



## Socrates

This project has been supported by the European Commission, Directorate General for Education and Culture in the framework of SOCRATES: Comenius – European cooperation for the training of school education staff  
226382 – CP – 1 – 2005 – SK – COMENIUS – C21

### FINAL REPORT - ABSTRACT

After this project we clearly see, that majority of problems in science education we should solve are the same across whole Europe. Even if in Slovakia only few schools are equipped with MBL tools, the situation in schools in pedagogy of use, in teacher training and in needs of teaching material are the same as in regions relatively well equipped, such as UK or Finland.

Next, quite startling result arose from our questionnaire – the science teachers across Europe prefer training in use of MBL tools – much more than training in use of internet, presentation software, or modern digital cameras with relevant software. The same situation is in regions well equipped with such tools and in regions low equipped.

One result, quite expected - great majority of science teachers see ICT tools as integral part of equipment for science education. To effectively use such equipment, it should: **1.** be delivered with teacher training and with material for direct use at the lessons (exemplary sheets for students and teachers), the teacher training can be done also before the delivery (optimally 3 months), teacher training for equipment not planned for delivery should be minimized to 1-2 hours **2.** Training should be focused for each – technical aspect of use, pedagogy of effective use and sharing of experiences; **3.** For highly interactive equipment (such as MBL tools, dataloggers, interactive software) the variety of such tools should be minimized within region – the sharing of best examples within teacher community is very important, specially in regions low equipped and with short history of using such tools; **4.** for systems with low interactivity, such as digital microscopes, or videocameras, the outputs must be compatible across schools in region (agreed format).

The impact of this project - it supported collaboration of our universities, it was one of main platforms for introducing MBL tools to schools in Slovakia and as such it set very good level of efficiency (efficiency based on experiences from UK and FI) of investment of schools to MBL tools in Slovakia, it was a platform for effective teacher training in ES, platform for deep study of effective use of ICT tools in FI and UK and PL. There can be seen direct impact to teachers and students in each of partner regions. The results has been broadly disseminated also to other regions of Europe (and also in USA)