Abstract

Concepts are abstract units of thought and constitute most important basis of the teaching process. Students’ pre-instructional knowledge about any subject before coming to class affects their learning to a great extent. Accordingly, new learning takes place as a result of the interaction of old and new information. When teachers provide instruction on concepts in various subjects, they are teaching students who already have some pre-instructional knowledge about the topic. Students’ knowledge, however, can be erroneous, illogical or misconformed. These erroneous understandings are termed alternative conceptions or misconceptions. It is very typical for students to have misconceptions in different content knowledge areas. Moreover, some concepts are very difficult to grasp. The term “information technology” is enough to induce panic in some students because the lexicon associated with computers and information technology tools are often difficult to grasp. Therefore, the purpose of this research is to investigate middle school students’ misconceptions on Information Technologies and Coding course. The method used in this research was survey research and is intended to reveal the current status of students regarding misconceptions on the given course. The sample of this study consisted of 112 sixth grade students who were attending a middle school in the city center of Isparta, Turkey. In this research, 3-stage 18-item misconceptions test was employed to determine the misconceptions. The results revealed that middle school students’ misconceptions were categorized under three themes. These were “desktop publishing tools”, “storage tools” and “operating Systems”. It was also found that there are no significant differences between male and female student on misconceptions. Furthermore, there were significant low level positive correlations among the several misconception levels.