Abstract

Recently, the growth of web learning system has stimulated the research on adaptive learning opportunity which is suitable to students' need and their preferences. One of those adaptation techniques is adaptive course material sequencing, in which the prerequisite for adaptive material sequencing is recognizing the students' knowledge level. The aim of this paper is to provide web learning system with relatively simple adaptive course material sequencing based on students' knowledge level and students' feedback of material difficulty level. Students' knowledge level is obtained from the analysis of pre-test result, while students' feedback is acquired through questionnaire after they finish a learning unit. After students give feedback, the system then modify the difficulty level of the corresponding learning unit to update courseware material sequencing. Findings of the experimental study showed that the students' effectiveness and achievements in personalized learning mode were higher, in comparison to the non-personalized learning mode.

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