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PRESENTING THE ACCESSIBILITY OF CAMPUS COMPUTING FOR STUDENTS WITH DISABILITIES SCALE

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The infusion into the curricula of instructional technology and the investment in IT infrastructures are two ongoing trends taking hold on higher education campuses in North America. An important aspect of this implementation is ongoing evaluation of how well these technologies are meeting the needs of students, faculty and other members of the campus community. The challenge is that there has not been any evaluation tool that reflects the current state of IT on campus with a focus on accessibility.

One difficulty in conducting institutional evaluation of the accessibility of campus computing to students with disabilities has been a lack of suitable assessment instruments. There have been several studies which evaluate the campus computing needs of postsecondary students with disabilities both in the U.S. (e.g., Jackson et al, 2001) and Canada (e.g., Killean & Hubka, 1999) that dealt, at least in part, with the views of professionals who provide on-campus disability-related supports in higher education around access to campus computing. However,

none of these have developed a valid, easy-to-administer self-evaluation tool geared specifically toward examining the accessibility of campus computing. Nor do any reflect the evolving nature of campus computing today.

It was only when we turned to the non-disability literature that we found work which had a specific focus on assessing the current state of campus computing (U.S.: Green, 2001; Canada: Campbell, 2001). Such measures, however, do not include indicators that measure aspects of access to campus computing for individuals with disabilities.

Present Investigation

Here we developed and validated a tool to evaluate the accessibility of campus computing for students with disabilities to be used by professionals who provide disability-related supports on campus. The measure had to meet a variety of criteria: easy to complete, adaptable to the changing landscape of campus computing, provides meaningful findings.

Accessibility in this context refers to a range of situations such as: are there computers with adaptive technologies on campus in general use computer labs (e.g., software that reads what is on the screen, adaptive mouse); are personnel who provide services to students with disabilities on campus consulted when computer infrastructure decisions are made; do computer-based learning materials used by faculty meet accessibility guidelines (e.g., course web pages).

In exploring institutional accessibility, one question predominates: What are the important aspects which make educational institutions technologically accessible to students with disabilities?

Method

Participants. 156 Canadian postsecondary professionals responsible for providing services to students with disabilities participated (110 females, 46 males). 96 worked in a junior/community college, 58 in a university, and 2 in distance education institutions. Participants had worked an average of 9 years providing services to students with disabilities. Overall participation rate was 80%.

Procedure. Recruitment was carried out by contacting all member institutions of the Association of Universities and Colleges of Canada and the Association of Canadian Community Colleges. Interviews were conducted by telephone during the spring of 2000.

Item content. The 19 6-point Likert scaled items which comprise the scale inquire about the situation at the respondents' institution, campus or sector and evaluate the adequacy of campus based: computer technologies, resources, training, policies, personnel, services and

the adequacy of rehabilitation sector support to meet the needs of students with disabilities. A key criterion item used for validation inquired about how well, overall, the computer and/or adaptive computer technology needs of students with disabilities are met at the respondent's institution. The scale is scored for 4 subscales: Access To Adaptive Computers, Infrastructure And Collaboration, Academic Inclusion, And Adaptive Technology Competence. The Accessibility Of Campus Computing For Students With Disabilities Scale and scoring instructions are available at <http://adaptech.dawsoncollege.qc.ca/pubs/accdsse.doc>

Conclusions

The investigation (1) provides a scale that has demonstrated reliability and validity for the evaluation of the accessibility of campus computing for students with disabilities, and (2) underscore the concept that good access to campus computing is a matter of good support systems in place to help computer users, a firm commitment to accommodating special needs of students, and keeping up-to-date with advances in technology.

The answer to our underlying research question, "What predicts how well the computer related needs of students with disabilities are met on campus?" is undoubtedly a combination of many variables, many of which have yet to be explored. Nevertheless, the present investigation suggests that our 19 item scale provides an important part of the answer to this question and suggests that the most likely predictors of how well the computer related needs of students with disabilities are met are the concepts embodied in the four subscales.

The ACCSDS has a variety of attractive features. It is a single page long, is designed for self-administration, and is available in both French and English (Fossey, et al, 2001). Scoring is simple. The measure could be administered at various times as major modifications are made to campus computing infrastructure. As the first step in addressing the evaluation of computer accessibility to students with disabilities in postsecondary education, the ACCSDS fills an important void. The ACCSDS would however, benefit from additional validation and norming. We are interested in hearing from individuals who wish to collaborate with us in doing this.

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