

“Touching the air”: a multi-discipline educational project carried out in the middle school by way of a cheap and simple set of meteorological instruments.

C. Iaquinto (1), A. Ronco Villotta (2), M. Michieli (2).

(1) Middle School “Educandato Uccellis”, Udine, Italy (iaquinto@uccellis.ud.it), (2) Lions Club “Udine Castello”, Udine, Italy (adrierrevillotta@yahoo.it - michimari2003@yahoo.it)

This project currently involves 10 middle schools of Udine (Italy), it is fully financed by the Lions Clubs of Udine and it is carried out with the scientific supervision of ARPA-OSMER and of the Unione Meteorologica del Friuli Venezia Giulia. The project “Touching the Air” started from an idea of prof. Velarde (former Rector of the Udine International Centre for the Mechanical Sciences) and it is devoted to the realization of 10 weather stations, one for each school, composed by the following - mainly mechanical- instruments: thermometer, barometer, hygrometer, anemometer (the only digital one) and a rain gauge.

Since October 2005 up to June 2006 (end of the lessons), a group of students for each school partner of the project carried out daily measurements and observations in the school courtyard, acquiring data and processing them by way of graphs and charts. But these meteorological measurements and observations gave to the teachers even the opportunity to start an educational activity that crosses various disciplines, from mathematics to poetry.

All the material collected by the various classes was stored in a single CD-Rom. Apart from the meteorological surveys, the material collected encompasses works on meteorology and climate, works on pollution caused by acid rains, transcriptions of poems, nursery rhymes, games and questionnaires devised by some of the schools and all related to the atmosphere.

One of these schools (Middle School “Educandato Uccellis” www.uccellis.ud.it/meteo) offered part of its web space to display and share the monthly surveys carried out by the schools partner of the project.

The aims of the project are:

- to increase the children sensitivity for the environmental and climatic problems;
- to increase the understanding of the meteorological measurements as well as their degree of “truth”;
- to increase the comprehension of meteorological phenomena;

- to arouse the interest towards atmosphere and its influence on Society and Culture.

Through these practical compared experiences, children have acquired the ability to make questions as well as a proper dictionary of technical terms concerning weather phenomena.

The cross value of this experience has involved not only Natural Sciences but even Maths, Geography, Foreign Languages, Technology, Literature and Arts.

In the next year, because of the interest collected by this project and thanks to the promotional activity carried out by the Lions Clubs of Udine, it will be adopted even by the schools of Gorizia and Trieste.