



## Where is our water?

A. Colli (1) and G. Spadaro (2)

(1) Italy (luriboni@libero.it), (2) Comune Pavia (crea@comune.pv.it)

C.R.E.A. (Reference Centre for Environmental Education), sponsored by Region Lombardia (Italy), is a reference point for environmental education. Every year different activities and laboratories are offered to Pavia's schools, in collaboration with science teachers in particular with ANISN ones. The wide range of material and techniques in geo and environmental sciences, the speed with which the discipline is developing, and the diversity of the student need a wide range of teaching approaches, including inquiry-, technology-, data-, field-, and game-based activities.

The purpose of teaching is not only to provide students with detailed skills and knowledge, but also to let them develop the capability of critical thinking, dealing with controversial issues in a balanced and sensitive manner. An "active", research-based teaching-learning style to bring young people to reflect and act on issues of vital importance for their future is WebQuest, an inquiry-oriented lesson format in which most or all the information that learners work with comes from the web. In the project Mothership Earth students critically evaluate information they found in the web about geo and environment issues and design actions using the information gathered.

In November 2011 the teachers and the students of a middle school of Bereguardo, a small town near Pavia, decided to realize a WebQuest about ecological footprint. They calculated the footprint of the food they eat every day: they calculated also the water used (water footprint).

WebQuest influenced students' learning performance positively. They discovered that animal food need a lot of water and has a very big footprint, so they decided to change their "diet" to make their footprint smaller. For the future we will implement the project, proposing the realization of WebQuest in outdoor: in real situations, students could acquire much more knowledge and experiences, with the aim to improve their lifestyle.

Every year laboratories about "Water health" are realized by different pupils in Pavia's schools (age 6-18). "Where is our water?" is a book written by CREA collaborators, a useful tool for teachers to engage students in constructing knowledge, skills and values from direct experience with laboratories and practical activities based on experiential learning (learning by doing).

### References

<http://www.waterfootprint.org/>

<http://www.comune.pv.it/site/home/canali-tematici/ambiente-e-territorio/c.r.e.a./>

Dov'è l'acqua...?! Fisica, chimica e biologia, cioè...l'ECOLOGIA nell'acqua" a cura di R. Sconfietti, I. Venzaghi, A. Colli, A. Pistoni, 2004

Impronta Ecologica e Agenda 21 Locale nella Città di Pavia: lo sviluppo sostenibile a partire da noi", dal programma di Agenda Locale 21 di Pavia