

Experience, Perceptions, Attitude and Intention to Use Information and Communication Technology (ICT) by First Year Students: The Case of a South African University

Abstract

It is increasingly becoming important for students to have a good command of technology for them to succeed at higher institutions of learning (Calderhead, 2011; Brown & Czerniewicz, 2010). However, there are still inequalities that exist in democratic South Africa. This may challenge the academic performance of students from various backgrounds who come to the university with a lower level of Information and Communication Technology (ICT) skills. This study investigated the first-year university students' perceptions and experience, attitude and intention to use Information and Communication Technology (ICT) to access learning at the University. Nine Thousand One Hundred and Ninety-Five (9195) first year university students were involved in the study. The researcher used a quantitative method research design, followed by qualitative findings which were used to complement the quantitative results. Even though most first-year students had a positive attitude towards the use of technology at the university, the majority of students did not feel self-efficacious in the use of personal computers (PC) and online tools. Therefore, as means to get a better understanding of each student's skill set, an ICT competency test was administered. Students who did not pass this competency test were required to attend digital literacy training. Many students lacked the confidence to even attempt the test and opted to sign up for computer literacy training.

About 70 % of the students who participated in the test before training scored below the set score of 80%. The researcher and team, then provided them with Digital Skills for Students training including skill sets for the university's Learning Management System (LMS). After we trained the students, we again administered the post-test to observe if there were any changes. The post-test showed a significant average increase of 30 % in students' ICT competency skills. It, therefore, became clear that inasmuch as today's first-year university students are known as digital natives, they still require the training on digital tools for them to succeed at the university. The results also indicate that these students gained positive attitudes after acquiring digital skills for learning, altering their perceptions of technological knowledge. The usefulness of these digital tools, as well as ease of access, are significant predictors of student's acceptance and intention to use ICT for learning.