



Environment and health: Probes and sensors for environment digital control

CHIARA SCHETTINI

Liceo Statale "G. Mazzini", Naples, Italy (chiaraschettini@hotmail.com)

The idea of studying the environment using New Technologies (NT) came from a MIUR (Ministry of Education of the Italian Government) notice that allocated funds for the realization of innovative school science projects.

The "Environment and Health" project uses probes and sensors for digital control of environment (water, air and soil).

The working group was composed of 4 Science teachers from 'Liceo Statale G. Mazzini', under the coordination of teacher Chiara Schettini.

The Didactic Section of Naples City of Sciences helped the teachers in developing the project and it organized a refresher course for them on the utilization of digital control sensors.

The project connects Environment and Technology because the study of the natural aspects and the analysis of the chemical-physical parameters give students and teachers skills for studying the environment based on the utilization of NT in computing data elaboration.

During the practical project, samples of air, water and soil are gathered in different contexts. Sample analysis was done in the school's scientific laboratory with digitally controlled sensors. The data are elaborated with specific software and the results have been written in a booklet and in a computing database. During the first year, the project involved 6 school classes (age of the students 14—15 years), under the coordination of Science teachers.

The project aims are: 1) making students more aware about environmental matters 2) achieving basic skills for evaluating air, water and soil quality. 3) achieving strong skills for the utilization of digitally controlled sensors. 4) achieving computing skills for elaborating and presenting data.

The project aims to develop a large environmental conscience and the need of a 'good' environment for defending our health. Moreover it would increase the importance of NT as an instrument of knowledge.