

McGILL UNIVERSITY SENATE

Memorandum

Secretariat

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TO:	Senate		
FROM:	Ms. Edyta Rogowska, Secretary-General		
SUBJECT:	Open Discussion on Experiential Learning		
DATE:	November 23, 2017		
DOCUMENT #:	D17-21		
ACTION REQUIRED:	☐ INFORMATION ☐ APPROVAL/DECISION		
ISSUE:	Background documents and discussion questions in support of the open discussion on "Experiential Learning" are provided.		
BACKGROUND & RATIONALE:	Following a review of topics suggested by Senators, the Senate Steering Committee selected "Experiential Learning" as the topic for the November 23, 2017 Senate meeting.		
	A Working Group was struck to frame the open discussion and identify background documentation. Based on the discussions of the Working Group, the following questions are proposed to guide the open discussion:		
	Context:		
	The <u>Principal's Priorities</u> emerged from conversations and consultations across the University and include a <u>commitment</u> to provide undergraduate students with meaningful exposure to research and learning opportunities that extend beyond the classroom and to provide graduate students with opportunities for developing career-enhancing professional skills.		
	McGill University's Strategic Academic Plan is founded on a vision of a university that is open, connected, and purposeful. The five key objectives of the Academic Plan are: (1) Be open to the world; (2) Expand diversity; (3) Lead innovation; (4) Connect across disciplines and sectors; and (5) Connect with our communities.		
	In this context:		
	1) What role does experiential learning currently play at McGill and to what extent should it change?		
	2) How could existing structures be further developed to enhance experiential learning at McGill?		

PRIOR CONSULTATION:	Senate Steering Committee; Senate Open Discussion Working Group		
SUSTAINABILITY CONSIDERATIONS	N/A		
IMPACT OF DECISION AND NEXT STEPS	Follow-up action may result from the Open Discussion.		
MOTION OR RESOLUTION FOR APPROVAL:	N/A		
APPENDICES:	 Appendix A: Sample of Experiential Learning Opportunities at McGill Appendix B: Guidelines for Assessment of Experiential Learning, Teaching and Learning Services, McGill University Appendix C: McGill Experiential Learning Network Website Appendix D: Experiential Learning, Centre for Teaching, Learning and Technology, University of British Columbia Appendix E: Further reading: https://www.mcgill.ca/eln/files/eln/report_bestpracticesryerson.pdf https://www.mcgill.ca/eln/files/eln/report_bestpracticesryerson.pdf 		



Background: Types of Experiential Learning Opportunities

The table below is based on information provided by McGill CaPS. While not exhaustive, it describes the wide variety of opportunities afforded to McGill students and serves to identify curricular and co-curricular experiential learning opportunities. The information contained in the table is informed by work conducted at Brock University, as well as the University of Victoria and Queen's University.

Type of Activity	Description		
Curricular			
Conference Participation	Develop, plan, coordinate, attend or present an original work at a conference or exhibition.		
Consulting Project	Work with client to identify issues or opportunities		
	and develop and/or implement solutions and/or		
	strategies.		
Со-ор	Alternate academic study with paid work terms to		
	gain relevant knowledge of the industry or		
	workplace.		
Creative or Physical Practice	Develop artistic, physical, technical, management or		
	production skills through intensive embodied and/or		
	practice-based experiences.		
Creative Performance or Exhibit	Produce, manage, curate or participate in a dramatic,		
	artistic, dance or musical performance or exhibit for		
	an audience (virtual, live).		
Creative, Entrepreneurship or	Identify problems and prototype/test solutions to		
Design Project	create final artistic, scientific, business or other		
	project		
Events	Develop, deliver or attend an event in order to		
	network with community partners and present and		
	gather feedback on projects and ideas.		
Experiential Research Project	Develop and complete research thesis/dissertation		
(Graduate level)	through systematic investigation, discovery,		
	synthesis and/or application of information designed		
	to solve a specific problem or answer an original		
	researchquestion.		
Experiential Research Project	Develop and complete a major research paper or		
(Undergraduate level)	thesis project through discovery, synthesis, and/or		
	application of information to solve a specific		
	problem or question.		

Type of Activity	Description		
Field Experience (Short Term)	Explore academic content in purposeful way outside		
	the classroom through short-term field trips and/or		
	field-work (less than 20 hours) in Canada		
Field Experience (Long Term)	Intensive and immersive time in the field (21+		
	hours) to study and apply academic concepts within		
	Canada.		
International Field Experience	Explore academic content in purposeful way outside		
(Short Term)	the classroom through short-term field trips and/or		
	field-work (less than 2 hours) outside of Canada.		
International Field Experience	Intensive and immersive time in the field (21+		
(Long Term)	hours) to study and apply academic concepts outside		
	of Canada.		
Internship	Participate in discipline-specific, supervised, full-		
	time work during the study period (400+ hours,		
	paid/unpaid).		
Lab	Observe, test and apply course concepts in a		
	controlled setting specialized for small group		
	learning (typically affiliated with specific technology		
	and/or facilities).		
Practicum	Supervised, practice based experience in		
	employment related field of study.		
Professional Practicum	Supervised, practice-based experience required for		
	professional licensing or certification.		
Project Activities	Develop and complete project as an		
	independent study working individually or in		
	Applied Student Research		
Simulations and Experimentation	Engage with academic content through content-		
Simulations and Experimentation	specific activities such as simulations		
	demonstrations, archival or design work role play		
	and/or case studies		
Service-Learning	Address community need (on campus or beyond) in		
Service Learning	reciprocal partnership through the integration of		
	course content, academic theory and assessed		
	critical reflection to produce meaningful outcomes		
	in personal, academic and civic learning.		
Co-Curricular/Additional Opportunities			
Undergraduate Skills	Develop, enhance, and/or improve your		
Program/Skillsets	understanding and skills to help navigate the many		
- <u>-</u>	opportunities to engage in activities outside the		
	classroom. (i.e. volunteering, university governance,		
	peer tutoring, learning skills workshops, career		
	development sessions, athletics, etc.)		

Community Engagement and	Develop your knowledge and skills in the areas of
Volunteering	social equity and diversity while contributing to a
	social purpose organization and various
	communities.
Entrepreneurship and	Cultivate, organize and/or manage a business, social
Innovation	enterprise or creative idea from development through
	implementation.
Student Led Initiatives	Participate in a club, conference, or competition.
	(i.e. Students' Association, Model UN)
Publication or Conference	Present and/or publish an original work or contribute
Presentation	to a publication in an editorial, original author or co-
	author capacity including open access publishing
	and the McGill digital repository (?)
Study Abroad or Exchange	Study internationally for one term, academic credit,
	and/or additional degree.
Teaching and/or Research	Gain experience with research, teaching and
Assistantship	classroom facilitation as part of graduate or
-	undergraduate programs.

Sample of Experiential Learning Opportunities at McGill

The list below, compiled by Teaching and Learning Services and CaPS, provides a sample of various experiential learning opportunities at McGill. While the list is not exhaustive, it does provide an overview of activities currently in place. Links to more information on the programs are provided where available.

- **Doctoral Internship Program**: Offers McGill's doctoral students at the end of their degree the opportunity to learn and grow outside of academia through a remunerated internship of a period of one to three months. Students will enhance the skills they have developed as graduate students, and gain new professional expertise that will aid in their transition from university to the workplace.
- <u>Graduate Mobility Awards</u>: Encourages graduate students to study and conduct research abroad as part of their McGill degree program by defraying part of the cost of the international experience.
- <u>CaPS Experiential Learning Program</u>
- Enriched Educational Opportunities (EEOs): High quality mobility or work experience opportunities that take place outside of the classroom and are officially recognized by Faculties. They foster self-development and help students transition successfully to the workplace or graduate studies. Examples of EEOs include (non-exhaustive list):

For academic credit			
Agricultural and Environmental Sciences:	 Field courses and field semesters 15+ courses with field trip/field work component FAES 300 (3 credit) – internship 		
Arts	 Internship courses for credit (credit for academic work post-internship, not during internship) Research awards (potentially for credit if work can be applied towards honours thesis, internship course credit, or independent study course) Undergraduate research project course 		
Dentistry	RotationsCommunity Service courses		
Education	Student Teaching		
Engineering	 Co-op program (Mining, Materials) Capstone/design courses 		
Law	 Clerkships Legal clinic course Mooting International Human Rights Internship Legal methodology tutors 		
Management	 Case studies/projects Some internships for credit (MBA level) 		
Medicine	Clinical rotations		
Music	Performances/concerts		
Science	Field courses and field semesters Field/lab work in classes		
Zero credit – but recognized on the aca	ademic transcript		
Agricultural and Environmental Sciences:	FAES 200 – internship		
Engineering	Internships / industrial practicums (4-8-12-16 months)		
Science	Internships / industrial practicums (4-8-12-16 months)		

Notes:

- Undergraduate research awards exist in Agricultural and Environmental Sciences, Science and Engineering, but are not currently recognized on the transcript.
- Entrepreneurial activities are not included for credit, unless taken within a minor in Entrepreneurship (Mgmt, Eng, Music, etc.)
- Many more opportunities (non-academic credit) include: design team work, summer internships, competitions, music competitions, etc.

• Summer Courses Abroad

- <u>Summer studies in Greece</u>: The International Hellenic University (IHU) is an accredited, research-focused public university offering graduate degrees in English to students from all around the world. Collaboration with IHU offers students the opportunity to obtain either North American or European academic credits (ECTS).
- Summer courses in Italy: Italian courses (ITAL 201, 216, 255) offered in Florence.
- Summer Brazil study abroad: The McGill Summer School Abroad Program in São Paulo & Rio de Janeiro, Brazil offers MBA and undergraduate students the opportunity to earn credits from McGill while experiencing life and learning about business in Latin America. The courses offered relate international business concepts directly to the Brazilian context and to the more general Latin American business environment.

• FAES courses with field trip/fieldwork component:

- AGRI 215 Agro-Ecosystems Field Course: Through case studies and field trips, students will examine the problems and constraints within the Canadian agroecosystem, including the interrelationships among food production, the environment, agricultural policy and social issues. Research in this field of study will also be introduced.
- **BREE 217 Hydrology and Water Resources:** Measurements and analysis of components of the water cycle. Precipitation, evaporation, infiltration and groundwater. Analysis of hydrologic data. Hydrograph theory. Hydrologic estimations for design of water control projects; flood control and reservoir routing. Integrated watershed management and water conservation. Water management systems for environmental protection.
- **BREE 314 Agri-Food Building:** Analysis and design of structures to house animals and plants and to process and store animal and plant products. Introduction to environmental control systems and animal waste management.
- **BREE 327 Bio-Environmental Engineering:** An introduction to how humans affect the earth's ecosystem and projections for the needs of food, water, air and energy to

support the human population. Ecologically-reasonable coping strategies including biofuels, bioprocessing, waste management, and remediation methods.

- **BREE 531 Post-Harvest Drying:** Heat and moisture transfer with respect to drying of agricultural commodities; techniques of enhancement of heat and mass transfer; drying efficiency and scale-up problems.
- BREE 655 Integrated Water Resources Management Research Visits: Class visits to various firms and agencies working in the realm of integrated water resources management.
- **ENVB 222 St Lawrence Ecosystems:** Integrative field biology course about the biodiversity and ecology of terrestrial and aquatic ecosystems within the St. Lawrence Lowlands. Research projects about the natural history of the regional flora and fauna. Fundamentals of community, ecosystem and landscape ecology.
- **ENVB 410 Ecosystem Ecology:** Biotic and abiotic processes that control the flows of energy, nutrients and water through ecosystems; emergent system properties; approaches to analyzing complex systems. Labs include collection and multivariate analysis of field data.
- PLNT 221 Introduction to Fungi: Field and laboratory survey of local representatives of the major groups of fungi, including edible and poisonous mushrooms. The role of each group in terrestrial and aquatic ecological niches will be studied with respect to saprophytism, parasitism and symbiosis. Economic importance of fungi in medicine and biotechnology will be introduced.
- **PLNT 358 Flowering Plant Diversity:** Principles of classification and identification of flowering plants and ferns, with emphasis on 35 major families of flowering plants and the habitats in which they grow.
- **PLNT 460 Plant Ecology:** Theory and practice of plant ecology with an emphasis on the interaction between patterns and ecological processes and the dynamics, conservation and management of plant populations and communities over a range of temporal and spatial scales.
- WILD 302 Fish Ecology: Introduction to the biology and ecology of freshwater and marine fishes. Topics include taxonomy, physiology, biogeography, competition, predation, fishing, and conservation. Lab exercises and field trips emphasize familiarity with local fishes and their ecological interactions.
- WILD 307 Natural History of Vertebrates: The diversity and natural history of Canadian vertebrates illustrated with trophic, phylogenetic, and macroecological approaches.

- WILD 350 Mammalogy: This course focuses on the evolution, classification, ecology and behaviour of mammals and relations between humans and mammals. Also structure, systematics and identification of local and world mammals, as well as field methods will be emphasized.
- WILD 420 Ornithology: Taxonomic relationships and evolution of birds are outlined. Reproduction, migration and population processes of North American birds are examined.
- Field Study Semesters:
 - o African Field Study Semester
 - o <u>Barbados Field Study Semester</u>
 - o Barbados Interdisciplinary Tropical Studies
 - o Panama Field Study Semester
 - o Arctic Field Study Semester
- Field Courses
 - AGRI 325 Sustainable Agriculture and Food Security: Allows students to gain experience in a variety of tropical agricultural systems, and analyze the environmental and social sustainability of these systems. (Note: The course was offered in Cuba from 2012 to 2016; it will be offered in Guatemala in 2018.)
 - **BIOL 240 Monteregian Flora:** This course is an introduction to the diversity of plants in the area surrounding Montreal, Quebec, concentrating specifically in the Saint Lawrence River Valley and on one of the Monteregian Hills, Mont Saint Hilaire. Plant groups studied include fern allies, ferns, conifers and flowering plants. Studies will be conducted at McGill's Gault Nature Reserve field station where there are dormitories, a laboratory and a wide variety of habitats and different plant communities. Emphasis will be on field and laboratory work but some lectures will be included for background material.
 - **BIOL 331 Ecology & Behaviour:** The aim of this course is to provide training in basic methods for the quantitative study of plant and animal systems and the testing of hypotheses in nature. The course is held at McGill's Gault Nature Reserve on Mont St. Hilaire.
 - **BIOL 334 Applied Tropical Ecology:** The format of the course is to have students divided into three groups of up to 7 individuals who rotate among three modules each lasting one day. These modules could include studies of coral reef and sea grass ecosystems and molecular ecology. There is one day for orientation to Bellairs, the course, and the adjacent reef and terrestrial environments. Two days will be spent visiting other sites of ecological interest on the island. During the second week of the course, students will focus on a collaborative research project under the direction of one of the professors.

- **BIOL 432/632 Limnology:** The students will be provided with an introduction to lake communities and the physical and chemical properties of their environment. Rivers and wetlands will be covered only briefly, but students may choose to do their independent projects on these systems. Topics covered during the class will include the watershed and its hydrology; fluxes of nutrients and materials to and within lakes; the pelagial and littoral zones and their dynamics; sediments and paleolimnology, and the structure and dynamics of major plant and animal communities. Interwoven will be lectures on nutrient and heavy metal pollution.
- BIOL 573 Vertebrate Palaeontology: The primary objective for the course is to train students in collecting and analysis methods in vertebrate palaeontology. The course will be given at a selected Late Cretaceous (~70 million years old) locality in Alberta and/or Saskatchewan. There, fieldwork will be conducted for approximately 18 days. During that time, students will have practical training with fossil identification, mapping, collecting, and stratigraphic interpretation. An emphasis will be placed on terrestrial vertebrate fossils (i.e. dinosaurs, crocodiles, and other reptiles) and palaeocommunity analysis.
- ENVR 421/422 Montreal: Environmental History and Sustainability: Summer field semester based on the island of Montreal. It focuses on exploring and establishing aspects of urban sustainability while emphasizing a healthy balance of theoretical and practical knowledge.
- EPSC 231 Field School 1: This course is designed to take the classroom experience (in either EPSC203, EPSC240, or EPSC211) and bring it to life in some of the most beautiful geological sites on the planet. Southern Nevada and eastern California are traditional stomping grounds for geologist training courses from all over the world, due to the variety of rock types and structural features which are well-exposed in strikingly beautiful landscapes. This course is designed to develop the students' spatial perception and understanding of maps, give some hands-on experience, and increase their literacy in the methods practiced by geologists working in academia, government, and the resource industries.
- **EPSC 331/341 Field School 2 and Field School 2:** Two-week intensive field school to a range of national and international locations.
- GEOG 495 Field Studies Physical Georgraphy: Field investigations remain the primary source of data for research in Physical Geography and Environmental Science. The quality or value of a scientist's research often reflects their ability to observe and measure natural processes or phenomena in the field. Thus, exposure to field techniques and the systematic analysis of a field problem and data are important components of a student's training. This course provides an introduction to the physical environment with emphasis on the application of field methods in physical geography.

- **GEOG 496 Geographical Excursion:** Lecture course on the geography of a region and excursion through the selected country or region including landscape interpretation and field study projects.
- **GEOG 499 Subarctic Field Studies:** This course provides an introduction to the subarctic physical environment with emphasis on the application of field methods in physical geography.
- WILD 475 Desert Ecology: A three-week field course exploring relationships between climate, geology, landforms, biodiversity, biotic adaptations and ecosystem conditions in the arid regions of Arizona and southern California. Focus is on the Sonoran and Mojave deserts but includes the transitions to adjacent grassland and forest biomes of the Sky Islands and Colorado Plateau. Exploration of issues arising from human use of land and water, and conservation in arid environments. Experiential learning involving team and individual projects and assignments before and during the field trip.
- **Cuba field course:** Allows students to gain experience in agro-ecological technologies and examine issues related to food security and sustainable agriculture using the Cuban model.

• SEDE's Experiential Community-Engaged Learning & Research (ExCELR):

Pedagogical approach where projects co-created with community organizations are linked to community needs, academic content and student learning goals. Structured reflection activities (journals, discussions) connects the community experience for the student to the learning objectives of the course. The following McGill courses offer SEDE's ExCELR project options:

McGill Course	Community Organizations	Term Offered
MGCR360 - Social Context of Business	 Suspicious Fish Child Literacy project NDG Food depot Share the Warmth Tyndale St-Georges Afghan Women's Centre 	W2016, F2016, W2017, F2017
FREN755 - Montréal et ses poètes en voix / Oral Poetry in Montreal	- Mediathèque Gaetan Dostie	F2016
QCST440 – Living in Montreal – Race and Ethnicity, Past & Present**	 Afghan Women's Centre Tyndale St-Georges Museum of Jewish Montreal Baobab Familial Montreal Arts Interculturel Chez Doris Maison d'Haiti Comité de logement Petite-Patrie 	W2016, W2017, W2018

McGill Course	Community Organizations	Term Offered	
QCST200 – Intro to the Study of Québec**	 Museum of Jewish Montreal Baobab Familial Montreal Arts Interculturel Chez Doris Apathy is Boring St-James Drop-in Centre Centre St-Antoine 50+ 	F2017	
SOCI386 – Contemporary Social Movements	In development	W2018	
ORGB 401 - Leadership Practicum: Social Sector	 Tyndale St-Georges Afghan Women's Centre Santropol Roulant 	W2015	
ARCH514 – Community Design Workshop	Association sportive et communautaire du centre-sud (ASCCS)	W2013	
**Courses part of Québec Studies Minor Concentration with all courses offering Experiential Community-Engaged Learning & Research (ExCELR) stream.			

- Student Life and Learning has funded a number of student initiatives, including:
 - App for tracking studying
 - **S!MVO**
 - Expo-Science
 - Student Research Symposium
 - Grace Hopper Initiative
 - **Big Data Conference**
 - One World Summit Conference
 - Women in House
 - Slush Pitching Competition
 - International Symposium on Academic Makerspaces
 - IBM Watson AI X Prize
 - Hult Prize
 - Innovation Fund

Guidelines for assessment of experiential learning

This guide provides an introduction to experiential learning, summarizes several strategies for assessing experiential learning, and offers case studies with potential in-class applications.

What is Experiential Learning?

In its simplest form, experiential learning means learning from experience or learning by doing. Experiential education first immerses learners in an experience and then encourages reflection about the experience to develop new skills, new attitudes, or new ways of thinking.¹

Experiential learning can take many forms, including field trips, laboratory experiments, role playing, and work placements. All share common characteristics, including:²

- *Mixture of content and process*: there should be a balance between the activities and the underlying content/theory.
- Engagement in purposeful, meaningful endeavors that encourage a "big picture" perspective: the activities must be personally and emotionally relevant to the student, and allow them to make connections between the learning they are doing and the real world.
- **Opportunities for reflection**: students should critically reflect on their own learning, connecting their experience to theory and gaining insight into themselves and their interactions with the world. Students can also consider how their new skills, knowledge and experiences are transferrable to other situations or environments, including those outside of academia.

The Challenge of Assessment

The outcomes of experiential learning can be varied and unpredictable. How one student chooses to solve a problem will be different from another student, and what one student takes away from an experience may differ for his or her peers. Also, in experiential learning, the process is as important as the final product. Therefore, we need to develop assessments that measure success in both the process and the product—each area may require separate learning outcomes and criteria.³

Assessment Strategies

Some of the following strategies can be used to assess experiential learning:^{4,5}

- Allowing students to define how their work will be judged: They choose what criteria will be used to assess their work, or help create a grading rubric.
- Creating a reflective journal or a portfolio
- Reflection on critical events that took place during the experience
- Essay, report, or presentation (could be arts-based, multimedia or oral) on what has been learnt (preferably with references to excerpts from reflective writing)
- Self-awareness tools and exercises (e.g., questionnaires about learning patterns)
- Short answers to questions of a 'why' or 'explain' nature (e.g., "What did you learn during this assignment? What did you not learn that you would like to?")
- One-on-one oral assessments with the instructor
- A project that develops ideas further (individually or in small groups)
- Self-evaluation and/or group evaluation of a task performed

Note that these methods incorporate elements of *reflection* or *self-assessment*.

In experiential learning, the student manages their own learning, rather than being told what to do and when to do it. The relationship between student and instructor is different, with the instructor passing much of the responsibility on to the student.³

Please cite as follows: Teaching and Learning Services (2014). *Guidelines for assessment of experiential learning*. Montreal: Teaching and Learning Services, McGill University.

Putting it into Practice

Here are some real-life examples of different experiential learning assessment tools put into practice, as described in the literature. One thing to note is that, while experiential learning opportunities may often occur in the field (work placements, community projects, field excursions, etc.), many of the assessment tools also translate well to in-class applications.

1. Science students participate in a field trip to Costa Rica to study biodiversity

Learning outcome: Demonstrate an ability to apply scientific theory to describe an environment. **Assessment tool:** Reflective Journals

Why and how it works: "Students were asked to journal their experience daily. These journal activities are similar to field journals used by scientists to organize and document field observations. The process meets criteria for authentic assessment as it replicates an activity in which scientists engage [and] the journal activity gave students the opportunity to construct knowledge in a way that both encouraged and provided evidence of higher-order thinking. Student journal entries were analyzed using a rubric designed to evaluate the cognitive level of their entries based on Bloom's Taxonomy."⁶

In-class applications: Journals can be used when students participate in an activity over a period of time (group or solo projects, weekly tutorials/readings, or even regular lectures). Journal entries can include summaries of new information/things learned (learning "products"), but more importantly, they should focus on the *processes* (e.g. self-reflection, learning strategies, successes, failures, lessons learned, new approaches tried, observations, making connections, asking questions, etc.).⁷ Journal entries can be free-form, but may be more effective if they follow some framework. For example:

- Critical reflections can be based on questions provided by the instructor (e.g., 'What insights did I gain today?', 'In what way does today's reading/activity tie in to the theory discussed in class?" 'What strategies have I used to help me in my learning?', 'What prior knowledge did I apply to help me understand the problem better?').
- Students may also reflect directly on their learning by developing a journal response to the DEAL (Describe, Examine, Articulate Learning)-Based Reflection Session Framework. This Framework for critical thinking may include the prompts "I have learned that... I learned this when... This learning matters because... In light of this learning I will..."⁸

2. Engineering students participate in a Sichuan Reconstruction Community Service Project

Learning outcome: Demonstrate an ability to summarize and present information via an oral presentation that meets professional standards, in a professional setting. **Assessment tool:** Presentation at an academic conference

Why and how it works: "If students are required to work outside the university, or to be supervised by their peers, professionals, or community members, then there must be measures in place to ensure that work is assessed in the same standard as required by the university. The benefit of using presentations is that they can be done as part of either individual or group work, and can utilize peer and self-assessment.... To make presentations effective, there needs to be explicit assessment criteria and a well-structured marking scheme."^{9,10}

In-class applications: You can "up the ante" for oral presentations by holding a "conference day", either by designating one or more lecture periods for the "event" or by creating a more formal event outside of regular class time, perhaps at the end of the term. Members of the community at large, the professional community, or the academic community (e.g. other members of the apartment, students

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from other classes) can be invited to observe the presentations and/or to participate by delivering their own. In addition to instructors' assessments, students can perform self-assessments of their work and assess their peers' performances.

3. Law students participate in a full clinical model, offering legal advice to members of the public

Learning outcome: Improve drafting/writing skills while developing self-awareness of own approach to learning.

Assessment tool: Portfolio of practical work and reflections

Why and how it works: "Students must include copies of all substantive written communications they have produced, and a reflective commentary which refers to three specific items (such as a letter of advice, a witness statement and a letter to an opposing party setting out a case) and which: (1) compares the different approaches the student took when preparing each of the three items, and (2) discusses the development of the student's drafting and writing skills throughout the year and his or her strengths and weaknesses in this area Not only will they perform better in their clinical course but reflection will make them more aware of how they learn. There is evidence that increased self-awareness of learning is correlated with better learning, so by engaging in reflection students are teaching themselves how to learn better in the future."¹¹

In-class applications: Like reflective journals, reflective portfolios of work accomplished throughout the term or during a single project can be used effectively in a classroom setting. Portfolios can be used to track the progression of different types of written work (e.g., letters, lab reports, essays: outlines, drafts, commentary from peers, final products, self-assessments) and can even be used to create products for hypothetical scenarios (e.g., business plans, not-for-profit funding proposal, intake assessments and client records for social workers/counsellors, etc.)

Checklists and rubrics

To provide feedback on journals and other methods of assessing students' experiential learning, instructors can develop a checklist or rubric. These tools have several benefits:

- Articulate clear, specific criteria on which students' work will be evaluated, so that students and instructors have a common understanding of expectations for the assignment. Criteria should be related to the desired learning outcomes what you want students to be able to know, do, or value as a result of the experience/assignment.
- Permit students to self- or peer-assess their work prior to submitting it, potentially resulting in higher quality submissions.
- Offer a systematic approach to providing feedback
- Students can see their strengths and possible areas for improvement

A checklist is a straightforward and accessible way to communicate assignment expectations. It should list the criteria that would define an excellent assignment. These criteria should be described such that each can be answered with a "yes" or "no", enabling students to self- or peer-assess prior to handing in their work. An example checklist for a short written assignment, an op-ed, is below. [The checklist and rubric examples here are elaborated from Professor Rosalie Jukier's "op-ed" assignment in the Faculty of Law. For the complete assignment description, consult the online <u>Writing Toolkit</u>.]

<u>Topic</u>

- **Current**, newsworthy
- Related to the course

Organization, Writing, & Mechanics

- □ The op-ed presents a clear, focused and original point of view
- □ Information is organized in a meaningful way (i.e. ideas follow a logical sequence)
- □ The language is appropriate for the purpose and the audience
- The length is appropriate

In its simplest form, a rubric is a list of assignment components with space for instructor comments:

	Comments	Grade: 🗖
Topic chosen		
Content of assignment		
Structure		
Manner in which		
assignment is written		
Response to another		
student's assignment		

To provide students with more detailed expectations, the instructor can define criteria:

	Criteria	Comments	Grade: 🛛
Topic chosen	Topic is current, related to the course, of interest to a national lay audience, newsworthy		
Content of assignment	The op-ed presents a clear, focused and original point of view		
Structure	Information is organized in a meaningful way (i.e., ideas follow a logical sequence)		
Manner in which assignment is written	The language is appropriate for the readership and the purpose. The length is appropriate		
Response to another student's assignment	The response is interesting, takes a critical stance and involves analytical reasoning		

To provide students with even more detailed expectations, the instructor can add a grading scale (e.g. 1-4; poor/fair/good/excellent; $\sqrt{-\sqrt{1}}$):

	Criteria	Score on scale of 1-4	Comments
		(inadequate to excellent)	
Topic chosen	Topic is current, related to the course, of		
	interest to a national lay audience,		
	newsworthy		
Content of	The op-ed presents a clear, focused and		
assignment	original point of view		
Structure	Information is organized in a meaningful		
	way (i.e., ideas follow a logical sequence)		
Manner in which	The language is appropriate for the		
assignment is	readership and the purpose. The length is		
written	appropriate		
Response to	The response is interesting, takes a critical		
another student's	stance and involves analytical reasoning		
Op Ed			

Please cite as follows: Teaching and Learning Services (2014). *Guidelines for assessment of experiential learning*. Montreal: Teaching and Learning Services, McGill University.

For a wealth of information and examples of checklists and rubrics, please consult suggested readings^{12,} ¹³ available through the McGill University Library.

Detailed sample rubrics for specific types of assessments similar to the case studies shared above:

- Reflective journals: <u>http://ar.cetl.hku.hk/am_rj.htm#6</u> (field biology); <u>http://www.rcampus.com/rubricshowc.cfm?code=LXW8B79&sp=yes</u> (clinical medicine);
- Presentations: <u>http://www.rcampus.com/rubricshowc.cfm?code=S8377C&sp=yes</u> (Engineering)
- Portfolios: <u>http://www.rcampus.com/rubricshowc.cfm?code=QXW8B74&sp=yes</u> (legal externship); <u>http://www.rcampus.com/rubricshowc.cfm?code=M5A7B6&sp=yes</u> (English/writing)

References and Suggested Readings

¹Lewis, L. H. & Williams, C. J. (1994). Experiential learning: Past and present. *New Directions for Adult and Continuing Education*, 1994(62): 5–16. Available at: <u>http://www.sunyjcc.edu/files/Experiential%20Learning%20-%20Past%20and%20Present.pdf</u>

- ²Chapman, S., McPhee, P., & Proudman, B. (1995). What is Experiential Education? In Warren, K. (Ed.), *The Theory of Experiential Education*. Dubuque: Kendall/Hunt Publishing Company, pp. 235-248.
- ³Schwartz, M. 2012. *Best Practices in Experiential Learning*. Ryerson University Teaching and Learning Office. Available at: <u>http://ryerson.ca/content/dam/lt/resources/handouts/ExperientialLearningReport.pdf</u>

⁴Wurdinger, S.D. (2005). *Using Experiential Learning in the Classroom*. Lanham: Scarecrow Education.

- ⁵Moon, J.A. (2004). *A Handbook of Reflective and Experiential Learning: Theory and Practice*. New York: Routledge Falmer. Ebook available through McGill library at: <u>http://www.tandfebooks.com.proxy1.library.mcgill.ca/isbn/9780203416150</u>
- ⁶McLaughlin, J. & Johnson, K. (2006). Assessing the Field Course Experiential Learning Model: Transforming Collegiate Shortterm Study Abroad Experiences into Rich Learning Environments. *Frontiers: the Interdisciplinary Journal of Study Abroad*, 8: 65-85. Available at: <u>http://www.frontiersjournal.com/documents/mclaughlinjohnsonfrontiersxiiifall06.pdf</u>
- ⁷Duan N.* & H. Schmidt. 2011. Writing to learn: can reflection journals be used to promote self-reflection and learning? *Higher Education Research & Development*, 30(4): 519-532. Available at:

http://www.tandfonline.com/doi/abs/10.1080/07294360.2010.512627#.VATWemPz9ws

- ⁸Ash, S. & Clayton, P. (2009). Generating, deepening, and documenting learning: The power of critical reflection in experiential education. <u>http://uncw.edu/qep/documents/AshClaytonGeneratingDeepeningandDocumentingLearning.pdf</u>
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http://www.tandfonline.com/doi/abs/10.1080/03043797.2011.644763

- ¹⁰Schwartz, M. 2012. *Assessing experiential learning in Engineering*. Ryerson University Learning and Teaching Office. Available at: <u>www.ryerson.ca/content/dam/lt/resources/handouts/engineering_experiential_assessment.pdf</u>
- ¹¹Ledvinka, G. (2006) Reflection and Assessment in Clinical Legal Education: Do You See What I See? International Journal of Clinical Legal Education, 9:29-56. Available at:

http://www.northumbriajournals.co.uk/index.php/ijcle/article/viewFile/86/89

- ¹² Fenwick, T. & Parsons, J, (2000). The Art of Evaluation: A handbook for educators and trainees. Toronto: Thompson Educational Publishing, Inc. <u>http://mcgill.worldcat.org/oclc/243514524</u>
- ¹³Stevens, D. & Levi, A. (2005). Introduction to Rubrics: An assessment tool to save grading time, convey effective feedback and promote student learning. Sterling, Virginia: Stylus Publishing, LLC. <u>http://mcgill.worldcat.org/oclc/57137995</u>

D17-21 Appendix C



We believe that experiential learning (EL) at McGill should include acquisition of experience, development of skills, reflection on learning, and evaluation and assessment (quantity and quality).



If you are a student:

> Discover Opportunities



If you are a professor:

Experiential Learning Resources
 Connect with other EL professionals

D17-21 Appendix D

EXPERIENTIAL LEARNING

Experiential learning is a philosophy of education based on the work of several 20th century scholars who gave experience a central role in their theories of human learning and development (e.g., John Dewey, Kurt Lewin, Jean Piaget, Paulo Freire, Carl Rogers).

"People grow best where they continuously experience an ingenious blend of challenge and support." (Kegan, 1994) In the early 1980s, educators began to explore how Experiential Learning Theory, and its six principles, could be

used to enhance learning in higher education (Kolb, 1984; Kolb & Kolb, 2005):

1. Learning is a process, not an outcome—learners should be engaged in a learning process, including feedback on the effectiveness of their efforts. person involved in an activity looks back and evaluates it, determines what was useful or important to remember, and uses this information to perform another

activity." An instructor can utilize this powerful process by incorporating specific and purposeful experiences in the classroom and prompting students with specific reflective exercises so they can draw meaning from course content.

An experience can take place at the level of exposure, participation, or immersion, and there are several different kinds of experiences an instructor can implement in a course. Some pedagogies and teaching approaches have been identified as particularly conducive to experiential learning as they address most or all of the principles of

2. All learning is relearning—the learning process draws out learners' beliefs and ideas about a topic so that they can be examined and refined or modified.

"When learning is conceived as a holistic adaptive process, it provides conceptual bridges across life situations such as school and work, portraying learning as a continuous, lifelong process." (Kolb, 1984)

3. Conflict resolution—disagreement and differences drive the learning process.

4. Holistic process—learning is not just the result of cognition, but the functional integration of thinking, feeling, perceiving, and behaving.

5. Transactions between the individual and the environment—the learning process takes place in social and physical contexts.

6. Creating knowledge—learners actively construct their understanding and knowledge.

From this perspective, learning is an iterative process involving experience and reflection on that experience. According to Dewey, "Learning takes place when a

"Education must be conceived as a continuing reconstruction of experience...the process and goal of education are one and the same thing." (Dewey, 1938) the Experiential Learning Theory. These include laboratory work, field trips, problem-based learning, reflective writing, content-creation, undergraduate research, events where students present their knowledge to the community, computer assisted instruction, community service, workplace learning, peer mentoring, and internships (Kolb & Kolb, 2015; Smart & Csapo, 2007).

Similarly, there are several different ways an instructor can support the iterative loop between experience and reflection

"Students remember only a fraction of what they hear but a majority of what they actively do." (Hawtrey, 2007)

on that experience for students, including facilitating debriefs or seminars, assigning reflective journaling, or introducing relevant or further content and prompting a synthesis between the experience and the new content. When choosing the experience, an instructor needs to think about what kinds of experiences their students



"Adult learners bring to the learning setting a wealth of prior experience and are eager to draw upon their background and previous learning in the classroom." (Lewis & Williams, 1994) might be ready for. The best learning will happen when the experience evokes just the right amount of tension or dissonance, which is then followed by a purposeful reflective exercise in the classroom. Across the many studies analyzed, mean failure rates dropped from 34% (traditional lecturing) to 22% (active learning), and learning gains showed significant improvement when looking at exam scores and concept inventory performance (Freeman et al., 2014).

The many existing literature reviews have also highlighted the variety in the methodological designs employed across individual studies, and it has been indicated that relatively few studies employ methodologies that permit generalization of results, or the establishment of a causal inference between events.

COURSES & STUDENT ENROLMENT:

Numerous studies on the effectiveness of experiential learning pedagogies have been conducted over the past decades. Because Experiential Learning Theory is a holistic theory of learning, research in this field is highly interdisciplinary and addresses learning and educational issues in virtually all education levels and disciplines. Research in higher education, in particular, spans, but is

"Methods and techniques that utilize learners" previous experiences, link conceptual foundations to practice, and encourage reflection are pivotal to the learning process." (Lewis & Williams, 1994)

not restricted to, disciplines such as management, education, business, science and engineering, the arts, second language education, information sciences, psychology, health disciplines, accounting, law, agriculture, etc. Experiential learning has been implemented and studied in classes with varied student enrolments, from low (around 20 students) to high (500 plus students).

EVIDENCE OF IMPACT:

Different qualitative and quantitative meta-analysises of the existing literature have highlighted the following:

BENEFITS:

- Improved academic performance
- Increased student interest and focus on learning topics and tasks
- Improved oral and written communication
- Faster content knowledge acquisition
- Reduced gap between theory and practice
- Increased student engagement
- Higher retention of course materials
- Enables personalized learning opportunities
- Promotes critical thinking and problem solving skills

LIMITATIONS:

- Insufficient/inadequate educational spaces and equipment
- Class management challenges
- Lack of instructor training or experience
- Traditional assessment practices require revision

REFERENCES AND RESOURCES:

For a complete list of references and resources, please visit: flexible.learning.ubc.ca/experiential-references

a place of mind THE UNIVERSITY OF BRITISH COLUMBIA Centre for Teaching, Learning and Technology

flexible.learning.ubc.ca