Weather station

Countries:	Czech Republic	Republic of Poland
Suitable for grade:	3 - 4	2 - 3
Specialization:	IT	IT, mechatronics
Responsible teacher:	Ladislav Opiol	Opoka Artur

Project description:

ARDUINO collects the data from the weather station sensors (temperature, humidity, pressure, direction and wind force). Visualization on a localcharacter LCD and wwwpage. The partner produces a direction and windsensor, prints a box and otherparts on a 3D printer.

Project tasks:
Student #1 (CZ):
- To select sensors and modules used by the partner
- To build a provisional system
- To programme ARDUINO
- To work with a partner on management algorithms
- To perform simulation tests
- To write documentation bothin English and Czech language

Student #2 (PL):
- To Make the final model
- To Assemble sensors - direction and wind force
- To programme HW tests on ARDUINO (in cooperation with a Czech student)
- To perform final tests
- To write documentation in both English and Polish language

Success criteria:
   The actual data from the sensors are displayed on the LCD or web page.

Developed hard skills:
   Analysis of real problems, use different sources of information, programming in C langure, software configuration, improvements in English, equipment selection, troubleshooting, complex problem solving.

Developed soft skills:
   Communication skills, problem solving skills, creativity, teamwork capability.