President’s Advisory Committee on Building an Inclusive Community (PACBIC)

Wednesday November 11, 2020
1:30 p.m. – 3:00 p.m.

Virtual: Microsoft Teams

AGENDA

1. Welcome and Introductions (10 min)

2. Updates and Announcements (20 min)

3. Strategic themes for Teaching and Learning at McMaster – Visioning Exercise (60 min)
   Facilitated by: Dr. Kim Dej, Acting Vice Provost, Faculty Associate Professor, School of Interdisciplinary Science and Dr. Lori Goff, Director, Paul R. MacPherson Institute for Leadership, Innovation and Excellence in Teaching

4. Adjournment - Next PACBIC Meeting:
   Thursday February 11, 2021, 10:00 a.m. – 11:30 a.m.
Over the winter and spring of 2020, McMaster University engaged seven stakeholder groups to inform the strategic planning process for Teaching and Learning. The following groups were consulted: undergraduate students, graduate students, faculty and staff, the Teaching and Learning Advisory Board, the Steering Committee, the McMaster Teaching Academy, and the Associate Dean Group. Undergraduate and graduate students participated in an online survey. Each of the other stakeholder groups participated in a facilitated session (those who were not able to attend one of the facilitated sessions were invited to answer the same questions in an online survey).

Each of the stakeholder groups was asked to describe the strengths that McMaster University should preserve into the future in the area of teaching and learning and the challenges the university might face in the area of teaching and learning. They were also asked to imagine the year 2030 and envision how McMaster University has transformed education and student experience. Finally, groups were asked to share key words that describe the desired future state of McMaster teaching and learning.

Data was themed and presented in individual reports for each stakeholder group. This document presents all of the insights gleaned from each of the stakeholder groups in one place for convenient access. The document is presented in the following four parts:

- **Part I: Strengths to preserve into the future for teaching and learning at McMaster University**
  - Undergraduate students
  - Graduate students
  - Faculty and staff
  - Teaching and Learning Advisory Board
  - Steering Committee
  - McMaster Teaching Academy
  - Associate Dean Group

- **Part II: Challenges that McMaster University may face in the area of teaching and learning**
  - Undergraduate students
  - Graduate students
  - Faculty and staff
  - Teaching and Learning Advisory Board
  - Steering Committee
Part III: Desired transformations to improve student learning experience at McMaster University
   - Undergraduate students
   - Graduate students
   - Faculty and staff
   - Teaching and Learning Advisory Board
   - Steering Committee
   - McMaster Teaching Academy
   - Associate Dean Group

Part IV: Visionary words to describe the desired future state of teaching and learning at McMaster University
   - Undergraduate students
   - Graduate students
   - Faculty and staff
   - Teaching and Learning Advisory Board
   - Steering Committee
   - McMaster Teaching Academy
Strengths

Part I: Strengths to Preserve into the Future for Teaching and Learning at McMaster University

Stakeholders were asked to identify the strengths that are important to preserve into the future for teaching and learning at McMaster. This section presents the strengths identified by each of the stakeholder groups.

Insights from undergraduate students and faculty and staff have been themed, tallied, and ranked. The top five most identified strengths are presented and contributions for each of the themes have been summarized. Data from the graduate student survey was themed, tallied, ranked, and the top strengths are presented in participants’ own words. Please note that some of the strengths for these stakeholder groups are ranked equally. For example, for undergraduate students, there are two strengths ranked at level five. These two are presented using letters (Strength 5a and 5b) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Teaching and Learning Advisory Board, Steering Committee, McMaster Teaching Academy, and Associate Dean contributions were themed and are presented alphabetically in point-form notes of participants’ words.

UNDERGRADUATE STUDENTS

**Strength One: Faculty**
The top strength to preserve into the future according to undergraduate survey respondents is the faculty. Students commented that they find the faculty to be passionate, enthusiastic, and engaging. There is a sense among undergraduate respondents that faculty members care about student learning and want to be sure that all students understand the course material (e.g. generous office hours and quality in-class support). Students also commented that they feel that professors genuinely care about students’ well-being, that they are available, approachable, and open.

**Strength Two: Application-Based Approach to Teaching and Learning**
Another strength to preserve into the future is the application-based approach to teaching and learning. Students commented that they value real-world examples, case studies, and experiential learning for the opportunity to apply their learning and develop context for the theoretical material covered in classes.

**Strength Three: Diversity, Inclusion, and Accessibility**
Diversity, inclusion, and accessibility are also strengths to preserve in the area of teaching and learning at McMaster. Undergraduate respondents commented that they value the diversity at McMaster, particularly the diversity of professors. They also appreciate efforts to promote inclusiveness at the university. Accessibility, accommodations, and flexibility were also mentioned as strengths to preserve into the future.
Strengths

Strength Four: Transversal Competencies
Transversal competencies are another strength according to survey respondents. Students mentioned the following as important to preserve going forward: time management, self-learning, self-motivation, confidence, inquiry, honestly, empathy, and working hard.

Strength Five a: Lectures
Survey respondents made comments about lectures at McMaster. Some appreciate learning by lectures, while others value recorded lectures and having access to podcasts and online lecture slides. There are also students who think that combining in-lecture learning with pre-lecture preparation is a strength. Guest lecturers who are experts in the field and interactive lectures are a strength according to undergraduate respondents.

Strength Five b: Assessment/Evaluation
Respondents mentioned several strengths in the area of assessment/evaluation. These included multiple forms of evaluation, understandable tests, weekly quizzes, fewer tests and more assignments, regular feedback to learn and improve in the future, and opportunities for extra credit.

GRADUATE STUDENTS

Strength One: Student Supports
• Access to academic support services such as ones offered by the student success centre
• Services outside the classroom are awesome. Workshops, writing and editing reviews. Keep those. Invest more in them.
• Library support services
• Funding for students
• Students as partners

Strength Two a: Strong Faculty and Instructors
• Amazing contract and sessional professors (Humanities). Take care of these teachers.
• Faculty in teaching roles
• Instructor responsiveness to student emails
• Approachable professors

Strength Two b: Equity and Diversity
• Equity and diversity
• Ethics
• The different disciplines and education background in the program
• Integrity

Strength Three a: Experiential Learning
• Experiential learning opportunities such as field courses
• Experiential and focused learning from people in the industry
• Non-classroom learning
Strengths

Strength Three b: Active, Shared Learning
- Active learning
- Participatory learning in tutorials and labs
- Shared learning

Strength Three c: Individual Learning
- Engaging all students in their own learning
- Individual learning
- Academic Freedom

Strength Four a: Evaluation and Assessment
- The flexibility and the spread out of the assignments
- No pressure of being graded at the graduate level

Strength Four b: Relevant, Evidence-Informed Courses
- Evidence-informed course content
- The courses offered/very relevant and practical to real life situations

FACULTY AND STAFF

Strength One: Equity, Diversity, Inclusion, Indigeneity, and Accessibility
The top strength to preserve for teaching and learning at McMaster is equity, diversity, inclusion, Indigeneity, and accessibility. Respondents commented on the need to continue to recruit students from diverse populations, and to preserve the commitment to inclusive and accessible teaching practices.

Strength Two: Experiential Learning
Experiential, community-engaged learning is another strength to preserve going forward. Students learn from hands-on, real-world experiences and engage in authentic research-based learning in the community. Experiential and community learning at McMaster is supported by leadership, consultation, and training workshops.

Strength Three a: Quality, Relevance, and Impact
Maintaining quality and rigour, ensuring the relevance of course content, and supporting student success in the classroom are essential to preserve into the future according to survey respondents. Student expertise and preparedness for the working world or graduate school is connected to the reputation of McMaster among employers and graduate schools.

Strength Three b: Problem-Based Learning
Respondents indicated that problem-based learning is a strength to preserve into the future.

Strength Four a: Transversal Competencies
Transversal competencies are another strength to preserve for teaching and learning. Respondents commented on the importance of continuing to support students in the development
Strengths of communication and critical thinking skills, as well as self-direction, accountability, transparency, and creativity.

Strength Four b: Research-Informed/Evidence-Based Pedagogies
Survey respondents indicated that the commitment to research-informed, evidence-based approaches to teaching is an important strength to preserve going forward.

Strength Four c: Interdisciplinary Learning
Faculty and staff respondents indicated that the interaction and networks among various departments and units create rich interdisciplinary learning opportunities for students. Interdisciplinarity is a strength to preserve for teaching and learning at McMaster.

Strength Five a: Innovation
The culture of innovation in teaching and learning is a strength to preserve according to respondents.

Strength Five b: Technology
Strengths to preserve in the area of technology include a culture of curiosity and openness to new technologies, the effective use of technology in the classroom (including simulation learning), online and blended learning options, and effective communication and responsiveness regarding the appropriateness of various technologies in different classrooms and settings.

TEACHING AND LEARNING ADVISORY BOARD

Commitment to Teaching and Learning
- I see that McMaster is unique in supporting teaching in their faculty members. We need to empower the faculty and harness the energy. I see that McMaster’s dedication to teaching is strength. We have dedicated faculty for teaching and learning.
- Macpherson is another strength
- Committees: Usually there is one person who gets everyone on board with their ideas
  The strength is the champions.

Community
- The community. Students come to McMaster and feel that they are part of a family. This is so important for mental health. Anxiety comes without community—hard to speak up, share ideas.
- Instructor to student engagement/student to student engagement are hugely important. So, when we are looking at tech, we need to keep that human connection (could have a mental health connection—i.e. isolation).

Innovation
- The opportunity and ability for innovation exists in pockets across the university.
- Thinking about problem-based learning (PBL)—innovation (observer, question, discuss, experiment). There is a strength.
Strengths

- Continuous innovation (e.g. PBL, project based learning, experiential learning, inquiry)
- Maturation in change management—desire to improve adapt and change. We need to ensure we keep the desire to change and improve. Hold this even when we struggle and fail. Strength in the desire. Need to maintain it.

Interdisciplinary Learning
- We have interdisciplinary learning
- Interdisciplinarity

Involving Students
- Having students involved is a real strength. Lots of times faculty/instructors think their ideas are great and then the students aren’t as keen. We need the students to be involved throughout. We are doing this. Can do it even more.

Knowledge-Sharing
- Connecting with people in different Faculties to talk about teaching in different disciplines. Showcase what you are doing that works. Knowledge sharing.
- School of Business—has a zero credit first-year synthesizing course which was optional initially (case competition, review what they have learned). They use rooms all over campus. Students get feedback on their cases. They are integrating knowledge (HR, accounting, etc.) and applying it holistically. Envisioning the future, we could build on this.

Opportunities for Community-Engaged, Experiential Learning
- Community engaged learning. Our location (Hamilton and proximity to Six Nations) coupled with what and how we are teaching…. There is an opportunity for a niche—a space to have community engagement regarding Indigenous connections. Embed different perspectives into the curriculum.
- Hands-on, experiential learning
- Community-engaged, co-curricular, experiential learning
- Experiential
- Spring/summer workload decreases, so I can take smaller groups of students—more experiential
- Experiential learning

Problem-Based Learning
- Problem-based learning and project-based learning. We do a great job of these things in pockets.
- PBL (observer, question, discuss, experiment)

Research Intensity
- We have research intensity at this university. How can we create a first year experience critical thought/critical understanding?
Strengths

Teaching Communication and Life Skills
- We are moving away from just teaching content, and also teaching skills that are not discipline specific such as communication and life skills—things that apply in all areas. The strength is that we are moving toward this.

STEERING COMMITTEE

Community-Engaged Learning
- Increasing interest in community-engaged learning. How rare it is that students engage with the Hamilton community? So many students know so little about Hamilton. In Arts and Science, there is an emphasis on community engagement which gives students career connections. Being part of community projects (e.g. city lab) gives students practical, tangible skills and job opportunities. We need to create even more courses that support that.

Equity and Accessibility
- Equity and re-centring: Syllabus construction is theory-based. For academia to be rigorous and reputable, syllabuses need to come from different places. Theories get missed and then students go into the world without that. This is done well in political science, but there are gaps. Some Faculties don’t do it.
- Accessible course structure

Experiential Learning Opportunities
- Experiential learning opportunities. Some universities have clear coop built into the curriculum. What I see here at McMaster is lots of ways for students to apply or reflect on what they have learned (e.g. coop, teams, clubs). Faculty recognize the importance of these and give course credit for these experiences.
- Experiential learning

Innovative
- McMaster is not afraid to be different. We are willing to push the boundaries. I was pleasantly surprised by the openness and lack of resistance to change that you might see at another university.
- Innovative
- Taking risks only works with a high tolerance for failure. This is a strength, but something that needs to be built on over time: risk-taking with forgiveness.
- Willingness for disruption. When the Medical School moved to problem-based learning, it was done because they felt it was right. Now, that’s what everyone does. Takes bravery to jump off like that. I would like to see that continue.

Interdisciplinary Teaching and Learning
- Interdisciplinary teaching and learning. We have a growing reputation for developing and maintaining many unique programs. Seen as critical to an uncertain future.
- Interdisciplinary learning
Strengths

- Opportunity for collaboration between faculty members and among and across Faculties. Bring engineering and arts to one classroom, for example.

Problem/Inquiry-Based Learning

- We have always reverted back to the small group problem-based learning approach that emerged in the Business and Medical Schools. Now, we do inquiry based learning—a development of PBL. We do that more in humanities. We are known for that and want to keep that.
- Problem-based learning
- Having worked at different universities, I think application-based would be very helpful—beyond health sciences. Should be adopted in other disciplines. In PBL, learn, then apply the theoretical piece in practice—this is common for health science, but important for all disciplines (e.g. job placement, shadowing someone). Brings the learning to reality.

Student-Centred and Student Participation

- Student participation in course review and pedagogical participation, for example. Students are very meaningfully involved in teaching and learning at McMaster.
- Student-centred

McMASTER TEACHING ACADEMY

Academic Freedom

- Academic freedom is a two-edged sword: We don’t want faculty to hide behind that, but we don’t want to stifle academic freedom. This group is doing great work because of that freedom.

Collaborative Orientation

- An ongoing strength is the collaborative nature that we have among the faculty.
- Group work/collaborative skills

Community Engagement

- We started a culture of community engagement.

Connecting with Students During the COVID Period

- One thing that I did that was welcomed by most of my students was increasing the amount of face time (through a virtual Office Hours Channel on MS Teams). I told them that whenever they see me connected (which is pretty much all the time) to feel free to ‘barge in’ on that channel and request a face-to-face meeting.
- I offered opportunities to book their time with me with Calendly.
- Calendly is great and I too have provided more face time than I ever have in the past.
Strengths

Equity, Diversity, Inclusion, and Accessibility
- Equity, diversity, and inclusion (EDI) conversations are happening at a larger scale. These need to trickle into the classroom. During the first week, I asked my students what they thought about EDI and I created a mandate for the class from that with their ideas about how participation would work etc. (e.g. introverted students struggle to get participation marks). Need to keep EDI front and centre.
- Accessibility

Innovation
- Pedagogical innovation

Interdisciplinarity
- Interdisciplinarity

Inquiry-Based and Experiential Learning
- Inquiry-based learning and experiential learning. Ensure we do not collapse back into the more didactic, lecture-based instruction.

MacPherson Institute
- A strength is the MacPherson Institute and I want to see that continue. The funding that they provide for educational research is important.
- Dedicated teaching and learning institute on campus (MacPherson)

Responsive and Flexible
- We responded well to pandemic. We were up and running with online learning in three days.
- COVID—I was impressed by what happened and how quickly we responded and switched to online.
- Flexibility

Student-Centred
- Student first

Valuing Teaching and Learning
- Something that has grown that I appreciate is the culture of strongly valuing teaching and learning. We all value this so deeply. As new people are hired, the incoming generations really have teaching and learning more prominent in their minds than we did 10 years ago. If we really value teaching and learning, we need to keep sending this message. This is really important. This has been a strength over the past 5-10 years, but we need to maintain that emphasis.
- The fact that we have teaching professors. We are passionate about teaching and learning.
- Now, there is a much greater emphasis on teaching and learning in new hires.
- Leadership commitment to teaching excellence
- Recognition of teaching excellence (awards and rankings)
ASSOCIATE DEAN GROUP

Accessibility
- Accessibility: Access to all members of community
- Access to resources: McPherson, etc.

Collaboration Across Faculties
- Collaboration across Faculties and Schools at McMaster

Diversity of Offerings
- Diversity of offerings

Experiential, Inquiry-Based, Community-Based, Problem-Based Learning
- Experiential learning and problem-based learning. We have built on this over the years.
- Inquiry-based learning
- The efforts for community-based learning, not only in health sciences, but other Faculties as well. That is something to be proud of.
- Work across Faculties—the interdisciplinary component. We all work together and look at ways to bring our students together.
- Student learning through co-curricular, experiential learning activities such as clubs, teams, and coop, as well as our internationally renowned MacChangers and Grand Challenge Scholars programs, which reinforce a culture of collaboration and purposeful education within and outside the curriculum. It is essential to preserve and grow these opportunities for students to scaffold future learning.
- Community engagement
- Inquiry-based and problem-based learning

Experimental and Playful Mindset (Innovation)
- An experimental, open minded, creative, innovative mindset. Willing to try new things. Experimental and playful approach to pedagogy. Playful, experimental, open-mindedness. The word innovation has become a bit cliché, but playful and experimental is really it for me.
- Building from our existing strength in technical and professional education. McMaster Engineering offers a world-class technical and professional education in a wide array of disciplines. We must continue to excel in the development of novel methods to enhance our rigorous teaching and learning in technical and professional programs.

Integration of Research into Undergraduate Learning
- Integration of research into undergraduate learning. McMaster Engineering has the largest undergraduate research program in Canada that is integrated with a coupled in- and out-of-lab training program. We plan to grow our leadership in this area.
Strengths

Quality Teaching
- Quality teaching and approaches

Resources and Infrastructure Support for Teaching and Learning
- The university is such a diverse place. I think that one of the things that is important is an infrastructure to provide resources to make it possible for faculty to use diverse modes of pedagogy. Need to provide autonomy for instructors, but also provide means and a cultural environment that supports pedagogy.

Student-Centred
- Although teaching and learning may vary, the outcome for all seems to be a student-centred approach. This approach is our strength.
- Students at the centre
- Student-centred learning
Part II: Challenges that McMaster University May Face in the Area of Teaching and Learning

Stakeholders were asked to describe the challenges that McMaster University may face in the area of teaching and learning in the future. This section presents the challenges identified by each of the stakeholder groups.

Insights from undergraduate students and faculty and staff have been themed, tallied, and ranked. The top five most identified challenges are presented and contributions for each of the themes have been summarized. Data from the graduate student survey was themed, tallied, ranked, and the top challenges are presented in participants’ own words. Please note that several of the challenges are ranked equally. For example, for undergraduate students there are two challenges ranked at level three. These two are presented using letters (Challenge 3a and 3b) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Teaching and Learning Advisory Board, Steering Committee, McMaster Teaching Academy, and Associate Dean contributions were themed and are presented alphabetically in point-form notes of participants’ words.

UNDERGRADUATE STUDENTS

Challenge One: Faculty
While the faculty was identified as the top strength to preserve into the future, undergraduate respondents also indicated that the top challenge for teaching and learning at McMaster is the faculty. Students expressed concerns about the quality of teaching and the need for faculty to update their lecture content, adapt their approach to teaching to better connect with a new generation of students, and shift away from an emphasis on memorization to an emphasis on supporting student understanding. Students indicated that faculty are leaning too heavily on slides for their teaching (sometimes reading exclusively from slides) and that slides are often disorganized and messy. Some faculty need to improve their use of the flipped classroom approach to avoid repeating the lecture during in-class time. Students also commented on the need for faculty to provide more thorough, clearly understandable explanations and better course outlines with clearly delineated due dates. There are concerns among some undergraduate respondents that faculty members do not make an effort to help students, support in an approachable and welcoming manner. Finally, students expressed concerns about faculty comments to marginalized students and suggested that faculty be required to take anti-oppressive training.

Challenge Two: Assessment
Survey respondents indicated that there are challenges in the area of assessment. In particular, students would like the university to shift away from midterms and final exams to smaller tests/quizzes and assignments that better assess learning. Undergraduate respondents would like to see greater variety of assignments, recognizing that essays are important, but that there are
Challenges

other, more creative ways to evaluate students. There are concerns about the fairness of marking assignments and concerns about the use of expensive online assessments.

**Challenge Three a: Improvements to Campus Life**
In terms of campus life, students had several concerns. First, they would like to see more study spaces available throughout the day. They commented that they waste a great deal of time trying to find a place to study. Second, there are concerns about the Wi-Fi connection. Third, students indicated that the quality of the food needs to be improved and it needs to be more affordable. This is an equity issue. Finally, students commented that there are problems with pests at the university: there are cockroaches at Centro and mice in the residence.

**Challenge Three b: Online Learning**
Student respondents indicated that they would like to see less online learning (fewer web modules) and better reinforcement of online learning.

**Challenge Four a: Equity, Diversity, Inclusion, and Accessibility**
While they did not mention specifics, students commented that equity, diversity, inclusion and accessibility are challenges for teaching and learning at McMaster.

**Challenge Four b: Academic Support**
Student respondents would like to see more academic support from faculty both in class (using class time to work through problems) and out of class (with more office hours and more approachable, available faculty).

**Challenge Four c: Too Much Reading, Over-Reliance on Textbooks, and Expensive Textbooks**
There is a concern among undergraduate respondents that the quantity and complexity of readings is too great to manage with a full-time course load. Students also expressed the sentiment that there is an over-reliance on textbooks in courses and that these books are very expensive.

**Challenge Four d: Student Experience**
Undergraduate students commented on the need to focus on student experience. This includes more organized events, practical experiences, and better course availability.

**Challenge Four e: Teaching Assistants**
The quality of teaching assistants (TAs) is another challenge according to survey respondents. Students expressed concerns about the quality and commitment of TAs and indicated that they would like to see changes to the selection process to ensure that TAs are interested in teaching and care about supporting students. There was a suggestion that TAs receive universal training to create consistency and support their practice.
Challenges

Challenge Five: Student Mental Health
Finally, student respondents commented on the need for more mental health services and resources. One example of this would be to ease access to mental health services and one-on-one appointments with counsellors on campus.

GRADUATE STUDENTS

Challenge One: Approaches to Teaching and Learning
- Variability of course organization. Need to apply adult learning principles to all courses
- Forms of tests/examination/grading
- Individual learning
- Active learning
- Shared learning

Challenge Two: Inclusivity and Accessibility
- Greater efforts to apply inclusive learning strategies into classrooms
- Accessibility and penalization for students who don’t hand in assignments on time. It doesn’t mean they’re getting more time to do it. Some students don’t want to self-identify as disabled or go to SAS so they can’t ask for more time if dealing with something.
- Make use of technology to link in off-site students to all student experiences (or at least more). There are some great on-site opportunities that are not open to off-site students.
- Off-site areas with limited resources

Challenge Three: Academic Freedom and Freedom of Speech
- Commitment to academic freedom
- Freedom of speech is a myth and needs to be challenged
- Non-tenured professors who are afraid to encourage discussion because problematic students might cost them their job

Challenge Four a: Faculty Communication Skills
- The professors need to communicate more
- Quality of professors’ communication skills

Challenge Four b: Fewer Adjunct/Contract Teaching Positions
- More faculty in teaching roles (fewer adjuncts)
- Fewer contract positions

Challenge Four c: TA Training and Preparedness
- More training for teaching assistants
- TAs need to understand the assignments more in order to answer the questions asked by the students
Challenges

Challenge Four d: Siloing
- Lack of interactions with other departments
- Siloing of teaching and learning efforts across campus

Challenge Four e: Valuing Graduate Students
- Involvement in teaching and learning initiatives can sometimes feel devalued
- More designated space for graduate students

FACULTY AND STAFF

Challenge One: Technology
Among the faculty and staff respondents, the top challenge that McMaster University may face in the area of teaching and learning is technology. There are concerns about the rate of technological change and the ability of the university to keep pace, the cost of upgrading, and the pressures to use commercial learning technologies. Respondents commented on the lack of investment in classroom technologies and the perception that University Technology Services staff are not motivated to improve efficiencies.

Survey respondents observed a shift toward online and blended learning. There was a sense among some respondents that McMaster is behind in online learning. Others commented that they feel pressure to use digital technology. Some faculty and staff respondents articulated concerns that online learning will take the place of rich, face-to-face experiential learning opportunities in which students develop valuable connections with one another and with faculty. Virtual group learning needs to be explored along with measures to build community and foster student growth in online environments. Educational support is necessary for effective use of online and blended approaches to teaching and learning.

Ensuring equitable access to technology across campus is another concern described by respondents. Finally, there are concerns about problematic technologies (e.g. Mosaic) and associated inflexibility as well as concerns about the proliferation of platforms (e.g. Echo360, A2L, Microsoft, TopHat) that have opaque privacy policies. There are perceived ethical issues regarding the safety of student information on these platforms and the risk of a data breach.

Challenge Two: Increasing Enrolment and Large Class Sizes
Respondents commented on the pressure to build or sustain enrolment numbers at McMaster which creates problems in terms of classroom/lab space and faculty to student ratios. Class sizes have grown and continue to do so. There are concerns that large classes can cause students to feel anonymous and disempowered in their learning experiences. Faculty feel pressure to ‘do more with less’ and have concerns about the value they are able to provide for students.

Challenge Three: The Status of Teaching and Learning at McMaster
There is a challenge in terms of the status of teaching and learning at McMaster that is demonstrated in tenure recognition structures, faculty priorities, the architecture of professional support systems, and in decision-making processes about teaching and learning. The continued
emphasis of research over teaching in terms of tenure decisions makes it difficult to persuade faculty that teaching and learning is a priority worthy of focus and attention. Based on these merit and reward systems, faculty elect to prioritize research rather than investing the significant time required to develop excellent courses that incorporate novel teaching approaches. Scholarship/research on teaching and learning is not fully recognized or celebrated across campus. In addition, respondents commented on the perceived lack of support for faculty to improve in the area of teaching and learning. There are insufficient training opportunities for both faculty and teaching assistants and too many demands on faculty time for the integration and use of new approaches to teaching and learning. Finally, some faculty and staff respondents expressed concerns about the fact that there is a lack of clarity about how pedagogical decisions are made and a perception that these decisions are falling to those in administrative positions. There is a need to reconcile trusted teaching methods, like the lecture, with new methods, but there is a sense among some respondents that there is uncertainty about what constitutes good teaching. Faculty need to be supported as they develop their teaching practice and they also need to be recognized and rewarded for making efforts to improve in the area of teaching and learning.

**Challenge Four: Funding**
Faculty and staff respondents expressed concerns about cuts in provincial funding and changes in the mechanisms by which funding is allocated to universities. Downstream challenges include the continuous focus on finances, the pressure to do more with less, and the increasing use of economically-focused metrics to assess success, which narrow the conception of post-secondary education.

**Challenge Five a: Diversity and Accessibility**
There are also challenges in the area of diversity and accessibility for teaching and learning at McMaster according to survey respondents. There is a perception that there is insufficient diversity among faculty members and, at the same time, there are concerns about the ability of the university to support students from increasingly diverse backgrounds. Respondents indicated that there is a need to improve in the area of accessibility (including digital accessibility) and ensure that faculty are meeting the individual learning needs of all students.

**Challenge Five b: Student Quality, Focus, and Engagement**
Finally, faculty and staff respondents commented on the preparedness of incoming undergraduate students, their commitment and willingness to work, as well as their distractibility and capacity for engagement, deep thinking, and exploration.

**TEACHING AND LEARNING ADVISORY BOARD**

**Equity, Diversity, Inclusion, and Accessibility**
- Equity, diversity, and inclusion: We need patience, but what is missing is intentionality. Without intentionality, not much happens. We need to marry intentionality with patience. McMaster is very collegiate. This can be a challenge because things move slowly. Collegiality is important to continue, but we need to ensure it doesn’t slow us down in change areas that are important, like EDI.
Challenges

- Expanding student body with wide ranging requirements
- I have concerns about diversity: 90% of my students have at least one parent working white collar. We need more diversity. Do not want university to be a career preparation institution. Some people do not want to invest in education that doesn’t lead to a job. Need to be mindful… Need to consider access. How can we make the classroom more diverse? Student looking for a career... what does that mean for interdisciplinary learning?

Commitment to Teaching and Learning

- Funding pressures with bureaucratic targets that do not meet pedagogical aims
- On the ground, I am wondering if there is lip-service to teaching. Tenure, promotion not really there for teaching and learning focused faculty.
- Committees—usually there is one person who gets everyone on board with their ideas and when that person moves on (e.g. sabbatical), the ideas sort of crumble, trail off. It isn’t institutionalized.

Community

- Creating community. Where is the time to do that? For example, in a first year general chemistry setting (working in small groups), how do you integrate the academic learning in such an intense setting? You are so focused on getting the experiment done, you don’t even know your lab partner’s name. Do you create another part of the course for the human interaction to happen? It’s so intense coming from high school. There are opportunities for extra-curriculars, but in first year, you want to focus on academics. It’s hard to want to seek those opportunities because you want to focus on grades. Academics matter.

Experiential Learning

- Moving from PBL and project-based learning and experiential: We do a great job of these things in pockets, but need to build it out. We need to support students and faculty to be able to do PBL and experiential. Different than teacher lecturer—they need to be supported to understand how to manage and run an experiential course—need training. It’s a whole different way of learning/delivering. There are also demands on students (e.g. social-emotional skills are necessary). So we need to support students in these learning models too.
- The challenge is that lots of students can’t take the smaller, more interactive experiential summer programs. They have to work and can’t stay for intersession classes. They only get the huge classes with hundreds of students. It would be nice to expand that opportunity.

Innovation

- Preserve the opportunity for innovation, but build this capacity across boundaries.
- Concerned about disinterest in pedagogical innovation
- A strength to foster is patience. Students, faculty, senior administration all need it. In a neo-liberal environment, we need immediate results. This doesn’t work. We need time to
Challenges

experiment. We encourage students to deal with failure. We need to be more open and willing to experiment and experience and deal with failure. (For example, as an experiment, social work and humanities professors taught a class together. It was difficult, but important. Need time to work through it.)

Instructor Inconsistency and Apathy
- Inconsistent instruction. Lots of different people delivering: some are great at it. Some are not. That is a core challenge.
- Instructor apathy, department chair apathy

Interdisciplinary Learning
- Want to teach interdisciplinary, but there are structural challenges. It’s hard to cross those boundaries. It is hugely exciting to cross-pollinate. Need to make this possible/make it easier. Faculty become energized, feel connection, become better teachers.
- We have interdisciplinary learning. We brag about it, but really six programs are interdisciplinary (and we could argue about how interdisciplinary they are). We need this to be more widespread. How can this be campus-wide and not just for these specific programs (e.g. health science, engineering)? Less than 1000 students in those programs. Let’s keep pushing it. Pursue it.
- Interdisciplinary/integrated
- Student perspective: In structured programs, there are lots of courses that you can’t take. You miss inquiry-based, PBL, interdisciplinary courses. You can’t do that until 3rd year and even then, these types of courses are not open to everyone. Not all students get the opportunity even though it is there.
- Another thing is to encourage students to think broadly. Young people coming out of high school are already thinking that they are ‘not science people’/’not English people’… We need to break those down a bit and nurture in students an interdisciplinary capacity. We need to encourage them to take courses outside what their perceived direction is.
- Now, departments are competing with each other. The walls between Faculties are strengthening. We say we are interdisciplinary, but the competitive budgetary model does not support interdisciplinarity.
- Need to align university’s description of itself with what is really happening. Interdisciplinary learning is amazing, but it is much harder. It takes twice as long to prepare for it and WAY more office hours to support students. It is great, but hugely demanding.

Student Mental Health
- Anxiety in students. There is something deeper going on. Students found a zero credit lab skills course to be was insanely stressful. It was not worth marks and was meant to be fun! Really concerning.
- Student mental health
Challenges

Teaching Communication and Life Skills
- We are moving away from just teaching content, and also teaching skills that are not just one discipline specific, e.g. communication and life skills—things that apply in all areas. The strength is that we are moving toward this. The challenge is that I am not sure if that is happening everywhere. I think some people are still stuck in content.

Technology
- Teaching with technology: How can we catch up with the present and prepare for the future?

STEERING COMMITTEE

Community-Engaged Learning and Research
- We have a lot to learn. There is a division between teaching and learning and research in terms of community engagement. We started learning that there are teaching and learning opportunities doing research in the community, but research and teaching need to be better linked. We can use the community for that. What if all researchers at McMaster were thinking in this community-engaged way?
- Building on this point about distinction between research and teaching: At McMaster we forget that there is a huge cost to community-engaged education. Need to consider the impact of students on the community (especially in organizations that don’t have many resources). We are a big institution in an area that doesn’t have a lot of resources. We need to be sensitive to that.

Equity, Diversity, Inclusion, Indigeneity, and Accessibility
- Variation in receptiveness among teaching instructors with respect to anti-colonial course syllabus adoption.
- Students of the future will do best with a global perspective. We have been stuck in a western/European perspective (e.g. start with the Greeks). We cannot overstate this. Absolutely core. If we don’t do it, then we are saying that those perspectives are not important. That is not ok. It goes hand in hand with decolonizing the curriculum. It’s bigger than that, though. Thinking about global perspectives. Not lip service.
- Aligns with the Indigenous programs on campus and the Truth and Reconciliation Commission and the changes we are starting to see with that. Needs to be continued.
- Diversity of our students. Need to be sure that the quality of our education is available fairly for all students. Professional development for faculty to better support international, first generation, other groups. What kind of behaviours do we want to incentivize?
- Continued awareness around accessibility for students. Continuing to look at ways that students come (e.g. first generation—familial connections to get a job or internship aren’t there). How can the university try to equalize this?
Challenges

Flexibility
- Make learning more flexible—micro-credentials. Shift curriculum to be offered in different ways to different people.
- Lack of flexibility
- Micro-credentialing: Big questions around the usefulness and efficacy of these. It takes resources and is maybe not valuable. Question about the value. Consult with external stakeholders to be sure that the micro-credentials are actually useful in the real world.
- One unit courses were proposed to the provost in the past, but rejected for financial reasons. Budget model needed to achieve these goals. Money follows the student now. It used to be that big Faculties funded the smaller ones. Need to decide what we want as an institution and make the budget follow that. Not the other way around.

Interdisciplinarity
- Interdisciplinarity—Questions about what credits I am getting from where limit our ability to do interdisciplinary programs well.

Online Learning
- Shifting to online learning. While this change to online learning is evidently possible, there are many associated challenges that must be reviewed.

Structural and External Constraints
- Question: Are we trying to retrofit what we come up with into the existing structure? Or are we willing to push for structural change? We can do as much visioning as we want, but what are we trying to do here? Do we have the ability to push on structure?
- External pressures. External standards and accreditations can be constraining. We want to be student-centred, but there are requirements and accreditation challenges that limit us (e.g. essential employability skills).

Student Feedback
- Student feedback on courses. Changes must be made to course feedback structure, and the effectiveness of these changes must be monitored.

Technology
- Technology disruption

What is the Vision and Unique Selling Proposition for Humanities and Social Sciences at McMaster?
- From a humanities and social science perspective, what is the unique selling feature of McMaster? We are mostly known for health sciences. What is going to be the unique selling proposition for humanities and social sciences? Particularly in this world we are in (COVID/funding issues/uncertainty), how is education connected to potential income (especially in equity seeking groups)? How can we create a vision for humanities and social sciences?
McMASTER TEACHING ACADEMY

Academic Freedom

- Academic freedom and intellectual property: For professors, we own the intellectual property, but we have a bunch of sessionals who teach and then their work is tossed out. Who owns the intellectual property? How can we be sure that people aren’t being taken advantage of?
- Who owns it? The university thinks that they partly own the course material because they put money into it. That should be put in writing. What is your course? What is your property? Who owns it?
- Course ownership: For our programs, we can't have faculty own a course to take away with them. Many of our courses must stay with our program.
- I have significant questions about who owns the courses.

Adult Learners

- I would further add that the adult learner community is important to remember and how they learn needs to be part of this process.
- The continuum of learning is essential to recognize and respect well beyond graduation.

Assessment

- Need to make assessment more useful.
- Accreditation bodies are a challenge when trying to innovate in terms of assessment. We are trying to move away from final exams. Focus on doing: ‘What can you do?’, ‘Can you apply your knowledge?’
- Integrity and how we maintain the integrity of those assessments. As we move forward, we need to look at how we assess. Final exams are fraught with problems in terms of potential academic dishonesty. How do we support students who are approaching those exams with integrity?
- The number of consultations for students asking Student Accessibility Service (SAS) for accommodations increases every year. Students are coming from high school with accommodations that need to continue. That challenges both the delivery of curriculum and the push toward universal design. It also challenges our student assessment systems. I have promoted the idea that we need to forget about the concept of the final exam and find more imaginative ways to assess what students have learned/what we want them to learn. That is a challenge for us.

Community

- Community

Educational Technology

- Educational technology. I shouldn’t have to do my own research about appropriate online platforms to use for my students. We are 10 years out of date. There should be a place where I say, ‘I like this’ and then the university makes recommendations: ‘Ok, so you
Challenges

want to do this… Try this… and here is how you can do it”. We need explicit recommendations. Otherwise, it is overwhelming.

- It’s tricky when some students don’t even log in to Avenue to Learn until last minute study is the only option.

Equity, Diversity, Inclusion, Indigeneity, and Accessibility

- Truth and Reconciliation Commission: the goals of decolonizing. We have aspirations. I want that to be a part of the conversation.
- International students: The university is focused on bringing international students. I see that this is focused on high-income countries. I would like to see how we could offer opportunities for people from low-income countries to benefit from what we have at McMaster.
- We are having great EDI conversations at a global level, but not sure if this is trickling into the students’ experience.
- Need to make more of an effort to bring EDI to classrooms.
- Larger, more diverse classes
- Changing technologies and student learning styles
- Accessibility
- We have local students who couldn’t get onto the Internet. Some people don’t have laptops, Internet access. There needs to be a bursary program to upgrade their wireless Internet access and get the basic equipment to participate in online learning.
- Most programs have partnerships (experiential, coop, clinical placements). When we have so many accommodations, we have to work with our partners to be sure students are safe. Accommodation plans need to be made and linked to the partnerships.
- Increase in SAS. Challenge in accommodations.

Funding for Educational Research

- We do have challenges finding funding for educational research.

General Labour Practices at McMaster

- I have significant questions about general labour practices at McMaster. We were a leader in developing the teaching stream approach. The consequences have been great. I am really frustrated with these one-year-less-a-day contracts to avoid giving benefits to people who are ostensibly full time. This is a moral issue. There have to be better labour practices. Let’s get MacPherson on board with appropriate labour practices, because what we are doing now is a scandal.

Interdisciplinarity

- We are losing a strength—interdisciplinarity. What is amazing about this [MTA] group is that it is interdisciplinary, but we are not succeeding. I am not sure we are failing, but we are not succeeding. I have seen more and more siloing. Faculties are more disparate than they were 20 years ago. We are learning in this group, but the extent to which this knowledge is disseminated to the university more broadly is limited.
Challenges

- At the graduate level, I have seen that students can’t pivot because they don’t have enough cross-disciplinary experience. We need to get students into different Faculties. Need to get some of the more hard-core science programs getting students to look at different courses/Faculties (e.g. I had a talented biomedical student who could not answer one question about ethics/different perspectives). There is not enough diversity of academic experience.
- What is a course? Thinking of micro-credentials. Part of the challenge in multidisciplinary is getting Faculties to agree on what constitutes a course. It is difficult. It would be good if there is a way to make that easier/to remove barriers.
- Multi-Faculty collaboration is an administrative challenge.
- Assessment expectations of students across the various Faculties are quite varied. In developing collaborative programming, this might lead to enrollment challenges.

International Students

- How do we preserve our attractiveness to international students? They bring diversity, freshness, and money to the university. In Business, we have 80-90% international students. How do we preserve and leverage our unique teaching and learning skills to attract international students in the COVID age where we are uncertain about whether we will be online-only or some mix? Will the borders ever be open? What can we do to make it worthwhile for someone in China to spend $30,000/year to stay at home and sit in front of their screen on Zoom and still feel like they are getting value from it?

Online Learning

- We were up and running with online learning in three days, but there were lots of challenges. Skills need to be acquired. The biggest benefit of COVID19 is that it shows our weaknesses and addressing those should be part of the strategic plan.
- I think one thing we realized at DeGroote is that we need to help faculty be better at online and blended learning.
- Concerned about the application of learning with the shift to online. Need to separate out skills and knowledge in STEM. ‘Can I understand?’ but also ‘Can I apply?’ I am worried with blended learning that we will tip to the knowledge side and focus less on application, skills, problem-solving, and understanding.
- How do we get students working together remotely? How to facilitate that in remote or blended strategies? We need to think about that a bit more. We are going to see more remote learning approaches come to the table. Some of those learnings/skills could filter down to in-person interactions when we get back to that.
- Conversion to online teaching

Responsiveness and Preparedness

- I am interested in preserving the flexibility we currently have. Speaking from social science, I am a little bit concerned about being less flexible when it comes to teaching and learning (highlighted by COVID). I feel like STEM decides and sets the agenda for how we go forward with teaching and learning, but the goals and values we have in social sciences are different. STEM goals aren’t bad, but they may not fit our goals.
Challenges

- While I was impressed by how quickly we responded and switched to online, at the same time, I was wondering if more structure should be embedded in the strategy. There is a need for emergency planning—more structures and recommendations. There should be a document to describe the situation and provide resources all in one place. It would be useful for the university to have a document/plan.
- Flexibility
- Old guard (faculty) aversion to change

Student-Centred

- When I speak with people outside of McMaster, I often comment on our student-centred approach. One thing I find lacking: We focus on how instructors managed COVID and pivoted to online. I am not sure we have a pulse on students and what they think about this. Any discussion about how teaching and learning will change going forward will need to include student voice. I would appreciate student-centredness as important as we move forward with strategy.

Student Mental Health and Engagement in the COVID Era

- I’ve seen a huge increase in student stress during this time (e.g. missed appointments, trouble getting work done, and a feeling of invasion with Zoom in their bedroom).
- I’ve heard from many students that low motivation is a big player.
- I personally struggle a lot with online learning. I teach mostly lab courses and I have a lot of face time with students. Now I struggle with keeping my students motivated, engaged, and positive.
- Less engaged students
- I think we need to really change the way we teach online so as to increase motivation. It won't work if we just move our content online without addressing motivation.
- Our students' response (mechanical engineering) to the rapid online shift has been mixed. There has been lots of stress (especially around assessments/final exams). Some students have expressed lots of appreciation for the online content (making the content more accessible), but others have a big problem with working online and finding motivation with a lack of schedule.

The Role of Humanities and Language at McMaster

- I have questions and would like more clarity about the place of the humanities and language teaching at McMaster. What is the content that we want to teach/we want students to learn? In the humanities, it is a little bit vague. We should maybe have more discussions about what the humanities should bring to the table. Usually, languages are considered unnecessary (‘Everyone around the world speaks in English’), but it’s not about translation. It is also about seeing the world in a different way and having different tools to describe the world. The languages also teach tolerance. We don’t all see reality in the same way. There are different world views. We should try to communicate between them.
Challenges

Traditional Program Structure
- We only run for 2/3 of the year and the summer is afterthought. That time could be more purposefully used. This could be useful in this era, although it would be challenging administratively.
- There is a limitation that comes from disciplines that require contact time and a certain number of required hours (e.g. engineering). I think we should decouple the external pressures/accreditation/government... Need more flexibility.
- In French, we want to move to new pedagogical approaches (e.g. task-oriented methods: think problem-based learning, but for teaching language). It is almost impossible to get students organized and get to some useful results in a 50-minute class. They just get organized and into some interesting conversations, and then the class is over. We have asked for more time for conversation (2 hours per class, 2 times a week), but we were not allowed because of the schedule. It has to be Monday and Thursday at this 50 minute time. It just doesn’t work.
- Scheduling classes and organizing time blocks for unique forms of learning experiences

Valuing Teaching and Learning
- Tenure track faculty are research focused.
- We have a lot great instructors on campus. We also have we have staff members and post docs that would be great instructors. There are barriers to getting them into instruction positions.
- Evaluating the quality of teaching

ASSOCIATE DEAN GROUP

Accommodations and Assessment
- Student Accessibility Services (SAS): the number of consultations/requests from students asking for accommodations increases every year. Students are coming from high school with accommodations that need to continue. That challenges both the delivery of the curriculum and the push toward universal design. It also challenges our student assessment systems. We need to forget about the concept of the final exam and find more imaginative ways to assess what students have learned and what we want them to learn. That is a challenge for us.
- Most programs have partnerships (experiential, coop, clinical placements). When we have so many accommodations, we have to work with our partners to be sure students are safe. Accommodation plans need to be made and linked to the partnerships.
- Increase in SAS. There are challenges in accommodations. We need to make assessment more useful.
- Integrity and how we maintain the integrity of assessments. As we move forward, how we assess is an issue. Final exams are fraught with problems in terms of potential academic dishonesty. How do we support students who are approaching those exams with integrity?
Challenges

- Accreditation bodies are a challenge when trying to innovate in terms of assessment. We are trying to move away from final exams and focus on doing: What can you do? Can you apply your knowledge?
- Academic accommodation requirements going up
- Changes required to assessment
- Maintaining integrity of submitted work

Adult Learners
- The adult learner community is important to remember and how they learn needs to be part of this process. The continuum of learning is essential to recognize and respect well beyond graduation.

Communication Across Faculties
- Communication across Faculties

Decolonizing the Curriculum
- Truth and Reconciliation Commission and the goals of decolonizing: we have aspirations. I want that to be a part of the conversation.

Experiential Learning
- Growth of experiential learning opportunities. The integration of experiences beyond the classroom into the engineering undergraduate experience is an urgent need. As a result, new resources to support work integrated study (coop) and innovation activities (entrepreneurship, start-up incubator) are required that must be more fully integrated into our curricula and properly supported.

Faculty to Student Ratios
- Faculty-to-student ratios

Flexibility
- Need to increase flexibility in course offerings toward undergraduate degrees

Learning Spaces
- Learning Spaces: In order to deliver novel curricula, current engineering spaces are not adequate. The need for collaboration spaces, design studios, innovation spaces and greater integration with technology is essential for developing future-ready graduates who will learn and seek work in a post-pandemic world.

Online Learning
- Resources for online learning
- Shift to online and away from traditional lecture
Challenges

Student Support
- Student Support: Improving the range of experiences that our students have during their education will require additional support for academic advising, mental health supports, mentoring innovation, and developing more durable career skills.

Technology
- Advanced technology to advance teaching methods
Part III: Desired Transformations to Enhance the Student Learning Experience at McMaster University

Stakeholders were asked to envision five to ten years into the future and identify desired transformations for teaching and learning at McMaster University. This section includes the desired transformations described by each of the consulted groups.

Insights from undergraduate students and faculty and staff have been themed, tallied, and ranked. The top five most identified themes are presented and contributions for each of the themes have been summarized. Data from the graduate student survey was themed, tallied, ranked, and the top challenges are presented in participants’ own words. Please note that several of the desired transformations are ranked equally. For example, for undergraduate students there are two desired transformations ranked at level one. These two are presented using letters (Transformation One a and One b) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Teaching and Learning Advisory Board, Steering Committee, McMaster Teaching Academy, and Associate Dean contributions were themed and are presented alphabetically in point-form notes of participants’ words.

UNDERGRADUATE STUDENTS

Transformation One a: Faculty
By 2030, survey respondents would like to see more approachable, caring, effective, and engaging faculty at McMaster. Students commented that there should be better interaction between faculty and students. Faculty members could be more approachable, caring, and willing to help students. Enthusiastic and passionate professors will develop engaging, understandable, organized, and effective learning experiences for students.

Transformation One b: Fewer Lectures; More Interactive Classes
Undergraduate students commented that they would like to see less lecture-style teaching and more interactive instruction. If lectures are required, students would like the option to experience them as a podcast and they would like faculty to move away from an over-reliance on slides and make more of an effort regarding the organization and tidiness of slides. They would also like to see higher quality lectures that augment the textbook, not repeat it.

Transformation Two: Equity, Diversity, and Accessibility
Respondents indicated that they would like to see more equity, greater diversity of faculty, and improved accessibility at McMaster. Overwhelmingly, undergraduate respondents commented about the cost of university and expressed the hope that it would be more affordable in the future. They would like lower tuition, less expensive textbooks (including e-textbooks), the elimination of paid online homework submission platforms, more affordable food for on-campus students, and more flexible schedules to allow students to work while they are students at McMaster.
Desired Transformations

Transformation Three a: Application of Learning
Undergraduate students commented that they would like more opportunities for the application of learning. They would like to connect in-class learning to practical, real-world situations and problems that they will be working to address in future years. Hands-on experience in coop, research endeavours, and experiential courses solidifies learning much more effectively than memorization.

Transformation Three b: Improvements to Campus Life
In the future, undergraduate respondents would like to see a number of improvements to campus life. They commented that they would like to see more healthy, affordable, and diverse food options on campus; the eradication of pests in residence buildings; more study space (with access to chargers); better Wi-Fi and more charging stations at Thode Library; and better accommodation of a steadily growing population of students (e.g. more classroom space and updated buildings).

Transformation Four: Academic Support
Undergraduate respondents indicated that they would like more academic support. At the start of their university careers, students would like help transitioning from high school. Some perceive that McMaster enrolls top students and then leaves them to languish. They would like faculty and tutorial assistants to prioritize academic support for students. There are particular concerns that marginalized students need more support at McMaster.

Transformation Five a: Assessment
Another desired transformation is in the area of assessment. Undergraduate respondents commented that they would like McMaster to offer alternatives to the traditional final exam. They expressed the view that tests and exams assess the student’s ability to take tests; not their knowledge. Students further commented that rubrics are not useful in certain cases because a creative process does not fit into a box. When tests are used, undergraduate respondents would like to have more practice questions and they would like to see a shift to make many aspects of the assessment process paperless. Finally, students would like better organization and more fairness in the marking of assignments.

Transformation Five b: Online Learning
Some undergraduate respondents would like there to be more online classes and blended learning at McMaster (both classes and tutorials). One respondent hopes that there will be less online learning in the future.

Transformation Five c: Student-Centred
Finally, undergraduate respondents indicated that they would like to see a more student-centred approach to teaching and learning. Specifically, they would like more student involvement including greater attention to student suggestions, a more significant effort to provide students with information about the services that are available to them, a revisioning of the McMaster Student Union to improve its principles, processes, and services, and greater care in scheduling so that students do not have back-to-back lectures on opposite sides of the campus.
Desired Transformations

GRADUATE STUDENTS

Transformation One a: Beyond Traditional Learning
- All courses organized to reflect adult learning principles. Shift away from traditional esoteric learning for learning sake only
- More interactive
- Focused on information synthesis (versus memorization)

Transformation One b: Equity, Diversity, Inclusion, and Indigeneity
- Real reconciliation with Indigenous peoples
- Adopted an inclusive learning approach to teaching so that knowledge is accessible to all students
- More bursaries and tuition assistance if tuition still isn’t free in a decade

Transformation One c: Prepare Students for the Workplace
- Made students job-ready
- Students have strong problem-solving skills
- Sought out and desired students and employers

Transformation One d: Prioritize Quality and Innovation in Teaching and Learning
- Created a Canada Research Chair position (or something similar) in the scholarship of teaching and learning to unite efforts across the university
- Maintained a high quality of teaching/learning and assessment
- Discovered the next ‘problem-based learning’

Transformation One e: Retain Quality Academics
- Retained the best academics
- Provided the experience to learn from true academics
- 100% employment satisfaction

Transformation Two a: More Experiential, Community-Engaged Learning Opportunities
- Increased the availability of experiential learning opportunities for students, including graduate students
- More connection between the community and the university with applied research

Transformation Two b: Reconsider Free Speech
- Gotten rid of the free speech nonsense
- Transformative discussions that include having a backbone re: problematic speakers who want to present at the university. Protect underrepresented students.

Transformation Two c: Technology
- Incorporated technology to open link off-site students to all on-site student opportunities (e.g. workshops, serving on committees, etc.)
Desired Transformations

- Embraced the integration of technology in learning and in the classroom

FACULTY AND STAFF

Transformation One a: Valuing both Teaching & Learning and Research
One of the two top desired transformations according to survey respondents is a cultural shift at the university in which teaching and learning (providing a positive educational experience for students) is valued equally with research. Evidence of this shift will take several forms. Tenure evaluation systems will recognize and reward quality teaching, and more teaching-track faculty will be hired across campus. Faculty who conduct research on teaching and learning will be given time to do so and this research will be valued in promotion evaluations. Commitment to teaching and learning will be demonstrated through training initiatives for faculty members to help them develop their teaching practice (both in person and online) and by providing time for them to integrate and evaluate new and innovative approaches to their practice. Resources and staff support will be available for faculty to help them to determine and make use of the best methods to meet their education outcomes. Finally, the university will demonstrate commitment to teaching and learning by modernizing classrooms to support active learning and by investing in the development of more innovative online offerings.

Transformation One b: Personalization and Student Support
Faculty and staff respondents indicated that the other top desired transformation is the personalization of the learning journey with appropriate supports for McMaster students. A more individualized, student focused approach to learning would include more flexible schedules and pathways including the ability to assemble courses/experiences to customize a degree (micro-credentialing), shift between degrees, and learn on demand. There could also be much greater flexibility in scheduling. In a desired future state, both online and in person class sizes will be reduced (by offering more courses) which will ensure that students have the opportunity for active learning and relationship-building with their instructors and other students. Small group experiences will enable students to develop strong communication and problem-solving skills. Students will be supported by personalized peer and faculty mentoring and improved mental health supports.

Transformation Two: Accessibility and Diversity
By 2030, respondents envision that McMaster will have a more diverse faculty as a result of committing both intention and resources to recruitment and retention processes. There will also be a more diverse student body as a result of high-profile, successful outreach and transition programs to facilitate access for under-represented groups of students (e.g. first generation, Indigenous students, low-income students, students with disabilities). The removal of tuition barriers and improved access to bursaries for low-income students will make university education more equitably accessible. Respondents commented on the importance of an accessible educational experience for all students across a number of diversities at McMaster. This includes adapting teaching for various learning styles, training faculty/instructors about accommodations and universal course design, prioritizing excellence in accessible digital design, and decolonizing the curriculum and infrastructure to support various ways of learning and knowing.
Desired Transformations

Transformation Three a: Community Connection/Community-Engaged Learning
Faculty and staff respondents would like to see greater connection and engagement with the community outside McMaster by 2030. Community-engaged learning gives students the opportunity to develop a sense of curiosity about the community, respectfully partner with and actively learn from community groups, contribute relevant and impactful research, and keep abreast of changes or innovations in industry and the environment. These experiences may inspire students to be life-long learners who are actively engaged community members. Increased partnerships and opportunities for international student exchanges will support community connection at broader scales.

Transformation Three b: Preparing Students for the Workplace
There are a number of desired transformations in terms of preparing McMaster students for the workplace and supporting their employability. Faculty and staff would like to see more co-op and internship opportunities for students. In addition, respondents commented on the need to create and maintain connections with industry and the private sector to develop more relevant programs for growing economic sectors (emphasizing appropriate transferable skills) and to facilitate higher employment rates after graduation. Hiring more instructors who have ‘real-world’ industry experience (whether or not they have a terminal degree) will support these initiatives and help graduates feel prepared and confident entering the working world.

Transformation Four a: Technology
Respondents commented on the importance of technology in 2030. They envisioned supported high-quality virtual learning tools in every classroom, robust learning platforms for in-class and online delivery and engagement, and the integration of artificial intelligence. To achieve these desired transformations IT infrastructure needs to be refreshed, limited software (e.g. Mosaic) needs to be replaced, IT staff need encouragement to be more innovative and forward thinking, and faculty need support.

Transformation Four b: Online Learning
By 2030, respondents would like to see more online courses and degree programs (to support distance learning) and more blended learning. To achieve this desired transformation, faculty will need support to design and implement quality online learning experiences that allow students to connect with one another and engage deeply with course material.

Transformation Five: Interdisciplinary Learning
Finally, faculty and staff respondents envision the expansion of interdisciplinary offerings across faculties at McMaster. Supported by infused technology in all campus buildings, innovative interdisciplinary experiences will be available to all students.

TEACHING AND LEARNING ADVISORY BOARD

Assessment
- I would love to find a way to assess without testing. Everyone hates exams. Anxiety (mental health)/bad behaviours/increasingly divided—students who can afford private tutors do better (EDI). I envision a future where we assess our students and have
Desired Transformations

confidence that they have learned the material, but without putting them in the awful experience of exams.

- Undergraduate perspective: Make choices about course selection based on how they are assessed.
- More focus on students meeting learning objectives rather than marks
- Focus on competencies in addition to intended learning outcomes

Commitment to Teaching and Learning

- I would like to see indicators across the campus that teaching really matters—policies, practices align. What does that look like? Hiring and onboarding, annual review, promotion, our policies, our processes: All of these need to reflect the importance of teaching. Connected to this is a theme of social connection, belonging for students and faculty coming onboard. Family, community, how do we pull all of this together? How is all this reflected? In 2030, we could look at people, policies, functioning of the university and see this across the board.
- Equal value to teaching and research. Need to value teaching. And incentivize (ultimately you have to invest resources in teaching).
- Experiential learning in all of its facets
- More non-traditional classroom experiences
- We all understand the purpose of the university—larger than the faculty. Include support people, like IT. There is accountability in teaching and learning. Everyone understands their role in teaching and learning—not just faculty.

Community Belonging and Community Engagement

- Set students on a journey together. Create a group of 60 to travel through together. Need a group and belonging. People to talk to. People who know you/care about you. Community. Engineering does this a bit. Could do this more. Build community. Fostering it onward. Supporting faculty to learn cross-disciplinary.
- Focus on teaching with technology and also community engagement
- Community. Create a broader community of engagement. There is pride in Hamilton about McMaster. Unique. Being embedded in a smaller city. Engaging that community in a more deliberate way—not just in a community engagement office, but in terms of education (parents, other groups). Consider Teams (platform for online learning).
- Get into parts of our community that we have already engaged, but actually do something there. What are we doing with parents? There is so much more we could do there. Can we invite families in in a way that helps them and helps us (e.g. educate them about EDI, mental health/parent newsletters)? Welcome the community in in a real way. Thinking about teaching in a very broad way. Our job is to teach all people in the community.

Diversity

- What if programs target people? Recruit people to help bring in and support more diverse groups/those who haven’t necessarily been in university before.
Desired Transformations

Partnering with Students

- Students having a voice in the way they are taught. [Student]: I wish I had this experience sitting in a meeting like this when I was in first year. You just don’t feel like you have a voice. You fill out comment cards, but what is that going to do. If you know that you have a say, that would be amazing/important.
- Eliminated course evaluations in their current form

Rethinking the First Year Experience

- I’d love to see a first-year experience more integrated. What are we offering students? Can we develop a set of principles (shared pedagogical strategies/objectives) to make the experience more whole/more experiential? Make the first-year student experience better for students and faculty. That would be a great part of first year. Why couldn’t we market that? Parents are concerned about the experience. It can be scary.
- First year is incredibly important in terms of pathway for students (happiness etc.). Having faculty from different Faculties teaching together for this. There are structural barriers for this, but could there be co-teaching interdisciplinary courses?
- Harnessing technology for good. (Book: Team Human—how to use technology better). Do this as an idea for a first-year program.
- First two years—empowering and supporting students with skills they would need to succeed. Individual development plans are great. So especially in interdisciplinary courses, help them figure out what they want to learn and where they want to go with their university experience.

STEERING COMMITTEE

Broad-Based Education

- I’d like to go back in time when a university student can have a conversation on any topic. University education used to be more broad-based. It is bad for university education to have the over-specificity of courses. Students get a deep level understanding of accounting, for example, and take many accounting courses, but then have no philosophy or history. We need to have more balance, more cultures, more perspectives. You see this in the world where people don’t have understanding about other disciplines and areas.

Equity, Diversity, Inclusion, Indigeneity, and Accessibility

- All existing and new McMaster courses are reviewed and adapted for adoption of an anti-colonial syllabus
- Some students have a better experience than others. Integrated Business and Humanities (IBH) struggle with this. There are only 150 students.
- All McMaster courses utilize online learning platforms like Echo360 that strive for universal design for learning
- Open education (z-cred degrees)
Desired Transformations

Flexible Learning Pathways
- Flexible learning pathways

Interdisciplinarity: Remove Structural Barriers, Find Common Definition, and Ensure Equal Access
- Would hope that by then we remove structural barriers that limit interdisciplinarity and other innovative/transformative ideas.
- In favour of interdisciplinary programs, what I’d like to see is a balance for disciplinary and interdisciplinary. Either lose one, or support both. Our definitions of interdisciplinarity vary. We often talk past one another in the Faculties because every Faculty has a different understanding/definition of interdisciplinarity. We are very decentralized here. I don’t want inequity in the student experience at McMaster. Concerned about the large programs and the difference in quality and experience between small and large programs. Everyone can be part of all the amazing programs that are offered.

International Orientation/GLOBAL Classroom
- Global classroom. Students from different parts of the world taking classes together in a single classroom. Different continents. Learning together. Fantastic. Experts teaching the content rather than professors who read the work of the expert.
- Social sciences build world competency. Need to be more available.
- Globalized classroom

Technology
- On Mosaic when students are choosing which courses to enrol in, it is clearly outlined for all courses which teaching and learning online platforms will be used during the term (e.g. Teams, Echo360, etc.).

Valuing all Degrees
- McMaster ‘Spotted at Mac’ (where students share their grievances): There are issues in terms of student life. Attitudes of elitism. Students feeling like they are graduating with degrees that they feel don’t matter. Some degrees are not valued (e.g. political science, history, sociology). Health science matters the most. We need to balance this better. Less elitism.
- Elitism

McMASTER TEACHING ACADEMY

Community-Engaged Learning Opportunities
- The availability of community-engaged courses

Flexibility and Student Choice
- Improved flexibility around scheduling
- Students have choices in their preferred mode of delivery
Desired Transformations

- Ability of students to take part in micro courses and obtain micro-credentials in addition to their primary degrees

Inclusivity and Accessibility
- Improved inclusivity (e.g. residence places assigned on a lottery system rather than grades)
- Improved accessibility

Interdisciplinary
- Make it administratively easier for students to take courses across campus/different Faculties. I like my biomedical science students to take more social science and humanities courses to develop a diversity of thinking. My passion is reducing that barrier and making it feasible for students to learn across disciplines.
- Inclusivity between researchers and between different methodologies in the humanities. I don’t think our humanities methodologies are well understood. I would like to be able to work with groups like this multidisciplinary group and bring forward more inclusive projects than what I am seeing now.

Learning Spaces
- Creativity of learning spaces (i.e. not necessarily lecture rooms) even after we can come back together
- The physical space has been re-imagined for collaboration.
- A variety of learning spaces and availability of more experiential courses

Mentorship System for Students
- Student-faculty mentorship system

Online Learning
- Instead of trying to bring more international students to our campus, I envision McMaster bringing a virtual campus (and our unique teaching and learning approach) around the world, and especially to low-income countries. Maybe we could provide a joint degree by partnering with international institutions. In the past, when I asked about this, I was told that we couldn’t do that—that we needed a micro-campus in those places. Now, with all this COVID shifting, we could have a virtual campus and roll this out.
- There are physical constraints to our university campus. We have enrolled more students and the physical capacity hasn’t changed. What we have been dragged into (in terms of online learning with COVID) will give us some freedom. If we accept the limitations where we can, we can engage students online. This could free up our schedule a lot.
- Online/virtual learning is the norm

Smaller Classes and Personal Connection
- Innovation to smaller classes that facilitates person-to-person learning
- Face-to-face learning
Desired Transformations

Student Involvement in Research
- What got me excited as an undergraduate student is being involved in research and collecting data. When I think student-centred, students are involved in research. The reason you have research faculty teaching is to get students involved in doing research and collecting data. It would be nice to see us getting back to that. We have moved away from that over the last 30 years. Content can be taught and accessed online. Universities have a unique role in teaching research. This applies across all domains. To solve problems, you have to do research. I hope that comes out in 2030.
- Highly research-based learning

Traditional Program and Scheduling Structure
- When will McMaster will move away from pen-and-paper-based scheduling? This system was designed and constrained by pen and paper. We’re still stuck with archaic ideas about how to schedule classes (e.g. ‘Mondays, Tuesdays, Thursdays at 9:30 are available for your course’). A lot of innovation could happen with how teaching is done. I hope by 2030 we move away from a pen-and-paper-based scheduling system. It is so rigid (e.g. three units/ three mornings per week at 9:30). We have technology that should allow us to schedule more flexibly. We made the technology developers design the new system to fit our old, archaic system. There should be a much more flexible way for students and faculty to interact, but we are stuck in this old fashioned system.

ASSOCIATE DEAN GROUP

Assessment and Key McMaster Competencies
- Make clear what the assessment is for. You assess students to make sure that learning has taken place. It would be nice to see that students are assessed on something worthwhile. Research shows that the final exam memorization approach doesn’t work. It doesn’t assess whether there has been deep learning. I’d like to see that we are assessing students in a more meaningful way.
- How about we don’t have final grades? What if we could provide an undergraduate experience where students have more flexibility? Assessment is on knowledge and practical competencies (much more than a final grade). The competition among students would decrease since the grades don’t exist.
- Job after university. What are the key competencies? We are realizing that students gain competencies at different times. Could we have them as competencies over time?
- I would also like there to be competencies that are key for McMaster. ‘This is a McMaster student’. What would that be?
- About ten years ago as the province put a quality assurance framework in place, a question came up about McMaster-specific degree competencies. People were not interested then. Maybe now we can bring that in (degree level expectations that are particular to McMaster and build out). What are those competencies?
- Abandoned final exams
- Implemented new forms of assessment
- Test enhanced learning predominates
Desired Transformations

Collaboration
- Integrated: The grand challenges facing our world require solutions that account for more than technical components. McMaster Engineering is rapidly transforming itself into an integrated program that includes global, diversity, inclusion, and social responsibility perspectives. This requires collaboration between all engineering units, as well with other Faculties so that we work in concert.
- Agile, collaborative approaches to teaching and learning

Equity, Diversity, and Accessibility
- Equity and diversity embedded
- Universal design of courses
- Simplified accommodations process (Student Accessibility Services) for faculty and students

Experiential
- Experiential: Students will learn engineering principles and topics not only in classrooms and labs, but through integrated experiences that apply engineering knowledge to solve current problems and grand challenges facing our world. Learning will spiral through experiences based on project and problem-based learning, inquiry, and experiential learning as students acquire and apply concepts while solving large engineering challenges within and outside the classroom.

Flexibility
- Individually customizable education for students. Traditionally, pick an area, stay in that. Wouldn’t it be great to do engineering and music or social science (sociology) and biology? Customizable pieces would be so great.
- World class learning, without barriers. Can you do engineering, for example, in a cocurricular setting, across departments, Faculties? Engineering students wanting to customize their degree—engineering and music, or political sciences… No artificial barriers inside the university.

Funding
- A major gift that will secure funding to adopt new approaches into the future

Open Access
- Another trend to continue for the future from a student perspective is continued growth in open access educational resources and flexibility with options for use of resources.

Reconsidering the Purpose of the University Campus
- We have had a lot discussions about existential issues with COVID19. Ten years from now, when we think about students being on campus, why are they there? What happens on campus? All that might change. Maybe the campus is for social interaction, or maybe physical space might be more of a learning commons. There could be real shifts there.
Desired Transformations

Student Attitudes, Engagement, and Mental Health

- I would like to see a change in student attitudes about learning. So many students are just focused on obtaining a grade. They are not taking courses that are of the greatest interest to them. They are simply chasing grades and will do everything to maximize their grade. They feel they are in competition with other students to get into the next program. I find that really sad and wish we could change that.

- Mental health is a continual challenge. If you find joy and passion in what you are doing, then the work is easier. The students that are the most miserable are the ones who are not engaged in what they are doing. The flexibility and choice would give them agency and empowerment, and that would give our students a sense of engagement and happiness.

- Mental health is an increasing issue. The student coming from high school now versus 15 years ago is very different. Different needs. In some ways, we don’t do any favours to students. We put them under such academic pressure from the moment they arrive. They say things like: ‘If you can survive level one, you will make it’. That’s what students say! That’s terrible. It would be nice to take some of that pressure off the students—give them choice, allow them to get engaged. Will help with mental health.

- Improved mental health/wellness

Supporting Student Innovation

- Innovators: A natural consequence of an integrated experiential program is the transformation of passive learners into active learners and innovators. We have supports, curricula, and facilities that enable our undergraduate students to develop their solutions as entrepreneurs, and this must grow. In the future, this innovation culture should not be limited to undergraduates, but also integrate the innovation activities of graduate students and their faculty and staff mentors within and outside of the Faculty of Engineering.
Part IV: Visionary Words to Describe the Desired Future State of Teaching and Learning at McMaster University

Finally, stakeholders were asked to identify visionary words that describe the desired future state of teaching and learning at McMaster. This section includes the visionary words provided by each of the consulted groups.

Visionary words from undergraduate students, graduate students, and faculty and staff have been themed, tallied, and ranked. The most frequently identified word themes are presented. Please note that several of the visionary words are ranked equally. For example, for undergraduate students there are two visionary words ranked at level three. These two are presented using letters (Three a and Three b) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Teaching and Learning Advisory Board, Steering Committee, and McMaster Teaching Academy words were themed and are presented alphabetically in point-form notes of participants’ words.

UNDERGRADUATE STUDENTS

One: Responsive and Flexible
- Agile
- Flexible
- Adaptive
- Responsive
- Dynamic

Two: Equitable, Accessible, and Inclusive
- Accessible
- Fair
- Affordable
- Anti-oppressive
- Equitable
- Inclusive

Three a: Engaging
- Engaging
- Enticing
- Enriching
- Exciting
- Involving
- Interesting
Visionary Words

Three b: Innovative
- Innovative
- Progressive
- Creative
- Experimental
- Modern

Four: Interactive
- Interactive
- Participation
- In-person learning
- Observational
- Visual

Five a: Compassionate and Supportive
- Compassionate
- Caring
- Supportive
- Approachable

Five b: Exploratory
- Exploratory
- Encouraging creativity

GRADUATE STUDENTS

One: Practical
- Practical
- Job-centric
- Industry centric
- Applied
- Opportunity

Two: Excellence
- Recognized as excellent both internally and externally
- Effective
- Advanced
- Commitment to academics
- Knowledge

Three a: Responsive
- Responsive
Visionary Words

Three b: Inclusive
- Inclusive
- Ethics

Three c: Innovative
- Innovative
- Progressive

Four a: Student-Centred
- Student-Centred

Four b: Transformative
- Transformative
- Inspiring

FACULTY AND STAFF

One: Flexible and Adaptive
- Responsive
- Adaptive
- Flexible
- Agile
- Dynamic

Two: Innovative
- Innovative
- Cutting-edge
- Risk-taking
- Trendsetting
- Modern
- Creative
- Exploratory
- World-leading
- Unique
- Aspiring
- Imaginative
- Mind-blasting
- Problem-solving

Three: Equity, Diversity, Inclusion, Indigeneity, and Accessibility
- Diversity
- Inclusive
- Caring
**Visionary Words**

- Accessible
- Equitable
- Equitable access for all
- Compassionate
- Socially-conscious
- Justice-oriented
- Ethics
- Global and inclusive of Indigenous context

**Four: Collaborative**
- Collaborative
- Group learning
- Collaborative and community based
- Community-engaged

**Five a: Evidence-Based**
- Evidence based
- Research informed/research active
- Research intensive education
- Research-led
- Research-focused

**Five b: Transformative**
- Transformative
- Impactful
- Inspiring
- Evolutionary

**Five c: Active Learning**
- Active learning
- Engaged
- Stimulating

**Six a: Experiential**
- Experiential

**Six b: Transversal Competencies**
- Transversal
- Critical-thinking
- Problem solving
- Honest
- Relatable
- Self-critical
Visionary Words

Six c: Interdisciplinary
- Interdisciplinary
- Expansive

Six d: Engaged Faculty
- Dedicated
- Healthy and engaged faculty
- Fair workload for instructors
- Well-resourced and supported
- Encouraging
- Attentive

TEACHING AND LEARNING ADVISORY BOARD

Community and Global Responsibility, Knowledge Generation
- Responsibility—community, global—we have responsibilities to the world!
- Getting away from the idea that the university houses knowledge, but that we generate knowledge. What we learn matters, but what we don’t learn matters too. Educate about the world and different perspectives.
- Accountable
- Leadership

Connection, Community, Belonging
- Connectedness (social, community, family, interdisciplinary)
- True sense of community and student experience and student involvement. Changing the notion of university as four years and move on. More flexible so first year is a transition, social life, learn about different offerings… Undergrad is five years. Give an opportunity to explore. Make the first year more about community and exploration.
- Belonging

Curiosity and Exploration
- Commitment to cultivate continuous curiosity
- Educate about the world and different perspectives. Curiosity and exploration.
- Wide-ranging
- Relevant

Dynamic, Flexible, Responsive, Evolving
- Dynamic, flexible, and changing with the times
- Freedom—freedom to come and take control of the way you are learning
- Dynamic and responsive and evolving
- Changing challenges that we will be faced. Need to be responsive.
**Visionary Words**

**Inclusive and Empowering**
- Inclusive
- Integration of inclusive teaching and student experience through co-creation/co-development
- Empowered/empowering teacher and learner

**Transformative**
- Students to have a transformative, inspiring experience. Teachers—opportunity to be creative and exhilarating.
- Opportunity for teaching and learning. Transformative for students. There should be a different perspective from the time you start a course and the time you finish it. And transformation for faculty—they need to continue to learn and grow.
- Growth: ‘grow though what you go through’… personal and academic… not just for students, but others… help all of the folks in teaching positions, not just faculty/tenured faculty, but instructors of all kinds. How do we grow our teaching and learning beyond the borders of the university to the community?
- Revolutionary. Deeply transformed at many levels. A moment for the public university to stand up and declare its devotion to learning. Youth are under siege—there is a war on youth. The university is one of the last remaining public spheres that support students.

**Other**
- Outcomes
- Experiential
- Valued. How do we recognize teaching? How do we show that we value it—to teachers and students. Engaged.

**STEERING COMMITTEE**

**Applicable**
- Applicable

**Community engaged**
- Community engaged
- Community engaged
- Community engagement—separation of university and community to our detriment

**Comprehensive**
- Comprehensive—basic knowledge that everyone that should have
- Broad

**Enlightened**
- Enlightened
Visionary Words

Equity, Diversity, Inclusion, Indigeneity, and Access
- Equitable
- Forward-thinking, accessible, equitable—everyone has access to the same experience/opportunity
- Socially-just
- Supportive-accessible notion
- Equitable
- Free, equitable—the same quality of education to all of our students for free
- Ethically-responsible
- Equitable
- Cheap
- Beyond colonial—Indigenous
- Responsible to the whole community
- Open education, sharing, practices
- Open

Experiential
- Experiential

Flexible
- Blended—whatever the post-COVID world looks like, there will likely be a blended, broad experience where students experience learning in lots of different ways
- Flexible—within programming
- Personalized—less hoops to jump through for students
- Personalized—not one size fits all
- Flexibility

Fun
- Fun

Innovative
- Innovative
- Disruptive
- Entrepreneurial—not about profit, but thinking and doing things differently

Interdisciplinary
- Interdisciplinary
- Integrated
- Cuts across traditional boundaries of learning
- Integrated—scholarly research-driven teaching, teaching driven research
- Integrated and broad-based
Visionary Words

- Questioning the bounds of the traditional school year: 5 courses/2 semesters, but what about the summer? Strong intercession period. Interdisciplinary options. Questioning the normative structure of the university.
  - Synergistic
  - Collaborative

Student-Centred
- Student-centred
- Responsive to student needs and changes in technology

Sustainable
- Sustainable

Responsive
- Responsive
- Adaptive

McMASTER TEACHING ACADEMY

Capacity-Building
- Capacity-building in the basics (literacy and numeracy). Some students don’t know what a noun is!

Collaborative
- Reciprocity
- Collaboration
- Can we build a teaching culture with shared responsibility for learning instead of individual responsibility for teaching?
- Personable

Community
- Community
- Community was lost for a bit at McMaster, but it has been rekindled. We want to keep and build that.

Community-Engaged Learning
- Community-engaged learning

Culture of Innovation
- Acknowledge when people try new things and reward people for trying even when it doesn’t work.
- Proactive in everything we do (e.g. anticipating jobs of tomorrow, decoupling schedules). We are so often reactive.
- Disruptive
Visionary Words

- Creative

**Equity, Diversity, Inclusion, and Accessibility**
- Equity, diversity, inclusion
- Accessible
- Equity, diversity, inclusion
- EDI issues

**Experiential**
- Experiential: We are moving there. Post COVID, can we do experiential learning remotely? Onsite? How do we engineer experiential learning into our programs?
- Experiential
- Multidisciplinary and experiential learning are both strengths. We need to continue through and past COVID. Need to find a way to differentiate ourselves. Post COVID will raise new challenges. How do we bring experiential and interdisciplinary learning?
- Experiential
- Experiential learning

**Flexible and Adaptable**
- Flexibility
- Flexibility
- Flexible
- Flexibility (personalization of learning)
- Micro-credentials
- Developing students who are capable of being creative, adaptable, mobile, flexible, and responsive to changes like the one we are experiencing now. Helping them.
- Resourcefulness
- Adaptable
- Flexible

**Global and Local Awareness and Responsibility**
- Global and local perspectives
- Civic responsibility and global awareness

**Hopeful and Exciting**
- Hopeful
- Exciting

**Interactive**
- Interactive

**Interdisciplinary**
- Interdisciplinarity
- Interdisciplinary (students so siloed)
Visionary Words

- Interdisciplinary
- Interdisciplinarity
- Interdisciplinarity
- Broad
- Interdisciplinarity
- Interdisciplinary

Research-Based
- Research-based

Technology and Online Learning
- Technological
- Mindful technology: How do you keep students motivated with online learning?
- I do use technology in the classroom. It can offer advantages, but we need to remember that learning is a human thing, a vulnerable thing.
- Technology is drawn on as the main solution too often. I would caution against that. Zoom can actually provide an engaging experience for students and give them a feeling that they are getting value. One example: I replaced my open office policy, with open online/virtual office hours. Students came, checked in, and asked for help. It worked really well. It used technology, but in ways that bring face-to-face time which is better than hearing voices. Make a rule, when you come to my meeting or office, turn on your camera even if you are in PJs. We need to see each other. What is the human side we can bring through technology?
- Virtual

Transferrable Skills
- Teaching transferable skills to our students. Thinking about the job market. The more diverse the education, the better to be better able to adapt in this changing world (not too specific).
Teaching and Learning 2020: External Climate Exploration
Teaching and Learning 2020: External Climate Exploration

This report presents the findings from an exploration of the strengths, challenges, and future aspirations of teaching and learning experts at nine of the world’s highly ranked universities. The following universities took part: Imperial College London, McMaster University, Queen’s University, University of British Columbia, University of Calgary, University of Cambridge, University College London, University of Ottawa, and University of Waterloo. A senior leader at each university participated in an interview with a member of the Kirwin Group from January through March 2020. The interview data was themed and tallied and the responses are presented and summarized in the following five parts:

• Part I: Strengths to preserve into the future for teaching and learning
  o Section 1: Summary of strengths to preserve into the future
  o Section 2: Strengths tally and ranking chart

• Part II: Anticipated future challenges around teaching and learning
  o Section 1: Summary of anticipated future challenges around teaching and learning
  o Section 2: Anticipated future challenges tally and ranking chart

• Part III: Desired transformations in the area of teaching and learning
  o Section 1: Summary of desired transformations in the area of teaching and learning
  o Section 2: Anticipated future challenges tally and ranking chart

• Part IV: Most significant aspiration for teaching and learning over the next five years
  o Section 1: Summary of the most significant aspirations for the next five years
  o Section 2: Most significant aspiration for the next five years tally and ranking chart

• Part V: Teaching and learning in the year 2030
  o Section 1: Teaching and learning in the year 2030 summary
  o Section 2: Teaching and learning in the year 2030 tally and ranking chart
Part I: Strengths to Preserve into the Future for Teaching and Learning

Section 1: Summary of Strengths to Preserve into the Future

Interview participants were asked to describe the strengths of teaching and learning at their university that are important to preserve into the future. This section lists and summarizes the strengths identified. Please note that several of the strengths are ranked equally. For example, there are three strengths ranked at level two. These three are presented using letters (Strength 2a, 2b, and 2c) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Strength One: Valuing Teaching as a Professional Practice

The top strength to preserve into the future according to interview participants is the emerging orientation that teaching is a valuable, scholarly professional practice. Evidence of the shift toward valuing teaching is reflected in several ways. First, teaching and learning is recognized in some overall university strategic plans. Strong plans include institutional/integrated frameworks for teaching and learning and a commitment to creating, bolstering, and maintaining leadership roles in teaching and learning at all levels of the university. These include the introduction of a centralized vice provost of teaching and learning position and the creation of associate deans of teaching and learning in any Faculty that has an associate dean of research. Second, in addition to research chairs, some universities have introduced teaching chairs to put student learning experience front and centre. Data about student experience and student satisfaction is used to assess the quality of teaching and to enhance teaching practice. Some universities have also established a full professor rank in the educational leadership stream (commensurate with a research professor title). This provides faculty with dedicated time to serve and develop the teaching and learning mandate of the institution. Third, the interest in and focus on teaching and learning is demonstrated by the increasing prevalence of networks and communities of practice to support teaching and learning. Fourth, some universities have created teaching centres to support faculty based on the recognition that many of them are not experts in teaching and learning, nor do they have time for extensive self-education in this area. The teaching and learning centre can support busy faculty members by giving them access to resources and support to develop their teaching practice. Fifth, teaching and learning faculty are increasingly being asked to consult and advise grant applicants to offer a teaching and learning perspective and link proposed initiatives to broader learning objectives and experiences for students. Finally, there are some shifts in reporting that highlight the emerging importance of teaching and learning. One of these is in annual reports which require faculty members to describe their efforts to improve and innovate their teaching practices rather than simply focus on the number of students per class and summarize course content. The emerging status of teaching and learning is a strength to preserve going forward.

Strength Two a: An Emphasis on Collaboration

Another strength to preserve going forward is the commitment to collaboration within and across Faculties, and among universities. Interdisciplinary programs and courses, and transdisciplinary
research opportunities give students the knowledge and skills to address challenges that face humanity (e.g. global justice and sustainability). Collaboration across disciplines makes possible important innovations in teaching and learning like a general first year offering for undergraduate students. The cooperation among Faculties allows for fluidity and choice as students explore and chart their post-secondary pathway. Supporting these initiatives is a shift in university culture away from competition to a more collaborative effort to support and enhance student experience. The commitment at the administrative level to support collaborative efforts in teaching and learning at the university level and across universities is also a strength.

Strength Two b: Societal Impact and Community-Based Learning

Community-based learning is seen by participants as a strength to preserve into the future. For some universities, this is not an add-on, but rather an essential part of the curriculum, embedded in courses. It emerges from an orientation that the community isn’t the background for learning; it is the learning. The role of the university is to partner with the community and to have a positive societal impact. In terms of the broader, global community, an emerging strength is the internationalization of the curriculum and the integration of global concerns in both content and delivery. Building on this strength going forward will require more coordination and collaboration among departments and Faculties to inventory effective practices and share and scale them across the university.

Strength Two c: Experiential Learning

Another strength to preserve going forward is experiential learning. This emphasis on experiential learning is demonstrated in various ways including the creation of an experiential learning office with connections to offices of community engagement, the transformation of infrastructure to support experiential approaches including more flexible classroom configurations, the establishment of experiential learning internships, and the development of experiential targets for each course. These efforts are seen as strengths to preserve into the future.

Strength Three a: Equity, Diversity, Inclusion, and Indigeneity

Efforts to bolster equity, diversity, inclusion, and Indigeneity (EDII) are essential to preserve into the future. The ultimate goal is to embed EDII and make it actionable; an emerging strength is the integration of an EDII lens in course content (e.g. Indigenous Literature and the Law), approaches to pedagogy, culture and behaviour expectations in the classroom, hiring policies, and faculty professional development offerings.

Strength Three b: A Culture of Innovation

A culture of innovation is a strength to preserve going forward. The willingness to try new things and create experimental solutions to problems, at both the grassroots and institutional levels, is fostered by willing leaders and through innovation funding (e.g. a portion of student fees and grants). It is important to preserve and enhance a culture that creates space for faculty to take risks, try new approaches in the area of teaching and learning, and then use grant money to study the effectiveness of their efforts.
**Strength Four a: Commitment to High-Achievement**

Another strength is the commitment to high achievement and to graduating outstanding students. Offering students real value for their tuition investment is important to preserve going forward.

**Strength Four b: Partnering with Students**

An emerging strength to foster into the future is the culture of valuing student voices and treating students as design partners in curriculum development, pedagogical research, and quality assurance. Students are invited to be members of curriculum review teams and provide feedback on content and delivery (e.g. lectures, assignments, assessment, etc.). Students are included as partners in research projects about teaching. They work with faculty to study teaching and learning, exploring issues like accessibility and inclusion, for example. Partnering with students is a strength to preserve and grow into the future.

**Strength Four c: Vibrant Student Community**

Participants indicated that another strength to preserve into the future is the vibrant student community. Fostered by residence-living, students come to know one another well, work together, and support one another. Students are engaged in extracurricular activities and take active roles on committees (e.g. curriculum and hiring).

**Strength Four d: Robust Discourse**

In an era of divisiveness and polarization, maintaining an environment that supports robust discourse is an important strength to be preserved at the university level. There is an emerging sense that controversial topics can no longer be discussed at universities, but discourse that challenges students’ thinking is precisely the role of universities. Teaching and learning will play a leading role in navigating the need to preserve a history robust discourse amid growing fears about disagreements and trigger warnings.

**Strength Four e: Personalized, In-Person Learning**

Personalized, in-person learning is a strength that will be preserved with some effort. Exploring ideas in tutorials and working in small groups in labs and simulation facilities are highly effective for learning, but they are expensive. Going forward, it will be necessary to explore other options, especially the use of technology and strategies like the flipped classroom, for example, to cover core content outside of class and use in-person time for sense-making and interaction.
Section 2: Strengths Tally and Ranking Chart

The following chart tallies and ranks the strengths identified by interview respondents as important to preserve into the future.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Strength</th>
<th>Times Identified</th>
</tr>
</thead>
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<tr>
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<td>An emphasis on collaboration</td>
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<td>Societal impact and community-based learning</td>
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<td>Experiential learning</td>
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<td>Culture of innovation</td>
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<td>Commitment to high achievement</td>
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<td>Partnering with students</td>
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<td>Vibrant student community</td>
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<tr>
<td>4</td>
<td>Robust discourse</td>
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<tr>
<td>4</td>
<td>Personalized, in-person learning</td>
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Part II: Anticipated Future Challenges Around Teaching and Learning

Section 1: Summary of Anticipated Future Challenges Around Teaching and Learning

Participants were asked to describe anticipated future challenges for teaching and learning. These challenges are summarized in this section. Please note that several of the challenges are ranked equally. For example, there are two challenges ranked at level two. These two are presented using letters (Challenge 2a and 2b) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Challenge One: Barriers to Adopting More Innovative Teaching Approaches

Participants expressed a desire to move from the ‘sage-on-the-stage’ teaching approach to more innovative approaches including experiential, interactive, interdisciplinary, online or blended learning, and others, but there are a number of challenges, or barriers in making these shifts:

- **Classrooms and Infrastructure Limitations**
  One challenge is the need to adapt classroom learning spaces from traditional designs, with rows of chairs facing a lectern, to more interactive, flexible designs that support innovative approaches to teaching and learning. Re-designing classrooms is very expensive, and it is difficult to secure funding for renovation projects. In addition, flexible designs that can be configured to allow for break-out discussion groups requires much more space, creating downstream problems in terms of available seating (a challenge that is exacerbated by increasing enrollments).
• **Systemic Limitations to Interdisciplinary Learning**
  Interdisciplinary learning is a part of teaching and learning strategy for several participant universities, but there are systemic limitations that challenge their ability to offer interdisciplinary courses. One limitation is financial: university Faculties are funded separately, which creates logistical difficulties in implementing interdisciplinary courses. Other challenges include the complexity of scheduling across Faculties, determining where to teach interdisciplinary courses, and coordinating faculty schedules.

• **Reward and Recognition Barriers**
  A significant challenge for teaching and learning and the adoption of more innovative teaching approaches exists in the ways that faculty members and universities are valued. Despite efforts to prioritize and emphasize teaching and learning, faculty members are still recognized and rewarded based on their research and by the research funding they bring into the university; not their aptitude and commitment regarding teaching and learning. (This is also the case at the university level: universities are judged by the research they do and the funding that they bring in.) On one hand faculty members are hearing the message that it is important to focus on and improve in the area of teaching and learning, and on the other, they see that tenure and merit assessments only focus on research productivity. This reward structure is a barrier for teaching and learning that needs to be addressed. Recognition and reward systems need to be redesigned, but there are no metrics to measure the quality of teaching and learning. Further, leaders do not know how to value or recognize faculty who are working to improve and excel in the area of teaching and learning. New means of assessing faculty are required and leaders need support to learn how to do this in a manner that values both research and teaching and learning.

• **Improvement in the Area of Teaching and Learning Requires a Long-Term Commitment**
  Improvement and innovation in the area of teaching and learning requires an institutional focus and commitment over the long term. A threat to the requisite long-term commitment comes in the form of leadership transitions and possible shifts in strategic priorities. Another challenge to teaching and learning comes in the form of funding cuts. Financial pressures tend to inspire greater emphasis on research and garnering associated research funding. There are concerns among participating universities that, while recognition of the importance of teaching and learning has grown in recent years, the culture change may not have been sufficient to withstand these financial pressures.

• **Faculty Readiness**
  There are questions about how to move forward with teaching and learning with both new and long-standing faculty and how to shift the faculty culture from a research-emphasis to an emphasis on both research and teaching and learning.

• **Logistics and Liability Issues around Experiential Learning**
  Regarding the shift toward more experiential approaches, there are issues including increased risk, complexity, and logistical challenges as well as issues about coordination and decision-making (tension between what is controlled centrally and what is controlled at the Faculty level).
Challenge Two a: Life-long Learning and the Role of the University

Participants anticipated that universities will have to adapt to the fact that graduates will very likely require re-skilling over the course of their careers. There is an opportunity for universities to scale their offerings over time to provide life-learning learning for graduates. To meet this need, universities will have to become more innovative in their use of technology and their delivery methods because adult, working learners will require more streamlined and flexible learning options. Further, existing continuing education centres/units will need to be better configured to align and liaise more seamlessly with other departments and Faculties to make possible this lifetime relationship with learners.

Challenge Two b: Technology and Faculty Digital Fluency

Another challenge is in the area of technology. One problem for some universities is the wide variety of technological tools being used by faculty members. With no agreement or university-wide approach in terms of technology, it is difficult for IT departments to support users, manage security, and provide training. Another problem is the issue of faculty digital fluency. Digital fluency means that faculty users can not only master new systems every few years (as new and improved offerings emerge), but also that they have a deeper sense of how to use technological tools appropriately given their situation and needs. There is a need for faculty to move beyond technological literacy (understanding how a particular program or software works) to digital fluency where they can think in a more technologically fluid way. This is a challenge because teaching and learning centres don't have time and resources to support faculty appropriately.

Challenge Three a: Supporting Student Collaboration and Connection

There exists a need for universities to maintain and improve their ability to support students in working effectively together. Students need to understand that there is more to work and life than high achievement on tests; working productively with others in groups is essential. To that end, universities need to provide students with opportunities to develop their capacity for effective collaboration. At a broader scale, universities have a role to play in resisting the global trend toward more insular and populist outlooks by maintaining and strengthening international connections and partnerships.

Challenge Three b: Assessment

Another challenge is in the area of assessment. There is a sense among some universities that there is too great an emphasis on assessment which creates two problems. First, there are concerns that traditional assessment methods create a culture in which the purpose of learning is to pass a test or exam. This orientation is not useful and does not reflect the realities of life post-university. Second, over-use of assessment creates significant stress for students who may struggle to prioritize and manage multiple expectations. In recent years, the increase in student mental health and well-being issues highlights the need to be more deliberate with assessments. Questions arise about how to create authentic assessments in large classes and how to create systemic shifts in a timely manner.
Challenge Four a: Widening Participation

Universities must be accessible to students of all backgrounds, but this presents some challenges. A diverse student body means that both faculty and students need to be aware of their assumptions about one another in terms of culture and about knowledge background. There is work to be done in this area to ensure that all students feel included.

Challenge Four b: Whole-Student Focus

Typically, universities are focused on supporting students in the classroom, but there is a larger role to play in terms of supporting students' mental health and well-being, and helping them to become good people. There exists a need for universities to educate the whole student which includes not only their academics, but also their broader experience on campus (at the library, in residence, in extra-curriculars, etc.) and in the community. Students need to feel a sense of belonging, purpose, and connection in their whole university experience. There is work to be done to treat students as partners in the community and to support them as they grapple with the challenges they face as young people.

Challenge Four c: Traditional Program Structures

Finally, the structure of university programs, especially at the undergraduate level, is very traditional. Undergraduate programs are four years long and consist of fall and winter semesters with five courses in each semester. Faculty members are not expected to teach in the summer. This model does not meet the needs of many students who require more flexibility to balance other responsibilities like work and family.
Section 2: Anticipated Future Challenges Tally and Ranking Chart

The following chart tallies and ranks the challenges identified in the interview process.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Challenge</th>
<th>Times Identified</th>
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<td>● Systemic limitations to interdisciplinary learning</td>
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<td></td>
<td>● Reward and recognition barriers</td>
<td></td>
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<tr>
<td></td>
<td>● Improvement in the area of teaching and learning requires a long-term commitment</td>
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<tr>
<td></td>
<td>● Faculty readiness</td>
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<td>● Logistics and liability issues around experiential learning</td>
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<td>Traditional program structures</td>
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Part III: Desired Transformations in the Area of Teaching and Learning

Section 1: Summary of Desired Transformations in the Area of Teaching and Learning

Respondents were asked to envision five years into the future and identify desired transformations in the area of teaching and learning. This section presents the ranked and summarized desired transformations for the next five years as identified by the interviewees. Please note that several of the desired transformations are ranked equally. For example, there are four desired transformations ranked at level one. These four are presented using letters (Desired Transformation 1a, 1b, 1c, and 1d) but these letters are used for organizational convenience and do not indicate value or sub-ranking.
Desired Transformation One a: Valuing Teaching and Learning

Participants were clear about their desire to see teaching and learning valued equally with research at their institutions. To achieve this cultural shift, faculty rating and tenure promotion guidelines need to be adjusted to include and reflect the importance of teaching and learning. Specifically, student feedback and instructor ratings need to move away from questions predominantly about the enthusiasm and organization of instructors, to questions about learning, the frequency of feedback, the value of the course design, etc. In addition, participants commented that they would like to see student feedback applied in a meaningful way by faculty members. There is an expectation that faculty will develop and grow as researchers; participants would like to see a similar expectation with teaching and learning. Building on this, participants commented that they would like tenure reviews to consider not only research productivity, but also the incorporation of student feedback (and peer feedback) and evidence of a developing teaching practice. Participants also commented on the need to more effectively capture, analyze, and share data to improve teaching and learning across the university. The copious data collected about the ways faculty and students interact around learning is fragmented and not widely accessible, which hampers efforts to explore trends, and limits opportunities for improvement. Making data available to departments, department heads, administrators would better enable them to describe and diagnose teaching and learning practice and make targeted interventions to improve it. For example, data about student engagement could be used to predict and prevent student failure. Finally, one of the participants expressed the desire to have a dedicated teaching and learning space that is designed in a manner that reflects the needs of learners (physical set-up, technology, etc.).

Desired Transformation One b: Equity, Diversity, Inclusion, Indigeneity, and Access

Another desired transformation is the area of equity, diversity, inclusion, Indigeneity, and access. Participants expressed the desire to decolonize the curriculum and to embed non-Western influences in the curriculum in all Faculties and departments. They commented on the need to widen participation to include people who have largely been excluded from universities and to take bold steps to completely embed equity, diversity, inclusion, and Indigeneity initiatives in all facets of the university. To support that process, faculty members need to be equipped with skills to facilitate and navigate difficult conversations that may arise around politics, rights, identities, etc. In terms of accessibility, participants wanted to see universal design in courses so that students don’t need to be accommodated, but rather that courses are accessible to all students. This would mean, for example, that students would have greater choice in terms of assignments and assessments in all courses. To support the growing number of students who struggle with mental health challenges and to improve accessibility, faculty require training in mental health and guidance in terms of supporting students.

Desired Transformation One c: Interdisciplinary, Transdisciplinary, and Experiential Courses

Participants would like to see more innovative and authentic learning opportunities including experiential, interdisciplinary, and transdisciplinary programs and course offerings that give students experience and support them in the development of communication and collaboration skills. This type of cross-disciplinary approach is important because the challenges that face the
world are not discipline-specific. Re-thinking first year courses to create opportunities for students to gain exposure to courses across disciplines is another desired transformation that would support students in determining a path that enables them to pursue their interests with greater self-knowledge and greater awareness of world issues. Finally, participants would like to use the insights gained from their successful, smaller interdisciplinary programs, and scale those successes to benefit all programs and all students.

**Desired Transformation One: Use of Technology to Enhance Learning**

The use of technology is another area of desired transformation. Participants commented on the need to deploy technologies to support the shift away from lecture-based formats toward more interactive approaches. One example of this is the flipped classroom where lectures are available online and classroom time is used for discussion and sense-making. Another example is the use of augmented virtual reality technology to explore and learn about inaccessible environments, like volcanoes, or to learn about the human body. Virtual reality could be used to bring colleagues and students together in interdisciplinary investigations, which not only support learning, but are also fun and build connection and community. The scope and pace of the desired shifts in the use of technology are such that faculty members and staff will need training and on-call technical assistance. This puts significant demands on teaching and learning personnel—a strain that is exacerbated by the lack of consistency in the use of technology across departments and Faculties. Attention needs to be given to streamlining the use of technology across Faculties and departments and identifying core technologies that can be centrally supported.

**Desired Transformation Two: Outcomes-Based Assessment**

Participants indicated that they would like to see the adoption of broader assessments in learning at their universities. This means moving away from a traditional emphasis on the midterm and final exam and more deliberately tying learning outcomes to more innovative forms of assessment. It requires support for faculty, who will ultimately be implementing the changes, in the form of training and technical support. Another desirable transformation according to participants is the shift from credits to competencies and outcomes-based curriculum development. This represents a significant shift that will take time. Some programs have clearly defined outcomes and key competencies; others do not. If a student asks, What I am going to be able to do, know, value, appreciate at the end of this degree?, many Faculties do not have clear answers. To shift to an outcomes-based approach, courses need to be designed with the desired outcomes and core competencies in mind and a commitment to aligning the curriculum with those outcomes and competencies.

**Desired Transformation Two: Online Learning**

Some participants would like to see much more in the way of online offerings including blended/hybrid programs. It is expected that online courses and degrees will play a larger role going forward and these need to be carefully designed to be strong and exciting learning experiences for students. Online learning can also be used to enable universities to reach out to graduates for re-training, re-skilling, or enrichment mid-career. There is an opportunity here.
Desired Transformation Three a: Flexibility and Individualized Learning Options

Another transformation that participants would like to see is greater flexibility and individualized learning options to give students more agency in their learning. Examples of innovations in this area include student-led, individually created courses (like a capstone project) and micro-credentialing to enable students to craft a personalized learning experience.

Desired Transformation Three b: Student Satisfaction

Student satisfaction is important to participants. They commented that they would like to see evidence of student engagement, satisfaction, and pride in their university. Student experience needs to be explored and thoughtfully considered in the curriculum review process. Further, as students are making a significant investment to earn a university degree, they need to be authentic participants in the design of their experience. Students need representation on committees and in future strategic planning processes.

Desired Transformation Four a: Community Engagement

Strengthening community engagement is another desired transformation. Participants indicated that they would like to see students valuing the community as part of the university experience. From a social justice perspective, it is important that students do not see themselves as saviours coming in to solve problems, but rather, as members of the community who engage with, learn from, and grow with community partners. This orientation is seen as an important aspect of citizenship and supporting the development of this way of thinking is part of the role of universities.

Desired Transformation Four b: Undergraduate Lab

Last, there are desired infrastructure transformations. One of these is new undergraduate teaching lab to acquaint students with labs and lay a foundation for future laboratory-based courses.
Section 2: Desired Transformations Tally and Ranking Chart

The following chart tallies and ranks the desired transformations for the next five years as identified by interviewees.

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<thead>
<tr>
<th>Rank</th>
<th>Desired Transformation</th>
<th>Times Identified</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Valuing teaching and learning</td>
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<tr>
<td>1</td>
<td>Equity, diversity, inclusion, Indigeneity, and access</td>
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<tr>
<td>1</td>
<td>Interdisciplinary, transdisciplinary, and experiential courses</td>
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<td>1</td>
<td>Use of technology to enhance learning</td>
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<td>Outcomes-based assessment</td>
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<tr>
<td>4</td>
<td>Undergraduate lab</td>
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Part IV: Most Significant Aspiration for Teaching and Learning Over the Next Five Years

Section 1: Summary of the Most Significant Aspirations for the Next Five Years

Based on their desired transformations, respondents were asked to identify their most significant aspiration in the area of teaching and learning over the next five years. Responses have been themed and ranked, and are summarized in this section. Please note that several of the aspirations are ranked equally. For example, there are two aspirations ranked at level two. These two are presented using letters (Aspiration 2a and 2b) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Aspiration One: Valuing Both Teaching and Research

The top aspiration for participants is to create and maintain a culture of valuing teaching and research. With that culture and strong orientation, teaching and learning can be embedded: Niche programs will share the secrets of their success and these successes will be scaled, universal design will be embraced, teaching and research will be better integrated, tenure promotion guidelines will equally reflect and recognize the importance of both teaching and learning and research, and there will be clear goals and a unified vision for teaching and learning. This success will build on itself as the university's reputation for a balanced emphasis on teaching and research will attract new students and faculty who resonate with this approach.
Aspiration Two a: Inclusivity

Improving inclusivity is a key aspiration. In particular, it is necessary to incorporate Indigenous values and pedagogies and delve into some critical questions about teaching and learning from an Indigenous perspective. This is an incredible opportunity to not only widen participation, but also to benefit all students and faculty by improving notions of citizenship and enhancing the human condition.

Aspiration Two b: Technology

Another key aspiration is supporting faculty members as they navigate ongoing technological changes and particularly offering support to faculty as they deploy technologies to shift away from lecture-based teaching to more interactive approaches.

Aspiration Three a: Global Partnerships

A significant opportunity exists to use online learning technology to create a network of partner universities in low or middle-income countries around the world and to share online learning modules with those partners to be used by students to support learning and research. The idea is not to impose or direct the learning, but rather to offer course materials to partners who can adapt them based on their particular needs and context. In return, partners send the revised curricula back so that faculty at home can learn from the adaptations, and students can study them to develop a global perspective.

Aspiration Three b: Classroom Space

Finding solutions to the space challenges is a key aspiration. It can take months to make a timetable that takes into account the myriad needs of faculty and students.

Aspiration Three c: Student Satisfaction

From the results of various survey instruments, students describe a sense of satisfaction with their university experience and outcomes. Maintaining and bolstering student satisfaction is a key aspiration for the future.

Section 2: Most Significant Aspiration for the Next Five Years Tally and Ranking Chart

The following chart tallies and ranks the most significant aspirations identified by interview respondents.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Most Significant Aspiration</th>
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<td>3</td>
<td>Student satisfaction</td>
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Part V: Teaching and Learning in the Year 2030

Section 1: Teaching and Learning in the Year 2030 Summary

Finally, respondents were asked where they see teaching and learning in the year 2030. Ranked responses are summarized in this section. Please note that several of the ideas are ranked equally. For example, there are three ideas ranked at level one. There three are presented using letters (Teaching and Learning in 2030 1a, 1b, and 1c) but these letters are used for organizational convenience and do not indicate value or sub-ranking.

Teaching and Learning in 2030–One a: Supporting Life-Long Learning

Participants commented about the need to support graduates over the course of their careers and the expectation that, in 2030, universities will routinely offer re-training and course upgrades to graduates. This is a great opportunity for universities to take people through much larger cycles of learning over the course of their lifetimes. It also provides a benefit to younger students who have the opportunity to engage with mid-career learners and learn from their experience. There is a need to determine how to best support and engage adult learners in a meaningful way to offer flexibility within structure. To provide life-long learning opportunities for busy, working graduates, universities will need to consider alternative delivery options like shorter, online, or blended programs, and more modularization and micro-credentialing.

Teaching and Learning in 2030–One b: Student Choice, Program Flexibility, and Personalization of Opportunity

There is a sense among participants that there will be greater choice and flexibility in university offerings in 2030. The discipline-specific degree will be increasingly challenged as students personalize their learning opportunities and choose their own pathway through courses and across programs. There could even be scenarios in which students complete a university degree and college certificate simultaneously. There is an opportunity to support students and open their minds to future careers and possibilities by encouraging them to reflect on their learning and by offering guidance as they navigate the options available to them.

Teaching and Learning in 2030–One c: Innovations in Approaches to Delivery and Assessment

Participants imagine that instructors will be more engaged and focused on their teaching practice in 2030. The traditional notion of large lecture theatres of students digesting information will be discarded for more innovative approaches to delivery (e.g. blended delivery, flipped classrooms, deployment of other technologies) and assessment. Universities will play an important role in curating access of information.

Teaching and Learning in 2030–Two a: Access, Equity, and Inclusion

In 2030, participants imagine that there will be greater clarity on how to deliver in the area of access, equity, and inclusion. Indigenous pedagogies will be embedded and students will have
greater opportunities in terms of course offerings (e.g. Global Studies, Black Studies, Indigenous History/Law/Literature, etc.).

**Teaching and Learning in 2030—Two b: Shared Understanding and Unified Vision about Teaching and Learning**

Another anticipated aspect of teaching and learning in 2030 is greater clarity about the definition of teaching and learning at the university level. Participants expect that teaching and learning will be better defined and that there will be broader agreement about what constitutes quality teaching across universities, locally, and nationally. Robust communities of practice will offer consistency, and support proficiency and growth. These shifts will be supported by the capture, analysis, and shared use of data on teaching and learning across departments and Faculties within universities to enhance teaching and learning and improve student experience.

**Teaching and Learning in 2030—Two c: Simultaneous Trends: Fragmentation and Crystallization of the University Experience**

Finally, there is a tension between two simultaneous trends for the future. One is toward fragmentation of the university experience (e.g. micro-credentialing, blended and employer-directed learning) and the other is a crystallization and valuing of the traditional approach to university education where there is a rich and lively in-person exchange of ideas. It is difficult to know how the future will unfold with the pull of these opposite forces, but there is a sense that it is essential for universities to continue to support the wise application of knowledge.

**Section 2: Teaching and Learning in the Year 2030 Tally and Ranking Chart**

The following chart tallies and ranks respondent expectations about the future of teaching and learning in 2030.

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<tr>
<td>1</td>
<td>Student choice, program flexibility, and personalization of opportunity</td>
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<td>Innovations in approaches to delivery and assessment</td>
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<td>2</td>
<td>Access, equity, and inclusion</td>
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<td>2</td>
<td>Shared understanding and unified vision of teaching and learning</td>
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<td>2</td>
<td>Simultaneous trends: Fragmentation and crystallization of the university experience</td>
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McMaster
Teaching and Learning
Strategic Planning Process
Phase 1 Exploration

During Phase 1, the following questions were explored:

I: Strengths to Preserve into the Future
II: Anticipated Challenges
III: Desired Transformations
IV: Visionary Words
## Phase 1: Strategic Planning Consultation Groups

<table>
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<th>Who</th>
<th>Process</th>
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<td>External Universities (n: 9)</td>
<td>Interviews</td>
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<tr>
<td>Faculty and Instructors (n: 64)</td>
<td>Survey</td>
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<td>Graduate Students (n: 10)</td>
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<td>Undergraduate Students (n: 36)</td>
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<td>Teaching and Learning Advisory (n: 15)</td>
<td>Focus Group and follow up survey</td>
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<td>Steering Committee (n: 15)</td>
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<tr>
<td>Associate Deans Group (n: 27)</td>
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<tr>
<td>McMaster Teaching Academy (n: 20)</td>
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</table>
Advisory / Committee membership

**Project Team:** Kim Dej, Lori Goff, Megan Kerwin, Sajeni Mahalingham

**Steering Committee**

Kim Dej – chair  
Sheila Boamah (HSc)  
Alpha Abebe (Humanities)  
Giancarlo Da-Ré (MSU)  
Alise de Bie (Grad/PDF)  
James Gillett (Associate Dean Grad, SocSci)  
Joanne Kehoe (MI)  
Fawziyah Isah (MSU)  
Colin MacDonald (Engineering)  
Emad Mohammad (Business)  
Lori Goff (MI)  
Sukhvinder Obhi (Science)  
Sydney Potts (UG, A&S)  
Khadijah Rhakie (EIO)  
Abeer Siddiqui (Library)  
Adrienne Xavier (Social Science, ISP)

**Teaching and Learning Advisory**

Kim Dej - chair  
Arig al Shaibah (AVP,EIO; Social Sciences)  
Ryan Belowitz (Science, Instructional)  
Teresa Chan (HSc)  
David Clark (Humanities)  
Andrea Cole (Grad studies)  
Linda Coslovi (Provost’s Office)  
Lisa Dyce (Grad)  
Mic Farquharson (Associate Dean, Science)  
Fatima Kijeraa (UG)  
Richard Godsmark (IT)  
Lori Goff (MI)  
Vivian Lewis (Library)  
Emad Mohammed (Business)  
Catharine Munn (Hippo project)  
Ishwar Puri (Dean, Engineering)  
Ayse Turak (Engineering)
Phase 1 Strategic Themes

- The data was themed and consolidated
- Developed core strategic themes that we are testing in Phase 2
Phase 2 Strategic Themes

• Tested and refined the strategic themes
  • Conducted 3 student focus groups (N: 29)
  • Conducted 5 faculty focus groups (N: 53)
• Integrated feedback from focus groups into the strategic theme document
Phase 3 and Next Steps

• Develop objectives and vision from the strategic priorities identified (action steps)

• Test with the community
Highlights

Partnered and Interdisciplinary Learning

Themes: Student as Partners in the Learning Process
        Interdisciplinary Learning
        First-Year Student Experience
        Diverse and Expansive Ways of Knowing
        Experienced-Based Learning

Holistic and Personalized Student Experience

Themes: Whole Student Experience
        Student Belonging and Inclusion
Highlights

Inclusive and Scholarly Teaching
Themes: Teaching as a Professional and Innovative Practice
       Inclusive Excellence in Teaching
       Assessment and Evaluation of Student Learning
       Evaluation of Teaching

Active and Flexible Learning Spaces
Themes: Learning Spaces
       Digital Learning Strategy
Guiding questions

- What excites you about the direction for the future?
- Do you feel that there is something missing?
- How might you see your work reflected in this plan?