



LEARNING SKILL LIBRARY (DRAFT)

O-CITY PROJECT - TECHNICAL



Erasmus+

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Cooperation for innovation and the exchange of
good practices, Knowledge Alliances.

1. Learning Skills Library: Technical Module

Introduction

The educational platform of the O-City Project has as its main objective to educate teachers for the realization of multimedia content related to heritage assets in the classrooms. The need to attract educators to the O-City Project makes it necessary to establish a series of manuals through an educational platform that allows teachers to be trained in technical subjects, with the aim of being able to transfer the necessary concepts required by the virtual platform to the students. In this way, teachers can understand and assume the possibilities offered by the platform for its subsequent application in the classroom and incorporation of the multimedia elements of each of the realities, enriching the project and demonstrating its viability and potential.

Competence Profile

The photography tutorials are added to the didactic material developed for the educational platform in order to be used by those teachers interested in the O-City project. The contents collaborate in improving the teaching integration to the field of the orange economy. For example, within the four different areas where the contents of the O-City training program are divided, the Photography competition is developed within the Technical Skills content library:

- Cultural Skills
- **Technical Skills** > Photography
- Soft Skills
- Business Skills

Within the Technical Skills module, the following competencies are obtained for teachers and students:

1. Teaching Tools for teaching within the O-City project
 - **COMMUNICATION:** They can transmit knowledge and information to their students in subjects such as history, sociology, geography through photography and heritage.
 - **PEDAGOGY:** With the tools provided, they must create their own educational content associated with heritage, history and photography.
2. Tools for students for the development O-City multimedia projects
 - **CREATIVITY:** Students will be able to develop this ability when designing multimedia content for a specific purpose or objective within the subject itself.
 - **INITIATIVE:** Students will be able to acquire more security to promote personal initiative and entrepreneurship within the classroom. Both for the development of multimedia projects and for the resolution of conflicts in the creative process.

- **INNOVATION:** They must detect, identify and solve their own problems associated with the project so it will be necessary that, based on the specific learning criteria, they innovate and use the technological tools in a creative way.

Learning Objectives

The general objective of this document is to define a teaching structure for technical training, through the proposal of theoretical and practical contents within the O-City educational platform in the Technical Skills module.

The main specific objective is to provide a series of virtual tools that allow teachers to be trained in multimedia issues, granting technical as well as artistic knowledge to obtain an audiovisual product that is consistent with the project requirements.

On the other hand, one of the specific objectives will be to expand the technical knowledge of teachers about the various programs and web applications that currently exist to finally assemble the audiovisual project.

The final objective will be that all this knowledge is applied in the classroom to be able to generate a material that can then be used in the O-City project, so practical activities will be proposed for the development of audiovisual products at all educational levels.

Types of educational materials

Within O-City there is a teacher training program that collaborates with teachers to incorporate the project into their daily academic activities. In that sense, it will be the teachers who choose which contents are useful and which are not, depending on their previous training; with the objective of complementing the teachers' training in the specific field in which they work so that the multimedia project is carried out.

In general, the educational materials developed can be classified into three types:

Teacher to learn: The contents will provide teachers with a basic technical knowledge focused on cultural and natural heritage. In this way, the transmission of knowledge to students through activities in the classroom is ensured.

Teacher to teach: Activities and workshops prepared for teachers to develop in the classroom. These activities have been prepared with the objective that the teacher can use them directly in the classroom, adapting them in each case to the subject and to the particular educational proposal of each center.

Student to practice: Repository of practical exercises and tasks focused on students. In this chapter we find a repository of activities to develop in the classroom, in order to motivate students to carry out a multimedia project, individually or in groups, to be executed within the institution or as an additional task.

Photography Structure.

Block 1 Introduction to Photography

An introductory video explains how photography can be used as an audiovisual medium to manage and disseminate the main values of heritage elements, whether natural and cultural. The video contains an introduction to the three thematic blocks (Photography, Script and Sound, Edition) applied to Heritage.

- **Pill 1.1:** Video introducing the importance of Photography and Heritage

Block 2 Photography

Chapter 1. Introduction

This module has been prepared so that those teachers interested in acquiring the basic knowledge about photography and heritage, acquire the competences with the objective of transmitting the tools to their students in the generation of multimedia content within the classroom for the O-City project.

Chapter 2. Objectives

Once the module is completed and approved, teachers and students will be able to:

- Apply the knowledge received in the field of photography and heritage.
- Make multimedia content that reflects the most important values of the assets chosen.

Chapter 3. Teacher to Learn

- **TECHNIQUE** (It analyzes how a camera works)
- **COMPOSITION** (It analyzes how the elements in the image should be ordered in goal to highlight one or the other)
- **LIGHTING** (It is essential to take into account the lighting characteristics that can be found in each place)
- **Pill 3.1** Elements of a camera
- **Pill 3.2** Diaphragm, Shutter Speed and Sensitivity ISO
- **Pill 3.3** Image composition
- **Pill 3.4** Characteristics of light, lighting in heritage photography
- **Pill 3.5** Resolution of exposure problems

Chapter 4. Teacher to Teach

- **Workshop 4.1.- Heritage:**
 - **Pill 4.1.1.-** Analyze the outstanding values of heritage reality to be photographed
 - **Activity 4.1.2.-** Characterization of heritage: define a series of values for different elements
 - **Activity 4.1.3.-** Photography and cataloging: Take a series of photographs that highlight the previously commented values
- **Workshop 4.2.- Photography:**
 - **Pill 4.2.1.-** Apply photographic technique to multimedia content
 - **Activity 4.2.2.-** Tour the city: learn to look through the camera. Go sightseeing in the city with the camera in hand to detect the elements that need to be disseminated
 - **Activity 4.2.3.-** Portray the Heritage: once the cultural or natural assets have been identified, take the first photographs in manual mode
- **Workshop 4.3.- : Resources:**
 - **Pill 4.3.1.-** Work with the exposure triangle
 - **Activity 4.3.2.-** Composition as a necessity: apply the compositional concepts to the photos obtained in workshop 4.2
 - **Activity 4.3.3.-** Lighting as a tool: apply the lighting tools to the photos obtained in activity 4.3.2
 - **Activity 4.3.4.-** How to configure your camera to portray heritage? Through the concepts seen, make a photographic series in manual mode applying the technique, composition and lighting appropriate to the heritage type

Chapter 5. Student to Practice

Concepts to develop in class:

- Heritage valuation criteria
- Photography as a tool for heritage conservation
- How does a camera work?
- The exhibition and the photometer as indispensable elements of documentary photography
- Composition and Lighting, how to integrate them?
- How do I solve my audiovisual photo project?
- Applications that improve my photography

Activities:

1. **Discover photography:** Pose a simple individual audiovisual challenge within the classroom to put into practice the theoretical concepts analyzed in reference to the camera.

2. **Photographic tours:** Create work groups and organize excursions to heritage realities that the students themselves select. Each of the groups must choose a different typology and show their values through the photographic material obtained.

Chapter 6. Useful tools

This chapter incorporates those documents that allow complementing and putting into practice the theoretical concepts seen above.

<http://www.thewebfoto.com/curso-de-fotografia-digital-en-pdf-gratis>

Chapter 7. Evaluation.

The section corresponding to the evaluation will be divided into two parts:

- Teacher evaluation for obtaining the Europass certificate.

In this section, the teachers are evaluated, so a proposal for teacher evaluation must be included, through a test, which ensures that the contents (Teacher to Learn) have been transmitted correctly. In this way, the teachers can demonstrate the correct understanding of the module material and obtain the Europass certificate.

- Evaluation proposal for students to be used by the teachers.

This section proposes activities (Teacher to Teach) or tasks (Student to Practice) that would allow students to be evaluated, with the objective of guaranteeing their learning process and ensuring the quality of photographic audiovisual projects in the next O-City cities.

Block 3 Sound & Script

Chapter 1. Introduction

This section has been prepared to train users on issues related to sound and script. So, it will be useful for those who wish to learn how to write a script and what is the relevant information that must be transmitted at the time of spreading a heritage reality through a multimedia element. On the other hand, audio recording knowledge must be incorporated to be able to record it and know how to combine it with music, that accompanies and highlights the values of the cultural or natural good.

Chapter 2. Objectives

Therefore, the objectives set for teachers in this block are:

- Learn to write a script that summarizes all the values assigned to heritage reality.
- Select the music that best accompanies the script developed.
- Learn the elementary concepts about sound recording, to be able to make multimedia content with a quality consistent with the cultural or natural good that we wish to expose.

In turn, students will be able to:

- Develop a video with a voice-over and voice-over music that accompanies the photograph obtained in the previous block.

Chapter 3. Teacher to Learn

- MULTIMEDIA RESOURCES (how to integrate multimedia resources according to the script and the characteristics of the heritage)
- SCRIPT (tips to write the script applied to the multimedia element to ensure its understanding and correct transmission of the assigned values)
- SOUND (how to record the sounds obtained in situ and how to record the reading of the script in a recording studio)

- **Pill 3.1** Writing a script for a certain multimedia content
- **Pill 3.2** Search for a music track according to the characteristics and values of the cultural or natural asset
- **Pill 3.3** Sound recording *in situ*, tips to eliminate outside noise
- **Pill 3.4** Recording script readings in the study room

Chapter 4. Teacher to Teach

- **Workshop 4.1.-** Script:
 - **Pill 4.1.1.-** Analyze the outstanding values of heritage reality to be explained
 - **Activity 4.1.2.-** Identify the characteristics of the cultural or natural good that must be transmitted
 - **Activity 4.1.3.-** Write a brief review of a selected heritage reality
- **Workshop 4.2.-** Music:
 - **Pill 4.2.1.-** Find audio resources that allow us to highlight the characteristics of the script.
 - **Activity 4.2.2.-** Make a list of musical genres and another list of heritage types. The activity focuses on linking genres with typologies
 - **Activity 4.2.3.-** Think of a specific heritage reality and look for the music that would accompany that cultural or natural good
- **Workshop 4.3.-** : Recording
 - **Pill 4.3.1.-** Learn the basics of audio recording
 - **Activity 4.3.2.-** Record with a mobile phone the ambient sound environment that can be identified in the space of the selected cultural or natural asset
 - **Activity 4.3.3.-** To record in an interior space the reading of a script prepared for a patrimonial reality

Chapter 5. Student to Practice

Concepts to develop in class:

- Criteria for the identification and subsequent drafting of the values and characteristics of an asset
- Analysis of the musical genres and their link with the documentary typology
- Tools for recording ambient sound environment, criteria and limits
- Speech of the script in a room, characteristics and aspects to consider

Activities:

1.- Describe the heritage: Create a SWOT matrix for a selected cultural or natural asset, in order to see the strengths and opportunities that can be obtained from weaknesses or threats. In this way, it will be easier to organize the information that should be included in the script.

2.- Log and Record: Write a short script, read it aloud so it can be recorded and then look for music that complements it. Work with the free license program Recording Studio.

Chapter 6. Useful tools

This section includes the recommended tools for carrying out the activities offered:

Recording Studio

<https://www.microsoft.com/es-es/p/recording-studio/9wzdncrfhv4d?activetab=pivot:overviewtab>

Chapter 7. Evaluation.

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- Teacher evaluation for obtaining the Europass certificate.

In this section, the teachers are evaluated, so a proposal for teacher evaluation must be included, through a test, which ensures that the contents (Teacher to Learn) have been transmitted correctly. In this way, the teachers can demonstrate the correct understanding of the module material and obtain the Europass certificate.

- Evaluation proposal for students to be used by the teachers.

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Block 4 Edition

Chapter 1. Introduction

This section will explain how to edit the multimedia project. Therefore, it is focused both on users who complete the full training of the photography module within the technical section of the educational platform, as well as those educators who, having previous

knowledge of photography and sound, want to know how it should be edited, and finalize the audiovisual project.

Chapter 2. Objectives

Once the section is finished, educators and students will be able to:

- Select and edit the appropriate photos for the transmission of information on heritage reality.
- Make creations that adapt to their own, collective and heritage needs.
- Edit the project, through the correct use of the photos, the audio of the script in voice-over and the music selected in various sound tracks.
- Develop the photographic project associated with the chosen heritage reality.
- Teaching students to create their own videos will give them the opportunity to practice the use of ICT.

Chapter 3. Teacher to Learn

- EDITION (how to edit the multimedia project using previously obtained images, audios, sound and music)
 - **Pill 3.1** Particular photo editing and use of digital tools to improve the images obtained
 - **Pill 3.2** Development of the audiovisual project through the simultaneous use of photos, audio and music in a prescribed period of time
 - **Pill 3.3** Review of the preliminary version and elements to be taken into account for its correction
 - **Pill 3.4** Assembly of the final version of the project

Chapter 4. Teacher to Teach

- **Workshop 4.1.-** Photo editing:
 - **Pill 4.1.1.-** Learn to edit images to obtain the highest possible quality in the multimedia project
 - **Activity 4.1.2.-** Identify the qualities of an image (composition, technique and lighting) and improve them using a digital tool

- **Activity 4.1.3.-** Edit photos of a cultural or natural heritage element and generate a series that can be exported to an audiovisual project
- **Workshop 4.2.-** : Video assembly
 - **Pill 4.2.1.-** Develop a project in which photography, music and audio are combined
 - **Activity 4.2.2.-** Link three photos of different heritage elements (natural, cultural material and cultural immaterial), with a particular selected music and incorporate an audio that describes reality
 - **Activity 4.2.3.-** Assemble all the elements already edited in a single project, taking into account the timing that it may have depending on the material obtained and the type of assets

Chapter 5. Student to Practice

Concepts to develop in class:

- Tools to edit images and criteria to select a documentary series that transmits the information and values of the heritage element.
- Temporary analysis of the multimedia project based on the selected photos, script and music.
- Programs to set up the audiovisual project.
- Correction criteria.

Activities:

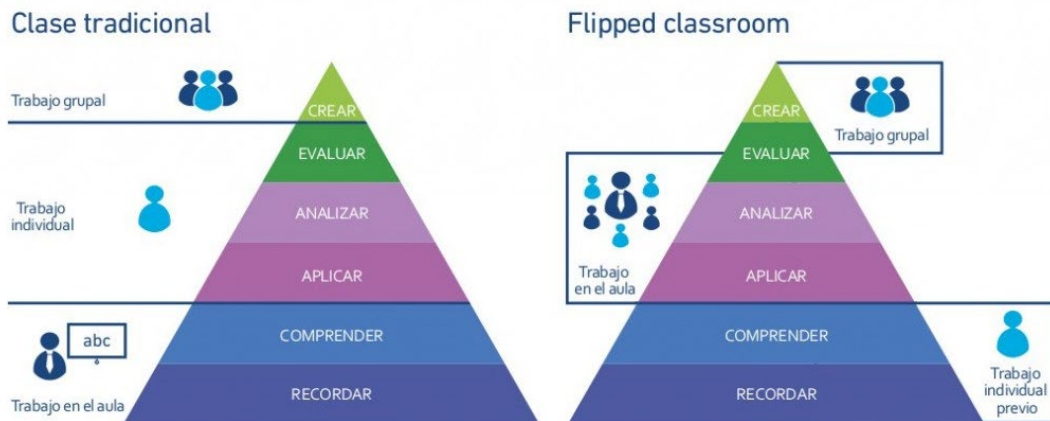
1.- Flipped Classroom: Also known as reverse pedagogy and upside down class, the flipped classroom is committed to reversing the traditional order of the class, changing its organization. With this system of blended teaching-learning, the order of activities is altered and students begin the learning process outside the classroom, then work on the knowledge and put them into practice with the teacher.

2.- Contest: Activity in groups of 4 students, in which the edition and assembly of a photographic series made to a cultural or natural asset is carried out, with the audio made in studio or in situ of the previously written script and the use of music or sound environment. After the exhibition, it will be the students themselves who choose an audiovisual project that will be part of the O-City content platform.

Chapter 6. Useful tools

This section includes the recommended tools for carrying out the activities offered:

Flipped Classroom



Kizoa

WeVideo

<https://www.kizoa.es/>

<https://www.kizoa.es/montaje-video-para-la-escuela>

<https://www.wevideo.com/education>

Chapter 7. Evaluation.

The section corresponding to the evaluation will be divided into two parts:

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Block 5 Example

A reference video of audiovisual element for natural heritage with an example of a photo of the Marjal de Gandía. It shows all the concepts seen before so that they can be addressed by the teachers in the classroom and subsequently uploaded to the web platform of the O-City project.

- **Pill 5.1:** Video example