The Application of Adaptive Learning Environment on Oxidation-Reduction Reactions Web-Title

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Abstract

The purpose of this study is to set up an adaptive learning environment on Internet and to experiment with the suitable methods and applications. My goal is to provide good suggestions with regard to Internet to the related researches and study. First all research resource are from relative documents from Taiwan and other countries and focusing on the theory of the asynchronous distant education nowadays. Finally, I set up an adaptive Internet learning system based on the theory and the explored learning models. My research targets are on those students who took the ‘Life Chemistry’ course for the asynchronous distant education environment in Providence University in Taiwan. They were further divided into two groups: The experimental group, which was in an adaptive learning environment and the controlled group, which was in a non-adaptive one. I took the ACS test as my research tool and used SPSS to analysis the data I obtained. The results are as follow:

2. After learning in an adaptive learning environment, students who are in an independent environment have shown better achievements.
3. Students with profound knowledge have shown better achievements to be in an adaptive learning environment than those who are not.
4. Male students have shown better achievements in an adaptive learning environment than those of females.
5. Students in Scientific departments have shown better achievements in an adaptive learning environment than students from other departments.
6. Students who study longer in an adaptive learning environment have shown better achievements.

Keywords: adaptive learning, Chemistry education, Distant education.