

President's Report to McMaster University's Board of Governors March 7, 2024

Spotlight on Teaching and Learning

McMaster has long been recognized as a global leader in teaching and learning innovation. We remain committed to creating the best possible learning environment for our students, and ensuring students are equipped with the knowledge and skills needed to make a transformative impact on our world.

We are continuing to innovate in this critical area, focusing on the expansion of active, experience-based, interdisciplinary, partnered and inclusive learning. We are developing innovative and varied approaches that incorporate global insights and encourage creativity, risk-taking and reflection, while embracing virtual learning approaches and new digital tools such as artificial intelligence.

I would like to highlight advances in this important priority area.

The Future of Teaching and Learning

Outcomes of the Generative AI Task Force

As Board members know, the Task Force on Generative AI in Teaching and Learning was convened in May 2020 to provide guidance to the McMaster community on the use of AI in academic programming. In August of 2023, the task force shared its [Provisional Guidelines on the Use of Generative AI in Teaching and Learning](#), recommended revisions to the academic integrity policy, and endorsed resources created to support educators and programs.

The MacPherson Institute has taken a leading role in enabling instructors to be responsive to the evolving AI landscape, producing an asynchronous, self-paced module, two Guidebooks, a podcast series, assessment workshops, and facilitated more than 40 departmental or program workshops with over 500 educators participating.

The MacPherson Institute is also hosting a post-doctoral fellow focused on theorizing new models of assessment in the era of generative AI. This post-doc is working with an independent contractor to develop a unique assessment tool designed to enable customized, learner-centered assessments across all disciplines and levels of instruction.

McMaster will continue to explore the use of generative AI in Teaching and Learning through a new ongoing committee, as was recommended by the task force. That committee will be in place in the coming weeks.

This work, undertaken jointly by the Office of the Vice-Provost Teaching and Learning, the Deputy Provost and the MacPherson Institute, represents McMaster's commitment to responding to the challenges and opportunities of generative AI, and is an example of the leadership role McMaster is taking in this increasingly important area.

Supporting Digital Learning

Nearly a year ago, McMaster launched its Digital Learning Strategic Framework (DLSF). As part of implementing this important strategy, the Office of the Vice-Provost, Teaching and Learning and the MacPherson Institute have partnered in the development of the Online Learning Fellowship Program

The program supports faculty members in the design, development and delivery of high-quality online or hybrid courses at McMaster and helps connect educators with colleagues and units on campus to build capacity, celebrate innovative teaching, and demonstrate that online and flexible learning is valued at McMaster.

The target is to have 24 courses across two cohorts completed by the end of the winter 2025 term. This new program will serve to enhance flexible learning opportunities for McMaster students and open learning opportunities to non-McMaster students while developing the skills and expertise of McMaster instructors in the area of online and hybrid teaching.

The first cohort of learners is set to begin in the spring/summer of 2024. It is another example of how McMaster is creating innovative new opportunities for both faculty and students in the digital learning space.

Innovations in Education Conference

In December 2023, McMaster hosted the annual Innovations in Education Conference for educators across campus. Participants explored the theme, “Taking risks and embracing challenge,” which was intended to foster a dynamic exchange of ideas, experiences, and best practices among educators, researchers, administrators, and other stakeholders in the field of teaching and learning.

Faculty members had the opportunity to share examples of how instructors are thinking “outside the box” and addressing new challenges by taking risks to enhance the student learning experience. The conference featured programming that explored the opportunities and challenges that arise from innovation, such as personalized learning, collaborative teaching models, interdisciplinary approaches, and inclusive education. Keynote speaker, Ronald A. Beghetto, delivered a timely and relevant session titled “Cultivating Creative Agency in the Face of Uncertainty, Risk and Artificial Intelligence,” to initiate an engaging conversation about the possibilities and challenges faced by the teaching and learning field in the wake of this new technology.

Opportunities like this are critical to challenging our faculty to explore new ways of approaching teaching and learning and are imperative to ensuring McMaster remains on the cutting-edge of educational innovation nationally and globally.

Supporting Innovation Within and Beyond the Classroom

Excellence in Experiential Learning

As the home of problem-based learning, McMaster has long been committed to providing our students with opportunities to build hands-on skills through experiential learning.

Over the last three years, the Office of the Vice-Provost Teaching and Learning (OVPTL), with funding from McMaster’s Strategic Alignment Fund has been working to develop infrastructure to support experiential learning initiatives. This project has been made possible by working with staff across the

Faculties, the Student Success Center (SSC), the MacPherson Institute, and the Office of Community Engagement.

Some of the key advances in this critical area include the development of [EXPLORE: an Experiential Learning Opportunities Resource](#) for students co-developed with the SSC; the creation of an Experiential Learning Network with staff representing co-op, career and experiential learning teams across Faculties; and the development of an experiential learning framework for the institution.

The next steps include a set of recommendations for developing additional infrastructure to support experiential learning, as well as the creation of a central website to provide educators and learners with coordinated support and resources for experiential teaching and learning.

INSPIRE Courses

In 2020, McMaster established [the INSPIRE Office of Flexible Learning](#) to help advance our strategic goal of developing holistic, transformational, and personalized student experiences. Since then, the INSPIRE office, in partnership with central units, Faculties and other areas on campus, have developed a range of interdisciplinary courses that are uniquely scheduled to allow for flexibility, and which are open to all undergraduate students, at all levels, without pre-requisites.

The goal of these courses is to provide students with opportunities to explore topics outside of their own discipline, learn from campus and community partners in small, interdisciplinary groups, and engage in experiential or outdoor learning in the city of Hamilton and surrounding areas, including urban and natural spaces. These courses are available as ongoing courses, as four-week “intersession” courses (offered in May), or as spring/summer courses.

Examples of these courses include The Voice of Refugees and Displaced Persons, Critical AI Literacies, Multidisciplinary Experiential Learning Opportunities, Language and Communication in Autism Spectrum Disorder, and Hamilton: A City in 10 Objects. As part of the suite of courses available, students can also take African and Black Diaspora courses, and courses in Latin American and Latinx Studies.

To support the goal of creating more flexible and personalized options for students, the INSPIRE Office is developing more opportunities for online and hybrid INSPIRE courses, in alignment with our Digital Learning Strategy. Also, by offering spring, summer and intersession courses, we are increasing the usage of campus learning spaces – including labs, studios and makerspaces – from May to August, and are able to attract new learners through workshops, certificates and microcredentials during the spring and summer months. This provides flexibility for a new demographics of students who may have off-campus responsibilities and presents an opportunity to generate new revenue through the Summer@Mac experience.

As well, INSPIRE courses have provided an important professional development opportunity for our instructors, as they are encouraged and supported in experimenting with new teaching approaches, team-teaching, and incorporating interdisciplinary topics and approaches.

These courses have seen a healthy growth in enrolment, demonstrating the strong demand for this kind of flexible, interdisciplinary learning, and are an outstanding example of the continuous innovation in our teaching and learning practises.

Supporting Accessible and Inclusive Teaching and Learning

In response to the need to foster greater inclusivity in our teaching and learning practices, McMaster, with the leadership of the MacPherson Institute, has developed a variety of resources and workshops focused on enhancing accessibility and inclusive excellence practices in course design and delivery.

Resources designed to improve **accessibility** in teaching and learning include:

- A five-part workshop series on Universal Design for Learning (offered once per term).
- Accessible document creation and remediation workshops.
- Assessment development workshops focused on accessibility, including customized workshops for various Faculties and departments on the topic of Universal Design for Learning.
- A new online learning module, which is being developed for the MacPherson Institute's Learning Catalogue. The focus of this new module is to provide an online learning course for instructors that focuses on the principles and application of Universal Design for Learning.

To embed the principles of **inclusive excellence** in teaching and learning practices across McMaster, the MacPherson Institute – in partnership with the Equity and Inclusion Office, and with input from students and faculty – launched the [Inclusive Teaching and Learning Resources website](#).

This new website connects instructors to a variety of resources, links and tools they can use to support building inclusive teaching and learning spaces. Resources on the webpage are categorized into four themes of inclusive practice: anti-racist pedagogies, decolonization, accessibility and assessment and grading.

As Board members know, McMaster is deeply committed to supporting and advancing inclusive and scholarly teaching, and these resources exemplify the innovative ways in which McMaster is embedding the principles of inclusion into our teaching and practices.

CAMPUS UPDATES

[Message from McMaster's Provost: We are committed to our international students](#)

"McMaster University remains steadfast in our commitment to international scholars and to our position as a global leader dedicated to the pursuit of academic excellence. I can assure you that this will continue to be a cornerstone of our institutional identity." – Susan Tighe, Provost and Vice-President (Academic)

[AI and international recruitment: A Q&A with Deputy Provost Matheus Grasselli](#)

Eighteen months after becoming McMaster's [inaugural deputy provost](#), Matheus Grasselli talks with us about his focus for the year ahead, the importance of pivoting when important issues arise, and some pleasant surprises in his new role.

[An update in how McMaster is addressing financial challenges](#)

"Careful planning and seeking out of efficiencies across all units, especially during the past three years, have ensured McMaster continues to be in a strong financial position to support the mission of the university and the aspirations of our students, faculty, researchers and staff while continuing to operate as normal." – Susan Tighe, Provost and Vice-President (Academic)

A chance for students to connect with nuclear industry professionals

McMaster's annual Nuclear Industry Night connected students with local nuclear industry professionals from a diverse range of fields. More than 150 students attended the event and had the chance to network with leaders from 12 companies – including Bruce Power, Kinetrics, Westinghouse, BWXT Technologies and AtkinsRéalis – to learn more about co-op opportunities, career paths in nuclear and emerging areas of focus in the industry.

INCLUSIVE EXCELLENCE

Black History Month at McMaster begins with infectious beats and optimism

Organized by the BHM at McMaster committee led by the Equity and Inclusion Office, McMaster celebrated the launch of Black History month with an event that featured local Black-owned business vendors, tables for campus groups and programs, plus live music, poetry and dance performances.

New webinars foster a community of inclusion and belonging

The [Equity and Inclusion Office](#) (EIO) along with campus partners, including Student Affairs, Faculty of Health Sciences and Employee & Labour Relations are inviting students, faculty and staff to attend a series of webinars that cover topics like respect, inclusion, belonging, effective intragroup dialogue and human rights. “In light of the recent world events, we want to offer a space for students, faculty and staff to learn about McMaster's foundational commitment to human rights, as well as our collective responsibility to learn, teach and work in an environment that is free from discrimination,” says Barrington Walker, Vice-Provost, Equity and Inclusion.

Employment Equity Census aims to better understand composition of McMaster's workforce

Open to all employees of the university, the Employment Equity Census is an important tool that helps the university better understand its workforce composition. It measures progress and informs continuous efforts towards inclusive excellence at McMaster. “The data from the census is essential in ensuring we are working toward and reaching our goal of inclusive excellence,” says Wanda McKenna, Associate Vice-President and Chief Human Resources Officer. “This is all part of McMaster's efforts to increase representation, remove biases and inequities within our systems, and build a sense of community and belonging on campus.”

TEACHING AND LEARNING

Students help community members adopt sustainable habits

Students in [SUSTAIN 3S03](#), a course dedicated to implementing sustainable change through experiential learning and community engagement projects, have developed two new projects that are helping improve sustainability in the local community. The first project saw students promote more active modes of transportation — like walking and wheeling — to and from school at an elementary school in downtown Hamilton. The second project included the launch of the ‘[Trash to Treasure Program](#),’ which helps community members find new owners for their unwanted office supply items, keeping them out of landfills and giving them a second life.

[Narrative arts certificate provides space for writers to evolve and connect](#)

In 2022, the [Department of English and Cultural Studies](#) began welcoming students into its newly founded Concurrent Certificate in Creative Writing and Narrative Arts (CWNA). The department knew that a supportive community would be key to each student's success. With the first cohort having earned their certificates, and applications now open for the next round of students, the CWNA program provides the opportunity for students from across the university to strengthen their writing skills through the support and guidance of mentors, and a community of their peers.

RESEARCH AND SCHOLARSHIP

[Researchers chronicle travels of a woolly mammoth that roamed earth more than 14,000 years ago](#)

An international team of researchers from McMaster University, University of Alaska Fairbanks and the University of Ottawa has tracked and documented the movements and genetic connections of a female woolly mammoth that roamed the earth more than 14,000 years ago. Researchers conducted a detailed isotopic analysis of a complete tusk and genetic analyses of remains of many other individual mammoths to piece together their subject's movements and relationships to other mammoths at the same site and in the vicinity.

[McMaster and ALK researchers discover new cell that remembers allergies](#)

Researchers with McMaster University and Denmark-based pharmaceutical company ALK-Abello A/S have discovered a new cell, called a "type-2 memory B cell" that remembers allergies. B cells are a type of immune cell that make antibodies – they can help fight off infections but can also cause allergies. Researchers found that those with allergies had many memory B cells, but non-allergic people had few, if any. This discovery gives scientists and researchers a new target in treating allergies and could lead to new therapeutics.

[New Professor Entrepreneurship Fellowship supports McMaster start-up founders](#)

The Office of the Vice-President, Research and Office of the Provost have launched a new fellowship program designed to support professors pursuing entrepreneurship. The fellowship releases full-time faculty members who have started companies that involve McMaster intellectual property (IP) from teaching one course or equivalent for one year. The fellowship may be renewed for an additional year. As part of the program, fellows will also have the opportunity to engage in entrepreneurship programming and quarterly mentorship and support meetings.

ENGAGING LOCAL, NATIONAL, INDIGENOUS AND GLOBAL COMMUNITIES

[New program will take McMaster students to Africa for internships](#)

McMaster is now a partner in a new program that will provide support for our students and other youth from across Canada to go on internships in Liberia and Ghana. The African Youth International Internship Project is a partnership between McMaster, [Empowerment Squared \(E2\)](#) and the charitable organization [Schools of Dreams](#). The project is set to launch later this year and run until December 2027 after receiving \$4.9 million in funding from Global Affairs Canada.

OPERATIONAL EXCELLENCE

Sustainability report showcases campuswide initiatives

The [third annual Sustainability Report](#) showcases student, faculty and staff initiatives that highlight McMaster's commitment to transforming campus into a living laboratory for sustainability. Featuring [a podcast with the president](#), [a robotic arm in space](#), [repurposing pizza oven heat](#) and [students encouraging all of campus to bring your own bottle \(BYOB\)](#), this report shares the university's progress within the four strategic drivers: A culture focused on sustainability, teaching, learning and research, self-sustaining campus and sites, and operational excellence.

TMG Peer-to-Peer Awards recognize six extraordinary employees

Six McMaster employees from The Management Group (TMG) were recognized by their colleagues for their outstanding work and exemplary leadership capabilities through the annual TMG Peer-to-Peer Recognition program. After being nominated by their peers, recipients are assessed by a selection committee, and the awards are given based on their demonstration of one or more of McMaster's six core leadership capabilities.

AWARDS AND ACCOLADES

McMaster Scientist receives biological chemistry award for cutting-edge research

The Canadian Society for Chemistry (CSC) is honouring McMaster scientist John Whitney with a New Investigator award in biological chemistry. Whitney is an associate professor in the Faculty of Health Sciences' department of Biochemistry and Biomedical Sciences and a member of the [Michael G. DeGroote Institute for Infectious Disease Research](#). He will receive the 2024 Melanie O'Neill Award for his cutting-edge research into the molecular mechanisms of antibacterial toxins. The award is presented to a scientist working in Canada who has made significant contributions to biological chemistry or biophysical methods during the early phases of their research career.

Two student-run projects win 2023 Climate Change and Health Innovation Award

Two student-run projects have been recognized for their efforts to address complex sustainability challenges. The projects, which grew out of experiential learning projects through McMaster's [Academic Sustainability Programs \(ASP\) Office](#), are the winners of the 2023 [Climate Change and Health – Innovation Award](#). The award, established in 2017, is intended to recognize students who have achieved excellence in creating an innovative solution that positively impacts climate change and health.

Health Sciences Dean Paul O'Byrne appointed to Order of Canada

Paul O'Byrne, Dean and Vice-President of the Faculty of Health Sciences, has been appointed an Officer of the Order of Canada for his global impact on the concept and treatment of asthma. His appointment to was announced December 28th by the Office of the Governor General of Canada. The Order of Canada, one of the country's highest civilian honours, recognizes individuals with extraordinary achievements, who have demonstrated outstanding dedication to their field.

Assistant professor Ryan Cloutier awarded Polanyi Prize in Physics

Ryan Cloutier, an assistant professor in the Department of Physics & Astronomy at McMaster, has been awarded the prestigious Polanyi Prize in Physics for 2023. The [Polanyi Prize](#) is awarded annually to researchers from Ontario universities who are in the early stages of their careers in the fields of physics, chemistry, literature, economic science and physiology/medicine.