THE EFFECTS OF INTEGRATING SELF-REGULATED LEARNING STRATEGIES WITH WEB PROJECT-BASED LEARNING ON STUDENTS' LEARNING ACHIEVEMENTS

[1]YUAN-CHEN LIU, [2]TZU-HUA HUANG

[1]National Taipei University of Education, Taipei, Taiwan (R.O.C.),
[2]University of Taipei, Taipei, Taiwan (R.O.C.)
E-mail: [1]liu@tea.ntue.edu.tw, [2]anteater1029@gmail.com

Abstract- E-learning is a general trend in the world. Many studies point out the importance of using self-regulation strategies in an E-learning environment, but rare of them mentioned the significance that using self-regulation strategies in the web project-based learning progress. The aims of this study were to construct a web project-based learning with self-regulation strategies system (WPLSS), and to investigate the effects of using WPLSS in an E-learning environment on students' learning achievements. To explain how qualitatively different between two groups, this study used quasi-experimental design. There are fifty-seven students in two fifth-grade classes were assigned to the experimental group and the control group. The experimental group was employed in WPLSS, and the control group used traditional instruction with self-regulation strategies in an E-learning environment, the experiment lasted for six classes in four weeks. Every class period was 40 minutes. The work scores were taken as the students' learning achievements, and the self-regulated learning questionnaire was used. Results showed that the learning outcomes of using WPLSS were significantly better than the control group. Furthermore, the ability of self-regulated learning could predict the learning achievements in the experimental group. This study proved that WPLSS have a positive effect in students' learning achievements in web project-based learning progress. It's a revelation in the instruction transform that instructor could use self-regulated strategies in web project-based learning to assist students to monitor their learning progress and further remotes the learning effectiveness of students.

Keywords- Web project-based learning, Self-regulated learning, Learning achievement