MacPherson Student Partners Posting – Summer 2018

In 2013-14, the Arts & Science Program and the MacPherson Institute (then known as MIETL) collaborated to create "student scholar" positions for students who are interested in pedagogical research and innovation. Since this time, a wide range of students from across campus have contributed to the enhancement of teaching and learning at McMaster by participating in projects run at or in partnership with the MacPherson Institute. Members of the student partner team have contributed to the design and development of new courses, helped to create resources for faculty and students, and collaborated with staff and faculty partners on research projects related to teaching and learning. Several have also co-authored research articles and conference presentations related to their work.

Encouraged by these successes, we’re thrilled to continue the student partners program in Summer 2018. We’re currently looking for students to work on a number of projects. Some of these are already underway, while others are just being formulated, so students will have opportunities to enter into the work at the stage that is most of interest to them. These positions will involve between 35-100 hours of paid work, between May and August 2018. The specific number of hours worked will depend on the project.

Projects for which student partners are currently being recruited are described on the following pages. If you are interested in filling one of the student positions, you will be asked to identify ONE to THREE of these projects and write a brief (~250 word) interest statement for each. These project interest statements should include the following:

- A description of why the project seems interesting/important to you. (Why do you want to join the project team? What are your goals in relation to the project?)
- A proposal for the role you might play on the project team. (What might you do to develop the project and help it meet its goals? What work do you see yourself carrying out?)
- An indication of the skills/experiences/interests/perspectives that you’d bring to the project team. (Why are you a good fit for this project?)

To apply, submit your project interest statements, along with some information from your resume, using the following application form: tinyurl.com/SPPSummer18

Any student (undergraduate or graduate) enrolled at McMaster University is eligible to be a Student Partner. While prior experience with teaching and learning research/practice would be an asset, it is not required. Indeed, we’re interested in working with a wide variety of students with a range of backgrounds and experiences, including members of equity seeking groups. Some projects do indicate preferences for students with particular experiences, skills, or educational levels, so be sure to read the project descriptions carefully and make the case for why you would be a good fit.

Applications MUST be received by 2 April 2018 at 4:30p.m. to be considered.

Further information about the student partners program, including guidelines for the application process, can be found in the Student Partners Handbook. If you have any questions about the student partner team, or about the MacPherson Institute and its work, please contact Dr. Beth Marquis at beth.marquis@mcmaster.ca.
Project Descriptions: Summer 2018

A Student-friendly Guide to Reflection ................................................................. 2
Advancing Accessible Education at McMaster: Considering the Factors that Promote and/or Discourage Change .............................................................................................................. 3
Course Development for Electronic Marketing .......................................................... 4
Course Development: Equity and Inclusion in the Engineering Workplace .................... 4
Design of a New Injury Biomechanics Lab ............................................................... 4
Diversity and Inclusivity Initiatives for Students, Staff, and Faculty of the W. Booth School of Engineering Practice & Technology .............................................................. 5
Enhancing Active and Experiential Activities in Design in Mechanical Engineering Courses...................................................... 5
Enhancing Experiential Learning Outcomes through the “Flipped Lab” ................................ 6
Evaluating Student Learning in Macro Field Settings ............................................... 7
Graduate Nursing Program Curriculum Renewal Project ............................................. 7
Intersectionality & Expertise: Faculty Experiences of Student-Faculty Partnership ............ 7
McMaster Child and Youth University (MCYU) Training Program Redesign ..................... 8
McMaster Mentorship Action Program (MMAP) ......................................................... 9
Student Curriculum Consultant (2018 IQAP) ............................................................ 9
Student Reading of Documentary & Fiction Film ....................................................... 10
Students’ Expectations of University Technology for Teaching and Learning ..................... 10
Additional Opportunity: Student Partners Initiatives Research, Support & Development .......... 11

A Student-Friendly Guide to Reflection

Goal: To create an accessible, engaging, and student-friendly guide to reflection.

Purpose: To support students, instructors, and teaching assistants in guiding (and assessing) student reflections.

Proposed Outcomes: A short (~3-page) guide, a short infographic or "cheat sheet", and an online video.

Current Status: Using a grounded theoretical approach, a framework and guide have been created to help guide, assess, and evaluate student reflections. The process for developing the framework, including the framework and guide, have been submitted for publication and we are awaiting formal response.

Challenge: While positive and encouraging response has been received from external reviewers, as a result of the academic and publication process, the framework and guide are full of jargon and written in a way that is neither engaging nor accessible to students.

Collaborators: The academic portion of this project is being conducted as part of a part-time PhD thesis in the School of Geography and Earth Sciences. Student is Kate Whalen and supervisor is Antonio Paez. The resources have primarily been tested and developed for courses in McMaster's Sustainable Future Program (Sustain 1S03, 2S03, 3S03, and 4S06). The Sustainable Future Program is under the administration of the Faculty of Engineering, specifically the Engineering & Society Program.
The Task(s): A student to help translate knowledge from the academic version of the framework and guide would be very helpful. Additionally, a focus group with students and possibly staff to gain feedback on how engaging, accessible, and effective the student-friendly versions of the resources are would also be useful. The students would be involved in creation of resources (design skills would be an asset), study design, research ethics, focus groups, coding qualitative data, etc.

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level.

**Advancing Accessible Education at McMaster: Considering the Factors that Promote and/or Discourage Change**

This research project seeks to explore the factors that encourage faculty and instructors to develop more accessible and inclusive teaching practices. We will ground our investigation in an evaluation of the recently released Forward with FLEXibility resource on Accessibility in Teaching and Learning and existing accessible education workshops and initiatives on campus, while attending to broader themes and implications related to supporting the enhancement of accessibility in teaching and learning. We want to better understand the processes and practices that support (or discourage) faculty and staff in creating more accessible teaching and learning experiences, including the usefulness and limitations of related teaching resources.

The Student Partners would work with Beth Marquis from the Arts & Science program and MacPherson Institute, Alise de Bie from the Equity and Inclusion Office, and other team members to conduct interviews and focus groups, transcribe and analyze data, and prepare recommendations/written reports.

We are excited to involve undergraduate and graduate Student Scholars from a range of backgrounds, especially those who identify as having lived experience of disability/madness/mental health stuff/addiction, and an understanding of accessibility barriers/facilitators in post-secondary education. Connections with interrelated equity-seeking communities and social movements (LGBTQ2S+, Indigenous, people of colour, faith groups, international students), and/or experience teaching as a TA, would also offer a significant contribution to the project.

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Undergraduate or graduate students of any level are welcome to apply.
Course Development for Electronic Marketing
Electronic Marketing (4MH3) is an elective course intended to introduce cutting-edge e-marketing strategies and tactics, including online retailing, search engine marketing, social media marketing, and mobile marketing. An up-to-date courseware is expected to help students better understand and review the course contents. The project is to invite two students to work with Professor Ruhai Wu to develop the courseware for 4MH3.

Professor Wu has taught this course for eight years and has prepared rich materials for the courseware. The invited students will contribute to updating and refining the materials, editing, and providing insights and feedback from the learners’ perspective. The students are expected to have enthusiasm for digital marketing and excellent writing skill. Past working experience in e-marketing is preferred but not required.

We anticipate that this project will involve approximately 35-50 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level.

Course Development: Equity and Inclusion in the Engineering Workplace
The central goal of this project is to develop a course entitled “Equity and Inclusion in the Engineering Workplace”. This course has been in development for over a year and will hopefully be offered for the first time in Winter 2020. We plan it to be a 400/600 level course that engineering students can take as a complementary studies elective, and that would also be available across campus. It is intended to identify some of the barriers that underrepresented groups might face in the workplace, and give strategies for overcoming those barriers — both for underrepresented groups and allies.

We would benefit greatly from student perspectives on relevance of our chosen content. We also need to develop appropriate means to deliver and assess the material with a focus on the Learning Objectives for the students. Kim Jones (Chair of the Women in Engineering Committee and faculty member in Chemical Engineering) will be the key contact person. Jennifer Long (CLA in BTech) will also be involved. Ideally, the student will have had some personal experiences in an engineering workplace and/or with equity issues.

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level.

Design of a New Injury Biomechanics Lab
The purpose of this project is to develop a new lab to illustrate principles of head injury biomechanics for final year mechanical engineering students. The equipment for the lab (a drop tower) has been designed and built. What remains now is to instrument it, and determine the test
methods and write up the lab manual that will allow students to investigate factors related to concussion and helmet design. The project will involve background research on head injury criteria and helmet design parameters, and will include deciding what methods will best illustrate these principles for students. It will conclude with writing a lab manual that includes background material, test methods, safety descriptions, and discussion questions. This project will be done working with Dr. Cheryl Quenneville, and experience with data acquisition and inquiry-based learning would be an asset, but not required.

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level.

**Diversity and Inclusivity Initiatives for Students, Staff, and Faculty of the W. Booth School of Engineering Practice & Technology**

The W. Booth School of Engineering Practice & Technology’s (SEPT) Vision and Mission states that we will recognize and work to understand the impact of diversity among students, faculty and staff in our school. Based on research conducted in this field, we expect that racialized students, faculty and staff will have had experiences related to their identity in the educational environment. This study seeks to generate a deeper understanding of these experiences; to provide a benchmark for feelings of welcoming and inclusion among students, faculty and staff; and to create a list of potential steps for a more welcoming environment for all. In order to better understand and collect this data we plan to distribute in Winter 2018 anonymized surveys for faculty, staff, and students in SEPT and contact a focus group with willing students.

A team of faculty and staff led by Dr. Long and Dr. Apostolou seek a Student Partner with past experience analyzing qualitative and quantitative data. Emphasis is placed on familiarity with quantitative data analysis, as the initial part of the study involves working with survey responses. The student will also be asked to conduct focus groups with willing faculty and staff. Qualitative analysis of the data connected through these focus groups and open-ended survey questions will be essential. The output for this research includes a report for SEPT and the creation of workshops for faculty and students. We expect the student to have significant input on the workshop creation process.

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3rd, 4th, or 5th year undergraduates or graduate students of any level.

**Enhancing Active and Experiential Activities in Design in Mechanical Engineering Courses**

I (Dr. Elizabeth Hassan) am in the process of improving in-class experience for 2nd and 4th year design classes in Mechanical Engineering. One of the challenges of in-class feedback tools for active learning is that they are generally ideal for closed-ended questions, but design questions are
inherently open-ended and ill-structured. Scaling design studio practices for large classes is still an unsolved problem in pedagogy research; identifying the best tools and techniques from a student perspective would be beneficial.

I am requesting a student partner to:
- Identify a set of optimal in-class digital feedback tools
- User test the tools
- Develop images, models and/or content for use with the tools

I expect that the findings from this work would be generalizable to other departments teaching design or other instructors working on open ended problems. These findings could be shared through a future publication.

The ideal student partner would have experience with some or all of the following:
- Rapid prototyping/3D printing
- Google docs
- At least one client based design project (e.g. ENG 1P03 or similar, IMPACT project)

We anticipate that this project will involve approximately 85-100 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Applicants should be undergraduate students of any level.

Enhancing Experiential Learning Outcomes through the “Flipped Lab”

Conventional lab teaching is solely guided by the cookbook–lab manual. Since the ultimate goal of lab teaching is to allow students to think and behave like scientists or engineers, rather than to solely learn or replicate what others have already done, the apparent disadvantage of this conventional teaching method is that it leaves little room for student initiative, creativity and critical problem solving. The objective of this project is to improve lab teaching quality by introducing the novel teaching method “flipped lab”. This research study involves the use of experiential learning in undergraduate labs to increase student initiative, creativity and problem-solving skills through a “flipped lab” design. The research study is currently underway and it is supervised by Dr. Fei Geng.

I am requesting a student partner to develop the new lab structure and the assessment tools. The ideal student partner would have experience with lab design and Google docs.

We anticipate that this project will involve approximately 60-75 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Undergraduate or graduate students of any level are welcome to apply.
Evaluating Student Learning in Macro Field Settings
Field placements are the cornerstone of social work education. The assessment of this experiential learning is critical and complex. The School of Social Work is starting to redesign the assessment tool for placements in community/policy/research settings. This project will engage a student to work collaboratively with the field faculty member (Jennie Vengris) to complete that redesign. The work will include scanning and discussing the literature (community-oriented field education in social work), consulting with key stakeholders (students, field instructors and social work faculty), analyzing the data and redesigning the assessment tool. The Student Partner for this project should have completed at least one social work placement (preferably with some practice in community work, policy work or research), demonstrate interest in learning about consultation processes, have a strong analysis around equity and inclusion and be ready to offer their ideas and perspectives.

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Applicants should be 3\(^{rd}\), 4\(^{th}\), or 5\(^{th}\) year undergraduates or graduate students of any level.

Graduate Nursing Program Curriculum Renewal Project
The overall goal of our project is to provide recommendations for revitalizing the curricula for the Master's and PhD streams of the Nursing Graduate Program to ensure provision of a curriculum that prepares nurses at an advanced level to meet the dynamic and complex health and health service needs of people, families, communities, organizations and the broader healthcare system, now and into the future. Our Curriculum Committee will transition from Phase 1 of our project, which included a review of our current state and an extensive literature review to examine best practices for graduate nursing education. We have engaged students, alumni, faculty and stakeholders to determine program quality and outcomes, and identify future directions. We have also begun curriculum concept mapping. We are looking for a graduate level student to work with the committee to assist us as we move forward with Curriculum Design and the development of new courses.

We anticipate that this project will involve approximately 85-100 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Graduate students of any level are welcome to apply.

Intersectionality & Expertise: Faculty Experiences of Student-Faculty Partnership
Student-faculty partnerships in teaching and learning are grounded in values of respect, responsibility, and reciprocity, and aim to destabilize hierarchies and share power amongst faculty and students (Cook-Sather, Bovill, & Felten, 2014; Healey, Flint, & Harrington, 2014). As such, one of the most exciting things about partnership for many practitioners is its potential to transform universities into more democratic, equitable learning communities (e.g., Cook-Sather & Luz, 2015). Partnerships can offer a space in which faculty and students can occupy different roles often not
available in traditional settings in the academy and work in more equitable ways. In spite of this potential, some scholars have noted that much partnership literature tends to take a rather homogenizing view of students and faculty/staff (Mercer-Mapstone, Marquis, & McConnell, 2018), not accounting for differences in experience or social location within each group, including power differentials that exist within faculty and student cohorts. At the same time, other research points out that individual faculty and students have very different experiences of higher education, which relate to their varying intersecting identities (e.g., Hendrix & Hebbani, 2011) and the precarity of status for some within the academy. Against this backdrop, the present study, which is being proposed by a faculty member (Beth Marquis), a student (Rachel Guitman), and a postdoctoral fellow (Cherie Woolmer), aims to understand how a wide range of faculty from different social locations perceive the call to engage in teaching and learning partnerships. In particular, we’ll draw on the theoretical lens of intersectionality (Crenshaw, 1991) to consider how differently located faculty/staff experience partnership and partnership discourse, particularly given that faculty from equity-seeking groups often experience discrimination that sees their expertise and authority questioned in university contexts (Pittman, 2010; Martinez et al., 2017). The student partner will work closely with Beth, Rachel, and Cherie to design the project, participate in data collection and analysis, and potentially contribute to co-authoring a manuscript for publication (time permitting).

We anticipate that this project will involve approximately 60-75 hours of work. *(Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)*

Undergraduate and graduate students of any level are welcome to apply.

**McMaster Child and Youth University (MCYU) Training Program Redesign**

The aim of this project is to collaborate with Student Partners to gain the student perspective on the MCYU In The City training program by:

- Identifying technology to be used during face-to-face facilitator training to make the training more interactive and engaging and to make the resources and activities more accessible.
- Redesigning the Inquiry Based Learning module that incorporates an active learning strategy and technology.
- Testing the redesigned module.
- Gathering feedback from facilitators who agree to test the new lessons.

Background: The MacPherson Institute supports the training program for the McMaster University Child and Youth University (MCYU) outreach initiative MCYU in the City. The MCYU program director is Dr. Sandeep Raha, Faculty of Health Sciences. Our community partners include The Community Foundation, Neighbourhood Action Strategy, Hamilton and Wentworth School Board, and Our Future Hamilton. This year, we trained a cohort of 75 undergraduate and graduate students (called MCYU facilitators) from all the Faculties. Training includes modules on Community Engagement Principles and Lesson Design Through Inquiry Based Learning (IBL).
MCYU Facilitators are expected to design a 60 minute module on a topic of their shared expertise using the inquiry based model, to be presented to youth (ages 7-14) and their families in public schools and community events. The training was held over two consecutive Saturdays in August.

We gathered feedback from the facilitators on how to improve the training program, which included suggestions for integrating technology in a way that would make the training more active/engaging and time efficient and the resources more accessible. We observed that facilitators continue to struggle with applying the Inquiry Based Learning approach to their workshops. They still rely on a more didactic approach that is less engaging for their student population of youth ages 7-14. A more in-depth training approach will allow facilitators to interact more with the idea of teaching through inquiry.

We anticipate that this project will involve approximately 35-50 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Undergraduate and graduate students of any level are welcome to apply.

McMaster Mentorship Action Program (MMAP)
The McMaster Mentorship Action Program (MMAP) is a project that partners McMaster University faculty and staff retirees with level 2 Life Sciences Students. The project emphasizes personal development, future planning, and networking opportunities for the undergraduate students. It combines two activities: (A) workshops for the level 2 students with current faculty and staff on the topics of time management, career planning, networking, and effective communication and (B) casual, small group mentorship with alumni faculty and staff. The project has run twice using two formats (monthly meetings versus a weekend experience). Unfortunately, student commitment in each case was low. We would like to investigate incorporating the MMAP experience into a 1-unit, pass/fail course with embedded reflections and entry and exit interviews. This student partnership would involve four pieces: (1) Design of the pilot course offering, (2) Evaluation of the pilot course offering, (3) Reflection on the three offerings, and (4) course re-design.

We anticipate that this project will involve approximately 60-75 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Applicants should be 3rd, 4th, or 5th year undergraduates.

Student Curriculum Consultant (2018 IQAP)
Several undergraduate and graduate programs are scheduled to undergo a program review over the 2018/19 IQAP cyclical year and would like to form a partnership this term with one student in co-creating the program’s self study. As a student curriculum consultant, the student will work with faculty to ensure student perspectives are included in the self-study document. The goal of this collective self-reflexion is to create a self study document that reflects student experience. It will also give the student partner a valuable professional experience, relevant to all students interested in teaching and learning, higher education and administrative positions in academia or
government. Amy Gullage (MacPherson) is looking for students who have familiarity with at least one program scheduled to be reviewed (IQAP Cyclical Review Schedule), either as a former student of the program or as a Teaching Assistant. Required skills include: leadership, team-work, good social skills, interest in the community involvement, good time management skills, pedagogical interests, analysis skills.

Required application information: Student applicants must specify with what program they would like to partner. Please refer to schedule link above to see what programs are being reviewed.

We anticipate that this project will involve approximately 35-50 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Applicants should be graduate students of any level.

**Student Reading of Documentary & Fiction Film**

Increasingly, instructors across disciplines are drawing on both popular and documentary films to support learning in their courses and programs (see, e.g., Andrist et al., 2014; Calcagno, 2015; Pelton, 2013). While research on this topic has begun to unpack the significant role film can play in college and university classrooms, many questions about the pedagogical functioning of media texts remain unanswered. In particular, we lack a fundamental understanding of how students approach and experience the process of reading films. This project thus seeks to investigate what happens when students attempt to read and analyse film texts in academic contexts. More specifically, it will investigate the following broad research questions: How do students experience the process of viewing films in an academic context? What elements of films do they attend to while viewing? How do they make sense of and respond to these factors? What elements do they not attend to? Do students approach documentary and fictional texts differently?

A proposal for a chapter connected to this research has been accepted for inclusion in a planned book on student reading, and initial data collection will begin in Spring 2018. In the summer term, student partners will work closely with Dr. Beth Marquis to complete the data collection (which involves a qualitative method known as ‘think alouds’ and accompanying interviews), analyse the data, and draft the chapter for publication. Experience and/or interest in film and media studies would be an asset.

We anticipate that this project will involve approximately 35-50 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Undergraduate and graduate students of any level are welcome to apply.

**Students’ Expectations of University Technology for Teaching and Learning**

This project is intended to provide critical insights into undergraduate students’ perception of technology usage in education. To make better design and production decisions in developing online and blended course content, it is imperative for designers and faculty to understand learner
expectations, usage, and experience of these modalities when learner engagement is the overall objective. Through a more nuanced understanding of student expectations and capabilities for technology use, and engagement with content, we would be able to make more informed choices in both the design and structure of blended/online courses as well as in the tools selected to engage students. The interested student will work with Zafar Syed and Jon Kruithof as well as others on the Educational Technologies team at the MacPherson Institute.

We anticipate that this project will involve approximately 35-50 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Applicants should be 3rd, 4th, or 5th year undergraduates or Masters students.

Additional Opportunity: Student Partners Initiatives Research, Support & Development
In Summer 2018, we are also looking for students to take up flexible positions that will support and contribute to the MacPherson Institute’s work on student-faculty partnerships in a range of ways. First and foremost, the student(s) taking up these positions will work with members of the Research team at MacPherson to develop materials and projects that will enhance the student partners program, and other partnership-relevant work carried out at McMaster. This might entail the development of additional resources and activities (e.g., further training opportunities for students, more chances for students to connect across projects, greater publicity of students' work with MacPherson, etc.), or contributing to the design and development of new partnership initiatives that complement the current student partners program. It might also involve helping to expand and develop our growing program of research on student-staff partnerships, including further research on the efficacy of the student partners program itself.

We anticipate that these positions will involve approximately 35-50 hours of work. (Please note that this is only an estimate. A more precise approximation of hours will be provided to successful applicants before they begin.)

Undergraduate and graduate students of all levels are welcome to apply.

You will not need to write an interest statement for this final opportunity, but will be asked to indicate whether you’d like to be considered for this position should we not be able to offer you a spot on one of the other projects for which you’ve applied.