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Participation and learning strategies in interdisciplinary projects

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Learning happens in the minds and souls,
not in the databases of multiple-choice tests.

Ken Robinson (2009)

Abstract

Spain is the second country in the European Union with more school failures. It's obvious that something in the educational system does not function well, and urgent changes are needed. As a result, there is much controversy about the use of traditional and new methodologies in the schools. This study presents a complete description of a new interdisciplinary project proposal, considering the guidelines defined by reference authors. The aim is to ascertain if an informed use of the cognitive, metacognitive and socio-affective learning strategies creates an effective environment for the students' learning. Additionally, it also provides contrast opinions regarding pupils' participation in interdisciplinary projects. To conduct this investigation, the researcher carried out an interactive and explorative investigation based on a mixed method. Thus, the researcher designed an observation grid to carry out participant observation while implementing the project, as well as sent interviews to different professionals. The results indicate that interdisciplinary projects favour pupils' participation, although this participation varies depending on the grouping used. However, the investigator could not verify how the learning strategies affected students' behaviour, since the interdisciplinary project could not be implemented. Conclusive evidence from this research indicates that future investigators can take advantage of this essay, and use it to ascertain how the learning strategies previously mentioned effect students' learning environment. Likewise, they must repeat the same study, but perhaps instead select a larger sample, or check more contrasting viewpoints than this study has done. Future researchers should also continue to work on the subject, and use their results to echo past findings in order to improve the educational system.

KEY WORDS: Interdisciplinary projects, learning strategies, participation, new methodologies, innovative methods.

Abstract (Spanish)

España es el segundo país de la Unión Europea con más fracaso escolar. Está claro que algo no funciona y que se necesitan cambios urgentes. Por este motivo, hay mucha controversia entre el uso de metodologías tradicionales y las nuevas metodologías en las escuelas. Este estudio presenta una descripción completa de una nueva propuesta de proyecto interdisciplinar teniendo en cuenta las pautas definidas por los autores de referencia. El objetivo es determinar si el uso informado de las estrategias de aprendizaje cognitiva, metacognitiva y socioafectiva crea un entorno efectivo para los estudiantes. Además, el estudio también compara opiniones sobre la participación del alumnado en los proyectos interdisciplinarios. Para llevar a cabo este análisis, la investigadora realizó una investigación interactiva y analítica mediante un método mixto. Con ese fin diseñó una ficha de observación en el aula para analizar a los participantes durante la ejecución del proyecto. También envió entrevistas a diferentes profesionales. Los resultados muestran que los proyectos interdisciplinarios fomentan la participación del alumnado, aunque esta varía según el tipo de agrupamiento que se utilice. De todos modos, la investigadora no pudo determinar en qué medida las estrategias de aprendizaje anteriormente mencionadas influyen en el comportamiento del alumnado, ya que el proyecto interdisciplinario no se pudo implementar. La evidencia concluyente de esta investigación indica que la información que aporta puede ser útil a futuros investigadores y que pueden utilizarla para establecer cómo las estrategias de aprendizaje a las cuales se ha hecho referencia, pueden influir en el contexto de aprendizaje de los discentes. De todas formas, se tiene que repetir el mismo estudio pero es mejor seleccionar una muestra mayor y comprobar que se han contrastado más puntos de vista. Los futuros investigadores también deberían continuar trabajando sobre el tema y utilizar los resultados para divulgarlos con la finalidad de mejorar el sistema educativo.

PALABRAS CLAVE: Proyecto interdisciplinario, estrategias de aprendizaje, participación, nuevas metodologías, métodos innovadores.

Abstract (Catalan)

Espanya és el segon país de la Unió Europea amb més fracàs escolar. És obvi que alguna cosa del sistema educatiu no funciona i calen canvis imminents. Per aquest motiu, ha sorgit molta controvèrsia entre l´ús de metodologies tradicionals i l'ús de noves metodologies a les escoles. Aquest estudi presenta una descripció completa d'una nova proposta de projecte interdisciplinari tenint en compte les pautes definides pels autors de referència. L'objectiu és determinar si l'ús informat de les estratègies d'aprenentatge cognitiva, metacognitiva i socioafectiva crea un entorn efectiu per als estudiants. A més, l'estudi també compara opinions sobre la participació de l'alumnat en projectes interdisciplinaris. Per a portar a terme aquesta recerca, la investigadora va realitzar una investigació interactiva i analítica mitjançant un mètode mixt, per la qual cosa, va dissenyar una graella d'observació per a analitzar els participants durant l'execució del projecte. També va enviar entrevistes a diferents professionals. Els resultats mostren que els projectes interdisciplinaris afavoreixen la participació de l'alumnat, tot i que aquesta varia depenent dels tipus d'agrupaments que s'utilitzen. De tota manera, la investigadora no va poder determinar en quina mesura aquestes estratègies d'aprenentatge influeixen sobre el comportament de l'alumnat, atès que el projecte interdisciplinari no es va poder implementar. L'evidència concloent d'aquesta investigació indica que la informació que conté pot ser útil a futurs investigadors i poden utilitzar-la per a establir en quina mesura les estratègies d'aprenentatge a les quals s'ha fet referència anteriorment, poden influir en el context d'aprenentatge dels discents. De tota manera, s'ha de repetir el mateix estudi però és millor seleccionar una mostra més gran i comprovar que s'han contrastat més punts de vista. Els futurs investigadors també haurien de continuar treballant sobre el tema i utilitzar els resultats per fer-ne ressò per tal de millorar el sistema educatiu.

PALABRAS CLAVE: Projecte interdisciplinari, estratègies d'aprenentatge, participació, noves metodologies, mètodes innovadors.
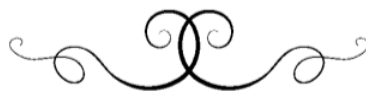
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First of all, I would like to show my gratitude to all the professionals and entities involved in the research for their willingness and for dedicating their time to answer my questions. Their interest and their involvement in research are reflected in the success of this investigation.

Secondly, in particular, I want to thank my tutor in this masters' final dissertation, Maria González, who guided and advised me during the development of the study, as well as enriched my education through her contributions and feedback.

Thirdly, I would like to thank all the masters' teachers for transmitting to me my first knowledge about interdisciplinary projects, and waking up my interest in this new work methodology. All the literature provided was extremely useful for elaborating both the theoretical framework and the practical part of the project.

Finally, I appreciate and value the support of my family and friends, who helped push forth my dedication to the assignment over this past few months. Thanks to their positive attitude, encouragement, and signs of confidence, my analysis and understanding of the work was less rocky, as they made it possible to work in a truly favourable environment.

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1. Introduction

1.1. Subject of study

My final project is based on new teaching methodologies, more specifically, on interdisciplinary projects, which have become the backbone of the research. This study provides the theoretical basis needed for the elaboration of an interdisciplinary project. Based on this information, the researcher designs a new educational action plan focused on 1st ESO students and considers some learning strategies: cognitive, metacognitive and socio-affective. The goal is to ascertain that an informed use of these strategies creates an effective working atmosphere for the pupils. In addition, at the end of the assignment, there are various interviews with different educators to determine if the implementation of interdisciplinary projects favours students' participation, and whether this participation changes depending on the grouping used within the classroom.

1.2. Motivation

First of all, I chose the implementation of new techniques and methodologies in the classroom approach in this research because, according to the PISA report (2015), Spain is the second country in the European Union with the highest school failure rate. It is obvious that something in the educational system does not function well; therefore, urgent changes are needed.

According to David Calle (2017), the education system needs to adapt to today's ongoing society and opt for new methodologies. Current generations have developed different competences from prior ones, and teachers must motivate students to awaken their ambition to learn. For this purpose, educators must look at interesting subjects for the students, and find a practical use for all that they learn, because "if we do not gradually change our work approach, then we are doomed to the fact that the problems that happen to us today are emphasized tomorrow" (Garcia, 2010).

Secondly, I decided to draw up an interdisciplinary project because it appears that educational changes are moving towards this direction. Hence, as a teacher, designing this kind of activity is complex work, but may be a truly rewarding experience.

Additionally, this research gives me the chance to meet some educational professionals and be nurtured with their knowledge and experience. Likewise, thanks to their testimony, I will be able to design my own interdisciplinary project, which could be an

interesting element in my curriculum for future jobs applications. Finally, I hope this study can be useful and helpful for future investigations.

1.3. Objectives

The study presented below is based on five specific objectives, which may be classified into five clearly differentiated aspects:

1. To explore interdisciplinary projects and their characteristics.
2. To study the cognitive, metacognitive and socio-affective learning strategies and understand how their application affects the students' learning process.
3. To develop my own interdisciplinary project.
4. To ascertain if the implementation of an interdisciplinary project increases students' participation.
5. To find out if pupils' participation varies depending on the grouping used.

Finally, I would like to emphasize the fact that this study does not aim to be judgmental about teachers or institutions that carry out their work in this field. The goal is to compare opinions and develop a project as well matched as possible to the educational context that I chose or propose, following the mentioned professional guidelines.

1.4. Research questions and hypothesis

Here below are the research questions around which the investigation revolves:

> 1. In interdisciplinary projects, do an informed use of the cognitive, metacognitive and socio-affective learning strategies create an effective working atmosphere?

> 2. Do interdisciplinary projects favour the students' participation? Does the participation change depending on the grouping used in the classroom?

Secondly, the following hypotheses have been formulated:

Hypothesis for the first research question

When implementing an interdisciplinary project, it is important to find a balance in the application of the different learning strategies, especially with regards to the cognitive, metacognitive and socio-affective ones. By doing so, the teacher creates a positive and effective learning environment for the students.

Currently, the educational reform is largely focused on increasing the students' motivation and their active participation in the classroom. In this way, the implementation of an interdisciplinary project is drawn upon pupils' interests, which will increase participation. Furthermore, pupils' participation varies depending on the grouping used in the classroom. Thus, participation increases according to the following gradation: individual work, large groups work, small groups work and peer work.

1.5. Methodology

The first step in carrying out the essay was to pose two research questions and the objectives of the investigation. Then, the professional looked for the literature needed to build upon the theoretical framework. Third, the selection of the instruments was made, which consisted of the following: interviews, questionnaire, and an observation grid. Later, the researcher drew up the interdisciplinary project by considering the information she got from the questionnaire, as well as the data from within the theoretical framework. Fifth, the investigator designed the observation grid to answer the first research proposition relating to learning strategies. Further on, the researcher conducted interviews to answer the second research question about participation. Finally, the professional discussed the results obtained, and came up with a conclusion.

The interdisciplinary project design is based on the **Organic Law 2/2006** of the 3rd May, the **Organic Law for the improvement of the quality of education (LOMCE), 8/2013**, of the 9th December and the **Royal Decree 187/2015 of the 25th August**, which regulates the basic curriculum for Secondary Education at Spanish level. Additionally, the project also took into account the **Royal Decree 150/2017 of the 17th October**, which defends inclusive education and the **Common European Framework of reference for languages (2002)**, which is a guide to provide a method of learning, teaching, and assessing for all languages in Europe.

In terms of ethical standards, this essay respects the bases described by The British Association for Applied Linguistics outlined in the Recommendations on **Good Practice in Applied Linguistics (2016)**: The rights, interests, sensibilities, privacy and autonomy of all informants and research contexts; the different cultures, beliefs, genders and ages of the testimonies and institutions involved in the investigation; the right of the informants to remain anonymous and confidential.

2. Theoretical framework

Hereafter, this assignment provides a definition of the most distinctive aspects of the research: education from a global perspective, the teachers' task and, finally, the main characteristics of an interdisciplinary project. These explanations will not only help the reader to understand the terminology used in the dissertation; it will also allow them to take in the particularities of the educational action plan that will be carried out at a later stage.

2.1. Education

The first chapter outlines a brief definition to explain what education consists of and what this professional activity should involve, according to some experts. Then, there is a specific definition that the researcher has chosen for this dissertation. Later on, it also describes the role of teachers in the twenty-first century, as the investigator sees it, based on the opinions of the experts.

2.1.1. Towards a definition

Today, the world is undergoing an important change that has led to a globalized and interdependent society. Consequently, education has also been forced to adapt itself to the new situation and move from schooling focused on knowledge transmission, to an education based on practical learning (Mark K. Smith, 2015). However, sometimes it is difficult to call *education* the way in which schools operate, since most of the time professionals just make students deposit their knowledge (Freire, 1972).

Consequently, there is a significant amount of controversy when trying to define the concept *education*: On the one hand, Smith (2015) defends that education should be "a process of inviting truth and possibility, of encouraging and giving time to discovery". On the other hand, in agreement with Dewey (1916), education should also be "a process of living and not a preparation for the future living". Furthermore, Musons (2018), states that a school should guarantee the acquisition of other aspects, such as critical thinking, creativity, problem solving, communication at all levels, collaboration, leadership, the ability to undertake projects, curiosity, motivation, gamification, citizenship, etc.

Thus, as the investigator sees it, the following might be concluded: "education is the wise, hopeful and respectful cultivation of learning undertaken in the belief that all should have the chance to share in life" (Smith, 2015).

2.1.2. Teacher

The role of the teacher, together with the entire educational system, has undergone a great reformation in recent years. Educators are changing from knowledge transmitters into learning facilitators and didactic situation designers. Today, teachers give special attention to the students, making them the focus of the learning process, as they pose challenges, observe and escort scholars, and at the end, assess them (Musons, 2018).

As distinguished by different experts in the educational field, a teacher in the twenty-first century should be emphatic, flexible, creative, passionate and persistent. Professionals should also be close to students, resilient and especially not afraid of taking risks. An educator should act as a guide by giving scholars the necessary tools and instructions to do the tasks by providing them individual feedback, and by assessing them singly. The rest of the learning process must depend on the pupils themselves.

Moreover, according to Lopez (2009), educators must show confidence and sensitivity towards students. It is important that teachers create activities that are motivating and effective for scholars by relating content to emotions and practical utility. Finally, professionals must adapt projects to both the biological, and behavioural characteristics of the students. In Musons (2018) words: "if pupils are not happy they do not learn".

2.2. The new school: Interdisciplinary projects

As previously mentioned, there is a global concern about the function of the educational system. However, some specialists keep on defending the application of traditional methods at school. In this chapter, there will be a short contextualization of the current situation with regards to this disagreement. Then, the section will focus on the central axis of the assignment: interdisciplinary projects.

2.2.1. Current situation: traditional methods vs. innovative methods

To start with, it is worth mentioning that there are main differences between traditional and innovative methods. In compliance with Boumová (2008: 29), these are the principal divergences:

Traditional methods	Innovative methods
They are focused on teaching rules and practice them.	Their main aim is to teach learners how to communicate (to get the meaning across).
They rely on routines and limited number of methods (translation activities, lectures and drills).	They contain a great number of activities that have different objectives, which are or should be balanced.
They consist of memorizing isolated items of lexis and rules, among others.	They make use of more contextualized information, and the tasks are similar to real life situations which is motivating for learners.
Professionals who apply these methods believe that students learn well if they listen to the teacher and do not make mistakes.	Professionals who apply these methods defend that students must learn by experimenting with the language, by using it.

Table 1. Traditional methods vs. Innovative methods. Boumová (2008: 29)

As stated above, some experts support the application of new methods for various reasons: on the one hand, they believe that traditional methods can humiliate students since they do not take into account Gagner's multiple intelligences (Bas and Beyhan, 2010). Furthermore, they defend that traditional methods are unattractive for students and that using innovative methods allows teachers to be the organizers of the learning process. This way, they can create their own content and adapt it to pupils' interests and motivations. In addition to this, professionals sustain that the application of innovative methods lets students participate and be active learners, instead of passive learners.

However, other experts in the field truly believe that traditional methods are effective to learners. They are convinced that these methods guarantee obedience and respect for the teacher. Furthermore, they defend the application of old methods because they are safe, since they are standard and no one can object to using them. Lastly, these professionals argue that new methods really distract students from what they should realistically do when in the classroom.

Once the different opinions are identified, it is important to clarify that many teachers share the idea that both traditional and innovative methods are useful, depending on the situation or the students' way of learning. As specified by Sara Wright (2016): "as with

most things, it is all about balance. We need to understand when a traditional method works best and when it is right to try new and innovative approaches".

2.2.2. Interdisciplinary projects

2.2.2.1. Definition

There are some problems, which include concepts and phenomena in life that are nearly impossible to understand or solve when approached from a single discipline. When this happens, "knowledge can only be constructed by applying multiple perspectives and ways of thinking" (Golding, 2009: 1).

For this reason, schools today are looking for a common path; a route to an improved way of doing things that will allow these institutions to work from different viewpoints and diverse disciplines, sub-disciplines, and areas of expertise; also known as interdisciplinary projects. Thus, when learning through this new methodology,

> *Students develop meta-knowledge about different disciplines, methods and epistemologies, and learn how to purposefully and reflectively integrate and synthesise different perspectives in order to advance understanding and solve problems (Golding, 2009: 1).*

In light of the above, in the book "Educational and social projects", Barbosa and Maura (2013: 19) define an educational project in the following way:

> *An initiative or set of activities with clearly defined objectives in terms of problems, needs, opportunities or interests, of an educational system, of an educator, of groups of educators or students, with the purpose of carrying out actions oriented to human training, to knowledge construction and to the educational processes improvement.*

Nevertheless, when talking about interdisciplinary projects, Anaya[1] (n.d.: 2) makes the following addition:

> *Interdisciplinary projects are a means to develop key competences, which are the central axis of the current curriculum. The basic essentials of interdisciplinarity are to work from different subjects with a common pedagogical purpose, which allows a coordinated and a joint development of learning.*

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[1] As viewed on the official website, Anaya is "a publishing house specializing in the publication of textbooks, supplementary material and teaching resources".

As noted in the descriptions, preparing and conducting an interdisciplinary project is an immensely complex task. Students learn from individualistic distinctions of educational abilities, so they can become a challenge for educators to teach universally.

Furthermore, as required by Anaya (n.d.: 2), an interdisciplinary project should:

1. Involve students in their learning process (they must build their learning by doing and elaborating, not only by receiving information).
2. Create an evaluable product as the final output.
3. Include contents from different disciplines and it must hold distinct tasks that share a common context.
4. It must contain a first documentation stage in which students have to be able to search, select, order and classify information.

Lastly, as per Kilpatrick (1918), the project method is considered a path to progressive education, since children learn by solving practical problems in real-life contexts. When learning through interdisciplinary projects, students engage in the learning process and develop skills in creativity, initiative and judgement (Kliebard, 1986). In addition, educational projects have to promote freedom, so pupils decide what they want to do. This way, the pupils' motivation increases and while student success increases (Kilpatrick, 1918).

2.2.2.2. Objectives

For proper application of learning processes accomplished by interdisciplinary projects, it is necessary that students have interdisciplinary skills, attitudes, and understandings. For this purpose, pursuant to Anaya (n.d.: 2), an interdisciplinary project has to:

1. Include different areas of knowledge.
2. Teach and build competences.
3. Apply knowledge.

Besides that, Golding (2009: 4) supports that when carrying out an interdisciplinary project, scholars must:

> 1. *be able to occupy and understand different disciplinary perspectives.*
> 2. *be able to critically evaluate knowledge from a broad range of disciplines.*
> 3. *be able to engage in interdisciplinary inquiry and problem-solving, employing multiple ways of knowing.*
> 4. *have a meta-disciplinary understanding of the nature of knowledge and the disciplines.*
> 5. *be able to integrate, synthesise, balance and accommodate knowledge from multiple disciplines in order to produce something greater than would be possible from any one disciplinary perspective.*

Table 2. Objectives of an interdisciplinary project. Golding (2009: 4)

2.2.2.3. Projects planning and management

Broadly, projects in the educational field are very innovative in terms of planning and management. In Barbosa and Maura's (2013: 35) words, the *management of a project* refers to "the technique, the art or the way of *administering*, *controlling* or *directing* the project in its implementation phase". Moreover, the concept of managing a project also includes the fact of modifying the initial planning depending on the students' needs.

Project Management Institute (PMI)

The PMI is a reference model acknowledged worldwide when talking about project management and planning (Barbosa and Moura, 2013: 36). According to this handbook, there are nine areas of knowledge that must be taken into account when drawing up a project: integration, concept (scope), time, costs, quality, human resources, communications, risks, and acquisition management.

However, according to Barbosa and Moura (2013: 35-36), applying all these methodological and conceptual transpositions in the educational field requires an additional effort on the part of the professionals, since it is a very challenging task. It must be emphasised that a project consists of different and independent processes and actions, but in reality, they are all interrelated.

Apart from all of these, in agreement with Barbosa and Moura (2013:36), there are five steps in the management process of a project:
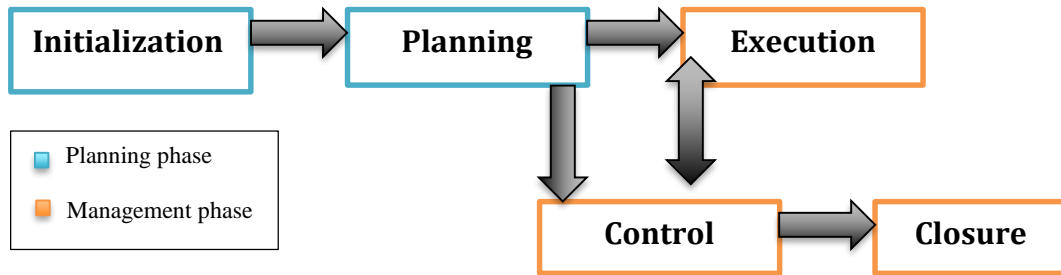
Figure 1. Steps involved in the management process of a project. Barbosa and Moura (2013:37)

Figure 1 shows that all these phases are related to each other: the result of the first one is the starting point of the following one. In addition, the different stages do not follow a linear order, since the implementation of a project forces the designers to carry out a continuous phase of control and correction in all steps.

All these activities and procedures are included in the project plan, which is the reference document to draw up and execute a project. The project plan "presents in a complete and organized way the whole conception, the foundation, the planning, the monitoring and evaluation tools of the project" (Barbosa and Moura, 2013: 40). For the development of the project plan, this assignment is going to focus on the Skopos model.

Skopos model

This model is based on three basic components: concept, action/control plan, and evaluation plan. According to Barbosa and Moura (2013:41), the concept becomes, "the soul of the project", since it includes what the project will consist of, suggested as the following: objectives and methodology that will be carried out, the reasons why it was created and the results that are expected.

Besides that, the action plan presents the activities and tasks that will be conducted and their timing. In addition, it contains the resources and material needed to ensure the proper functioning of the project according to the objectives that are meant to be achieved.

Finally, the control and evaluation plan includes all the essential processes for a good monitoring and assessment of the project and its results: how the results will be obtained and verified, what measures will be taken to evaluate the project, what are the possible risks that will arise, etc. Hereunder, there are intricate relationships between the steps involved in the management process of a project and the project plan:

Management process of the project
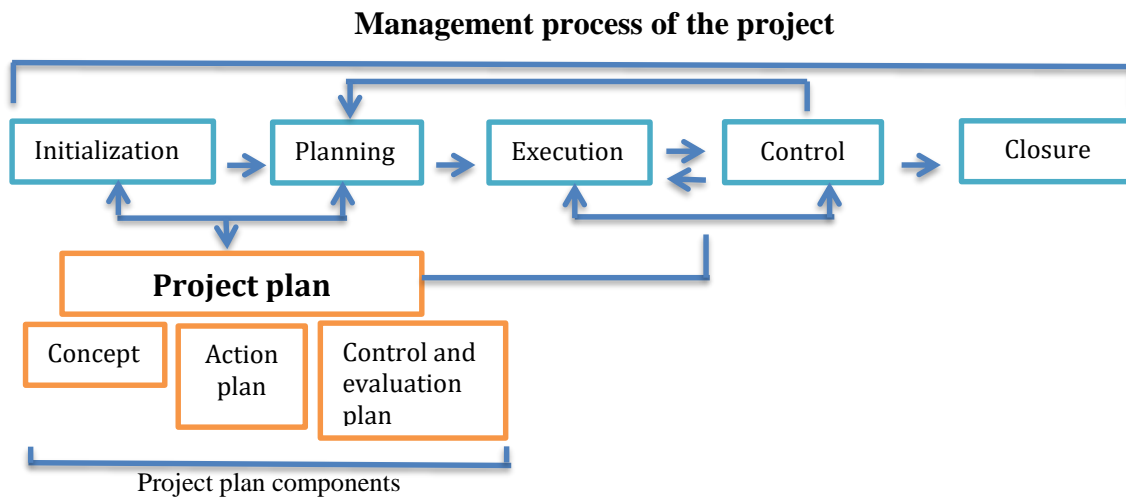
Figure 2. Relationship between the management process and the project plan. Barbosa and Moura (2013:46)

2.2.2.4. Projects timing

According to Barbosa and Moura (2013: 94-95) the time needed to carry out one activity or task will depend on different factors: experience and skills, materials availability, supplies, unexpected events (personal issues, changes in the social context, economic problems…), etc. Even so, it is worth mentioning that routine activities are easier to schedule than other kind of activities that can experience great variations.

As per these authors, when planning an activity there are various ways to estimate the time that they will last. First off, the team of designated designers can be based on previous experiences. Otherwise, they can ask other professionals for information or advice. As another option, there are various calculations that can be performed to obtain an estimate of the time needed to invest in each activity:

1. Optimistic execution time (if everything works well) = ot
2. Pessimistic execution time (if everything goes wrong) = pt
3. Most likely execution time (if everything works as planned) = mt

$$T = (ot + 4mt + pt) / 6$$

2.2.2.5. Interdisciplinary projects elaboration

When preparing an interdisciplinary project it is essential to relate it with the contents and competences in the school curriculum. Thus, a great dedication is needed in order to reflect and carry out a good and successful education plan.

In keeping with the Ministry of Education, Culture and Sports (2017), the European Union states that it is necessary that citizens acquire key competences to develop in their personal, social and professional fields successfully. DeSeCo[2] (2013, mentioned in the Ministry of Education, Culture and Sports, 2017) defines the concept *competence* as follows:

> *The ability to respond to a complex demand and to carry out different tasks in an appropriate way. It involves a combination of practical skills, knowledge, motivation, ethical values, attitudes, emotions and other social and behavioural components that are mobilized together to achieve effective action.*

The competency-based education must deal with all knowledgeable areas. This new system tries to teach and transmit contents that students should be able to apply in real life after school, so they can be independent people and they can keep on learning and acquiring new knowledge in future projects.

The official website of the Ministry of Education, Culture and Sports (2017) groups the key competences in the Spanish Educational System in the following way:

1. Communicative competence: linguistic and audio-visual (CC1)
2. Mathematical competence (CC2)
3. Knowledge of and interaction with the natural word competence (CC3)
4. Artistic and cultural competence (CC4)
5. Digital competence (CC5)
6. Social and civic competence (CC5)
7. Learning to learn competence (CC7)
8. Autonomy, personal initiative and entrepreneurship competence (CC8)

These key competences must be taught at all educational levels: primary school, secondary school, baccalaureate and further studies. Thus, teachers should design activities that combine more than one competence at the same time (Ministry of Education, Culture and Sports, 2017).

In Catalonia, each subject has its own basic competences. However, in order to contribute to the acquisition of the key competences defined by the European Union, the secondary education curriculum gathers the basic competences of the different subjects

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[2] According to Álvaro and González (n.d.: 10), DeSeCo means "definition and selection of competences".

and then groups them together by fields of knowledge; such as contents, pedagogical methods and evaluation criteria at this stage (Generalitat de Catalunya, 2015).

Furthermore, as per Álvaro and González (n.d.: 14), one of the most effective methods when talking about competency-based education is the development of interdisciplinary projects, since they allow students to reflect and share knowledge that they learned from real situations. However, this unification between the curriculum and class activities must be prepared by following certain specific steps. This assignment provides guidance according to Álvaro and González (n.d.: 16-23), which teachers should take into account when drawing up an interdisciplinary project:

1) To establish the structure of the project and its elements

Teachers have to decide the educational stage of the interdisciplinary project. They must choose a motivating title and the facets of subjects that will be involved. Moreover, the project managers have to establish a subject on which the whole project will be developed. The others in the project will be considered complementary (Álvaro and González, n.d.: 16).

In this stage, teachers will also include a brief justification of the relevance of the final product, particularly the environment for which it was created. Some examples of a final product could be a newspaper, dramatization, debate, mural wall or a fairy-tale. What is more, the project leaders will need to decide who will participate in the project (teachers, students, family, etc.) and its social context. Finally, teachers will think about the tasks that will be carried out and the members responsible for doing them (Álvaro and González, n.d.: 16).

Besides that, according to Moya and Luengo (2013, mentioned in Álvaro and González, n.d.: 13), the project COMBAS (MECD, 2011)[3] clarifies that students' tasks are complemented by different activities and exercises oriented to achieve knowledge from the experience and the action. In the same way, the Common European Framework of Reference for Languages (2002: 15) specifies that, when it comes to language, activities should be organized in four fields:

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3 According to the Ministry of Education (2011), the project COMBAS "is the first action of the Territorial Cooperation Program "*Consolidation of basic competences as an essential element of the curriculum*", an initiative of the Ministry of Education to improve the development of Spanish school population's the basic skills in collaboration with the autonomous communities, in line with current approaches to education and training in the European Union"

1. **Public field**: makes reference to social interaction (relationships with different entities, such as the media, public services, etc.).

2. **Personal field**: extends to family relationships and individual practices (reading for pleasure, hobbies, etc.)

3. **Professional field**: refers to the activities and relationships that a person conducts in his/her professional activity.

4. **Educational field**: relates to the learning context, where a person acquires knowledge or skills.

2) Which are the apprenticeships we pursue in the project?

This stage is known as the "curricular specification of the project", since teachers have to complete the selection of the curriculum elements on which the students will work on (Álvaro and González, n.d.: 18).

In this phase, professionals must link the curriculum with the tasks and activities that students will perform. In keeping with Álvaro and González (n.d.: 18), when preparing a project, teachers should "contribute to achieve the apprenticeships established in the curriculum decrees corresponding to each of the educational stages" while taking into account their level of acquisition and their learning styles.

To sum up, in this second part of the process, teachers must decide which objectives, competences and contents from the curriculum students must learn through the activities. Furthermore, in interdisciplinary projects, all the elements from the curriculum should be presented in an interrelated way (Álvaro and González, n.d.: 18).

3) The management of the project's learning process

This third step is known as the "learning management" or "didactic transposition", because the teaching materials have to manage and plan the entire interdisciplinary project (Álvaro and González, n.d.: 20). This section should fulfil the following actions:

1. **Activities design**: teachers must think about activities, considering the different patterns of thought (logical thinking, analytical thinking, creative thinking, etc.) and the students' development of cognitive domains.

2. **Methodology selection**: the project leaders have to decide which resources pupils are going to use and the project timing.

Nevertheless, in this stage, Álvaro and González (n.d.: 20) give special attention to the reflection about the cognitive domains, which are essential to facilitate the development of competency-based learning. In their view, the activities that make up the interdisciplinary project should provide different levels of complexity. Today, educators take into reference Bloom's taxonomy, "a multi-tiered model of classifying thinking according to six levels of complexity" (Forehand, 2011: 2):
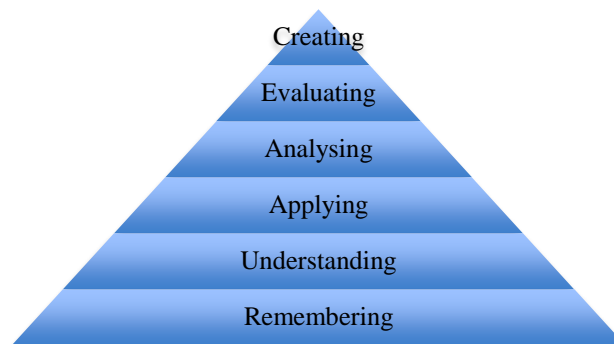
Figure 3. Cognitive domains' classification according to Bloom's taxonomy. Forehand (2011: 3)

It is important to know that Bloom's taxonomy is a hierarchical system, so the achievement of the prior skill or ability has to be acquired before gaining access to the next category. Moreover, it is an important and useful tool for teachers because it helps to classify the objectives and goals of each session, since students should level up through gradual knowledge acquisition (Forehand, 2011: 4).

On the other hand, Álvaro and González (n.d.: 20) defend that the concept of teaching education also raises concerns about integrating new technology in the learning process, since students are living in a digital society and favouring faster knowledge acquisition.

4) Students' learning assessment

As explained by Álvaro and González (n.d.: 23), it is recommended that teachers use different assessment tools (rubrics, observation scales, written tests, etc.) depending on the kind of activity or exercise they are evaluating during the project. This way, the teaching staff can promote self-evaluation and co-evaluation, so that the students can identify their mistakes and learn in an autonomous way.

In Mayoral (2018)'s opinion, the assessment will only be useful if it serves to educate, so it must be gratifying, not negative. The student is the only individual who should make the corrections (self-evaluation). Nevertheless, teachers have to teach pupils how

to do the assignment by giving them the necessary tools. In other words, students must be clear about the evaluation criteria and always receive feedback from the teachers.

Finally, according to Musons (2018), the assessment must meet diversity. Essentially, the evaluation must be individualized and subjective. There are contents and competences that pupils need to acquire, but their assessment will depend on the students' effort. In such a way, the specialist defends that pupils are the first ones to evaluate their work, and after that, the teachers will assess it. Sometimes, even the families can participate in the assessment process.

5) Collaboration with the environment and the family

Álvaro and González (n.d.: 23) highlight the relevance of collaboration between families and the whole education community in the implementation of an interdisciplinary project (parents, AMPA[4], school board, etc.). To do this, the project managers must include tasks and activities where everyone's participation is required. In this manner, everybody works together towards one direction: knowledge acquisition.

2.3. Educational action plan: Pedagogical framework

This last section of the theoretical framework establishes a brief description about the most used approaches, learning strategies and groupings in competency-based education. These three elements will be essential to preparing the final interdisciplinary project:

2.3.1. Approaches

According to Wilson (2018), we talk about an *approach* "when an instructional design is fairly explicit at a level of theory of language and learning but can be applied in many different ways which regards to objectives, teacher and learner roles and activities". Clarified and identified below is a definition of two different approaches:

2.3.1.1. Teacher-centred approach

In light of experts' opinion, and in the theory of teacher-centred approach, students are exclusively focused on the teacher, so the latter transmits information and displays detailed knowledge while the student just listens to him/her. In addition, pupils work alone, and the trend within the field is to play down the importance of collaboration.

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4 As described in the Generalitat de Catalunya official website (2017), the AMPA is an association formed by the students' fathers and mothers.

"The teacher is an effective model of the target language and an important source of information on how the learners are doing" (British Council, 2018).

In this case, some of the activities that students do in class consist of assignments, homework, lecturing, questioning, reviewing and memorizing, to name a few.

2.3.1.2. Student-centred approach

In students-centred approach, the main goal is to develop learners' capacity for self-direction and autonomy, since students participate more actively in their learning process this way. Pupils "learn more than just course specific topics as they also must be able to work in group situations and interpersonal roles" Wilson (2018). Still, teachers become a guide and direct students by asking questions, suggesting alternatives, and encouraging them to develop criteria in order to make informed decisions.

Furthermore, this approach is based on students' interests and problem-based learning. This way, pupils acquire knowledge from real-world contexts. Some activities to assign in the classroom include diaries, portfolios, projects, discussions and communicative tasks (Ministry of Education, Culture and Sports, 2018).

2.3.2. Learning strategies

According to Scarcella & Oxford (1992: 63, mentioned in Oxford, 2003: 2) learning strategies are "specifications, behaviours, steps or techniques –such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task– used by students to enhance their own learning". Some of the learning strategies used in competency-learning education are the following:

2.3.2.1. Cognitive learning strategy

As defined by the British Council (2018), cognitive strategies "involve deliberate manipulation of language to improve learning". These include repetition, summarising meaning, using imagery for memorisation, organizing new language, guessing meaning from context, activating students previous knowledge, etc.

For teachers, there are many activities to do in the classroom that can be described as cognitive strategies: association, underlining key words, mnemonics, making mind maps, using clues in reading comprehension, among others (British Council, 2018).

2.3.2.2. Metacognitive learning strategy

Gagné et al. (2009, mentioned in Perras, 2018) describes metacognition as follows:

> *Metacognition enables students to be more active in their learning, i.e., to mobilize all of their resources in order to have successful learning experiences. To do this, they must know how they learn and be aware of the steps that are followed and the means that are used to acquire knowledge, solve problems, and perform tasks.*

In other words, and in compliance with different professionals, metacognitive strategies are different methods that help students understand the way they learn. Thus, metacognition allows pupils to think about their thinking. Some examples of these strategies include gathering and organising materials, motoring their own work, self-reflection, directing their own learning, evaluating task success, etc.

2.3.2.3. Socio-effective learning strategy

On the one hand, affective strategies are those that are "concerned with managing emotions, both negative and positive" (British Council, 2018). According to this institution, a positive affective environment aids students during the entire learning process. On the other hand, in terms of social strategies, Oxford (2013: 14) defends that they "help the learner work with others and understand the target culture as well as the language".

Examples include talking about feelings, identifying one's mood, rewarding oneself for good performance in respect of affective strategies, asking questions to get verification, talking with a native-speaking conversation partner or exploring cultural and social norms when talking about social strategies.

2.3.3. Grouping

When learning through interdisciplinary projects, students can work in many different ways in order to accomplish the activity. Down below are main identified forms of combining students in the classroom:

2.3.3.1. Individual work

According to experts, using this method students work in their own pace, so they are constantly aware of what they know and what they can do better in order to achieve their goals. Furthermore, individual work allows students to use the learning styles and strategies that they prefer at any given moment.

On the other hand, individual work fosters autonomy. Consequently, pupils can prepare their own ideas and thus, "the learning journey becomes self-directed, as the child is able to move from work to work as each item interests him" (Lelei, 2015: 4).

2.3.3.2. Peer learning

As defined by Boud (2001: 9), *peer learning* is "a two-way reciprocal learning activity" that should be mutually beneficial. Students work together for the purpose of sharing knowledge, ideas and experiences, so they experience an interdependent learning. Still, in peer learning students do not have power over each other; they must have the same responsibilities and obligations.

Using this method in the classroom, pupils develop skills by working collaboratively with others, planning activities, receiving and giving feedback, and evaluating their own learning process. This way, students can learn from each other (Boud, 2001).

2.3.3.3. Group work (cooperative work)

Implementing group work in class can be a useful method in order to "motivate students, encourage active learning, and develop key critical-thinking, communication and decision-making skills" (University of Waterloo, 2018). However, according to experts, teachers must form the groups strategically. If not, some students may feel frustrated.

Pupils can work in large groups and in small groups. Nevertheless, working in small groups has become more popular, especially when referring to cooperative work. According to Xtec[5] (2018), cooperative groups must be comprised of minimum three or maximum five students, and they should be heterogeneous. Likewise, these groups should meet the following conditions in order to function properly:

1. **Positive interdependence**: students achieve common goals and objectives.
2. **Face to face interaction**: pupils help each other and agree on solutions.
3. **Individual and group responsibility**: all members must contribute to achieve goals.
4. **Development of social skills**: students learn to resolve conflicts and take decisions.
5. **Group work assessment**: pupils evaluate how they are working to improve its performance.

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[5] Xtec refers to "Xarxa Telemàtica Educativa de Catalunya" (Educational Telematics Network of Catalonia)

3. Research development

This section describes the different phases and actions carried out during the research. It also delineates the objectives and instruments used in the investigation stage. Hereafter are the steps that have been followed within this study:

PHASE 1
1. Formulation of two research questions.   2. Review of the literature related to the subject matter of study: education and interdisciplinary projects (objectives, planning/management, elaboration, timing, methods/approaches, learning strategies, etc.).   3. Selection of a sample: the school and three professionals of the field.   4. Determination of the research objectives.
PHASE 2
1. Elaboration of the methodological framework: definition of the investigation and design of the first data collection tools: interviews and questionnaire.   2. Preparation of the theoretical framework of the assignment.   3. Interview design.
PHASE 3
1. Sending the interview to the professionals.   2. Data collection through the following instruments: questionnaire and interview.   3. Elaboration of the interdisciplinary project, and preparation of the last data collection tool: observation grid.
PHASE 4
1. Emptying of data.   2. Analysis and interpretation of the results.   3. Drafting of the source documents.   4. Preparation of the conclusions and description of future lines of research.
PHASE 5
1. Delivery of the master's final dissertation.   2. Oral presentation of the project before a court.

Table 3. Research phases. Source of own elaboration.

3.1. Research objectives

In order to answer the research questions, hereunder are the general and specific objectives that are sought to be obtained in this investigation:

General objectives	Specific objectives
1. To explore interdisciplinary projects and their characteristics.	1.1. To learn what an interdisciplinary project is and to determine its objectives.
	1.2. To understand the role of the teacher when using these new methodologies.
2. To study the cognitive, metacognitive and socio-affective learning strategies and to understand how their application affects the students' learning process.	2.1. To find out the kind of activities included in each of the learning strategies.
	2.2. To ascertain if an informed use of these learning strategies is favourable to the pupils' learning process by making use of an observation grid.
3. To develop my own interdisciplinary project.	3.1. To uncover how to prepare, manage, plan and assess interdisciplinary projects.
	3.2. To apply all the research done and all the learning achieved to develop my own project.
4. To inquire whether the implementation of an interdisciplinary project favours students' participation.	4.1. To study how the implementation of an interdisciplinary project affects pupils' behaviour regarding participation.
	4.2. To study what main elements influence students' participation.
5. To find out if pupils' participation varies depending on the groupings used.	5.1. To go deeper into grouping methods in the classroom and inquire which are most frequently used in interdisciplinary projects.
	5.2. To know if students' participation increases or not depending on the grouping through different interviews.

Table 4. General and specific objectives of the research. Source of own elaboration.

3.2. Methodological framework

Thirdly, the data collection tools have been designed according to the type of research this study belongs to:

3.2.1. Type of research

The main objective of the investigation is to verify if an informed application of the cognitive, metacognitive, and socio-affective learning strategies creates an effective working environment, as well as discovering whether the participation of the students varies with the implementation of an interdisciplinary project or the students' grouping. Based on this purpose, the type of research is defined as an interactive and explorative qualitative investigation based on a mixed method, since the investigator learns from experts' knowledge and analyses its application in the classrooms. Therefore, McMillan and Schumacher (2005: 44), describe this type of investigation as follows:

> *An in-depth study using face-to-face techniques to collect people's data in their natural settings. The researchers interpret the phenomena in terms of the meanings that people give them, describe the context of the study, illustrate the different perspectives of the phenomena and continuously review issues from their experiences in the field.*

3.2.2. Data collection techniques

In accordance with the type of research already described, the data needed to respond to the initial questions are of a qualitative and quantitative nature. Hence, these are the instruments used to carry out the investigation:

3.2.2.1. Participant observation (observation grids)

Once the interdisciplinary project has been designed following the experts' guidelines (objective three), the investigator can design an observation grid. These tables could be used to carry out the participant observation in the classroom, and extract information regarding objective two. Thus, the researcher could assess whether the application of the specific learning strategies creates an effective work environment for students by taking field notes. According to Colás and Buendía (1998: 255), the participant observation is:

> *The social interaction between researcher and social groups. Its objective is to collect data, in a systematic way, through direct contact in specific contexts and situations. Direct observation looks for a complete vision of reality, trying to articulate the intersubjective apprehensions with the objective data.*

Dimension	Category	Items	1	2	3	4	Comments
Learning strategies	Cognitive	Pupils activate their previous knowledge					
		Students keep their attention in what they are doing					
		Pupils organize the information to learn properly					
	Metacognitive	Students monitor their own work in an efficient way					
		Pupils plan and organize themselves					
		Students self-reflect (rubric)					
		Pupils pay attention to lost of focus					
		Students advocate for their own needs					
	Socio-affective	Pupils ask questions for clarification					
		Pupils interact with others to assist in learning					
		Students cooperate and develop cooperation skills					
		Pupils empathize with others					

Table 5. Observation grid. Source of own elaboration.

3.2.2.2. Questionnaire

Before preparing the interdisciplinary project (objective three), the researcher prepared an online questionnaire so that pupils could choose between the following topics:

1. Life in a village vs. Life in a city
2. Adopt a dog
3. Where do our clothes come from?
4. Recipe book
5. Do our best for the environment: The playground

This way, pupils could decide what they would like to learn. Thanks to this technique, the project was drawn up according to students' interests, as it is one of the most important requirements according to experts. The questionnaire was carried out at a school in Barcelona to 1st ESO students. Pupils used their mobile phone to answer, so the responses were recorded on the Internet and the information was easily accessed.

3.2.2.3. Interviews

In order to achieve objectives four and five, the investigator prepared scheduled open standardized interviews to determine if the implementation of interdisciplinary projects favours students' participation, and whether this participation changes depending on the groupings used. The interviews were carried out with three professionals in the sector:

o Two school directors who work through interdisciplinary projects in their centres (one from Barcelona and one from Amposta).
o One teacher who gives professional advice to educational centres about new learning methodologies.

All experts responded freely to the questions, since according to Penalva and Mateo (2006: 51), the scheduled open standardized interview:

> *Must meet the requirement of uniformity regarding the stimulus. All interviewees must be subjected to the same stimulus with the same sequential order. It is therefore an interview with a questionnaire, in which the conditions to the questions are answered freely. There is no pre-coding or forced choice of the answers.*

Each interviewee received a total of five questions, which were sent to the different professionals by email.

4. My interdisciplinary project

This section provides all the information related to the interdisciplinary project, as well as the results obtained once the necessary data to answer the research questions has been collected. Thus, readers can find the results of the questionnaire and the project plan of the interdisciplinary project hereafter. Finally, there are the concluding interview findings.

4.1. Contextualization

"Where do our clothes come from?" is an interdisciplinary project drawn up for a secondary school in Barcelona, and it is aimed at a class of 15 students of 1st ESO. Furthermore, pupils came from families with a high purchasing power, so the centre has the means and the facilities to carry out the project.

The main subject in the interdisciplinary project is Geography, but it also includes ICT Art and Design, and English. Hence, it is worth mentioning that the project includes some activities related to emotions. Additionally, there is a boy with ADHD in the class who will need special support.

Regarding the timing, the project lasts for 10 sessions, which are distributed as follows: 2 hour sessions, 2 days a week (1 month duration). Besides that, the students will work in 5 groups of 3 students each (cooperative work) for most of the activities.

4.2. Project plan

As previously mentioned, the project plan of this interdisciplinary project was drawn up following the Skopos model. Thus, it consists of the concept, the action plan[6], and the evaluation plan:

4.2.1. Concept

"Where do our clothes come from?" consists of the elaboration of a blog, a souvenir, and a final exhibition of all the material designed during the implementation. The project was created according to the students' interests, since they were the ones deciding its topic. Nevertheless, identified below are some of the reasons why the researcher suggested this subject matter:

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[6] See the entire action plan with the objectives, activities, tasks, timing, grouping, materials and diversity in annex 1.

1. Adolescents like fashion, so taking clothing as a starting point to study the different countries was a motivating idea for the students.
2. Teenagers love social networks and blogs. This project allowed pupils to create their own blog as a final product. Thereby, students could learn all the contents related to the countries they studied (geographical features, maps, climates, food, places to visit, etc.) in an innovative way.
3. Students could develop their creativity, while improving their English and digital skills, as well as learning content from the curriculum of different disciplines.
4. Talking about the clothing manufacturing process enabled the students to reflect on climate change and human rights.

On the other hand, by implementing the interdisciplinary project, the researcher expects to create an effective learning environment, since all activities and tasks were designed by taking into account the cognitive, metacognitive, and socio-affective learning strategies. In addition, the investigator also expects students to learn the elements in the curriculum related to the four subjects included in the project, as well as learning how to work cooperatively. The researcher expects pupils to acquire knowledge by using innovative methodologies and by learning through real contexts. Finally, the investigator wants students to experience self-assessment, co-assessment, and family involvement.

Besides that, this interdisciplinary project was designed following a **student-centred approach**, so the teacher acts as a counsellor and a guide, and the students are the protagonists of their own knowledge acquired. Moreover, the whole programming is based on Gagner's **eight multiple intelligences theory** and the **inclusion principle**, so all the students are attended. Also, the project is based on significant learning, which implies being related to Brewster's **PP: Presentation, Practice and production**. In order to achieve this purpose, the researcher applied **the task-based approach**: in each lesson, the teacher introduces the topic through a driving question, and gives the students clear instructions on what they have to do. Then, pupils complete the task in pairs, or in cooperative groups, using the resources and scaffolding documents that the teacher provides them. Finally, students share what they found out with the rest of the classmates and together reflect (orally or written) on the topic they studied.

In terms of approaches, the interdisciplinary project is based on David Marsh's **CLIL approach**, since students learn contents from other subjects in English. Additionally, it also applies the **communicative approach,** since the activities are all interactive, unpredictable, and within a context.

Lastly, regarding techniques, the tasks of the project were designed using the **total physical response (TPR)**, as they introduce kinaesthetic activities, which help reduce stress and lower students' affective filter. Similarly, the **gamification** technique was also included in the project's activities. Thus, students can develop the "learning to learn" and digital competences, which, as a result, multiply their motivation.

4.2.2. Evaluation plan

The results of the interdisciplinary project will be obtained and verified in various ways: written reports, oral presentations, mind maps, posters, debates, reflections on different topics, etc. Furthermore, the teacher will follow clear **evaluation criteria**[7] to assess the students. It is important to know that the assessment will be **continuous**, so the teacher will evaluate from the beginning until the end of the project through different materials.

In addition to this, pupils will carry out **self-evaluation** and **co-evaluation**. To do this, the researcher will have prepared rubrics[8], so that the students will be able to reflect on their own individual work and group work contributions during the process. Furthermore, students will receive feedback from the teacher and their classmates through comments on the blog and on the Padlet platform. Apart from that, the educator will also evaluate the **teaching-learning process**[9]**,** and the families will be able to participate in the evaluation process of the project by leaving comments on the blog.

In regards of possible risks that can arise when implementing the project, the researcher could have made mistakes when estimating the timing of the tasks and activities. Similarly, the dynamics of some groups could potentially not flow properly. Finally, some activities that were thought to be motivating could obtain poor results in the end.

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[7] See the general rubric in annex 13.
[8] See the students' self-assessment and the co-assessment rubric in annex 15.
[9] See the teacher's self-evaluation rubric in annex 14.

5. Results and discussion

This section is focused on the results obtained once the necessary data to answer the two research questions was collected. Thus, readers can find the analysis and the interpretation of the questionnaire and observation grid in relation to the interdisciplinary project. Subsequently, there are the interview findings.

5.1. Questionnaire

After exploring interdisciplinary projects and its characteristics (objective one), the researcher ascertained that one of the requirements of building up an effective project was to design it based upon students' interests (Álvaro and González, n.d.: 16). Thus, the researcher created a questionnaire to decide upon a topic the project would develop. The graph below shows the possible topics and the results of the students' votes:
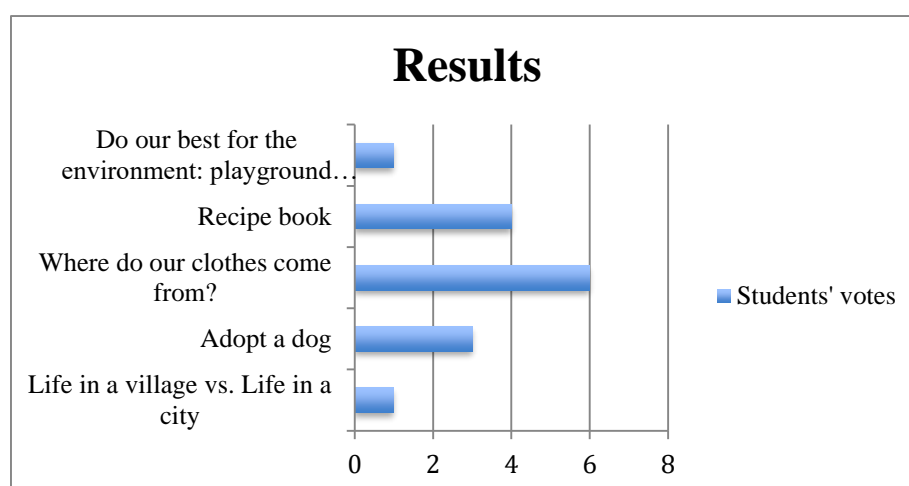
Graph 1. Students' votes for the topic of the project. Source of own elaboration.

Observing the table, it is clear that 40% of the students voted for the "Where do our clothes come from?" project. Thus, based on the experts' opinions, the investigator designed this specific interdisciplinary project considering students' motivations.

On the other hand, this technique also enabled the investigator to decide the principal subject of the whole project: Geography, as well as helped to establish the complementary disciplines: English, ICT and Art and Design. Additionally, it allowed the researcher to choose the appropriate contents of the curriculum within the specific educational stage (1st ESO), as well as to connect with an attractive topic to adolescents: clothing.

5.2. Participant observation (observation grid)

Another important goal of the research was to study different learning strategies (cognitive, metacognitive, and socio-affective) and to understand how their application affects the students' learning process (objective two). To do this, the investigator developed an interdisciplinary project (objective three) taking into account the experts' guidelines and incorporated different activities related to these learning strategies:

In terms of **cognitive learning strategy** and considering the British Council (2018) recommendations, the interdisciplinary project incorporates activities in which the students have to elaborate mind maps, do summaries, and brainstorm. In like manner, it also includes videos. Also, students must find key vocabulary and use clues in reading comprehension when searching the Internet and deciphering the different tasks.

Regarding **metacognitive learning strategy**, and based on Gagné et al. (2009, mentioned in Perras, 2018) suggestions, the project builds in the following standards: the teacher gives clear instructions at the beginning of each session, pupils experience self-reflection activities and, finally, students motor their own work.

In respects of the **socio-affective learning strategy**, the researcher followed the British Council (2018) and the Oxford (2013: 14) specifications, then at the end of the project, organized an activity to talk about emotive involvement. Furthermore, in each session, the teacher asks the students how they are feeling in order to identify their mood. What is more, the educator acts as a guide, so students have the opportunity to ask them questions for clarification. On the other side, when concerning social strategies, the investigator designed the activities to foster cooperative learning, so that the students can work in pairs and small groups throughout most of the activities. Finally, the investigator focused the project on exploring cultural aspects of other countries.

Apart from that, the researcher drew up an **observation grid** to carry out the participant observation and to analyse the students' behaviour when applying these learning strategies. However, as previously mentioned, the project could not be implemented, since the school in which the investigator was granted access, and in which the project was created, uses traditional educative methods. Nevertheless, future researchers can use this observation grid to find out if an informed use of these learning strategies creates an effective learning environment, and therefore answer to the first research question of this essay.

5.3. Interviews

Concerning objectives four and five, this assignment also aims to ascertain if the implementation of an interdisciplinary project favours students' participation, and whether this participation changes depending on the groupings used. Hereafter is a table which summarizes the answers obtained in the experts' survey:

	Director of a school in Barcelona	Director of a school in Amposta	Teacher (trainer)
Do interdisciplinary projects favour participation?	Yes (methodology)	Yes	Yes
What is the key element to boosting participation?	Methodology used in the classroom.	Practical use in what the students are learning.	Attractive final product.
Does participation vary depending on the grouping?	Yes	Yes	Yes
When do students participate more?	1. Peer work 2. Large groups 3. Small groups 4. Individual work	1. Peer work 2. Small groups 3. Individual work 4. Large groups	1. Peer work 2. Small groups 3. Individual work 4. Large groups
In cooperative work, is participation equitable?	Yes	Sometimes	No
How can teachers guarantee an equitable participation?	Making sure that the project is a well-designed.	Forming groups where students feel comfortable, and assigning a role to each member.	It is not important that the work is totally equitable. The purpose is for students to feel comfortable and know their potential.

Table 6. Summary of the interviews' answers. Source of own elaboration.

It is clear from the table that the three professionals agree that interdisciplinary projects favour students' participation. However, the director of the school in Barcelona specifies that it is not the project itself that increases students' willingness to participate, but the methodology used in the classroom. He believes that the key to boosting pupils' participation is by learning from challenges. Furthermore, the three professionals support that this kind of project allows students to work cooperatively and experience

peer work. Consequently, students have more opportunities to interact since they work autonomously, which forces the learning to become more significant and participation to increase.

Besides that, professionals cannot reach an agreement when deciding which is the principal element of promoting participation. The director in Amposta defends that it is essential that students find a practical use for what they are learning. By contrast, the educative trainer states that the most important aspect is that the final product is attractive. Additionally, these two experts maintain that the topic of the project, understanding of evaluation criteria by the students, involvement of families and institution, and understanding of objectives/contents by the pupils are also important to boost participation. Nevertheless, the director in Barcelona insists on the importance of the methodology used, since he holds that all these mechanics previously mentioned do not always imply participation.

Beyond this, all experts coincide on the basis that participation varies depending on the grouping. On one hand, the educative trainer and the director in Amposta affirm that students' participation increases according to the following gradation: peer work, small groups, individual groups, and large groups. In effect, they think that the smaller the group is, the greater responsibility the students have. Thus, their involvement and participation in the activities multiplies. On the other hand, the director in Barcelona differs from their opinions and elaborates his own participation gradation: peer work, large groups, small groups and individual groups. From his point of view, the bigger the groups are, the better the groups' dynamics are. Consequently, participation increases.

Regarding participation in cooperative groups, the director in Barcelona defends that if the project is well-designed, participation is equitable. If not, there is already an established risk of turning it into a totally asymmetric group work. Moreover, according to the director in Amposta, participation is not always equitable when working in cooperative groups. She maintains that a measure of equal participation is achieved by giving a role to each student, and bringing together pupils that get along within their teammates, so that they take charge. Finally, the educative trainer states that participation is not equitable in interdisciplinary projects. Nevertheless, she believes that teachers should not care too much about this fact. In her opinion, the purpose is for the students to feel comfortable, and gradually figure out and develop their potential.

6. Conclusions

At the initiation of this investigation, the researcher tabled five objectives. Once the results have been analysed and interpreted, it can be said that not all the objectives have been meet. Hereafter is the final reflection on the assignment woven into the goals, research questions, and hypothesis of the entire essay:

On one hand, regarding objective one, the researcher delved into the current situation in the education field, and could arrived at a definition of what interdisciplinary projects are, and determine their characteristics. This enabled her to understand the role of a teacher today, as well as become aware of the pros and cons of using new methodologies, approaches, and techniques such as gamification, TPR, communicative approach, task-based approach, etc. in the classroom.

In addition, concerning interdisciplinary projects themselves, the investigator could ascertain that according to Anaya (n.d.: 2) their main objectives are to include different areas of knowledge, teach and built competences, apply knowledge and to involve students in their learning process. By doing so, scholars develop their critical thinking, acquire metacognitive understanding, and engage in problem solving (Golding, 2009:4).

With reference to objectives two and three, the researcher found out that a good way to plan and manage an interdisciplinary project is to follow the PMI reference model, which consists of the following phases: initialization, planning, execution, control and closure. Furthermore, the researcher learned that all the activities and procedures of an interdisciplinary project are included in the project plan. In the education field, the reference model used to design the project plan is within the Skopos model, which is based on three basic components: concept, action plan, and evaluation plan. Hence, thanks to Álvaro and González (n.d.: 16-23)'s guidelines, the investigator made certain that teachers should suggestively consider the following aspects when elaborating an interdisciplinary project: educational stage, disciplines involved, final product, elements of the curriculum on which students work on, activities design, the methodology used, levels of complexity, ICT resources and assessment, among others.

On the other hand, the researcher could study different approaches and groupings used when learning through interdisciplinary projects. However, the investigator focused on learning strategies, more specifically, in the cognitive, metacognitive, and socio-

effective learning strategies. Thus, the investigator could understand the main features of each strategy, and the kind of activities they involve. Then, considering all this information, and the results in the students' questionnaire about possible topics, the researcher developed her own interdisciplinary project.

Still, the researcher could not verify if an informed use of the cognitive, metacognitive and socio-effective learning strategies in interdisciplinary projects creates an effective working atmosphere for the students, since the investigator was not capable of implementing the project, and therefore could not observe how their application affects the pupils' behaviour. Therefore, the first hypothesis in this essay could not be confirmed. Even so, the researcher designed an observation grid through which she could carry out the participant observation in the classroom, which would allow her to confirm or reject the hypothesis in case she wanted to implement the project.

In terms of objectives four and five, the investigator contrasted the idea that interdisciplinary projects favour students' participation. Thus, the first part of the second hypothesis was confirmed. Nevertheless, professionals support that to ensure this participation, it's important that projects use the appropriate methodology in the classroom, and that pupils learn cooperatively as well as from challenging activities. Consequently, students have more opportunities to interact, which means the learning becomes more significant and participation increases. However, there are different opinions when deciding which principal element promotes participation. Some professionals believe that the key is finding students a practical use of what they are learning; others defend that the attractiveness of the final product is essential; finally, some experts believe that all participation depends on the methodology used.

Beyond this, the researcher could also confirm some aspects of the second part of the hypothesis: students' participation does vary depending on the grouping. However, the investigator could not confirm nor refuse the second part of hypothesis, since the professionals do not reach an agreement on the way participation is carried out. Some of them defend that the smaller the group, the greater responsibility the students have. Thus, their involvement and participation in the activities multiplies. Nonetheless, others guarantee that the bigger the groups are, the better the groups' dynamics are. Consequently, participation increases. In view of this situation, the investigator should do more interviews and get more information in order to come to a firm conclusion.

On the other hand, this study offers an innovative proposal, since education has become centre stage, and it's often heard that the educational system requires reformations. What is more, this essay provides information about new methodologies, innovative techniques, and motivating topics to discuss with students. It is noted that thinking about motivating activities for pupils in secondary education is a great challenge. Adolescents are experiencing physical and emotional changes, so it is a demanding task for teachers to understand them, love them, and encourage them through this time. In light of the above, this essay facilitates a complete description of an interdisciplinary project with its objectives, methodologies, activities/tasks, timing, grouping, diversity, and evaluation plan. Thus, teachers and other professionals can take ideas and adapt them to their needs. Moreover, this investigation provides contrasting ideas regarding participation, which is a recurrent theme among the education community. This way, educators can learn several techniques in order to foster students' participation according to different professionals' opinions.

In respect of limitations, the researcher could not implement the interdisciplinary project, thus the researcher could not verify if an informed use of the cognitive, metacognitive, and socio-affective learning strategies creates an effective environment for the students' learning process. As a consequence, the researcher could not meet part of objective two, or answer the first research question. Likewise, concerning students' participation, this study is not an exhaustive investigation, since the researcher could only interview three professionals. Therefore, selecting a larger sample would enable the researcher to provide more reliable data, and come to firmer conclusions. Finally, as for the interdisciplinary project itself, the investigator is aware that teachers do not build up this kind of projects alone. Thereby, the draft proposed needs to be revised by professionals of the disciplines involved before implementing.

Thus, future researchers are encouraged to continue investigating the subject, and increase their awareness and knowledge about interdisciplinary projects. On top of that, investigators are urged to revise and implement the interdisciplinary project proposed in order to ascertain if an informed use of the cognitive, metacognitive, and socio-affective learning strategies creates an effective work environment for the students. Lastly, other experts are encouraged to find new ways to increase pupils' participation, and disseminate the data they explore. Participation results from motivation, which is one of the main objectives essential to strive for in the education field.

7. Source documents

Web pages

Álvaro, M., and González, E. (n.d.). *Los proyectos interdisciplinares en la ESO*. Recovered from http://explora.anaya.es/wp3/wp-content/uploads/2016/09/01_prologoproyectos_ESO.pdf

Anaya. (n.d.). *Orientaciones para desarrollar un proyecto interdisciplinar*. Recovered from http://conexiones.dgire.unam.mx/wp-content/uploads/2017/09/Orientaciones-para-desarrollar-un-proyeto-interdisciplinar.pdf

Boletín oficial del Estado. (2013). *Disposicions generals*. Recovered from https://www.boe.es/boe_catalan/dias/2013/12/10/pdfs/BOE-A-2013-12886-C.pdf

Boud, D. (2001). *Making the Move to Peer Learning*. Recovered from https://www.researchgate.net/publication/309967818_Making_the_Move_to_Peer_Learning

British Council. (2018). *Cognitive strategies*. Recovered from https://www.teachingenglish.org.uk/article/cognitive-strategies

British Council. (2018). *Teacher centred*. Recovered from https://www.teachingenglish.org.uk/article/teacher-centred

British Council. (2018). *Affective strategies*. Recovered from https://www.teachingenglish.org.uk/article/affective-strategies

Forehand, M. (2011). *Bloom's Taxonomy*. Recovered from https://www.d41.org/cms/lib/IL01904672/Centricity/Domain/422/BloomsTaxonomy.pdf

Generalitat de Catalunya. (2015). *DECRET 187/2015, de 25 d'agost, d'ordenació dels ensenyaments de l'educació secundària obligatòria.* Recovered from http://portaldogc.gencat.cat/utilsEADOP/PDF/6945/1441278.pdf

Generalitat de Catalunya. (2015). *DECRET 187/2015, de 25 d'agost, d'ordenació dels ensenyaments de l'educació secundària obligatòria*. Recovered from http://portaljuridic.gencat.cat/ca/pjur_ocults/pjur_resultats_fitxa/?action=fitxa&mode=single&documentId=701354&language=ca_ES

Generalitat de Catalunya. (2017). *Decret 150/2017, de 17 d'octubre, de l'atenció educativa a l'alumnat en el marc d'un sistema educatiu inclusiu*. Recovered from http://xtec.gencat.cat/web/.content/curriculum/educacioadults/trobades-pedagogiques/presentacio_DECRET_ADULTS_2.pdf

Generalitat de Catalunya. (2017). *Associacions de mares i pares d'alumnes (AMPA)* . Recovered from http://familiaiescola.gencat.cat/ca/escolaritat/participacio-compromis/participacio-coresponsabilitzacio/participacio-funcionament-centre/ampa/

Golding, C. (2009). *Integrating the disciplines: Successful interdisciplinary subjects*. Recovered from https://baalweb.files.wordpress.com/2016/10/goodpractice_full_2016.pdf

Gurría, A. (2016). *PISA Resultados Clave*. Recovered from https://www.oecd.org/pisa/pisa-2015-results-in-focus-ESP.pdf

Jefatura del Estado. (2006). *Ley Orgánica 2/2006, de 3 de mayo, de Educación*. Recovered from https://www.boe.es/buscar/pdf/2006/BOE-A-2006-7899-consolidado.pdf

Ministry of Education, Culture and Sports. (2002). *Marco común europeo de referencia para las lenguas: aprendizaje, enseñanza, evaluación*. Recovered from https://cvc.cervantes.es/ensenanza/biblioteca_ele/marco/cvc_mer.pdf

Ministry of Education, Culture and Sports. (2011). *Proyecto combas: informe de evaluación externa*. Recovered from file:///Users/zaidaarditroda/Downloads/DAngeloRusinek-COMBAS_Informedeevaluacinexterna.pdf

Ministry of Education, Culture and Sports. (2017). *Competencias clave*. Recovered from https://www.mecd.gob.es/educacion/mc/lomce/el-curriculo/curriculo-primaria-eso-bachillerato/competencias-clave/competencias-clave.html

Oxford, R. (2003). *Language learning styles and strategies: an overview*. Recovered from http://web.ntpu.edu.tw/~language/workshop/read2.pdf

Perras, C. (2018). *Metacognitive Strategies or "Thinking About My Thinking"*. Recovered from https://www.ldatschool.ca/metacognitive-strategies-or-thinking-about-my-thinking/

Smith, M. (2015). *What is education? A definition and discussion*. Recovered from http://infed.org/mobi/what-is-education-a-definition-and-discussion/

The British Association for Applied Linguistics. (2016). *Recommendations on Good Practice in Applied Linguistics*. Recovered from https://baalweb.files.wordpress.com/2016/10/goodpractice_full_2016.pdf

University of Waterloo. (2018). *Implementing Group Work in the Classroom*. Recovered from https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/alternatives-lecturing/group-work/implementing-group-work-classroom

Xarxa Telemàtica Educativa de Catalunya. (2018). *Treball cooperatiu*. Recovered from http://www.xtec.cat/~aorihuel/treball%20cooperatiu.htm

Electronic magazine articles

Bas, G., and Beyhan, O. (2010). Effects of multiple intelligences supported project-based learning on students' achievement levels and attitudes towards English lesson. *International Electronic Journal of Elementary Education, 2*(3), 367-368. Recovered from https://files.eric.ed.gov/fulltext/EJ1052017.pdf

Garcia-Retamero. (2010). De profesor tradicional a profesor innovador. *Temas para la educación: revista digital para profesionales de la enseñanza, 102*(11), 1-7. Recovered from https://www.feandalucia.ccoo.es/andalucia/docu/p5sd7620.pdf

Kilpatrick, W. (1918). The Project Method: The Use of the Purposeful Act in the Education Process. *Teachers College Record*, *6*(19), 319-335. Recovered from http://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1610455

Wright, S. (2016). The 30-second briefing: What is the traditional versus progressive education debate?. *Tes*. Recovered from https://www.tes.com/news/30-second-briefing-what-traditional-versus-progressive-education-debate

Electronic newspaper articles

Fernandez, B. (3 March 2017). David Calle: "Hay que dar la vuelta a las clases". *El país*. Recovered from https://elpais.com/elpais/2017/03/09/videos/1489079278_636354.html

Shepherd, J. (10 February 2009). Fertile minds need feeding. *The Guardian*. Recovered from https://www.theguardian.com/education/2009/feb/10/teaching-sats

Books

Barbosa, E., and Moura, D. (2013). *Proyectos educativos y sociales: Planificación, gestión, seguimiento y avaluación*. Madrid: Narcea, S.A. De ediciones.

Colás, M. P., and Buendía, L. (1998). Investigación educativa. Sevilla: Ediciones Alfar, S.A.

Dewey, J. (1916). *Democracy and Education: An introduction to the philosophy of education* (1966 edition). New York: Free Press.

Freire, P. (1972). *Pedagogy of the Oppressed.* (50th anniversary edition). Harmondsworth: Penguin.

Kliebard, H. M. (1986). *The struggle for the American curriculum: 1893-1958.* Boston: Routledge & Kegan Paul.

Lopez, P. (2009). *Entendre's amb adolescents: 10. Cap, cor i mans*. Barcelona: Grao.

McMillan, J. H., and Schumacher, S. (2005). Investigación educativa. Madrid: Pearson educación, S.A.

Penalva, C., and Mateo, M. Á. (2006). Tècniques qualitatives d'investigació (1st ed.). Inner material of the Alacant University.

Electronic theses

Boumová, V. (2008). *Traditional vs. Modern Teaching Methods: Advantages and Disadvantages of Each* (Master's Diploma Thesis). Recovered from https://is.muni.cz/th/86952/ff_m_b1/MgrDiplomkaBoumova.pdf

Moodle notes

Mayoral, P. (2018). *Avaluació* [lecture notes]. Scala Blanquerna.

Musons, J. (2018). *Escola Sadako. The changemaker project* [lecture notes]. Scala Blanquerna.

Wilson, J. (2018). *Teacher and Learner Styles- Intro to Approaches & Methods.* [lecture notes]. Scala Blanquerna.

8. Annexes

8.1. Action Plan

Area: Geography, English, ICT Art and Design	**Project:** *Where do our clothes come from?*	**Timing:** *10 sessions (2 hours each)*	**Class:** *1st ESO* **School Year:** 2017-2018 *(3rd trimester)*	**Teacher:** *Zaida Ardit Roda*

Dimensions and specific competences		Specific Learning Objectives

Geography	B. *Reading comprehension dimension:*
	   C7. To analyse different models of political, economic and territorial organization, and the inequalities that they generate, in order to value how they affect people's lives and to make proposals for action.
	C. *Cultural and artistic dimension:*
	   C10. To value one's own cultural expressions, in order to promote the construction of personal identity in a global and diverse world.
	D. *Citizenship dimension:*
	   C11. To develop one's own criteria on relevant social problems to develop critical thinking.
		1. *To understand the grammar of the curriculum and practice it: present simple, present continuous, past simple, past continuous, future tenses and "there is and there are" structures, etc.*
		2. *To study the vocabulary of the curriculum and apply it in real contexts: adjectives of opinion, adjectives to describe landscape features, persuasive language, etc.*
		3. *To do an oral presentation.*
		4. *To learn the continents and how to locate them on a map.*
		5. *To study the countries of each continent and its location on a map.*
		6. *To find out information about some countries: inhabitants, area, main geographical features, traditions, beliefs, typical food, etc.*
		7. *To study the world climates and to identify the ones in the country students are working on.*
		8. *To study the climate change and the relation between climate change and clothing.*
		9. *To brainstorm about different topics: clothing, climate change, human rights, etc.*
		10. *To create a poster.*
		11. *To create a blog.*
		12. *To make a mind map.*
		13. *To experience an escape room.*
		14. *To work cooperatively.*
		15. *To use online tools: Kahoot, YouTube, Padlet, Genial.ly, Canva, Prezi, PowerPoint...*
		16. *To experience a flipped classroom.*
		17. *To review from scaffolding documents and other materials.*
		18. *To reflect about different topics: how the clothing manufacturing process affects the environment and the human rights, climate change, similarities between the geographical features in Barcelona and other countries, etc.*
		19. *To get information on the Internet from reliable sources.*
		20. *To do a debate.*
		21. *To do an exhibition with all the information students learnt.*
		22. *To design a souvenir.*
		23. *To prepare a "making off" about the whole project process.*

English	A. *Oral communicative dimension:*
	   C1. Obtain information and interpret oral texts of daily life, media communication and the academic field.
	   C3. Use oral interaction strategies to communicate according to the communicative situation to start, maintain and finish the speech.
	B. *Reading comprehension dimension:*
	   C4. Apply comprehension strategies to obtain information and interpret the content of written texts with a clear structure about the daily life, the media and the academic field.
	C. *Writing expression dimension:*
	   C8. Produce written texts of different typology and formats using textualizing strategies.	

ICT	B. *Information processing and learning and work areas organization dimension:*
	   C4. To search, contrast and select digital information suitable for the work, considering various sources and digital media.
	C. *Collaboration and interpersonal communication dimension:*
	   C8. To perform group activities using virtual collaborative tools and environments	

Art and Design	A. *Perception and listening dimension:*
	   C2. To show habits of reflective and open perception of the sound and visual reality of the natural and cultural environment
	B. *Culture and society dimension:*
	   C9. To enjoy artistic experiences and creations as a source of personal and social enrichment	

Key Contents		Diversity

Geography	CC17. Sources for the knowledge of the physical environment and its societies.
	CC18. Reading and interpretation of maps and images of different characteristics and supports.
	CC19. Interaction between human groups and the environment
	CC20. Location and characterization of different landscapes.
	CC21. Demographic, economic, social, political and cultural features of different societies around the world.
	CC23. Political and territorial organization
	CC25. Sustainable human development
	CC27. Human rights
		✚ *Universal support:*
		
		- *Heterogeneous groups:* The teacher organizes the groups trying to mix students with different capacities and taking into account multiple intelligences. .
		- *Scaffolding resources.*
		- *VAKog activities.*
		- *Fast finishers: students help their classmates.*
		- Create a *pleasant atmosphere.*
		- Respect students' *Silent period.*
		
		✚ ***Additional supports/Special needs:***
		
		    ➢ *Fast finishers*
		
		- *Optional work: Students have some extra work in the instructions document of each task.*
		
		    ➢ *ADHD boy*
		
		- *Give him responsibilities* (making off and a role in the cooperative group)
		- *Clear instructions*
		- *Time flexibility*
		- *Give him space to relax and have ready ICT tools.*

English	CC4. Oral interaction strategies CC8. Reading comprehension strategies CC9. Search and management of information and linguistic consultation CC10. Criteria for selection and evaluation of information CC11. Planning strategies CC12. Adaptation, coherence and cohesion in written texts CC13. Strategies for revision, correction, preparation and presentation of written texts CC14. Written interaction strategies forums of opinion in social educative networks CC16. Use of dictionaries (physical and digital) and other electronic tools	
ICT	CC1. Basic functionalities of devices CC9. Text document editing tools and multimedia presentations CC10. Audiovisual language CC12. Searchers CC13. Digital information sources CC22. Work areas and collaborative learning	
Art and Design	CC3. Basic elements of artistic productions CC7. Comunication and expression CC10. Art and society	

Session 1	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
1	**"First of all":** *Before starting the project, the teacher explains that the boy with hyperactivity is responsible for recording some images of the whole making off process. He will be the one doing the making off that will be projected the final day.*	*Digital camera*	*L*	*WG*	*5'*	*CC1*	*C1*	-
2	**Presentation:** *Students are introduced to the project: topic, tasks, objectives, assessment criteria, contents, requirements, methodology and timing. Likewise, students write the goals that they want to achieve at the end of the project.*	*Digital screen Notebook*	*L W*	*WG I*	*20'*	*C11*	*C1*	-
3	**Warm-up activity (Brainstorming):** *Pupils' brainstorm about "clothes" using the website Mentimeter through their smart phones. The teacher tells the students to submit the first three things that come to their minds when thinking of clothes. Then, the entire class reflect about the results.* https://www.mentimeter.com/s/5446d42dde5b04151dbb2708c2436631/e30ecd4b592d/edit	*Projector Smart phones*	*L W S I*	*I WG*	*10'*	*CC8 CC22 CC11*	*C3 C8*	-
4	**Introductory activity (Kahoot):** *The teacher asks the question: where do you think our clothes come from? Then, students do an online questionnaire to find out which country is the main clothing exporter, which materials are used in the process and some amazing facts:* https://play.kahoot.it/#/k/fdeb7209-0175-43b5-8a39-8a8c9eb225cd	*Projector Smart phones*	*R*	*I*	*10'*	*CC8 CC1*	*C4 C8*	-
5	**Group formation:** *The teacher divides the class into five groups of three students each (cooperative work) taking into account pupils' relationships and multiple intelligences. The teacher also gives a role to every member of the group (editor, secretary and checker).*	*-*	*L S I*	*WG SG*	*10'*	*CC4*	*C1 C3*	-
6	**Task 1:** *Students have to answer a driving question following the teacher's instructions[10]: "How does the clothing manufacturing process affect the environment? Are human rights respected?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Instructions sheet Laptop*	*L W S R I*	*SG*	*60'*	*CC4 CC1 CC19 CC8 CC9 CC21 CC10 CC22 CC25 CC12 CC27 CC13 CC16*	*C1 C4 C7 C3 C11 C4 C8*	1 2 4 6 9 11
7	**Cold down activity (Visual reflection):** *Each student writes down the most interesting thing that he/she learnt during the session on a post-it and sticks it on the wall. This way, students share ideas, have a visual summary and reflect on what they studied.*	*Post-its*	*L W R I*	*WG I*	*5'*	*CC4 CC19 CC13 CC25 CC27*	*C3 C7 C8 C1*	12

[10] See the instructions and the material needed in annex 2.

	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
Homework	***Pictures activity**: each student in the group is asked to take a picture of a different geographical feature in Barcelona on an excursion with their families: a river, a mountain and a beach.*	*Digital camera*	L	I	-	CC4 CC1 CC29 CC10 CC25	C1 C8 C10 C3	-

Session 2	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	***Recording time:** The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	I	WG I	-	CC1	C1	-
1	***Introduction**: The teacher explains the objectives of the session and the contents to the students.*	*Projector*	L	WG	5'	C11	C1	-
2	***Label activity:** The teacher asks the students to find out where their T-shirts come from. To do this, in pairs, they look for the information in their labels. The teacher writes on the board the different countries that appear on the labels. Then, in pairs, the students have to identify where the countries are using Google maps. The teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*T-shirt Blackboard Laptop*	L W S R I	WG PW	20'	CC4 CC13 CC17 CC22 CC23	C1 C8 C7 C3	-
3	***Country assignment:** Each group chooses what country they want to work on from the ones on their labels.* *IMPORTANT: each group has to work on a different continent, so at the end of the project, the students will have learnt about the five continents. The teacher can provide a name of a country in case that there is a continent that is not on the labels.*	-	L S I	SG	5'	CC4	C1 C3	-
4	***Task 2:** Students have to answer a driving question following the teacher's instructions [11]: "How far is my clothing from me?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Instructions sheet Laptop*	L W S R I	SG	90'	CC4 CC1 CC23 CC8 CC9 CC10 CC22 CC12 CC13 CC16	C3 C4 C7 C4 C8 C8	1 2 5 6 7 11 12
Homework	*Students add at least three comments to any of their classmates' posts (positive feedback). The teacher will also give feedback to students through comments on their posts.*	*Laptop*	W	I	-	CC12 CC1 CC14 CC9	C8 C8	1 11 12

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[11] See the instructions and the material needed in annex 3.

Session 3	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	**Recording time:** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	*I*	*WG* *I*	-	CC1	C1	-
1	**Introduction**: *The teacher explains the objectives of the session and the contents to the students.*	*Projector*	*L*	*WG*	*5'*	C11	C1	-
2	**Task 3:** *Students have to answer a driving question following the teacher's instructions[12]: "Are the geographical features in another country the same as here?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).* *The students should come to the conclusion that the same description could be used to describe either geographical feature in Barcelona or in the country they are working on (the world is different but equal at the same time).*	*Projector* *Laptop*	*L* *W* *S* *R* *I*	*SG*	*55'*	CC4 CC1 CC17 CC8 CC13 CC20 CC10 CC12 CC13 CC16	C3 C4 C7 C4 C8 C8	*1* *2* *5* *6* *8* *11* *12*
3	**Task 4:** *Students have to answer a driving question following the teacher's instructions[13]: "Which are the main geographical features of the country we are studying?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Projector* *Laptop*	*L* *W* *S* *R* *I*	*SG*	*40'*	CC4 CC1 CC17 CC8 CC13 CC18 CC10 CC22 CC20 CC12 CC13 CC16	C3 C4 C7 C4 C8 C10 C8	*1* *2* *5* *6* *8* *11* *12*
4	**Map activity:** *The teacher prints a big mute map and sticks it on the wall. Each group approaches to the wall map, colours and writes the name of the three mountains and the three rivers that they studied.*	*Map* *Colours*	*L* *W* *S* *I*	*WG* *SG*	*20'*	CC4 CC1 CC23	C3 C7	*7* *8* *12*

Session 4	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	**Recording time:** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	*I*	*WG* *I*	-	CC1	C1	-
1	**Introduction**: *The teacher explains the objectives of the session and the contents to the students.*	*Projector*	*L*	*WG*	*5'*	C11	C1	-

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[12] See the instructions in annex 4.

[13] See the instructions in annex 5.

2	**Task 5**: *Students have to answer a driving question following the teacher's instructions[14]: "Which are the main climates in the country we are studying?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Instructions sheet* *Laptop*	*L* *W* *S* *R* *I*	SG	90'	*CC4 CC1 CC17* *CC8 CC12 CC20* *CC10 CC13* *CC12 CC22* *CC13* *CC16*	*C3 C4 C7* *C4* *C8*	*1* *2* *6* *8* *11* *12*
3	**Climate change activity:** *Students watch two videos:* 1. *Explanation climate change:* https://www.youtube.com/watch?v=Sv7OHfpIRfU&t=49s 2. *How the clothing materials affect the environment:* https://www.youtube.com/watch?v=BqkekY5t7KY	*Projector*	*L*	WG	25'	*CC4 CC10 CC17* *CC19* *CC20* *CC21*	*C1 C8 C7* *C3 C11* *C8*	*4* *9* *11* *12*
	Debate: *In groups (cooperative groups) students think about the ideas that attracted their attention and write them down. Then, they share ideas with the rest of the class and the entire class reflects on the matter.*	*Projector* *Notebook*	*L* *W* *S* *R* *I*	WG *I*				
Homework	**Flipped classroom**: *Students have to watch the following videos that the teacher herself has recorded to review the theory about some verbal tenses:* 1. *Past simple and past continuous:* https://youtu.be/VGnouCSzHNg 2. *Future tenses:* https://youtu.be/8SxrYMtaKmM	*Laptop*	*L*	*I*	-	*CC22 CC1* *CC23 CC10*	*C1 C8*	-

Session 5	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	**Recording time:** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	*I*	WG *I*	-	*CC1*	*C1*	-
1	**Introduction**: *The teacher explains the objectives of the session and the contents to the students.*	*Projector*	*L*	WG	5'	*C11*	*C1*	-
2	**"Zone of hope" exhibition:** *The teacher shows the students a trailer of the museum exhibition that they are going to visit[15]:* https://mediaproexhibitions.com/ca/project/zoh **Excursion:** *Students go to the museum to see the exhibition.*	*Projector* *Notebook* *Laptop*	*L* *W* *S* *R*	WG SG	115'	*CC4 CC1 CC17* *CC9 CC13 CC19* *CC10 CC22 CC20* *CC12 CC25*	*C1 C8 C7* *C3 C11* *C8*	*1* *4* *9* *11*

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[14] See the instructions in annex 5.

[15] As explained in the official website, "The Zone of Hope (TZOH) is an experience which enables visitors to experience the effects of climate change first-hand. The exhibition uses Immersive Extreme technologies to ensure a truly captivating immersion by pairing the real space with the virtual space. The Zone of Hope is an interactive and multi-sensory experience combining 360º composite images and visual effects at 90 frames a second, 3D geotagged sound effects, special effects using mechanical, climate, and tactile actuators, which allow visitors to appreciate the textures of the virtual world, to feel cold, heat, wind, humidity, etc. The experience is grounded in the idea that "there's only one way to halt climate change, and that's by experiencing it".

		Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
	Task 6: *Students have to answer a question following the teacher's instructions[16]: "Do we have to worry about climate change?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*		I			CC13 CC16		12

Session 6	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	**Recording time:** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	I	WG I	-	CC1	C1	-
1	**Introduction**: *The teacher explains the objectives of the session and the contents to the students.*	*Projector*	L	GW	5'	C11	C1	-
2	**Task 7:** *Students have to answer a driving question following the teacher's instructions[17]: "Are we good tour guides?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Instructions sheet DIN A3 Felted pens Projector Laptop*	L W S R	SG WG I	75'	CC4 CC1 CC17 CC8 CC9 CC20 CC9 CC10 CC21 CC10 CC23	C3 C4 C7 C4 C8 C10 C8	1 3 5 8
	Oral presentation: *Each group does an oral presentation of their tour guide. The other students make comments (positive feedback).*		I		40'	CC11 CC13		12

Session 7	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	**Recording time:** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	I	WG I	-	CC1	C1	-
1	**Introduction**: *The teacher explains the objectives of the session and the contents to the students.*	*Projector*	L	GW	5'	C11	C1	-
2	**Task 8:** *Students have to answer a driving question following the teacher's instructions[18]: "Where are you planning to go?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Instructions sheet Laptop*	L W S R I	SG	115'	CC4 CC9 CC17 CC8 CC13 CC20 CC10 CC22 CC21 CC12 CC23 CC13 CC14	C3 C4 C7 C4 C8 C10 C8	1 2 5 6 8 11 12

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[16] See the instructions in annex 7.

[17] See the instructions in annex 8.

[18] See the instructions in annex 9.

Session 8	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	***Recording time:*** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	*I*	*WG I*	*-*	*CC1*	*C1*	*-*
1	***Introduction****: The teacher explains the objectives of the session and the contents to the students.*	*Projector*	*L*	*WG*	*5'*	*C11*	*C1*	*-*
2	***Escape room****: The teacher sticks different QR codes throughout the playground. In groups (cooperative groups), students look for the QR codes and when they find them, they use their smart phones to scan each code and to answer the questions[19]. When they have registered all the answers, the teacher checks the solutions. If everything is right, students get the key of the Art classroom and they find the instructions for the next task.*	*QR codes Smart phones Key*	*L W S R I*	*SG*	*40'*	*CC4 CC1 CC20 CC8 CC12 CC21 CC10 CC13 CC16 CC22*	*C3 C4 C7 C4 C8 C10*	*12*
3	***Task 9 (I):*** *Students have to answer a driving question following the teacher's instructions[20]: "Are we good clothing designers?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).*	*Instructions sheet Laptop White T-shirt Paintings*	*L W S R I*	*SG I*	*75'*	*CC4 CC17 CC3 CC11 CC20 CC7 CC21 CC10*	*C3 C10 C2 C4 C9*	*10 11*

Session 9	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
0	***Recording time:*** *The boy with hyperactivity is responsible for recording some images of the whole process of the project.*	*Digital camera*	*I*	*WG I*	*-*	*CC1*	*C1*	*-*
1	***Introduction****: The teacher explains the objectives of the session and the contents to the students.*	*Projector*	*L*	*WG*	*5'*	*C11*	*C1*	*-*
2	***Task 9 (II):*** *Students finish their souvenir.*	*Laptop White T-shirt Paintings*	*L W S R I*	*SG I*	*115'*	*CC4 CC17 CC3 CC11 CC20 CC7 CC21 CC10*	*C3 C10 C2 C4 C9*	*10 11*
	Making off: *The boy with hyperactivity with the help of three more volunteers put together the videos recorded and prepare the making off of the entire project. When they finish, they generate a QR code.*	*Camera Laptop*	*L S I*	*SG*		*CC4 CC1 CC7 CC11 CC9 CC16 CC10*	*C1 C8 C9 C3*	*12*

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[19] See the escape room questions and QR codes in annex 10.

[20] See the instructions in annex 11.

Session 10	Activity	Resources / Material	Skills	Grouping	Time	Key Content	Specific competences	Evaluation Criteria
1	**Introduction**: *The teacher explains the objectives of the session and the contents to the students.*	*Projector*	*L*	*WG*	*5'*	*C11*	*C1*	-
2	**Task 10:** *Students have to answer a driving question following the teacher's instructions[21]: "What did we learn?" While doing the activity, the teacher goes around the class and interacts with the pupils (how are you doing? Are you feeling ok? Do you need any help?).* **Important:** *Each group prepares their exhibition. Families, teachers and the rest of the students in the school can see the results of the project and share knowledge. Moreover, the students' families have to assess their kids' work. To do this, they must use their smart phones and the QR codes to get to the blog and leave some comments.*	*Instructions sheet Students' works Table Smart phones Blue tag*	*L S R I*	*WG SG*	*85'*	*CC4 CC1 CC18 CC8 CC10 CC19 CC2 CC20 CC21 CC23 CC27*	*C1 C8 C10 C3 C4*	*12*
3	**Emotions activity:** *Tables are placed stuck to the walls and with the chairs students form a circle in the centre of the classroom. The teacher and the students sit on the chairs. The teacher places the emotions cards in the centre of the circle. One at a time, the students pick up one emotion and write how they felt carrying out the project on different post-its, how they feel now, if they like or don't like that emotion, what they do when they feel like that, draw the face for that emotion and give it a colour. Finally, they stick the post-its on the walls of the classroom and walk around sharing their feelings with their classmates.*	Cards with emotions (indifference, happiness, empathy, nervousness, surprise, frustration, anger, pride, disgust, envy, remorse, resignation, loneliness, sadness) Post-its	*L W S R I*	*WG I PW*	*30'*	*CC4 CC8 CC12 CC13*	*C1 C3 C4*	*11 12*

_____

Grouping: WG (Whole Group), I (Individually), PW (Pair Work), SG (Small groups)

_____

[21] See the instructions in annex 12.

TASK 1: "How does the clothing manufacturing process affect the environment? Are human rights respected?"

1. Write a text (50-60 words) reflecting about how the clothing manufacturing process affects the environment and the human rights. Here below, there are some topics you can talk about:

   - Pollution
   - Climate change
   - Water wastage

   - Work conditions
   - Salaries
   - Vacations

2. Write the text using the following verbal tenses and grammatical structures: present simple and present continuous, adjectives of opinion and "there is/there are". At the end of this document you can find some scaffolding information to review all the grammar and vocabulary needed to carry out this activity.

3. Before writing, look for information on the Internet (newspaper articles, YouTube videos, TED talks, interviews…). Once you have collected all the information, start with the writing.

4. Remember! You have to work cooperatively! The editor will be the one making sure that the writing meets the standards set out by the instructor. The secretary will take notes of any important data or idea. Finally, the checker will be the one double-checking the data for accuracy and correctness.

5. As there are only 3 members in each group, you will need to decide who will be the spokesperson. In case of having any doubt, he/she will be the one asking the teacher and receiving his/her feedback.

Let's do it!

Scaffolding document

There is/There are (hi ha)

There is	Singular	There is one chair in the room.
There are	Plural	There are four girls in a team
There isn't	Singular negative	There isn't a car in the garage.
There aren't	Plural negative	There aren't four balls in the box.

Present simple

Something that is true in the present		I'm nineteen years old.
Routines	**Adverbs of frequency**	I sometimes **go** to the cinema. She never **plays** football.
	Always	
	Usually	
	Normally/generally	
	Often/frequently	
	Sometimes	
	Occasionally	
	Seldom	
	Hardly ever/rarely	
	Never	
Something that is always true		The adult human body **contains** 206 bones.
Something that is fixed in the future		The school term **starts** next week

	he	
3rd person singular	she	**- s**
	it	**- es**

Don't	**Negative form**	I **don't want** vegetables for lunch.
Doesn't		He **doesn't play** tennis.

Adjectives of opinion

English	Catalan
Awesome	Impressionant
Awful	Horrible
Boring	Avorrit
Disappointing	Decebedor
Disgusting	Repugnant
Exciting	Emocionant
Exhausting	Esgotador
Scary	Esgarrifós
Surprising	Sorprenent

Present continuous (Subject + to be +Ving)

An action that is going on at this moment	You **are studying** English grammar.
An action that is going on during this period of time or a trend	**Are** you still **working** for the same company?
Action or event in the future, which has already been planned	We'**re going** on holiday next week.
To describe a temporary event or situation	The weather forecast was good, but it'**s snowing** at the moment.

To describe a continuing series of repeated action	**Adverbs**	Your parents **are always arguing**!
	Always	
	Forever	
	Constantly	

Attention!

Verbs that are not usually used in present continuous forms	Senses	Feel, hear, see, smell, taste
	Opinion	Assume, believe, consider, suppose, doubt
	Mental states	Forget, imagine, know, mean, remember, understand
	Emotions	Envy, fear, like, hate, hope, love, prefer, want, regret, wish
	Measurement	Contain, cost, hold, measure, weigh
	Others	Seem, be (in most cases) have ("to posses"

	Subject + to be + not +Ving	At this moment, **we aren't going** to the beach.
?	To be + subject + not +Ving?	**Is she coming** to the party?

8.3. Instructions task 2

TASK 2: "How far is my clothing from me?"

1. Create a post on **Padlet** with the following information**:**

    -   A world map.

    -   A map of your continent (including all the countries).

    -   A map including the route from Barcelona to your country.

2. How can I do my **world map**?

    1. Go to https://www.genial.ly/ and one of the members of the group has to register.
    2. Click on "create Genially" and choose the option "maps".
    3. Select the map "Hello World Map" and click on "use this template".
    4. Use the necessary tools to write the name of the 5 continents.
    5. When you finish, click on "share" and select "share a link" (this is the link you will have to post on Padlet).
        o   OPTIONAL: use any tool on Genially to modify the map: add pictures, you can change colours, add audios, etc.

    6. Once you have the map, upload the link on Padlet:
        1. Go to https://padlet.com/zaidardit_3/o5re4w6r0307.
        2. Click on the icon "+"
        3. Add a title and a description.
        4. Click on the second icon and add the link.

3. How can I make a **map of my continent?**
    1. Go to https://www.genial.ly/.
    2. Click on "create Genially" and choose the option "maps".
    3. Select the map of your continent and click on "use this template".
    4. Use the necessary tools to write the name of the different countries.
    5. Write a brief description including the following information (15-20 words):
        1. Information about the continent: landmass, inhabitants…
        2. Capital city
        3. Information about the city you are working on: landmass, inhabitants, and location…

6. When you finish, click on "share" and select "share a link" (this is the link you will need to post on Padlet).

   o OPTIONAL: use any tool on Genially to modify the map: add pictures, change colours, add more information, etc.

7. Once you have the map, upload the link on Padlet. To do this, follow the instructions in step 2.

4. How can I know the **route from Barcelona?**

1. Go to Google Maps: https://www.google.com/maps and write the locations.
2. Make a screenshot and add the picture on Padlet. To do this, follow the instructions in step 2 but selecting the camera icon.
3. Add the following information to the post (15-20 words):
   1. Distance (km)
   2. How are clothes imported to Spain? (Aeroplane, car, boat…)

5. **Grammar and vocabulary instructions:** use present simple and present continuous, adjectives of describing landscape features and "there is/there are" structures. At the end of this document you will find some scaffolding information to review the vocabulary needed to carry out the activity.

Let's do it!

Scaffolding information

Adjectives to describe landscape features

English	Catalan
High	Alt
Low	Baix
Wide	Ample
Narrow	Estret
Long	Llarg
Short	Curt
Big	Gran
Small	Petit

TASK 3: "Which are the main geographical features of the country we are studying?"

1. Complete the following information about **rivers** in the country you are studying:

Name	Location	Volume of water	Length

2. Complete the following information about **mountains** in the country you are studying:

Name	Location	Height

3. **Compare** your information with the following data about Catalonia (60-70 words) using the grammar structures and the vocabulary you learnt in previous lessons:

Name of the river	Location	Volume of water	Length
Ebre	It has its source in the Cantabrian Mountains (Pico Tres Mares) and flows into the Mediterranean Sea (Delta del Ebre).	614 m^3/s	910 km
Llobregat	Cadí) and flows into the Mediterranean Sea (Prat del Llobregat).	20,77 m³/s	175 km
Segre	It has its source in the Pic del Segre and flows into the Ebre River.	100,2 m³/s	265 km

Name of the mountain	Location	Height
Pica d'Estats (Pirineus)	Pallars Sobirà	3.143 m
Caro (el Port)	Tarragona	1.441 m
Sant Jeroni (Penedès)	Montserrat	1.236 m

TASK 4: "Are the geographical features in another country similar to the ones in your country?"

1. Bring the picture you took of the geographical feature in Barcelona.

2. Sail the Internet for a picture of the same geographic features in the city/country you are working on (1 mountain, 1 river and 1 beach).

3. Make a **poster** following the instructions below:

    1. Go to https://www.canva.com/en_uk/; click on "education (teacher or student)"

    2. Choose the way you want to sign up and choose the option "student"

    3. Invite the rest of the members of your group (add their email).

    4. Select the option "poster" and choose the type of poster you want to create.

    5. Use the necessary tools to make the poster including the information in the example at the end of this document.

    6. When you finish, click on "download" and save the document.

        o OPTIONAL: use any tool on Canva to modify the poster: add pictures, change colours, add more information, etc.

    7. If you need further information go to:

        https://www.youtube.com/watch?v=R4n3A6ZTZsM

        https://www.youtube.com/watch?v=92IO9p3kHRA

4. Write the text using the following **verbal tenses and grammatical structures**: present simple, present continuous, adjectives of describing landscapes and "there is/there are". Find all the scaffolding information to review all the grammar and vocabulary needed to carry out this activity in previous tasks. For further help, visit the following links:

    o Present simple and present continuous:
       https://www.youtube.com/watch?v=VP8MRGAjgAs

    o There is/ there are: https://www.youtube.com/watch?v=RHbUkaZcvFc

    o Some and any: https://www.youtube.com/watch?v=zbQAIJK7chE

Let's do it!

Titltle

Picture of a river in Barcelona	Description using adjectives to describe landscape features (20-30 words)
Picture of a river in the country you are working on	
Picture of a mountain in Barcelona	Description using adjectives to describe landscape features (20-30 words)
Picture of a mountain in the country you are working on	
Picture of a beach in Barcelona	Description using adjectives to describe landscape features (20-30 words)
Picture of a beach in the country you are working on	

Reflection about the description of the geographical feature in Barcelona and the city/country you are working on (25-50 words).

TASK 5: "Which are the main climates in the country we are studying?"

1. Complete the following table about the characteristics of the world **climates**:

Climate		Characteristics	Location
Dry	Equatorial		
	Humid tropical		
	Dry tropical		
	Desert		
Temperate	Mediterranean		
	Oceanic		
	Continental		
Cold	Polar		
	Mountain		

2. Which are the **main climates** in the country we are studying? Where are they located? (60-70 words)

3. **Grammar and vocabulary instructions**: use present simple and present continuous, adjectives of describing landscape features and "there is/there are" structures. Use the scaffolding information from previous lessons.

Let's do it!

TASK 6: "Do we need to worry about climate change?"

1. Today we are going to the museum! But you will enter to the exhibitions in threes. While you are waiting for your classmates, brainstorm about some ideas related to the **climate change**:

Before the exhibition	After the exhibition
What do we know about climate change?	What did attracted our attention the most?
What are its consequences?	How will the world be if we don't stop climate change?
How does it affect us?	What did we learn that we didn't know before the exhibition?
What are we going to see in the exhibition?	Is there any solution for climate change?

2. Write a **reflection** on the topic "Do we need to worry about climate change? (80-100 words). Use your brainstorming notes and all your knowledge about climate change.
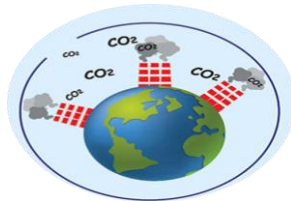
3. **Grammar and vocabulary instructions:** use present simple, present continuous, past simple, past continuous, future tenses, adjectives of describing landscape features and "there is/there are" structures. You can use the scaffolding information from previous lessons.

Let's do it!

TASK 7: "Are we good tour guides?"

1. Make a **mind map** in a DIN A3 paper (the teacher will provide you one) including the following information about the country you are studying:

   - Traditions
   - Beliefs
   - Religion
   - Main rivers and mountains

   - Places to visit
   - Food
   - Clothes to wear according to the climate
   - Information about the country: inhabitants, capital city, etc.

     o OPTIONAL: use can add any other information you'd like. You can also use different colours and include some drawings.

2. **Oral presentation (5'):** Organize all the information you found out in the first step to prepare a tour guide and… Try to convince your classmates that your destination is the best choice for vacations! To do this, you can use the following tools:

   Prezi   Canva

   PowerPoint   Genial.ly

   Pdf   Padlet

3. **Grammar and vocabulary instructions:** use present simple, present continuous, past simple, future tenses, adjectives of describing landscape features and "there is/there are" structures, and persuasive writing. At the end of this document you can find some scaffolding information about persuasive writing.

Let's do it!

Scaffolding information

Persuasive language

  ➢ What is persuasive Language?
     https://www.youtube.com/watch?v=hD9arWXIddM
  ➢ How to use it? https://www.youtube.com/watch?v=nRAtS4s_Dr8

TASK 8: "Where are you planning to go?"

1. Create a **blog** following the steps below:

    1. Give your email (one member of the group) to the teacher so she will add you to the shared blog.

    2. You will receive an email. Open it and click on "accept invitation".

Hello,

The purpose of this message is to inform you that Zaida Ardit Roda has invited you to contribute to their blog "Where are you planning to go?". To accept this invitation, click on the button below.

Accept invitation

    3. You will be redirected to another page. Click again on "accept invitation"

Blogger |

You have been invited to contribute to a blog

Accept Invitation

Accept this invitation as **Zaida Ardit Roda** (zaidardit.3@gmail.com)

Blog title	Where are you planning to go?
Blog url	http://zaidardit.blogspot.com/
Invited by	Zaida Ardit Roda
Expires on	08 July 2018

Accepting this invitation will make your Blogger profile and email address visible to administrators of this blog. Additionally, public blogs will be visible on your Blogger or Google+ profiles.

    4. Click on "create a new post" and start to write your post.

2. **Add** the **information** in your oral presentation about the country you are studying to your blog:

- Traditions
- Beliefs
- Religion

- Main rivers and mountains
- Places to visit
- Food

- Clothes to wear according to the climate
- Other information about the country: inhabitants, capital city, etc.

- OPTIONAL: use can add any other information you'd like. You can also use different colours, include some images, videos, etc.

3. For more help, watch the following **tutorial video**:
https://www.youtube.com/watch?v=LyFgQK77_70

4. **Grammar and vocabulary instructions:** use present simple, present continuous, past simple, future tenses, adjectives of describing landscape features and "there is/there are" structures, and persuasive writing. Use the scaffolding information from previous lessons.

REMEMBER! YOU MUST CONVINCE THE READERS THAT YOUR COUNTRY IS THE BEST DESTINATION!

5. **Make a QR code:**
    1. Go to: https://www.the-qrcode-generator.com/
    2. Click on "url"
    3. Enter the blogs' url: https://zaidardit.blogspot.com/
    4. Click on "save" and add a file name.
    5. Click on "save" again and download the QR code (save it for the final day).

6. **Leave at least one comment** to each of your classmates' posts (constructive and positive feedback).

Let's do it!

8.10. Escape room questions

Write down 5 differences between continental climate and polar climate

Find out which is the biggest and the smallest continent

Relate the countries (X, Y, Z) to the Continents and write the capital cities

Find 2 famous people from each continent and write as follows: "Nadal is from Spain, in Europe."

Match the countries (China, Egypt, USA, Norway, India, France, Morocco, Australia, Brazil) to the monuments/ geographical wonders (Taj Mahal, The Great Wall, Sfinx of Giza, Eiffel Tower, Fjords, The Great Canyon, Sahara Desert, Iguazu Falls, Tasmania Island)

Find out where theses sports are original from: hockey, judo, football, rowing, basketball, tennis and taekwondo.

TASK 9: "Are we good clothing designers?"

1. Create your **souvenir!**

    1. The teacher will provide you with a white T-shirt (one for each member of the group).

    2. Design your own souvenir! You can make use of all the material in the Art and Design classroom.

    3. Be creative and original. Use all the information on your mind map and your blog to get ideas to decorate the T-shirt:

        - Food
        - Places to visit
        - Main mountains

        - Main rivers
        - Location
        - Flag

        o OPTIONAL: use can draw and write whatever you want: slogan, symbols, letters in the language of the country, etc.

2. The members in each group can **decide** if they want to design the same decoration for all the T-shirts in the group, or a different design each.

TASK 10: "What did we learn?"

1. **Final exhibition!** Today we celebrate the end of the project! To do this, prepare a final exposition with all the material that you designed during the process:

- Poster
- Mind map

- Souvenir
- Maps

- QR codes (blog and Making off)

   o OPTIONAL: bring whatever you want related to the country you studied:

   - Curious information about the clothing manufacturing process (Kahoot and reflections)
   - Slogans about your country or against climate change.
   - Typical food from your country
   - Pictures
   - You can play videos in your iPads.

2. Each group will have a spot in the school hall. You will also have a table and some blue tack to show and post **all the material you bring**.

FAMILIES WILL COME TO SEE THE EXHIBITION TOGETHER WITH THE REST OF THE STUDENTS IN THE SCHOOL!!! TRY TO BE ORIGINAL!!

PD: Tell your family and friends to bring their smart phones. They will have to use the QR codes to get to the blog and to leave some comments on it! Furthermore, they will also access to the project's MAKING OFF!!!!!!

Let's do it!

8.13. General rubric

	Evaluation Criteria	Failing	Average	Very good	Excellent
English	1. To produce written texts using the new vocabulary and adequate grammatical structures.	Is not able to produce a coherent written production.	Can formulate simple phrases with simple connectors.	Can express himself/herself in a written form with help at some points.	Can write clear and detailed texts in the appropriate style.
English	2. To Know and apply the most appropriate basic strategies in order to understand the general sense, the essential information or the main points of a text.	Is not able to give the write answers to questions about a text.	Can answer some of the questions about the text correctly.	Can understand most of the information in the text and answer right questions.	Can understand the whole text and answer all the questions.
English	3. To produce oral texts in front of small and big groups.	Is not able to speak English.	Can produce oral short sentences.	Can express himself/herself without difficulties and using proper expressions and vocabulary.	Can express himself/herself fluently and can improvise.
English	4. To get information from oral texts.	Is not able to understand the information from a recording without a written support.	Can understand little information from a recording without a written support.	Can understand most of the information from a recording without a written support.	Can understand all the information from a recording without a written support.
ICT	5. To use online tools.	Is not able to use online tools.	Can use online tools with a little help.	Can use online tools efficiently without help.	Can use online tools efficiently and has full control.
ICT	6. To search, contrast and select digital information related to the project.	Is not able to find the specific information.	Can find specific information successfully.	Can find, select and organize specific information.	Can find, select, organize and contrast specific information from different sources.
Geography	7. To represent and interpret maps in different supports	Does not locate geographical features or areas on a map.	Locates geographical features or areas on a map with difficulty.	Locates geographical features or areas on a map with some help.	Locates geographical features or areas on a map without help.
Geography	8. To know the main geographical features, traditions, climates, etc. in different countries.	Does not know the main geographical features in different countries.	Knows the main geographical features in different countries with difficulty.	Knows the main geographical features in different countries with some help.	Knows the main geographical features in different countries without help.
Geography	9. To analyse and interpret the interaction between the environment and the human activity	Cannot interpret the interaction between the environment and the human activity.	Can interpret the interaction between the environment and the human activity with difficulty.	Can interpret the interaction between the environment and the human activity with some help.	Can interpret the interaction between the environment and the human activity without help.
Art and Design	10. To produce artistic works and show initiative and creativity	Can produce artistic works using few techniques.	Can produce artistic works using some techniques.	Can produce artistic works using some techniques with initiative and creativity.	Can produce artistic works using a lot of techniques with initiative and creativity.
All subjects	11. To respect others' opinions and be able to work cooperatively.	Is not able to accept others' opinions or to participate actively when working in groups.	Can listen to others' opinions but little active participation in group activities.	Can give his/her own opinions and listen to the others'.	Can participate actively in group activities and help the others.
All subjects	12. Participation	Does not participate in class activities.	Participates in class activities when the teacher asks for his/her participation.	Participates in class activities on its own initiative.	Participates in class activities on its own initiative and provides good input.

8.14. Teacher's self-evaluation rubric

Teacher and teaching process assessment					
Evaluation topics		Always	Usually	Sometimes	Never
Teacher	I designed suitable materials				
	I helped the students and I solved their doubts				
	Students were motivated and interested in the subject				
	The activities I designed attracted the pupils' attention				
	I attended all my students' needs				
	The scaffolding resources were useful				
	I could manage unexpected situations				
	I enjoyed the project				
	The activities are varied				
Teaching process	The tasks and activities were adapted to students' level				
	The project met pupils' needs				
	All sessions covered the 5 skills				
	The time given for each of the tasks and activities was appropriate				
	The activities were meaningful and students could put into practise what they learnt				
	The activities helped to learn cooperatively				
	Students gave opinions during the project				
	I used the appropriate methodology				
	Pupils enjoyed the project				

8.15. Students self-assessment and co-assessment rubric

My work and my classmates' work on the project					
Evaluation topics		Always	Often	Sometimes	Not yet
My work	I used English language to communicate				
	I learnt the vocabulary, grammar and concepts we worked on the project				
	I could manage using the ICT resources				
	I was able to create my craft and develop creativity skills				
	I learnt about some world geographical facts				
	I can locate different continents, countries, rivers and mountains on a map				
	I actively participated in class activities (debates, brainstorming, etc.)				
	I gained awareness of the climate change consequences				
	What changes would I make for the next time?				
My classmates' work	My classmates helped me				
	My classmates actively participated in the project				
	My classmates respected my opinions and ideas				
	My classmates fulfilled their mission according to their role				
	The classmates to create a good work atmosphere while working				
	My classmates could work autonomously and cooperatively				