

# **DESIGN OF SITUATED COGNITION TASKS FOR PRIMARY EDUCATION**

**MASTER'S DEGREE IN CONTENT AND LANGUAGE INTEGRATED LEARNING**

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**ACADEMIC YEAR 2021/2022**

**JULY**

## **Abstract**

This Final Master's Degree work consists of a documentary review of important aspects related to Cognition and the role it plays during the learning process in Primary Education, in this case, of a second language in the subjects where the CLIL perspective is implemented. In addition, two theories are explored in greater depth to learn more about how the brain works in different contexts and situations, focusing on the school and the teaching-learning process.

The next aspect that is developed is a bank of activities for different levels and subjects of Primary Education that deal with the CLIL perspective. It analyses what aspects and adaptations have been used, relating it to all the documentary information indicated and what objectives are intended to be achieved with these activities.

To conclude, a final reflection is made on all the work done above and what impact it can have on the way of teaching in this CLIL perspective and the positive effects it would have in the short and long term on the students.

**Keywords:** cognition, CLIL, primary education, motivation, situated cognition theory, cognitive load theory, design, tasks, teaching, learning, benefits.

## **Resumen**

Este Trabajo de Fin de Máster, consiste en la revisión documental sobre aspectos importante relacionados con la Cognition y el papel que juega durante el proceso de aprendizaje en Educación Primaria, en este caso, de una segunda lengua en las asignaturas donde están implementadas la perspectiva AICLE. Además, se profundiza sobre dos teorías para conocer en mayor profundidad como trabaja el cerebro ante diferentes contextos y situaciones, enfocadas en la escuela y en el proceso de enseñanza-aprendizaje.

El siguiente aspecto que se desarrolla es, un banco de actividades para diferentes niveles y asignaturas de Educación Primaria que tratan con la perspectiva AICLE. Analizando qué

aspectos y adaptaciones se han empleado, relacionándolo con toda la información documental señalada y qué objetivos se pretenden conseguir con estas actividades.

Para concluir, se realiza una reflexión final sobre todo el trabajo realizado anteriormente y qué impacto puede tener en la forma de enseñanza en esta perspectiva AICLE y sus efectos positivos que tendrían en corto y largo plazo en los estudiantes.

**Palabras claves:** cognición, AICLE, educación primaria, motivación, teoría cognición situada, teoría de la carga cognitiva, diseño, actividades, enseñanza, aprendizaje, beneficios.

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## **1. Introduction**

Today, the way we see the world has changed over the years, and so has education. Not so long ago, it was very common to have to learn abstract and complex aspects by heart. Being ineffective and unlikely to be remembered in the short or medium term, without having any impact on the real-life of the students and without promoting the development of fundamental aspects in the students.

It is important to understand how our minds work in order to promote effective learning. Teachers, above all, must be very aware that the way of teaching must change and innovate, given that some old methodologies have become practically obsolete. It is about focusing on a way of learning that captures sensations, emotions and experiences. Where they can face new challenges and experiences and achieve meaningful learning.

To this end, in this Final Master's Degree work, we will deal in-depth with aspects of cognition and how this influences the acquisition of a second language during the development of CLIL sessions at school. In addition, we will analyse in-depth two related theories: Situated Cognition Theory and Cognitive Load Theory. And the objectives and principles pursued by each of them and strategies in the classroom to achieve as a final objective meaningful and valuable learning for the students.

In addition, a bank of activities has been created focused on different levels of Primary Education and in subjects where the CLIL perspective is implemented. In this way, it is intended that these activities promote and take as a reference, those principles and objectives of these two theories, which are the object of analysis, during the process of all the activities.

Finally, this work ends with a general conclusion to all the research and the proposed activities.

## 2. Theoretical framework

### 2.1. Cognition

Cherry (2022) explained that “cognition is a term referring to the mental processes involved in gaining knowledge and comprehension. Some of the many different cognitive processes include thinking, knowing, remembering, judging, and problem-solving.”

### 2.2. Cognitive theory in the acquisition of a second language

A cognitive theory of learning sees second language acquisition as a conscious and reasoned thinking process, involving the deliberate use of learning strategies. Learning strategies are special ways of processing information that enhance comprehension, learning or retention of information. This explanation of language learning contrasts strongly with the behaviourist account of language learning, which sees language learning as an unconscious, automatic process. In the classroom, relevant activities include review and revision, class vocabulary bags, using a scaffolding approach with young learners, analysis and discussion of language and topics, inductive approaches and learner training (*Cognitive theory*, n.d.).

In presenting some of the findings of second language research, Lightbown & Spada (2013) have included several examples of learner language as well as some additional samples to allow you to practise analysing learner language. Of course, teachers analyse learner language all the time. They try to determine whether students have learned what has been taught and how closely their language matches the target language. But progress cannot always be measured in these terms. Sometimes language acquisition progress is reflected in a decrease in the use of a correct form that was based on rote memorization or chunk learning. New errors may be based on an emerging ability to generalize a particular grammatical form beyond the specific items with which it was first learned. In this sense, an increase in error may be an indication of progress.

### 2.3. Motivation in the learning process

It is fair to draw attention to the fact that, motivation is one of the main keys to generating meaningful learning in the classroom. Skinner and Belmont (1993) highlighted those students with high levels of motivation are usually actively and spontaneously involved in activities and find the process of learning enjoyable without expecting any external rewards. In contrast, rewards are needed when students exhibit low levels of motivation. Therefore, learners who are motivated will work hard to achieve their goals and thrive while the lack of motivation causes them to flounder.

### 2.3.1. Types of motivation

There are two types of motivation introduced by Ryan & Deci (2000), intrinsic and extrinsic motivation.

Intrinsic motivation is the eagerness and interest to do and take part in certain activities because an individual feels that they are attractive and pleasant. Students who have intrinsic motivation are inclined to stay with intricate and complicated problems and gain knowledge from their slips and mistakes (Walker, Greene, & Mansell, 2006). Besides, intrinsic motivation is essential and fundamental for the integration process through which elements of one's accessible internal awareness and knowledge are assimilated or mixed with new knowledge. Extrinsic motivation, on the other hand, is the propensity to take part in activities because of the reasons which do not link to the activity. These reasons can be the anticipation of reward or punishment, like being successful in an exam or getting a good mark (Vansteenkiste, Lens, & Deci, 2006).

### 2.4. Situated cognition theory

As Irby, Brown, Lara-Aiecio & Jackson (2013) pointed out, situated cognition has varied in different forms and names (i.e., cognitive apprenticeship, situated learning, legitimate peripheral participation, etc.) shares the same idea, which is that cognition is situated and that learning is inseparable from doing, *in situ*; that cognition and learning are processes of enculturation.

Choi and Hannafin (1995) explained that in situated cognition, learning cannot be separated from the context in which it occurs, and emphasize the importance of learning in real-life contexts, whereby knowledge is acquired by embedding the subject matter in the experiences of the learner and by creating the opportunity for the learner to interact in the context of real-life situations. Transfer of learning then occurs when the natural learning environment that is created engages the learner in solving authentic, complex, non-routine problems, which they would likely encounter in a professional or work-life solution.

#### 2.4.1. Goals

In situated cognition, the primary goal of cognitive activity is to guide the learner to think like a professional who would solve a problem within a given context. The focus is on assisting the learner to move from novice to more capable and independent expert, a person who learns to use their expertise, intuition, and deep understanding to solve problems of their choosing. This requires authentic experiences with opportunities to examine ideas, develop underlying concepts, and engage in activities to complete a learning experience.

The intellectual goal of situated cognition is acquiring cognitive skills and strategies; this occurs through sustained participation and engagement within a community of practice. In this way, learning through authentic activities, situated in sociocultural contexts, can be to solve problems encountered in everyday situations. Through the lens of situated cognition, the problem represents an authentic situation that allows 'real world' problem solving to be experienced (Irby et al., 2013).

In terms of learning and tools, as Silly, Collins & Duguid (1989) argued that we should abandon any notion that they are abstract, self-contained entities. Tools share several significant features with knowledge: They can only be fully understood through use, and using them entails both changing the user's view of the world and adopting the belief system of the culture in which they are used. Learning how to use a tool involves far more than can be accounted for in any set of explicit rules. The occasions and conditions for use arise directly out of the context of activities of each community that uses the tool, framed by the way members of that community see the world. The community and its viewpoint, quite as much as the tool itself, determine how a tool is used. Thus, carpenters and cabinet makers use chisels differently. Because tools and the way they are used reflect the particular accumulated



insights of communities, it is not possible to use a tool appropriately without understanding the community or culture in which it is used. Conceptual tools similarly reflect the cumulative wisdom of the culture in which they are used and the insights and experience of individuals.

#### 2.4.2. Principles

Jonassen & Land (2000) described these eleven principles related to learning environments.

- **Learning in context.** Thinking and learning make sense only within a particular situation. All thinking, learning, and cognition are situated within particular contexts; there is no such thing as non-situated learning.
- **Communities of practice.** People act and construct meaning within communities of practice. These communities are powerful repositories and conventions of meaning and serve legitimate action. Communities construct and define appropriate discourse practices.
- **Learning as activity participation.** Learning is seen in terms of belonging and participating in communities of practice. Learning is seen as a dialectical process of interaction with other people, tools, and the physical world. Cognition is tied to action-either direct physical action or deliberate reflection and internal action. To understand what is learned is to see how it is learned within the activity context.
- **Knowledge in action.** Knowledge is located in the actions of people and groups. Knowledge evolves as individuals participate in and negotiate their way through new situations. The development of knowledge and competence, like the development of language, involves continued knowledge-sharing activity in authentic situations.
- **Mediation of artefacts.** Cognition depends on the use of a variety of artefacts and tools, chiefly language and culture. These tools constructed environments constitute the mediums, forms or worlds through which cognition takes place. Problem-solving

involves reasoning about purposes with the resources and tools which a situation affords.

- **Tools and artefacts as cultural repositories.** Tools embody the history of a culture. They enable thought and intellectual processes and constrain or limit that thought. They also provide powerful means of transmitting culture.
- **Rules, norms and beliefs.** Cognitive tools include forms of reasoning and argumentation that are accepted as normative in society. Using a tool in a certain manner implies the adoption of a cultural belief system about how the tool is to be used.
- **History.** Situations make sense within a historical context, including the past experiences and interactions of participants, as well as anticipated needs and events. Cultures, through tools, artefacts, and discourse practices, embody the accumulated meaning of the past.
- **Levels of scale.** Cognition can best be understood as a dynamic interplay between individual and social levels. Focus on one level, while assuming constancy or predictability at the other, is bound to at least partly misinterpret the situation.
- **Interactionism.** Just as situations shape individual cognition, individual thinking and action shape the situation. This reciprocal influence constitutes an alternative conception of systemic causality to the more commonly assumed linear object casualty.
- **Identities and constructions of self.** People's notion of self- of continuing identity, separate from others yet belonging to various groups- is a constructed artefact with many uses. People have multiple identities, which can serve as tools for thinking and acting.

## 2.5. Cognitive load theory

As Sweller (1988) explained that “Cognitive load relates to the amount of information that working memory can hold at one time. Our working memory is only able to hold a small amount of information at any one time and that instructional method should avoid overloading it in order to maximise learning.”

As Chandler & Sweller (1991) state, this theory is concerned with how cognitive resources are focused on and used during learning and problem-solving. Many learning and problem-solving procedures encouraged by instructional formats result in students engaging in cognitive activities far removed from the ostensible goals of the task. The cognitive load generated by these irrelevant activities can impede skill acquisition.

As Baddeley (2003) explained that one of the ideas that teachers can do to reduce cognitive load in the lessons is to activate prior knowledge before sharing new information with students. Our long-term memory is said to have a number of organised patterns of knowledge (known as 'schema'). Each schema acts as a single item in working memory, so can be handled easier than having lots of new, isolated information. By retrieving information from their long-term memory via quizzes, visual aids and discussions, students can bring crucial information to working memory and assimilate new information to build upon what they already know (Williams, n.d.).

### 2.5.1. Types

The author's main idea (*Cognitive Load Theory*, n.d.) is that cognitive load takes one of three forms.

- ***Intrinsic Cognitive Load.*** This type of cognitive load refers to the demand made of a learner by the intrinsic quality of information being learnt. The load exerted on a learner depends on the complexity of the task set or concept being presented, and a learner's ability to understand the new information. The intrinsic nature of such a cognitive load makes it difficult to eliminate: you will always find a difficult, new activity (e.g. solving a complex equation) more challenging than a simple task (e.g.

adding two small numbers together). However, the cognitive load resulting from a complex task can be reduced by breaking it down into smaller, simpler steps for a learner to complete individually.

- ***Extraneous Cognitive Load.*** It is produced by the demands imposed on learners by the teacher, or the instructions that they are asked to follow. This type of cognitive load is extraneous to the learning task and is increased by ineffective teaching methods, which unintentionally misdirect students with distracting information or make a task more complex than it needs to be. To reduce this external cognitive load, learning techniques are necessary. Such as the use of visual content, and reducing unnecessary content, among others.
  
- ***Germane Cognitive Load.*** This third type of cognitive load is produced by the construction of schemas and is considered to be desirable, as it assists in learning new skills and other information. A memory schema is a conceptualisation of a particular idea or object which tells us what to expect when we encounter it in the future. We hold schemas for people, household objects and ‘script’ schemas for routines and events such as our morning routine, as well schemas for particular ‘roles’ that we find people enacting, which tell us what kind of behaviour to expect of them. The first time we experience something new (e.g. attending the first wedding) can be daunting, as we do not have a schema that tells us what to expect, and so a germane cognitive load is produced as we observe and learn about the experience to help us to anticipate and understand it in the future.

### 2.5.2. Five principles of reducing cognitive load

Mayer (2002) described five principles in order to reduce cognitive load and increase retention and progress in the students.

1. **The Coherence Principle.** The coherence principle involves reducing the amount of information on each slide/page/worksheet to only that that is necessary. Images, sounds and words that are not essential, add to cognitive load. The main objective is to give the student's working memory fewer stimuli to focus on enabling more processing power to be used by the germane load.

1. **The Signalling Principle.** The signalling principle tells us to help our students focus on the information we are talking about by highlighting the important details. We can do this via arrows or rings around the information. This reduces cognitive load by taking the work of scanning this visual away from the working memory.

2. **The Redundancy Principle.** Students learn best from images and narration, rather than text and narration. Images (visual) and narration (audio) do not compete with each other, therefore they use less cognitive load.

As Loveless (2022) says is known as the "Modality Effect". Basically, the idea is about to don't putting lots of text on your resources and don't just read out the text word for word.

3. **Spatial Contiguity.** Placing labels next to the thing they are describing, so students don't have to waste cognitive load juice working anything out.

As Loveless (2022) explained, "It's all about making the working memory's job easier in terms of the intrinsic and extraneous load so students have more use of germane load, and the ability to make those connections with previously learned information."

4. **Temporal Contiguity.** This one is achieved simply by presenting the visual images and their labels at the same time. By doing this, the working memory knows they should be treated as individual units rather than separate entities.

### 2.5.3. Teaching strategies from cognitive load theory

- 1. Tailor lessons according to students' existing knowledge and skill.** As CESE (2018) points out, the cognitive load must be optimised. Therefore, there must be an appropriate balance between too much and too little load. In order to do this, the teacher must be aware of the situation in which his or her pupils find themselves, and what prior knowledge they have on the subject. When teaching a lesson that is relatively easy for the learners to learn, the teacher should be aware of the situation of the learner, and what prior knowledge he/she has on the subject. When teaching a lesson that is relatively simple for students to understand, there is room in their working memory to process a little more information. In this case, teachers should aim to increase the complexity of the task to challenge their students. But when the task is already complex, there is no space in the students' working memory to process more information. In this case, teachers should focus on reducing the cognitive load.
- 2. Use worked examples to teach students new content or skills.** According to CESE (2018), it states that students learn new content best when practical examples, a problem solved by the learner, are used. Explaining the steps clearly and showing them. In this way, it minimises the unnecessary workload of students and allows them to solve the same problem quickly. Rather than being focused only on finding the correct answer to a problem, students are able to focus instead on how to solve the problem. This means that they are more likely to recall how to solve this type of problem when they are faced with it again in the future.
- 3. Gradually increase independent problem-solving as students become more proficient.** CESE (2018) comments that opportunities to practice the use of the knowledge and skills that students learn should be gradual. While fully guided instruction is most effective when it is new material, it becomes less effective and even counterproductive as students become more proficient at solving a particular type of problem. That is why they should gradually be given more opportunities to solve problems independently.

- 4. Cut out inessential information.** CESE (2018) warns that providing additional information to learners can hinder learning. This non-essential information may be information that learners already know, additional information that is not relevant, or the same information presented in multiple forms. The inessential information adds to the load on their working memory but does not contribute to their learning.
- 5. Present all the essential information together.** Students do not learn effectively when their limited attention is divided between two or more sources of essential information that have been separated, as this can lead to cognitive overload. Therefore, cognitive overload can be avoided if separate sources of information are presented together.
- 6. Simplify complex information by presenting it both orally and visually.** CESE (2018) states that students can process complex information more easily when it is presented orally and visually at the same time. Therefore, this strategy increases the capacity of students' working memory, creating more mental space for learning.
- 7. Encourage students to visualise concepts and procedures that they have learnt.** CESE (2018) states that students understand and recall information better when they visualise the things they have learnt. Encouraging students to visualise what they have learnt helps them to better understand and recall the information. Once students have a good grasp of the content, the mental process of visualising helps students to store the information more effectively in their long-term memories. This strategy should only be used once students are familiar with the content, as visualising imposes quite a heavy cognitive load.

### 3. List of activities

→ **Activity 1.** *We discover through the senses!*

Year: 3rd year of primary.

Subject: Natural Science.

Assessment criterion: number 2.

Time: 2 sessions of 55 minutes.

Description of the activity:

In this activity, content related to Natural Science assessment criterion number 2, for 3rd grade of primary education, related to the senses, is addressed.

First of all, in order to introduce the new topic and to probe their prior knowledge, each group of students will be given a box full of objects that they can touch, smell, see and hear. They will have to say and find out what the session will be about and the new topic to be developed.

Then, they will be introduced to a very interactive video that deals with this topic. It is a song in which they work with these functions "I can hear...", "I can see...", etc. These functions will be repeated repeatedly in different ways (singing, slowly, in a low voice...), followed by examples with the objects they have in the box. They will have to cover their eyes and their partners will give them one of the objects and they will have to perceive its texture, smell, and sounds to find out what it is.

In addition, they will be introduced to previous vocabulary (about food, animals, etc.) as a form of review.

Then, the whole group will move to an outdoor area in the school, where, in groups of five students, they will have to agree and choose one sense each, in which they will have to write down everything they have perceived during that period of time.



Theoretical analysis:

The aim of this activity is for pupils to experience facts in a context, in this case, the outside of the school, where they can smell, hear, touch, etc. The contents are intended to be dealt with in a less abstract way, where pupils experiment, and learn using their own bodies and with the help of their classmates in gathering all the information. The aim is to develop cognitive skills in a real context, where students can put into practice what they have learnt through experimentation.

On the other hand, the aim is to reduce the cognitive load through the use of different strategies such as finding out from what basis the pupils start from about this content, carrying out an exercise on previous content; examples are used about the activity to be carried out by the teacher and the pupils themselves; simplifying the content to deal with the most important and significant for their learning, in this case working with the functions "I can hear...." and "I can smell..." using vocabulary that has already been covered; and, finally, we work with visual and interactive resources such as the song obtained from YouTube and the putting into practice of what has been learnt outside, in a real context.

→ **Activity 2.** *Are our habits healthy?*

Grade: 6th year of primary.

Subject: Natural Science.

Assessment criterion: number 2.

Time: 3 sessions of 55 minutes.

Description of the activity:

In this activity, content related to assessment criterion number 2 of Natural Science, for 6th grade of primary education, is covered. It is related to healthy habits.

In this case, each student will make a short blog about their weekend, recording the things they do and they will have to attach short audio to the video explaining each aspect they do.

Once the blog has been made, it will be shown to the rest of the class and a debate will be held on which habits can be healthy and which are not. Finally, they will brainstorm on the blackboard about all those healthy habits and the alternatives to unhealthy habits.

Theoretical analysis:

The aim of this activity is for students to use their own context and routines, share with their peers and learn new concepts related to this topic. In addition, students should reflect on whether these routines that have been recorded are really appropriate and what would be healthier alternatives. Therefore, a problem is proposed to them and they must look for solutions and alternatives to this fact.

On the other hand, the aim is to reduce the use of cognitive load by using visual and oral material with essential and concrete aspects on the topic in question.

→ **Activity 3.** *What do you know about history?*

Grade: 4th year of primary.

Subject: Social Science.

Assessment criterion: number 9.

Time: 4 sessions of 55 minutes.

Description of the activity:

In this activity, we deal with content related to criterion number 9 of Social Science, for 4th grade of primary education. It is related to the stages of history (Prehistory, Ancient Age...).

In this case, they will be divided into groups and each group will belong to a stage of history.

Each group will decide on an object that is characterised by that stage of history and will make a short presentation about the object and explain to which stage it belongs.

The aim is to create a museum in the classroom, decorated by themselves, in which they will make their small presentations to the rest of their classmates.

Theoretical analysis:

The aim of this activity is for students to learn more about this period in history and to produce an object themselves that symbolises this period. In addition, the aim is to contextualise this activity as if it were a museum. In which they will have to talk about the context of the object/tool to their classmates so that they can understand a little better about this stage of history. This is why the student acquires a more independent and expert role during this activity, working in a committed way with their classmates to elaborate a final product that they will explain to the other classmates during the presentation.

On the other hand, the aim is to reduce the cognitive load of the students by using other methodologies in which the students take on a participatory and independent role and each group is responsible for transmitting their historical stage to their classmates so that they

learn from each other. The aim is for students to talk about the key features and present all the information together in the same presentation to avoid a high cognitive load.

→ **Activity 4.** *We create a company*

Grade: 6th year of primary.

Subject: Social Science.

Assessment criterion: number 9.

Time: 4 sessions of 55 minutes.

Description of the activity:

In this activity, content related to criterion number 9 of Social Science, for 6th grade of primary education, is covered. It is related to the characteristics and essential elements of a company.

In this case, a model of a company will be presented with the basic elements and its fundamental characteristics. Then, in groups, they will be asked to create a company with certain characteristics related to today's needs (e.g. environmental care). To do this, they will be given a series of questions to guide them in the development of their presentation (Appendix I).

Finally, each group will make their own PowerPoint presentation about their company to all their peers.

Theoretical analysis:

The aim of this activity is for students to carry out a simulation of how to create their own company. To do so, they will have to put themselves in context and find out the elements and aspects that they must take into account as a basis for creating this company (e.g. type of product they sell, type of customers they are targeting, etc.). This is why students acquire a more entrepreneurial role and develop their imagination, acquiring an independent and expert role.

On the other hand, the cognitive load is low as they will be learning and acquiring certain competences through the development of the activity itself, which is why they will learn by doing. They will be given an example of a company previously created by the teacher and a

model of questions as a guide, in order to avoid cognitive load on aspects such as how to start the project and to focus this energy directly on the creation and creativity of their company.

→ **Activity 5.** *We discover colours together!*

Year: 1st year of primary.

Subject: Arts and Crafts.

Assessment criterion: number 1.

Time: 2 sessions of 55 minutes.

Description of the activity:

In this activity, content related to Arts and Crafts assessment criterion number 1, for 1st year of primary, is covered. It is related to primary and secondary colours.

In this case, they will be given tempera paints with the primary colours (red, yellow and blue) and in pairs, they will make a card (Appendix II) in which they will colour with the primary colours and then mix them to create the secondary colours. Each colour is represented by an element (e.g. red is an apple), so that they can see that colour represented by something close to their context.

Then, when they discover the secondary colours, they will be asked to find out what the secondary colours are.

Theoretical analysis:

In this activity, the aim is for pupils to experiment with their own hands and discover for themselves those colours that are created from the primary colours. The aim is for pupils to find a context and to relate the colours to objects and things that can be found in their immediate environment. In addition, they are given a more independent role in their own learning and have constant interaction with their partner.

On the other hand, the aim is to reduce the cognitive load by using manipulatives (e.g. tempera) and more visual resources during the activity. Essential content is dealt with and all information is presented in a simple and straightforward way.

#### **4. Conclusion**

To conclude, having done this in-depth analysis of cognition, how it influences second language acquisition and the Situated Cognition Theory and Cognitive Load Theory. I believe that a teacher must be very conscious of what kind of content he/she works within the classroom and how he/she transmits it. When students work on certain content in a context where they can see a real meaning and with the active participation of the students so that they can investigate, experiment and be more independent, very satisfactory results are obtained that can make this learning effective and long-lasting throughout their lives.

On the other hand, in terms of strategies to reduce cognitive load, it is very important to take this into account. Given that, with these principles and strategies, we can make the content richer and more useful when dealing with it in the classroom, especially with the CLIL perspective. Teachers should be aware that this perspective aims at learning the content of the subject in question and not only focusing on the acquisition of foreign-language content. Therefore, the simpler, the more precise and the more important, the better. In addition, the use of visual and interactive resources, the use of examples, will ensure that students do not spend part of their cognitive load on thinking and understanding prior to carrying out the activities and that they simply use it directly in the development of the activities and projects. In this way, students have space and time to develop their competences, creativity and cognitive development, and in turn their motivation to learn and discover new aspects increases.



## **5. Appendices**

### **Appendix I. List of questions for activity number 4**


1. What are you going to sell?
2. Who is going to buy it?
3. How will the product you are selling help your customer?
4. Where are you going to sell it?
5. How are you going to manufacture it?
6. How much will you charge for the product?
7. How is the customer going to pay you?
8. When do you think you will be successful (number of customers, volume of revenue, other...)?
9. What are the main obstacles you will face in selling your product?
10. How are you going to solve these obstacles?



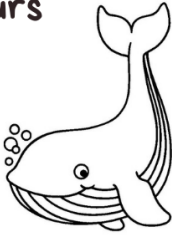
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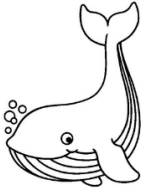



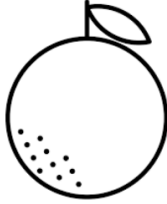
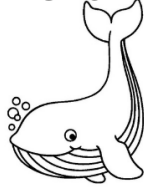

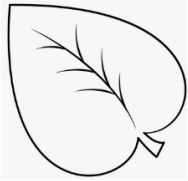
Date:

# Discovering colours

 Colour the 3 primary colours

		
Yellow	Red	Blue

Create new colours!

	+		=	
Red		Blue		
	+		=	
Yellow		Red		
	+		=	
Blue		Yellow		



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