Supporting Students with Vision Loss

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

Vision loss includes difficulties with:

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

Because of the nature of visual disabilities, not all individuals make use of a cane, wear glasses, or are accompanied by a guide dog. Some students will have lived with the disability all their lives can be very independent, while others will have developed the disability later in life and are still adjusting to the changes.

Assistive Devices

A student with vision loss may use devices for reading, writing exams, taking notes and navigating. These include:

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

Best Practices

In Your Classroom

- Adopt Universal Design for Learning (UDL) strategies. UDL benefits all students and promotes a respectful classroom climate with: clear expectations and feedback; a variety of ways to demonstrate knowledge; natural learning supports; multimodal teaching methods; and technology to enhance learning
- Provide course materials (reading lists, notes, course-packs etc) as early as possible to allow time if conversion to accessible audio format
- Provide preferential seating close to the front of the classroom.
- Connect with the student directly and provide your office location and email orally during the first week of classes
- Warn students when you dim lights, as it may be difficult for them to adjust.
- Provide lecture notes, outlines or handouts in accessible format allowing for effective screen reader use
- Verbally describe any visual aids used in class (e.g., models, charts, graphs).
- Spell out any words that you project or write on the board if their spelling is not obvious.

- Ensure your video and multimedia clips have descriptions. eLearning (CETL) team can help instructors make course content accessible.
- Student make extensive use of adaptive technology and will likely need to use a smartphone and a laptop in class

In Labs

- Tour the lab with the student, making sure they know where safety equipment is and related procedures.
- Keep aisles and emergency exits clear.
- Arrange lab equipment so it is easily accessible.
- Using large print and braille, label all equipment the student would use, including safety equipment.
- Connect TV monitor to microscope to enlarge images.
- Give spoken lab instructions of demonstrations and visual aids.
- Provide lab instructions in digital format if requested, for use with screen readers.
- Provide adaptive lab equipment such as talking thermometers, calculators, light probes and tactile timers.
- Substitute plastic for glass when possible
- Allow the student to have a lab partner.
- Allow extra time to complete lab work.
- Use raised drawings or tactile models for illustrations.

In Computer Labs

- Ensure that some computers have adaptive software to support screen reading and text magnification (e.g., JAWS, ZoomText).
- Ensure students with vision loss have priority access to accessible computers
- Consider an alternative 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.

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.
- Offer assistance with finding a chair by asking if you may place the student's hand on the chair's back.
- When directing the student to an object (e.g., water glass), gently place your hand under his/hers and move your hand toward 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 there is sufficient width for them to find their way safely.

When Communicating

- Identify yourself when approaching students who may be unable to recognize you.
- Use students' names so they know when you are talking to them.

- Feel free 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 the student has a service dog, ask whether s/he wishes to take your arm 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; to maintain their orientation, show them to a chair or guide them to stand by a wall, door or piece of furniture.
- Walking away without saying goodbye.
- Low light levels, shadows, glare and reflective or glass surfaces.
- Drawing attention to the student's vision loss.
- Touching the student without letting him/her know first, unless it's an emergency.
- Image-based PDF files scanned from paper documents. Screen readers are unable to read them.
- Handouts made from poor quality photocopies of books or articles.
- Highlighted or underlined readings that will be difficult to transcribe.
- Whenever possible, rooms with poor acoustics or background noise.

Accommoations that may be arranged by CAL

In Class

- Class assignments and instructions outlined orally
- Overheads and handouts provided in advance for creation of alternate format
- In-class transcriber
- Reserved seating as required
- Use of adaptive equipment such as a portable CCTV and laptop

Exams

- Additional time
- Computer to enable screen reading
- Screen magnification
- Scribe