

e-Education – Educational Scenarios, Standards and Tools

(Peter Baumgartner)

e-Education - a notion which is still not very common - in my view includes e-Learning and e-Teaching as two sides of the holistic educational process. In my talk I will present the consequences of such a holistic view:

1.

First of all we have to distinguish between different types of learning and teaching modes: The still very dominant presentation mode is very suitable for factual knowledge, general rules and to give someone orientation. But just presentation is not convenient to teach problem solving and to construct or invent new solutions. For these more advanced modes we need to teach skills that have to be practiced individually and in a social environment. In the so called "situated learning" paradigm the teacher has to provide a rich learning environment but does not have complete control over the learner's interaction and the produced content anymore. A forth type of learning mode is not a learning activity in the common sense at all. Informal learning - sometimes also called accidental learning - is a kind of learning taking place during an advanced work process, which includes research, trying new methods and evaluation of the results.

2.

After we have outlined the intrinsic characteristics of these different teaching modes we have to think about learning environments being able to assist one of these modes adequately and of tools that can be used to create and administer such learning environments. I'll give some paradigmatic examples and talk about the integration of tools like Learning Management Systems (LMS), Content Management Systems (CMS), Weblogs, Webservices, Syndication, Portals and the Building of Learning Communities.

3.

These tools not only have to be integrated seamlessly into educational scenarios, but they also have to be constructed in a way which provides sustainability of the investments, e.g. standardisation has to prevent that technology becomes outdated after a new update of the software and/or hardware, so that the content can be used in different learning contexts and the learner records aren't locked in a special software. I'm talking about on different standardisation initiatives and their pedagogical shortcomings.

4.

In the concluding remarks I will present an approach which tries to overcome the still predominantly technology driven view of e-Education. Instead of choosing tools that fit more or less the desired educational strategy I propose to reverse this process. Let us choose among different educational scenarios depending of the learner's needs and the teacher's preferences and then let us design the necessary educational interaction patterns which best fit the chosen scenario. Only from here - at this fine granular educational interaction level - tools get their real importance: To support and to assist (and not to determine) the educational interaction.