

MOSQUITOS, THE BEARERS OF MALARIA.

THE EXPERIENCE OF DUAL SCHOOL-WORK BASED LEARNING.

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ABSTRACT.

During the year 2015 the law 107/15 has been issued. The dual school-work based learning has been introduced. Then our class has started this course at the museum of "Terra Pontina" where we were able to learn the history of the territory under all its aspects. In the present work, results concerning scientific experiments will be presented. By slides Mosquitos that were the bearers of MALARIA have been studied.

INTRODUCTION.

The law 107/15 has introduced a lot of innovations in the field of school, especially regarding students' work. According to this law students of Lyceums must cover 200 hours stage in three years. This year the class has begun a training course at the museum "Terra Pontina" where they have analysed the situation of territory over centuries. The museum is situated in Latina that for a long time used to be a swamp. This situation caused the presence of a lot of mosquitos, the bearers of MALARIA.

In the stage the class was divided in two groups: SCIENTIFIC and ARTISTIC.

The ARTISTIC group analysed the territory through art. In particular it analysed the art works that represent several aspects of the territory.

The SCIENTIFIC group analysed mosquitos and some aspects of malaria.

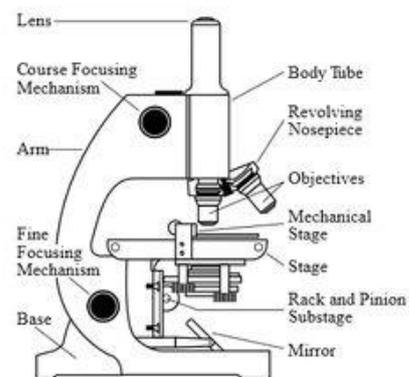
MATERIALS AND METHODS.

In order to analyse mosquitos, the scientific group has been divided in three subgroups, that have worked in turn.

Every group has analysed about 60 mosquitos' glasses that were in 2 drawers and then they have taken pictures of every slide to put them on the database. Data showed the conditions of the slides, mosquitos' species, where and when they were taken.

The following materials were used during all the scientific work: two optical microscopes, two computers, programs for taking photos of the slides and of mosquitos' slides.

INSTRUMENTATION.



(fig.1 optical microscope)

Optical microscopy, with help of digital video, can also be used to view very thin optical sections, and confocal optical systems are now in operation at most major research institutions.

In the fig.1 an optical microscope is shown with all its parts. All the parts work together to show the slide in every single part.

RESULTS.

By the analysis of every slide the different subspecies of the mosquito have appeared. They were different by the zone they were got, identical subspecies were classified by their common body features. The group could see it thanks to the microscope's camera.

The slides were not all in the same conditions, the majority were good but there was a part (especially in the second drawer) that wasn't in good conditions, anyway every group managed to categorise any single slide.

CONCLUSION.

The experience of dual school-work based learning was focused on the territory changes in time. Now the class is able to better understand the history of its territory.

The Artistic group could learn how classify an art work with the right method and glossary.

The Scientific group could learn a scientific method to classify slides, now it is able to use a microscope too.

The experience of the dual school-work based learning opened to the class a new way and a new perspective about how a museum works in all its aspects. The groups have worked with experts and this was a great opportunity.

ACKNOWLEDGEMENTS.

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