

A Study on Collaborative Learning Based on Dynamic Group in E-Learning

Jui-Feng Ho, Far East University, Taiwan
Ling-Chin Ko, Kun Shan University, Taiwan

The Asian Conference on the Social Sciences 2017
Official Conference Proceedings

Abstract

The purpose of this study will be to explore best practices for online learning communities. The researchers will dynamic learning groups into learning communities by heterogeneous learners, and learners' profiles, learning style, self-directed, autonomous and achievements. The experiment will focus on the development of learning communities through online discussion. The researchers hope that design new e-learning platform to improve students' learning attitude and achievements in vocational school.

Keywords: Online learning communities, Vocational school, Heterogeneous learners

iafor

The International Academic Forum
www.iafor.org

Introduction

E-learning's dramatic change in information technology (IT) infrastructure has led to fundamental changes in how educations operate and also brought people flexibility, freedom, and equal rights and opportunity to learn. However, not all students could adapt to virtual learning successfully. There are different characters between students in vocational school systems and students in traditional universities in Taiwan. The purpose of this study will be to explore best practices for online learning communities. The systems will dynamic learning groups into learning communities by heterogeneous learners, and learners' profiles, learning style, self-directed, autonomous and achievements. The experiment will focus on the development of learning communities through online discussion. The researchers hope that design new e-learning platform to improve students' learning attitude and achievements in vocational school.

Statement of the Problem

In recent years, e-learning has continued to grow at a tremendous rate in vocational school systems in Taiwan. However, there are different characters between students in vocational school systems and students in traditional universities. General speaking, students' achievements in traditional universities are better than students' in vocational school systems. Students' learning styles cause their barriers to learning, when they take web-based courses. Very few learners have the self-discipline to set their own schedules and complete courses in vocational school systems.

Literature Review

E-learning environments are different from traditional learning environments. Learners need to use different learning strategies, styles, and attitude to fit new learning environments. This section will collect and organize a number of learning styles from the literature. Based on studies of these materials and author' experiences, major factors for students' learning style include (a) Self-directed learning (b) autonomous (c) accept new technology (d) enterprising (e) thinking (Alessi & Trollip, 2001) (f) sharing in order to success in e-learning.

Learning styles

Learning styles refer to the ways people prefer to approach new knowledge or information (Conner, 1993-2005).

Self-directed learning

Howland and Moore (2002) point out that "self-management, self-reliance, and accurate expectations of learner responsibilities are important attributes for successful Internet-based learning experiences" (p. 187).

Autonomous

Drennan, Kennedy, and Pisarski (2005) have discussed “an autonomous learning mode influence student satisfaction with courses presented in a flexible learning mode” (p. 337).

Methodology

E-learning does not fit everyone (Mantyla & Woods, 2001). Learners can learn subjects very well in face-to-face class not mean students can learn in e-learning environments. This purpose of this research was to investigate how to success in E-learning. The authors will design profile and stream systems to monitor the status of heterogeneous learners. The researchers will use a purposeful or random assignment of students to groups in order to produce variety within those groups.

Design Experiment

1. After learners register in a course, the systems will automatically dynamic learning groups into learning communities by learners' profiles.
2. This study will use discussion board to evaluate students' learning output or performances. Learners can rate each other from discussion contents.
3. After three weeks, instructors will check every learning group's output or performances.
4. After six weeks, the systems will combine students' profiles and learning output or performances. The systems will assign learners into different groups again.

Samples

The test will be conducted using students at a southern institution in the Taiwan. The student participants had to have taken more than one Web-based course. Participants in the study will be 40 college students enrolled in a web-based course in the Management Information Systems program at the Far East University in Tainan, Taiwan, R.O.C.

Conclusion

This study is in progress. From this research, the authors want to find out the effects of Web page design with different strategies that are the message area location and the function area location in order to improve Web page design for Web-based courses.

References

Conner, M. L. What's your learning style? 1993-2005. Retrieved August 15, 2006, from <http://www.agelesslearner.com/assess/learningstyle.html>

Drennan, J., Kennedy, J. & Pisarski, A. (2005). Factors affecting student attitudes toward flexible online learning in management education. *The Journal of Educational Research*, 98(6), 331-338.

Howland, J. L. & Moore, J. L. (2002). Student perceptions as distance learners in Internet-based courses. *Distance Education*, 23(2), 183-195.

M. Faisal, and K. Munir, SS-Stream: Single Scan Algorithm for Maintaining Patterns over Data Streams, Proc. of ELML-PKDD the 2nd Int. Workshop on Knowledge Discovery from Data Streams, pp. 17-26, 2005

Contact email: hojuifeng@gmail.com