INTELLECTUAL PRODUCT O1-T

Erasmus+ Project 2019-1-ES01-KA204-065615

Toolkit for the Smart Art knowledge transfer project

Teaching-learning of children from 3-12 years old

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Universidade do Minho
Universidad de Valladolid
Universidad de Oviedo
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SMART art

Authors:

Selection of visual material and creation of the sheets:
Dra. María José Zaparín Yáñez.
University of Burgos.

Selection of visual material and creation of the sheets:
Dra. María Consuelo Sáiz Manzanares.
University of Burgos.

Art History Supervision:
Dr. René Jesús Payo Hernanz.
University of Burgos.

Outreach and social networks:
Dr. Gonzalo Andres López.
University of Burgos.

Translation and layout supervision:
Dña. Sandra Rodríguez Arribas.
University of Burgos.

Research Groups:

University of Burgos
PART: Dr. René Jesús Payo Hernanz y Dra. María José Zaparín Yáñez.
ADMIRABLE: Dr. Carlos Pardo Aguilar. University of Burgos.
DATAHES: Dra. María Consuelo Sáiz Manzanares, Dra. M. Camino Escolar Llamazares, Dra. Nuria Alonso Santander, Dña. Sandra Rodríguez Arribas
iENERGIA: Dr. Fernando Aguilar Romero & Dra. Natalia Muñoz Rujas
GEOTER: Dr. D. Gonzalo Andrés López

University of Oviedo
ADIR: Dr. José Carlos Nuñez Pérez & Dra. Rebeca Cerezo Menendez

University of Minho
CIEd: Dr. Leandro Almeida, Dr. José Alberto Lencastre & D. Joana Casanova.

University of Valladolid
GIR179UVA: Dr. Miguel Ángel Carbonero Martín, Dr. Luis Jorge Martín Antón, & Juan Antonio Valdivieso Burón

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Introduction

The subjects presented below have been created as part of the Erasmus+ Project 2019-1-ES01-KA204-065615 financed by the European Union and coordinated by the University of Burgos in Spain. The project also relies on the participation of other partners from Spain (University of Oviedo, University of Valladolid and Bjaland), Portugal (University of Minho) and Malta (Paragon Europe). Our project falls within the innovation theme and has a duration of 36 months from 01/09/2019 until 31/08/22.

Advancement in society is aimed at using new forms of education, both formal and non-formal. This document outlines the **transfer of the first intellectual product IO1** to the population of children between the ages of 3 and 10 years old and intended to promote **knowledge about cultural heritage**. The teaching of this IO1 is carried out in ***b-Learning* settings.** Society needs **non-formal online education** to face this challenge of virtual learning. We must **facilitate the learning process for students of different ages**, making the process more functional and efficient in achieving the learning results, as well as in promoting interest and **increasing motivation**.

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As part of this framework, the **SmartArt** project **aims to design a smart educational environment for Art History** that integrates **self-regulated learning design** through the use of **hypermedia resources** that include a **continual systematic evaluation of the learning process**. To do so, the partners propose the development of **two intellectual outputs, two learning activities and three multiplier events (Spain, Portugal and Malta)**. The proposed intellectual results are: O1. Self-Regulated Learning in SmartArt, and O2. Methodological Pathways to personalise the **Virtual Learning Environment** (VLE) to students' learning habits. This document refers to the development of the first intellectual product **O1. Self-Regulated Learning in SmartArt**. Likewise, this product and its technological implementation are openly accessible on the project's website **www.srlsmartart.eu.** which includes an **interactive platform** where teachers and learners can use materials that will be progressively implemented. These materials are accompanied by the **figure of an avatar** which will accompany the learner throughout the learning process, thereby ensuring **personalised development tailored** to the traits of each learner, **enhancing personalised learning**.

El objetivo es el de motivar el aprendizaje de la Historia del Arte, especialmente en personas adultas.

As stated above, the goal is to motivate students to learn History of Art, especially among children, by including **digitalisation tools** and **motivational learning techniques** such as **gamification** and **avatars.** These tools and techniques **regulate and enhance learning by increasing motivation and progress in the learning process.** These materials can be used in different stages of the educational system such as **Pre-school and Primary School Education**. These materials have also been implemented into an **interactive platform** (VLE) that has been included on the project's website **www.srlsmartart.eu.** All the materials and the interaction on the VLE are **free-of-charge** and **open access**.

The objective of the **transfer** of the first intellectual product O1 has been developed through the **creation of a virtual "SmartArt" classroom** that includes the following **specific objectives:**

a) to facilitate and improve the access to learning Art History in children aged 3-10 in virtual environments.

b) to achieve the participation of children in learning Art History in virtual environments.

c) to simplify the skill and learning attitude evaluation among children between 3 and 10 years old in virtual environments.

d) to facilitate the teaching process for teachers in Pre-school and Primary School Education in virtual environments.

e) to apply systematic supervision and evaluation mechanisms for all interested parties (teachers, students and parents and legal guardians).

University of Burgos members of the SmartArt project

Strategic Partnership of the SmartArt project

Theoretical Framework

The adult learning project in the field of Art History has been designed following the **meaningful learning** approaches (Ausubel, 1968) within a **constructivist** methodology (Vygotsky (1962), Piaget (1975)). These methodological approaches have become consolidated in recent decades in the educational field. One of the methodologies that has been shown to be the most significant in achieving this inclusion is the **Project-Based Learning (PBL)** technique (Kirschner, Sweller, & Clark, 2006). This type of learning aims to make use of **solving practical solutions to develop personalised, meaningful learning** (Sáiz, García-Osorio, Díez-Pastor, & Martín-Antón, 2019). In recent years the inclusion of technological resources known as **Advanced Learning Technologies** (ALT) have also facilitated the implementation of this educational approach on interactive platforms, called **Learning Management Systems** (LMS)**,** along with the use of resources within the LMS known as ***Smart Tutoring*** systems that facilitate continual guidance while learning. Included among these resources are avatars that facilitate **Self-Regulated Learning (SRL)** and **process-oriented feedback**, not only product-related feedback, (Hattie, 2013). These all help to enhance the learner's motivation (Azevedo, 2005; Zimmerman & Moylan, 2009).

Why are we addressing Pre-School and Primary School Education students?

Education for children between the ages 3 to 10 should introduce children to an understanding of Art as well as to provide guidance on how to see and interpret works of art. The SmartArt project provides a response to both challenges by facilitating **effective learning** by including materials that apply **SRL** through **gamification** and inserting **avatars** that **guide** and accompany the learner through the learning process, facilitating understanding and therefore **motivation** (Zimmerman & Moylan, 2009). These materials, accompanied by technological resources (the interactive VLE platform) can be used by the users in a personalised manner or they can be used by teachers or educators as support material in their regular teaching practice. Therefore, this material, together with the VLE of the SmartArt project is an important resource to **help children to start learning art and cultural heritage of humanity** which is backed by the latest research both on **methodological and technological resources** (Sáiz, Marticorena, & Garcia-Osorio, 2020). The ultimate goal is to facilitate **lifelong education** and **social inclusion** in an

accessible, simple and free manner which is within everyone's reach, from the premise of **sustainable education** (Sáiz, Rodríguez, Marticorena, Zaparaín, & Cerezo, 2020).

Methodology used during the development of the materials

The materials created in the different thematic units are based on the systematic use of **feedback** on **both the conceptual** and **procedural contents** and on **evaluation to verify the results of the learning process**. The strategies that have been used to apply the feedback are based on the use of **ALT resources** and **avatars** that facilitate the development of **SRL**, whether face-to-face or remotely in the **VLE**. The work is based on the studies by Hattie (2013); Hattie and Timperley (2007). These authors differentiate between **feedback oriented towards processes** and feedback oriented towards products, considering both to be elements on a continuum. The effectiveness of **process oriented feedback** facilitates the **development of metacognitive strategies** and the **self-regulated learning (SRL)** process. **Process-oriented feedback** and **SRL** respond to the following questions: **what, how, when and where to learn**. Likewise, SRL resources facilitate support for learning in the learning process (Hattie, 2013):

1. They provide **clear explanations** to students about what they are expected to learn, they also specify and define the **skills** that comprise the learning objective.
2. They provide **precise criteria** to students about what is understood by **successful learning**.
3. They guarantee learning that seeks to **reduce the distance** between what students know and what they are expected to lear
4. They guarantee the **feedback** on the steps aimed at bridging this distance.

Likewise, the use of **SRL** ensures that the learning activities are structured in a hierarchical order of increasing difficulty, thereby enhancing the learner's **motivation** to continue learning. A tool that enhances this **sequencing** is based **on feedback** (Sáiz, Cuesta, Alegre, & Peñacoba, 2017).

Why use a Learning Management System?

As has been previously mentioned, in the last decade the use of LMS has been shown to be highly effective in the educational process (Cerezo, Sánchez-Santillan, Paule-Ruiz, & Nuñez, 2016). Learning Management Systems allow for the use of hypermedia resources that facilitate the development of the **educational process**. These resources also orient **SRL** and allow learners to **regulate their own learning** in a personalised fashion as they include **planning**, **monitoring**, **control** and **regulation** which improves the learner's **motivation**. Learning Management Systems can include many of the processes and procedures of **process-oriented feedback** (Sáiz, Marticorena, García-Osorio, & Díez-Pastor, 2017). Learning Management Systems also offer the option of hypermedia resources, which helps to implement **ALTs** that are becoming increasingly relevant. As these resources are automated in the development of **process-oriented feedback,** they have been called **Smart Tutoring** or **MetaTutoring systems** when they implement **metacognitive self-regulation** (Azevedo et al., 2013). The use of the self-regulated practice in children in these ages helps them to reflect on the learning process through **self-evaluation** (Sáiz, García-Osorio, & Díez-Pastor, 2019). For the design of these activities in the LMS, the educator or teacher must follow the steps cited in Table 1.

Tabla 1. Design of learning activities (adapted from Sáiz, Arnaiz, & Escolar, 2020 p. 3).

ACTIVITIES DESIGN	MODULE DESIGN	WHAT TO EVALUATE
What	What do I want to teach?	Learning goals
	What skills do I want to develop in the lessons?	Design of the information
How	Design of the learning tasks	Tests and quizzes to verify learning achievements
Who	Who are the learning tasks addressed to? What is the learner like?	Understand the prior knowledge
When and Where	Time line of the learning tasks development Study students' learning habits	Sequential gradation of the difficulty of the learning tasks Planning the process-oriented feedback Planning the product-oriented feedback

Why monitor the learning process?

In the last decade the use of LMS has been shown to be very effective in **monitoring the learning process** especially in **adults** in university settings (Cerezo, Sánchez-Santillan, Paule-Ruiz, & Nuñez, 2016). Learning Management Systems provide a record of the interaction of the different players involved (students and teachers) during the educational process. This fact is significant as it allows **each student's learning habits** to be known and also makes it possible to **monitor how learning develops** at the start, during the development and at the end. These records can be extracted and processed in different statistical programs or data analysis systems (Python libraries, WEKA, etc.) which will allow **data mining techniques** to be applied. These techniques make it possible to predict and cluster the behavioural patterns developed by the learners, among other possibilities. These results will help the teacher or educator to know how their students learn. Based on these patterns and **learning styles**, the teacher can apply different resources or supports intended to offer a **personalised learning response tailored** to the **specific learning needs** of each student (Sáiz, Marticorena, & Garcia-Osorio, 2020).

Why personalise the learning?

Personalising learning is related with the teacher to the **learning pace of each student**. This adaptation to the characteristics and needs of each learner will increase successful learning, optimise resource usage and lastly enhance **educational sustainability** (Sáiz, García-Osorio, Díez-Pastor, Martín-Antón, 2019; Sáiz, Rodríguez, Marticorena, Zaparaín, & Cerezo, 2020). This form of education is increasingly necessary as the knowledge society advances at breath-taking speeds. Offering educational materials and designs that facilitate successful learning is therefore an obligation of those that govern for their citizens, in addition to ensuring that these resources are **cost-effective** and **sustainable**. Within this framework the use of the previously cited procedures and resources has been shown to be a very effective practice to **achieve effective learning**. These objectives are related with the search for a sustainable society and are made explicit in The 2030 Agenda for Sustainable Development and the SDGs (for more information click here).

Research groups involved in the strategic group of the SmartArt project

One of the strengths of the **SmartArt Project** is that **8 research groups** from different areas of knowledge are collaborating in the project's development: Learning Psychology (ADIR, DATAHES, GIE179, GIPDAE), Educational Psychology (ADIR, DATAHES, GIE179, GIPDAE), Artificial Intelligence and Data Mining (DATAHES, ADMIRABLE), Educational Engineering (iENERGIA) and History, Culture and Geography (GEOTER, PART). The **interdisciplinarity** between these fields at the core of the SmartArt project thus means that it tackles aspects of educational methodology, learning strategies, data analysis through the use of data mining and artificial intelligence techniques on the development of contents related with Art History and cultural heritage.

Research Group from the University of Burgos

ADMIRABLE Research Group
https://investigacion.ubu.es/grupos/1817/detalle

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DATAHES Research Group
https://investigacion.ubu.es/grupos/1812/detalle

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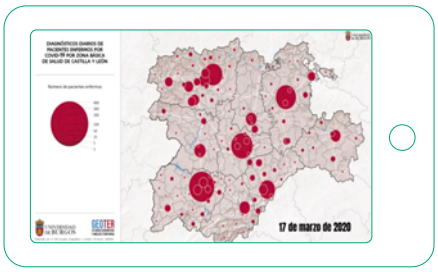

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Section Summary

Lifelong education is a right for all citizens. Therefore, representatives in every country have an obligation to develop and implement lifelong education.

Technology and advances in educational instruction facilitate tools that will help educational authorities to provide a response to lifelong education.

Educational design together with innovative methodological resources and technologies facilitate access to learning for different groups and increase the motivation for learning. This will also enhance the achievement of effective learning.

Learning Activities

4.1
How to approach Art History in Pre-School and Primary School?

The completed output on transfer of knowledge in the SMART ART Project for older students is adapted for children of ages 3-10 years, in this IO, since the onset of knowledge of one's cultural heritage at this young age is essential for the creation of a humanist spirit of respect towards the cultural patrimony of the European Union. T**his additional intellectual product will facilitate education and awareness on Art History in the Second Cycle of Pre-School Education and First Cycle of Primary School Education**. The approach will be based on the students' interaction through **play and constructive and self-regulated learning** which will be implemented face-to-face and through the use of technological resources.

The sections below are additional material addressing younger learners.

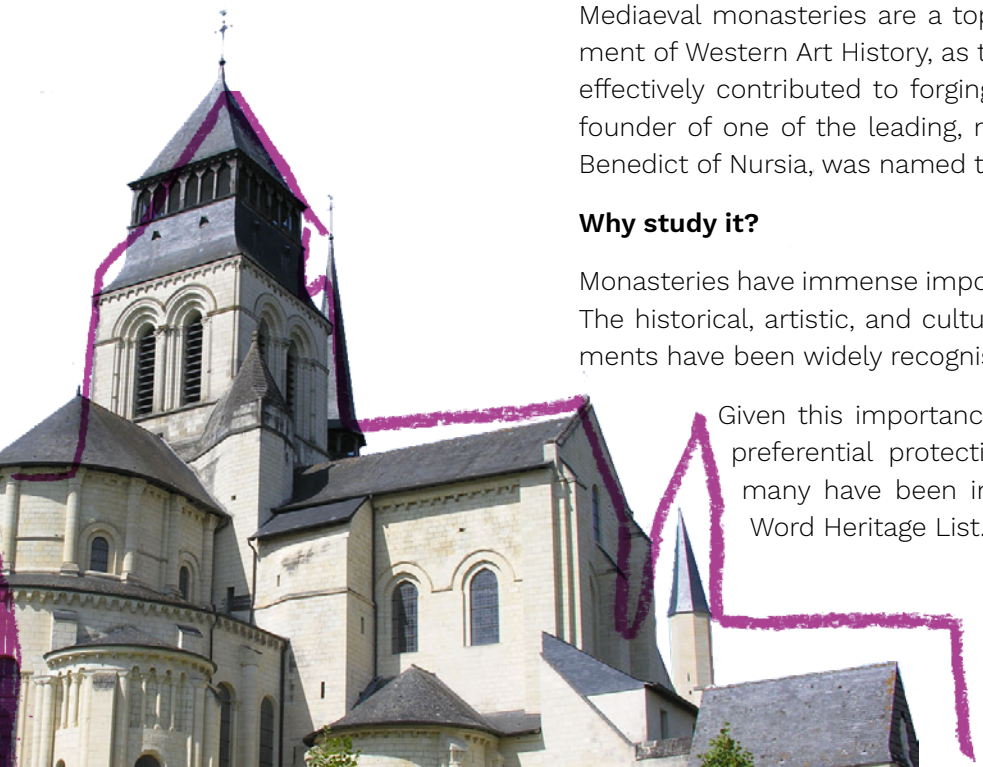
4.1.1
What is a Monastery?

What is its importance?

Mediaeval monasteries are a topic of particular interest in the development of Western Art History, as they were one of the elements that most effectively contributed to forging a common substrate. That is why the founder of one of the leading, most widespread monastic orders, Saint Benedict of Nursia, was named the Patron Saint of Europe..

Why study it?

Monasteries have immense importance in the History of Art up to this day. The historical, artistic, and cultural importance of many of these monuments have been widely recognised.



Given this importance, they are the subject of attention and preferential protection in their respective countries, while many have been internationally recognised as part of the Word Heritage List.

It is therefore especially important to focus on their most defining characteristics such as their architectural features with noteworthy social-cultural values, even if from merely a general overview.

Introducing children to Monasteries as part of History of Art, helps them learn about human heritage. As such, the use of play and training is important in self-regulated strategies to learn these concepts in a meaningful manner. For more information readers can consult the studies by: Sáiz-Manzanares, Carbonero-Martín, & Román-Sánchez (2012); Sáiz-Manzanares, Carbonero-Martín, & Román-Sánchez (2014); Sáiz-Manzanares, Carbonero-Martín, & Flores (2010); Sáiz-Manzanares, & Guijo (2010); Sáiz-Manzanares & Román-Sánchez (1996); Sáiz-Manzanares & Román-Sánchez (1996); Sáiz-Manzanares, Flores & Román-Sánchez (2010); Sáiz-Manzanares & Román-Sánchez (2010); Sáiz-Manzanares & Román-Sánchez (2011); Sáiz-Manzanares & Román-Sánchez. (2013). All these works discuss practical experience in implementing educational programmes intended for children (age 3-10 or for older children who have special educational needs). These experiences have been experimentally tested.

How will we work on the topic?

The topic on the monastery will in turn be divided into three thematic units:

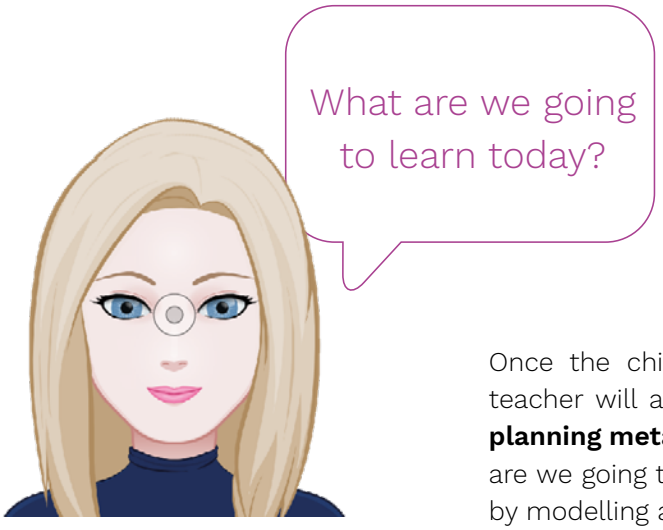
Unit 1.
What is a Mediaeval Monastery?.

Unit 2.
What is a Mediaeval Monastery Like?

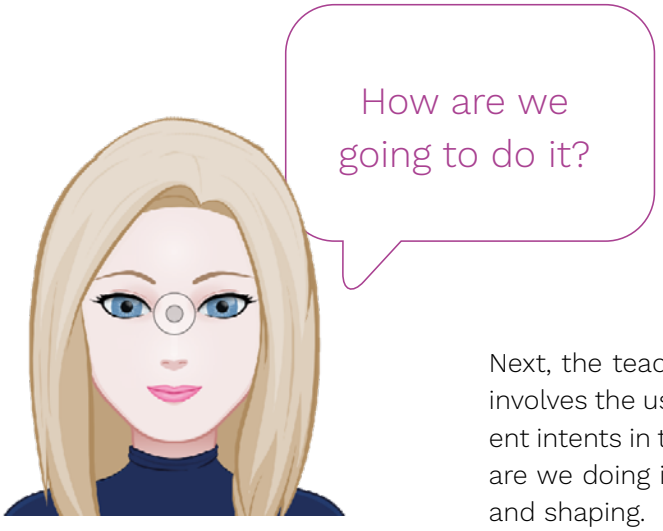
Unit 3.
Shall we Take a Trip Through the Mediaeval Monastery?

The project will make us of a **constructivist teaching methodology** and reflection about the students' own thinking. Therefore, it will use **Self-Regulated Learning (SRL) strategies** adapted to the Pre-School and Primary School Education (age 6-9) as well as to older students with special educational needs. These methodological strategies are similar to those applied by Sáiz and Román (1996); 2010. Self-regulation has been shown to facilitate **effective and comprehensive learning** at different ages with lifelong lasting effects (See works by: Sáiz-Manzanares, Carbonero-Martín, & Román-Sánchez (2012); Sáiz-Manzanares, Carbonero-Martín, & Román-Sánchez (2014); Sáiz-Manzanares, Carbonero-Martín, & Flores (2010); Sáiz-Manzanares, & Guijo (2010); Sáiz-Manzanares & Román-Sánchez (1996); Sáiz-Manzanares & Román-Sánchez (1996); Sáiz-Manzanares, Flores & Román-Sánchez (2010); Sáiz-Manzanares & Román-Sánchez (2010); Sáiz-Manzanares & Román-Sánchez (2011); Sáiz-Manzanares & Román-Sánchez. (2013).].

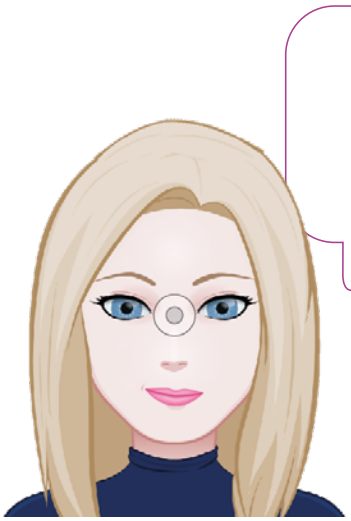
To work on SRL in children of these ages the project will use **an avatar** that will regulate the use of **task orientation metacognitive strategies**, i.e. understanding of what we have to do. This reflection helps to focus the students' attention on the task to be performed. The teacher will use the question: "What are we going to learn today?" and will be accompanied by the figure of the avatar with a sheet projected on the digital blackboard or by using the Virtual Learning Environment (VLE).



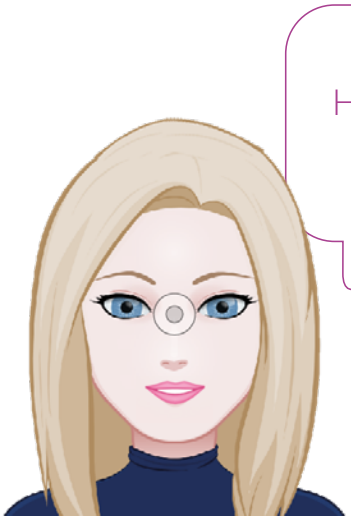
Once the child starts providing answers helped by the teacher. The teacher will ask a second question that helps to develop the learner's **planning metacognitive strategies**: "How are we going to do it?" or "How are we going to solve it?", the teacher will regulate the possible solutions by modelling and shaping the answers.



Next, the teacher will guide the students on how to solve the task. This involves the use of **evaluation metacognitive strategies** about the different intents in the execution for which teachers will use the question: "How are we doing it?", the teacher will regulate the actions through modelling and shaping.



Finally, once the task has been concluded the teacher will guide the learners' reflection on the product and the process developed to perform it. This involves the use of **metacognitive strategies for elaboration and reflection,** both about the product as well as the process. For this purpose teachers will use the question: "How did we do it?", the teacher will regulate the performance through modelling and shaping, helping the student to reflect.



To carry out these steps, the teacher is suggested to use the **self-instructional training** by Meichenbaum & Goodman (1971) which in turn is based on research in neuropsychology by Vygotsky (1962) and Luria (1961). All these studies are based on the use of language to facilitate behavioural control. To do so, self-instructional training is divided into the following steps: 1) *Cognitive Modelling*. The adult performs a task while speaking aloud to themselves. 2) *Overt self-guidance*, the child performs the task while the teacher guides them through the steps using language. 3) *Overt self-guidance*, the child performs the tasks while giving instructions to themselves aloud. 4) *Attenuated self-guidance*, the child repeats the instructions subvocally while performing the task. 5) *Covert self-instruction*, the child performs the task while guiding their performance covertly.

The adult models the lesson through a series of questions that guide the acquisition of a series of metacognitive strategies. See Table 2

QUESTION	METACOGNITIVE STRATEGY IMPLEMENTED	INSTRUCTIONAL A CTIVITIES	COGNITIVE ACTION
"What are we going to learn today?" or "what do I have to do	Orientation	Identification and specification of the problem Analysis of the problem	Definition of the problem Focusing attention
"How are we going to do it?" or "How are we going to solve it?"	Planning	Selection of goals	Focusing attention, Planning
"How are we doing it?"	Evaluation	Implementation of solutions	Self-evaluation and self-reinforcement, self-assessment
"How did we do it?"	Elaboration and Reflection	Evaluation	Self-control, self-evaluation, self-reflection

Table 2. Relationship between the self-instructional questions, metacognitive strategies that the question implements, and the cognitive action that it develops.

The teacher should take the suggestions by Meichenbaum (1977) into account to carry out self-instructional training effectively. These suggestions are the following:

1ª.
Use playful situations to start and model the students speaking to themselves.

2ª
Introduce appealing tasks to use sequential cognitive and metacognitive strategies.

3ª
Tailor the work in the different units to each child's learning pace.

4ª
Ensure that self-instruction is not mechanical. It should be comprehensive in each situation.

5ª
Complete the self-instructional training with imaginative practice.

6ª
Expand the self-instructional training with corresponding training.

(Adapted from Sáiz-Manzanares & Román (1996) p. 21)

4.1.2
Unit 1. What is the Mediaeval Monastery?

Objectives

For children in pre-school

- For the children to be introduced to the concept of a mediaeval monastery.
- For the children to colour in an image of a mediaeval monastery.

For children in primary school

- For the children to draw and/or write* what a monastery is for them.
- For the children to draw and/or write* what a hermit is for them.
- For the children to draw and/or write what monks or nuns do in the monastery or convent.
- For the children to draw and/or write* what the monks or nuns did in the *scriptorium*.
- For the children to draw and/or write* who Saint Benedict was.

Evaluation indicators.

For children in pre-school

- The child colours in the image of a monastery.
- The child tells a story of a monastery.

For children in primary school

- The child draws and/or writes* what a monastery is for them.
- The child draws and/or writes* what a hermit is for them.
- The child draws and/or writes what monks or nuns do in the monastery or convent.
- The child draws and/or writes* what the monks did in the *scriptorium*.
- The child draws and/or writes* who Saint Benedict was.

* Depending on the child's maturity level they can narrate, draw, and/or write. Each evaluation criterion will be adapted to the oral or written expression capacities of each educational stage.

Self-regulation skills will be measured in the children in both educational stages (Pre-school and Primary school).

Procedural knowledge skills (Self-Regulated Learning strategies).

- The child answers the self-regulation question “What are we going to learn today?” (Task orientation metacognitive strategy).
- The child answers the self-regulation question “How are we going to do it?” (Task planning metacognitive strategy).
- The child answers the self-regulation question “How are we doing it?” (Task evaluation metacognitive strategy).
- The child answers the self-regulation question “How did we do it?” (Task elaboration and reflection metacognitive strategy).

Task

For children in pre-school

- The teacher will ask the children to colour in an image of a monastery.
- The teacher will ask the children to tell a story about a monastery.

For children in primary school

- The teacher will ask the children to write what a monastery is for them.
- The teacher will ask the children to explain and/or write what a hermitage is.
- The teacher will ask the children to explain and/or write what the monks did in the monastery.
- The teacher will ask the children to explain and/or write what the monks did in the scriptorium.
- The teacher will ask the children to explain and/or write who Saint Benedict was.

Procedure

The teacher will use the following questions that help to regulate the learning which will be supported in the platform using an avatar.

- What are we going to learn today?
- How are we going to do it?
- How are we doing it?
- How did we do it?

Materials

- PowerPoint material that will help the teacher to explain the origin of monasteries.
- VLE platform which will include the unit on the images of the monastery which will be used fundamentally with kids in the 3rd cycle of Pre-school Education and the first cycle of Primary School Education, which includes the figure of an avatar that will guide the learning process.
- Drawings of the monastery to colour in.
- Drawings of a monastery to indicate the elements shown.

Extension Activities

The same dynamics will be used to differentiate between different types of monasteries in more advanced learning.

4.1.3
Unit 2. What is a Mediaeval Monastery Like?

Objectives

For children in pre-school

- For the children to be introduced to the concept of what a mediaeval monastery was like.
- For the children to colour in an exterior image of a mediaeval monastery with fountains and trees.
- For the children to colour in an interior image of a mediaeval monastery with its distinctive elements: the cloister.

For children in primary school

- For the children to be introduced to the concept of what a mediaeval monastery was like.
- For the children to understand that the monastery was a very peaceful place with fountains and trees.
- For the children to know that the monastery or convent was the house for monks/nuns which surrounded the cloister.
- For the children to know that the cloister was where the monks went to think and pray alone.
- For the children to know that there were plants and trees in the monastery that the monks could use to make medicines in the pharmacy.
- For the children to know that there were sundials in the monastery that the monks could use to read the time.

Evaluation indicators

For children in pre-school

- The child colours in an exterior image of a mediaeval monastery with fountains and plants.
- The child colours in the image of a monastery with a cloister.
- The child says what a mediaeval monastery is like.

For children in primary school

- The child associates actions and the correct elements about life in the monastery.
- The child draws and/or writes and/or narrates* what a mediaeval monastery was like.
- The child draws and/or writes and/or narrates* what the monks did in the monastery.
- The child draws and/or writes and/or narrates* what the monks did in the *scriptorium*.

- The child draws and/or writes and/or narrates* who Saint Benedict was.

* Depending on the child's maturity level they can narrate, draw, and/or write. Each evaluation criterion will be adapted to the oral or written expression capacities of each educational stage..

Self-regulation skills will be measured in the children in both educational stages (Pre-school and Primary school).

Procedural knowledge skills (*Self-Regulated Learning strategies*).

- The child answers the self-regulation question "What are we going to learn today?" (Task orientation metacognitive strategy).
- The child answers the self-regulation question "How are we going to do it?" (Task planning metacognitive strategy).
- The child answers the self-regulation question "How are we doing it?" (Task evaluation metacognitive strategy).
- The child answers the self-regulation question "How did we do it?" (Task elaboration and reflection metacognitive strategy).

Task

For children in pre-schooll

- The child colours in an exterior image of a mediaeval monastery with fountains and plants.
- The child colours in the image of a monastery with a cloister.
- The child says what a mediaeval monastery is like.

For children in primary school

- The child associates actions and the correct elements about life in the monastery.
- The child draws and/or writes and/or narrates* what a mediaeval monastery was like.
- The child draws and/or writes and/or narrates* what the monks did in the monastery.
- The child draws and/or writes and/or narrates* what the monks did in the *scriptorium*.
- The child draws and/or writes and/or narrates* who Saint Benedict was.

Procedure

The teacher will use the following questions that help to regulate the learning which will be supported in the platform using an avatar.

- What are we going to learn today?
- How are we going to do it?
- How are we doing it?
- How did we do it?

Materials

- PowerPoint material that will help the teacher to explain the origin of monasteries.
- VLE platform which will include the unit on the images of the monastery which will be used fundamentally with kids in the 3rd cycle of Pre-school Education and the first cycle of Primary School Education, which includes the figure of an avatar that will guide the learning process.
- Drawings of the monastery to colour in
- Drawings of a monastery to indicate the elements shown

Extension Activities

The children write and draw stories about the mediaeval monastery.

4.1.4
Unit 3. Let's Take a Trip Through the Mediaeval Monastery

Objectives

For children in pre-school

- For children to know that the mediaeval monastery had a structure similar to a house.
- For children to colour In images of the elements of a mediaeval monastery.
- For children to express what a mediaeval monastery was for them.

For children in primary school

- For children to know what a refectory in the monastery is and what it was used for.
- For children to know what a chapter house in the monastery is and what it was used for.
- For children to know what a *scriptorium* (library) in the monastery is and what it was used for.
- For children to know what a *cilla* (storage room, dispensary) in the monastery is and what it was used for.
- For children to know what a kitchen in the monastery is and what it was used for.
- For the children to know what the monks' dormitory was like.

Evaluation indicators

For children in pre-school

- The child colours in the different parts of a monastery.
- The child associates the different parts of a monastery with their use.
- The child tells what some of the parts of a mediaeval monastery were used for.

For children in primary school

- The child matches the image of the refectory with its function.
- The child matches the image of the chapter house with its function.
- The child matches the image of the *scriptorium* (library) with its function.
- The child matches the image of the *cilla* (storage room) with its function.
- The child matches the image of the kitchen with its function.
- The child marks the image of how the monks slept (distinguishes between together or separate).

• The child draws and/or writes and/or narrates* what some of the parts of a mediaeval monastery were used for.

* Depending on the child's maturity level they can narrate, draw, and/or write. Each evaluation criterion will be adapted to the oral or written expression capacities of each educational stage..

Self-regulation skills will be measured in the children in both educational stages (Pre-school and Primary school).
Procedural knowledge skills (Self-Regulated Learning strategies).

- The child answers the self-regulation question "What are we going to learn today?" (Task orientation metacognitive strategy).
- The child answers the self-regulation question "How are we going to do it?" (Task planning metacognitive strategy).
- The child answers the self-regulation question "How are we doing it?" (Task evaluation metacognitive strategy).
- The child answers the self-regulation question "How did we do it?" (Task elaboration and reflection metacognitive strategy).

Task

For children in pre-school

- The teacher will ask the children to colour in an image of a monastery.
- The teacher will ask the children to tell a story about a monastery.

For children in primary school

- The teacher will ask the children to write what a monastery is for them.
- The teacher will ask the children to write what a hermitage is.
- The teacher will ask the children to write what the monks did in the monastery.
- The teacher will ask the children to write what the monks did in the *scriptorium*.
- The teacher will ask the children to write who Saint Benedict was.

Procedure

The teacher will use the following questions that help to regulate the learning which will be supported in the platform using an avatar.

- What are we going to learn today?
- How are we going to do it?
- How are we doing it?
- How did we do it?

Materials

- PowerPoint material that will help the teacher to explain the origin of monasteries.
- VLE platform which will include the unit on the images of the monastery which will be used fundamentally with kids in the 3rd cycle of Pre-school Education and the first cycle of Primary School Education, which includes the figure of an avatar that will guide the learning process.
- Drawings of the monastery to colour in.
- Drawings of a monastery to indicate the elements shown.

Extension Activities

The same dynamics will be used to differentiate between different types of monasteries in more advanced learning.

4.2
Evaluation procedures

What to evaluate?

The materials that have been presented which refer to the knowledge of the mediaeval monastery can be used in a regulated or non-regulated educational process, that is, they can be used in teaching intended for children in regulated school activities or in other environments such as museums, town hall activities, etc. In each case, it is essential to evaluate both the conceptual and procedural skills.

How to evaluate?

There are many different ways to carry out the evaluation and they are related with two procedures: one quantitative and another qualitative. Both evaluation procedures are necessary and currently the most innovative educational methods use both within what is known as **mixed evaluation methods** (Sáiz, Escolar, & Rodríguez-Medina, 2019). Therefore, this work will use both quantitative and qualitative procedures. Readers can check the evaluation tools developed in each thematic unit in annex 1. These tools analyse both the conceptual knowledge, as well as the motivation and task solving procedural skills (Self-Regulated strategies).

When to evaluate?

The research into evaluation and educational teaching (Sáiz, Escolar, & Rodríguez-Medina, 2019) recommends using three moments in the evaluation: at the start of a training activity, during the development of the training activity and after finishing the activity. The registries of these three moments will allow on the one hand to know the evolution of the learner's learning process (**summative evaluation**) and on the other hand the evaluation of learning throughout their development (**formative evaluation**). Both types of evaluation are necessary and complementary.

Why evaluate?

Learning development is evaluated in order to know how the **educational process** has developed and based on the results to study the strengths and weaknesses of the process. These data will provide the teacher and learner tools to reflect on their practice and based on this reflection to implement the improvements necessary within a continual improvement process.

4.3
Extension Activities

Throughout the learning process it is recommendable to include complementary activities during the learning process in order the strengthen the contents discussed. These activities complement the training and activate the extension process of the lessons learned. This all strengthens safer and more effective learning.

Section Summary

3

The thematic units are presented for learning about the origin and development of the monasteries adapted to children aged 3 to 10.

Validation of Materials and Evaluation Questionnaires

5.1
Validation of Learning Activities

This project proposes a series of tools that will serve to validate the materials presented in the topics (Unit 1, Unit 2, and Unit 3) when these are implemented in Pre-School and Primary School Education centres. It is important to indicate that initial object of the work in the SmartArt Project is intended for adults in non-regulated education and **the material that is presented is an adaptation and transfer of the project to work with children age 3-10, therefore it will be implemented Pre-School and Primary School Education centres throughout 2021 and 2022 as long as the COVID-19 pandemic permits it**. However, the project proposes the use of a tailor-made questionnaire which is presented in Table 3 and which will be filled in by the teachers of these educational stages who are experts in teaching children of these ages. This questionnaire contains 10 closed evaluation questions on a Likert-style scale of 1 to 5, along with 3 open-ended questions.

VALIDATION QUESTIONNAIRE FOR MODULE 1. SMARTART PROJECT

This questionnaire forms part of the content validation process of the SmartArt Virtual Classroom within the European project 2019-1-ES01-KA204-065615 and includes Likert-style questions where 1 is equal to nothing or poor and 5 is equal to everything or excellent and open-ended questions. We thank you in advance for participating in this questionnaire.

I agree to participate in this questionnaire, and I have been informed of the objectives and the use of the data SI NO

1. Evaluation of the module's methodology with regard to the objectives.	1	2	3	4	5
1. Evaluation of the unit's methodology with regard to the contents.	1	2	3	4	5
2. Evaluation of the unit's methodology with regard to the evaluation criteria.	1	2	3	4	5
3. Evaluation of the activity comprehension questions.	1	2	3	4	5
4. The avatar's dialogues make it easier to self-regulate learning.	1	2	3	4	5
5. The image that accompany the text visualise the contents.	1	2	3	4	5
6. The evaluation tools in the units are clear.	1	2	3	4	5
7. The evaluation criteria are aligned with the units' objectives.	1	2	3	4	5

8. The units feature inclusive language	1	2	3	4	5
9. What would you include in the units?					
10. What would you remove from the units?					
14. Briefly describe the strengths and weaknesses of the units.					

Tabla 3. Design of learning activities (adapted from Sáiz, Arnaiz, & Escolar, 2020 p. 3).

Section Summary

3

This section presents the tools to evaluate the units and the evaluation tools used with regard to the transfer of IO1 to the education in Art History for children in Pre-School and Primary School Education

Conclusions

The transfer of the first intellectual product (O1) from the European SmartArt project offers materials to Pre-School and Primary School teachers which have been created in an interdisciplinary manner by the partners participating in the project who are members of research groups in the fields of Art History, Educational Psychology, Information and Technology Engineering, and data mining. Likewise, these materials will be implemented on the project's website **www.slrsmartart.com** using an open-access interactive platform (VLE). The information presented in this document together with the VLE and the project website will undoubtedly be of great interest both for teachers and educators in these ages as well as for children's parents and legal guardians. Its usefulness will be tested in future studies in order to confirm its effectiveness and usability to detect aspects for improvement through a continual improvement process.

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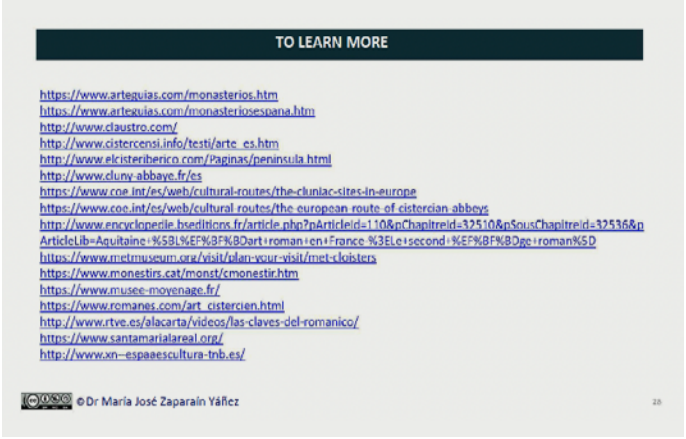


Glossary

Glossary

Advanced Learning Technologies: This methodology is based on the development of learning through the use of Technology 4.0 resources.

Avatar: This animated figure helps regulate the learning process.

b-Learning: This refers to learning that is developed in virtual environments or platforms combined with face-to-face learning spaces.

Blended evaluation: This is the evaluation which is performed by different personal or technological players on a learning process or product.

Bloom Taxonomy for the digital era: This is based on Bloom's original classification related to the different degrees of learning based on the development of cognitive and metacognitive skills that include the terms of learning in the digital era.

Constructive learning: This is based on Piaget's theory and is carried out in learning through practice and experimentation.

Continual evaluation: This type of systematic evaluation is based on an evaluation of the learning process and not only the product.

Digitalisation tools: These resources are based on learning techniques that implement the use of new technologies which help present the task through multiple channels (visual, audio, text or the interaction between them).

Educational process: This is the interactive process between the teacher and learner throughout the instruction. This process can be carried out face-to-face or remotely through the use of technological resources.

Effective learning: This refers to achieving safe, in-depth and continual learning over time. This also refers to correctly learning the learning goal.

Elaboration and reflection metacognitive strategies: these strategies help to assess the result of the performance.

Evaluation metacognitive strategies: these strategies help in the supervision while solving a task or problem.

Evaluation rubrics: this methodology is based on establishing the evaluation criteria based on the skills that the learner must acquire. The skills are measured based on the use of a scale that can be quantitative, qualitative or both qualitative and quantitative.

Extension Activities: These are learning activities have a structure similar to the activities that have served as the basis for learning. These activities, however, include different degrees of difficulty.

Formative evaluation: This is a type of systematic evaluation in which the teacher gives feedback to the learner about each relevant aspect of their learning process.

Gamification: This learning methodology is based on the use of serious games in learning the task. It is usually carried out in technological settings.

Interdisciplinarity: This refers to collaborative working teams made up of professionals from different disciplines. This work will help provide a more complete and useful product for its social application.

Learning Management System: These systems are implemented through interactive and modular learning platforms such as the Moodle environment.

Meaningful learning: this learning is focused on acquiring knowledge based on the construction of learning and not simply on memorisation.

Motivation: This refers to the learner's interest in the learning process and in achieving satisfactory results. It is related with intrinsic motivation based on self-reinforcement.

Non-regulated education: This refers to the type of teaching that is not included in education aimed at obtaining official titles for professional development.

Orientation metacognitive strategies: these strategies help to define the task or problem to be carried out.

Personalised learning: This learning design is based on adapting the learning contents to the learner's traits related with their learning style and prior knowledge on the subject of the lesson.

Planning metacognitive strategies: these strategies help to plan the steps to solve the task or problem.

Process-oriented feedback: this is feedback that the teacher or learning management system gives the learner about the task development. The feedback is focused on providing information about the entire learning process (start-development-end) and not only on the product or end result.

Project-Based Learning: This learning methodology is focused on the development of learning by solving a task, problem or project. This methodology is done in a collaborative environment and involves implementing theoretical knowledge applied to solving a practical task.

Regulated education: This refers to the type of teaching that is included in education aimed at obtaining official titles for professional development.

Self-evaluation: In learning environments, the learner evaluates the process and product of their own learning.

Self-instructional training: this is a form of intervention based on regulating behaviour through language and which has its origin in the works by Vygotsky (1962), Luria (1961) and Meichenbaum & Goodman (1971).

Self-instructions: This refers to the orders that a subject gives themselves during the task and problem solving process.

Self-Regulated Learning: This is a learning methodology which is based on personalised construction of learning through self-regulation resources whether they are human, technological or both human and technological.

Self-Regulated Learning: This methodology facilitates learning through personal or technological resources that guide the learner throughout the learning process.

Smart Tutoring: This involves a process of personalised tutoring carried out through the use of technological resources.

Social inclusion: This refers to providing resources that allow for access to standardised learning environments to different people regardless of their personal and social educational needs.

Summative evaluation: This refers to the feedback that the teacher gives to the learner about the final learning product.

Sustainable education: This refers to planning personal and material resources from the principles of no copying and optimisation.

Virtual Learning Environment: This refers to the learning management system or LMS.

Abbreviations

ALT = Advanced Learning Technologies
LMS = Learning Management System
PBL = Project-Based Learning
SmartArt = Self-Regulated Learning in SmartArt
SRL = Self-Regulated Learning
VLE = Virtual Learning Environment

ANNEX 1

Unit evaluation tools

Unit 1 record sheet.

What is the mediaeval monastery

EVALUATION INDICATORS	1	2	3	4	5
PRE-SCHOOL EDUCATION STAGE					
Conceptual knowledge skills and fine motor and oral communication skills					
The child colours in the image of a monastery.	1	2	3	4	5
The child tells a story of a monastery.	1	2	3	4	5
Procedural knowledge skills (Self-Regulated Learning strategies)					
The child answers the self-regulation question: "What are we going to learn today?" (Task orientation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we going to do it?" (Task planning metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we doing it?" (Task evaluation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How did we do it?" (Task elaboration and reflection metacognitive strategy)	1	2	3	4	5
PRIMARY SCHOOL EDUCATION STAGE					
Conceptual knowledge skills and oral communication and reading-writing skills					
The child draws and/or writes* what a monastery is for them.	1	2	3	4	5
The child draws and/or writes* what a hermit is for them.	1	2	3	4	5
The child draws and/or writes what monks do in the monastery.	1	2	3	4	5
The child draws and/or writes* what the monks did in the *scriptorium*.	1	2	3	4	5
The child draws and/or writes* who Saint Benedict was.	1	2	3	4	5
Procedural knowledge skills (Self-Regulated Learning strategies)					
The child answers the self-regulation question: "What are we going to learn today?" (Task orientation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we going to do it?" (Task planning metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we doing it?" (Task evaluation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How did we do it?" (Task elaboration and reflection metacognitive strategy)	1	2	3	4	5

* Depending on the child's maturity level they can narrate, draw, and/or write. Each evaluation criterion will be adapted to the oral or written expression capacities of each educational stage.

Unit 2 record sheet

What a mediaeval monastery is like

EVALUATION INDICATORS	1	2	3	4	5
PRE-SCHOOL EDUCATION STAGE					
Conceptual knowledge skills and fine motor and oral communication skills					
The child colours in an exterior image of a mediaeval monastery with fountains and plants.	1	2	3	4	5
The child colours in the image of a monastery with a cloister.	1	2	3	4	5
The child says what a mediaeval monastery is like.	1	2	3	4	5
Procedural knowledge skills (Self-Regulated Learning strategies)					
The child answers the self-regulation question: "What are we going to learn today?" (Task orientation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we going to do it?" (Task planning metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we doing it?" (Task evaluation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How did we do it?" (Task elaboration and reflection metacognitive strategy)	1	2	3	4	5
PRIMARY SCHOOL EDUCATION STAGE					
Conceptual knowledge skills and oral communication and reading-writing skills					
The child associates actions and the correct elements about life in the monastery.	1	2	3	4	5
The child draws and/or writes and/or narrates* what a mediaeval monastery was like.	1	2	3	4	5
The child draws and/or writes and/or narrates* what the monks did in the monastery.	1	2	3	4	5
The child draws and/or writes and/or narrates* what the monks did in the *scriptorium*.	1	2	3	4	5
The child draws and/or writes and/or narrates* who Saint Benedict was.	1	2	3	4	5
Procedural knowledge skills (Self-Regulated Learning strategies)					
The child answers the self-regulation question: "What are we going to learn today?" (Task orientation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we going to do it?" (Task planning metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we doing it?" (Task evaluation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How did we do it?" (Task elaboration and reflection metacognitive strategy)	1	2	3	4	5

* Depending on the child's maturity level they can narrate, draw, and/or write. Each evaluation criterion will be adapted to the oral or written expression capacities of each educational stage.

Unit 3 record sheet.

A trip through the mediaeval monastery

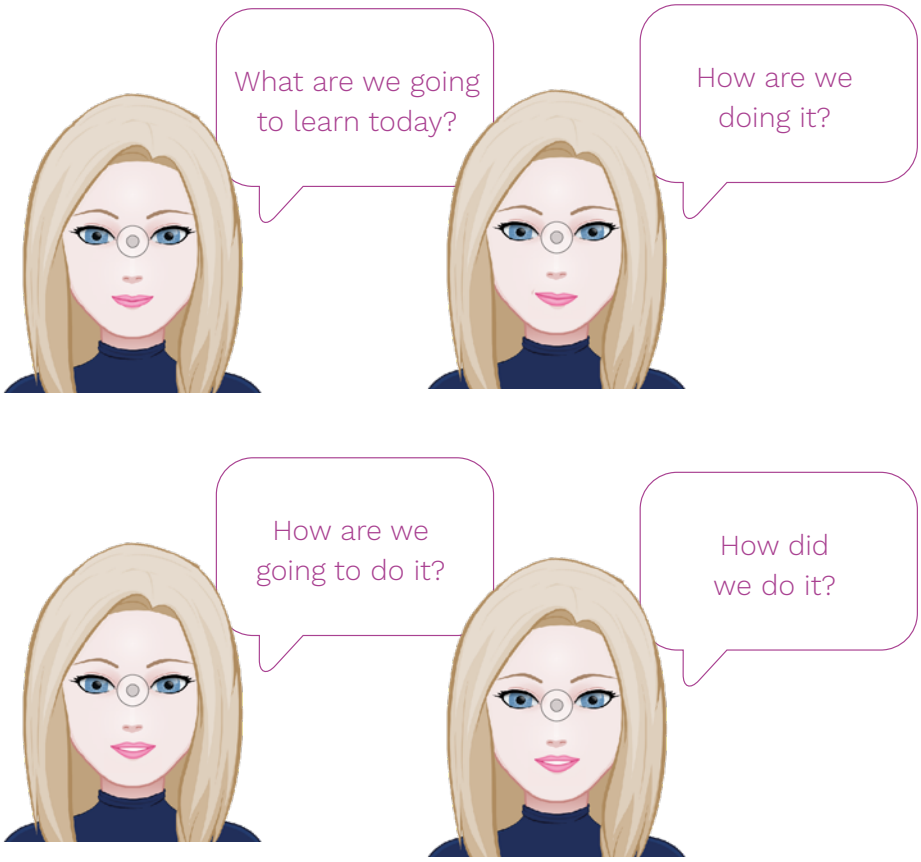
EVALUATION INDICATORS	1	2	3	4	5
PRE-SCHOOL EDUCATION STAGE					
Conceptual knowledge skills and fine motor and oral communication skills					
The child colours in the different parts of a monastery.	1	2	3	4	5
The child associates the different parts of a monastery with their use.	1	2	3	4	5
The child tells what some of the parts of a mediaeval monastery were used for.	1	2	3	4	5
Procedural knowledge skills (Self-Regulated Learning strategies)					
The child answers the self-regulation question: "What are we going to learn today?" (Task orientation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we going to do it?" (Task planning metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we doing it?" (Task evaluation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How did we do it?" (Task elaboration and reflection metacognitive strategy)	1	2	3	4	5
PRIMARY SCHOOL EDUCATION STAGE					
Conceptual knowledge skills and oral communication and reading-writing skills					
The child matches the image of the refectory with its function.	1	2	3	4	5
The child matches the image of the chapter house with its function.	1	2	3	4	5
The child matches the image of the *scriptorium* (library) with its function.	1	2	3	4	5
The child matches the image of the *cilla* (storage room) with its function.	1	2	3	4	5
The child matches the image of the kitchen with its function.	1	2	3	4	5
The child marks the image of how the monks slept (distinguishes between together or separate).	1	2	3	4	5
The child draws and/or writes and/or narrates* what some of the parts of a mediaeval monastery were used for.	1	2	3	4	5
Procedural knowledge skills (Self-Regulated Learning strategies)					
The child answers the self-regulation question: "What are we going to learn today?" (Task orientation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we going to do it?" (Task planning metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How are we doing it?" (Task evaluation metacognitive strategy)	1	2	3	4	5
The child answers the self-regulation question: "How did we do it?" (Task elaboration and reflection metacognitive strategy)	1	2	3	4	5

* Depending on the child's maturity level they can narrate, draw, and/or write. Each evaluation criterion will be adapted to the oral or written expression capacities of each educational stage.

Annex 2

Unit materials

Materials
to work on
self-regulated learning



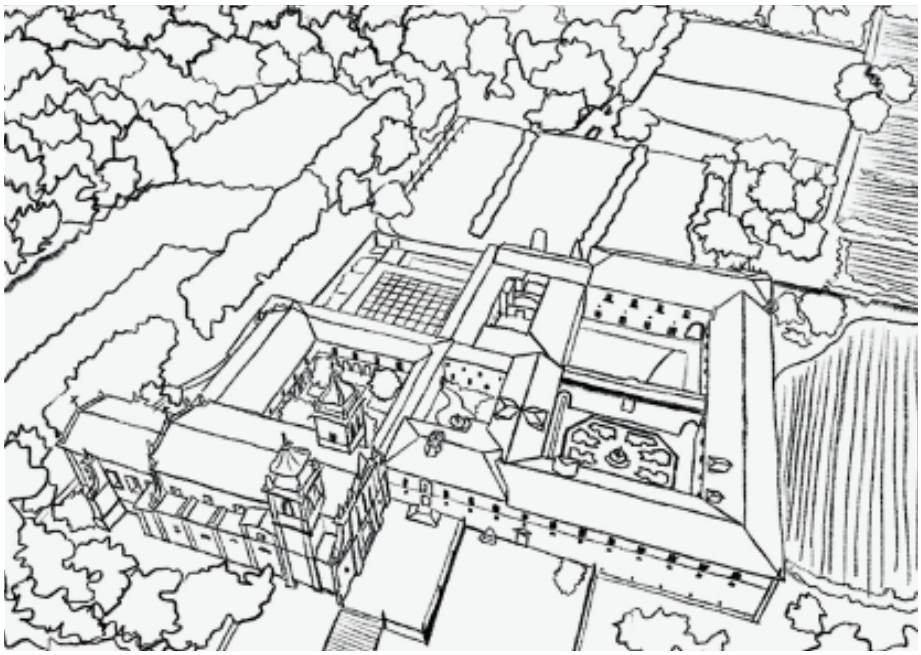
Unit 1 materials

Cloister of the Santa María de Poblet monastery, Tarragona (Spain). Drawing by Sofía Sáez Yáñez

Chapter house of the Santa María de Bujedo de Juarros Monastery, Burgos (Spain). Drawing by Sofía Sáez Yáñez

Unit 2 materials

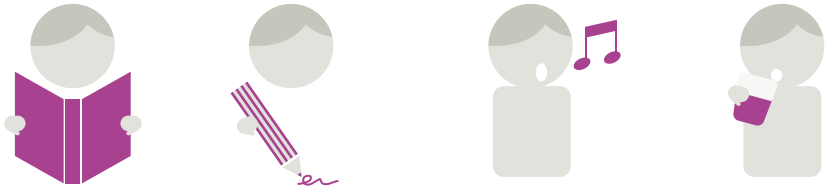
Refectory of the Santa María de Huerta Monastery, Soria (Spain). Drawing by Sofía Sáez Yáñez



São Martinho de Tibães Monastery, Braga (Portugal). Drawing by Sofía Sáez Yáñez

Task of association

Draw a line to connect the monks with what they do in the scriptorium *scriptorium*



reading

writing

chanting

drinking

Unit 3 materials

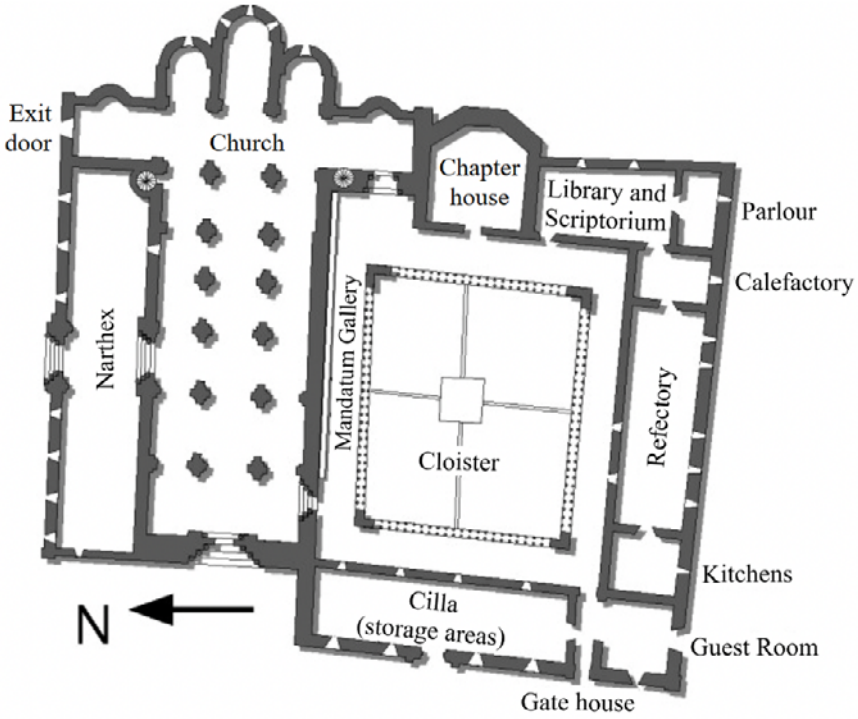
Ask the child to colour different rooms in a monastery and say and/or write what they were used for.

- Eating and drinking

- Reading and writing

- Walking and thinking

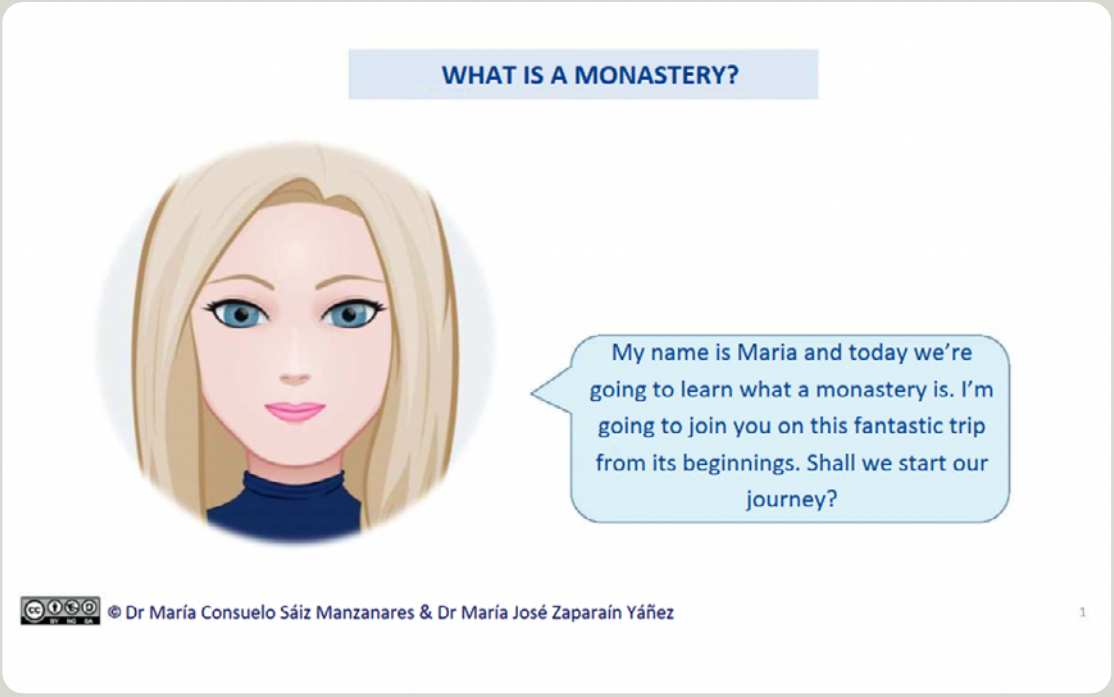
https://commons.wikimedia.org/wiki/File:Monasterio_de_Poblet_-_CS_02052009_170656_40573.jpg#/media/File:Monasterio_de_Poblet_-_CS_02052009_170656_40573.jpg



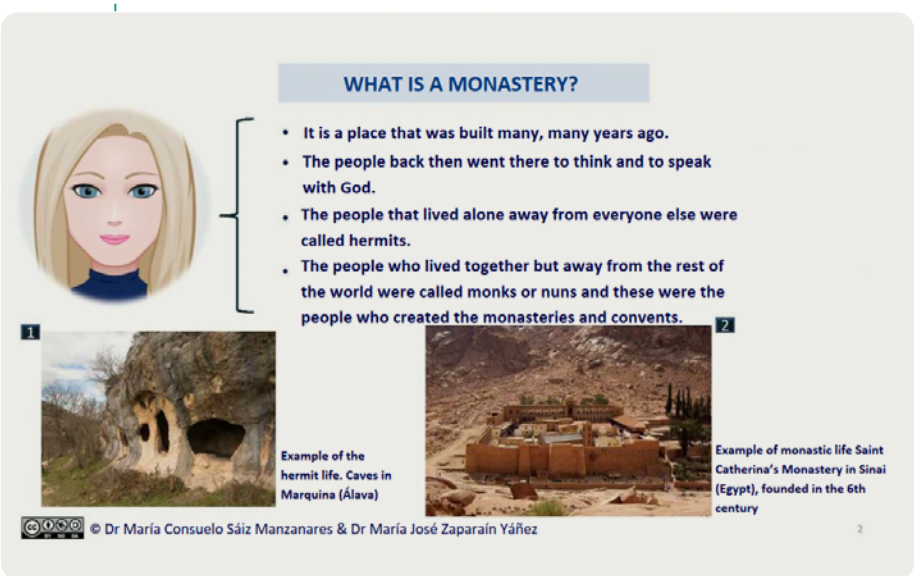
https://commons.wikimedia.org/wiki/File:Santo_Domingo_de_Silos.png#/media/Archivo:Santo_Domingo_de_Silos.png

Annex 3

Powerpoint
presentations
of the units


WHAT IS A MONASTERY?
My name is Maria and today we're going to learn what a monastery is. I'm going to join you on this fantastic trip from its beginnings. Shall we start our journey?
© Dr María Consuelo Sáiz Manzanares & Dr María José Zaparaín Yáñez
1

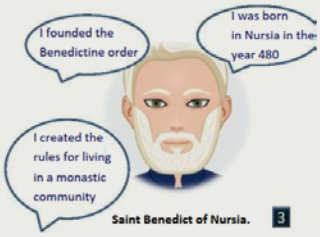
Unit 1


WHAT IS A MONASTERY?
It is a place that was built many, many years ago.
The people back then went there to think and to speak with God.
The people that lived alone away from everyone else were called hermits.
The people who lived together but away from the rest of the world were called monks or nuns and these were the people who created the monasteries and convents.
1
Example of the hermit life. Caves in Marquina (Álava)
2
Example of monastic life Saint Catherina's Monastery in Sinai (Egypt), founded in the 6th century
© Dr María Consuelo Sáiz Manzanares & Dr María José Zaparaín Yáñez
2

WHAT IS A MONASTERY?

Monks live together and have to follow certain rules. That's just like you when you are in class you have to listen to your teacher and there are certain things you can and can't do in class.
One of the first who created an order was Saint Benedict of Nursia.

PATRON SAINT OF EUROPE



Saint Benedict of Nursia. 3

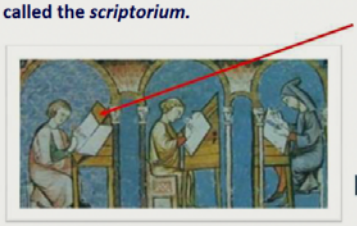
WHAT DID MONKS DO IN THE MONASTERIES?

Monks and nuns in monasteries and convents pray and chant, which is the way they have to communicate with God

Benedictine monks chanting 4

WHAT DID MONKS DO IN THE MONASTERIES?

- Monasteries had a lot of books and the monks dedicated themselves to reading, writing and copying books in a room called the *scriptorium*.



5

Image of a *scriptorium*

WHAT DID MONKS DO IN THE MONASTERIES?

We know about how the people lived in the middle ages with the information that the monks wrote

6

Aerial view of the Tibães monastery. Braga (Portugal), founded in the 4th century and renovated in the 17th and 18th centuries

7

Representation of the estates of the realm in the shape of a pyramid

THE BENEDICTINE MONKS

- Saint Benedict of Nursia (6th century) lived in the 6th century, his monks prayed and worked
- In the 9th century, Saint Benedict of Aniane made the monks pray and study more.

The BENEDICTINES get their name from Saint Benedict

8

Saint Benedict of Nursia

THE BENEDICTINE MONKS

In the 10th century, the French abbey of Cluny, which was founded in 910, was a place where monks could pray and learn many things (poetry, art, etc.).

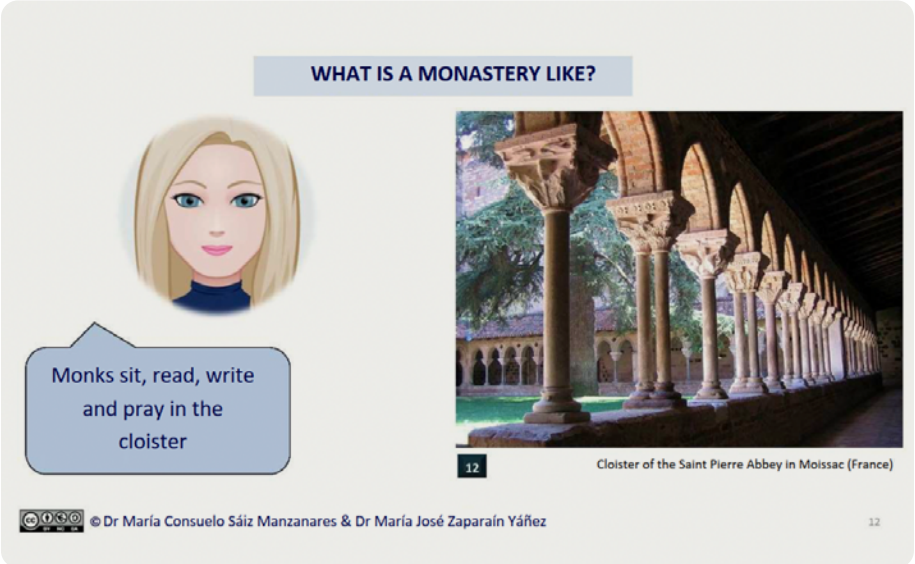
It was the most important Benedictine abbey in Europe

View of the church at the Cluny Abbey Drawing by Étienne Martellange, 1617 (BNF) 9

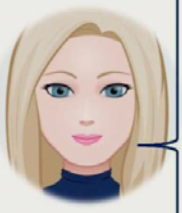

WHAT IS A MONASTERY?
Now we're going to play games to see what we've learned today
© Dr María Consuelo Sáiz Manzanares & Dr María José Zaparaín Yáñez


WHAT IS A MONASTERY LIKE?
A monastery is the home for monks. It is laid out like a house, but the houses from so many, many years ago were a lot different from today's houses. The monks' and nuns' houses all had a space called the
CLOISTER
11
© Dr María Consuelo Sáiz Manzanares & Dr María José Zaparaín Yáñez
11

Unit 2


WHAT IS A MONASTERY LIKE?
Monks sit, read, write and pray in the cloister
12
Cloister of the Saint Pierre Abbey in Moissac (France)
© Dr María Consuelo Sáiz Manzanares & Dr María José Zaparaín Yáñez
12

WHAT IS A MONASTERY LIKE?



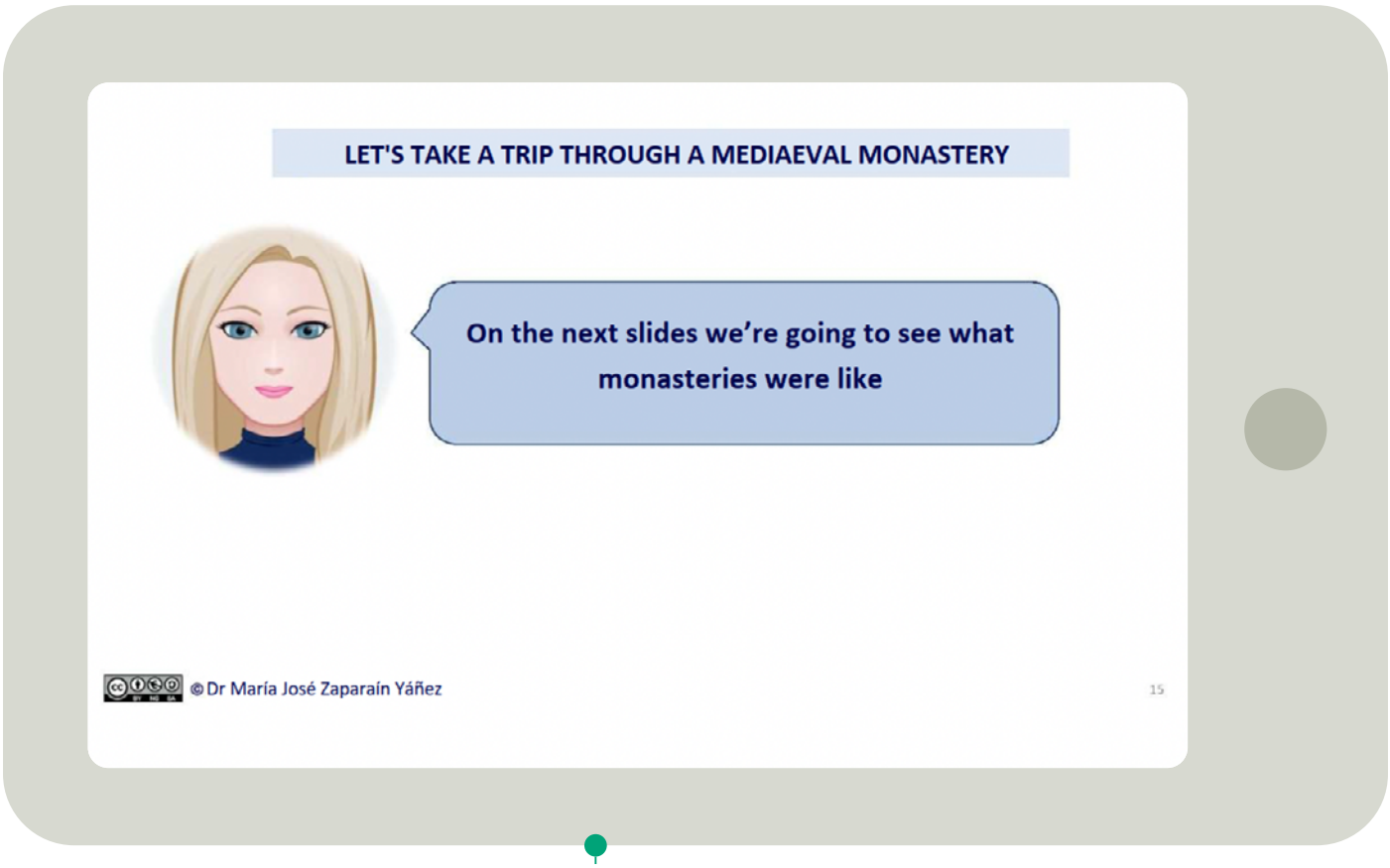
- The cloisters had different types of plants and trees that the monks used to make medicines in the apothecaries, which were the pharmacies of the monasteries.
- They could also tell the time with a sundial.

Fontevraud Abbey (France)

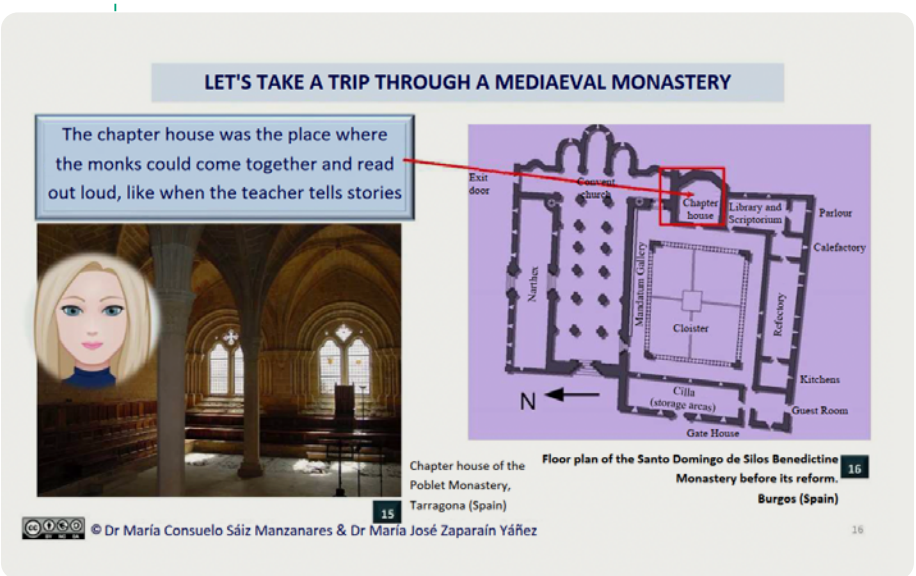
13

WHAT IS A MONASTERY LIKE?

Now we're going to play games to see what we've learned today


LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY
On the next slides we're going to see what monasteries were like
© Dr María José Zaparaín Yáñez
15

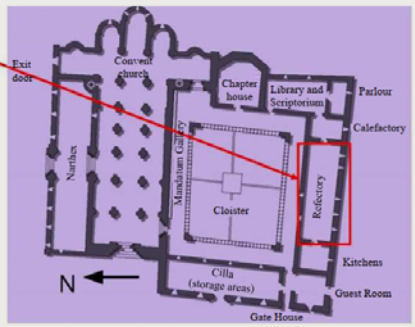
Unit 3


LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY
The chapter house was the place where the monks could come together and read out loud, like when the teacher tells stories
Exit door
Convent church
Chapter house
Library and Scriptorium
Parlour
Calefactory
Narthex
Mandatum Gallery
Cloister
Refectory
Kitchens
Cilla (storage areas)
Guest Room
Gate House
N
Chapter house of the Poblet Monastery, Tarragona (Spain)
15
Floor plan of the Santo Domingo de Silos Benedictine Monastery before its reform. Burgos (Spain)
16
© Dr María Consuelo Sáiz Manzanares & Dr María José Zaparaín Yáñez

LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY

The REFECTORY or DINING HALL was the place where the monks ate like you do in the dining room

17 Refectory of the Santa María de Huerta Monastery. Soria (Spain).

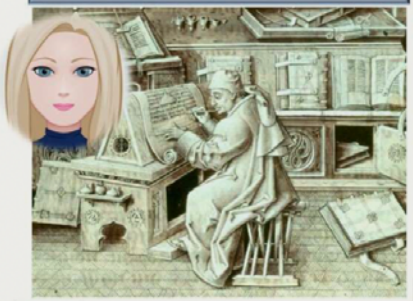


Floor plan of the Santo Domingo de Silos Benedictine Monastery before its reform. Burgos (Spain) 18

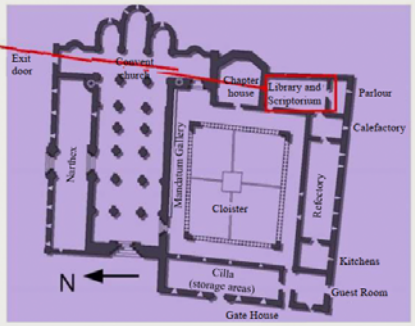
17

LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY

The SCRIPTORIUM OR LIBRARY was where the monks read and wrote like you do when you are at your desks. Then they stored the books in a cabinet like you do in the reading corner.



19 Working in a *scriptorium*



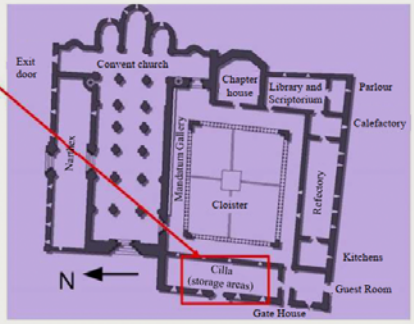
Floor plan of the Santo Domingo de Silos Benedictine Monastery before its reform. Burgos (Spain) 20

18

LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY

The CILLA or WAREHOUSE was the place where the monks stored their food like we do in the refrigerator or in the pantry

21 Storage room of the Santa María de Huerta Monastery. Soria (Spain)



Floor plan of the Santo Domingo de Silos Benedictine monastery before its reform. Burgos (Spain) 22

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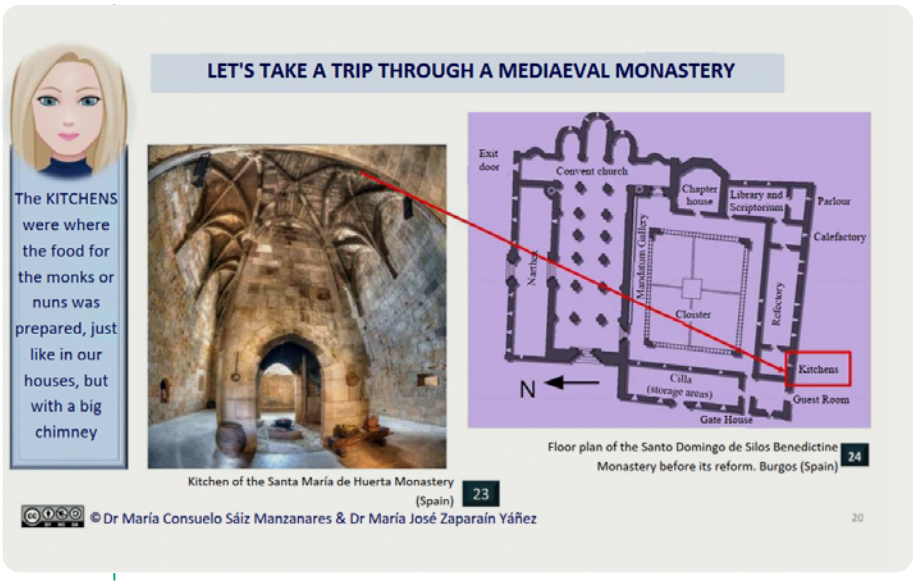
LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY
The KITCHENS were where the food for the monks or nuns was prepared, just like in our houses, but with a big chimney
Exit door
Convent church
Chapter house
Library and Scriptorium
Parlour
Calefactory
Narthex
Mandatum Gallery
Cloister
Refectory
Kitchens
Cilla (storage areas)
N
Guest Room
Gate House
Kitchen of the Santa María de Huerta Monastery (Spain)
23
Floor plan of the Santo Domingo de Silos Benedictine Monastery before its reform. Burgos (Spain)
24
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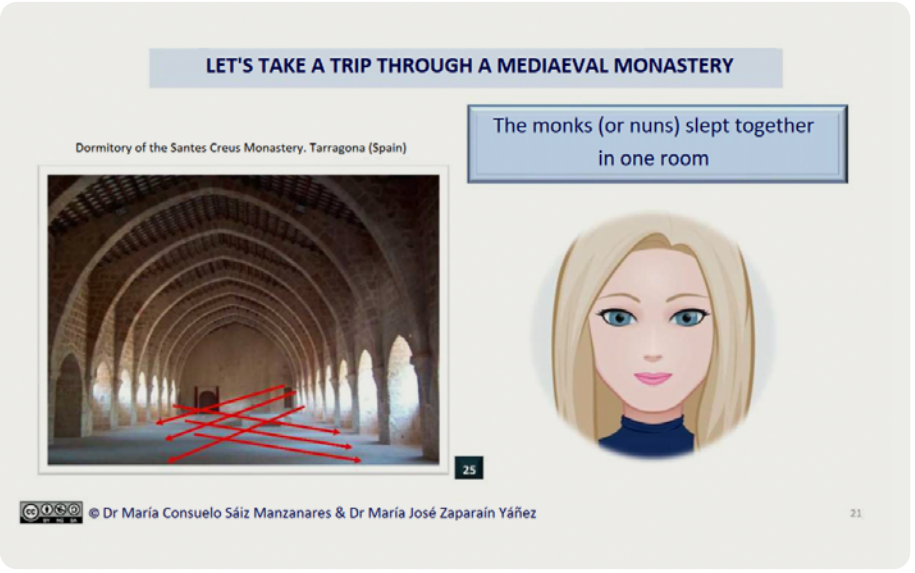
LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY
Dormitory of the Santes Creus Monastery. Tarragona (Spain)
25
The monks (or nuns) slept together in one room
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LET'S TAKE A TRIP THROUGH A MEDIAEVAL MONASTERY
Now we're going to play games to see what we've learned today
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