Outreach and the Faculty of Science

Guiding idea: Outreach in the Faculty of Science aims to create, implement and support enriched learning opportunities for McGill Science students who are interested in helping serve the needs of the Montreal community for varied, high-quality programs in STEM.

Aspirations

Centering Outreach on our students: Science outreach provides students with benefits associated with applied learning in real-world settings, developing and practicing professional skills, reflection and mentoring, an introduction to different careers, and the opportunity to combine formal learning with students' personal interests.

Developing an integrated Outreach team: We are moving to develop a common Faculty Outreach strategy by integrating all of the groups doing science outreach and providing a more cohesive, high-quality offering. These changes will benefit all groups, increase our impact, and reaffirm the Faculty's mission of committing to excellence.

Prioritizing support*:* The Faculty has developed a set of criteria that will help us encourage and support Outreach efforts that provide enriched learning experiences for McGill students and high-quality programming for the Montreal community. We will prioritize funding for those programs that meet these criteria, and collaborate with all groups to help them work towards attaining the new standards.

Criteria for support of a science outreach program/initiative include:

Enriched learning opportunities
- Provides both undergraduate and graduate students with enriched learning opportunities and opportunities to develop professional skills   - Provides both undergraduate and graduate McGill students opportunities to present individual outreach activities.   - Has defined, stated learning outcomes for McGill students.
Program development and training
- For school programs: - Consults with the Faculty of Education to identify teacher needs for programming (e.g., curriculum support, enrichment, etc.) and to co-design programs to incorporate age-appropriate content, critical-thinking skills and inquiry-based learning techniques.   - Has defined, stated learning learning objectives/goals for each presentation.   - Consults the Quebec Education Program's Progression of Learning for context: to situate content in terms of appropriate grade level and relate content to prior student knowledge.   - Follows a structured training program for all McGill student and staff volunteers, and coordinators. For school programs, this includes Faculty-designed workshops on designing activities, inquiry-based learning and teaching children.   - Includes assessment.
Valuing outreach
Includes mention of significant involvement in learning opportunities outside the classroom on the co-curricular record for McGill students.

Other aspects we evaluate when considering a program/initiative for funding:

Links to the Faculty of Science

• Links program content to the Faculty's research.
 • Teaches participants about the process of science.
 • Engages the audience in dialogue – to learn from them as well.
 • For school programs
     o Provides participants with direct experiences (e.g. field trips to labs, bringing an experiment or specimen to the classroom, etc., rather than showing only PowerPoint presentations, photos or films).
     o Develops critical thinking skills and enthusiasm for science.
     o Includes connections between humans and the topic.
     o Makes local and global links to the topic.
     o Presents lectures/talks on science topics that are relevant and of interest to the audience.
     o Provides ongoing support for teachers.

Evaluation
• Has McGill students evaluate their experience participating in the program   • Has structured, ongoing feedback/mentoring to McGill students on how to improve skills   • Includes assessment of individual activities, with participant feedback   • Includes assessment of the outreach program as a whole on a mid-year and annual basis
Sharing best practices and results
• Communicates and connects with other Faculty outreach groups regularly to align efforts and share best practices.   • Has a communication plan to share and celebrate achievements on a regular basis with the Faculty.   • Reports annually to the Faculty.

Questions?

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www.mcgill.ca/science/outreach