Building and Adaptive Learning Mechanism to Assist eLearning Students

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Abstract:
Intelligent Tutoring System has been developed to provide an individualized learning environment in order to prompt learning interests and learning efficiency for online education. In this paper, based on the concept of intelligent tutoring system and educational product function, we establish a distance learning environment where students receive learning contents that best suit their needs. In this environment, we adopt clustering theory by utilizing SOM algorithm in the system and analyze the relationship between students’ personal background, interests and learning result. The workload of instructors is relieved and student’s learning ability and interests are considered in providing adequate learning contents which lead to more effective teaching effect and learning result. The proposed system is applied to the construction of an online 3D virtual museum.