A study of the personalized SCORM materials Retrieval system by using semantic and agent technologies- Example of math t

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ABSTRACT

The purpose of this study refers to the essence of SCORM and considers the future development trend to design a search engine, which can search with SCORM's in grade 1-9 math teaching material. The new search engine improves the problem which without semantic search of current k12 while teaching will be imported through the system to find information related to student learning process. It also uses the agents to monitor learner's learning status in order to enhance learner's efficiency. The design of the multi-agents system helps the learners to update the search for their teaching. learners can reduce the information burden when searching materials on the Internet, and combine with the use of Semantic Web includes RDF syntax to construct a semantic search function of e-learning environment. URI, the other standard used to denote entities, concepts, characteristics and relationships between patterns of teaching materials and teaching links. Meanwhile, through the system it enables the learners to save time to search less suited for their current learning materials to improve learning efficiency and use OWL (Web Ontology Language) language to describe the links between materials as strengthening various materials semantic connotation inside the system. There are two aspects in our research result: (1) On the basis of Semantic Web-based search mechanism, the system is able to upgrade from the "String Search" to a "semantic search". Therefore learners can obtain more precise fit with their teaching to enhance learning. (2) A designed prototype system emphasize that the grade 1-9 integration of primary school curriculum materials application that learning cultivated with the reusable objects and shared characteristics.

Keywords : AGENT   SCORM   SEMANTIC SEARCH   RDF

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