

INTERDISCIPLINARY TEACHING: Project worksheet

Project name: **THINK & BUILD BRIDGES**

Project goals:

The idea on which the learning experience was based, tends to rely on experiential dimension that is often overlooked during daily activities, especially when it comes to technical and scientific phenomena which are kept in the abstract case studies contained in textbooks.

What motivated the project?

"Think & build bridges' is a path which draws its origins from the project Teaching Science in Europe. We thought that the project could be a chance to work in a real network with different classes of different grade and so we were able to compare different way to relate with a topic.

How does it fit into the current curriculum (grade, subject, age of pupils)

Childhood school

Girls and Boys 3-4-5 years old were involved from three different classes: one of the youngest ones who also uses ICT (in the normal school time) and the other two that proceed without the use of technology in teaching. Within these three classes the following students are enrolled and attending: about 70 girls/boys including two disabled and nine children having foreign parents: Chinese, Moroccans, Polish, Romanians, and Ukrainians.

Primary school

For the primary school the experience was done by children of third year; this choice was taken due to their intermediate level between the early childhood and the first degree secondary school.

Secondary school

For the first degree secondary school we involved girls and boys from 11 to 14 years old.

For the second degree we introduced the project in the first years of high school for arts (15-16 years old).

How much class time did you need to do it?

Our activity had requested a longer time compared to the one initially forecasted by the group: from September 2007 to December 2007; during the progress we collected the material produced by classes and documented it online¹ so to share it with other partners and with girls and boys of the several schools involved in the path. The time we spent in the class depended on the different grade of school.

How much preparation time did you need?

2 weeks.

How was the class prepared?

During the activities.

What materials / equipment are needed to carry it out?

Recycled material, Lego bricks, wood elements, simulation software and programmable Lego bricks.

What help from colleagues is necessary?

Help to share the project in their course and to share the general goals of the experience.

What hurdles did you encounter in getting started?

None.

What problems did you encounter in carrying it out?

Some problems to explain that we have to introduce science in different way than in secondary school when we teach in childhood and primary schools. Disciplinary teachers involved in the project (physics, chemistry, biology) tend to repeat strategies they use in secondary schools.

Did the project result in any concrete products? (texts, play, protocols, etc.?)

Survey;

Report on all the activities:

http://www.descrittiva.it/calip/0708/teaching_science_in_europe_II.htm

What was the response by students?

Verry good, because they were able to have different points of view of a general topic and they made their own experience with the abstract idea of the bridge and real problems related with the structures.

How was the project evaluated?

With a survey from primary to secondary school.

Was there a way to measure the impact vis-a-vis other types of learning?

Is very difficult to measure competence, so.....

If you had to do this again, what would you change?

We could save more time to manage and to coordinate the project.

Have you/ could you prepare the project to be repeated by other teachers?

http://www.descrittiva.it/calip/0708/teaching_science_in_europe_II.htm

Are there already on-line materials or products that can be used by other teachers who might like to repeat the project?

http://www.descrittiva.it/calip/0708/teaching_science_in_europe_II.htm

In this kind of projects, there is only one step: do and show.... after every day.

If you want to build a real network you cannot wait to close the experience for making a report.

Would they need special training or preparation to carry it out?

No.

ⁱ On line documentation http://www.descrittiva.it/calip/0708/teaching_science_in_europe_II.htm