

Which forms of eLearning are Accessible to Canadian Postsecondary Students with Disabilities?

BY JENNISON ASUNCION, CATHERINE FICHTEN AND MARIA BARILE

For over three years, the Disability and Information Technology Research Alliance (Dis-It <http://www.dis-it.ca>) has been conducting research where the goal has been to assure that Canadians with disabilities are not excluded from innovations and emerging IT.

As part of this alliance, the Adaptech Research Network, which is based at Dawson college, along with our team of researchers and partners from across the country have been examining the accessibility of eLearning to Canadian college and university students with both visible and invisible disabilities. For the purposes of our research we defined eLearning as the range of information and communication technologies that professors use when teaching their courses in the classroom, online, or a combination of both. Examples include PowerPoint used in the classroom, online tests, CD-ROMs, and WebCT. In the same way, we defined accessibility as the ability of learners, regardless of their disability, to easily and independently use eLearning

Using bilingual, online surveys, we have collected and are now in the process of analyzing data from a convenience sample that is comprised of:

- 245 Canadian college and university students with disabilities who have taken at least one course in the last three years where the professor used some form of eLearning;
- 39 college and university professors who have taught at least one student with a disability during the last three years in a course where they used some form of eLearning;

- 77 staff who provide disability-related services at Canadian postsecondary institutions; and
- 45 individuals who support/implement eLearning at Canadian postsecondary institutions, including VPs and managers of distance education and instructional technology departments; persons who train faculty to use technology; designers and developers of eLearning on campus.

While we are still busy analyzing the data, we wanted to share some initial findings from our student sample. The 245 students who completed the online survey were enrolled in Canadian



colleges and universities and represent nine of ten provinces. There were no students from either Prince Edward Island or the Territories. Students were instructed to indicate all of their disabilities/impairments. The most common disabilities/impairments that students declared were:

1. Learning disability (42%)
2. ADD/ADHD (20%)
3. Psychological / psychiatric disability (16%)
4. Mobility impairment / wheelchair user (16%)
5. Health or medically related impairment (15%)

It is worth noting that almost half of the students (44%) indicated having more than one disability/impairment.

What are the most and least accessible forms of eLearning for students with disabilities? When we asked students to rate the level of accessibility of specific forms of eLearning that they encountered in their courses, the top five most accessible types as rated by all students in the sample were:

1. eMail;
2. course-related files in Word, PowerPoint etc.;
3. WebCT, BlackBoard, FirstClass or other course/learning management system;
4. course web pages; and
5. in-class presentations using PowerPoint.

Conversely, the least accessible forms of eLearning were:

1. videoconferencing;
2. live online voice-based chat (speaking and listening);
3. audio clips / files (e.g., recorded class lectures);
4. online content that uses Flash; and
5. CD-ROM tutorials used in class or computer labs.

It goes without saying that the rankings are different for students with different disabilities/impairments. For example, the most accessible form of eLearning for students who are blind was course-related files in Word, PowerPoint, etc. and the least accessible was PowerPoint presentations viewed online using a browser.

As we complete analysis of the data we will be publicizing the results widely. In the interim, Sylvia Currie, community coordinator for ScoPE (an online community supported by the Learning and Instructional Development Centre at Simon Fraser University) has generously provided us with a virtual place to discuss issues of and exchange information on eLearning accessibility and learners

with disabilities on an ongoing basis. We invite you to visit <http://scope.lidc.sfu.ca/course/view.php?id=29> and join the discussion. It's absolutely free to join.

Jennison Asuncion, Catherine Fichten and Maria Barile are with Adaptech Research Network in Montreal. To learn about the Adaptech Research Network, including other research activities visit <http://www.adaptech.org>