

Public Abstract
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Design of Learning Objects to Support
Constructivist Learning Environments
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Graduation Term Fall 2005

Most learning objects design has been associated with Instruction Design. Our research instead uses Constructivism as our guideline of learning object design, and our design of learning object is intended to support constructivist learning environments. We develop a generic structure that classifies knowledge into different types on different levels. With a simple generic structure of learning object, learners can easily share knowledge on the Internet, and knowledge can be rendered in various ways according to different patterns. In addition to the patterns rendered, the ease and efficiency of viewing the whole picture of knowledge and zooming into any degree of details at run time allow the learner to learn the material iteratively in different ways according to her current sense-making, setting up her learning strategies at each iteration of her learning. Thus, by putting learning back into the hands of the learner, our system assists the learner to construct knowledge efficiently in the real constructivist learning environment.