



FACULTAD DE EDUCACIÓN DE PALENCIA
UNIVERSIDAD DE VALLADOLID

**AN IMPLEMENTED PROPOSAL THROUGH
PROJECT-BASED LEARNING IN A 5TH GRADE
PRIMARY EDUCATION GROUP.**

**TRABAJO FIN DE GRADO
EN EDUCACIÓN PRIMARIA – MENCIÓN LENGUA EXTRANJERA INGLÉS**

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Palencia, February 2020

APPRECIATION

With this project d my second stage at college is finished. This time with the Primary Education Degree – English Language. I am going to take advantage of this situation and thanks to all the persons that have supported me during these years. It was not easy for me to take the decision to continue in college after coming back from abroad and there have been many people supporting me.

Special mention to my family, my parents and my brother as well as my grandparents and partner Edgar. Also, my family, my friends, thank you Ana for never letting me down.

“Tell me and I forget, teach me and I remember, involve me and I learn”.

Benjamin Franklin

“A different language is a different vision of life”

Federico Fellini

RESUMEN

El presente trabajo se centra en la enseñanza-aprendizaje de la asignatura de Natural Science a través de proyectos en Educación Primaria, concretamente en una clase de 5º. La propuesta se lleva a cabo en un contexto bilingüe. Se presenta un diseño de un proyecto llamado 'I have a hunch' ('Tengo una corazonada'). Con ello se pretende plantear las sesiones de Natural Science más dinámicas y atractivas para el alumnado, así como la realización de un proyecto de carácter interdisciplinar a nivel de ciclo.

PALABRAS CLAVE:

Aprendizaje basado en proyectos, Lengua inglesa, Bilingüismo, Ciencias Naturales, Interdisciplinariedad

ABSTRACT

The present work is focused on the teaching and learning of Natural Science through projects in Primary Education, in 5th grade. The design, carried out within a bilingual context, presents the proposal of a project called 'I have a hunch'. It is intended to make Natural Science lessons more dynamic and attractive for the students, as well as the realization of an interdisciplinary project at a cycle level.

KEY WORDS:

Project-based learning, English language, Bilingualism, Natural Science, Interdisciplinarity

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1. INTRODUCTION

Society is progressing faster than we can follow. We are all surrounded by electronic devices replacing everything we used to have. There are no more books on the nightstands, we can have all the books we want in a simple device which is smaller, lighter. The same situation has been taken to the schools. Students do not always have school books on many subjects. In some cases, they are asked to take a tablet or a computer to the school; in others, they just need a notebook, the teacher is the one in charge of developing the class with her computer.

Do we, as teachers, receive enough information and training in the use of ICTs in class? The answer may be way different in some cases. Sometimes it is not the lack of resources and it is a matter of initiative. Even a three years old kid knows how to use a phone or a tablet, so we assume we know it as well. We do not realize the number of different resources, applications, we can learn about to take them to the class and innovate with them.

What impact could it have for students? Is it the same if we use an interactive board the way it was designed for or just as a projector to show the PowerPoints we have created? It may sound simple, but even in PowerPoint, there are different resources that we may not know about. Once we know ICTs it is going to be easier to put them in practice and make students interested in our lessons. Furthermore, if we master an application, for example, we can explain it to our students so they can create their own materials.

Apart from ICTs, there is another term nowadays we can listen to in most of the schools. I am referring to 'Project-Based Learning' (PBL). Along this work, the intention is to offer an example of a real project in a specific context of a Primary Education classroom.

This document starts referring to the theoretical basis about the project-based learning methodology and the benefits it has in students. Then, it is followed by the different roles teacher and students should carried out in class following the methodology mentioned before. Finally, this methodology is linked with the second language acquisition.

Project-based learning is not the only methodology followed during the project. Cooperative learning will gain importance during the development of it.

This document is focused on an implemented proposal of a project already carried out in a bilingual school. The project design shows several of the activities already done with the previous idea, and some other activities which have been changed as these new ones can benefit students when learning Natural Science with the CLIL methodology.

At the end of the document, there are some conclusions. First of all, about what I experienced when developing the first proposal, and then, others related to the design and the objectives of this TFG.

2. OBJECTIVES

The present TFG has as a general objective to develop an interdisciplinary bilingual project (English as the foreign language) in a Primary Education classroom, specifically for the Natural Science subject.

Based on the general objective, several specific objectives are pretended:

- To analyse the use of project-based learning methodology in class.
- To design an implemented proposal based on project-based learning methodology for the Natural Science subject.
- To encourage the communicative competence within the cooperative learning.
- To develop the participation and the students' autonomy through the cooperative learning.

3. JUSTIFICATION

The present TFG comes up after my internship of the Practicum 0 done for the Primary Education Degree – English Language. Through it, it is going to be demonstrated the acquisition of certain competences needed to obtain the Primary Education Degree – English Language title.

Bearing in mind the Primary Education Degree objectives, worth noting number 2 ‘Design, plan and evaluate the teaching-learning process, both individual and in collaboration with other teachers and professionals of the centre’¹.

Among the general competences stands out ‘The inclusion of subjects or activities in the different degrees that allow achieving a minimum command of a foreign language, preferably’². This competence is proved with the development of a teaching-learning proposal from a bilingual perspective.

Within the specific competences of the Primary Education degree there are three different modules³:

A. Basic Training Module:

1. Know and understand the primary students’ characteristics, their learning process and the development of their personality, in family, social and school contexts.

2. Know, value and reflect on the problems and requests of heterogeneity in the classroom, as well as plan practices, measures, programs and actions which facilitate attention to the student diversity.

3. Know in deep the fundamentals and general principles of the elementary stage, as well as design and evaluate different projects and innovations, mastering active methodological strategies and using different resources.

4. Understand and value the demands of the scientific knowledge, identifying investigative methods and strategies, designing educational investigation process and using appropriate methods.

¹ Personal translation: Diseñar, planificar y evaluar procesos de enseñanza-aprendizaje, tanto individualmente como en colaboración con otros docentes y profesionales del centro.

² Personal translation: La inclusión de asignaturas o actividades en las distintas titulaciones que permitan alcanzar un dominio mínimo de un idioma extranjero, preferentemente inglés.

³ Personal translation. Original document: Competencias del Grado de Educación Primaria. Universidad de Valladolid.

5. Know the Primary schools' organization, the normative and legislative elements which regulate these centres, developing the ability to work as teams and define educational projects at the centre.

6. Select and use information and communication technologies in classrooms that contribute to student's learning, achieving communication skills through the Internet and collaborative work through virtual spaces.

B. Didactic-disciplinary Module.

C. Practicum and TFG Module:

1. Know, participate and reflect on the practical life of the classroom, learning to collaborate with the different sectors of the educational community, connecting theory and practice.

D. Optional Module:

1. Communicative competence in Foreign Language (English/French), advanced level C1, according to the European Framework of Reference for Languages.

2. Plan what will be taught and evaluated concerning the corresponding foreign language, as well as select, conceive and develop teaching strategies, types of activities and teaching resources.

The last competences make reference to the English language section. That is why the following work is developed in English.

After a first stage of observation at school, it is developed a project during the Practicum 0. Once it finishes and, after its analysis, it is decided to propose an improved proposal attempting a more dynamic approach in the theoretical development. It is going to make the most of the resources the school has.

Project-based learning is included in the Spanish curriculum as we can see in the DECRETO 26/2016, de 21 de julio:

'Project-based work, especially relevant for competences learning, is based on a proposal of an action plan that seeks to achieve certain practical results. This methodology pretends to help students to organize their thinking stimulating the reflexion, criticism, the hypothesis development and the research task through a process in which each one

assumes their learning responsibilities, applying their knowledge and skills to real projects.⁴

We can find in the PEC (School-based Education Project) as one of the main competences 'learn to learn' which is pretended to be achieved through the following:

‘Assist methodologies, strategies and techniques which help in this way. Students study, observe and register, work cooperatively and through projects, solve problems, plan and organize activities and times effectively, know different resources and sources for the collection, selecting and process information, including technological resources.’⁵

The school in which the project has taken place is a private school, located in Palencia capital. The main characteristics of this school are, on one side its religious character, and, on the other, its bilingual education proposal.

⁴ Personal translation.

⁵ Personal translation.

4. THEORETICAL BASIS

4.1 PROJECT-BASED LEARNING

In recent years, everybody speaks about Project-Based Learning (PBL). But do we know what is PBL? As mentioned in Du, X. & Han, J. (2016), Dewey declared it as the idea of 'learning by doing'. It is understood that students are going to be the main characters of their knowledge acquisition process. According to Thomas (2000), 'projects are complex tasks, based on challenging questions or problems, that involve students in design, problem-solving, decision making, or investigative activities' (p. 1).

In the 1970s, it experienced a remarkable renaissance, especially in Northern and Central Europe. Many current movements of educational reform-the comprehensive school movement, the movement for community education, open curriculum, and practical learning-make reference to the project method as far as implementation of their programs is concerned. (Knoll, 1997)

Many authors state that, 'through PBL, students develop positive outcomes including thinking strategically, designing solutions to complex challenges (Walker and Leary, 2009), long-term retention, and skill development (Strobel & van Barneveld, 2009)' (Saavedra, A. et al. 2019).

As it requires a critical thinking from the students, it is link it with higher-order thinking skills (Bloom's taxonomy).

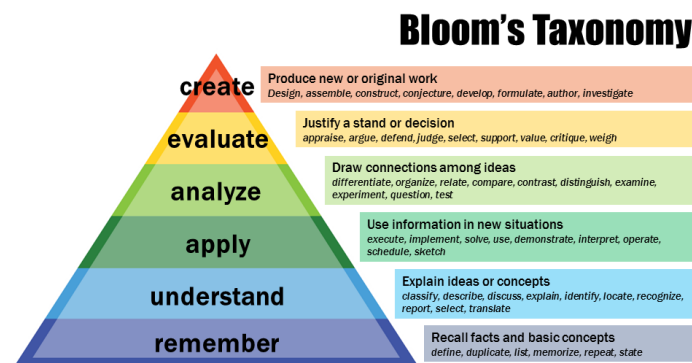


Figure 1. Bloom's taxonomy revised. from "Bloom's Taxonomy," by P. Armstrong, Vanderbilt Center for Teaching, 2017. Available on <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

Bloom's taxonomy revised make reference to a group of action words which describe a cognitive process. The base of the pyramid shows the basic knowledge, that means, activities which does not require a higher-order thinking. On the contrary, at the top of the pyramid, creation requires for the student a higher level of cognitive process.

4.2 PROJECT-BASED LEARNING AND SECOND LANGUAGE ACQUISITION

When thinking about second language acquisition and the way in which it is learnt the new language, everything has change over the years. As Richards, J. and Rodgers, T. (1999) affirm 'changes in language teaching methods throughout history have reflected recognition of changes in the kind of proficiency learners need'. Many years ago, the focus was on mastering the grammar. 'Language learning was viewed as a process of mechanical habit formation' (Richards, J., 2006, p.4). The idea of a globalized world has changed this vision. It is not only a matter of the grammatical competence, but also knowing how to use the language appropriately.

Project-based learning 'it has been referred to as a language education approach that reflects student-centred learning' (Stoller, 2006, p.5).

There are many benefits of working through projects while acquiring a second and foreign language. As mentioned in Fragoulis, I., & Tsiplakides, I. (2009), 'project-work provides opportunities for students to develop their confidence and independence (Fried-Booth, 2002). Knowing that they are not going to be evaluated because of their language level makes them more receptive to use it. Some articles support the connection between self-confidence and student's achievements: 'Building confidence in students can help prevent student dropout rates, ensure that kids maintain their love for learning and help them achieve their dreams and goals' (Kohli K., 2019).

Papandreou (1994) establishes three different advantages of projects:

- a. It makes the reader aware of one important feature of vocabulary, namely, that context determines the meaning of words.
- b. It helps readers develop a holistic approach toward reading a text. While they are looking for context clues, they learn to direct their attention to language units larger than the sentence

because the context of a new word may be drawn from a group of sentences, a paragraph, or even the entire text.

c. This approach encourages readers to develop the quality of taking risks, and makes them more confident and independent in their approach to reading.

Another author who second the benefits of the PBL in EFL (English as a Foreign Language) classrooms is Pham, T. As he mentions on his article 'Project-Based Learning: From Theory to EFL Classroom Practice', when working through projects we work on the four language skills (speaking, listening, reading and writing). Many authors support this idea and add the natural context in which students are developing the use of the language.

4.3 ROLES IN PBL

Carrying out new methodologies imply new roles in the classroom. This includes teachers and learners. It was common to see a teacher in front of the class giving a lesson while the students, sitting in their desks, were listening and copying.

Starting with teachers, they are going to play a different role from the one they were used to. 'The teacher should motivate the students to set up the right environment for this type of work.' (Papandreou, 1994, p.41).

There are new challenges for the teacher from the design of a project-based curriculum, the management of the classroom, facilitate student inquiry, until they assess the student's learning (Condcliffe, B., 2017).

Planning for project-based learning. 'The development of a coherent curriculum is one of the most important but difficult aspects of designing a project-based approach' (Condcliffe, B., 2017, p.25).

Classroom interactions. In this section, the teacher needs to control the student's behaviour as most of the time, in PBL, students need to work in groups and independently.

Facilitating student inquiry. Ertmer and Simons (2006) talk about the difficulties that novice PBL learners use to have in the first steps of the investigation. Teachers change their role and make into guiders who need to give support and resources to the students to abolish that problem.

Scaffolding the learning process. Similar to the process before, teachers need to facilitate and support students' acquisition. There are different types of scaffolding as it can be scaffolded for preparation (modelling), to contextualise (providing visual aids), to process the information with graphic organisers.

Assessment. Finding the appropriate type of assessment is complicated as well. Mergondoller and Thomas (2000) outline three principles a teacher should follow when assessing. '1. Use a variety of assessment methods. 2. Include both individual and group grades. 3. Emphasize individual over group performance.' Apart from the students' assessment, the teacher needs to receive feedback on her practice.

If the teacher's role is to support and guide, the main characters when working with PBL are students. According to McGhee and Kozma (2007), there are three different roles associated with project-based learning. Those roles are 'self-learner, team member, and knowledge manager'. The first one refers to the idea of being the protagonists of their learning, their previous knowledge and their interest is what motivates them to keep learning. The role of 'team member' is not new, students used to work in groups. What is different is the idea of cooperation to get a result. Learners need to work together, to make decisions to achieve their goals. The last one indicates the use that students give to their knowledge.

Project-based learning is well-linked to Cooperative learning as mentioned before. This means that students are going to work in groups. As Sbandin (1977) mentions, there are three different categories when describing the roles in a group.

The first one 'Roles for group work', refers to those roles needed to complete the work, most of the times it is the teacher who assigns them. The opposite happens in the third category 'Individual roles' in which students acquire a natural role because of their character. The second category is 'Constitution and maintenance roles'. Those roles should be taken into account when working cooperatively.

4.4 COOPERATIVE LEARNING

As mentioned in Gillies, R. (2014) 'interest in cooperative learning began to emerge in 1970s' and it is when researchers started to show the benefits of this methodology.

Johnson, D. & Johnson, T. define cooperative learning as ‘the instructional use of small groups so that students work together to maximize their own and each other’s learning (Johnson, Johnson, & Holubec, 2013)’.

Spencer Kagan (1999) talks about four different elements needed in a cooperative learning. Those elements are PIES (Positive interdependence, Individual accountability, Equal participation, Simultaneous interaction). The first one refers to the idea of group word. All the members of the group need each other to achieve their objectives, but, as the second element says, each member has a responsibility. In terms of participation Kagan suggest for the teachers to help in this aspect. ‘Dejar la participación en manos de los estudiantes es hacerse falsas ilusiones y casi siempre acaba en participación desigual⁶ (Pujolàs i Maset, 2009, p.230).

In this sense, Gillies, R. (2014) shows the behaviour the components of a group need:

- Actively listening to each other during discussions
- Considering the other person’s ideas and perspectives
- Stating ideas clearly without making disparaging comments
- Accepting responsibility for one’s own behaviour
- Constructively critiquing the ideas of others
- Sharing resources
- Taking turns

Slavin, R. (1988) discuss about the idea of a group goal. He considers it necessary for the students to ‘overcome their reluctance to ask for help or provide help to one another’. One of the rules in the class is to ask their classmates for help before asking the teacher.

⁶ Personal translation: Leaving participation in the hands of the students is making false illusions and almost always ends up in unequal participation.

5. METHODOLOGY

Within this section, the most important methodologies carried out during the project, are going to be explained. First, in a theoretical way, and then, how it has been put into practise in a real context.

5.1 CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL)

Although it is not a methodology itself, it is important to take it into account. Pérez-Vidal (2009) refers to CLIL as the ‘communicative approach revisited’ since it is ‘essentially the natural development of communicative approaches, updated with the incorporation of the effects of recent developments’ (p. 6).

In spite of the diversity of techniques when teaching a second language, they all coincide in teaching through content. As Arnau (2001) defines: ‘*Learn as you see. Use as you learn. Not learn now and use later*’ (p.10). Through this program, it is intended that students learn the language while assimilating the contents. This means that, in this project, the language is not going to be the centre of interest but, through it, the different contents of the curriculum will be taught.

Within this TFG it is pretended to learn, as Dale and Tanner (2012) mention, ‘*through* another language’, in this case, English. Despite it, the focus is not on the language itself but the contents, in this case, the circulatory system.

5.2 COOPERATIVE LEARNING

As CLIL, Cooperative Learning is not a methodology itself. We can describe it as a teaching strategy. Cooperative Learning doesn’t mean just work in groups; it goes further. This strategy aims to complete tasks collectively. The groups should be mix with different levels of ability so all of them can help in some way to their classmates.

As the school is very concerned about this strategy, students have different roles in the class. There are students in charge of recycling, windows, write on the board, materials... Those roles are going to change each term.

The tables are also organized in groups of four or five and they have different roles. Each student has its card stuck on their table. The roles are:

- Speaker. This role is for the student who can ask questions to the teacher as well as an answer when required.
- Secretary. They are the ones who have to remind and check that everyone has the homework written in the agendas. They also have to write when working in groups.
- Coordinator. The coordinator is in charge of running the turns when speaking or when doing an activity. Their function is also checking that everyone is following their role.
- Controller. It is the one who controls the level of voice, they are in charge of the materials, and they have to check that everything is clean.

Those roles were bear in mind when developing group activities.

5.3 SCAFFOLDING

It is a 'resource to bridge learning gap in order to achieve learning goals' (Jaén, 2018: 9). So, it refers to all the strategies we use to help students to build their knowledge. Walki (2006) listed different types of strategies:

- Modelling, which consists on giving the students examples of the tasks we are asking them to do. Most of the times, when the teacher is explaining what they have to do in each activity, she is going to do it by herself first. For example, the mini-book.
- Bridging. This strategy is related to *meaningful learning*⁷. It involves a connection between the new information and the previous knowledge of the student. From the beginning of the project, student's previous knowledges are going to be taken into account to develop the rest of it.
- Contextualising. Supporting the ideas with different mediums as images, videos. There is some information which requires audio-visual aids for the students to get the idea of what we are talking about.

⁷ Meaningful learning is a term coin by David Ausubel. It consists on associate new information with the one we already have.

- Schema building. Similar to bridging, it refers to sets of interrelated knowledge to organise and understand information.
- Developing metacognition. For the students to reflect about their learning process. In this way, we are going to use self-evaluation rubrics.

5.4 PROJECT-BASED LEARNING

This methodology has a centre of interest as a starting point. This means that there is a topic or triggering situation that motivates students to want to know more about it, to investigate and work on that topic (Tobón, 2006).

Through this TFG it is developed a common project between 5th and 6th grade. The triggering situation, the final task and some other activities are going to take place in shared places as the gym or the corridors, so they are going to work together.

5.5 ICTS

ICTs (Information and Communication Technology) is related to the Digital Competence, which ‘involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society’ (The European Digital Competence Framework).

According to the Ferrari (2013), the areas of the digital competence are divided into five:

1. Information: this first area consists on identify, organise and analyse digital information.
2. Communication: it refers to the interaction through digital tools.
3. Content-creation: is the use of digital resources to produce creative expressions.
4. Safety: this area is link with personal and data protection and all the security actions for that purpose.
5. Problem-solving: it is the ability to choose the most appropriate digital tools depending on the purpose of its use.

The use of ICT in education has a big impact in students' learning. Within this project, technological devices are going to be present in the class ass the Smart Board or the use of different applications in Tablets.

6. PROJECT DESIGN

The project described in the following sections complements a previous designed developed during the *Practicum 0*. After carried the project out and analysing the results, this proposal aims to improve them.

It corresponds to a stage project called 'I have a hunch'. It is developed in 5th and 6th grade of Primary Education and it comes up because one student in the school (6th grade) has a heart disease. It is an interdisciplinary project, which means that it is not only going to be taught in one subject. Students are going to learn about it in Natural Science, where we are going to focus the proposal, English, which is the one who evaluates the accuracy in the language, Spanish, where students are going to learn different types of texts to develop the project, and Math and PE are going to be focused on the heart rate.

The final product of the project consists of a recorded interview. Students are going to work in groups, and they need to perform an interview about the project topic. This activity is going to be explained more detailed in the activities section.

6.1. CONTEXT

6.1.1 School Context

The following proposal has been developed to implement it in a private school located in Palencia.

The educational project covers regulated education at infant, primary, secondary and high school levels, but also a whole set of values and free time education activities that include sports, Christian groups and volunteering.

It is a bilingual centre, so they have English lessons from 1st year of Infant Education. The general hours for the centre are from 8.00 to 19.30 from Monday to Friday. The school day for students is from 9.00 to 14.15h, although there is an early bird service from 7.45 to 9.00h. School canteen from 14.15 to 16.00h.

One of the most important programs to take into account in this TFG is the *BILINGUAL PROJECT*. The project is based on a Communicative Methodology, based on the Common European Reference Framework (2001). Parts of a 'self-centred

curriculum’, which means that we start from what the students know and the topics introduced are within their ‘zone of proximal development’, that is, topics that they already know, even if superficially, or that they can understand despite their initial ignorance. Based on this principle the school applies a CLIL Methodology (Content and Language Integrated Learning), teaching content through a foreign language. In this sense, apart from English as a subject, students have the opportunity to learn Science (Natural and Social) and Arts through English.

6.1.2 Class Context

The level in which we are going to focus on the design is 5th grade. We are going to concentrate on one specific class, 5th A, composed of 26 students, 14 girls and 12 boys. Most of them are 10 years old, even though, some students are 11, as it is their 2nd year in the level. The subjects in which we work with the students are Natural Science, Social Science, English and Arts, as well as one hour of tutoring in Spanish. Due to the hours spent with the group, the connection with them has been notorious from the first days, which facilitates the teacher task.

The organization of the class starts with the tables. Most of the time they are placed in pairs, in three lines. But others, they are placed in groups, four groups, four students each, and two of five students. At the front, there is the teacher’s desk and behind it some displays like the classroom timetable, the calendar or the school year motto. Next to the teacher’s desk is the smartboard and the blackboard. (*see Appendix I*)

At the back of the class there, are hangers, and the wall is full of space to place different displays. That wall is going to be used for the Project. On the right side, there are constructed shelves.

Some of the important resources we have in class are, on one hand, the classroom library, which is at the back of the class. In that corner, there are going to be different books and magazines used during the project. Students can go and make use of them every time they work in groups and they have to investigate something. On the other hand, and also used to look for information, the class can use some tablets, there are 30 in total.

6.2. OBJECTIVES

The ‘Real Decreto 126/2014, de 28 de febrero’ establishes the general objectives for Primary Education. In the next chart there are represented the **objectives** taken into account through the project:

Article 7. Primary Education Objectives	
f	To acquire in, at least, one foreign language the basic communicative competence that allows them to express and understand simple messages and to develop in everyday situations.
h	To know the fundamental aspects of Natural Science, Social Science, Geography, History and Culture.
k	To value hygiene and health, to accept their own body and the other’s, to respect differences and to use physical education and sports as ways to promote personal and social development. ⁸

The **learning outcomes** for the unit are:

- Be aware of health problems in young people.
- Identify every step the blood follows around the heart.
- Design an interview.
- Demonstrate their knowledge about the circulatory system.

6.3 TIMING

5ºA	LUNES	MARTES	MERC.	JUEVES	VIERNES
09:00-10:00	INGLÉS	RELIGIÓN	NAT. SC.	LENGUA	SOC. SC.
10:00-11:00	MATE	LENGUA	INGLÉS	MATE	TUTORÍA
11:00-11:45	NAT. SC.	MATE	LENGUA	NAT. SC.	MATE
11:45-12:15	R	E	CR	E	O
12:15-13:15	LENGUA	SOC. E.F.	MATE	SOC. SC.	INGLÉS
13:15-14:15	E.F.	ARTS	E.F.	FRANCÉS	MÚSICA

⁸ Personal translation. For the original document go to ‘Real Decreto 126/2014, de 28 de febrero’

The previous chart shows the timetable for 5° A. In light blue are highlighted the hours in which students have Natural Science. As we can see we count on two and a half hours per week to work in the project in our area. It is important to mention that in some cases, as in this particular one, the English teacher is the same as the teacher who teaches Science (Natural and Social). That means that on some occasions as it can be on Wednesdays, we may use some both hours dedicated to the project to connect both subjects, English and Natural Science..

During Spanish lessons, different types of text are going to be worked on. Special attention to 'interviews' as it is going to be the format used for the final task of this project. It is going to be in English lessons as well, where students are going to see how to structure an interview.

The project is going to last 4 weeks, it starts on a Wednesday so we can do the first activity in the first hour.

6.4 ACTIVITIES

As mentioned before, it is a common project in 5th and 6th grade and it involves more than one subject. Even though, the focus of this proposal is on the Natural Science subject. It is important to bear in mind that the last unit for 5th grade was about health and illness, and that is also a reason why the project is developed at the end of the first term.

As we can see in the charts (*see Appendix II*), the project consists of nine lessons. All the lessons have more or less the same structure. At the beginning of the lessons there is a time in which some previous knowledges are reviewed as well as linking the lesson with the previous one. Then, there is a time to acquire new information. And, in the end, some conclusions to sum up what it has been learnt through the lesson.

Every day there is going to be a guiding question which is going to allow the students to know about the aim of each day's session.

Triggering situation.

To start with the project, the first activity is going to be the four classes together in the gym. There are going to be posters with different pictures related to the heart, a healthy

lifestyle, unhealthy... (see *Appendix III*) To enter the gym students are going to be asked to join in groups (the same as in class), so all groups 1 are going to be together and so on. The first activity consists of letting the students go around the gym, looking at the pictures and writing down what the pictures suggest them in the poster. Then, the teacher is going to read some of the ideas written so the students can think about them. To finish this activity, a worksheet (see *Appendix IV*) is going to be given to the students to be completed it in groups. In this worksheet, they need to agree in two ideas about what they would like to learn through this project.

Once we go back to the class, we are going to create a poster with three different sections: Know / Wonder / Learnt (see *Appendix V*). In the first part, Know, it is going to be written everything the students already know about the project (previous knowledge); on the second part, Wonder, what their wonders are about the project, they can use things said before in the gym or questions about the pictures (hypothesis); and, the last one, Learnt, is going to be completed through the project and at the end, we can check if our wonders have been solved.

Day 2. (Investigate)

The guiding question for this first day is: *'What is the primary function of the circulatory system?'* Students may have some ideas, so they are going to share them in pairs and next with the rest of the class.

To answer the guiding question more accurately, we need to know what the circulatory system is. The first activity is called 'Rotatory paper'. It consists of a collaborative activity. In groups, each group has a paper and each student a pen of a different colour. The teacher says which student is going to start first (coordinators) and which order they have to follow. Then, each student has to write one word or expression related to the topic, the circulatory system, and pass the paper to the next one. Once the time is up, they have some time to review the answers in groups and then share them with the rest of the class.

To start their investigation about the project, each group is going to have two tablets to look for information about the circulatory system and write the most important information down in the Seesaw Activity (see *Appendix VI*) (1 per group). To check if their information is right, the teacher is going to give an article (see *Appendix VII*) to each group and, after reading it, they can complete their information.

In the end, everyone can share their answer to the guiding question and the teacher can write it down on the Learnt part of the KWL poster.

Day 3.

It is important to start the session with a small review of the contents worked with during the previous one. In this lesson, we are going to ask the students about the circulatory system and see what they remember. After reading the article, the answer to yesterday's question is related to the heart and the blood vessels.

This led us to today's question: *'How the blood moves around the blood vessels?'* To answer that question, first, we are going to watch a documentary: 'Once upon a time... the human body – the blood'.

After watching the video, students need to answer some questions through Plickers (*see Appendix VIII*).

In the end, everyone can share their answer to the guiding question and the teacher can write it down on the Learnt part of the KWL poster.

Day 4.

As every day, first, we start the lesson with a review of the previous one. How we are going to review is through a link in Seesaw to a video of Edpuzzle (*see Appendix IX*). Each student is going to have a Tablet and headphones and they need to watch a video and answer some questions while watching it.

The teacher shows a tube in which it is possible to see some of the components of the blood. We know what the blood is and what are its components, but, *'Where does our blood go?'*

A picture of the three types of circulation (*see Appendix X*) is going to be shown to the students and they need to think, in groups, which one represents each name. The teacher explains the three types of circulation and asks the students to do a Seesaw activity (*see Appendix XI*).

In the end, everyone can share their answer to the guiding question and the teacher can write it down on the Learnt part of the KWL poster.

Day 5.

To start this session, we are going to review the previous lessons through Plickers (*see Appendix XII*). From the first lesson, students know the important components of the circulatory system are the blood vessels and the heart, but they don't know 'How the heart works?'. That is going to be today's guiding question.

To answer it, we are going to watch a video:

https://youtu.be/tg_ObDJEaGo

Then, in groups, they need to complete an activity about the video (*see Appendix XIII*).

<https://view.genial.ly/5e2ec047a67cde1719c2ebfb/game-genially-sin-titulo>

After everyone has finished, we are going to complete the KWL poster with the last question of the project. Then, we are going to dedicate some time for the students to review everything creating a mini-book (*see Appendix XIV*) about the circulatory system.

Interview with a doctor.

To help the students get more information from an expert, it is going to be very important the visit of a doctor to the school.

All students involved in the project (5th and 6th graders) are going to join in the assembly hall to receive the doctor. There, she is going to explain important things about the heart and some related diseases, and the students can complete the information they already had. After listening to the doctor, students can ask some questions.

Visit of our classmate.

As it has been mentioned before, the project has its origin due to a student of the school who has a heart disease. This student is going to go class by class telling his story and the rest can make him questions.

Final task.

The final task of the project consists of an interview about everything learnt through the project. To prepare it, it is going to be necessary to use three lessons. Students are going to work in groups (the same as in class) and first, they need to decide which characters are going to be in their interview. Some examples are the journalist, which everyone must have at least one, a scientist, a doctor, a person with some heart problems... Then, they need to start planning their interview having in mind the assessment criteria (*see Appendix XV*). Furthermore, they need to include what they have learnt in the different subjects. In Spanish lessons, they have learnt about the structure of an interview. What is more, they have the visit of a journalist who explained to them how to develop a good interview. But they have also worked about contra advertisements, so, they need to include, at least two. In English lessons, the use of present simple and the structure 'you should' to refer to healthy habits have been taught and the students must reflect it on their interviews.

Once they have the script ready, which has been worked during the English lessons, as it is reflected on lessons 7 and 8 on the charts, they can start practising the performance. Then, taking into account the Arts lessons, in which students have learnt how to record videos, they have to record themselves while performing the interview and upload it to Seesaw in a video presentation (*see Appendix XVI*).

Conclusions and sharing.

In this session, the first-day poster is going to be checked and completed. First, students are going to see if their hypothesis and their wonderings were right (Confirm hypothesis), and then, they are going to write what they have learnt through the project.

To share the project with the families, they are going to be invited to come to the school so they can see everything children have done.

6.5 ASSESSMENT

Assessment is an integral part of language teaching and learning, not merely a final step in the process nor just a judgment about an activity accomplished.

On one hand, according to the ‘Decreto 26/2016, de 21 de julio’, assessment for Primary Education it will comply with the provisions of article 20 of the ‘Ley Orgánica 2/2006, de 3 de mayo’, and article 12 of the ‘Real Decreto 126/2014, de 28 de febrero’:

- The evaluation of the learning processes of the students will be continuous and global and will take into account their progress in all the areas.
- The most appropriate measures will be established so that the conditions for conducting the evaluations are adapted to the needs of students with special educational needs.
- Teachers will evaluate both the student's learning and the teaching processes and their teaching practice, for which they will establish indicators of achievement in the teaching schedules.
- Special attention will be paid during the stage to the personalized attention of the students, the realization of early diagnoses and the establishment of reinforcement mechanisms to achieve school success.

The **assessment criteria** linked to this unit are collected in the ‘Real Decreto 126/2014, de 28 de febrero’:

3. Relate certain life practices with the appropriate function of the body, adopting healthy lifestyles, knowing the health consequences of their way of life.⁹

If we specify it more, in the ‘Decreto 26/2016, de 21 de julio’ we have the assessment criteria for 5th grade:

4. Explain the benefits of prevention and early detection of diseases and relate certain life practices with the appropriate function of the body, adopting healthy lifestyles, knowing the health consequences of their way of life.

5. Point out the contribution of relevant scientists and their contribution to investigation.¹⁰

⁹ Personal translation. For the original document go to ‘Real Decreto 126/2014, de 28 de febrero’.

¹⁰ Personal translation. For the original document go to ‘Decreto 26/2016, de 21 de julio’

On the other hand, the **learning standards** in the ‘Real Decreto 126/2014, de 28 de febrero’ (see *Appendix XVII*) are summarized in identify, value and adopt healthy habits as well as knowing how to follow a healthy diet. They are also related to plan autonomously and creatively tasks and take decisions following criteria.

And, in the ‘Decreto 26/2016, de 21 de julio’ for 5th grade:

4.1. Know and explain prevention measures and diseases detections and identify health risks.
4.2. Identify and value healthy habits to prevent diseases and keeps a healthy behaviour.
4.3. Recognize the harmful effects of alcohol and drug consume.
5.1. Recognize the contributions of scientists in the science progression which improve people’s life quality. ¹¹

Make an assessment is very important for teachers and families to follow the development of children. In this way, we will know and find out the abilities and capacities of the children to enhance them, as well as the difficulties or problems they may present to be able to solve them.

“The main potential for self-assessment, however, is in its use as a tool for motivation and awareness raising: helping learners to appreciate their strengths, recognise their weaknesses and orient their learning more effectively.” (The Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFRL))

Although the assessment during the Practicum 0 was different, this is how I would improve it, bearing in mind the PBL methodology. Among the Practicum, there was a final exam because of the link of the project with the previous unit ‘Health and Illness’. Within this improve proposal, the assessment is going to be as practical as possible.

- **Children self-assessment.** Every day working on the project, children are going to make a self-assessment about the knowledge and learning of it. To get this self-assessment most consciously, we are going to provide our students first, with the objectives of each lesson so that they can get a better understanding of what we want them to learn. Secondly, we have a traffic light in which students have to put in a post-it what they have learnt in the

¹¹ Personal translation. For the original document go to ‘Decreto 26/2016, de 21 de julio’

lesson and what they need to reinforce (green for the things that they have learnt and red for the things that they need to improve or reinforce).

- **Peer-assessment.** Once a week we are going to have a time in which students are going to evaluate their classmate's behaviour and work. Every member of the group participates in the evaluation of each member except for the turn in which they have to evaluate themselves. (*see Appendix XVIII*)

- **Final self-assessment.** At the end of each unit, students will complete a self-assessment rubric in which they will have to indicate if they think they have achieved the objectives we established at the beginning of each unit. (*see Appendix XIX*)

- **Final evaluation.** At the beginning of each project, we are going to establish some objectives and at the end, we will check them through the final task. We will use a rubric as a resource. (*see Appendix XX*)

- Every day, at the end of the class, we are going to use 5 minutes for **teacher self-assessment.** We are going to think about how we feel after the class and we are going to observe our students' self-assessment which will indicate us if we have developed the class as we had planned, if we have failed in something and how we can improve it.

7. CONCLUSIONS

Within this section of the document, I am going to establish some conclusion about the project I saw during my internship, as well as concerning the proposed objectives.

It is important to highlight the enormous labour of teachers. Within the theoretical basis, we have seen how the roles of teachers have changed through the years and what are the steps teachers have to follow when working through Project-based learning. First of all, preparation. It takes a lot of time to think of a project, to organize it and it doubles the challenge if it is interdisciplinary work. In this particular case, you are not working on your own, you have to speak with your co-workers and take decisions together. Apart from the time needed to plan a project, how it is going to be developed and the context are important. We have to bear in mind the students and design the project according to them. Sometimes you may need to change parts of the same project if you are working in two different classes as they may need different challenges. Motivation is another essential element to take into account when planning the project. Once we know the students, we have to plan according to them and think about what is going to motivate them more.

Even if the project carried out during the internship was less dynamic and more theoretical than the one proposed in this document, students had fun and learnt a lot. Once they finished the project, they had an exam and all the contents were learnt for most of the students. After the changes done in the design of the project, it is expected for the students to be more motivated and to have an intrinsic interest to keep investigating and to learn.

Based on the general objective ‘to develop a bilingual project (English as the foreign language) in a Primary Education classroom, specifically for the Natural Science subject’ there have been proposed some specific ones.

Thanks to this work, it has been analysed the use of project-based learning in general and regarding second language acquisition. PBL makes the students learn without being aware of it. They can have a good time investigating a topic and developing different activities from the ones they were used to do while learning at the same time. In my opinion, boredom is one of the most challenging elements we have to fight against as teachers and it is becoming more difficult nowadays with the technology. Apart from the numerous benefits of the use of technologies, it is important to know some of the cons. As

they spend so many hours in front of a screen, it can also be a distraction for them. This could affect the way children's brain develop and it may lead to problems of attention.

After analysing the use of PBL in class and the design of a proposal, there were two more objectives which cannot be evaluated since this is an implementation proposal and the changes have not been taken to the class. Those two objectives were introduced to further encouragement of the communicative competence and to develop the participation and the autonomy of the students through cooperation. Along the activities, thinking first individually and then sharing with their classmates is one of the most attractive activity which intends to achieve the objectives mentioned before. It requires time and practice setting the steps clearly.

The idea of having two objectives not demonstrated leaves a blank for future researches in which this implemented proposal could be put into practice in a real context.

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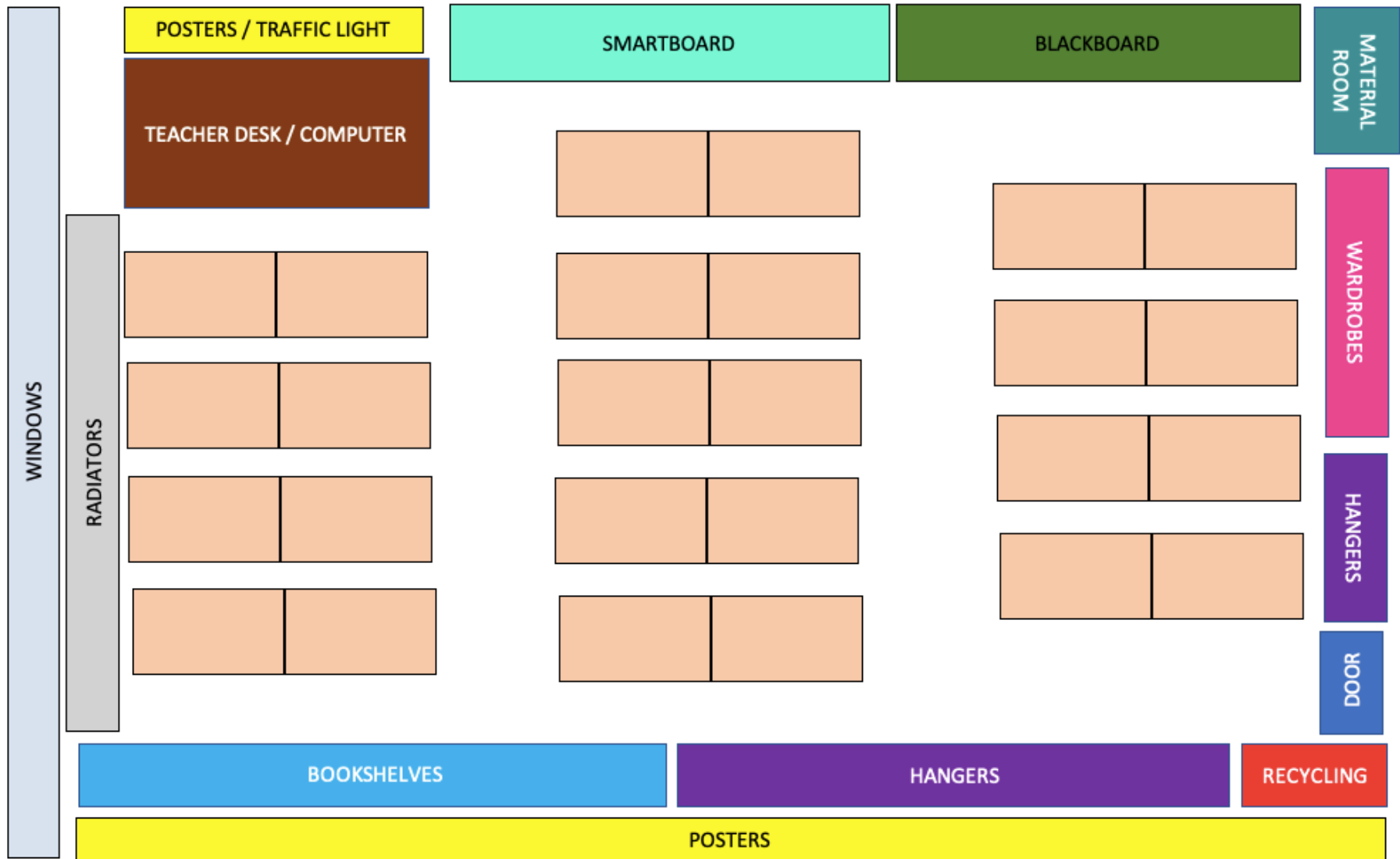
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APPENDIX

APPENDIX I. CLASS ORGANIZATION



APPENDIX II. UNIT

Where this unit fits

This project is carried out in the middle of the first term, as it is related with the second unit ‘Health and illnesses. The title of this project is ‘I have a hunch’.

As it is a project, every lesson is going to give us information answering a leading question that students are going to need for the final task. The final task consists of a podcast in which students have to record an interview about the heart, an advertisement and a poem. As this project is connected with more than one subject, the contents of the interview are going to be evaluated through Science, the structure of the interview is going to be evaluated through the Spanish teacher, and the English level is going to be evaluated through the English teacher.

Through the development of the project and to help students with the final task, we are going to have the visit of a member of the radio. He is going to explain the different types of interview and how we can make a good interview. There is also included a visit of a doctor and one of our students (who has a heart disease) is coming to the class to explain us his disease.

Prior Learning

Language used in the unit

Important Resources

The students already know some concepts related with this project as they already have studied them in previous years. According to the Spanish Curriculum of Castilla y León (DECREE 26/2016, de 21 de julio), students have learnt about the systems involves in the vital functions, common diseases, healthy habits, advances in medicine. Nonetheless, at the beginning of the project we are going to review those previous concepts as well as every time we start a new topic, we are going to make

- The heart: circulation, arteries, veins, capillaries, blood, plasma, red blood cells, white blood cells, platelets, atria, ventricles, vena cava, aorta
- Prevention: vaccination, antibodies
- Diagnosis: X-rays, electrocardiograph
- Anaesthetic, surgery, blood transfusion, pacemaker, organ transplant

- Smartboard
- Posters
- Tablets
- SeeSaw
- Plickers

some questions to check what they remember.		
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Expectations

At the end of this unit all the children must	<ul style="list-style-type: none"> • Enjoy the lesson • Be respectful • Be aware of the healthy problems in young people • Identify some steps the blood follows around the heart • Participate in the design of an interview • Demonstrate their knowledge about the circulatory system
At the end of this unit most of the children should	<ul style="list-style-type: none"> • Participate in class • Collaborate with their groups • Identify every step the blood follows around the heart • Demonstrate their knowledge about the project • Participate in the design of an interview providing reasons to their thoughts
At the end of this unit some of the children could	<ul style="list-style-type: none"> • Give reasons and examples to complete their thoughts • Demonstrate their knowledge about the circulatory system

Lessons Overview.

Lesson	Learning goals	Learning outcomes	Main activity	Assessment criteria
1	<ul style="list-style-type: none"> • Introduce the project • Hypothesize • Differentiate between health and illness 	<p>Children will learn:</p> <ul style="list-style-type: none"> • To express their previous ideas about a picture • To hypothesize about the project • The types of diseases • How an infection can be transmitted 	<ul style="list-style-type: none"> • Posters with photos • KWL poster 	<ul style="list-style-type: none"> • They will respect the activity • They will write on the posters • They will hypothesize what they think the project is going to be about • They will recognize a healthy and an ill person
2	<ul style="list-style-type: none"> • To identify the circulatory system • Investigate about the circulatory system • Discriminate necessary information 	<p>Children will learn:</p> <ul style="list-style-type: none"> • The circulatory system 	<ul style="list-style-type: none"> • Rotatory paper 'circulatory system' • Searching information (Tablets) • Article • KWL poster 	<ul style="list-style-type: none"> • They will complete the rotatory paper • They will write down information to answer the question • Students will express their ideas in their own words
3	<ul style="list-style-type: none"> • To know the components of the blood • To understand the function of each component 	<p>Children will learn:</p> <ul style="list-style-type: none"> • The blood vessels • The components of blood • The function of the components of blood 	<ul style="list-style-type: none"> • 'Once upon a time...the human body – the blood' https://www.netflix.com/watch/80206182?trackId=13752289&tctx=0%2C4%2C67426b00-d0b5-4ae1-8b06-ca53b0f113be-13995372%2C%2C 	<ul style="list-style-type: none"> • They will identify the components of blood • They will differentiate the function of each component

			<ul style="list-style-type: none"> • Plickers • KWL poster 	
4	<ul style="list-style-type: none"> • To know the components of the blood • To understand the function of each component 	<p>Children will learn:</p> <ul style="list-style-type: none"> • The components of blood • The function of the components of blood 	<ul style="list-style-type: none"> • Video edpuzzle • https://edpuzzle.com/assignments/5e2c1df1d7fdcf40d09c01b4/watch • Seesaw • KWL poster 	<ul style="list-style-type: none"> • They will identify the components of blood • They will relate the function with each component
5	<ul style="list-style-type: none"> • To understand how our heart works • To identify the different parts of the heart 	<p>Children will learn:</p> <ul style="list-style-type: none"> • The parts of the heart • The blood route 	<ul style="list-style-type: none"> • Plickers • Video https://youtu.be/tg_ObDJEaG_o • Blood circulation maze https://view.genial.ly/5e2ec047a67cde1719c2ebfb/game-blood-circulation • Minibook 	<ul style="list-style-type: none"> • They will select the way they need to follow in the maze
6	<ul style="list-style-type: none"> • To implement information 	<p>Children will learn:</p> <ul style="list-style-type: none"> • A general vision of the project 	<ul style="list-style-type: none"> • Interview with a doctor 	<ul style="list-style-type: none"> • They will ask questions to the doctor
7	<ul style="list-style-type: none"> • To design an interview 	<p>Children will learn:</p> <ul style="list-style-type: none"> • How to select what they know and what is important for their final task 	<ul style="list-style-type: none"> • FINAL TASK: Podcast Interview 	<ul style="list-style-type: none"> • They will work cooperatively • They will design an interview

8				
9	<ul style="list-style-type: none"> To produce an interview 	<p>Children will learn:</p> <ul style="list-style-type: none"> How to select what they know and what is important for their final task 	<ul style="list-style-type: none"> Record and share the Interviews 	<ul style="list-style-type: none"> They will work cooperatively They will create an interview

APPENDIX III. POSTERS


IDEAS, QUESTIONS, THOUGHTS...

80% of Teens Don't Get Enough Exercise

WORLD HEALTH ORGANIZATION | SEPTEMBER 29, 2017

The World Health Organization (WHO) says that 80% of the world's teens don't get enough exercise to live healthy lives. The pattern of inactivity could have serious effects as these teens become adults.

The report, which was published in *The Lancet*, was based on research done with students aged 11 to 17 in 146 different countries. The WHO has been studying teen activity levels since 2001 and reports that not much has changed since then.



IDEAS, QUESTIONS, THOUGHTS...

Iker Casillas stable after heart attack, but will he play again?

JAMES WORTHING FOR GETTY IMAGES | LONDON - 2017-09-20 10:04:00Z

Spanish goalkeeper who now plays for FC Porto may never go back to top-level soccer, say some cardiologists




Iker Casillas shared this photo on Twitter.

Spanish goalkeeper Iker Casillas remains stable after his heart attack on Wednesday, but it is unclear whether he will be able to play soccer again.


IDEAS, QUESTIONS, THOUGHTS...

Drones that fly medical equipment to patients is the next frontier

Stephanie Bernicki, May 27, 2016 10:00AM | @stephaniebernicki



IDEAS, QUESTIONS, THOUGHTS...





Class: _____ Group: _____

Components: _____

What would I like to learn with this Project? Two **agreed** ideas.

1. _____

2. _____

APPENDIX V. KNOW/WONDER/LEARNT

KNOW

WONDER

LEARNT

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APPENDIX VI. SEESAW ACTIVITY 1



1. What are the functions of the circulatory system?

1. Look for information about 'the circulatory system'
2. Read the Article
3. Answer the question

0 Responses, 0 Waiting for Approval, 0 Drafts, 0 Not Responded



Add Response

 Assigned on Jan 24 at 01:15 PM

 Assigned to All Students in 5° primaria

 Circulatory System

 Template attached



About the Circulatory System

The heart and blood vessels are called the **circulatory system** because blood circulates through the body. The heart is the important pump that makes it all work.

When the heart pumps, the blood first flows into tubes called **arteries**. The arteries that leave the heart are large tubes. The biggest one, called the **aorta**, is an inch wide. But the arteries soon branch again and again, to form many smaller tubes.

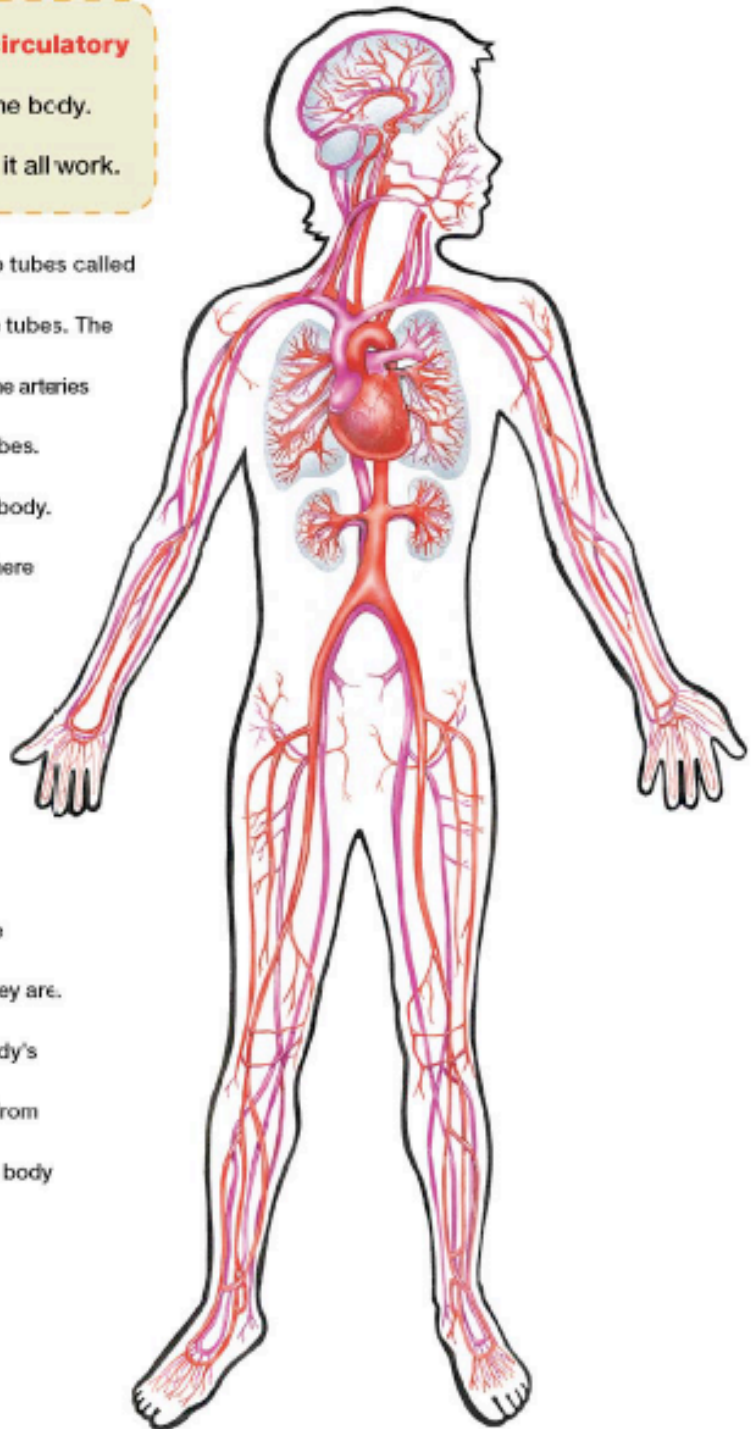
These **blood vessels** carry blood to all parts of the body.

The farther from the heart, the more blood vessels there are, and the smaller they are. The tiniest blood vessels, called **capillaries**, are so small you would need a microscope to see them.

Capillaries join to form larger blood vessels.

The bigger ones are called **veins**. These tubes carry blood back toward the **heart**. The closer to the heart, the fewer the veins there are, and the larger they are.

The largest veins empty blood into the heart. The body's **blood vessels** carry blood in a circle: moving away from the heart in **arteries**, traveling to various parts of the body in **capillaries**, and going back to the heart in **veins**.



APPENDIX VIII. PLICKERS 1

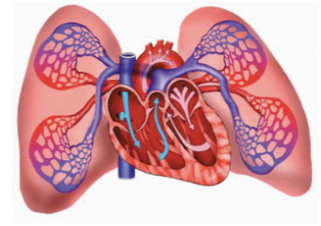
What is the function of the heart?

- A The heart pumps nutrients. x
- B The heart pumps the blood to every part of the body. x
- C The heart bombs the blood to every part of the body. x
- D The heart pamps the blood. x



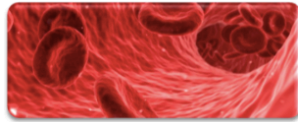
What are the three types of blood vessels?

- A Vins, arteries and capillaries.
- B Tubes, arteries and veins.
- C Arteries, veins and capillaries.
- D Capilaris, veins and arterias.



What are the four components of blood?

- A Plasma, red blood cells, blue blood cells, platelets.
- B Palsma, white blood cells, red bloos cells, platelets.
- C Plateleta, red blood cells, plasma, blue blood cells.
- D Plasma, red blood cells, white blood cells, platelets.



The ... transport blood from the heart to the rest of the body. The ... collect the blood and return it to the heart. The ... give oxygen and nutrients to the cells.

- A Arteries. Capillaries. Veins. x
- B Arteries. Veins. Capillaries. x
- C Veins. Arteries. Capillaries. x
- D Capillaries. Veins. Arteries. x

APPENDIX IX. SEESAW ACTIVITY 2



2. The blood.

1. Press the video
2. Watch the video
3. Answer the questions

0 Responses, 0 Waiting for Approval, 0 Drafts, 0 Not Responded

[+ Add Response](#)

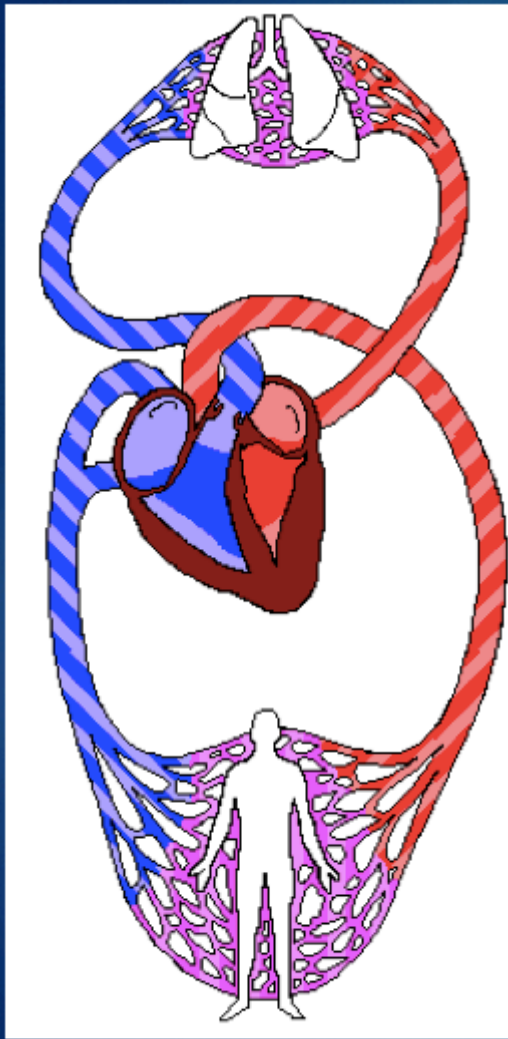
 Assigned on Jan 25 at 12:07 PM

 Assigned to All Students in 5° primaria

 Circulatory System

 Template attached





CORONARY
CIRCULATION

SYSTEMIC
CIRCULATION

PULMONARY
CIRCULATION

APPENDIX XI. SEESAW ACTIVITY 3



3. Types of circulation

1. Write the names of the types of circulation.
2. Record your voice explaining each type of circulation.

0 Responses, 0 Waiting for Approval, 0 Drafts, 0 Not Responded

[+ Add Response](#)

 Assigned on Jan 27 at 10:51 AM

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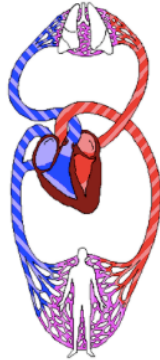
 Template attached



APPENDIX XII. PLICKERS 2

What are the three types of circulation?

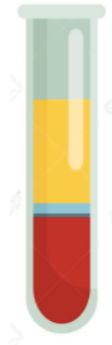
- A Systemic circulation, pulmonary circulation and coronary circulation.
- B Pulmonary circulation, systemic circulation, coronary circulation.
- C Coronary circulation, pulmonary circulation, systemic circulation.
- D Systemic circulation, pulmonary circulation, systemic circulation.



The components of the blood are:

- White blood cells
- Red blood cells
- Plasma
- Platelets

- A True
- B False



The function of the ... is to transport blood from the heart to the resto of the body.

- A Veins
- B Atria
- C Arteries
- D Vinas



The... is when the blood is carried to the lungs.

- A Systemic circulation
- B Pulmonary circulation
- C Coronary circulation
- D [Click here to edit](#)

1. ... - Liquid which is the base of blood.
2. ... blood cells - They transport the oxygen.
3. ... blood cells - They help your body to fight disease.
4. ... - They coagulate the blood when it is not in a closed vessel.

- A 1 Plasma. 2 White. 3 Red. 4 Platelets.
- B 1 Platelets. 2 Red. 3 White. 4 Plasma.
- C 1 Platelets. 2 White. 3 Red. 4 Platelets.
- D 1 Plasma. 2 Red. 3 White. 4 Platelets.

APPENDIX XIII. BLOOD CIRCULATION MAZE



4. Blood circulation

1. Follow the steps during the blood circulation.
2. Click on the lock when you finish.
3. Enter the code.

0 Responses, 0 Waiting for Approval, 0 Drafts, 0 Not Responded

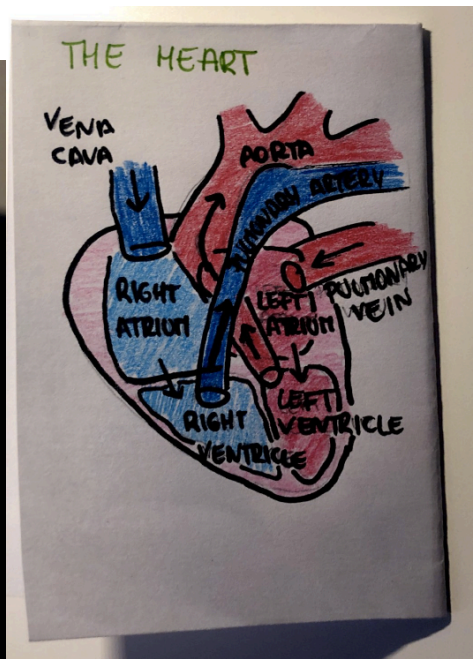
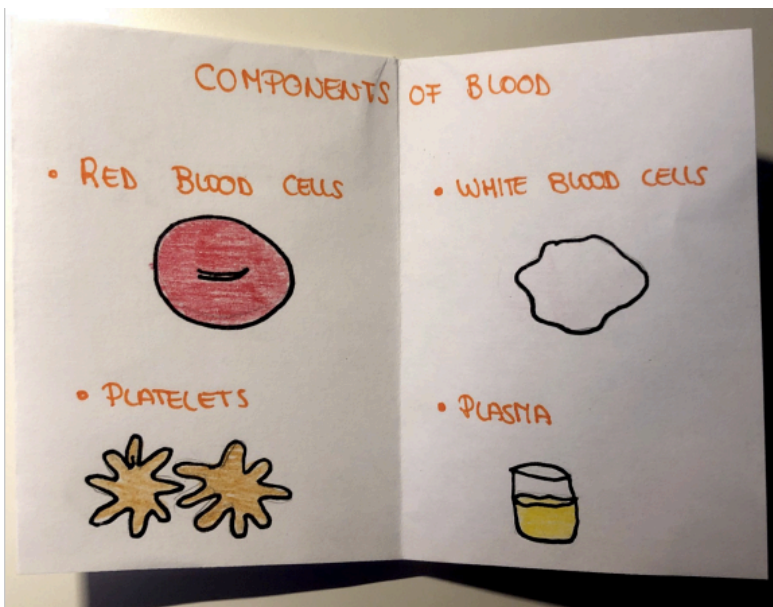
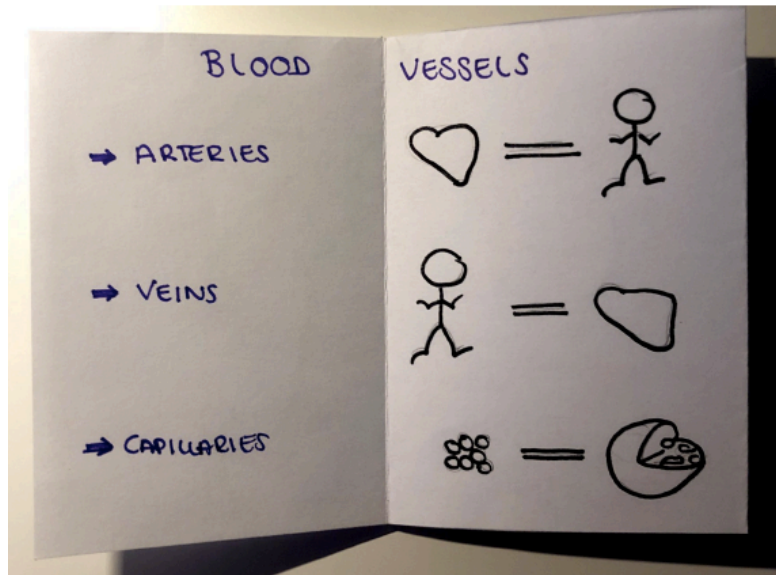
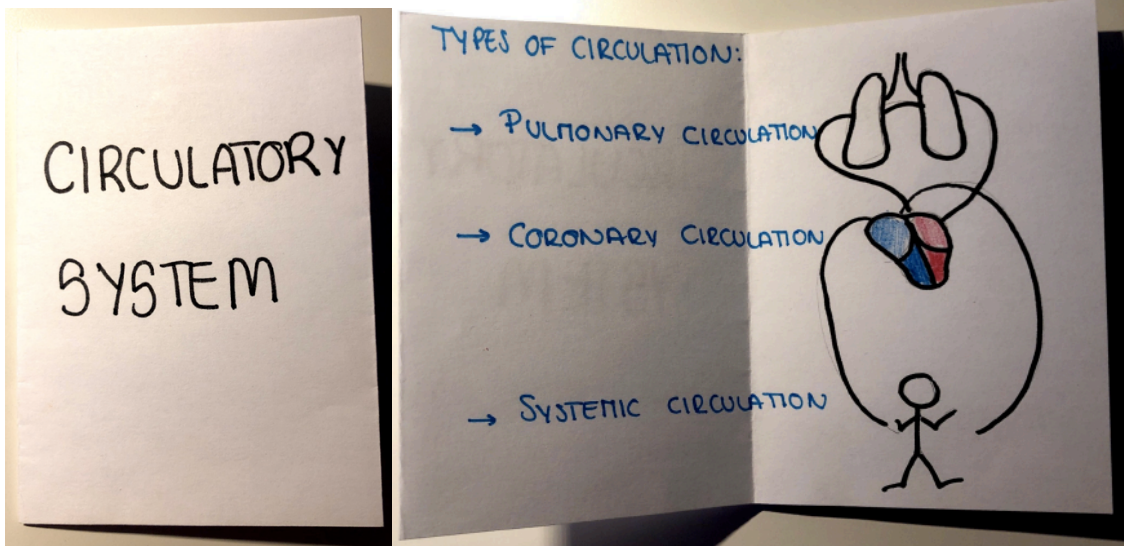
[+ Add Response](#)

Assigned on Jan 27 at 03:06 PM

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Template attached





APPENDIX XV. ASSESSMENT CRITERIA

RADIO SHOW				TOTAL
4	3	2	1	
The final video has: the name of the program, the name of the characters, advertisement, interview, close and goodbye. It is easy to distinguish among parts.	The final video has most of the following elements: the name of the program, the name of the characters, advertisement, interview, close and goodbye; but it is not easy to distinguish between the parts.	The final video has some of the following elements: the name of the program, the name of the characters, advertisement, interview, close and goodbye; but it is not easy to distinguish between the parts.	The final video has a few of the following elements: the name of the program, the name of the characters, advertisement, interview, close and goodbye; but it is not possible to distinguish between the parts.	
NATURAL SCIENCE				
4	3	2	1	
All important parts of content were included and were correct (You have talked about diseases, tips to stay healthy, parts of the hear, how it works, components of blood, blood vessels, types of circulation).	Almost all important parts of content were included and were correct. There is one missing.	Almost all important parts of content were included and were correct. There are 2 or 3 missing.	Almost all important parts of content were included and were correct. There are 4 or more parts of the content missing	
ENGLISH				
4	3	2	1	
There are 0-1 important spelling (vocabulary explained) or grammatical mistakes (like subjects missing or 's' when using the simple present).	There are 2-3-4 important spelling or grammatical mistakes.	There are 5-6 spelling or grammatical mistakes.	There are more than 6 spelling or grammatical mistakes.	
COMPETENCIA LINGÜÍSTICA: TEXTOS LITERARIOS, LA POESÍA				
4	3	2	1	
En el audio se hace referencia a la poesía: se habla o se entrevista a un poeta real o inventado, se declama un poema relacionado con el corazón. Hay incluso, refranes y aforismos. Se os escucha hablar de poesía y dan	En el audio se hace referencia a la poesía: se habla o se entrevista a un poeta real o inventado, se declama un poema relacionado con el corazón. Hay incluso, refranes y aforismos. Se os escucha hablar de poesía y dan	En el audio se hace referencia a la poesía: se habla o se entrevista a un poeta real o inventado, se declama un poema relacionado con el corazón. Hay incluso, refranes y aforismos. Se os escucha hablar de poesía y dan	En el audio se hace referencia a la poesía: se habla o se entrevista a un poeta real o inventado, se declama un poema relacionado con el corazón. Hay incluso, refranes y aforismos. Se os escucha hablar de poesía y dan	

ganas de estar enamorado/a, de dar besos y abrazos, también de llorar o reír en un 100%	ganas de estar enamorado/a, de dar besos y abrazos, también de llorar o reír en un 75%	trasmítis tanta sensibilidad, y tanta emotividad...como la que transmite una lavadora. No pasa nada, ¿quién no se ha sentido un poco cursi hablando de poesía alguna vez?	ganas de estar enamorado/a, de dar besos y abrazos, también de llorar o reír en menos de 25% , pero no os preocupéis, la próxima vez os tomaréis menos en serio cuando habléis de poesía.	
COMPETENCIA LINGÜÍSTICA: LOS ANUNCIOS PUBLICITARIOS, LA ‘CONTRAPUBLICIDAD’				
4	3	2	1	
Vuestro “Contra anuncio” llama la atención sobre un problema, critica un abuso de alguna marca transformando su eslogan y/o el nombre del producto y lo hace de forma muy clara.	Vuestro “Contra anuncio” llama la atención sobre un problema, critica un abuso de alguna marca transformando su eslogan y/o el nombre del producto y lo hace de forma bastante clara.	Vuestro “Contra anuncio” llama la atención sobre un problema, pero faltan varios de los elementos propios de un contra anuncio, o están, pero no se alcanzan a comprender.	Vuestro “Contra anuncio” no llama la atención sobre un problema, o lo hace, pero de forma muy poco clara.	
COMPETENCIA MATEMÁTICA Y EF				
4	3	2	1	
En algún momento del programa hay una referencia muy clara a la frecuencia cardíaca, y/o a alguno de los contenidos trabajados en matemáticas (F. Absoluta, F Relativa, la moda, el rango, la mediana)	En algún momento del programa hay una referencia clara a la frecuencia cardíaca, y/o a alguno de los contenidos trabajados en matemáticas (F. Absoluta, F Relativa, la moda, el rango, la mediana)	En algún momento del programa hay una referencia a la frecuencia cardíaca, y/o a alguno de los contenidos trabajados en matemáticas (F. Absoluta, F Relativa, la moda, el rango, la mediana) pero es poco clara o insuficiente.	En ningún momento se hace referencia a lo mencionado, o se hace referencia, pero de forma muy poco clara.	
SPEAKING PARTICIPATION				
4	3	2	1	
We can listen to you clearly in both languages in ALL the interventions. You distribute them in an equal way. Everyone participates in different ways.	We can listen to you clearly in both languages in MOST of the interventions. You distribute them in an equal way. Almost everyone participates in different ways.	We can listen to you clearly in both languages in SOME of the interventions and they are not always distributed in an equal way or not everyone participates.	We can listen to you clearly in both languages in NOT MANY interventions and they are not distributed in an equal way or not everyone participates.	
FINAL MARK				

APPENDIX XVI. SEESAW INTERVIEW



INTERVIEW

1. Select your characters (journalist, doctor, scientist...)
2. Plan your interview (CAREFUL!!: have in mind the ASSESSMENT CRITERIA)
3. Write the script on your notebooks
4. Record a VIDEO of your interview

0 Responses, 0 Waiting for Approval, 0 Drafts, 0 Not Responded



Add Response



Assigned on Jan 24 at 01:08 PM



Assigned to All Students in 5° primaria



APPENDIX XVII. LEARNING STANDARDS

3.1. Reconoce estilos de vida saludables y sus efectos sobre el cuidado y mantenimiento de los diferentes órganos y aparatos.
3.2. Identifica y valora hábitos saludables para prevenir enfermedades y mantiene una conducta responsable.
3.3. Identifica y adopta hábitos de higiene, cuidado y descanso.
3.4. Conoce y explica los principios de las dietas equilibradas, identificando las prácticas saludables para prevenir y detectar los riesgos para la salud.
3.5. Reconoce los efectos nocivos del consumo de alcohol y drogas.
3.6. Observa, identifica y describe algunos avances de la ciencia que mejoran la salud (medicina, producción y conservación de alimentos, potabilización del agua, etc.).
3.7. Conoce y utiliza técnicas de primeros auxilios, en situaciones simuladas y reales.
3.8. Identifica emociones y sentimientos propios, de sus compañeros y de los adultos manifestando conductas empáticas.
3.9. Conoce y aplica estrategias para estudiar y trabajar de manera eficaz.
3.10. Reflexiona sobre el trabajo realizado, saca conclusiones sobre cómo trabaja y aprende y elabora estrategias para seguir aprendiendo.
3.11. Planifica de forma autónoma y creativa actividades de ocio y tiempo libre, individuales y en grupo.
3.12. Manifiesta autonomía en la planificación y ejecución de acciones y tareas y desarrolla iniciativa en la toma de decisiones, identificando los criterios y las consecuencias de las decisiones tomadas.

APPENDIX XVIII. PEER-ASSESSMENT

GROUP: _____

NATURAL SCIENCE

COOPERATIVE LEARNING												
The achievement you get will be taken into account in the final mark of the unit (10%).												
CRITERIA	MARK											
<u>Helping</u>												
Help their partners the entire time.	3	2	1	3	2	1	3	2	1	3	2	1
Try their best in all of their work.	3	2	1	3	2	1	3	2	1	3	2	1
<u>Listening</u>												
Listen when the teacher (or speaker) is talking.	3	2	1	3	2	1	3	2	1	3	2	1
Follow directions the first time they are given.	3	2	1	3	2	1	3	2	1	3	2	1
<u>Participation</u>												
Participate / try to participate in class.	3	2	1	3	2	1	3	2	1	3	2	1
Participate in the group by doing their job.	3	2	1	3	2	1	3	2	1	3	2	1
<u>Respect</u>												
They are polite and respectful to students and adults.	3	2	1	3	2	1	3	2	1	3	2	1
NAMES:												

3= Always; 2= Sometimes...; 1= Never

APPENDIX XIX. SELF-ASSESSMENT

NAME: _____

NATURAL SCIENCE

COOPERATIVE LEARNING			
The achievement you get will be taken into account in the final mark of the unit (10%).			
CRITERIA	MARK		
<u>Helping</u>			
I help my partners the entire time.	3	2	1
I try my best on all of my work.	3	2	1
<u>Listening</u>			
I listen when the teacher (or speaker) is talking.	3	2	1
I follow directions the first time they are given.	3	2	1
<u>Participation</u>			
I participate / try to participate in class.	3	2	1
I participate in the group by doing my job.	3	2	1
<u>Respect</u>			
I am polite and respectful to students and adults.	3	2	1
FINAL MARK.	_____ / _____ =		

3= Always; 2= Sometimes...; 1= Never

APPENDIX XX. FINAL EVALUATION

NAME: _____

NATURAL SCIENCE

KNOW TO BE and COOPERATION				
The achievement you get will be taken into account in the final mark of the unit (20%).				
CRITERIA	MARK			
You keep an adequate noise level and respect turns to speak.	4	3	2	1
You respect cooperative techniques, collaborating and letting others collaborate.	4	3	2	1
You participate in the task development (individual responsibility)	4	3	2	1
You follow the role you have, and you respect your classmates'.	4	3	2	1
You reach agreements and shared decisions.	4	3	2	1
You pay attention to the teacher, show interest and behave.	4	3	2	1
FINAL MARK.	_____ / _____ =			

1= Rarely; 2= Sometimes...; 3= Almost always; 4= Always, a lot

WORK				
The achievement you get will be taken into account in the final mark of the unit (30%).				
CRITERIA	MARK			
<u>Participation</u>				
You participate / try to participate in class. (x2)	4	3	2	1
You show attended in class or studied at home	4	3	2	1
<u>Work in class</u>				
You came prepared to class. (With everything you need)	4	3	2	1
You do the work in a clean and tidy way.	4	3	2	1
You do / finish the work in the established time.	4	3	2	1
FINAL MARK.	_____ / _____ =			

PEER-ASSESSMENT (10%):

SELF-ASSESSMENT (10%):

FINAL TASK (30%):

FINAL MARK: