

On-campus Resources

Teaching Support Services (TSS)

Instructional Support

Advice on designing accessible face-to-face courses/curricula

Peter Wolf - ext. 52468, pwolf@uoguelph.ca

Courseware Support

Advice on designing accessible on-line courses

Kyle Mackie - ext. 53936, kmackie@uoguelph.ca

Classroom Technology and Design

Advice on designing accessible teaching spaces

Steve Borho, Ext. 52956, sborho@uoguelph.ca

Universal Instructional Design (UID)

UID is about universal thinking – consider the potential needs of all learners when designing and delivering instruction and minimize the need for special accommodations.

www.tss.uoguelph.ca/uid/

Center for Students with Disabilities (CSD)

Advisor, Students with Vision Loss

Barry Wheeler Ext. 56416, bwheeler@uoguelph.ca

Individual Accommodations

Information on accommodations for exams and FAQ's can be found at

www.slcs.uoguelph.ca/csd/faculty_guide.cfm

Library Centre for Students with Disabilities (LCSD)

Students registered with CSD have access to computer lab/study space in the Library.

www.lib.uoguelph.ca/assistance/LCSD/

Off-campus Resources

Web Accessibility

3CWeb Content Accessibility Guidelines

List of points to check your web content for accessibility

www.w3.org/TR/WCAG/checkpoint-list.html

Web Accessibility in Mind's 'Introduction to Web Accessibility'

www.webaim.org/intro

Information Accessibility

The Ontario Ministry of Community and Social Services 'Make Information Accessible' page: www.mcscs.gov.on.ca/mcscs/english/how/howto_information.htm

The Canadian National Institute for the Blind's ClearPrint initiative:

<http://www.cnib.ca/en/services/accessibility/text/clearpring/Default.aspx>

The Adobe Product Accessibility page: www.adobe.com/accessibility/index.html

WebAIM's Rich Media Accessibility tutorials: www.webaim.org/articles/#html



Teaching Students with

Vision Loss

The Challenges

Vision loss includes a broad range of eye conditions that result in total blindness to partial or low vision that cannot be corrected fully with lenses.

Difficulties vary in type and degrees and can affect the following:

- perception of depth and distance
- night vision
- field of vision
- ability to manoeuvre
- ability to read and recognize signs and instructions
- ability to write
- ability to see colours and contrast

Consider the Following...

Most people who are "legally" blind have some degree of vision. Don't assume they cannot see you.

Braille is used by 10 – 15% of people who are "legally" blind.

Students also use large print, electronic and taped text.

Needs vary depending on the individual.

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.

Service Dogs

Do not feed, touch, make eye contact or otherwise communicate with a service dog when it is in harness unless you have the owner's permission.

Best practices

...in Your Classroom

Provide preferential seating close to the front of classroom.

Warn student if you dim lights or turn them off as it may be difficult for them to adjust to abrupt changes.

Audio tape, or provide lectures notes, handouts in electronic format.

Describe verbally any visual aids.

Spell out any terms, names or words that you project or write on board.

Ensure your video and multimedia clips have described video including those developed by you.

...Learning Materials

Make syllabi, handouts, short assignment sheets and reading lists available in electronic format (e.g., txt or rtf) or 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.

Check with students who have low vision regarding accessibility of PDF documents and follow instructions provided by Adobe when creating PDF's.

Provide clean copies of books and articles when placing material on Library Reserve.

...in Wet Labs

Take student on a tour of the lab.

Discuss safety concerns including auditory lab warning signals. Modify safety procedures. Replace glass with plastic.

Visual warnings should be paired with audible alarms.

Keep aisles and emergency exits clear.

Ensure student knows where safety equipment is in the lab and label using large print and braille labels.

Arrange lab equipment so that it is easily accessible.

Label all 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 where 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 or Zoomtext). Identify computers that have adaptive software and ensure other students yield to student with vision loss.

Provide accommodation such as an alternate assignment if your software applications are not accessible to screen reading software.

Exams

Allow extra time to transcribe and process test questions.

Consider allowing students to turn in exams electronically.

Contact CSD, Ext. 52785 for assistance.

Fieldwork

Ask student how they might be able to do specific aspects of field work.

Attempt to include students in fieldwork assignments. If not possible suggest an alternative assignment.

Physical

Describe layout of room, its furniture, principal features, location of other people by using clock face, 1 o'clock, 4 o'clock, etc.

Seat the person, by gently placing their hand on the back of the chair.

When directing to an object (e.g. water glass), gently place your hand under theirs and move your hand towards the object.

After contact is made, slide your hand away, allowing them to locate the object. Do not pick up or put it in their hand. You may need to steady the object.

When planning a route or guiding the student, ensure there is sufficient width for them to safely find their way.

Offer assistance with layout, visual prompts.

...when Communicating

Use student's name so they know you are talking to them. Repeat their name throughout the conversation so they know you are speaking to them not others present.

Identify yourself.

Do not be afraid to offer a handshake to a student who uses a cane or service dog, but let them know that you are about to do so.

Students with tunnel vision may step back or move object to enable them to see more clearly.

Guiding a Student who has Vision Loss

Ask the student if they would like help.

Let them take 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. They will feel a change in height of your elbow.

Ask if you should describe major obstacles or changes in direction.

If a service dog is used, ask the handler where you should walk.

Identify the arrival or departure of others, name and introducing them if they do not do so themselves.

If giving directions, be precise, clear and specific. E.g., "on your left" or "in front of you".

Avoid...

- leaving student alone in the middle of a room. Show them 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 them 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