

Abstract

The integration of theory and practice is a great concern in computer instructions, in which students are required to solve different issues in their daily lives by applying information technology. However, through instructions, the researcher finds that students always consider learning computer technique as an operational subject. Students believe, as long as they firmly remember every operation step the teacher instructed and finish all the assignment, they can accomplish the study goal. Therefore, students may limit their study to the classroom only, instead of connecting their study with their daily lives, and their creativity surely will be bound. The researcher would like to introduce the collaborative project-based instruction method into the teaching and thereby analyzes if students' study effect can be advanced.

The researcher adopts the standard experiment research method in this research and applies this research to students from four classes of the third grade of the junior high school. In the content of this research, the researcher devises four instruction plans (2 months respectively) including traditional teaching with individual study method, traditional teaching with group study method, traditional teaching with Project-based learning method, constructive teaching with Project-based learning, for the subject of webpage design. In which, adapted computer-using attitude measurement, webpage design assessment adopted as the measuring device. The Means Report, Paired-samples t-test, ANCOVA and interviews are used for the analysis. The purpose of this research is, through applying the collaborative project-based study in computer teaching, to analyze if students' study attitude can be progressed and if their study achievements can be advanced.

Through the experiments and the data analysis, the conclusion is as follows:

1. By comparing the four different teaching methods, it is found that, by applying the constructive teaching with Project-based learning, student using computers' attitude cannot be advanced significantly, but obviously, their confidence in using computer can be advanced significantly.
2. By comparing the four different teaching methods, it is found that, by applying the constructive teaching with Project-based learning, students' webpage design study effect can be advanced most significantly.
3. Among the four different teaching methods, only the constructive teaching with Project-based learning students' computer attitude and webpage design study effects are directly interrelated.

Keywords: Project-based learning; computer teaching; computer-using attitude, webpage design study effects.