

Dissertation Title: An assessment of the impact of Information and Communications Technology solutions on education of visually impaired learners in Zimbabwe: A case of the visually impaired at UZ and ZOU.

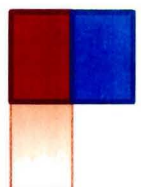
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ABSTRACT

The research sought to assess the impact of information and communication technology on the education of the visually impaired learners at tertiary institutions namely University of Zimbabwe and Zimbabwe Open University. The key objectives of the research were to assess the needs and expectations of visually impaired students in using the available information and communication solutions, to assess the impact of information and communication solutions in education of the visually impaired at UZ and ZOU, to assess difference in learning opportunities between the visually impaired and the sighted students at the institutions and to propose an information and communication technology in education assessment model. Questionnaires, interviews and focus groups were administered to collect primary data from the respondents and the secondary data was collected from the respective university administrations to support the gathered primary data. The following research questions were asked; what are the current opportunities available for the visually impaired in tertiary institutions? Which ICT solutions are available to students? What challenges are being faced by visually impaired students in these ICT technologies? What further enhancements are required by the students to meet their unresolved challenges technically? Action research methodology was used to gain answers to these questions to come up with a proposed model that the institutions can implement to address challenges faced by the student by evaluating the information and communication technology solutions. The research offered the following null hypothesis; visually impaired students have equity opportunities with sighted students and the alternative hypothesis is visually impaired students do not have equity opportunities with sighted students. It was hypothesised that visually impaired students have equity opportunities with sighted students using the one tailed hypothesis testing. The findings also show that information and communication technology uptake is linked to accessibility, availability and frequency of use. The higher the uptake the more beneficial the technologies are. The research also showed that lack of policies and enforcements affect the uptake of information and communication technology in education for the visually impaired whilst cultural and social beliefs have an unmistakable influence. Lastly, the research brought to light the challenges that the available technologies have in delivering information such as failure to read tabular data, scientific data as well as not being user friendly.