

TEACHING STUDENTS WITH DISABILITIES:

*A Resource for Faculty,
Graduate Teaching Assistants,
Librarians and Archivists*

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Teaching Students with Disabilities:

A Resource for Western Faculty, GTAs, Librarians and Archivists



Faculty members typically receive information from a Services for Students with Disabilities counsellor about the needs of students with disabilities. This information often includes recommended accommodations for individual students. The information on this site may help faculty, graduate teaching assistants, librarians and archivists understand the nature of various disabilities as it relates to learning, and provides best practices for the classroom, lab, and other teaching settings to help make your teaching accessible.

Teaching Students with Hearing Loss

CHALLENGES

An estimated 310,000 Canadians are profoundly deaf and 2.8 million Canadians have varying levels of hearing loss.

Hearing loss is an invisible disability that affects at least 10% of Canadians and often isolates students from their peers and faculty. The inability to hear significantly diminishes the student's potential for learning, actively participating, and connecting socially with peers and faculty in the classroom. In spite of this, many students with hearing loss do not self-identify, and are unaware of and/or do not apply for student services in the classroom.

Students with hearing loss can be grouped as follows:

- **Hard-of-hearing:** The largest group of people with hearing loss is those who are hard-of-hearing. Usually they have mild to severe permanent hearing losses and use hearing and speech to communicate. They may or may not use

hearing aids, other assistive listening devices, and visual cues to assist them with communication.

- **Deafened or late-deafened:** Are people who grew up hearing or hard-of-hearing and then suddenly, or gradually, experienced a permanent profound hearing loss. They may or may not use hearing aids, cochlear implants and other assistive listening devices, and rely on visual cues, visual assistive technologies or sign language to assist them with communication.
- **Deaf:** Are people who have severe to profound permanent hearing losses and use either sign language, speech, or a combination to communicate. They may or may not use hearing aids, cochlear implants, and other assistive technologies or sign language to assist them with communication.
- **Culturally Deaf:** Are people who identify with and participate in the culture and community of Deaf people and use American Sign Language to communicate. They may or may not use hearing aids, cochlear implants and

other assistive listening devices, and rely on visual cues, visual assistive technologies and/or sign language for communication.

Students with hearing loss should speak with their instructors about their specific communication needs.

Methods of communicating can vary and may include one or more of the following;

- Lip or speech reading
- Assistive listening devices
- Writing
- Gesturing
- Email, Messaging, TTY Relay
- Sign Language

Students with hearing loss need to simplify communication so their speech and written work may be grammatically simple and direct. This is not indicative of level of education or understanding of material.

Because hearing loss can be very gradual, many people may not be aware of their own hearing challenges.

SPEECH READING

Speech reading is more than just lip reading. Because it involves the entire face and neck, such things as facial hair and gum chewing present additional challenges. Speech reading is a difficult skill to master and is never a substitute for hearing. Even with the best viewing conditions, only 25-30% of speech sounds are visible on the lips and face. The remaining sounds are made in the back of the mouth and cannot be seen. Many sounds also look alike as they are formed on the mouth. (Eg. p-b-m - pack, back, mat; f-v - fold, vote; island view' - looks like 'I love you')

Because a student cannot speech read and take notes at the same time, Services for Students with Disabilities will provide note-taking services at the request of the student.

ASSISTIVE TECHNOLOGIES

Technology solutions such as hearing aids and other Assistive Listening Devices (ALDs) **do not** restore hearing in the way glasses can restore eyesight to 20/20. They make everything louder with no differentiation between wanted and unwanted sounds. Deciphering sounds and eliminating those that are not important is very tiring.

Assistive technologies for students include:

- Hearing aids; work best in quiet environments when listening within close proximity to a limited number of speakers

- FM system (student may ask you to wear a microphone), wireless microphones are only available in larger classrooms and are identified as auditory assistive systems on the Classroom Management Group website. Frequency –Modulated (FM) transmission systems amplify the voice of the talker above extraneous noise in the classroom. A student using an FM system can access the audio signal within the transmission range of the FM system, usually between 50 and 200 feet. FM systems have two components, a transmitter and a receiver. The transmitter is directly connected to the audio output of the A/V system in the classroom. You must use the wireless microphone so that the audio signal is sent to the FM receiver. The receiver portion of the FM system is worn by the student. When using the FM receiver, the student will only have access to the voice of the person who is using the microphone. It is important that if questions are asked or if comments are made by other students in the classroom, the person using the microphone repeats or rephrases the questions/comments before responding.
- Visual Supports; such as overhead and computer projection systems are available in most classrooms
- Cochlear implant
- Closed captioning; only use films that are closed captioned and be sure that the DVD player's closed captioning setting is turned on
- WebCT; make full use of all aspects of WebCT and provide electronic information prior to each class meeting
- Messaging
- Email
- Communication device or board
- Bell TTY Relay Service

BEST PRACTICES

...in Your Classroom

- Universal Instructional Design (UID) is beneficial to all students and is essential for students with hearing loss. UID considers the needs of all students, promoting a respectful classroom climate with clear expectations and feedback, natural supports for learning, use of multimodal teaching methods, technology to enhance learning, and allowing students a variety of ways to demonstrate knowledge.
- Make full use of all available technology in the classroom
- Use either the wireless microphone, or the microphone wired to the teaching station. Remember to turn off any microphone that you are not using; it causes interference.
- Assistive Listening Devices (ALD / Gentners) will only transmit sound from the microphones or the VHS/DVD player when the wired or wireless microphone is on.
- Turn OFF audiovisual equipment when not in use to reduce background noise.



- Permit only one student to speak at a time, and have students identify themselves (hand up) before they begin to speak or point to them.
- Repeat into the microphone all relevant Q&A from other students.
- Summarize discussion or group work visually (chalkboard, projected image, etc.)
- Incorporate visual aids, handouts, etc.
- Provide information in electronic format.
- Plan a 10 minute break every 1 1/2 hours.
- Students should sit in a circle when doing group work or when it is a small class so that each person's face is visible
- Only talk when you are facing the students in the classroom
- Avoid moving around the room when you are talking
- Consider including information on the appropriate classroom communication environment in your course syllabus

...in Your Lab

- Take the student on a tour of your lab.
- Discuss safety concerns.
- Assign a lab partner to ensure that the student is alerted in case of emergency.
- Provide written lab instruction prior to each lab, and written summaries of all demonstrations.

...when Communicating

- Communicate in a quiet location, away from all sources of noise (overhead and computer projection systems, HVAC systems, laptop computers, cell phones, students talking or eating, noise from hallway outside classroom)

- Include the student when you are chatting with others.
- In one-on-one conversation be sure to have the student's attention before beginning to speak. Get the student's attention before speaking by gently touching their arm or providing some visual clue.
- Maintain eye contact.
- Speak clearly and concisely.
- Ask if one ear hears better than the other and position yourself accordingly.
- Rephrase what you are saying if you are asked to repeat.
- Use gestures - they help with understanding.
- Confirm that the student understands – ask them to review key points.
- Use email and keep a writing pad handy.

AVOID...

- Situations where the student cannot clearly see your face - e.g.- talking to the chalkboard, screen or overhead/ document camera; or positioning yourself with mirrors or windows behind you, or shadows on your face
- Pacing or excessive movement – this interferes with voice transmission
- Talking during a film or video
- Using a film or video that cannot be close captioned
- Drawing attention to the student
- Yelling, exaggerating, or speaking unnaturally slowly
- Changing topics without letting the student know
- Chewing gum while speaking
- Extraneous noise in the classroom from students talking during lectures, typing on their keyboards, eating or otherwise creating disturbances

Teaching Students with Vision Loss

CHALLENGES

A broad range of conditions result in various degrees and types of vision loss. Vision loss ranges from total blindness to partial or low vision that cannot be corrected fully with lenses.

Vision loss includes difficulties with:

- Depth and distance perception
- Night vision
- Restricted field of vision
- Manoeuvring through areas with novel spatial configurations
- Reading and recognizing signs and instructions
- Writing
- Seeing colours and contrast

Most people who are “legally” blind have some degree of vision.

ASSISTIVE DEVICES

The following devices are used to increase or maintain a person’s ability to read, write, and navigate independently.

- Monocular, binocular
- Digital recorders, portable Braille note-taking and video magnification devices
- Computer-based screen readers and text magnifiers

Students may need to use one or more of these devices in order to take notes in class and write exams.

SERVICE DOGS

Service dogs are working whenever they are in their harnesses. Please do not feed, touch, make eye contact or otherwise communicate with a service dog when it is in its harness.

BEST PRACTICES

The following practices are intended to enhance the accessibility of university courses. The applicability of these practices will depend on the nature of students’ vision loss and environmental or task demands.

...in Your Classroom

- Provide preferential seating close to the front of the classroom.
- Warn students if you dim lights; it may be difficult for them to adjust to abrupt changes.
- Provide lecture notes, outlines, or handouts in electronic or audiotape format.



- Describe verbally any visual aids that are used in class (e.g., models, charts, graphs).
- Spell out terms, names or words that you project or write on the board if their spelling would not be obvious.
- Ensure your video and multimedia clips have described video. Western’s Instructional Technology Resource Centre can help instructors make videos and course content accessible.

Learning Materials

Most individuals who are legally blind use one or more of the following alternate text formats: enlarged print, electronic, audiotape, or Braille. Most students are able to access text that contains verbal information when it is presented in electronic form. Nevertheless, students’ needs will vary as a function of their abilities and the nature of the information. For example, some students may require scientific notation, mathematical symbols, and diagrams in Braille.

- Make syllabi, handouts, short assignment sheets and reading lists available in electronic format (e.g., txt or rtf) or in large print before class so the student can use the material at the same time as other students.
- Provide text transcripts of PowerPoint notes, including descriptions of any visual material in the slides.
- Provide clean copies of books and articles when placing material on Library Reserve and submitting material for course packs so that they can be successfully scanned in order to produce electronic copies.
- Avoid using PDF documents.

...in Wet Labs

- Take student on a tour of the lab.
- Discuss safety concerns including auditory lab warning signals. Visual warnings should be paired with audible alarms. Contact

the Occupational Health and Safety Consultant Anne Marie McCusker by telephone 519-661-2111 ext. 84741 or by email amccuske@uwo.ca for more information or specific concerns regarding laboratory safety.

- Keep aisles and emergency exits clear.
- Ensure student knows where safety equipment is in the lab.
- Arrange lab equipment so that it is easily accessible.
- Label all equipment that student would use (including safety equipment) using large print and braille.
- Connect TV monitor to microscope to enlarge images.
- Give oral lab instructions of demonstrations and visual aids.
- Provide lab instructions in electronic format if requested.
- Provide adaptive lab equipment such as talking thermometers, calculators, light probes and, tactile timers.
- Replace glass with plastic when possible
- Assign a lab partner.
- Allow extra time to complete lab work.
- Use raised drawings or tactile models for illustrations.

...in Computer Labs

- Equip computers with adaptive software that supports screen reading and text magnification programs (e.g., JAWS, ZoomText). Identify computers that have adaptive software and ensure other students yield the adaptive work stations to students with vision loss.
- Consider accommodation such as an alternate assignment if your software applications are not accessible to screen reading software.

Fieldwork

- Ask students how they might be able to do specific aspects of field work.
- Attempt to include students in fieldwork assignments. If this is not possible, suggest an alternative assignment that does not compromise academic integrity.

Physical Space Configuration

- Describe layout of room, its furniture, principal features, and locations of other people by using a clock face, 1 o'clock, 4 o'clock, etc.
- Offer assistance with finding a chair to sit on by asking if you may place the individual's hand on the back of the chair.
- When directing an individual to an object (e.g. water glass), gently place your hand under his or hers and move your hand towards the object. After contact is made, slide your hand away, allowing the individual to locate the object. Ask before touching the individual.

- When planning a route or guiding students, ensure that there is sufficient width for them to safely find their way.
- Offer assistance with layout, visual prompts.

...when Communicating

- Identify yourself when approaching individuals who may be unable to recognize you.
- Use students' names so that they know you are talking to them.
- Do not be afraid to offer a handshake to students who use canes or service dogs, but let them know that you are about to do so.
- Be aware that students with tunnel vision may step back or reposition an object in order to see it more clearly.

Guiding Students who have Vision Loss

- Ask students if they would like assistance.
- Offer your arm; do not take theirs.
- Walk at their pace but a half step ahead.
- Pause at stairs or curbs to warn that a change is coming.
- Ask if you should describe major obstacles or changes in direction.
- If a service dog is used, ask the handler if he/she wishes to take your arm and/or where you should walk.
- Identify the arrival or departure of others, naming and introducing them if they do not do so themselves.
- If giving directions, be precise, clear and specific (e.g., "on your left", "about 3 feet in front of you)."

AVOID...

- Leaving students alone in the middle of a room. Show them to a chair or guide them to stand by a wall, door or a piece of furniture to maintain orientation.
- Walking away without saying goodbye
- Low light levels, shadows, glare, gloss finishes, mirror or glass surfaces
- Drawing attention to the student
- Touching the student without letting him/her know first, unless it is an emergency
- Image-only PDF files scanned from paper documents or hand-written notes since screen readers are not able to read them
- Handouts made from poor quality photocopies of books or articles
- Highlighted or underlined readings that will be difficult and time consuming to transcribe
- Whenever possible, rooms with poor acoustics or loud background noise.

Teaching Students with Physical Disabilities

CHALLENGES

Students with a physical disability may be unable to...

- Control spontaneous limb movement
- Control speed of movement
- Move quickly or in a well coordinated manner
- Perform manual tasks such as gripping and turning a handle, holding a pen, and typing
- Move arms or legs sufficiently to negotiate stairs and perform other actions
- Move independently when walking beyond certain distances, standing for extended periods of time, getting in and out of a vehicle, etc.
- Reach, pull, push, manipulate
- Perform tasks that require endurance and strength

Not all physical disabilities are visible. Students may have difficulty performing some tasks yet may not otherwise appear to have a disability. Furthermore, students' abilities may vary with changes in their illnesses. Conditions in which a disability may not be visible or may be intermittently visible include:

- Arthritis
- Heart and peripheral vascular disease
- Multiple sclerosis and other progressive neurologic conditions
- Joint replacements
- Haemophilia
- Cancer
- Diabetes
- Parkinson's

Persons with physical disabilities may use a cane, crutches, walker, brace, wheelchair, scooter, support person, and service animal. Students using wheelchairs and scooters cannot always take the most direct route and may need additional time to travel among buildings on campus.

PHYSICAL ASSISTANCE

Provide time for persons to move or perform tasks independently, if they would like to do so. Offer assistance; however, do not provide it without asking unless the need is urgent.



BEST PRACTICES

...in Your Classroom

- Most classrooms have wheelchair accessible student stations. Ensure these desks are available for students who need them and report any missing tables and chairs to Western's Classroom Management Group.
- Arrange information and handouts so they can be seen and picked up without undue bending and turning.
- Make class assignments available in electronic format.

...in Your Lab

- Offer assistance, but don't provide it without asking unless the need is urgent.
- Locate lab equipment and supplies within reach so as not to expose students to hazards.
- Provide adjustable tables and chairs.
- Allow extra time for setting up and completing work.
- Consider using a document camera to demonstrate on a large screen.
- Make containers with handles available.
- Consider extended eyepieces on microscopes for students who use wheelchairs.
- Discuss safety concerns, taking into consideration that students may not be able to react quickly to dangerous situations.

- Position fire extinguisher, emergency call button, eyewash etc. within easy reach.
- Ensure emergency exits within your labs are wheelchair accessible.
- Pair a student with another student who can do fine motor manipulations.
- Use plastic instead of glass where possible.
- Keep lab uncluttered and aisles clear.

...when Conducting Field Work

- Try to have field trips in accessible locations.
- Include special needs in requests for field trip vehicle reservations.
- Consider alternate assignments if they would not compromise academic integrity (e.g., review video of field work, analyze samples other students have collected, write a paper on the topic)

...when Communicating

- Don't be afraid to offer a handshake to a person with a missing or artificial limb, or to those who use a cane or crutches.
- Position yourself in front of the person so that he/she doesn't have to change position to face you.
- Make eye contact. Don't stand too close.
- Sit when speaking with a short person or person in a wheelchair.

AVOID...

- Speaking loudly
- Bending over during conversations
- Pushing, pulling or leaning against a wheelchair without permission
- Lifting, supporting or moving a person unless you understand safe techniques and are asked to do so.



Teaching Students with Learning Disabilities

CHALLENGES

University students with learning disabilities, like those who do not have disabilities, have average to above average intelligence and are similarly capable of graduating with a university degree. Learning Disabilities are invisible and vary significantly from person to person.

Learning Disabilities often co-occur with attention deficit disorders, which are characterized by intermittent attention, difficulties persisting at a task, and sometimes impulsivity. Students' challenges may be further complicated by problems with social skills which are sometimes characteristic of nonverbal learning disabilities and attention deficit disorders.

Students with Learning Disabilities (LD) may be limited by one or more of the following...

- Difficulties with relating sounds with their corresponding symbols, which may slow reading and writing, and make spelling difficult
- Weaknesses in the ability to mentally hold onto or attend to information while integrating it with other information (or otherwise transforming it), which may result in the need for additional time when reading and organizing one's thought for written expression, problem solving, and note-taking
- Weaknesses in the ability to work with part-whole relationships and visual information, which may be associated with problems with organization and problem-solving in mathematics
- Organizational skills
- Spatial orientation, directions and way finding

BEST PRACTICES

...in Your Classroom

- Provide assistance in finding a volunteer note-taker from the class in a manner that protects the student's privacy and dignity.
- Provide copies of presentation materials and course notes, or make them available through your learning management system.
- Allow taping of class.
- Use captioned video.
- Provide seating at front of room to reduce distractions.

- Ensure periodic breaks.
- Present your materials in a variety of delivery modes (oral, written, visual).

...in Your Lab

- Provide a lab partner.
- Provide seating at the front of the room to reduce distractions.
- Ensure periodic breaks.
- Demonstrate procedures and provide time for hands-on practice.
- Present your lab materials and instructions in a variety of delivery modes (e.g., oral and written instructions, visual representation or demonstration).
- Permit students to use assistive technology (e.g., a scanning and speaking pen to read text)
- Arrange lab equipment so that it is easily accessible.
- Allow extra time for the student to set up and complete lab work.

...when Communicating

- Use plain language.
- Speak clearly; rephrase and repeat if the student does not understand.
- Reinforce words with pictures or graphics.
- Reinforce with demonstration of a process.
- Permit the student to record lectures or conversations for later use.
- Allow time for the student to express his thoughts.
- Ask the student to repeat what she is saying if you are having difficulty understanding.
- Read instructions out loud and explain the steps of a calculation process if requested.

AVOID...

- Making assumptions about the limits of what someone might be able to do
- Exaggerating or speaking unnaturally slowly
- Finishing sentences or interrupting - you may misunderstand what the student is saying
- Drawing attention to the student and/or his/her challenges

Teaching Students with Mental Health Disabilities

CHALLENGES

Students with mental health issues may be limited in the number or kinds of activities they can perform because of an emotional, psychological or psychiatric condition. Furthermore, the activities students are able to perform may change over time with fluctuations in the severity of their conditions.

Teenagers and young adults aged 15-24 experience the highest incidence of mental health or psychological disorders of any age group in Canada.

Mental health issues can include but are not limited to

- Heightened anxieties, fears, suspicions
- Changes in personality
- Confused or disorganized thinking; ideas that may seem unusual or grandiose
- Difficulty concentrating, making decisions, remembering things
- Extreme highs and/or lows in mood
- Difficulty with social interaction and communication

Encourage open communication and comfortable exchange of information between people. Respond to students' needs. Be patient and calm. If conversation becomes lengthy and disorganized, ask them what you can do for them. Ask questions that require "yes" or "no" answers.

ADAPTIVE TECHNOLOGIES

Some students use computers equipped with text reading software to read text books and other documents. They report that using this technology facilitates their concentration. Some students use voice recognition software if they have difficulty writing or typing (e.g., tremors from medication).

BEST PRACTICES

...in General

- Use a flexible approach to assignments and assessments.
- If the student is being abrupt, acknowledge the request without commenting.
- Be courteous, remain calm.
- Use positive statements such as "What we usually do is..." or "What I can do is..."

...in the Classroom

- Permit the student to leave class periodically.
- Provide preferential seating near the door to allow leaving class for prearranged breaks.
- Incorporate a variety of learning styles: auditory, visual, kinaesthetic, experiential.
- Permit assistance and/or accommodation with note-taking (e.g., peer note-taker, photocopies of another student's notes, taping of lectures, use of laptop to take notes)
- Make syllabus and course material available electronically in advance.
- Provide printed course material in audiotape or electronic format.
- Provide copies of overheads/class notes.
- Provide feedback in private.
- Permit the student a beverage if medication causes thirst.

Assignments

- Make readings and assignments available in advance.
- Extend deadlines to complete assignments when students' conditions compromise their ability to do course work or attend classes.
- Consider substituting assignments in specific circumstances if doing so would not compromise academic integrity.
- Allow assignments to be handwritten rather than typed if a student has difficulty using a computer.

AVOID....

- Taking responses personally
- Assuming a therapeutic role (Instead, if you are concerned about a student's mental health or emotional wellbeing, refer student to the appropriate service <http://www.sdc.uwo.ca/psych/index.html?crisis>. If a student is in crisis and you are concerned about his/her safety, call Western's 911 Emergency Services for immediate medical or other assistance.
- Stressful situations such as abrupt sounds, flashing lights, confrontational interactions
- Pushing social interaction and sharing of intimate or traumatic personal experiences in group work
- Using negative statements such as "We don't do that." Or "I cannot..."



Exams

Academic accommodation for exams is intended to allow students with disabilities a fair opportunity to write the exams. Normally, Student Development Centre's Services for Students with Disabilities (SSD) recommends exam accommodations for specific students. In most of these cases, faculty members choose to have Exam Services, in the Registrar's Office, administer their exams with the accommodations that SSD has recommended.

The information below is intended to indicate exam accommodations that SSD may recommend for individual students and to provide information that may help you make decisions concerning these recommendations, implement certain recommendations, and make your exams more accessible in other ways.

EXTRA TIME

The most commonly recommended exam accommodation is extra time. This accommodation is effective for many students whose disabilities slow their progress on academic tasks. For example, additional time may allow students with vision loss to read questions and/or work with assistive technology. It may allow students with mobility impairments sufficient time

to type their answers using a computer. Additional time also may allow students with mental health disabilities or learning and attention disorders to compensate for difficulties with concentration.

Some faculty members are able to provide all of their students with a large amount of time to write exams relative to the length of the exams. In these cases, students who only require additional time as an accommodation are able to write with their class and have easy access to their instructors.

SEPARATE, QUIET LOCATION

Many students who have diverse disabilities share a need to write exams in a separate, quiet location. Some of these students have learning, attention, or mental health disabilities that make them more prone to distraction than are most of their peers. Other students require a separate space in order to monitor their blood glucose levels, administer insulin, and consume beverages. Still others write in separate locations because they use technology that would disturb classmates and/or computers that are housed in a facility in which internet access can easily be denied.



REST BREAKS

The opportunity to take supervised breaks away from the exam, without reducing the amount of time available, is beneficial for students who are unable to work efficiently for somewhat unpredictable amounts of time during exams. For example, students use such breaks to practice strategies for managing anxiety when they experience a worsening of their symptoms. Students with chronic illnesses such as Crohn's Disease and diabetes use breaks to attend to health-related needs which may take them away from the exam for half an hour at a time. Students who have chronic pain stretch and move about during breaks in order to prevent their pain from increasing to a level that would prevent them from completing exams.

OTHER EXAM ACCOMMODATIONS

Less common exam accommodations include:

- a. providing assistance with filling in scantron forms for multiple choice exams;
- b. providing a scribe for students for whom voice recognition software is not a good option;
- c. having students write exams in locations that are near washrooms;
- d. providing altered lighting (e.g., incandescent lighting, low level lighting)
- e. providing ergonomic seating, adjustable writing surface, slant board;
- f. breaking exams into segments to be administered at different times to students who have conditions that limit the length of time that they can work on exams; and
- g. permitting exams to be rescheduled to a time of day in which students do their best work if their conditions and/or medications cause their abilities to fluctuate over the course of a day.

In general, faculty members are encouraged to consider offering a variety of methods of evaluation, and allowing students some choice as to how they demonstrate their knowledge.

Some students are able to write exams in the classroom if they are permitted to sit in locations in which distractions are minimized (e.g., near the front of the classroom, away from the door).

TECHNOLOGY

An increasing number of students use assistive technology for exams. Students with low vision and those who are blind may use closed circuit televisions or computer software (e.g., Zoomtext) to magnify print, screen reading software (e.g., JAWS) to hear the computer read aloud information displayed on the monitor, and computers equipped with Braille displays to read Braille versions of electronic exam questions and the answers that they have entered into the computer.

Students with mobility impairments may use computers for word processing if typing is easier than handwriting or if they require the use of voice recognition software. Students with learning disabilities, attention deficit disorders, and mental health disabilities also may use computers for word processing for a variety of reasons.

Resources

GENERAL RESOURCES AT WESTERN

Student Development Centre

Services for Students with Disabilities SSD

You can communicate with a student's counselor about academic accommodation and other ways in which to support students. Faculty members should contact SSD at 519-661-2147 or ssd@uwo.ca
<http://www.sdc.uwo.ca/ssd/>

Office of the Registrar

Examination Services

To communicate information regarding arrangements for the administration of exams under conditions of academic accommodations, please contact Examination Services at 519-661-2111 ext. 81536
<http://www.registrar.uwo.ca/infoservices/AccommodatedExams/index.cfm>

Teaching Support Centre

For more information and resources on best teaching practices for students with disabilities.
<http://uwo.ca/tsc/>

Western Libraries

Library Accessibility

<http://www.lib.uwo.ca/disabilities>

Classroom Management Group

For information on all general use classrooms on the constituent university campus, and instructional technology systems which are available in each classroom on campus. Please contact by telephone at 519-661-2111 ext. 82222 or by email cmg@uwo.ca
<http://www.ipb.uwo.ca/cmg/>

RESOURCES FOR TEACHING STUDENTS WITH SPECIFIC DISABILITIES

Teaching Students with Hearing Loss

Student Development Centre's Services for Students with Disabilities (SSD)

Please contact SSD to arrange services that are designed to facilitate participation of students who are deaf or have hearing loss in the classroom, such as interpreters, note-takers, etc. Please contact by telephone 519-661-2147 or email ssd@uwo.ca
Western Student Services Building, 4th Floor
www.sdc.uwo.ca/ssd/

Classroom Management Group

Lists all general use classrooms on the constituent university campus and the instructional technology systems available in classrooms. Visual supports (overhead and computer projections systems) are available in most classrooms. Wireless microphones and FM transmission systems are available only in larger classrooms. FM transmission systems are identified as *auditory assistive systems* on the CMG website. Please contact by telephone at 519-661-2111 ext. 82222 or by email cmg@uwo.ca
Support Services Building Room 1301
<http://www.ipb.uwo.ca/cmg/>

Western's National Centre for Audiology

Research and consultation on facilitators and barriers to hearing assistive technology use, hearing conservation, how noise affects the ability to learn and communicate. Contact by telephone at 519-661-3901
Elborn College Room 2262
<http://www.uwo.ca/nca/>

Bell Canada

Accessibility Services

http://www.bell.ca/specialneeds/PrsSN_SvcLanding.page
You can communicate with a student free in the local calling area if they have TTY Service in their residence.
1-800-855-0511

Teaching Students with Vision Loss

The Adaptive Computing Technology Centre

For advice regarding computer technology and Braille for students with vision loss, Faculty members should contact 519-661-2111 ext. 86844 or kirk@uwo.ca
<http://www.sdc.uwo.ca/ssd/index.html?ACTC>

ZoomText Software

Screen Magnification and screen reading software products for the visually impaired.
<http://www.aisquared.com/>

JAWS Screen Reading Software

Software for students whose vision loss prevents them from seeing screen content; JAWS reads aloud the information on the computer screen.
<http://www.freedomscientific.com/products/fs/jaws-product-page.asp>

CNIB Canadian National Institute for the Blind

Accessibility Resources

<http://www.cnib.ca/en/services/accessibilities/resources/Default.aspx>

Teaching Students with Physical Disabilities

Accessibility at Western

Accessibility Maps and Floor Plans

Provides information about areas of the campus that have barrier free access, including information on the location of automatic door openers, elevators, washrooms and parking to assist students in navigating campus.

<http://www.accessibility.uwo.ca/maps.htm>

Teaching Students with Learning Disabilities

National Centre for Learning Disabilities

<http://www.nclld.org/>

The International Dyslexia Association

<http://www.interdys.org/>

Teaching Students with Mental Health Disabilities

Student Development Centre

Psychological Services

Western's Student Development Centre provides professional, confidential psychological services free of charge to Western students.

Western Student Services Building Suite 4100

<http://www.sdc.uwo.ca/psych/>

Student Health Services

Counseling Clinic

The student health clinic offers free and confidential counseling and psychiatry services to all Western students.

The SHS Counseling Clinic can be reached by telephone at 519-661-3771

University Community Centre Room 11 (lower level)

<http://www.shs.uwo.ca/student/services.html>

Canadian Mental Health Association

A Guide to College and University for Students with Psychiatric Disabilities

<http://www.cmha.ca/youreducation/introduction.html>

RESOURCES FOR MAKING INFORMATION AND COURSE CONTENT ACCESSIBLE

Western's Instructional Technology Resource Centre

For questions about making course content accessible to students with disabilities please contact the Instructional Technology Resource Centre by telephone at 519-661-2111 ext. 85513 or by email at itrc@uwo.ca. The Instructional Technology Resource Centre is located in the Support Services Building, Room 4320.

<http://itrc.uwo.ca>

Seven Principles for Universal Instructional Design from Brock University

Information and methods for instructional design which is learner centered and reduces the need for special accommodations in the classroom.

[http://kumu.brocku.ca/twiki/Seven_Principles_of_Universal_Instructional_Design_\(UID\)](http://kumu.brocku.ca/twiki/Seven_Principles_of_Universal_Instructional_Design_(UID))

World Wide Web Consortium (W3C)

Resources on Web Accessibility

A list of points to check your web content for accessibility

<http://www.w3.org/WAI/gettingstarted/Overview.html>

WebAIM Web Accessibility in Mind

Introduction to Web Accessibility

<http://www.webaim.org/intro/>

WebAIM Web Accessibility in Mind

The User's Perspective

<http://www.webaim.org/articles/>

Ontario Ministry of Community and Social Services

Making Information Accessible

http://www.mcass.gov.on.ca/en/accesson/tools/making_information_accessible.aspx

Adobe Systems

Accessibility Resource Centre

<http://www.adobe.com/accessibility/index.html>

Making Your Documents Accessible

<http://x.dc-uoit.ca/accessibledocs/>

Parts of this document have been adapted, with permission,
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Teaching Students with Hearing Loss, Vision Loss, a Physical Disability, Learning Disability, Mental Health Disability

<http://www.tss.uoguelph.ca/resources/index.cfm>