## ICT-BASED EDUCATION AS A DRIVER OF CHANGE IN LEARNING

Toolkit for creating digital learning materials in schools

STAGE 3 Piloting

## 'Variation is the mother of learning'

It is common knowledge that teaching occurs "in particulars: particular students interacting with particular teachers over particular ideas in particular circumstances", see Reference below: no single strategy or material, e-materials being no exception, will always work in every school, for every teacher, for every student, all of the time.

**Reference:** Systemic vs. one-time teacher professional development: what does research say? Research Note 15. Prepared for Texas Instruments by the Center for Technology in Learning, SRI International, July, 2009.

Retrieved September 17, 2010, from <u>CL9847 Research\_Note\_15 PD.pdf</u>.

## Read more

'Variation is the mother of learning'.

While designing tasks, activities and problems for your students, consider a model of instruction that is based on Ference Marton's insight: 'Variation is the mother of learning'.

In traditional instruction, students solve a number of similar problems or tasks with only one solution possible, and the problems and tasks vary on their surface properties only.

In the variation model, variation is in the different solutions produced by students to a single complex problem or task. Try out the variation model in your DLM and with your students. Read more about this in *From Paralyzing Myths To Expansive Action: Building Computer-Supported Knowledge Work Into The Curriculum From Below.* Yrjö Engeström, University of California, San Diego and University of Helsinki, Finland, <u>Yrjo.Engestrom@helsinki.fi</u>; Ritva Engeström, University of Helsinki, Finland, Arja Suntio,University of Helsinki, Finland.

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