

Sustainability Projects Fund Final Report –
Linking Action and Research on Sustainability
April 6, 2015

1. On the project itself

1.1. Summary of the project

McGill University is home to a host of world-class researchers who tackle issues of sustainability in their day-to-day research and teaching. Communication of this research is typically directed at other scientists, through the highly specialized format and language of academic journals or conferences. Despite the importance of scientific research for creating a sustainable society, scientific literacy among the public is low, with many people struggling to even name a living scientist, much less explain what scientists actually *do*. Building on the Potvin and Bennett's labs experience in science communication and outreach with the initiatives *McGill at Work/Au Travail*, *Montreal's Ecosystems at your Service* and the *McGill Liber Ero Communication Training*, *Linking Action and Research on Sustainability* is a project designed to provide visibility for McGill scholars who are working on positive contributions/solutions to sustainability. Using three different approaches, we emphasize how McGill researchers are contributing to a sustainable McGill, Canada, and World:

- 1) *Brown bag lunches*: help McGill researchers to engage in outreach and share their work with a broader audience through various training events (brown bag lunches) and opportunities to participate in existing outreach activities (*Montreal's Ecosystems at your Service*, *Sustainable Canada Dialogues (SCD)*);
- 2) *Videos and outreach*: Identify positive solutions to sustainability coming from research by the McGill community, and make these better known through a series of videos and blog posts shared on our social media platforms (*Dialogues on Sustainability* and *Montreal's Ecosystems at your Service*) and with the Cegep Vert network (replaced by the Forum Science et Société at the Cegep level and various other outreach events of SCD);
- 3) *Vision of sustainability*: Begin to articulate a “vision of sustainability” from the grad student community at McGill as a test run for the up and coming *Sustainable Canada Dialogues* project from Dr. Potvin's lab.

1.2. Successes and challenges

We achieved most of our goals successfully and, as expected faced many challenges during the year. Our main success is the number of people impacted by this project: more than 100 brown bag lunch's participants, 980 facebook followers, 1000 people who received our promotional DVDs and USBs at various events hosted by the *Sustainable Canada Dialogues*. Not only did we meet our objective to increase the visibility of McGill researchers working in sustainability we exceeded it.

The table below shows our activities in more detail:

Task	Target	Status	Date	Details
Milestones or communication commitments	Estimate mm/dd/yy		mm/dd/yy	
Hire Project Managers	Done	Completed	01/04/2014	Split position between 2 people: Carly (April-May 2014) and Martine (May 2014-April 2015).
Announcement through existing social media channels	01-Apr-14	Completed	01/04/2014	LARS was promoted through the ESMontreal social media channels (twitter and Facebook), as well as through the personal twitter accounts of several team members and collaborators. These announcements were well received by the online community.
Initial Brown Bag Lunch w/ Profs	May	Didn't happen.		Introduce project & solicit feedback: as profs had been already solicited for the video workshop, they didn't respond to our next invitation.
Video Production Workshop	May	Completed	05/05/2014	8 participants (we didn't want to diffuse at large, we had a specific list of professors to contact - most of them sent a grad representative/didn't come); participants were very excited by the project and 7 ended up producing a 30 sec video "My sustainability Action".
Reframe McGill at work facebook page as "Dialogue on Sustainability"	May	Completed	05/05/2014	993 page likes, 4 likes/share/comments on average per post, 1 post/day, 8 clicks on average per post (higher with pictures).
Graduate student visioning workshop (Biology department as case study)	May	Completed	15/05/2015	Visioning workshop to talk about how students can contribute to a "sustainable Canada", starting with McGill. Pilot project to see if this is a strategy we would continue in other departments: 17 participants from 5 departments. This visioning workshop was successful and lead to 5 other workshops in different communities across Canada

				hosted by SCD.
Participation in the Forum Science et Société of ACFAS at Cégep Morency	May	Completed	Fall 2014	We identified Cegeps as key audience for our outreach activities given the recruitment potential. Catherine Potvin took part in the Forum Science and Société and this way was in contact with more than 200 Cegep students coming from all around Québec
Video-making: Research/Outreach	May (start)	Ongoing (1 month extension)	01/05/2015	Ongoing throughout project. Highlighting McGill research that contributes to a sustainable McGill/Canada/World: 15 videos produced (French and English), 25-150 views/video
Video-making: "30 second solutions to sustainability"	May (start)	Completed	01/04/2015	Ongoing throughout project. Highlighting researchers "pet solutions" to sustainability, in 30 seconds or less: 16 videos produced (French and English), 25-150 views/video
Hire Fall Student Ambassador	August	Didn't happen.		Since LARS targets grad students, postdocs and profs, hiring an undergrad wouldn't have been helpful. Moreover, we had many partners already so managing another person would have been inefficient.
Brown Bag Lunch 1: Creating your academic personal website	Sept	Completed	25/11/2014	Opportunities for training in outreach/social media for profs, grad students. Opportunities to connect with existing outreach initiatives/activities at McGill: 14 participants. We invited a webmaster to give the workshop. Participants asked many questions and had positive feedbacks. Some started creating their own website following our

				BBL.
Visit with CEGEP Vert	Sept	Completed	25/10/2014	Discussion of our project & video showing: Catherine Potvin distributed our 400 promotional DVDs containing LARS and McGill at Work videos to the 27 Cegep Verts (~250 students and ~30 professors) and they were really happy to take them home/at school. Some of them came back to attend Catherine Potvin's workshop in Cegep Matane in March 2015.
Brown Bag Lunch 2: Learn to network	Oct	Completed	16/12/2014	16 participants. We partnered with Niem Huynh and Catherine Stace from CaPS to lead this BBL. Participants asked a lot of questions and we discovered that there was a need for networking techniques and advice.
Brown Bag Lunch: Communicating your research on video II	Nov	Completed	30/01/2015	14 participants. Martine led this BBL/training workshop with Sam, our very talented filming and post-production specialist. Participants were very excited by what they learnt and didn't hesitate to practice with our equipment during the second part of the BBL. Some started working on their own videos following the event. We ended up making 2 LARS videos out of this BBL and acted as consultants for other participants.
Hire Winter Student Ambassador	December	Didn't happen.		See above

Brown Bag Lunch 4: Get media coverage for your research	Jan	Completed	10/02/2015	26 participants. This BBL was our most popular. We asked Carole Graveline, director of McGill Media Relations to lead the workshop. Most of this event was her to answer the numerous questions of the participants.
Visit with CEGEP Vert	Jan	Completed	18/03/2015	Discussion of our project & video showing: this outreach event was replaced by the Americana panel on climate change led by SCD. Catherine Potvin distributed our 200 promotional USB keys containing LARS and McGill at Work videos and SCD reports to the panel attendees coming from the environment, business and governmental sector thus broadening the range of our outreach.
Brown Bag Lunch 5:Montreal's Ecosystems at Your Service Brainstorming session	Feb	Completed	23/03/2015	13 participants. This BBL got the most active and positive participation. Participants came from different backgrounds but all had story ideas for the ESMontreal website and were all happy to contribute with their own backgrounds/experience/vision, etc. We led this BBL with four Bennett's lab members engaged in ESMontreal. We drew a map to put sticky notes on with story ideas corresponding to five categories of ecosystem services. We ended up having about 60 new story ideas.
Have a visioning meeting/workshop open to the McGill community (Dreaming a sustainable McGill)	Feb/March	Completed	27/03/2015	Show the videos we have made so far, discuss future plans for a "Good McGill": this outreach event was replaced by the SCD events in the <i>Green Living Show</i> in Toronto and the upcoming <i>Climate change: Impacts and Responses</i> in Vancouver (10-11

				April) where Catherine Potvin distributed our 200 promotional USB keys containing LARS and McGill at Work videos and SCD reports.
Brown Bag Lunch 6: Use social media strategically	Mar	Completed	31/03/2015	Around 15 participants. We invited Prof. Magda Fusaro, UNESCO Chair in communications at UQAM and SCD member to lead this BBL.

Below are the successes and challenges of our three objectives:

- 1) *Brown bag lunches*: these events were very appreciated by the McGill community and answered real needs and questions regarding outreach and science communication. We discovered that McGill professors, graduate students and postdoctoral fellows working in sustainability are very keen to diffuse their research to the public while lacking the knowledge and the time to do so. We had more than twice the number of participants expected to attend our training events and more than three times the number of McGill departments and faculties engaged. We also succeeded in creating a community of McGill researchers engaged in outreach since several participants attended more than one brown bag lunch. Here are a few examples of positive feedbacks:
 - i) Following our brown bag lunch “Communicating your research on video”, one participant used his new-learned skills and our expertise to create a video engaging more than a dozen of his fellow Bioresource Engineering graduate students to create an outreach tool for his project in high schools.
 - ii) At the “Lean to network”, the “Get media coverage for your research” and the “Use social media strategically” brown bag lunches, many participants came to us after the workshop saying how much they learnt and how they will put these new skills into practice.
- 2) *Videos and outreach*:
 - i) Video production and blog posts: this first component had a mixed success, given that we produced less than half of the expected number of video. However, the McGill researchers involved in making these videos were really excited by the project, were fully engaged in the production of the videos and were satisfied by the final product. Finding participants interested and available to make the videos themselves was our biggest challenge. To address this challenge, we decided to reach out directly to entire labs and offer our services in making video interviews instead. Because we started this initiative at the end of the project, we could not make as many interviews as we wanted but found that it would have been the best way to meet our objective of 80 videos (20 in French, 20 in English). We made 15 3min videos

- (6 in English, 6 in French) and 16 30sec videos (8 in English, 8 in French). We acted as consultants for 1 video and 6 people/labs would have been interested in making one.
- ii) Visibility on social media and events: the second component of our outreach strategy was to use our social media platforms (Facebook, Twitter) and our engagement with *Montreal's Ecosystems at Your Service* and the *Sustainable Canada Dialogues* to share positive sustainability solutions coming from McGill researchers with a broader audience. The success of this strategy is evident when considering our 993 Facebook followers and 909 Twitter followers (and 110 for the newly created French account) and the interest and enthusiasm that the different groups who attended the SCD events manifested towards our promotional DVDs and USB keys.
- 3) *Vision of sustainability*: our initial visioning workshop with McGill Biology students was a success on its own, with 17 participants. The participants were enthusiastic about the event, represented a range of backgrounds (e.g. families who had been in Quebec for several hundred years as well as new immigrants), and freely shared personal information about their hopes and dreams for Canada's future. Three challenges were:
- i) Balancing their expectation for a smooth-running workshop with the knowledge that it was a pilot session and we would learn from their experience and feedback;
 - ii) Not being able to finish all tasks during the allotted time;
 - iii) Disorganization about follow-up which meant that participants were repeatedly asked for information or participation after the workshop. But this activity led to the unprecedented success of the *Sustainable Canada Dialogues*, an initiative that built from this first visioning workshop, our Facebook page and Twitter account and later a website.

1.3. Directly and indirectly impacted stakeholders

- 1) *Brown bag lunches*: our 120 brown bag lunch participants were directly impacted by our project. Each of our brown bag lunches had a participative component, including either a hands-on learning or an extended period of comments and questions. We raised awareness on the need to develop a set of communication tools to effectively engage in outreach. Among the participants, there were at least 6 professors, 6 postdoctoral fellows, around 30 PhD students, around 20 masters' students and around 10 McGill employees. Participants had a large diversity of backgrounds, representing 32 departments and 11 faculties. 11 partners were directly impacted by our project by either helping us share our events/activities or being our guest speakers:
- i) Advertizing: Jacqueline Farrel (NSERC CREATE in Green Chemistry), Sherryl Ramsahai (ISID), Megan Poss (Deshautels SEI), Guillaume Larocque (QCBS), Krystle Manintveld (McGill Multimedia), Ian Tattersfield (MOOS), Neale McDevitt (McGill Reporter)
 - ii) Brown bag lunches' guest speakers: Francois Drolet (webmaster at Lionvertmedia), Prof. Magda Fusaro (UQAM), Niem Huynh and Catherine Stace (CaPS), Carole Graveline (McGill Media Relations)

- 2) *Videos and outreach*: 7 professors and 10 graduate students were directly impacted by our project by creating videos:
 - i) Video production: Elena Bennett, Catherine Potvin, Chris Solomon, Chris Barrington-Leigh, Brian Robinson, Marty Lechowicz, Marcia Waterway, Aerin Jacob, Heather Mariash, Catherine Baltazar, Sarah Wilson, Kyle Martins, Anna Luz, Melissa Lenker, Jaco Ziegler, Nicola Craig, June Po
- 3) *Vision of sustainability*: 4 organisations were our direct partners:
 - i) Organisations : ACFAS, Cegeps, Montreal`s Ecosystems at your Service, Sustainable Canada Dialogues

We also attempted to partner with McGill's 3 Minutes to Change the World, CAGS for the 3MT competition and ECOLE. We contacted the first two several times to ask for collaboration but due to organization problems on their side, it did not happen. As for ECOLE, they were interested in making a 3min video with us and were thus supposed to attend one of our video workshops but did not come for unknown circumstances.

More than 1000 people were indirectly impacted by our project with the promotional DVDs and USB keys that Catherine Potvin gave out to participants of three major events where SCD was present: the *Forum international Science et Société* (Montreal, October 25th 2014), the *Green Living Show* (Toronto, March 27th 2015) and the *Climate change: Impacts and Responses conference* (Vancouver, April 10-11 2015). The DVDs and USB keys contain a selection of the best LARS videos, McGill at Work videos and the SCD's Acting on Climate Change report. The 1000 people indirectly impacted are Canadian researchers, Cegep students and professors, and Canadian citizens. Our 993 Facebook and 1000+ Twitter followers were also indirectly impacted by our initiative.

1.4. Changes in budget compared to the original budget

Since we saved money on transportation and salaries (the project manager's), we decided to reallocate a part of this money on promotional material containing our LARS videos (USB keys) to give to the participants of three SCD events (through Catherine Potvin). The total cost of the 600 USB keys was \$3,795.

The 400 promotional DVDs containing McGill at Work and LARS's videos that Catherine Potvin brought to an ACFAS event with Cégeps in October 2014 were a success and disappeared quickly. Because of this success, Dr Potvin suggested that we made more for three other events as an outreach strategy. However, duplicating DVDs was a difficult process and some computers can't read DVDs anymore. Hence we decided to use USB keys instead.

1.5. What is next for this project

This project will end on May 1st, after our video post-production specialist, Sam Quigley, finishes our last four videos. The Facebook page and Twitter account will be maintained and managed by the Potvin's lab until December 2015, end of the *Sustainable Canada Dialogues* initiative. Our videos will also remain on the McGill Youtube channel when the project ends.

Montreal's Ecosystems at your Service will be maintained by four new Bennett's lab members who helped LARS with the Brainstorming session brown bag lunch.

Our brown bag lunches inspired other McGill groups to offer similar events to their students in the future: CREATE in Green Chemistry, CaPS and Web Communications Lunch and Learn Series.

2. On the project's planning and management and on the SPF experience

2.1. Success and challenges from a project planning and management perspective

The success of this planning and management experience is the number of contacts, partners and impacted stakeholders (directly and indirectly) that we created in a year. Since this project was built around past, existing and burgeoning projects (*McGill at Work*, *Montreal's Ecosystems at Your Service*, *Sustainable Canada Dialogues*), it was a challenge to present LARS as a different entity with its own goals and activities but that was achieved with great success. The success of this experience also stems from the ability of LARS to reach departments and faculties that are not often targeted by sustainability projects. Sustainability should be addressed in all sectors and it is critical to be as inclusive as possible in our message.

Starting a project that is interconnected with other projects (*Montreal's Ecosystems at your Service* and *Sustainable Canada Dialogues*) is a difficult mandate because as important it was to contribute to the other projects to make LARS work, we had to keep managing LARS as an independent project (brown bag lunches, video making, blog posts). Consequently, it was difficult for time-management and setting priorities. Moreover, this distinction and interconnection between the three projects was very difficult to explain and would confuse our stakeholders. This was amplified by the use of common social media platforms (one Facebook and two Twitter accounts for both LARS and SCD named *Dialogues on Sustainability*).

2.2. Lessons learned from a project's planning and management perspective (project development, HR, budget, timeline, monitoring, etc.)

- 1) LARS started with one project manager who had to leave the project after the first month. The second project manager took the lead until the end of the project but realized she was missing critical information/background. One lesson we learned is that information could have been more carefully transmitted during that transition (how this project started, who are involved and to what level, which are the contacts that have already been made, what are the different SPF forms, etc.).
- 2) Communication issues between employees must be addressed quickly as they will only amplify with time. We ended up losing precious time dealing with this issue with our first post-production specialist.
- 3) In terms of timeline, we started the LARS project too slowly and rushed to meet our objectives towards the end of the project. This is due to a lack of a communication plan built ahead of time to ensure full participation to our first events and activities. To create videos and offer brown bag lunches to McGill researchers, we had to make them participate and engage. However, in the beginning of the project, reaching out to this community was very difficult and we had to cancel our activities several times

due to a low participation. We learned that reaching out to extremely busy McGill researchers (professors, graduate students, and postdoctoral fellows) is a very challenging task and thus needs a large-scale communication strategy and the creation of a strong list of contacts.

- 4) We didn't have enough follow-up/planning meetings within our team. This led to a momentary decline in motivation.

2.3. Recommendations to ongoing or future SPF project teams on managing a similar and/or different SPF project

Our main challenge throughout the project was that all of our activities depended on the willingness of McGill researchers to participate and engage in outreach. We soon discovered that professors, and to a smaller extent postdoctoral fellows and graduate students, are extremely busy and though they truly acknowledge the value of outreach and its lack in the academia, they don't have the time/resources needed to develop it. We realised that one can efficiently mobilize academics to engage in outreach with a project leading to direct large-scale impacts like Dr Potvin's initiative *Sustainable Canada Dialogues*, or by including it in a curriculum like the NSERC CREATE in Green Chemistry program. The *Sustainable Canada Dialogues*, an initiative of the UNESCO- McGill Chair for Dialogues on Sustainability under the leadership of Dr Potvin and with participation of Dr Bennett, which started with the first visioning exercise hosted by LARS, has now become a national-scale project mobilizing over 60 researchers from every province in Canada. The network's scholars come from a range of disciplines from Engineering and sciences to social sciences, sustainability being at the heart of their research programs. They aim to identify actions that would help Canada in its necessary transition toward a low carbon economy based on scholarly consensus on science-based, viable solutions for greenhouse gas reduction. LARS contributed to the SCD during the entire year by managing their shared "Dialogues on Sustainability" facebook page and helping them with their website.

In addition, for future SPF teams managing similar projects, we would recommend:

- 1) *Building a communication plan ahead of time*: create contacts, network, make sure that your contacts will share and advertize your activities on time, prepare email, facebook and twitter samples, learn how to use social media manager (ex. Twittimer) and possibly email managers (ex. Mail Chimp) because it is very time-consuming. You also want to ensure that each of your activities gets enough participants.
- 2) *Being aware that creating videos is a very time-consuming activity*: it includes building a story board, finding a date suiting every actors in your video, prepare the filming, filming (can include multiple takes) and post-production, the most difficult and time-consuming step. For these reasons, it is very difficult to get busy professors and graduate students to create one. Several might like the idea and start working on it but will not finish it due to the process length. The best way to encourage video production is to either do the most part of the video-making (ex. interviews), to make it mandatory (ex. SPF projects) or to include them in contests (ex. 3MT competition, NSERC-Science, Action!).
- 3) *Choosing your name wisely*: *Linking Action and Research on Sustainability* is too long and not evocative. We suffered from this in our communications.

2.4. Feedback on the SPF experience: provided SPF support/processes/tools

This SPF project was a challenging experience in terms of financing. The project manager had to pay a lot of the expenses with her credit card and each reimbursement took at least a month to be processed. There are many kinds of expenses and most of them require a direct and immediate payment, which makes any purchase a source of stress. However, Krista Houser has always been very supportive, easy to reach and eager to find solutions to our problems. We also really appreciated the new expense reimbursement information sheet that replaces the complicated expense report on Minerva. We recommend that SPF provide more guidelines to project managers in terms of the purchase policy and the budget changes, including details like the maximum number of hours aloud on an expense report of the maximum budget amendment aloud without an SPF Working Group review, etc. We appreciated the SPF help with advertising our events on social media and McGill Channels.

2.5. Recommendations to the SPF team regarding what could be improved with the SPF

- 1) A detailed and accurate guide
- 2) A Dropbox folder with the various SPF forms, logos, rules, etc.
- 3) Simplify the purchase policy so that project managers don't have to advance the money
- 4) Online timesheets with online approval by project lead