

## ABSTRACT

The adaptive hypermedia concept is a solution of the ineffectiveness of traditional hypermedia to present content and navigation according to different user characteristics. In the field of education there is a concept called Adaptive Educational Hypermedia (AEH). There are two models that can be used of traditional in the construction of an AEH system, Dexter and AHAM, which divide the system into several layers. Learning design represents learning and support activity that is run by a different user, for example learner and teacher in the context of the UOL. Instructional Management Systems Learning Design (IMS-LD) is a standard in learning system that represent UoL semantically, formally and easily interpreted by machines. IMS-LD standard is expressive enough to represent some type of adaptation. Interactive problem solving-based adaptation is one type of adaptation which is well-supported by the IMS-LD. Interactive problem solving-based adaptation techniques are show / hiding links, hint, and display error. The testing concluded that the three techniques can be applied to the IMS-LD.

**Keywords:** *adaptive, hypermedia, navigation AEH, interactive problem solving-based adaptation*