Students with learning disabilities in college -
how information and communication technologies can help

Many high school students are unaware they have a learning disability (LD) and only experience problems when they enter college or university, where reading loads are heavier and students are expected to do substantial amounts of writing. Both general use and specialized information and communication technologies (ICTs) can help.

ICTs have the potential to help and enhance the academic success of all students, including those with LD. Some students do not use specialized ICTs because they are unaware that they have a LD; others because their high schools and/or learning/tutoring centers did not include ICTs in their programs. Thus, many students first learn about ICTs from their college's disability service provider.

We recently completed interviews with 58 experts: those with excellent knowledge of both LD and ICTs. This included students with LD who are highly skilled users of ICTs. They told us the main advantage of ICTs for college students with LD is that they support academic success. For example, the experts said that ICTs can improve the quality of students' work, including their grammar and spelling, help students edit their work more effectively, contribute to becoming better organized, assist students to more easily comprehend what they read

The Adaptech Research Network study is inspirational to those who wish to see students with disabilities succeed.

and, in general, allow them to acquire more skills and techniques for effective learning. ICTs were also seen as helping students work more independently so they have to rely less on others to complete their academic work. ICTs were also perceived as "leveling the playing field" by allowing students with LD to work at their own pace, function on a par with their peers and achieve grades which more accurately reflect what they have learned. In addition, many of the experts noted that ICTs increased students' self-confidence and motivation, and decreased their stress levels.

ICTs That Can Be Useful to Students

Our findings show that the most popular ICTs to help students were multipurpose, general use software, like Microsoft Office, and specialized ICTs such as Kurzweil, Wynn, and Médialexie (this works in French only). These products allow students to do a variety of things, such as have text read aloud to them, render paper documents into editable digital text, highlight and colour code words and key concepts, access dictionaries, and the like.

Software that assists students with writing, including Antidote (works in French only) and WordQ, were also popular. WordQ is word prediction software that assists students with spelling by giving them choices from a list after they begin typing a word.

Dictation (voice recognition) software was also seen as useful for students with LD, Dragon Naturally Speaking being the most frequently mentioned. This allows students to dictate rather that type text.

Screen reading software, which reads digital text aloud, was also a popular option. The free version of ReadPlease was mentioned in this context. This type of software allows students to listen to their textbook and course materials. Some even allow students to save the voice file to MP3 which they can then take with them on an iPod or other MP3 devices.

Scanners with optical character recognition (OCR), which allow students to convert paper documents into digital text (e.g., OmniPage), were also mentioned as was mind-mapping software such as Inspiration. This type of software helps students organize their ideas with the help of concept maps which allow users to graphically see links among ideas.

One Size Does NOT Fit All!

We suggest that students try out different types of ICTs to see what works for them. In many cases there are free demo versions of the software for students to try. A listing of some of the ICTs noted by the experts can be seen at http://adaptech.dawsoncollege.qc.ca/cfichten/learning.doc. In addition, The Adaptech Research Network provides a listing of free and inexpensive ICTs that could be helpful, along with information about where this software can be obtained, what it costs, and whether it works in French or English or both http://www.adaptech.org/downloads. This listing is continually updated. To help with training, we have made several five minute videoclips about how to use popular ICTs that can assist students with LD. These can be seen on YouTube http://www.youtube.com/user/adaptechresearch.

Ensuring that the ICT needs of students with LD are being met must become an urgent priority for the Ministère de l'Éducation, du Loisir et du Sport, college administrations, and tutoring/academic support/remediation/assessment centers. Since many college students with LD have other disabilities as well, rehabilitation facilities also need to make LD-related ICTs a priority. This is likely to result in more motivated and self-assured students who are less stressed, whose academic work is of better quality, and whose college experience is more satisfying. Access to the required ICTs and to training on how to use these will equip students with LD with the skills they need to succeed in the ICT-intensive world of school, work, community and leisure.

This article was written by Catherine S. Fichten, Laura King, Maria Barile, Alice Havel, Mai N. Nguyen, Jillian Budd, Alexandre Chauvin of the Adaptech Research Network at Dawson College and CEGEP André-Laurendeau.

Up to date special needs database

By Wendy Singer

The updated Inspirations special needs database is available online at www.emsb.qc.ca/inspirations, listing over 350 resources in and around the city of Montreal for children and young adults. Within its pages, you will find services for all special needs, including Autism Spectrum Disorders, Down Syndrome, ADHD, learning disabilities, behavioral difficulties, hearing and visual impairments. The table of contents will guide you through various therapeutic, counselling and support services from recreational activities, tutoring and vocational services, medical clinics, rehabilitation, adaptation and social integration, to resources for parents and

professionals (such as associations and government organizations), camps, respite care, physical aid resources and other helpful information.

The database, compiled to fulfill a need voiced by both parents and professionals, provides pertinent information for each listing such as phone numbers, links to email and website addresses, and a brief description of the service offered. This database is intended to be used as a guide. The English Montreal School Board recommends that you research these resources to determine if they are appropriate for the care of your child or young adult. If you would like to recommend a resource for this list, please contact inspirations@emsb.qc.ca.