Peer-tutoring educational experiences about meteorological and climatological issues in Friuli Venezia Giulia (Italy)

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The aim of this work is to present some experiences of intergenerational education about meteorology and climatology issues carried out with school pupils from 6 to 19 years old, through peer-tutoring methodology. These experiences started in 2003 and each year the project involves about 500 students in Friuli Venezia Giulia region (about 8,000 km²) in northeastern Italy.

A group of volunteers (older students from upper secondary school, 17-19 years old) play the role of “tutor”: they receive supplementary training on meteorology and climatology, and then, during students’ meetings and/or public events, they teach younger pupils how to use meteorological instruments (thermometer, hygrometer, barometer, anemometer, rain gages, etc.) and they carry out interactive experiences such as “game-experiments”, to better understand some meteorological concepts, like density of fluids, and some climatological notions, like the effects of climate change with an exhibit that simulates the greenhouse effect.

They also do some meteorological forecasting exercises, using meteorological maps, as if they were actual forecasters. All these activities are addressed to pupils from primary (age 6-11) and lower secondary schools (age 11-14), and both tutors and their younger “apprentices” are not only cognitively, but also emotionally involved in such learning experiences.

As a second step of this educational process, after consolidating the above mentioned peer-tutoring activities, high school students have been actively involved in developing visual tools – e.g. video-clips, interviews and cartoons - in order to communicate climate change issues in the most effective way to younger pupils.

Keywords: meteorology, climatology, climate change, schools, education, communication.