Schools - project to measure, visualize and improve indoor climate

The Problem

A good indoor climate is essential for learning and creativity, but also a key element for good health and well-being. Therefore, it is obvious that it is important to secure a good indoor climate in schools, kindergarten ea. The problem is that actual air indoor climate often is quite bad in Danish schools.

A research project from DTU Center for Indoor Climate and Energy (prof. Geo Clausen ea.) documented that the air quality in about 50% of the classrooms was unacceptable, and there does not seems to be any improvement during the last five years.

The minister for education comment the report, with a remark that the conclusions would be stronger, if the collected data came from professional meters.

In Denmark, there is a political ambition that the learning process should improve with at least 10%. Contrary a bad indoor climate can reduce the student's ability to learn with the same amount or more.

The Project

The Danish union for primary school students (Danske Skoleelever) and a private consulting company has establish a project about indoor climate in schools.

The students should measure indoor climate in a number of classrooms with professional meter equipment. A teacher should help and secure that the meter process fulfills professional standards. All data should be published at a Web-site and given to scientific research projects.

As an important part of the project, the headmaster of the school signs an agreement where he/she accepts and supports that the students measures indoor climate, that all data becomes public, that at teacher becomes a part of the project, and that indoor climate and the project results includes in the education.

The Meter device

 The Company IC-Meter (Indoor Climate Meter) has delivered a professional Plug 'n Play concept to measure, analyze and visualize indoor climate (temperature, humidity, CO_2 and noise) and local weather any place on earth. The ICT-concept uses a Cloud solution with smart mathematics to analyze the buildings indoor climate as a response to user behavior.

A feedback concept on smartphones, Web, spreadsheet and an open API makes it easy for all parts to get online and historical information in order to optimize user behavior and improve the design and control of ventilation systems.

Read more about the
School Project   www.skoleelever.dk/index.php/kategorier
IC-Meter concept on   www.ic-meter.com.

Enclosed
./. Folder about the IC-Meter concept
./. Example of an automatic generated report for a classroom, giving statistic for indoor climate for one month.