Constraints on reusability of learning objects: Didactic aspects of modular e-Learning in engineering education

It is the aim of this paper to discuss some didactic constraints on the use and reuse of digital modular learning objects. Engineering education is used as the specific context of use with examples from courses in introductory electronics and mathematics. Digital multimedia and modular learning objects have been proclaimed as important elements in e-learning for a long time, and there are good reasons to believe in the benefits of interactive multimedia as well as flexible and modular learning objects. Nevertheless the use and reuse of learning objects on a large scale seems to be a slow success. Constraints on reuse arise from the nature of conceptual understanding in higher education and the functionality of learning objects within present technologies. We will need didactic as well as technical perspectives on learning objects in designing for understanding.

General information
Publication status: Published
Organisations: Department of Mechanical Engineering, Solid Mechanics, Office for Study Programmes and Student Affairs, Department of Informatics and Mathematical Modeling, Department of Mathematics, Geometry
Pages: 325-332
Publication date: 2010

Host publication information
Title of host publication: CSEDU 2010 - 2nd International Conference on Computer Supported Education, Proceedings
Volume: 2
ISBN (Print): 9789896740238
Keywords: E-learning, Interactive computer systems, Metadata, Multimedia systems, Reusability, Engineering education
Source: dtu
Source-ID: n:oai:DTIC-ART:compendex/216376023::19514
Research output: Chapter in Book/Report/Conference proceeding -> Article in proceedings – Annual report year: 2010
Research: peer-review