

Learning object reusability in e-Learning

Abstract

The Internet has brought drastic changes in the way people work, communicate, and entertain themselves. The Internet is now viewed as the primary medium to facilitate e-learning. Using the Internet and the World Wide Web for e-learning brings many advantages to education providers. E-Learning provides an environment where learners are able to access educational materials anywhere, anytime and at any place. It is much more cost effective and efficient to provide e-learning compared to traditional classroom learning. E-learning over the web is also more convenient since students can access learning materials at any time of the day. Presently, a significant change is taking place in the way e-learning is provided. At the heart of this change is something referred to as a learning object – an item of content, a learning resource, or an entity of learning capable of being reused from one course to another. The content of related courses taught at different schools and universities often tend to be similar. If course content is either partially or completely delivered using learning object, there is great potential for reusing these resources within one organization, and more importantly, between organization. Since the cost of developing the learning material can be shared among its potential users, it is significantly cheaper to make course material available on the Web by reusing resources created by others (Downes, 2001). The most obvious motivation is the economic interest of reusing learning material instead of repeatedly authoring it and also enhances the quality of digital learning experiences (Mohan & Brooks 2003, Duval & Hodgins 2000). Other motivations can be found in the pedagogical area since learner-centric teaching theories invite instructors to use a wide variety of didactic material (Motelet et al 2007). The term Learning Object is one of the main research topics in the e-learning community in the recent years, and most researchers pay attention to the issue of Learning Object reusability (Duval & Hodgins 2003, Motelet et al 2007). Reusable of Learning Object can be achieved if learning materials are broken down into small content units that can be easily handled. Several standards have been developed so far aiming to improve Learning Object reusability and IEEE Learning Object Metadata (LOM) and Dublin Core are among two initiatives specifying a standardized set of metadata that facilitates reusability and accessibility of Web-based learning materials.