ABSTRACT
This study aims to investigate the effectiveness of integrating information technology into mathematics teaching on the learning achievement, delayed retention and learning motivation. This study also tries to understand students' attitudes and learning status by survey and interview methods. This study adapts the topic of series and arithmetic series of the second grade mathematics courses in a junior high school as the teaching content. The participants are two groups of second graders in a junior high school in Nantou county. One is the experimental group while the other is the control group. The experimental mathematics courses lasts for three weeks and this study adopts different teaching methods for these two groups. The results show that the teaching method of integrating information technology into teaching makes students have significantly better learning motivation than traditional teaching method. However, there is no significant difference in their effectiveness on students' learning achievement. There is also no significant effect on students' delayed retention. The finding that the teaching method of integrating information technology into teaching makes students have significantly better learning motivation may result from novelty effect. This study suggests that teachers can apply information technology integrated instruction more to enhance students' learning motivation and make students learn mathematics by doing and the memory can be retained as well.

Keywords : Integrating Information Technology into Instruction、Tablet PC、Mathematics、Learning Motivation、Learning Effectiveness、Series and Arithmetic Series
中文文獻：
