An Approach to Developing Peer Learning by Integrating Tutoring System and Social Network Site

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ABSTRACT

With the popularization of higher education, many universities face the problem that students are very diverse in ability and willingness to learn. In this study, an approach to developing peer learning by integrating tutoring system and social networking site is proposed. An intelligent tutoring system for the course of system software is implemented with the abilities of automatic demonstration of assembly program tracing, algorithm animation for assembler, linking loader and macro processor, automatic problem generation, and automatic diagnosis. While tutoring systems act as social games, social networking site provides channels for communication. A set of missions are designed for students to accomplish. Learning activities are blended with missions. Students must invite classmates to participate in order to accomplish missions. Experiments showed that the approach encourages students learning from each other and therefore getting better understanding of the course content. The students get a sense of accomplishment from completing missions. And, since the exercises automatically generated are unique for each student, it effectively prevents plagiarism.

Keywords: Peer Learning   Preventing Plagiarism   Social Networks   Tutoring System   System Software

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