There is a growing need to attend to accessible course design, content creation, and course delivery to support instructors in meeting the needs of students with disabilities, as well as students experiencing accessibility issues for potentially the first time, with the sudden and disruptive shift to online / virtual learning environments. Our fourth virtual panel was about fostering increasingly accessible and disability-inclusive spaces in the classroom, with your teaching and within student learning communities.

Panelists:

**Allison Williams**, Professor, School of Geography and Earth Sciences

**Li Wang**, Assistant Professor, Department of Anesthesia

**Anne Pottier**, Associate University Librarian

Panel Questions:

Why did you start making your courses accessible?

What impact has the enhanced accessibility features of your online/blended (or even in-person) courses had on your learners? On yourself, as the instructor?

What strategies or tools have you found to be most helpful for increasing accessibility in your online teaching?

What barriers to accessibility/disability inclusion have you experienced and/or anticipate surfacing with the sudden shift to online/remote learning? What solutions have you considered or implemented to address these barriers

**5 Key Takeaways from the panel**

1) Live captioning is now available through Otter.ai captioning. This resource can help improve accessibility standards and provide up to 99% accuracy. Auto Captioning is computer generated whereas live caption integration is executed by a human captioner. [0:24- 2:39]

2) It is crucial for all faculty members to comply by the accessibility standards and disability inclusion principles to strive for universal accessibility. [17:55 - 18:49]

3) Accessible learning is learner-centered teaching, intercultural safety, anti-racist pedagogies, support for first generation students, LBGQT positive spaces and much more. [18:49-31:32]

4) It is important for faculty members to foster flexibility in course design and create student-centered classrooms to help mitigate student stress and encourage in-depth learning. [39:47-41:30]

5) Echo 360 is a great resource to use for lecture content and presentation. It has a vast array of features which allow faculty members to produce accessible content. For example: script embedding options and live poll tools. [47:35-48:32]

6) Alternative text is very useful. For faculty members in science and math it might be in your best interest to create an image interpretation instead of an image description to save time while increasing functionality. [51:20-52:45]
Some key takeaways from each panelist

Allison Williams, Professor, School of Geography and Earth Sciences

- Accessibility concerns can be addressed through universal design which focuses on the why, what and the how of learning. When we use these guidelines we encourage ourselves to not only stimulate interest and motivation but also find different ways to present information and content. [18:49-22:21]
- Faculty members should provide multiple means of engagement. Providing flexibility and alternative means for communication can reduce stress and allow students to participate in ways that are best for them as learners. [22:21-25:43]
- It is important to provide multiple means of action and expression. For example giving students the option to participate in person, in real time online and through asynchronous modules. This gives students more flexibility in how they can express what they know and engage with their teacher and other students. [25:44-29:33]
- We must provide multiple means of representation. This can be achieved by moving content delivery into a digital format for multi-modal representations of content and use of assistive technologies. [29:34-31:32]

Li Wang, Assistant Professor, Department of Anesthesia

- Promoting accessibility enables students with disabilities, difficulties as well as immigrants to participate. [37:12-38:30]
- McMaster has accessibility guidelines that faculty members are expected to follow. There are also CCE guidelines which provide a framework for accessible content design. [38:44-39:46]
- Faculty members must strive to remove accessibility barriers. For example giving students the option to download and print lecture content to avoid eye strain or offering students with opportunities to ask questions through email, private face-to-face meetings and/or through discussion boards. [41:31-43:43]

Anne Pottier, Associate University Librarian

- For students with visual impairments faculty members can convert content to braille, or use modern forms of tag PDFs which can be used analogously with screen readers. Faculty members may also consider creating MP4 files for students who are auditory learners. [50:38-51:10]
- It is important to provide alternative formats of material for students. Instructors can upload video clips they need to use on a web forum and receive a captioned copy for greater accessibility. This web forum can be found on the library accessibility page. [51:20-52:45]
- Providing captioning for lecture content can help ensure that students are able to play lectures multiple times, alter the speed of sound and hence grasp a better understanding of the concepts taught during class. [52:51-54:06]
- It is important for faculty members to provide alternate assignments and be flexible with due dates to provide a better learning experience for students. [54:07-55:32]

Resources

- The Accessibility program manager
- Kate Brown: brownk33@mcmaster.ca (Manager Accessibility, Equity)
- Accessibility Hub
- MacPherson Institute Website
- Past Virtual Panel Sessions
- Ai-Media provides a human-generated transcript
- McMaster Accessibility and Copyright Guidelines
- Alternative Text
- McMasters Inclusive Teaching and Learning Guide
- Video Captioning Request Form
- Otter.ai
- Pollev
- Publishing your video
- Sharing your video
- Knowledge Base
- How to use resources in Avenues Learning Object Repository in your course