

**Can technology assist the disadvantaged student?
A case study at University of Limpopo**

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Abstract

The overwhelming majority of students entering the Historically Disadvantaged Institutions (HDIs) of Higher Learning in South Africa have not had any exposure to ICTs (computers) when they first start their education. This study examined the level of students' ICT use and the extent that it was influenced by their cultural and motivational background. It then examined the instances where academic performance could be attributed to ICT use.

While the role of technology was clearly found to be of vital importance, its impact on academic performance was manifested only when ICT use is encouraged through academic programs. The mere use of ICTs or the length of student experience with ICTs did not show a demonstrable difference, in most cases, in terms of academic performance. In particular, the use of the Internet, email and online search were found to influence academic performance when encouraged by the academic community.

Intrinsic, extrinsic and self-efficacy motivation were tested using the Motivated Strategies for Learning Questionnaire (MSLQ) and were found not to be predictors of academic results as anticipated by the literature. However, strong evidence for self-directed learning in disadvantaged students was found where ICTs are used in pursuit of their academic goals. The study showed that the students despite their lack of ICT background were highly motivated to acquire the required skills and use them when needed. Off campus access was shown to be problematic, and, unless special provisions are made to compensate for this lack of access, disadvantaged students' full academic potential will remain unrealized.

Key Words: Disadvantaged students, Culture, Motivation, Technology, Academic performance, ICTs, Intrinsic, Extrinsic, Self-efficacy.

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