

Massive Using of ICT and Other Technologies Needs Changes in Education Processes.

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Abstract

Education is of continually increasing importance in a modern society that takes full advantage of progress in science and research. This is true both of general knowledge and of the teaching of subjects focusing on specialised fields. Demands on the education of the population are dictated by the economic requirements of society, the complexity of the technologies used and a large number of other effects. New technologies and results of research in Informatics, Communication, Modelling and Artificial Intelligence have opened not only new ways for continuing and self education. It is particularly reflected in the need to tend to teach students methods, tools and contexts rather than specific data, information and figures. In general terms, it is necessary to teach skills rather than data knowledge.

This shift can be seen both in general education at secondary schools and colleges and in bachelor and master degree studies at university. The paper put forward focuses primarily on education in technical fields, though it also considers the impact on the humanities and artistic subjects. The author serves as a professor and rector emeritus at a second biggest technical university in the Czech Republic.