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E-Learning and E-Systems to Facilitate Learning from Marked Student Work

A thesis presented

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Abstract

Heinrich (2004a) first introduced the concept of 'electronic repositories of marked student work' and suggested an innovative approach of learning from marked student work. This research project further develops this e-learning approach.

The learning approach was analyzed in the framework of modern educational theories, especially those relevant to formative assessment. Learning activities that mostly suit this new approach were identified. These activities show a large degree of variation in cognitive complexity and learning effectiveness, and according to their characteristics, can be associated with various learning styles. A range of factors that need to be considered in constructing learning processes based on these learning activities were investigated.

The conceptualization of an e-learning environment to support the approach of learning from marked student work was developed. Three major objectives of developing such an e-learning environment were identified. Based on these objectives the general framework of e-learning from marked student work was outlined.

There were very few applications of this approach in teaching practice and no study has been done on its effectiveness in the practical teaching before this research. An initial learning experiment using this approach was carried out. The effectiveness of this approach was evaluated and various aspects associated with this approach were investigated. To fully support this new learning approach, a web-based prototype system named *E-Repositories of Marked Student Work*, was developed.

This research project developed opportunities for student learning and provided guidelines for teaching staff on how to reuse valuable learning resources in their teaching practice in the e-learning context.

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Publications

Publications related to this research are:

Heinrich, E. & Lu, J.Y. (2005). Opportunities in Learning from Marked Student Work. Paper presented at the Ed-Media2005 World Conference on Educational Multimedia, Hypermedia & Telecommunication, Montreal, Canada.

Lu, J.Y, Heinrich, E. & Fung, I. (2005). An Initial Survey on Student Attitudes toward Working with Marked Examples in the E-learning Context. Paper presented at the International Conference on Computers in Education (ICCE2005), Singapore.

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