

8

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Accessibilty and Students with Disabilities

L'accessibilité et les élèves handicapés

Notre équipe examine plusieurs façons d'améliorer l'accessibilité à l'éducation, particulièrement au niveau postsecondaire. Nous croyons que de prêter attention aux facteurs obstacles et aux facteurs facilitants qui influencent l'accessibilité de l'appren-tissage comme la qualité du matériel didactique et les conditions d'apprentissage — accroîtra la sensibilité envers les besoins de tous les apprenants. De plus, étant donné le pourcentage grandissant d'étudiants de niveau postsecondaire qui sont touchés par une forme ou une autre d'handicap (visuel, auditif, neurologique, psychiatrique, problèmes de mobilité, d'apprentissage, de santé, etc.), la question de la conception pédagogique universelle n'a jamais été aussi cruciale. Les technologies de l'information et des communications (TIC) peuvent améliorer de manière significative l'accessibilité pour les étudiants : nous avons découvert que les étudiants de niveau postsecondaire qui présentent des invalidités peuvent utiliser efficacement les TIC afin d'obtenir le même taux de réussite que leurs pairs sans handicap. Une grande part de notre engagement consiste donc à faire connaître ce potentiel aux éducateurs et aux concepteurs pédagogiques, par la dissémination de nos résultats de recherche.

ur theme examines ways to improve accessibility in education, particularly at the postsecondary level. We believe that attention to the obstacles and facilitators to accessible learning – such as the quality of educational materials and learning conditions – will lead to a greater sensitivity to the needs of all learners. Furthermore, considering the growing percentage of postsecondary students who are affected by some form of impairment (visual, hearing, neurological, mobility, psychiatric, learning, health, etc.), universal instructional design has never been more critical. Informational and communication technologies (ICTs) have the potential to significantly enhance accessibility for students: we have found that postsecondary students with disabilities can effectively make use of ICTs to succeed at the same rate as their non-disabled peers. A large part of our undertaking is therefore to communicate this potential to educators and instructional designers, through the dissemination of our research findings.

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(continued on pg 10)

Anthony Tibbs began his work with CSLP through his involvement with the Adaptech Research Network, more than a year ago. He says he has found his experience working on CSLP projects — such as his involvement in the CSLP's 2007 Research and Technology Fair and his collaboration on research into eLearning and use of ICTs at the postsecondary level — "highly rewarding". Under the direction and guidance of **Catherine Fichten**, he has assisted with technical aspects of coding and data analysis, and has learned a great deal about research methodologies and processes along the way: "I believe that this experience and exposure to the methodologies and processes used in research and statistical data analysis will allow me to more fully understand the meaning and implications of data and information reported by other researchers in the future."

> Natalie Martiniello has found that her work on CSLP-related projects over the past year has been extremely valuable in terms of the knowledge and expertise which she has gained. She was responsible for the coding process on a national research project aimed at pinpointing the negative and positive effects of eLearning and ICTs on post-secondary students with disabilities, and had the opportunity to present some of the preliminary findings at the 9th International Conference on Low Vision in Montreal this past July. Martiniello thanks **Catherine Fichten** for being an excellent mentor and resource person throughout the research process, who "continuously stressed the value of collaboration, while encouraging independent work and self-learning." Martiniello says, "The opportunity to work on this project, and to present at the Vision 2008 conference, has provided me with the skills and motivation to pursue my own research interests in the future."

10



(continued from pg 8)

Using bilingual questionnaires, archival and qualitative research methods, structured interviews, and focus groups, we develop appropriate testing instruments for collecting and analysing user-data. We then disseminate our findings to end-users: educators, students, campus disability service providers, policy-makers, faculty, and others. In the past year, we have been busy with an ongoing study, funded by PAREA, of standardized college exit grades of graduates with and without disabilities; we are examining the relationship between exit grades and perceived academic obstacles and facilitators. With the help of the Canadian Council on Learning, we have also been working on an accessibility study of campus-based software and hardware, involving over 1000 Canadian college and university students.

We were fortunate this year to have the participation of three students — **Natalie Martiniello**, **Anthony Tibbs**, and **Jill Budd** — through our summer internship program. **Martiniello** and **Tibbs** were accompanied by their guide dogs, **Sherby** and **Rhodes**, who have proven exemplary honorary Adaptech Research Network members. At weekly team meetings, students and team members presented aspects of their ongoing projects (while Rhodes was absent for these meetings, **Sherby** participated with the occasional snort, grunt, or grumble). Our work area was pretty crowded, but we were able to accomplish a lot, and we are grateful for the students' contributions to our ongoing projects.

We are looking forward to some exciting opportunities to share our findings in the coming year. As a result of their strong research work, **Martiniello** and **Budd** will present at Vision 2008: The 9th International Conference on Low Vision. At the same event, **Tibbs**, who has made important contributions to ensuring the accessibility of the new Dawson College website for science students, will present on his work with the Alliance for Equality of Blind Canadians. **Rajesh Malik**, **Catherine Fichten**, and **Jennison Asuncion** will present at eINDIA, the fourth annual Information and Communication Technologies 4 Development (ICT4D) Forum in New Delhi. For the upcoming 21st World Congress on Rehabilitation, theme members have organized a symposium, entitled "College and University Education for Individuals with Disabilities: A Formula for Success"; **Maria Barile**, **Shirley Jorgensen**, **Alice Havel**, and **Joan Wolforth** will be presenting. \blacklozenge

✿ Antonia Arnaert, Luc Bonneville, Frank Ferrie, Fichten, Jeffrey S. Hoch, Tom Hutchinson, Mark Yaffe, Jaroslav Prchal, Justine Farley, and Annie-Claude Nadeau were awarded a three-year St. Mary's Hospital Center grant for their project, "Development and evaluation of a tele-homecare platform for patients with cancer and their family caregivers. ➡ Fichten and Genevieve Lefebvre — in collaboration with Lucie Germain, Julie Lagacé, Daniel Rock, Gerard Fontaine and Ghislaine Prata — have completed their study on telerehabilitation and are in the process of publishing the results ("Videoconferencing and wheelchair positioning in a bilingual context") in Recherche interdisciplinaire en réadaptation: Défis techno-logiques dans les domaines de l'éducation et de la santé-théoriques et cliniques, vol. 3.