# INCLUSIVE TEACHING STRATEGIES FOR MEANINGFUL RELATIONSHIPS BETWEEN SCHOOLS AND MUSEUMS. DATA FROM A FORMATIVE MUSEUM EVALUATION

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### Summarv

This poster presents data from a formative museum evaluation on the educational project "We are a myth!". The project aims to establish meaningful relationships between schools and museums. It is targeted at 3rd-5th grade pupils and is realised at the ETRU (Rome). Frequently, museum visits lack cognitive repercussions in the school setting: the school delegates to the museum the task of managing the pupils' museum experience; the didactic activity carried out by museums often lacks the evaluative dimension. Quantitative and qualitative results confirmed the validity of the approach adopted for the project both in terms of content and teaching methods.

## **Context Analysis**

The research was carried out at the National Etruscan Museum of Villa Giulia in accordance with the Department of Education and Cultural Accessibility, which – pedagogically speaking – did not cover two essential aspects to qualify museum communication as properly didactic (Vertecchi, 1990; Nardi, 2007): evaluation and individualisation.

#### **Research Hypotheses**

How to raise the level of primary school pupils' learning in museums? How emotional engagement can help in that? To answer these questions, a didactic proposal for a critical approach to myth was designed: it is indeed a fundamental part of cultural heritage, particularly feasible to promote emotional engagement and foster a sense of cultural belonging; furthermore, because of its versatility, it can be adapted for different learning objectives.

#### State of the Art

Assessment and individualisation (Auer et al., 2022) are fundamental to ensure inclusiveness, especially in school contexts where there are pupils with specific learning disorders, special educational needs or foreign language speaking. Furthermore, the investigation of learning processes in museums for younger visitors can still be deepened (Andre, Durksen & Volman, 2016). This state of the art is partly due to the problem concerning the very definitions of learning, development, education and entertainment, the memory of single facts and cumulative experiences of facts, knowledge gains and affective consequences (Paris, 2002). For learning and meaning-making in museum contexts, the relevance of experiential learning is nevertheless well established (Mughal, 2011).

#### The workshop "Hercules, Medea, Ulysses... what myths!" as a formative museum evaluation

The workshop, intended for 6-11 years old, was part of a series of events that the Department of Education and Cultural Accessibility organises for younger visitors. In this context, the validity of the fundamental points of the educational project "We are a myth!" was tested. The objectives selected for testing are part of those underlying the rationale for the guided visit and the reading, drawing and writing workshop of the main project:

- to know and place in space and time facts and events from the history of ancient civilisations;
- to know the rudiments of iconography enabling the reading of images;
- to read, understand and interpret written texts collaborating with peers and the museum educator;
- to stimulate the 4C Skills (Communication, Collaboration, Critical thinking, Creativity), which are fundamental in any education context and a prerequisite for more complex competencies and active citizenship (Poce, 2018).

The myths selected were Heracles and Odysseus. Before the actual start of the guided visit, children were asked if they knew the topic of the workshop and if they had ever heard of the two heroes. They were explained why there are countless vases of Greek production in an Etruscan museum and what meanings images might have had for the ancients, who were, in most cases, analphabets. The visit took half an hour and was carried out through the adoption of the Visual Thinking Strategy (VT) (González-Sanz et al., 2017), implemented by the use of frames, the reading of passages from classical sources for the myth of Heracles and the viewing of a clip from "Ulysses" (1954). The myths of Heracles were also historicised according to the same reading key adopted in the educational project "We are a myth!" (Piccardi, Alberti, Paterna, 2017). Then, a drawing and storytelling workshop took place. Within each small group, each child drew a narrative sequence of the myth in agreement with the others and with the help of some prints of museum objects. Then the children from each group placed their drawing inside a kamishibai and, working together and sometimes with the help of the museum educator, narrated their version of the myth to the other groups: a dialogue ensued involving all participants.

The achievement of the objectives was verified by analysing both the products produced during the drawing and storytelling workshop and the attitudes demonstrated regarding the 4C skills. Evaluation grids adapted from Poce (2018) were used. To evaluate the degree of satisfaction, children were asked: How did you feel? What did you like? What would you change?

## Data analysis

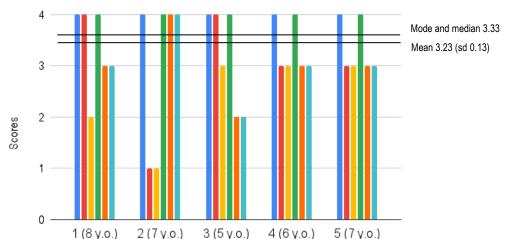
Scores can vary between a minimum of 1 and a maximum of 4. The central trend measurements of the indicators are at the top of the distribution.

Overall scores of the products of each participant (graph 1) show the mean is high (3.23), similarly to the mode and the median (3.33). In particular, the standard deviation is very contained (0.13).

An analogous pattern emerges from analysing the data concerning the 4C skills (graph 2). The mean of the overall scores given to each participant is 3.35, with a standard deviation of 0.25, while the mode and the median are 3.25.

Some qualitative aspects of particular interest emerged from the dialogue with the children. Firstly, they had a high cultural level: they had been prepared by their respective families on the topic of the workshop. In particular, participant 2 turned out to have an uncle, who is an archaeologist, while participant 5's mother is an archaeologist employed at the ETRU museum.

Overall, the children were able to communicate effectively not only with museum educators but also with each other. Initially, they were shy, did not interact with each other and scarcely with the educators. However, stimulated in the introductory phase of the guided tour, prompted to observe and express their reasoning through the inclusive learning strategy of VT and free to collaborate and express their creativity during the workshop, they gradually opened up, achieving excellent levels of attention and listening and good interaction. Guided by the museum educator, the children described the attributes of the main hero, secondary characters and gods and identified them; then, they independently read and interpreted the unfolding of the action. They also read ancient passages and watched a clip from the *peplum* Ulysses, grasping their specific contents.

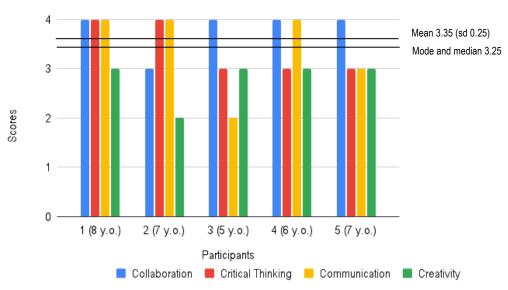


Three participants, in particular, stood out, albeit for different aspects. Participant 1 stood out for his ability to interpret and reproduce the images. Participant 2 stood out because, although he was better prepared, more active than all the other children in every aspect dealt with during the guided tour and the ablest to assimilate through listening, he nevertheless found it difficult to follow the rules of group communication and was always dissatisfied with every drawing he started. The very young participant 3, who was not yet literate, showed a remarkable speed of learning and processing ability relative to her age but required more support from the museum educator during the narration with the kamishibai.

A further observation concerns the participants' handwriting. Participant 1's handwriting appeared neat, similar to that of Mickey Mouse comics, and consistently the child was skilled in drawing, dreaming of becoming an artist one day. On the other hand, the handwriting of the highly prepared Participant 2 – who was always so dissatisfied with all of his drawings that narrated the myth by showing a print of the artifact - was slow, shaky and untidy in its use of space and the distances between the letters making up individual words. Besides, the child had openly expressed, upon learning of the workshop activity, that he did not like drawing.

Concerning the assessment of the degree of satisfaction, it emerged that the children enjoyed the museum experience and would not change anything about it. Participant 1 stood out for the self-consciousness he displayed when answering the question "How did you feel?". Symptomatic of the familiarity with the museum, on the other hand, was the answer to the question "What would you change?" given by participant 5, the son of a museum employee.

# Participants Relevance of the drawing to the topic 📕 Relevance of the storytelling to the topic 📒 Structure of the storytelling 📕 Originality and creativity of the storytelling Graph 1. Evaluation of the drawing and storytelling workshop.



## **Conclusions and Possible Developments**

Graph 2. Evaluation of the 4C Skills during the museum visit and the drawing and storytelling workshop.

Data analysis from the formative museum evaluation showed that the mean is high and reliable, confirming the validity of the approach both in terms of content and teaching methods.

Results proved possible to successfully present rather complex content to such young visitors through channels that might seem difficult but are characterised by an essential form, i.e. passages from ancient sources and clips from old films, thus suggesting a reflection on the availability of non-innovative but valid narrative and representational tools. Furthermore, the overall assessment of attitudes, performance and handwriting suggests that a graphological focus could usefully be programmed, alongside the analysis of quantitative and qualitative data, not only for their corroboration but also to provide a deeper understanding of the needs and psychology of children and, ultimately, to support them in their education.

As far as methodological aspects are concerned, new long-term models could assist in assessing the effects of museum experiences in terms of self-awareness, civic awareness and soft skills developed by the participants.

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