



## Teaching Science with Technology

Svetlana Gornostaeva

Estonia (svetlana.gornostajeva@mjpg.ee)

**ABSTRACT:** This is a short introduction about me, description of different teaching methods, which is used in my teaching practice of Geography, biology and GIS systems education. The main part is tell about practical lesson with lab Vernier.

My name is Svetlana Gornostaeva. I am a geography, biology and GIS systems teacher in Tallinn Mustjõe Gymnasium ([www.mjpg.ee](http://www.mjpg.ee)) and private school Garant (<http://www.erakoolgarant.ee/>). In my teaching practice I do all to show that science courses are very important, interesting, and do not difficult. I use differentiated instruction methods also consider individual needs. At lessons is used different active teaching methods such as individual work of various levels of difficulty, team works, creative tasks, interactive exercises, excursions, role-playing games, meeting with experts. On my lessons I use visual aids (maps, a collection of rocks and minerals, herbarium, posters, Vernier data logger).

My favorite teaching methods are excursions, meeting with experts and practical lesson with lab Vernier. A small part of my job demonstrate my poster. In the next abstract I want to bring a one practical work with Vernier which I do with my students, when we teach a theme "Atmosphere and climate".

**OUTDOOR LEARNING. SUBJECT "ATMOSPHERE AND CLIMATE". WEATHER OBSERVATIONS WITH VERNIER DATA LOGGER.**

The aim: students teach to use Vernier data logger and measure climatic parameters such as: temperature, humidity, atmospheric pressure, solar radiation, ultraviolet light radiation, wind speed. In working process pupils also teach work together, observe natural processes, analyze. Children are working by small groups, 4-5 in each group. Every one should personally measure all parameters and put numbers into the table. After it group observe cloudiness, analyze table and give conclusion "Is at this moment dominates cyclone or anticyclone?".

Children really like this kind of job. Vernier data logger it is really fantastic tool. It is mobile lab. This system give possibilities to easy and fast observe nature process in dynamic. Vernier puts easy-to-use data loggers, sensors, experiments and graphing/analysis software into the hands of students, helping educators develop the next generation of scientists and engineers. You also can do a bit fun with Vernier. For instance, children, who finished their job faster with anemometer can give answer to the question : whom lungs are bigger?" or with thermometer give answer to the question : who has the hottest hands?". Also with thermometer children can draw a rabbit or a mountain. I convinced that Vernier data logger with sensors should be in each school.

### SUMMARY

Personally I am young teacher and do not have a lot of work experience, but I really like my work and do all to share my skills to my students.