Comparison Group

Ömer Delialioğlu
Berkan Çelik
Amine Hatun Ataş
Middle East Technical University
Computer Education and Instructional Technology

Abstract

The aim of this study is to compare course engagement for vocational education students who enrolled in the Cisco Networking Academy (CNA) courses and who took the network courses from the standard vocational education curriculum in Turkey. The comparison group was established in a way that students in both groups had very similar characteristics. The data were collected using a survey throughout 2 separate school years. The participants are 2793 vocational education students (Cisco Group=1373, Non-Cisco Group=1420). Engagement was measured with 7 constructs, which are active learning, collaborative learning, interaction with instructor, student effort, feedback, satisfaction, and personal development. The instruments were validated through a series of instrument validation steps. First, the original items in the instruments were reviewed by a panel of experts, and then a pilot test was conducted on high school students. A factor analysis was run to identify items grouped under the same construct and unrelated items were removed from the survey. The data were analyzed using descriptive statistics and Independent Samples t Tests after satisfying necessary assumptions. The results indicated that Cisco students in both years of the study scored higher than non-Cisco students in all engagement constructs. All differences were significant between Cisco and non-Cisco students. Comparing within the student groups, Cisco students showed somewhat consistent picture in both years. With the exception of active learning, collaboration, and satisfaction, all measured constructs were in similar scores whereas non-Cisco students showed significant decreases on all engagement constructs. What factors might be influential on engagement and implementations are discussed.

Keywords: engagement, course engagement, student engagement, vocational education, Cisco, Cisco Networking Academy, vocational high school students