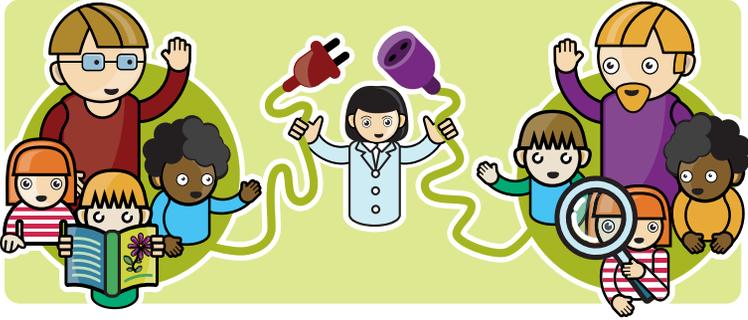


Supporting collaborative projects



What does this consist in?

The aim of collaborative projects is to create links between several classes in different districts, even different regions or countries, and work simultaneously on a common scientific project.

In this context, the scientist can take part in the design of the project alongside teachers or take part as an expert inside the actual classrooms of participating classes. His role is that of a reference. These projects take place over several weeks or even the entire school year.

For projects that involve international exchanges, members of the scientific community can be called upon to relay the project to other schools in their region or country and periodically bring the appropriate scientific support.

A few characteristics of supporting a collaborative project.

- The contact between classes is continuous throughout the entire project: exchange of ideas, skills, tips and results, etc...Internet access in each school is essential.
- Design of the project is conceived by a teachers/scientist team:
 - The scientist can help with the explanation of certain scientific concepts.
 - He provides scientific background for the teachers.

- He provides coherency between the notions treated and the sessions planned.
- During the actual project:
 - The scientific tutor serves as a scientific reference who, whenever possible, regularly visits the classes involved.
- The advantage of this type of collaborative project resides in the fact



Testimony

“Twenty worlds below ground” is the name of a collaborative project devoted to the study of soil fauna which takes into account the diversity of land within the French department of the Pyrénées Orientales. The project was part of the programme Environmental Education for Sustainable Development (EEDD). It was carried out by 18 classes spread out over the entire department. Soil fauna was studied by all the classes, according to an experimental protocol. The necessary equipment (especially non-consumables) was used on a rotating basis by each class according to a pre-defined calendar managed by the teachers. For example, we had around 20 binocular magnifiers (very useful for the observation and description of soil fauna) for 15 classes. Each class could use 6 binoculars for 2 to 3 weeks and then sent the equipment on to another class. All the participating classes had computer equipment enabling them to exchange written information and images. The text exchanges concerned mainly the experimental protocol and tips for overcoming technical difficulties.

Concerning the results, we could observe a difference in the biodiversity of the soils studied. For example, soil heavily impacted by human activity had a low level of diversity with respect to soil fauna. The pupils were able to observe some remarkable results.

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that one scientific tutor centralises and coordinates the progress of work in numerous different classes.

A few guidelines for effective supporting

- Regular interventions via the Internet are decisive in order for the scientific tutor to maintain contact with the classes and promote exchanges between them.
- Exchanges between staff members as well as pooling of equipment and joint activities breathe life into the project.
- Teachers can, within the training sessions or during encounters and exchanges, get acquainted, identify together the project goals, different phases, the role of the inquiry-based approach, media for exchanges between classes, possible difficulties...
- Regular monitoring is necessary as well as an intermediate and final assessment of the project.
- Promotion of the results is achieved by disseminating them through an exhibition (ExpoSciences) a website or book.

Pitfalls to avoid, hurdles to overcome

In general, project logistics (Internet, online help, pooling equipment...) is the main source of difficulties

- Timing between classes: to actually carry out the activities can vary from one class to another and it is sometimes difficult to synchronise exchanges between classes. Do not hesitate to propose a calendar with the main phases and related exchanges.
- Impersonal exchanges: to breathe life into virtual exchanges it is a good idea to promote inter-class correspondence (similar to twinning) even if this remains a marginal activity within the project (description of the school, class organisation, student names...).