of participants having selected this grade				
Question 1	2	1	1	-	-
Question 2	2	1	1	-	-
Question 3	2	1	1	-	-
Question 4	3	1	-	-	-
Question 5	4	-	-	-	-
Question 6	3	1	-	-	-

Question 7	3	1	-	-	-
Question 8	4	-	-	-	-
Question 9	4	-	-	-	-
Question 10	3	1	-	-	-
Question 11	2	1	1	-	-
Question 12	4	-	-	-	-
Question 13	3	1	-	-	-
Question 14	3	1	-	-	-

1= of no importance 2= very little importance 3=somewhat important 4=important

5= very important

Table 6. Teachers results after answering the questionnaire. In this case, teachers have rated the grade of importance of every item in relation to what aspects are necessary for a success-prone implementation of bilingual education and CLIL programs. Teachers only answered the post-implementation phase questionnaire.

To begin with, we would like to start by saying that the sample is not geographically and numerically representative since we have worked with just 22 students and 4 teachers, we have given more importance to the qualitative analysis of the data obtained by means of structured observation within the classroom.

When it comes to the results of the questionnaire regarding the pre-implementation phase, we may say the different results obtained can help us to draw some crystal-clear conclusions. The mean rate obtained has been 2,49 which quite representative if we compare it to the results obtained during the post-implementation phase questionnaire. When talking about the mode, the most frequent score has been “3”. In line with this the questions with have received the highest score are items 1 and 2; and the items with the lowest score are 8, 9, and 14 which are related to the kinds of materials used, the introduction of ICTs, and the use of cooperative work.

As for the results of the questionnaires completed by the students, it is worth remarking that they have been quite gratifying. As can be observed, all the items have been graded with the highest punctuation which is “5=always” by the 81% to the 100% of the students. The mean rate obtained after analyzing all the results has been 4,86 which has turned out to be hopeful information data for us.

In relation to the mode, the most frequent score has been “5” as well. In line with this, the questions which have received the highest rate have been items 8, 12, and 14 which are connected to the kinds of materials used, the introduction of ITCs, and the classroom atmosphere. Curiously, these are the items which have obtained the lowest score in the results of the pre-implementation phase questionnaire.

With regards to the teachers answers, they have considered as the most important ones, questions 5, 8, 9 and 12 which are related to the use of manipulative materials, ITCs, classroom atmosphere and teachers’ and students’ roles since the 100% have decided to give the highest rate to this items.

In order to make this results more easy to understand, in the following table it can be observed the comparison among the different results of each question of both questionnaires, that is to say the one devoted to the most traditional method and the one related to a methodology based on a learner-centred approach:

METHODOLOGICAL PRINCIPLES		
QUESTIONS	TRADITIONAL	LEARNER-CENTRED
Question 1	4	4,86
Question 2	3,63	4,82
Question 3	2,55	4,73
Question 4	2,36	4,82
Question 5	2,45	4,73
Question 6	2,09	4,95
Question 7	2,09	4,95
Question 8	1,72	5
Question 9	1,81	4,86
Question 10	3,04	4,82
Question 11	3,04	4,95
Question 12	2,27	5
Question 13	2,09	4,55
Question 14	1,72	5

Following you can find some photographs in which you can observe the students working in groups towards a common cause, that is to say, to create their own knowledge by means of manipulative materials and carrying out meaningful tasks. As we all know, students at that age love playing with others and there is no doubt they learn better by doing. For that reason, we can easily observe how students are enjoying the experience of learning together and how they benefit from each other. If we draw our attention towards these pictures, we can say the results we have obtained by means of the quantitative analysis of the data are reflected in all of them without no doubt.





Furthermore, we addressed an interview to our students since they were requested to write a personal opinion about their own experience throughout the weeks employed in implementing our teaching unit. There is no doubt that the quantitative analysis of the data obtained by means of the questions of our questionnaire are a valuable source of information in this study but, from our viewpoint, it is far more interesting and enriching analyzing in a qualitative way the real words of the protagonist of this story: our young learners. Besides these personal opinions, we had the

opportunity to use direct observation to obtain some important information which can be really useful for the final results of this research. Thus, by putting all this information together, we are now able to draw some crystal-clear conclusions which give response to the research questions we intend to answer with this study:

- The students consider this type of activities and tasks in which students have to use the language in a meaningful way is really fun and motivating. Most learners have named the work we have done during these weeks as “Fun Science” and they would love to keep working this way in science and other subjects.
- When experiencing, living, discovering, and manipulating different materials, devised by the students themselves, the subject’s contents turn out to be more interesting and easy to understand. Furthermore, introducing ICTs into the classroom has been quite gratifying and enriching since these resources really motivate the students and catch their attention. Besides, the knowledge students construct are more useful and durable. Before carrying out this piece of research, I check students’ answers to the previous test they had completed after studying this same topic by means of the textbook and worksheets. As we can observe in the following figures, before working this way, students did not understand many simple terms in connection to this topic, and now, this problem is completely solved.

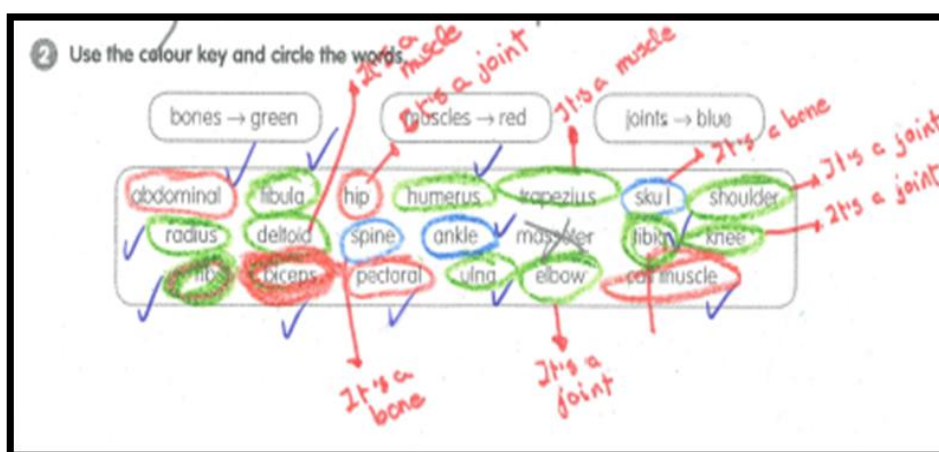


Figure 2. Students’ previous mistakes. Learners do not appreciate the difference between muscles, bones, and joints.

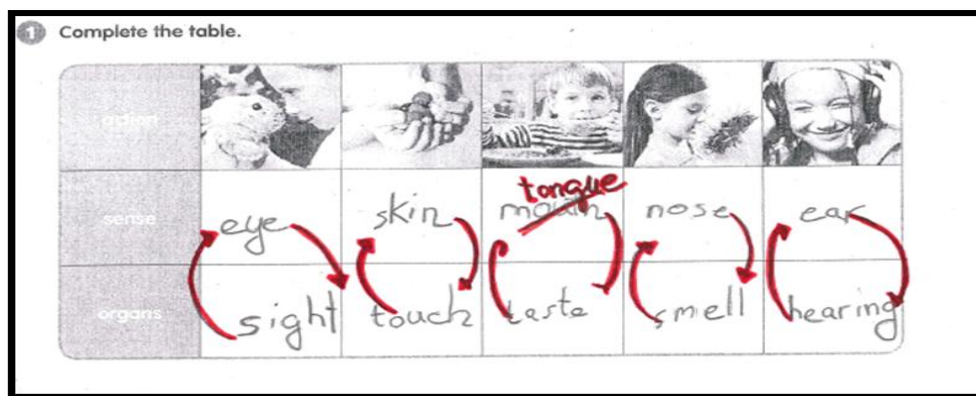


Figure 3. Students' previous mistakes. Learners have problems when identifying senses and organs.

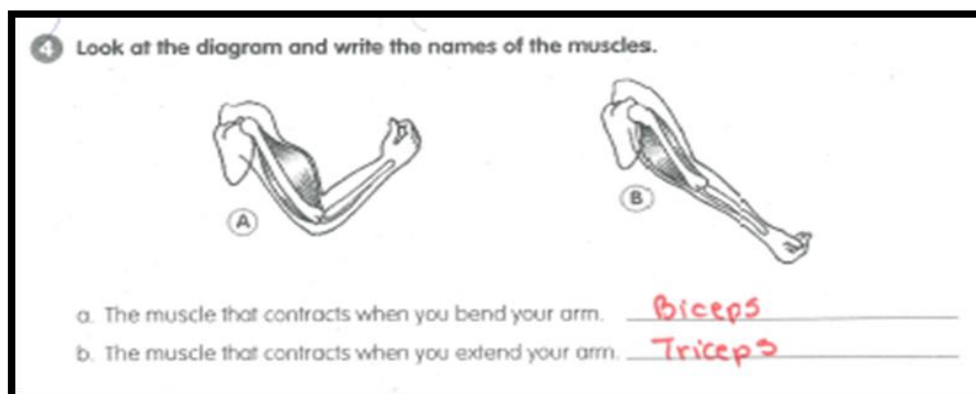


Figure 4. Students' previous mistakes. Learners do not remember nor distinguish between some of the main muscles they had studied in the unit.

- Working in groups and using strategies of cooperative learning improve the relationship among students, thus reaching the goal of creating a relaxed and comfortable atmosphere in the classroom where it is possible to learn in a fun and motivating way. This is something easily observable in all the pictures attached in this document.
- Students feel more comfortable when using English if they are working in groups and when they see they use the language for meaningful purposes.
- Giving our young learners a great level of autonomy and letting them take their own decisions when carrying out motivating tasks make them feel as the real protagonists of their own learning process and the results are more enriching.

Now, we think it could be really interesting to include in this section some extracts of the learners' personal opinions since we can obtain useful data which we can reflect on:

CONO DIVERRIDO

A mi me gustó mucho porque de ese modo se aprende mucho mejor y se comprenden los dibujos.

Lo que más me gustó fue el trabajo en equipo que hubo entre compañeros daba igual si nos conocíamos o no nos llevábamos muy bien, colaborábamos todos con su grupo.

Todo fueron risas y diversión no hubo discusiones.

Fue una experiencia inolvidable.

Quiero que todas las señoras y profesores lo hagan.

 Me lo puse muy bien ojalá hagamos los exámenes
 así y me gustaría hacerlo otra vez. gracias por elegir
 a la clase de tercero y lo que más me gustó fue
 ponerle la plastilina a la oreja y lo que menos me gustó
 fue escribir. |||| Muchos gracias por venir a este colegio!!!!

Redacción como divertido:
 Me ha encantado hacer maquetas de los ojos,
 pues hacer venas con plastilina es muy divertido.
 No pense que el ojo tenía venas. También
 un poco de travesuras y juegos no está nada
 mal, si fuese todos los días así nos lo pasaríamos
 genial, pues de esa forma se aprende
 mucho más que con los libros.

Me ha encantado lo que hemos hecho
 con Nuria. Lo que más me gustó fue
 el hueso, ojalá así fuese como siempre.
 Era muy divertido y nos lo pasamos
 pipa haciendo el trabajo.

Redaccion de Ciencias divertidas

Yo no sabía que el hueso ~~era~~ así por dentro ni sabía que tuviera venas. Me gustaría haber hecho más pero me fue pase genial.

¡Muchas gracias por elegir a la clase de 3º!

Echo por: Nuria Amaro Ruiz

Ciencia divertida



Hola señor Nuria el proyecto que hicimos fue muy divertido me divertí mucho y yo no me lo esperaba y he aprendido mucho me gusta más aprender con el proyecto. Porque la oreja era muy chula.

Redaccion como divertido

Me gusto mucho porque usamos las pinturas y pintamos, escribimos y escribimos los 5 sentidos y hicimos la parte que más me gusta el hueso. Me sorprendía que había tantas partes en el hueso.

CIENCIAS DIVERTIDAS II

Me lo he pasado super bien contigo. Lo que más me ha gustado es hacer como aprendiendo con experimentos. He aprendido muchas cosas de ti. Todos te vamos a hacer de menos.

Me gusto mucho hacer el dentiro, fue una experiencia regno la pupila tambien puse hiza que aprendieramos mucho hacen más cosas como esa. II

Como divertido

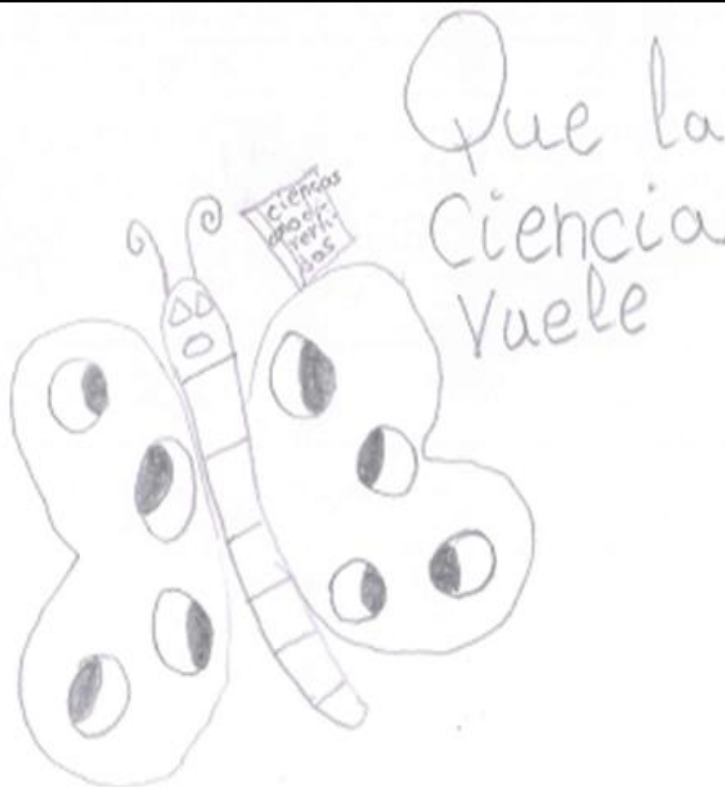
ojo descubri como es por chulísima, yo pinte de plastilina. La seño Nuria sobre el ojo. Me gustaría

CONO DIVERTIDO NACHO CALERO

Yo no me esperaba esta sorpresa de como divertido. Oviamente me gusta más hacer conocimiento del medio en experimentos.

El mi me gustó mucho porque yo vi un ojo por dentiro y muchas cosas más...

Me gustó porque hicimos maquetas
muy divertidas y nos entreteníamos.
¡Fueron los mejores días del colejito!
Fue muy divertido estar con mis
amigos y hacer la maqueta...
y no sabía que hubiese cosas tan
interesantes, su forma y tan guay
aprendí mucho y me gustó ese
tipo de enseñanza muy muy
muy muy divertido



Once we have discussed the results and we have provided some personal reflections, we think it is important to mention here some reflections about *where do we need to go?* CLIL perspectives are widely employed in many countries and are likely to increase in the near future, there is no doubt about that, but there are some goals we need to reach in order to succeed when implementing this perspective.

With regards to the above, we strongly believe that the main problem when implementing these programs is that our schools and teachers are not prepared yet to face this teaching method. We think the starting point for any bilingual teacher should be an accreditation of any of the C levels.

Apart from this requirement, they need more preparation regarding motivation techniques, catchy methodologies, meaningful work-modes, different tasks and activities may be proposed, the kind of materials which could be used and how to devise our own resources, among other measures. Without any doubt, there is still a long way to go in terms of bilingual education, especially when it comes to our autonomous community.

6. LIMITATIONS OF THE STUDY

Currently, we could say that there is no real agreement on what methodologies work better into the classroom when implementing CLIL programs. Furthermore, research into bilingualism in its different forms is far from being consolidated.

Some of the most relevant longitudinal studies which have been carried out in different parts of the world have proved the wide variety of advantages of CLIL regarding students' academic performance in both the foreign language and subject's contents.

However, when it comes to talking about CLIL methodologies, strategies, materials, activities, and so on; in other words, about classroom implementation matters, we have not found much information. Generally speaking, there are many field studies available carried out in schools by the teacher himself/herself; something similar to this research.

These studies are a valuable source of information if we want to get a general understanding of CLIL programs and how they work in real practice. However, these researches, apart from being linked to just one point in time and the representativeness of the sample, depend too much on the specific context in which the study has been carried out. In other words, these investigations into a group of students belonging to a

specific class, school, and context, could provide us with many useful evidences; but these evidences are difficult to be applied into other schools, students, and contexts. This lacunae need to be solved by supporting and fostering quality longitudinal studies into CLIL programs on the part of the government of different countries.

7. LINES FOR FUTURE RESEARCH

As we have said in previous sections of this paper, the first thing we must improve in this study may be working with a more geographically and numerically representative sample since we have worked with just 22 students belonging to a class in the third grade of Primary Education and the four teachers who participate in the implementation of their different subjects. Besides, it could be a good idea to replicate this same research in different levels, as it may be more easily applied to different contexts and situations.

On the other hand, we are conscious that this is our first piece of research so in future works we intend to take into account a more comprehensive number of variables.

Furthermore, although we are satisfied with the results and happy with the experience we live during the implementation phase of our didactic proposal, in future studies we should include more types of triangulation, for example by means of using more complex instruments or data collection techniques.

Finally, there is no doubt that conducting a longitudinal study, more prolonged in time, would be a valuable source of information regarding CLIL methodologies. Within this longitudinal study, it could be a good idea to include pre- and delayed post-testing phases in order to compare different results and add feasibility and reliability to our research and its future practical applications into real situations.

8. CONCLUSION

Throughout this paper, we have analyzed which kinds of methodological principles, regarding CLIL programs, work well into the Primary Education classroom when it comes to engaging students and making them feel motivated to learn and willing to participate.

In order to give a brief summary, we must say in the first part of the investigation, we provided a comprehensive picture of bilingual education and CLIL models. In line with this, it is important to highlight that we focused our attention towards the prototypical characteristics which underlie all CLIL programs and then, we

describe the methodological principles which underline a learner-centred approach which captures better than any other the characteristics that we are looking for. Besides, we move on to the definition of the term motivation itself and its practical applications in a real classroom.

In the second place, before this brief introduction about bilingual education, we pointed out some of the most remarkable aspects of the Teaching Unit we have designed which are the following: the real context, the methodology followed, some remarkable tasks and activities and, finally, the means of assessment we have used.

In the third place, you can find data concerning the methodology followed in this research and a detailed discussion on the results obtained.

The last sections are devoted to the principal conclusions, inclusive of the limitations of the study, suggestions for improvement, and lines for future research, as you can observe.

After carrying out this piece of research we have drawn some conclusions which may be sum up by answering the following question which give response to all the hypotheses we set at the beginning of this study: what aspects are necessary for a success-prone implementation of bilingual education and CLIL programs?

- **Redefinition of teachers and students roles:** students should be placed at the centre of the classroom and the teaching-learning process by making them take an active, make their own decisions, suggesting topics and activities, create their own materials, etc. The teacher, on the other hand, should take the role of a classroom researcher (who investigates the efficiency of the methods s/he uses, observes what works well on the classroom and what does not, tries out new techniques and evaluates their efficiency) and a participant (who acts as simply another, although better, language user who interacts with the learners naturally and conversationally).
- **Meaningful tasks and activities:** suggesting topics which are closely connected to the students' previous experiences and daily life activities.
- **Use of different types of groupings:** individual work, pair-work, whole class activities, group work, etc. in order to catch students attention and get a good pace of the lesson. Besides, using different groupings fosters students' autonomy as well as they are allowed to benefit from each other.

- **Use English for effective and real communication with a clear purpose:** the final aim of the teaching and learning of a foreign language, that is to say being able to communicate efficiently with people from different countries.
- **The kind of materials used:** ITCs, audiovisual resources (Digital whiteboard, videos, etc), wallcharts, posters, comics, manipulative resources, and so on. Students find them motivating and engaging and we meet all students' needs and different learning styles.
- **Assessment:** taking into account the learning process as well as the final product.

In line with this, all the previous characteristics could be included into one single methodology which is that of the **learner-centred approach**.

*Tell me....And I Forget,
Teach me.....And I Remember,
Involve Me.....And I Learn. (B. Franklin)*

We can use these words to make sense of what this approach emphasizes. When pupils play an active role in their own learning process and their interests and needs are heard and taken into account the contents are clearly meaningful for them. Hence, this will increase student's intrinsic motivation, they will be willing to learn and the results will be more enriching.

Fortunately, we had the opportunity to evidence this into a real classroom and we must say we are very happy with the results and the experience we have lived. In spite of this, as we have said previously, there is a long way to go regarding bilingual education methodologies in terms of investigation and practical applications.

In order to conclude, we must not forget that teachers must work together in order to achieve one of the main purposes of Primary Education: an integral and meaningful formation of each student. Consequently, there are many things a teacher can do for us to bring about a better world. Nelson Mandela exemplified it brilliantly:

Education is the most powerful weapon which you can use to change the world.

9. BIBLIOGRAPHY

- Council of Europe (2001). *Common European Framework of Reference for Languages*. Cambridge: CUP.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL. Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- Darn, S. 2006. *Content and Language Integrated Learning*.
<http://www.teachingenglish.org.uk/think/articles/content-language-integrated-learning>
(July 9th, 2010).
- Ellis, R. (2000). *Understanding Second Language Acquisition*. Oxford: OUP.
- Lasagabaster, D. & Sierra, J. M. 2010. *Immersion and CLIL in English: more differences than similarities*. *ELT Journal* 64(4): 367-375.
- Lasagabaster, D. (2008). *Foreign language competence in Content and Language Integrated courses*. *The Open Applied Linguistics Journal* 1: 31-42.
- Lorenzo, F. (2007). *The sociolinguistics of CLIL: Language planning and language change in 21st century Europe*. *RESLA Vol. Extra 1*: 27-38.
- Madrid, D. & McLaren, N. (2004). *TEFL in Primary Education*. Granada: UGR.
- Maljers, A., Marsh, D., Kitanova, S., Wolff, D., Zielonka, B. (2004-2007). *CLIL Matrix. Achieving good practice in Content and Language Integrated Learning/bilingual education*. Available at <http://www.ecml.at/mtp2/CLILmatrix/index.htm>
- Mehisto, P., Marsh, D. & Frigols, M. J. (2008). *Uncovering CLIL. Content and Language Integrated Learning in Bilingual and Multilingual Education*. Oxford: MacMillan Publishers Limited.
- Méndez García, M.C. (2014). *A Case Study on Teachers' Insights into Their Students' Language and Cognition Development through the Andalusian CLIL Programme*. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, ISSN 1697-7467, N°. 22, 2014, págs. 23-39.
- Nunan, D. (2010). *The Learner-Centred Curriculum*. Cambridge: CUP.
- Pérez Cañado, M. L. (2012). *CLIL research in Europe: Past, present, and future*. *International Journal of Bilingual Education and Bilingualism* 15(3): 315-341.
- Richards, J. C. & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.
- Smith, K. 2005. *Is this the end of the language class?* *Guardian Weekly*, Friday 21 January 2005. <http://www.guardian.co.uk/theguardian/2005/jan/21/guardianweekly.guardianweek1>

Widdowson, H.G. (2002). *Teaching Language as Communication*. Oxford: OUP.

Wolff, D. 2005. Approaching CLIL. In D. Marsh (Coord.), *The CLIL quality matrix. Central workshop report* http://www.ecml.at/mtp2/CLILmatrix/pdf/wsrepD3E2005_6.pdf

LEGAL FRAMEWORK

Organic Act of Education 2/2006 (LOE), modified by Organic Act of Education 8/2013 (LOMCE)

Royal Decree 1513/2006 of 7 December, establishing minimum curriculum for primary schooling.

Royal Decree 126/2014 of 28 February, establishing the minimum curriculum for Primary Education.

Education Act in Andalusia LEA 17/2007

Decree 230/2007 which establishes the sequencing and teaching contents in Primary Education within the Andalusian context.

Order of August 10, 2007 which develops the Primary Education curriculum in Andalusia.

Order of August 10, 2007 regarding evaluation in Primary Education in Andalusia.

Order 25 July 2008 on Attention to Diversity in Andalusia.

10. APPENDICES

Items	1	2	3	4	5
At the beginning of each lesson, the teacher tells us what we are going to learn and listen to what we have to say in connection to the topic (what we already know about that, our opinions, personal experiences, etc.)					
The use of L1 (Spanish) is limited to a minimum on the part of the teacher but he helps us when necessary with some terms and definitions.					
We feel confident when using English and interacting with my mates and the teacher and I understand the importance and usefulness of using L2 as much as possible.					
We are not afraid to participate because errors are treated as a part of the learning process and the teacher give us praise and encouragement very often.					
The teacher guides us while carrying out the proposed tasks and activities but he/she gives us autonomy to work in groups and take our own decisions.					
We found all the activities and tasks proposed useful and interesting.					
We think we have learnt a lot and we have done it in a fun and motivating way.					
We learn by means of manipulative materials and ITCs rather than using the textbook in every lesson.					
We feel more confident and motivated when working in groups and we think is an enriching experience because we can benefit from each other.					
We feel our opinions, interests, and needs are taken into account on the part of the teacher.					
The teacher makes us want to learn more about the topic we are studying.					
The atmosphere of the classroom has been relaxed and fun.					
We are conscious of what we are learning because the teacher makes us reflect on our learning process at every step we take into the classroom.					
We have enjoyed this experience and we would love to work following these methodological principles to learn science from now on.					