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E-LEARNING AS AN ASSISTIVE TECHNOLOGY TOOL

Distance Learning

Telecommunications technologies offer all learners the opportunity for **distance learning**. Distance learning is defined as instruction received by learners who are in a different physical location than the instructor. This approach to learning includes courses offered by educational institutions, businesses, or other entities. Some of these courses can be accessed from home. Others may be offered at a company's headquarters, factory meeting room, public library, or other community site. These settings can provide learners with the flexibility they need to be involved in the learning process and, thus, a valuable form of accommodation.

Courses can be taken:

- through university consortium programs that include **cable television**
- via **telephone conference calling** (interactive telephone), where the instructor conducts class from a telephone-- the telephone lines of the students and teachers are linked through a bridging device;
- through **interactive television broadcasting** received at a learning site furnished with equipment that allows learners at that site to see and speak with the instructor and learners in other sites;
- through courses organized around a core of **videotaped presentations** (these videocassettes can be closed-captioned as well)
- through **correspondence courses**, beneficial to learners with learning disabilities who benefit from working in a non- threatening environment at their own pace and
- through **combinations** of the above technologies.

Students with learning disabilities can tape these courses and review them later at their own pace and as many times as needed to acquire the knowledge. Accompanying printed coursework materials can be obtained in audiocassette for reinforcement.

Closed captioning, now a standard feature in new television sets, allows learners to see and hear the words on broadcast or cable television. **Closed-circuit** television is an effective training tool used in many work settings, a tool that can be adapted to the special needs of those with learning disabilities.

Growing in popularity is the use of the **computer, a modem and the internet** for such things as **Webcast learning**. Webcast learning is an interactive web TV, where you can watch programs, read and download information and email questions simultaneously.

Another option involves **online long distance courses** offered as a general interest course or towards a certificate at the college level, or towards a

degree at the university level. Many offer certificate programs and courses to earn professional development credits.

Online courses are an exceptionally accessible, flexible resource that can be accessed anytime, by choosing when and where you participate in class. Your course is conducted according to a schedule, but there are no "live" classes to attend. Instead, lectures, coursework, and discussions all take place at your convenience. You choose the place - at home, at school - wherever you have access to a computer, modem, and an Internet Service Provider. You'll get the same high-quality instruction and course content that you demand, but without the day-to-day obstacles that prevent so many of us from pursuing other goals. With online learning, commuting to campus and paying for childcare are things of the past.

A large majority of colleges and universities across Canada now provide the convenience of online learning programs.

(<http://snow.utoronto.ca/resources/technology/techdised>)

A downfall to these online courses however, is that accessibility standards are not uniform. Many learners with disabilities have difficulty with online learning because of access issues resulting from their disability, or because the environment does not suit their preferred style of learning.

Online learning is not recommended if you are overwhelmed with typing, have an aversion to the words 'software download and set up', and if reading is a struggle. However, assistive technology for reading and writing activities such as a voice output/text to speech system scans and converts text into computer documents that can be read by a speech synthesis and a speech to text allows the user to use the computer by speech.

Research is currently being done to allow web developers and web educators to develop online educational content to be presented in a structured adaptable learning environment. One such tool being developed is called **A-Tutor**. A-Tutor is a free adaptive learning environment and Web based course-authoring tool. It allows Web developers, and particularly Web educators, to easily develop online educational content to be presented in a structured adaptable learning environment. It allows online learners to arrange content in many different ways, adapting it to their preferred style or method of learning web-based instructional material. A-Tutor has been created to provide a learning environment that adapts to the characteristics of the learner. Visit the A-Tutor website to learn more about it

<http://www.atutor.ca>

FACT SHEET

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