# Interdisciplinary blocks



Organising institution: Zaffiria

Country: Italy

Age: 2 third classes of Secondary schools 1° grade of Crespellano and Calcara

Key question: Is it possible to activate interdisciplinary connection paths through the videogame?

# **Objectives:**

- Promote interdisciplinary paths between technological and artistic subjects
- Promote teamwork
- Promote the ability to design three-dimensional spaces
- Promote presentation skills

## https://vimeo.com/266278691

Time: 8 hours

#### Software and apps to be used:

- Minecraft
- · Google presentation

**Brief presentation:** The proposal is to start from their extracurricular passion (generalizable in the passion for video games) to design new cultural spaces for the community. Starting from a historical-artistic study, students choose works of art, currents and artistic movements as a basis to design a new artistic-cultural space, as future's designers. These new places of culture and art are displayed thanks to a work in three dimensions using Minecraft, which is also explored and questioned, to better understand how it works and what kind of relationship we have with technology.

**Civic engagement**: Through the imagination and the construction of the museum pavilions, the boys and girls are asked to put their own passion at the service of the local community imagining places and cultural habits of the future. What characterizes an artistic-cultural place designed by teenagers? How can I explore the past to revive ideas for the future? How can an artistic-cultural institution like a museum or an art gallery be attractive to young people? Moreover, through small lessons having the different features of Minecraft as subject, the boys and girls were able to compete in helping their peers and their teachers and parents to better understand the world of Minecraft, its mechanics and its possibilities.

## Topics covered:

- Deepen the use of technologies
- Deepen the knowledge of museum/exhibition architecture
- · Deepen the most famous themes and examples of classical, romantic, impressionist, surrealist and modern art
- School subjects incorporated: technical education, art, architecture, literature, history.

**Preparation of space for the Atelier**: Set up a classroom with enough computers to allow groups of at most 3-4 people to play minecraft

#### Materials needed:

Laptop or computer with minecraft installed

## Main inspirations taken from personal research:

The open structure of minecraft and its popularity among children has allowed them to focus on the most creative and artistic aspects.

**Mass media and social media connections**: The videogame was used here as a vector and a tool from which to imagine virtual museums or to stage famous works of art.

How do you plan to give voice to students to present or show their personal skills and knowledge? Some students showed a knowledge of the really remarkable gameplay mechanics. They were then able to explain them through mini lessons or through direct tutoring to the rest of the class.

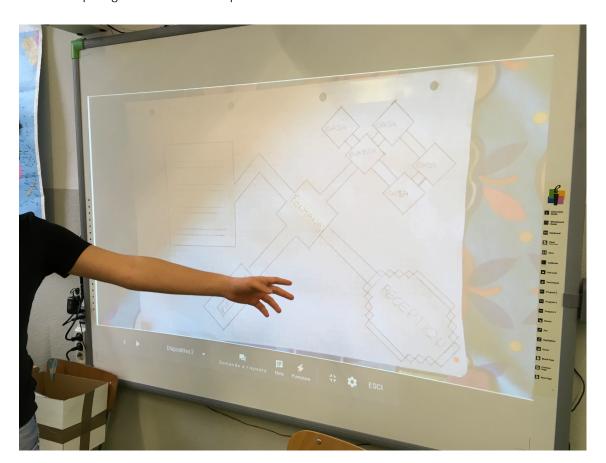
How do you collect information as the starting point of a Digital Atelier? Each activity was structured with final moments in which the students verbalized what they had done, what they had discovered again, how they had used their skills and knowledge to solve the problems encountered.

**Introducing students to the key question - the research begings**: Can you design cultural spaces for your country? This passage of preliminary design of the works and of the museum structures was carried out by the teachers in class before the digital ateliers, directly focusing on all the related disciplinary learning such as: the study of perspective, the technical drawing in three dimensions, some periods of art history.



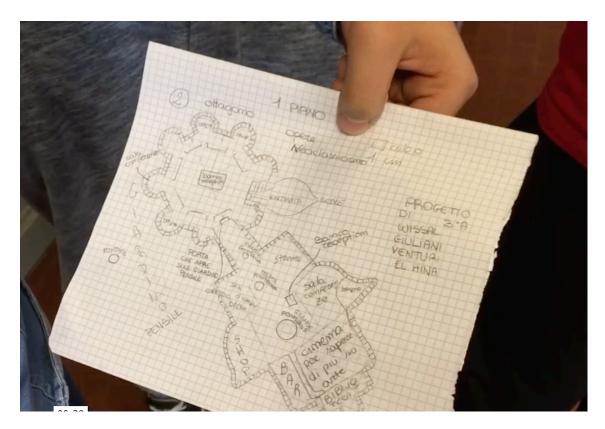
## **Experimental phase**

- 1. Action that unfolds the practical activity to clarify the question (experimental phase): The teachers worked in class with the different groups mainly in two directions: to get them to start thinking about the plant and the structure of the museum to start imagining which work to develop
- 2. Active work of the students: First of all the students carried out the technical design by hand, on paper, of the idea of a museum and of the works it was supposed to contain.
- 3. Presentation of findings and results (visualisation of information): The students had the possibility at the beginning of each meeting to illustrate before the rest of the class their projects, their tutorials (Through a presentation on a light board) and then their creations (directly in Minecraft)
- 4. Analysis of results: The analysis of museums and hand-crafted design ideas was cured by the teachers and during the presentations was offered feedback from the educator and from the rest of the class. Every technical project had a passage of discussion and improvement thanks to the collective work of the class.



## Project/design phase - part 1

- 1. Second action that unfolds the practical activity (project/design phase): Once the technical design was done, with ruler and square, the different groups had to work on the construction of their museums in Minecraft. Can you create these spaces using Minecraft?
- 2. Active work of the students: Subsequently, during the digital atelier, the students built their projects through minecraft blocks, walls, floors, fountains, towers and windows, but also artificial lakes, woods, farms, wheat fields and mountains that donated the right context for the works they had decided to represent.
- 3. Presentation of findings and results (visualisation of information): Each group has developed its own museum / exhibition space project on Minecraft.
- 4. Analysis of results: The students presented their work by showing them directly from the game, in a presentation. Then, students were given the opportunity to save all created maps in order to be able to play, change or finish even later.



#### Project/design phase - part 2

- 1. Third action that unfolds the practical activity (project/design phase): Minecraft tutorial: how do I use this tool? What can I do?
- 2. Active work of the students: The students were asked to create brief and precise tutorials on some aspects of Minecraft's game mechanics to present to the rest of the class: how to use the buttons and levers, the trolleys, the redstone, the signs and the light sources.
- 3. Presentation of findings and results (visualisation of information): The presentation was carried out in the classroom through an interactive whiteboard
- 4. Analysis of results: All the Groups have succeeded in creating the respective museum structures and have been able to illustrate pertinently the assigned tutorials. Moreover, during the work, the exchange of small tricks or aid was constant and continuous, a sign that the students were deeply involved in the work and willing to carry out their roles and tasks. Note: it would have been even more interesting to be able to work on the network on a single map, in a collective way but the technological infrastructure of the school did not allow it

**Approach to a new software or a new app:** The use of a video game, in the context of this digital atelier, was not aimed at passing an educational content, but rather giving the students the opportunity to "write", "create" and "shape" a series of concepts that they had already explored in other subjects. All this allowed them to open a new space for reflection and experimentation using Minecraft in a finalized way.

**Links between the Digital Atelier and real life of the students:** The use of Minecraft was perceived by the students not as a moment of play but as a time when they were working on a group school project. In this context, the videogame was simply a medium that most of them knew very well and in which they felt very experienced and at ease. This extracurricular competence has served to complete the experimentation carried out at school.

**How do you plan to evaluate knowledge and skills?** Evaluating number of students actively involved in the work, the quality of the works, the quality and clarity of the tutorials, group dynamics and the level of interaction and mutual help among the students

**Conclusion:** The ateliers went very well. Some of the museum projects were perhaps excessively ambitious and would have had required more time. In these cases, it was necessary to redimension the projects. In general, the groups have divided the work in a balanced way even if in some groups (previously created) the work was tiring because of the background of the boys. The presentations were relevant and clear, and in general, the dynamics of peer help worked and has indeed even surpassed the intervention of the educator. Painful note for the materials: some laptops were not suitable for running minecraft, they were not always connected and the batteries were not always charged. Furthermore, the problem of internet in the educational infrastructure did not allow the use of the "education" version of Minecraft, which would have allowed the groups to work on the same map.

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