



Energiakeskus

Estonia, Tallinn



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Energiakeskus in WP2-Chemistry

- Energiakeskus attends mainly in work package 2: “ Hands-on Chemistry”
- The purpose is:
- to develop innovative **science education method** for school curricula to be used in science centers as well as in schools by providing the best content already **tested in science centres**
- to create **new educational materials** for teaching chemistry by laboratory programs (for grades 1 – 4)

The deliverables of WP2 are:

- **Laboratory program** by month 12 (November 2006)
- **Web-based handbook** for teachers by month 20 (July 2007)

Laboratory programs

Energiakeskus implements **a laboratory program about liquids.**

By that program we demonstrate and explain:

- fluency of liquids in connected vessels, in a system of vessels and under impact of force
- dissolution of matter in fluids
- removal of matters from fluid.
- pressure in fluid.

Linking points to school curriculum

In our national curriculum of natural sciences:

- for grades 1-3 one of the main topics is “Human Senses and Exploring” that includes also liquids
- for grades 4-6 one of the main topics is water and its properties. That topic also includes dissolution of substances

Energiakeskus in training teachers

- Energiakeskus aims to train:
 - **80 in-work teachers** – so far we have trained 11 teachers; in November we'll train 15 more; and other 44 in December and in January
 - **30 teacher students** – we'll train them in December and in January
- Contact persons from other educational institutions are:
 - **University of Tallinn** – Külli Rauk, Leida Talts, Priit Reiska
 - **National Examination and Qualification Centre** – Imbi Henno

Dissemination of project

- Teachers liked the project from the very beginning: humoristic lector; interesting, emotional demonstration
- Some teachers plan to use those and other experiments in their future lessons
- Some teachers discovered an interesting science centre (Energiakeskus) to visit in future
- Most teachers predict the added value of the project for their school very high (5 points)
- Most teachers predict the anticipated usability of the proposed pedagogical approach for their school high (4-5 points)

Dissemination of project

- Most teachers predict the appropriateness of project-related guidelines and/or preparation/training measures for themselves very high (5 points)
- Most teachers predict the pedagogical quality of activities held by teachers and learners within the framework of the project very high (5 points)
- Nobody plans to run an analysis of the related integration costs (e.g. per unit, subject, teacher, pupil)

Thank you !