

With the Flying Colours

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Abstract

This article reports a positive educational experience in a vocational school. Teachers of different subjects have combined their skills to achieve the goal to involve and motivate the students especially by scientific matters. The approach can be defined as a guided inquiry, where students had many opportunities to make suggestions and propose solutions.

Students were involved in cooperative learning method, they colored and painted fabrics, designed, cut and sewn their shopping bags. They carried out the experiences of biology and chemistry in the laboratory with unthinkable final results, they also have won a prize in the national competition: their joy was great, as well as the satisfaction of their teachers and the headmistress.





The National contest "Adopt Science and Art" with a production of drawings inspired by famous phrases of the world of Science 's great personalities was the starting point. It was the perfect opportunity to explore the link between Science and Art, in an interdisciplinary way, with the aim of promoting curiosity, knowledge and creative skills in pupils.

With the students of a second year Fashion course we develop a module based on a realistic contexts. The fruitful collaboration between teachers of different disciplines has been successfully transferred to the students, which were active protagonists of their knowledge.

Students have been working in heterogeneous pairs formed so as to enhance individual skills and to encourage cooperation among peers. Teaching with the use of the laboratory has been the point of connection between everyday reality and the theory behind it.



Thanks to this project the high school students were able : to observe the chloroplasts under a microscope and carry out "in situ" chlorophyll photosynthesis (Biology)



to Investigate, the theme of color and light-matter interaction. (Physics)

to learn the main features of the dyes and their chemical composition. In particularly the colored vegetable substances already known as dyers such as: chlorophyll saffron, indigo, tea, red cabbage, coffee.(Chemistry)

to choose the phrases of interest, analyzed these and finally developed a personal commentary to match the graphic work produced (Italian)
To draw, painting and sewing their shopping bags (Technologies and Techniques Graphical Representation)







Conclusions

In this experience we wanted to put the meaningful learning of the students prior to our curricula. This work was based "on acquiring educational skills involving intellectual, attitudinal, communicative,



societal and interdisciplinary learning." We were able to teach significant portions of our curriculum and more importantly, learning was fun for the students. With great joy and satisfaction of teachers, students passed the exams with the flying colours.

References

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