Virtuelle Wissensräume
Ein Ansatz für die kooperative Wissensorganisation

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The WWW developed as the standard for computer based learning. However, as a server-centered approach it confines readers and learners to passive non-sequential reading. Authoring and web-publishing systems aim at supporting the authors' design process. Consequently, learners' activities are confined to selecting and reading (downloading documents) with almost no possibilities to structure and arrange their learning spaces nor do that in a cooperative manner.

This thesis presents a learner-centered – completely web-based – approach of virtual knowledge rooms. Based on this concept, the goal of the presented work is to first develop a theoretical foundation to characterize the design potentials of technology-supported learning processes (distinguishing individual and cooperative primary media functions) and to develop a technical framework allowing us to study different technical configurations for daily use in a university setting. The main design goal of the resulting concept of virtual knowledge rooms is to combine event-based technology of virtual worlds with the classical document management functionalities in a client-server framework. Knowledge rooms and learning materials such as documents or multimedia elements are represented as a fully object oriented model of objects, attributes and access rights. The focus is not, then, on interactive systems for individual access to knowledge bases, but rather on the cooperative management and structuring of distributed knowledge bases.