Integration of the L3 Learning Environment into the WiBA-Net Project

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The WiBA-Net Project

WiBA-Net aims to provide a multimedia network platform for the civil engineering and architecture students in different German and Austrian universities. WiBA-Net shall provide a flexible learning atmosphere, in which learners can easily access materials according to their way of learning. Learning can be independent of time and space. The learner can also exchange information with other learners. WiBA-Net is an interdisciplinary project in which several German and Austrian universities are collaborating. Currently, 31 educators provide content for the WiBA-Net, coming from universities in Germany , Austria , Switzerland , Denmark and Hungary . At the Darmstadt University of Technology, the Telecooperation Research Group, Civil Engineering department and the research group on education and technology at the institute for Pedagogy are collaborating.

The L3 Learning Environment

The L3 (*Life*long *L*earning) project [1], funded by the German Ministry of Education and Research as a key project, is a cooperation of twenty organizations for realizing the vision of a technical and organizational infrastructure for lifelong learning. This infrastructure supports efficient, modular, net-based cooperative learning for individual learners as well as for groups. Courses in L3 environment run in learning centers, which are equipped with the latest learning and communication technologies.

L3 is one of the largest joint national projects in Germany using Internet technology for continuing vocational education. The main goal is to provide a scalable platform for vocational continuing learning in Germany . The platform provides a cooperative web-based distance learning environment. It comprises business models of online learning, quality assurance, as well as pedagogic and didactic aspects such as learning-on-demand, flexible learning and collaboration between learners and tutors.

One of the main benefits of L3 is the recommended learning path which is generated dynamically according to learner settings. For this end, L3 incorporates macro- and micro-strategies. A macro-strategy operates on the level of courses and subcourses, ordering them according to the type of view the learner prefers. Two example views are deductive versus inductive. The micro-strategy operates within one learning unit, affecting the sequence of display for the basic learning elements. For example, the learner can choose whether he wants to see explanations before examples or vice versa. Note that the learning path is only a recommendation; the learner can also skip to other parts of the course.

Integrating L3 into WiBA-Net

L3 is used for structuring and presenting the course content of WiBA-Net. We can thus provide adaptable courses to our students, provided that the materials are structured appropriately. The individual content

pages as seen by students are standard HTML and therefore require only a standard Web browser at the client side. The user administration is performed by MTS, developed by our project partners of the Fraunhofer Group.

[1] Thomas Leidig, L3 –Towards an Open Learning Environment, in ACM JERIC Vol.1, No.1