



Science on the go

One are the days, when schoolchildren used labs for experiments in Physics, Chemistry, and Biology which took a lot of time to master. Times have changed and new technologies are coming in the world of science and education.

A novel way to conduct experiments in schools is set to revolutionise the way science is taught and learnt in schools. Called the mobile science lab, it is designed for classrooms of tomorrow for conducting experiments, including environmental sciences. The technique is based on the present trend of business in the country.

"It is a scientific lab which runs on battery back-up of eight hours and can be charged with generators. It has four probes and a tool for statistical analysis of captured data," says Sushmita Pruthi, Divisional Manager of the School Learning Solutions. These probes can be attached to the projector for presentations in the classrooms etc. "This scientific lab has excess space for saving and capturing real time data for permanent storage of records," Pruthi tells you.

The lab is mapped according to the curriculum of the NCERT and an individual can perform 215 experiments with the same probes. On the other hand, it is equivalent to the palm device and browses data through Wi-fi or Lan connection.

"An individual can perform experiments of light, distance, current, voltage, heat, force etc and biological experiments like recording and interpretation of ECG, transpiration in plants, measuring temperature of patients of different age groups," Pruthi adds.

Apart from this, minor experiments on comparison of carbon dioxide, common gas sources, percentage of gases, release of carbon dioxide, etc are also performed easily. "The lab has 128 MB memory. It can be carried to field trips, classrooms, home, etc for conducting the related experiments of work," says Sanjeev R Pande, President of School Learning Solutions and HIWEL, NIIT Ltd.

The product is designed to bring joy of teaching and learning science in a very interactive and interesting way for students of Classes VI to X. The lab is equipped with all standard applications like Internet, word processing, spreadsheets and e-mail to help students tabulate, record and share their observations during an experiment.

"The lab is a very sophisticated tool which remembers everything," says Viswanathan Anand, who was present at the launch of the mobile lab.

Providing an enriching experience, it also makes available the multimedia data analysis software that includes graphical manipulations, multiple analysis functions and lab reports. The tool is easy to handle and long drawn out experiments are done faster. This small and robust device comes with readymade sensors with a setup of apparatus that has perfect sound systems.

The concept, developed by NIIT and Fourier System, kept in mind that students today want to explore different areas of study and have more clarity and precision in the concept of experiments that goes well beyond the usual mindset.

— Monika Bagga