

# *The cultural heritage to improve skills and to create a bridge between school and museum*

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**Abstract**— Cultural heritage education can provide information in different fields due to different ways one can use to approach them, depending on the context: given its nature, it can in fact represent both object of study, meaning and aim. This means that cultural heritage allows for a multidisciplinary approach, being related to several aspects of human life. This is a fundamental feature when it is employed in the school environment.

Starting from these assumptions, we present the project Observing artwork as a form of education for learning and citizenship, started in the school year 2015/2016. This project has proposed a practice allowing for the use of cultural heritage within classrooms as a multidisciplinary learning tool, by means of the Visual Thinking Strategies (VTS) method.

VTS focus on the learner, placing him at the centre of the learning process. The student, by means of his knowledge and experiences, constructs the meaning of image represented by an artwork, cooperating with his classmates, aiming at learning to learn. Hence, it is a method that addresses the needs of the application of the constructivist theory in the scholastic environment.

In order to bring cultural heritage inside classrooms, educational activities are carried out using digital resources, such as visual artworks repositories, and technological devices, like interactive whiteboards displaying pictures employed for the VTS practice. For this purpose it has been in our interest to keep teachers upgraded regarding digital resources possibility access.

## *Cultural Heritage in Education, Flipped Museum and Learning*

### I. INTRODUCTION

Cultural heritage, as a sign of human actions carrying the value of civilization, allows us to acquire a plurality of information, notions and stories regarding any aspect of human life. This implies that cultural heritage’s education can provide insights into different contexts. Moreover, given its nature, it can be studied not only by itself, but also in a bigger framework in which it can represent the mean to approach different areas of knowledge; furthermore, it can be the aim of a study, since it requires awareness about its safeguard, conservation and protection issues [1]. Cultural heritage, therefore, is well suited to school learning since it can be used for multidisciplinary learning.

### II. CULTURAL HERITAGE EDUCATION AND CONSTRUCTIVIST LEARNING THEORY

Introducing cultural heritage education in school curricula is therefore deeply appropriate: this is due to the fact that messages carried by cultural heritage can be understood with different manners of interpretation. According to constructivist learning theory, these manners belong to us, since we can look for them in our experience, knowledge and observation capacity [2]. However, it is fundamental that the study of cultural heritage is carried out methodically: in order to be effective, learning has to fulfil needs and preferences of the student.

Indeed, learning has to be an active process in which students construct their own knowledge by themselves, during a social activity which involves interactions with others. In the learning process, what students know and have experienced so far are the foundations for building future knowledge.

### III. VISUAL THINKING STRATEGIES

It is possible to approach cultural heritage education consistently with the prescriptions coming from the constructivist theory by means of the Visual Thinking Strategies (VTS) method. Developed in the eighties by Abigail Housen, a cognitive psychologist, and Philip Yanewine, an expert coordinator of educational activities at MOMA, the VTS method is based on conducting a discussion with a group led by a facilitator, answering three questions about an artwork: What’s going on in this picture? What can you see that makes you say that? What more can you find [3]?

Placing every student at the centre of the learning process, the VTS method makes the learner able to construct the meaning of image represented by an artwork and, therefore, to build his own knowledge. The previous knowledge and experiences, the interaction with more capable peers, the activation of observing and reasoning are all fundamental elements for the application of the VTS method.

The purpose of the application of the Visual Thinking Strategies is not only to get new informations about a certain artwork, but, most importantly, to learn a method which enable students to solve problems: VTS method teaches students how to learn [4]. Furthermore, using VTS allows to discover and understand and, therefore, to respect and protect cultural heritage.

#### IV. VTS AND SCHOOL. THE ITALIAN EXPERIENCE

Starting from 2015/2016 school year, the project Observing artwork as a form of education for learning and citizenship proposed for the first time in Italy the introduction of the Visual Thinking Strategies in school curricula. Within a year 2600 students of all ages, together with their teachers, took part in laboratory practices, consisting in the application of the VTS method, both in classroom and in museum contexts, with the support of a tutor. The activities carried out included also the introduction to the teachers of the VTS method and of the digital resources possibility access. A total of 10 schools have been involved in this project [5].

The Visual Thinking Strategies method can be applied in both formal contexts, such as school and universities, and non-formal learning ones, such as museums.

Using VTS in museums allows us to apply the method to any kind of artwork and media: not only paintings or graphic works, but also sculptures and bas-reliefs, models, diorama and any object that is part of our cultural heritage can be involved in the practice.

Applying the VTS method in school context, on the other hand, implies new needs, but also opens to endless possibilities. Usually pictures employed for the VTS practice are displayed on the interactive whiteboards; therefore, it is recommended to choose only two-dimensional artworks, according to the needs to reproduce faithfully the original picture. Using technological devices to bring cultural heritage within classrooms also means to fully exploit the opportunities that the digital resources access offers.

Cultural heritage education employed in the classrooms becomes part of the student's everyday life; thus, this involves the development of interest, familiarity and affection for cultural heritage.

When Visual Thinking Strategies are applied in museums, it is important to ensure that both teachers and museum staff are aware of the needs associated with the use of exhibition spaces as a place of learning and the need to make students protagonists of their own learning.

Regarding the choice of the artworks to analyze in classrooms, the teachers are suggested to pick pictures later available to the students during the museum visit: this will make the museum a closer, more understandable and engaging place, resulting in an enjoyable visit.

#### V. RESULTS

To assess the impact of VTS practice in the school context, teachers were asked to fill in a form to record their first

evaluation about the student's reactions to the method. These forms show that the VTS method can be considered effective for acquiring and developing soft skills: students are capable to obtain new abilities and capabilities thanks to a collaborative work environment. As a consequence, social inclusion has been encouraged, since VTS favor the active participation of anyone who has a disadvantage.

Presently, we are studying a way to perform quantitative analysis capable of gauging the improvement of learning capabilities in students practicing the VTS method.

#### VI. CONCLUSIONS AND PERSPECTIVES

Given the positive outcome of the experience, we can state that VTS method can be considered a valid learning tool. Therefore, our perspective is to proceed with the experimentation not only in the school context, but also in medical and health education and in the long-life learning context.

Moreover, the collaboration between school and museum was found to be crucial in developing a bridge between the two learning environments: a new type of dialogue is being opened up to experimenting new approaches to museum visit.

#### ACKNOWLEDGMENT

The authors wish to express their gratitude to the Museum System of the Municipality of Rome and to Galleria Nazionale D'Arte Moderna e Contemporanea for their support during the progress of the project.

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