Standards, Technology and e-Learning- A Graduate Course in Education and Computer Science
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The rapid development and acceptance of e-Learning standards by the national governments, world wide commercial training organizations and educators committed to e-learning, demands that the principles and praxis of this complex topic be thought through and taught to both teachers and computer technology graduate students.

The paper describes the process of developing a course jointly presented by the Department of Computer Science and the College of Education at the University of Nebraska in the fall of 2002. It reviews the material taught, the lab experiences required and the visits to the class by industry working in the area of SCORM and SCORM complaisance.

The challenge of the course was to put bounds around a whole new vocabulary that makes up the subject of technical standards, bring in the role of XML as a language used for meta-tagging Learning Objects (so that they can be found when put out on a repository) at the same time making it as simple and complete as possible with as much practical hands-on experience as possible.

Tomorrow’s teachers must be ready for the implications of this major turn in the technology that surrounds the development of course material and courses based in standards. Teachers Unions as well as teachers themselves are aware of the possibility of value contained in the Learning Objects they prepare. Students became convinced that if the LO is not developed in accordance with standards they will not be readily reusable in the many LMS that are available in the world today.

The Learning Object (LO), along with the scaffolding that makes up the surrounding metatags has been the focus of spirited debate and has occupied the best technological and linguistic minds in worldwide technology education. These standards that are still evolving but already cover the LO itself, the assessment component, the instructional design component, the digital rights component and the enterprise-wide interfaces. The student saw these issues through the methods used to develop SCORM compatible LO’s as well as through the observations of companies planning to make a profit from the yet to be certified LO they own.

The role of standards bodies involved, the value and use of XML and the evolution these standards were presented and it was a course premise that the material should be understood by any teacher working in or concerned with e-Learning development.

The courses praxis component reviewed the details behind SCORM, the use of Microsoft’s LRN 3.0 for both LO development and SCORM certification and the contrasting use of ADL provided by Intelldon.
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