

Abstract

The purpose of this research focuses on the learning effect, learning interest, learning attitude and classroom atmosphere induced by integrating information technology into geography instruction in senior high school; so as to provide suggestions and as a reference.

The study was a quasi-experimental research. The design of this research was based on Nonequivalent pretest-posttest control group design. The subjects were students in two Form one classes selected from a senior high school in Macau. According to the curriculum degree of course progress, the experimental group was treated with a learning cycle teaching activity of integrating information technology into instruction, while the control group received the traditional instruction only. The study collected quantitative and qualitative data in students' learning processes. The qualitative data of students' responses was obtained from Classroom Observation, Teacher's Teaching Diary and Semi-structured Interview. The quantitative data included students' test achievement and Attitude Questionnaire in order to obtain a better understanding between the two groups.

Through around 4 weeks, the major findings of the research were as follows:

1. Integrating information technology into instruction had obvious help to raise interest the learning interest and the learning attitude of students.
2. Integrating information technology into instruction provided a more relaxing class learning atmosphere than the traditional instruction did, and induced more interactions between the instructor and the students as well as the students among the students.
3. Integrating information technology into instruction, although could help understand more easily geography concept, the student still neglected thinking and understanding towards the contents.
4. Integrating teaching with information technology, although could raise the learning interest in the class, but there was no help in raising the students' passion in geography.
5. The research found the usage of the teaching strategy had more influence in a student's learning attitude and class atmosphere more directly than the tools used in integrated information into instruction.

According to the above study results, this research puts forward some suggestions to provide a reference to related personage and later studies: 1. Expand the software and hardware resource, decrease the person-machine ratio. 2. Construct a teaching database, help relieve a teacher's burden. 3. Speed up the teacher training process, making the teacher have basic information literacy.