THURSDAY, JULY 14, 2022

Public Lecture
Tony Bates
Contact North
Online, In-Person or Both? Some Guidelines for Deciding

Workshops

In-Person
Testing Principles & Best-Practice Assessments for Different Learners, Topics, and Teaching Modalities
Led by Amy Pachai

Learning from Experience: How Design Thinking Can Create Impactful Learning Experiences
Led by Irina Ghlic & Amy Pachai

Led by Irina Ghlic

4 Ways to Think About Student Engagement
Led by Laura Cole

Motivating Effective Learners
Led by Veronica Yan

Incorporating EDI principles into STEM education by understanding the importance of Privilege, Identity and Belonging
Led by Imogen Coe

Delivering Powerful Presentations: Apply Multimedia Learning Principles to Slide Design
Led by Joe Kim & Paulina Rzeczowska

Online

Equity, Diversity and Inclusion in the Classroom
Led by Mayu Nishimura

Applying the 7 Core Skills of Digital Accessibility for Inclusive Teaching
Led by Kate Brown & Jessica Blackwood

Creating Mental Health-Positive Environments via Principles of Universal Design
Led by Sarah Whitewell & Sam Clarke

Restorative Learning: Embodied Connection & Feeling to Learn
Led by Deena Kara Shaffer & Diana Brecher

Practice Makes Perfect: Supporting Student-Generated MCQs with PeerWise
Led by Paul Denny

FRIDAY, JULY 15, 2022

Presentations

Bridgette Hard
Duke University
The Undercover Scientist: Teach and Discover with Stealthy Pedagogical Research

Kristy Robinson
McGill University
Motivated Students and Motivating Classrooms: Socioemotional Processes as Opportunities for Student Success

Joe Kim
McMaster University
Motivating Durable Learning for In-Person and Online Classes

Data Blitz

Poster Presentations

Panel Discussion
Looking Forward to the Next Decade of Evidence-Based Interventions in Education

#EdCog2022

Visit our website to register & learn more:
https://edcog.mcmaster.ca
Welcome to the 10th Annual McMaster Conference on Education & Cognition!

Over the pandemic, we have all had a crash course in teaching online and experienced success, failures, and new insights. As we look ahead to the Fall 2022 term with cautious optimism, our conference theme will explore: Looking forward to the next decade of evidence-based interventions in education. In the spirit of innovation, this year for the first time, our meeting is presented as a hybrid conference with activities on both days made available to in-person and online attendees. I’m sure this will be a learning process and we appreciate your patience!

In 2013, the first EdCog Conference opened with these words:

“Intuitive notions, prior experience and poor metacognitive judgments on effective teaching and learning (by instructors and learners alike) may be at odds with established research findings. These biases underscore an urgent need to base best practices on empirical evidence that can be tied to basic mechanisms of learning and performance.”

We now face added challenges of implementing best practices for wide-scale, online learning that is expected to dominate higher education throughout the academic year, and likely, beyond. The meeting of educators, researchers and policy makers can help to connect these key players to build engaging and meaningful learning experiences that are grounded in empirical evidence to make online learning effective.

A 10th anniversary is a good moment to pause and reflect. Over the years, we have had the privilege of hosting an outstanding lineup of leading researchers and workshop leaders that connect research in cognition to teaching in the classroom including: Bob Bjork, John Dunlosky, Katherine Rawson, Elizabeth Marsh, Geoff Norman, Dan Schacter, Terry Sejnowksi, Regan Gurung and many others.

This tradition continues with our lineup for EdCog 2022:

Tony Bates (Contact North) “Online, In-Person or Both? Some Guidelines for Deciding”

Bridgette Hard (Duke University) “The Undercover Scientist: Teach and Discover with Stealthy Pedagogical Research”

Kristy Robinson (McGill University) “Motivated Students and Motivating Classrooms: Socioemotional Processes as Opportunities for Student Success”

Joe Kim (McMaster University) “Motivating Durable Learning for In-Person and Online Classes”

During the meeting, we encourage you to share what you learn on twitter using #EdCog2022. Following the meeting, keep in touch with us through our website (https://edcog.mcmaster.ca) where you can view archived recordings of plenaries from previous years, read blog posts, and join our online EdCog Journal Club which resumes in September 2022 (weekly meetings discuss assigned journal articles and you can join us online).

For returning EdCogers, thank you for joining us again and for newcomers, welcome!

Dr. Joe Kim
EdCog Conference Chair
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<td>9:45–10:00 Break</td>
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<td>15:30–16:30 Panel Discussion</td>
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*Time given in Eastern Standard Time*
The Large Interactive Virtual Environment Laboratory (LIVELab) at McMaster University, directed by Dr. Laurel Trainor, is presently the only facility of its kind in the world: a research space which allows for the simultaneous collection of all types of behavioural, electrophysiological and physiological measurements from up to 106 people at a time. Real time physiological data such as EEG or heart rate, synchronized with data from other collection systems like motion capture, audio or video recordings can be monitored and recorded from both performers and audience members simultaneously. This allows researchers to collect individual data much more quickly than would be possible in a traditional laboratory, and also to answer questions about how people respond to the presence of others in large group settings and in realistic performer/audience scenarios, something that is impossible in a traditional neuroscience laboratory where participants are studied individually.

Beyond the unique configuration of data acquisition systems, other technologies such as a large video wall, a highly flexible infrastructure, broadcast quality audio/video recording and motion capture systems, and a highly flexible active acoustics system let us configure the LIVELab for different types of studies very quickly.

LIVELAB TOUR

TOURS

July 14th 12:15-12:45
July 15th 13:15-13:45
Meet in MDCL South Lobby

CAMPUS MAP
Online, In-Person or Both?
Some Guidelines for Deciding

The session/presentation will focus on the benefits and drawbacks of synchronous and asynchronous teaching, and will set out some criteria for deciding on the appropriate mix of in-person and online teaching. It will also include suggestions on good design principles when teaching online or in a blended mode.

Tony Bates is President and CEO of Tony Bates Associates Ltd, a private company specializing in consultancy and training in the planning and management of e-learning and distance education. He is also Distinguished Visiting Professor in the G. Raymond Chang School of Continuing Education, Ryerson University, Toronto and a Research Associate at Contact North, Ontario.

He is the author of twelve books, including:

- his latest, a free, open online textbook for faculty and instructors, called *Teaching in a Digital Age*, which has been downloaded over 200,000 times since its publication in April, 2015. It has been or is being translated into ten languages.
- *Technology, e-Learning and Distance Education*, published in 2005 by Routledge,
- *Managing Technological Change: Strategies for College and Universities Leaders*, (with Gary Poole)
- *Effective Teaching with Technology in Higher Education*, both published by Jossey-Bass, and
- *National Strategies for e-Learning* published by UNESCO.
Online, In-Person, or Both

or The Psychology of Effective Digital Learning

Dr. Tony Bates
@DrTonyBates

March 2020
- No time to redesign
- High stress
- Less effective than either in-person or properly designed online learning

Effective Online Design
- Lessons from online learning pre-pandemic
- Lessons learned during the pandemic

Future Teaching & Learning

Teaching in a Post-Covid Era

Understanding the affordances of...
- in-person /online
- synchronous /asynchronous

What kind of course?

- Synchronous
  - Same time, same place
  - Immediate response

- Asynchronous
  - Anytime, anywhere
  - Step ahead, review, consolidated response

Students

- In general...
  - Older: want fully online
  - Young: hybrid

- In-Person

Subject Requirements

- "V"s: theory, content, soft skills, online, hands-on/practical

Importance of creating appropriate learning environments

- Knowledge as coal (objective)
- Knowledge as developmental (constructivist) e.g. heat

??? Campus school, online course, experience, work, family, technology, blended ???

Applying the Psychology of Effective Online Learning

- How do we progress thinking skills?
- How do we exploit digital media to do this?

Core Requirements for All Teaching

- Know your students' learning environment
- Clear learning objectives
- Content
- Skills
- Appropriate choice of delivery mode

McMaster Conference on Education & Cognition
@EdCogMcMaster
#EdCog2022
The Undercover Scientist: Teach and Discover with Stealthy Pedagogical Research

In this presentation, I will share how my teaching became more data-driven and evolved into a stealthy pedagogical research program that is both theoretical and practical, integrated with instruction, and useful to students, teachers, and scholars. Along the way, I will describe various tools in my pedagogical research “toolkit” as well as several findings that have emerged from my classroom “laboratory” that have helped me improve my teaching as well as strengthen our collective knowledge about effective pedagogy. I will offer practical advice for helping instructors build pedagogical research into their own courses.

Dr. Bridgette Hard is an Associate Professor of the Practice in the Department of Psychology and Neuroscience at Duke University as well as the Director of Undergraduate Studies for Psychology. Dr. Hard’s explores the intersection of psychology and pedagogy: She uses data from the classroom to extend psychological theories and uses insights from psychology to inform new classroom practices. Her research is conducted in collaboration with psychologists from diverse institutions around the U.S.
The UNDERCOVER SCIENTIST: teach + discover with stealthy pedagogical research

1. Stealthy Pedagogical Science
   "Research so intertwined with pedagogy to be virtually undetectable"

2. Three Case Studies
   Students are complex thinking, feeling, and socially connected creatures.

3. The Ethical Dimension
   Class policies can shape social norms in ways that free students to pursue their goals more effectively.

RECOMMENDED TAKE-HOMES
- Anxiety doesn't have to be your students' enemy, but can be harnessed with cognitive reappraisal.
- There are simple ways to show students we value and respect them as multi-faceted people, and this can improve learning outcomes.
Motivated Students and Motivating Classrooms: Socioemotional Processes as Opportunities for Student Success

We often think of motivation as a stable trait that students have or don’t have, and as something they’re responsible for maintaining. In reality, classrooms provide many opportunities for students to become motivated, to stay motivated, or to lose motivation. As a result, students’ motivational beliefs can change quite a bit, even in the short term, and have important implications for their learning and academic choices. In this presentation, I’ll highlight takeaways from my research on changes in university students’ motivational beliefs in large, introductory STEM courses. I’ll focus in particular on how instructors enact motivationally supportive teaching practices in online and in-person lecture courses, with implications for how we might consider and reconsider motivational interventions in education.

Kristy Robinson

Kristy A. Robinson is an Assistant Professor and the director of the Motivation, Identity, Learning, and Education in STEM Lab in the Department of Educational and Counselling Psychology at McGill University. In her research, she examines how and why students’ motivation changes over time. She investigates developmental patterns of motivation including identity, interest, and competence beliefs during adolescence and early adulthood, along with classroom practices and interventions that support students’ socioemotional development. The ultimate aim of her work is to expand opportunities for the pursuit of students’ valued goals by informing the design of more equitably motivationally supportive classrooms.
MOTIVATED STUDENTS + MOTIVATING CLASSROOMS

Socioemotional Processes as Opportunities for Student Success

MOTIVATION

What is it + why should we care about it?

- Competence beliefs
- Effort beliefs + mindsets
- Environmental / contextual concerns

Why do I want to do this?

- Task values / intrinsic motivation
- Achievement goals
- Belonging / identity

How does motivation typically change?

- What kinds of support do students need? When do they need it? Who needs it most?

How can we support students’ motivation?

- Motivation is a highly contextual, socially regulated process

Takeaways

- Motivation is a highly contextual, socially regulated process

Kristy A. Robinson
@krisa_pan

McMaster Conference on Education & Cognition
@EdCogMcMaster
#EdCog2022

@mparslew
Motivating Durable Learning for In-Person and Online Classes

Most of the undergraduates at McMaster University take introductory psychology in their academic programs. How do you deliver a high-quality educational experience to 6000+ students and maintain an academically rigorous program that motivates deep learning? Research from cognitive psychology on attention, memory and learning has informed our pedagogical decisions to develop evidence-based interventions in education. A key focus has been to promote learning that is durable – extending beyond short-term testing into long-term retention of information that remains with the student. In this presentation, I will discuss how academic performance is significantly improved with understanding the factors that contribute to students’ (in)attention in learning which is critical to sustaining attention whether classes are in-person or online. These practices work by strengthening long-term retention and depend on instructors to implement effective instructional design and students to take an active role in their own learning.

Abstract

Joe Kim

Joe Kim is an Associate Professor in the Department of Psychology, Neuroscience & Behaviour where I have 3 major roles. A common link is my desire to implement evidence-based practices to promote life-long learning.

1. Director of Education & Cognition Lab. We study how cognitive principles of attention, memory and learning can be applied to improve education and training.

2. Faculty Director of McCall MacBain Postdoctoral Fellows Teaching and Leadership Program. This program supports the leadership and education development of a cohort of postdocs from across the university.

3. Principal Instructor for MacIntroPsych. I direct the innovative McMaster Introductory Psychology program which combines traditional lectures with interactive on-line resources and small group tutorials. Each year, over 6,000 students enroll in the program which has been prominently featured in Maclean’s, Globe and Mail, Toronto Star and numerous education media outlets.

Biography
Motivating Durable Learning: (In)attention spreads in both physical + online classrooms

Students are expected to consume volumes of information... retain knowledge to apply in novel situations.

Should instructors encourage students to turn on their webcams?

Do webcams benefit learning?

Did you notice?

Student attentiveness (and learning) is most strongly influenced by their immediate neighbours.

Interim Conclusions

• Evidence of a benefit when students can see their classmates via webcam and have their own webcam on

• Learning may be hindered for students who can see their classmates but have their own webcam off

• The effect of webcams also depends on the attentiveness of visible classmates, which is contagious (attention contagion)

When you pay attention, you signal to yourself + others that it’s worth paying attention

Less than 2.5% of humans are hyper-reactives.
DATA BLITZ & POSTER

01 Chem-FAST: Development of a Formulative Assessment Study Tool for First-Year Chemistry Students
Benjamin Potter, Longxi Lin, Jan Pohls, Wil Adams, and Sharonna Greenberg, McMaster University

02 Exploring the Impact of Visual Course Outlines at McMaster University: A Randomised Control Trial Study
Olivia Dong-Hamilton, and Dr. Katie Moisse, McMaster University

03 Investigating the Impact of Academic Experiences on Physics Student Mental Health and Wellness
Devin Burke, Pat Clancy, and Miranda Schmidt, McMaster University

04 The CAMPUS Method: Application of Research in Cognitive Science and Education
Suiya Murti, and Kenneth Kwan, Psychological and Counselling Services Group

05 An Experimental Examination of Active Learning
Laura J. Bianchi, Joyce Park, Alyssa Smith, Suzanne Kearns, Dan Smilek, Patrick Craven, and Evan F. Risko, University of Waterloo

POSTERS

06 A Scholarly Teaching Practice on Making Teaching Portfolio Conversations Easier
Monica De Paoli, and Robert Fleisig, McMaster University

07 The Effects of Video Quality on Online Video Lectures
Julianna Salvatierra, Joyce Park, and Evan Risko, University of Waterloo

08 The Impact of Virtual or Blended Learning on the Sense of Belonging in Level-One-Undergraduate Inquiry Students in the Bachelor of Health Science (Honours) Program: A Prospective Cohort Study
Michael Wong, Shahad Al-Saqqar, Jennifer Nash, Ali Al-Humuzi, Michael Dottori, Laurie Barlow, Alysha Boles, Hartley Jafine, Jennifer Landichio, Rosanna Morales, Debbie Nifakis, Robert Spree, Lainey Stirling, and Margaret Secord, McMaster University

09 Concurrent Quizzing Selectively Reclaims Attention During Lecture Periods Prone to Mind Wandering
Si Pan, McMaster University, Amy Grace Tuer, and Jeffrey D. Wammes, Queen’s University

10 Online Lecture Breaks Can Promote Media-Multitasking and Harm Learning
Kitty M.Q. Guo, Abigail J. Fisher, Noah D. Forrin, Faria Sana, and Joseph A. Kim, McMaster University

11 Your Best Effort? Study Strategies and Subjective Experience
Caitlin Reintjes, Jeremy Marty-Dugas, Joe Kim, and Faria Sana, McMaster University

12 The Effect of Professor Enthusiasm on Student Engagement
Maya Rajasingham, Josheil Boparai, Dr. Jeremy Marty-Dugas, McMaster University
Testing Principles & Best-Practices: Assessments for Different Learners, Topics, and Teaching Modalities

Assessments measure the extent to which students have learned the facts, concepts, procedures, and skills that have been taught by a learning experience. Knowing what to assess and how to assess it relies on the intended learning outcomes and teaching that happens throughout the course. Our goal is to create constructive alignment within our learning experience by connecting or aligning the learning outcomes, teaching activities, and assessment methods. This means that assessment can take many forms beyond the traditional exam and can have unique benefits for different types of learners, topics, and teaching modalities.

In this workshop, we will:

- Learn about and use different assessment tools and types to administer effective questions
- Explore how theories of learning such as Bloom’s revised taxonomy can help us determine the level at which assessments or questions should be created
- Practice writing questions for use in lectures, exams, take-home assignments, or other learning activities

Biography

Dr. Amy Pachai is an Educational Developer on the Teaching and Learning Services team at DeGroote School of Business, McMaster University. Since joining DeGroote, she has worked with instructors, staff, and students to create and execute an innovative new blended learning MBA program for working professionals, launched in Fall 2018. Now, she supports the faculty and staff across DeGroote on their courses and programs from design through to feedback and continuous improvement. Prior to this role, her doctoral research explored ways to reduce mind wandering and improve learning. Amy has facilitated workshops for diverse audiences on topics such as creating effective assessments, maximizing the impact of your LMS, design thinking, scientific writing skills, business communication, and study strategies for students. Through these experiences, she has experimented with many tools and techniques to foster engagement, improve comprehension, assess learning, and promote collaboration.

“Let me write that down!”. Taking notes is an embedded practice in our day to day lives. From “to-do” and grocery lists, to meeting minutes and notes during learning experiences, we offload information by writing things down. Since learners cite “notes” as their main source of reviewing learned material, taking good notes is essential. The work environment is no different when it comes to recording information. In a dynamic workplace, having no record of meetings or project updates quickly devolves into a game of broken telephone, especially in an online or remote environment.

During this workshop, we will discuss various types of notes and their success (based on note-taking literature), tips and tactics for taking notes, and strategies to aid both students and professionals in becoming proficient notetakers in face-to-face and/or eLearning environments. Throughout this workshop, participants will explore how to:

- Inform their note-taking practices through cognitive research on note-taking and studying;
- Apply self-regulated learning and metacognitive awareness for taking good notes; and
- Plan for future note-taking experiences through shared templates and resources.

Irina Ghilic is currently an Educational Developer on the Teaching and Learning Services team at DeGroote School of Business, McMaster University. She believes learning is a process, and as an Educational Developer and Learning Experience Designer, she explores a learner’s entire journey and creates human-centric solutions in a variety of settings, including course, program, and curriculum design. Her work with educators and learners is driven by accessibility practices, multimedia design, research-based standards in learning, and digital learning development practices. As a Ph.D. Candidate in Educational Psychology research, Irina’s hope is to work on bridging the gap between educational science, learning strategies, and instructional practices. Driven by her experience as an educator, learning experience designer, researcher, workshop facilitator, and creative problem solver, her work practice is at the crossroads where inclusive design, cognitive science, and technology intersect.
Learning from Experience: How Design Thinking can Create Impactful Learning Experiences

Experience designers have a motto: “great experiences don’t happen accidentally”. An engaging learning experience requires intentionality, which can be achieved by planning the details of the experience and creating an environment conducive to learning. Whether we are designing an experience or engaging as participants, there are three phases to any experience: anticipation (before), participation (during), and reflection (after). We will explore how to have an impact in all three phases by applying the Design Thinking process: empathize, define, ideate, prototype, test, and implement. In this workshop, we will consider how the design thinking principles can be applied to (re)designing learning experiences.

A key factor to applying learning experience design in your work is to foster an environment of co-creation: students, instructors, and staff all play an important role in creating effective and exciting learning experiences. Whether your learning experience is related to course refinement or new development opportunities, let’s ask ourselves: how might we insert touchpoints in those learning experiences that allow for discovery, play, teamwork, wellness, and reflection? In this workshop, we will explore how to insert learning experience design touchpoints that make learning “stick”.

By the end of this workshop session, participants will be able to:

1. Understand and apply the elements of the design thinking process as they relate to course refinement and learning experience design through prepared and self-generated examples;
2. Define and create learner personas to represent their audience’s needs, expectations, challenges, and strengths throughout the design process;
3. Implement learning experience design practices to build effective habits in daily work and life; and
4. Plan for future learning experience design through shared templates and resources.

Led by Amy Pachai & Irina Ghilic
4 Ways to Think About Student Engagement

This engaging and inspiring workshop tackles student engagement from the unique perspective of personality theory by borrowing from the 4 personality dichotomies of how people learn, where we get our energy, how we make decisions, and how we experience our surroundings. Understanding these basic personality preferences gives us insight into many simple and easy to use strategies for student engagement.

In this workshop we will:

- Explore the 4 personality dichotomies of how people learn, where we get our energy, how we make decisions and how we experience our surroundings.
- Discover links between these dichotomies and challenges educators experience with student engagement.
- Identify practical strategies to tackle some of these challenges.

Laura Cole

Laura Cole is a business professor at Mohawk College, and facilitator with McMaster University Continuing Education with over 15 years’ experience engaging and supporting student success. She is the founder of Your Latitude, a boutique professional development company working with leaders to design and sustain engaging workplace cultures through communication and leadership strategies. Laura is a returning EdCog facilitator.
Motivating Effective Learners

Effective strategies for long-term learning (e.g., spacing, interleaving, retrieval practice) are often counterintuitive for the same reason why they are effective: they require learners to more effortfully and elaboratively engage with the material; the side effect is an experience of difficulty and challenge that can mislead students into thinking that they aren’t learning. However, difficulty does not have to be interpreted in this way. In this workshop, we’ll discuss the current state of research linking implicit beliefs, motivation, and learning strategies, and explore ways to foster a classroom culture that leans into challenge.

Veronica Yan

Dr. Veronica Yan (PhD, University of California, Los Angeles) is an assistant professor of Educational Psychology at the University of Texas at Austin. Bridging cognitive, social, and educational perspectives, Dr. Yan’s research explores how we can empower people to become motivated and effectively self-regulated learners. In particular, her work examines the mechanisms underlying ‘desirably difficult’ strategies, their interaction with individual differences, and learners’ motivational mindsets and metacognitive beliefs.
Incorporating EDI principles into STEM education by understanding the importance of Privilege, Identity and Belonging

Academics in the sciences are struggling to move beyond minimum diversity standards to sustainable inclusion practices within their teaching and learning environments. This workshop will address the role that privilege plays in who accesses and succeeds in STEM and will discuss how an increased understanding of privilege, identity and belonging can improve inclusive engagement in the classroom. Actions that help both instructors and students to become more self-aware and challenge personal biases will be described. Other topics that will be covered will be how to create an inclusive class through thoughtful use of content and how to create a sense of belonging for students from diverse backgrounds who feel marginalized, unwelcome and unseen.

Dr. Imogen Coe is currently a professor of Chemistry and Biology and was the founding dean of the Faculty of Science at X (Ryerson) University in Toronto. She is also an affiliate scientist at St. Michael’s Hospital, Toronto, where her research group studies drug uptake. In addition to being an academic scientist, Dr. Coe is well known as a long time advocate for a more diverse, inclusive & accessible world of science and medicine. She is much in demand as a speaker and panelist, has published on the topic of inclusion, diversity, equity and accessibility in various venues such as The Lancet and the Globe and Mail, and has received numerous awards for her advocacy work.
**Delivering Powerful Presentations: Apply Multimedia Learning Principles to Slide Design**

Applying findings developed in controlled-lab and classroom-based studies can lead to improved slide design which translates into durable learning that extends from short-term tests to beyond the final exam. Building on the previous workshop in which we learned how to organize the lecture structure, we will next explore the underlying multimedia learning principles that guides good slide design. We will practice as we learn about redundancy, segmentation, signaling, and coherence. Together, these workshops will provide a practical plan for delivering lectures with a cohesive message.

**Abstract**

**Biography**

Joe Kim

Dr. Joe Kim is an Associate Professor in Psychology, Neuroscience & Behaviour at McMaster University. He coordinates the innovative MacIntroPsych program, directs the Education and Cognition Lab and organizes the annual McMaster Symposium on Education & Cognition. His research interests include multimedia learning principles and evidence-based approaches to education and training. Follow him on Twitter @ProfJoeKim.

Paulina Rzeczkowska

Paulina Rzeczkowska is a digital media specialist. She applies her unique interdisciplinary background in neuroscience (MSc, UofT) and commercial photography to photo, video, web design, eLearning, and presentation consulting projects for the scientific community. Notably, she is a key member of the development team for the pioneering online web modules used in the MacIntroPsych blended learning program at McMaster University. Paulina creates aesthetically salient, functional designs for visual communication, that are artistically creative and informed by science.
Equity, Diversity and Inclusion in the Classroom

This 90-minute workshop will introduce strategies for fostering equity, diversity, and inclusion in the classroom. It will be an interactive workshop where participants will engage in brainstorming and discussions to make learning accessible and equitable to students of various backgrounds. Discussion topics will include in-person vs. virtual delivery, lecture materials, assessments, and Gen Z learners.

Biography

Dr. Mayu Nishimura is a teaching-stream assistant professor (CLA) in the Department of Psychology, Neuroscience & Behaviour at McMaster University. She is also currently the co-chair of the PNB Departmental EDI Committee, where she is actively involved in engaging members of the department in discussions of EDI issues. Dr. Nishimura’s research interests are in visual development and applied health. She has been teaching psychology courses for 15 years, and more recently has become interested in pedagogical research and the use of evidence-based approaches to teaching.
Applying the 7 Core Skills of Digital Accessibility for Inclusive Teaching

Sudden shifts to online learning, teaching, and remote work over the past several years, and subsequent 2022 Return to Campus activities, have resulted in the creation of new, and amplification of pre-existing, barriers to accessibility in physical, social and digital environments. Through the recognition of these accessibility barriers as being often systemic, McMaster community members have never been better positioned to contribute to the collective removal of these barriers through disability- and accessible design-centred approaches. Integrating accessible design into digital course and web content creation, as well as daily communications, has never been more important to facilitate an equitable and inclusive educational community as we increasingly consider the role of technology and Hybrid/HyFlex approaches in areas of instructional design and delivery. During this session, participants will learn about the 7 Core Skills of Digital Accessibility and how they can be applied across digital environments (related to both digital platforms, as well as content published on or uploaded to platforms). These skills will also assist attendees in understanding how to meet Accessibility for Ontarians with Disabilities Act (AODA) and Web Content Accessibility Guideline (WCAG) 2.0 AA compliance guidelines.

By the end of the session, attendees will:

1. Gain theoretical understanding of concepts and frameworks of digital accessibility
2. Be introduced to definitions of the “7 Core Skills of Digital Accessibility”, initially coined by the University of Minnesota
3. Connect how the 7 Core Skills of Digital Accessibility can be applied to software used by instructors, including: Microsoft Word, Microsoft PowerPoint, Microsoft Outlook

Learn how to successfully implement alternative text, document structure, colour contrast, links, lists, tables, and video/audio, through observing live demonstrations during the session.

Abstract

Biography

Kate Brown

Kate Brown is the Accessibility Program Manager and the coordinator of the Employee Accessibility Network for employees who self-identify with disability at McMaster University; she is currently co-ordinating a User Testing Pilot Program within the University, partnering students and staff with lived experience of disability and assistive technology expertise with units on-campus needing accessibility testing carried out of their web environments. Kate partners frequently with instructors, as well as the MacPherson Institute, to better support the dissemination and take-up of accessible (digital and non-digital) education principles and practices at the University.

Jessica Blackwood

Jessica Blackwood MSc, BHSc, is the Accessible Digital Media Specialist Supervisor in the Faculty of Science at McMaster University. They currently work to audit and remediate educational and promotional materials within the Faculty and educate the McMaster community on how accessible and inclusive practices can be integrated into everyday practices in our digital world.
WORKSHOPS - ONLINE

Abstract

Creating Mental Health-Positive Environments via Principles of Universal Design

This workshop focuses on the creation of mental health-positive learning environments and the tenets of universal design. We will first set a foundation by discussing research on mental health in postsecondary settings, including recent trends and promising initiatives. Key topics will center around accessibility, equity, and community-building via course design—especially in light of online learning and the pandemic. The group will then be guided through several case-based exercises to make the discussion more concrete. Approaching these topics with curiosity rather than judgement, our hope is that the conversation will draw upon the diverse backgrounds of everyone in the group, allowing us all to share and elucidate best practices.

Biography

Sarah Whitwell

Sarah Whitwell is an educational developer with the Paul R. MacPherson Institute for Leadership, Innovation & Excellence in Teaching. She recently completed her PhD in History at McMaster University and has several years of practical teaching experience in addition to her work in the field of educational development. Sarah’s teaching philosophy emphasizes the importance of active and inquiry-based learning, as well as creating an inclusive classroom environment where everyone feels as safe and comfortable as possible. To this end, she specializes in accessible educational practices in remote, in-person, and blended learning environments, along with student-centred approaches to teaching and learning.

Sam Clarke

Sam Clarke is an educational developer at the MacPherson Institute for Leadership, Innovation and Excellence in Teaching here at McMaster. She specializes in accessible and equitable educational practices, as well as community-building and engagement in blended and online learning contexts. Sam is working toward completing her PhD in the Department of History, where she has put pedagogical theory into practice as a teaching assistant and sessional instructor. As an instructor, Sam’s teaching philosophy is premised on compassion: just as she seeks to understand the motives behind historical actors’ decisions, she seeks to understand students’ needs and motivations for learning in order to better support them in achieving their goals. She believes in student-centred learning experiences, including active learning, multiple methods of engagement, representation, and expression, and feedback which is supportive and solutions-based. Both learning and teaching are iterative processes and the goal should be to continuously improve and grow.
Abstract

Practice Makes Perfect: Supporting Student-Generated MCQs with PeerWise

As more classes move online and students become accustomed to working remotely, it can be challenging for instructors to keep students engaged with course content. One approach which can work well is to have students create learning materials for their peers. There are learning benefits associated with students reflecting on, and explaining, their understanding of relevant concepts as they create resources. In addition, distributing the work required to generate resources enables the rapid creation of large repositories of content. PeerWise is a free, easy to use tool in which students create, share, answer and discuss practice questions that target the material they are learning. Participants will learn how to set up PeerWise for use in their courses, how to efficiently assess students’ contributions and - if of interest - how to collect and analyse data for research purposes.

Biography

Paul Denny is an Associate Professor in Computer Science at the University of Auckland, New Zealand. His research interests include developing and evaluating tools for supporting collaborative learning, particularly involving student-generated resources, and exploring the ways that students engage with these environments. One of his projects, PeerWise, hosts more than five million practice questions, with associated solutions and explanations, created by students from 90 countries. He has fostered a community of educational researchers around this project, more than 150 of whom have published their work as a result. Dr Denny has been recognized for contributions to teaching both nationally and internationally, receiving New Zealand’s National Tertiary Teaching Excellence Award (2009), the Computing Research and Education Association of Australasia Award for Outstanding Contributions to Teaching (2010), and the QS Reimagine Education Overall Award (2018).
Restorative Learning: Embodied Connection & Feeling to Learn

Fear, trauma, overwhelm, panic, and pain have been amplified throughout the pandemic. They have been heightened features of our collective day-to-day these pandemic years, and the shaky transition back to campus. In response, on our minds has been the pressing wondering: how can a student learn well when they’re afraid? When they’re grieving? When they’re worried? When they’re suffering? These questions have always been with us, and no doubt for most involved in teaching and learning, but have felt particularly crucial to consider as of late. We cannot simply think or strategize our way through these types of powerful experiences. They live in the body. This presentation will explore how somatic salves can actually help students flourish and academically thrive. And, too, how they help us as educators and practitioners as we each navigate our own tough moments, COVID-related or otherwise. Join us for a nourishing, hopeful session, rich with evidence-based, feel-good interventions.

By the end of this session, participants will:

1. Feel more fluent about health-promoting learning strategies, how to use them with students, and how to incorporate them into their own professional practices.
2. Become familiar with the interplay of holistic interventions and academic success.
3. Bolster their confidence to disrupt, unsilo, and integrate what’s often been separated as academic/learning-skill based and what’s considered the realm of health and wellness, in the hopes of further ripples of disruptive/integrative conversations and collective work.

Abstract

Biography

Deena Kara Shaffer, PhD, MEd, BEd, (Hons)BA, OCT is the Coordinator of Student Transitions and Retention in Student Wellbeing, Adjunct Faculty in the Sociology Department, and Lecturer in the Psychology Department, at X/Ryerson University. Deena is the President of the Learning Specialists Association of Canada (2nd term). A former learning strategist for students with disabilities, and a skilled certified high school teacher, Deena offers a holistic, inclusive, equity-guided, research-driven, health-promoting, kindness-forward pedagogical stance to every educational encounter. Deena is co-initiator of the Thriving in Action resilience intervention, Portage paddling program, and Mood Routes campus outdoor st/rolling initiative. Deena was the academic resilience subject matter expert for the multi-campus Thriving in the Classroom faculty toolkit. Deena holds a doctorate in nature-based pedagogy and learning strategies; is a trained yoga teacher (200 hr), restorative yoga teacher (60 hr), and mindfulness meditation teacher; is a published poet (The Grey Tote, Véhicule Press, 2013); and, is a thought leader, writer, and public speaker on learning and well-becoming. Deena is also the owner of Awakened Learning academic and leadership resilience coaching and consulting; is working on her how-to-learn book of the same name; and, looks forward to starting her Master’s of Design in Strategic Foresight and Innovation part-time at OCAD this fall. To keep nourished and well, Deena gardens, cooks, and savours hikes with her husband and two daughters.
Dr. Diana Brecher is a clinical psychologist who has been working with Ryerson University’s Centre for Student Development and Counselling since 1991. She was the clinical director from 1994 - 2011. As adjunct faculty at OISE/UT in the Counselling Psychology Dept. (2000 - 2009) in the Ryerson Psychology Department, (2010 - present), and the MBA department (2020-present) she has taught graduate-level courses in CBT, brief counselling therapy, theories and techniques of counselling, clinical supervision and Mental Health and Wellbeing in the Workplace.

In 2016, Diana’s long-standing interest and certification in Positive Psychology led to a five-year secondment to the ThriveRU program within Student Affairs. She is the co-creator of the Thriving in Action program. Diana contributed to the personal resilience section of the Thriving in the Classroom faculty toolkit resources funded through eCampusVLS strategies.

Diana’s long-term goal is to infuse Ryerson University’s programming, services and academic curriculum with principles of resilience and flourishing and to help facilitate a cultural change within the university.

Diana was interviewed by Scott Barry Kauffman fairly early on in her role on the Psychology Podcast.
Looking Forward to the Next Decade of Evidence-Based Interventions in Education

Q1
What are your key suggestions for modern universities to build better learning environments?

Q2a
What is a teaching tip unsupported by research that you swear by?

Q2b
What is an important area of teaching that needs more rigorous research?

Q3
How do you motivate students to become lifelong learners?

Panelists

Bridgette Hard
Associate Professor, Department of Psychology and Neuroscience, Duke University

Veronica Yan
Assistant Professor, Educational Psychology, University of Texas at Austin

Danielle Brewer-Deluce
Assistant Professor, School of Kinesiology, Western University

Arianna Davids
B.A. (Honours), Psychology, Neuroscience & Behaviour (Mental Health Specialization), McMaster University
Edcog Panel Discussion

1. What are your key suggestions for modern universities to build better learning environments?
   - Value teaching
   - Reward teaching
   - Show that teaching is why we are here
   - Teaching deserves respect
   - Use space well online/in-person
   - Emphasize having a supportive classroom culture
   - Don't mean lowering standards

2a. What is a teaching tip supported by research that you swear by?
   - Community Building
     - "Trust students" - Jesse Stamml
     - Take course material seriously. Don't take yourself too seriously.
     - Be a model.
     - Use stories

2b. What is an important area of teaching that needs more rigorous research?
   - Randomized controlled trials
   - Make sure that technology is good & helpful
   - Voluntary vs. assigned
   - Where is formative assessment used?
   - Eileen & mental health: how can we help?
   - How do we support working
   - Inclusivity & diversity

3. How do you motivate students to become lifelong learners?
   - Build opportunity for failure into courses
   - Give room for experimentation + risk
   - Model how much you enjoy learning
   - Energy + enthusiasm

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