

---

## Designing a Culture of Co-Learning: Mobilizing Knowledge About KTT-KMb Among Graduate Students

Scholarly and Research  
Communication

VOLUME 7 / ISSUE 1 / 2016

Andrea LaMarre, Kate Bishop-Williams, Megan Racey,  
Lindsay Day, & Tylar Meeks  
*University of Guelph*

### Abstract

The goal of this Field Note is to outline our experiences developing and maintaining a Knowledge Translation and Transfer-Knowledge Mobilization (KTT-KMb) Learning Circle for graduate students at the University of Guelph. Since the fall of 2013, we have planned and held events and training opportunities for graduate students across the university's colleges and maintained an online presence for our membership of 107 students. In this article, we reflect on the successes of the Learning Circle, including a sustained presence across an interdisciplinary group, securing funding, and engaging in successful collaborations. We also highlight our challenges, including attendance at events, staying relevant in a quickly evolving field, and striving toward sustainability. Our hope is that this article provides a non-prescriptive guideline for students wishing to develop similar "by student, for student" initiatives to scaffold graduate student learning and engagement in KTT-KMb.

### Keywords

Knowledge mobilization; Knowledge translation; Graduate students; Training; Community of practice

### Résumé

Dans ce field note, nous visons à surligner nos expériences en développant et maintenir un cercle d'apprentissage pour la mobilisation des connaissances pour les étudiants de deuxième et troisième cycle à Université de Guelph. Depuis 2013, nous avons organisé

**Andrea LaMarre** is a Vanier Canada Graduate Scholar (CIHR) and PhD Student in Family Relations and Human Development at the University of Guelph. Email: [alamarre@uoguelph.ca](mailto:alamarre@uoguelph.ca).

**Kate Bishop-Williams** is a PhD candidate at the University of Guelph, in the Department of Population Medicine. Email: [kbishop@uoguelph.ca](mailto:kbishop@uoguelph.ca).

**Megan Racey**, MSc, is a PhD Candidate in the Department of Human Health and Nutritional Sciences at the University of Guelph. Email: [mracey@uoguelph.ca](mailto:mracey@uoguelph.ca).

**Lindsay Day** is an MSc Student in the Department of Population Medicine at the University of Guelph. Email: [lday02@uoguelph.ca](mailto:lday02@uoguelph.ca).

**Tylar Meeks**, MSc, graduated from the College of Biological Sciences at the University of Guelph in 2015. Email: [tmeeks@uoguelph.ca](mailto:tmeeks@uoguelph.ca).

CCSP Press  
*Scholarly and Research Communication*  
Volume 7, Issue 1, Article ID 0105233, 15 pages  
Journal URL: [www.src-online.ca](http://www.src-online.ca)  
Received August 31, 2015, Accepted December 27, 2015, Published May 5, 2016

LaMarre, Andrea, Bishop-Williams, Kate, Racey, Megan, Day, Lindsay, & Meeks, Tylar. (2016). Designing a Culture of Co-Learning: Mobilizing Knowledge About KTT-KMb Among Graduate Students. *Scholarly and Research Communication*, 7(1): 0105233, 15 pp.

© 2016 Andrea LaMarre, Kate Bishop-Williams, Megan Racey, Lindsay Day, & Tylar Meeks. This Open Access article is distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc-nd/2.5/ca>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

de nombreuses événements et formations pour les étudiants de toutes les collèges à l'Université; nous avons aussi maintenu un présence web pour nos 107 membres. Dans cet article, nous réfléchissons au sujet des succès du cercle, ci inclus une présence soutenu au coeur d'un nombre de membres interdisciplinaires, du succès a obtenir les fonds, et les collaborations conçus pour réaliser nos buts. Nous surlignons aussi nos défis, en tant que les difficultés attirer les étudiants aux événements, rester au courant dans une domaine en evolution, et viser à la durabilité. Nous espérons que l'article fournira une guide non-préscrit pour les étudiants qui veulent développer des initiatives "par étudiants, pour étudiants" qui visent a soutenir les connaissances et engagement dans la domaine de la mobilisation des connaissances.

### **Mots clés**

Mobilization des connaissances; Partage du savoir; Étudiants; Formation; Communauté de pratique

### **Introduction: Goal of the field note**

In this Field Note, we detail the development, activities, and experiences of the Knowledge Translation and Transfer-Knowledge Mobilization (KTT-KMb) Learning Circle at the University of Guelph. The Learning Circle is an interdisciplinary KTT-KMb skills development initiative led by graduate students for graduate students. Operating as a loosely structured community of practice (CoP), the KTT-KMb Learning Circle works to foster a culture of knowledge sharing and mobilization among graduate students, largely through the provision of training and networking events and online communications. In contrast to other university-based services that support institutional knowledge mobilization, which often rely on sustained funding and staff, our community of practice is distinctly focused on student needs and interests.

We situate this work within a growing body of literature dedicated to exploring knowledge mobilization, translation and exchange elements – and strategies and actions – including an emerging focus on facilitating and promoting such processes within academic institutions (Phipps, 2011). Networks like ResearchImpact, an inter-university network designed to facilitate the exchange of knowledge between communities and universities, and the Institute for Knowledge Mobilization have been actively encouraging academics to build skills in taking their research out of the Ivory Tower. Researchers are increasingly called to recognize the complexity and interactional nature of communication (Manojlovich, Squires, Davies, & Graham, 2015) and to engage with communities in order to enhance the impact and relevance of their research (Wade & Demb, 2009).

Students and emerging scholars share the desire to engage with community and to make an impact in their respective fields (Hynie, Hensen, Johnny, Wedlock, & Phipps, 2011). Universities have been providing these opportunities over the past several years as they engage students by increasingly offering knowledge mobilization internships (Hynie et al., 2011), providing "science shop" models that give students hands-on research experience working on community-initiated projects (Farkas, 1999; Fischer, Leydesdroff, & Schophaus, 2003), and offering community service learning opportunities (Mayhew & Engberg, 2011). In these programs, students develop critical

thinking skills (Bringle & Hatcher, 2009), build networks (Hynie et al., 2011), enhance research skills (Masuda, Creighton, Nixon, & Frankish, 2011), and develop an appreciation for interdisciplinarity (Amey & Brown, 2005) through direct involvement with community organizations and by practicing knowledge mobilization skills on real-world problems. Peer learning may also be part of the model; for instance, graduate student interns at the Research Shop at the University of Guelph discuss ongoing community-engaged projects with fellow interns and project managers (Hawkins, 2011). Often, students also receive either financial or course credit for participation, though students often opt-in to participating and participation often requires an application (Hynie et al., 2011; Masuda et al., 2011), with the exception of a select few programs operating without such incentives (Hawkins, 2011).

The existence of such programs illustrates how students are seeking out opportunities to become more involved with, and accountable to, the communities touched by their research (Hynie et al., 2011). We add to this literature by focusing specifically on an initiative designed by graduate students, for graduate students, oriented toward building skills and knowledge in and about knowledge mobilization, translation, and exchange. Our peer-led, interdisciplinary, voluntary, co-curricular group is a loosely structured, non-contingent space for graduate students to develop practical skills for mobilizing knowledge. While we know about the skills students are gaining through more formal involvement in community-engaged initiatives such as science shops, internships, and service learning, we know less about what students need and desire to become effective knowledge mobilizers. Particularly as graduate students are increasingly seeking jobs outside of academia (Ballard & Daniel, 2015), these skills may help to scaffold careers as knowledge brokers or community researchers. In discussing the evolution of the KTT-KMb Learning Circle at the University of Guelph and reflecting on our successes and challenges over our two years in operation, we aim to share insights gained from our experience that may assist those interested in developing and supporting student-based KTT-KMb resources.

### **Defining KTT-KMb and the scope of the Learning Circle**

Knowledge translation is a growing field of research and practice, and many terms are used to refer to knowledge translation processes. Examples of these terms include knowledge mobilization (KMb), knowledge transfer and exchange (KTE), and knowledge translation and transfer (KTT). While nuanced in their emphasis, such terms all broadly encompass the concept of moving from knowledge to action (Graham, Logan, Harrison, Straus, Tetroe, Caswell, & Robinson, 2006). The Canadian Institutes of Health Research (CIHR) has one of the most commonly used definitions for the practice of knowledge translation: “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge ...” (CIHR, 2015). Our definition of knowledge dissemination practices most closely fits with the CIHR definition, though we encourage our interdisciplinary members to continue to learn about and use the definitions their respective disciplines prefer and employ.

As our KTT-KMb Learning Circle is based at an institution receiving funding from all three arms of the Canadian Tri-Council, we wanted our group to be inclusive of the

various knowledge translation terms and definitions to which our members may differentially adhere to in their work. Although K\* (KStar) has been introduced as a shorthand title to collectively refer to the various knowledge translation processes and components (UNU-INWEH, 2012), our experience has been that this umbrella term is not widely recognized at present. The use of K\* is a pragmatic approach; however, our aim is to appeal to a broad audience that may not currently identify or be familiar with the designation. We therefore chose to incorporate terms in our circle's title that would be recognizable across the university. For the purposes of this article, we will use KTT-KMb terminology when we refer to the specific activities of our Learning Circle, as this language has been helpful for us in designing action-oriented programming for graduate students. However, we lay this onto the backdrop of the wider, evolving field of K\* and will use the term K\* when discussing the field in general, in order to make our conclusions as applicable as possible across the knowledge dissemination continuum.

The concept of K\* reflects more than the dissemination of knowledge generated in the academy. As graduate students are commonly placed in the role of research-immersed knowledge translation practitioners, training students in how to “create new knowledge and connect that knowledge with knowledge users” (Barwick et al., 2014, p. 5) is becoming increasingly important. In our Learning Circle, we provide opportunities for graduate students to learn about and practice the diverse skillsets required for effective knowledge development and communication. These skillsets *include* dissemination and communication, but also the development, translation, and dissemination of research evidence for practical uptake (Barwick, Phipps, Johnny, Myers, & Coriandoli, 2014). K\* includes “pull, push, and exchange” (Barwick et al., 2014, p. 8) strategies for getting evidence into the hands of stakeholders and focuses on disseminating knowledge in line with the needs and goals of knowledge users. Accordingly, we work to develop training opportunities that will offer students the opportunity to think about the needs and goals of knowledge users earlier in the process of developing knowledge to be shared, tailoring messages to intended audiences and communicating them accordingly (Manojlivich et al., 2015).

From its outset, the University of Guelph KTT-KMb Learning Circle has functioned as an informal and loosely structured CoP. The model of situated learning by Jean Lave and Etienne Wenger proposes that learning involves a process of engagement in CoPs that stems from shared interests and goals. Through these shared interests, members engage in and generate their CoP (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott, & Snyder, 2002). While communities of practice may be especially beneficial to those seeking to engage in K\*, the use of CoPs in this context may inadvertently entrench power differentials that can negatively impact the true “community” of practice (Hart et al., 2013). In our case, however, our “community” of practice is explicitly graduate-student only and is oriented toward the development and practice of K\* skills, rather than representing a CoP oriented toward developing and delivering best practices in any particular substantive area.

Within our CoP, we mobilize knowledge about K\* itself; we are an interdisciplinary group and thus draw on our unique experiences and work at the boundary of different research worlds, as do members of other K\* CoPs (Hart, Davies, Aumann, Wenger,

Aranda, Heaver, & Wolff, 2013). Further, in our CoP we provide a space for students to explore and practice skills in a field where training models are only now emerging (Barwick et al., 2014). In this way, we provide graduate students with the “safe spaces” they may seek in which they can learn and practice skills by participating in informal and non-contingent (i.e., non-graded, non-competitive) settings (Tallman & Smith, 2014). Communities of practice offer graduate students the chance to explore new ideas, relationships and connections, resources, and skills applicable within and outside of academia (Bertram, Paquette, Duarte, & Culver, 2014). In our CoP, we work to support KTT-KMb skills development among graduate students while also promoting a culture of co-learning and knowledge sharing across research areas and disciplines.

As the field of K\* research and practice advances, there is growing interest not only in identifying, developing, and systematically evaluating effective knowledge translation strategies, but also in working to understand the needs and priorities of knowledge translation trainees (Newman, Van Eerd, Powell, Urquhart, Cornelissen, Chan, & Lal, 2015). There are a number of models for graduate student training in knowledge mobilization and community engagement, including knowledge mobilization oriented internships and courses (Hynie et al., 2011). The emergence of these programs and models responds to what appears to be a shared sentiment: that graduate students are uniquely positioned to engage in, learn from, and contribute to the development of knowledge translation processes, research, and practice. We add our peer-led, by graduate students, for graduate student model to the literature as we discuss the emergence of our CoP, our methods of engaging graduate students, and the successes and challenges we have encountered along the way. We also provide recommendations for others interested in developing and supporting student-focused KTT-KMb initiatives through our reflection on lessons we have learned.

## **Process**

The Graduate Student KTT-KMb Learning Circle was created to fill a gap in graduate student training in knowledge translation, transfer, and mobilization at the University of Guelph. As a group run by graduate students, for graduate students, we have grown to a membership of 107, with a four-person steering committee. In this section, we detail our history, outlining how we came to be, and the shifts and changes in the landscape that have led to our current structure.

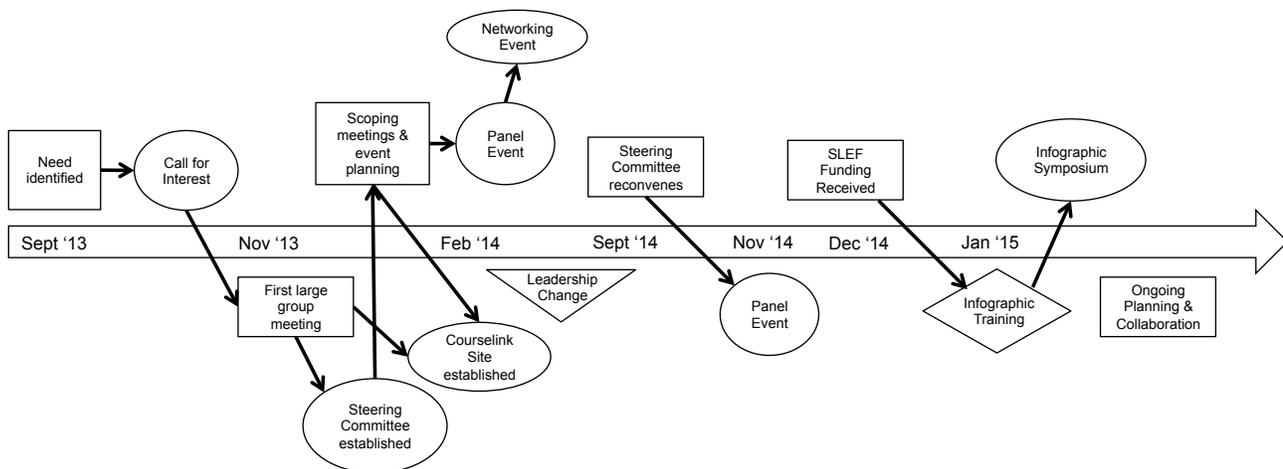
The University of Guelph has a strong history of community engagement, particularly through the Community Engaged Scholarship Institute (CESI), a community-facing institute oriented toward connecting community and the university. The Research Shop, housed within CESI, provides graduate students with the opportunity to engage with community agencies through internships of a minimum of two semesters in length. Through these internships, graduate students take on a variety of projects with community partners who have approached the Research Shop with their research needs. These internships provide graduate students with skills through interacting with stakeholders beyond the university campus, engaging in different ways of doing research and building relationships, while meeting community partner needs for research capacity. Interns often remain at the Research Shop throughout their graduate programs; for example, first author (AL) has been a Research Shop intern and project

manager since 2011. However, while interns at the Research Shop often engage in K\* as a part of their projects, the focus of the internships is community-engaged research more generally.

The Research Shop and CESI are not the only entities on the University of Guelph campus engaged in community- or stakeholder-facing work; among other programs, the OMAFRA-U of G Partnership partnership program also has a strong K\* presence on campus. While each of these programs is designed to be interdisciplinary, they tend to attract students with research interests near their focus. For the Research Shop, social science students have historically been drawn to the community-based research model. At the OMAFRA-U of G Partnership partnership, students with an interest in agricultural science have engaged in K\* initiatives.

In the fall of 2013, it was becoming increasingly evident that there was a gap related to K\* training for graduate students across the university. Several graduate students approached Dr. Anne Bergen, the knowledge mobilization coordinator at the Community Engaged Scholarship Institute at the time, asking for opportunities to engage in specifically K\*-oriented initiatives. Bergen sent out a call to graduate students across campus to gauge interest in convening a learning circle that would address KTT-KMb (see Figure 1). The group would be co-designed and driven by student interests. The first meeting was held in November 2013, and attended by 47 graduate students, representing all of the University of Guelph colleges. At this meeting, graduate students were invited to discuss what they would like to see happen in a graduate student learning circle in terms of structure, membership, roles, events, content, and outcomes. Students were invited to sign up to be a part of a steering committee that would guide group programming and represent the interests of its student members in the larger K\* community at and beyond the university. Initially, the steering committee was comprised of ten students; nine of these students attended planning meetings to determine the structure of the group and plan the group's first event. Two scoping meetings were held, during which this group of students considered the feasibility and scope of the first activities to be held as a larger group, taking into account cost, autonomy, and timelines.

Figure 1: Timeline of KTT-KMb Learning Circle development and activities



These preliminary planning steps yielded another key outcome: the establishment of our ongoing online presence in the form of a Courselink site (the online learning platform used by the University of Guelph for courses and on-campus groups to connect outside of a physical learning space). Three students volunteered to assist Bergen in updating this site with key news items related to KTT-KMb, including resources, calls for papers, conferences, and employment opportunities. These students also sent out approximately bi-weekly updates compiling the latest resources for the broader Learning Circle as a listserv digest. Over the next several months, Bergen and the steering committee planned events and continued to update the Courselink (see Figure 1).

In June 2014, Bergen left her post as knowledge mobilization coordinator at CESI (see Figure 1, “Leadership Change”). In her absence, the first author (AL) maintained communication with CESI in order to keep the Learning Circle active. In the fall, the first author (AL) circulated a call to the Learning Circle in order to assess interest for continued KTT-KMb activities. While six members left the Courselink site during this time, the broader sentiment was that this group filled a gap related to graduate student training in KTT-KMb. From this email, the steering committee was re-established, this time with six of its original members. This group began to work toward planning a larger event, an Infographic Training Session and Symposium in collaboration with the EcoHealth Community of Interest chaired by the second author (KBW) in the winter 2015 semester, as well as a smaller panel event to be held in the fall 2014 semester.

The steering committee has evolved and shifted with the Learning Circle; over the course of the fall 2014 semester, two members removed themselves from the steering committee due to other commitments, and the four remaining members worked to bring these events to fruition. One of these members (TM) has since graduated and moved out of academia, and the three others (AL, KBW, MR) continue to comprise the steering committee. A fourth member (LD) has since joined. Over its short existence thus far, our Learning Circle has moved from a student-driven group partially led by an employee of the Community Engaged Scholarship Institute (CESI) to a fully student-led Learning Circle. We continue to be supported by CESI on a project-by-project basis, and we collaborate with other on-campus groups to run our events. We have found that operating as a relatively autonomous group (i.e., not having any paid members of the steering committee) allows us freedom and flexibility in designing and leading events that appeal to an interdisciplinary group.

We expand upon the opportunities and challenges associated with our structure throughout this article. In the next section, we elaborate on the events mentioned in this brief history to outline how we engage students at the university.

### **Methods of engagement**

There are various ways to engage stakeholders in KTT-KMb activities and to disseminate, share, and use research knowledge. Some methods of engagement that others have used include CoPs, discussion forums, media and web platforms, symposiums, training workshops, panel events, seminars, knowledge fairs, manuals, information packages, case studies, fact sheets, etc. (Ministry of Agriculture, Food and Rural Affairs, 2010). Each of these methods has various levels of success in accelerating

research use to benefit the target audience. Described in this section are the five methods of engagement our steering committee has used to engage our group members as well as the measurements of reach of each method. A timeline including these events is presented in Figure 1 and these activities and their impact are summarized in Table 1.

**Table 1: KTT-KMb Learning Circle by the numbers (January 2014–July 2015)**

Student members (Current)	107	
University colleges represented	7	
Courselink postings	139	
Graduate students involved in events		
Total: 213	Panel event 1	30
	Panel event 2	20
	Training workshop	93
	Infographics symposium	70
	Informal discussion	4
Methods of engagement events held	5	
Collaborations	5	
External community members involved	18	
Total funds raised for events	\$1,875 + in-kind contributions	

### ONLINE ENGAGEMENT

One of the easiest and most accessible ways to reach our group members is through online methods, including Courselink, a virtual learning environment and course management system used by the university, with many customizable features. Members are added to an online group, where they can access various KTT-KMb resources; find groups, associations, societies, and other CoPs; post on the discussion board; and have access to news items we have posted. All of these resources, postings, and features are managed by the steering committee. We generally email highlights from the site to our members on a bi-weekly basis. There are currently 107 members subscribed to the Courselink site and only six members have graduated or withdrawn over the 18 months the group has been operating. The most actively used portion of the site is the News Feed, in which the steering committee has posted 139 times since the inauguration of the site in January 2014. The News Feed is updated with opportunities related to KTT-KMb, including employment and training opportunities, resources (articles, blog posts, and webinars), and conferences and calls for papers. Throughout the 18 months the course site has been running, there has been a fairly constant number of posts to the News Feed year-round. These postings are available to all members as needed and Courselink site statistics indicate that about ten percent of the group has used these resources.

## PANEL EVENTS

One of the first events conducted by the steering committee was a panel event called “KTT-KMb Career Paths & Practices (A Graduate Student Learning Circle Event),” at which the speakers discussed their career pathways and their favoured KTT-KMb practices, resources, and toolkits. We had three speakers from distinct career fields: one from the not-for-profit sector, one from the university context, and a third from healthcare. Speakers had diverse educational backgrounds and varying degrees of experience in KTT-KMb, providing attendees with diverse perspectives on the ways in which KTT-KMb can feature in these fields and beyond. There was also an opportunity for questions and discussion following the speakers’ short presentations. This event attracted 30 attendees.

A second panel event called “Behind the Acronyms: Knowledge Mobilization in Action,” was held to explore KTT-KMb projects in practice. The goal of this event was to share and promote the use of KTT-KMb in effective and innovative ways. We had three speakers, once again from diverse areas of expertise: one independent consultant, one from the university, and one from a community-based research team. Speakers shared their experiences of KTT-KMb projects in diverse settings and provided concrete examples of innovative methods of KTT-KMb, including arts-based and community-based methods of engagement with stakeholders across the research-practice continuum. This event attracted 20 attendees.

## TRAINING WORKSHOP

Our group held an extremely successful infographic training session in collaboration with the EcoHealth Community of Interest. Students attended this event from all colleges across the university campus. The event included a full dinner and light dessert, through funding of a Student Life Enhancement Fund grant. The event provided training on an innovative way of sharing research in an accessible and visually appealing way known as infographics. Data visualization techniques such as infographics have become a popular method of sharing knowledge, lauded as “knowledge assemblage for an information age” (Featherstone, 2014, p. 147) and are continuing to gain prominence in K\*. Accordingly, we suspected that providing training on this popular method would attract Learning Circle members. After the workshop, evaluations were distributed for participants to rank certain aspects of the workshop on a scale of one to five and provide feedback about any of the components of the event. This event scored 4.57/5 on event evaluations, with a 96 percent response rate. This event attracted 93 participants from the university, community, neighbouring universities, and government institutions.

## SYMPOSIUM

Following the infographics training workshop, we held an infographics symposium. All workshop attendees were invited to submit their own infographic to the symposium, a public event held in a centrally located building on campus. The symposium was an excellent example of collaboration: the event was run in partnership with the EcoHealth Community of Interest and we secured grants totalling more than \$1,800 to support the event. We received \$1,200 from a grant, \$475 from the Centre for Public Health and Zoonoses (CPHAZ) and \$200 from the Community Engaged Scholarship

Institute. In addition, the College of Biological Sciences donated the poster boards and event space for the symposium in-kind. These funds and in-kind donations allowed us to print student infographics (poster size: 24 by 36 inches), encouraging participation, and to provide breakfast and beverages, encouraging attendance. The event showcased 17 student-created infographics. Ten KTT-KMb experts in the local community also participated as judges for the event. Cash prizes were awarded to the judges' top overall infographic (based on a judging scheme that we provided) as well as to the people's choice. All presenters were invited to attend the CPHAZ Spring Symposium and have their infographic published to the CPHAZ website, providing both an internal and external opportunity to share research and knowledge within the university and with sectors outside the university. Both students who presented, and community and university attendees, completed event evaluations; overall, the event received a score of 4.625/5 on these evaluations. This event attracted 70 attendees from across the university.

#### **INFORMAL DISCUSSION GROUP**

We also attempted to facilitate informal networking opportunities for students via a discussion group. We hoped this event would provide an opportunity for Learning Circle members to meet other students from across campus with interests in KTT-KMb. The event was promoted as a networking event to share graduate student experiences with mobilizing knowledge in their fields. However, only four people attended this event, making it our least successful method of engagement. While networking is a well-known method for facilitating communication and sharing of resources, our approach to networking was not successful in this instance. We believe that a facilitated networking event may work better with a more formal approach for our members. For graduate students, KTT and KMb are relatively new terms, which we have found may lead to uncertainty around the topic and hesitancy in sharing experiences or attending events.

#### **Reflections and recommendations: Making it work for graduate students**

In building a graduate student-learning circle for KTT-KMb, we have learned a number of valuable lessons that may assist others in developing and supporting similar student-focused resources and learning opportunities. Our reflections, which we share in this section, are centred on the concepts of building a learning circle by and for graduate students, attendance, perceived benefits and relevance, and sustainability.

##### *By graduate students, for graduate students*

As a group led by and for graduate students, we have faced a unique set of challenges, and reaped a unique set of benefits. The experiences of this group, and the members of its steering committee, reflect a process that is different in many ways from the process of building a CoP for KTT-KMb in a professional setting.

As a graduate student-led group, we are autonomous, and have no formal overseeing body. This structure has yielded both positive and negative results. For instance, the group has had the ability to make autonomous decisions internally, increasing our ability to respond to student interests in a timely fashion. Additionally, the group's autonomy has created a space in which external pressures and agendas are minimized.

In contrast, there are also inherent drawbacks of student group autonomy in a large Canadian university. In particular, the group's autonomy has presented challenges with respect to advertising, financial support, time, and commitment.

Our autonomy has led to difficulty advertising our group and group events to potentially interested students, particularly in the early days. Sharing information about upcoming events throughout university departments is difficult when administrators do not recognize the affiliation or group from which a message was sent. Over time, this has become less of an issue, as the steering committee has formed relationships and connections across campus. Allies have been a solution to this and other challenges the group faced as a result of its autonomy, as noted below.

Financing events can also be difficult for a group with no general fund or budget. Since the group is not maintained by a staff person or directly affiliated with a university department, provision of basic incentives like coffee and tea has been a struggle. Similar to our struggles with advertising, the primary remedy for this problem has been to build allies. By partnering with various groups across campus, based on the alignment of event objectives, the group has been able to provide incentives at each of our events to date.

Without a dedicated staff member, time has been an issue for members of the steering committee and wider group alike. As an autonomous group, the workload for students can be substantial, and the time required to organize and run events can become burdensome. A core group of students interested in maintaining the Learning Circle, in the form of the steering committee, has been essential for the success of our community of practice in the long run. We recognize the need to plan for sustainability by ensuring ongoing interest in steering committee membership as we move forward. This is similar to recommendations in the literature to identify champions for KTT-KMb CoPs (Phipps, 2011).

Finally, commitment, as with time, has been an issue for the group. Without the penalty of leaving behind an overseeing body with large pull at the university, it was at times difficult to maintain steering committee members. This was less of an issue for peripheral members, who would maintain connections at events and within the online community. Again, it has been essential to have a key group within the steering committee committed to the ongoing development and maintenance of an active CoP.

#### *Attendance, perceived benefits, and relevance*

As in professional KTT-KMb CoPs (Phipps, 2011), attendance has been an issue for our group. We suggest that the reasons for low attendance may be similar in both cases. A lack of time, rather than a lack of interest, is a reasonable assumption to make of this group, because the online community for the Learning Circle is consistent, despite variable attendance. It is also possible that for students, as with other groups, that inconsistent attendance is linked to anxiety or apprehension related to lack of expertise in the content area. For many student members, KTT-KMb is an area of interest and may not be a key theme of their research. For these students, a lack of experience with the content may have been a deterrent for attendance. In discussions with members of

the Learning Circle, we can infer that students may not attend events because they feel they do not know enough about KTT-KMb, ironically meaning that they miss out on the opportunity to learn more about it.

We have seen that perceived benefits and relevance of Learning Circle events are critical for graduate students. Students have suggested that activities such as trainings, symposiums, and networking events are most beneficial to them in the long run, and thus increase their likelihood to attend. Event attendance has been high for trainings and symposiums, but relatively low for networking events. There is an interaction between perceived benefits of networking events and anxiety around expertise that is likely a cause for this inconsistency. In contrast, training sessions and symposiums attract the most students since the time to output for employable skills is reasonable.

### *Sustainability*

From our perspective, sustainability is one of the largest hurdles that a graduate student group faces. The structure of academic programs and sustained demands on graduate student time often results in fluctuating membership and a time-limited involvement (i.e., the length of a graduate program). Sustainability is central to the success of the Learning Circle in the long run, and relates to autonomy, attendance, and perceived benefits of programming.

With regard to autonomy, sustainability requires building allies between multiple members of external organizations and steering committee members. Additionally, to sustain an autonomous group, student champions must build networks with individuals that will become the future champions of the group. Without champions, the group will eventually collapse. Our steering committee primarily consists of PhD students, increasing the length of time they can commit to leadership roles within the group. Additionally, the steering committee is constantly open to accepting new members, in an attempt to identify and train new champions before existing members graduate and leave.

Sustainability is also related to event attendance. We recommend providing at least one high-impact event per semester, such as a training or symposium for students. These events will maintain contact with the peripheral members of the group and increase the traction of the group in the long run. In addition to attendance at events, contact needs to be maintained with peripheral group members where possible. The use of an online platform has facilitated ongoing communication with our members between in-person events, further contributing to the sustainability of the Learning Circle.

There are also connections between sustainability and the perceived benefits and relevance for the attendee. We recommend that groups not recycle their programming. Maintaining fresh, exciting, and innovative programming for members will increase the likelihood that students will return based on our experiences. This is particularly true for students who are interested in building an employable skill set and strengthening their *curriculum vitae* through events like training and symposia. It is possible that sustainability might be ensured by providing some kind of credit (either financial or academic) for event attendance and/or participation. Others have found

this to be a way to successfully attract and retain graduate students (e.g., Hynie et al., 2011). However, given that we perceive a part of the appeal of the group to be its informal, graduate-student only, and non-contingent nature, this may not be a practical avenue for us to pursue.

Finally, sustainability of a KTT-KMb CoP for graduate students is reliant on how we relate to the broader world of KTT-KMb. This group recognizes an ever evolving and changing discipline known as K\*. Within an academic institution, the pace of change in K\* is exceptional. The members of this group suggest that successful graduate student KTT-KMb CoPs will be flexible; working toward a paradigm shift of a non-stagnant paradigm (i.e., a dynamic, ongoing relationship to the field of KTT-KMb, which is itself continually in flux) or conceptualization of K\*. We believe that groups who do this will be able to exist long-term, on a changing stage of K\* in academia.

## **Conclusion**

In this article, we have presented our experience in developing and running a graduate student KTT-KMb Learning Circle at the University of Guelph. We hope this article provides a non-prescriptive model for engaging graduate students in KTT-KMb. Our experience suggests that an autonomous, student-led KTT-KMb CoP can operate successfully to provide valuable learning and networking opportunities for graduate students in the evolving field of K\*. We have faced challenges related to funding, consistent event attendance, commitment, and sustainability – challenges that might be expected by others considering the development of similar initiatives at their institutions. Identifying and working with allies, particularly other organizations within the university, strategic programming, and the formation of a committed steering committee have been key to overcoming these issues and have contributed substantially to our success. Our experience with the KTT-KMb Learning Circle suggests that such a group is a viable and constructive model for facilitating graduate student engagement in K\* training and practice.

## **Acknowledgements**

The authors would like to acknowledge Dr. Anne Bergen for her role in developing the Learning Circle. We would like to acknowledge our funders and collaborators: the Community Engaged Scholarship Institute, the EcoHealth Community of Interest, the Student Life Enhancement Fund, the College of Biological Sciences, and the Centre for Public Health and Zoonoses. We are also grateful to our student members, panel and other event speakers and judges for their role in sustaining the Learning Circle.

## **Websites**

Institute for Knowledge Mobilization, <http://www.knowledgemobilization.net>

ResearchImpact, <http://www.researchimpact.ca>

## **References**

Amey, Marilyn J., & Brown, Dennis F. (2005). Interdisciplinary collaboration and academic work: A case study of a university-community partnership. *New Directions for Teaching and Learning*, 102(25), 23–35.

LaMarre, Andrea, et al. (2016). Designing a Culture of Co-Learning: Mobilizing Knowledge About KTT-KMb Among Graduate Students. *Scholarly and Research Communication*, 7(1): 0105233, 15 pp.

- Ballard, Cher, & Daniel, Brittany. (2015). What skills are important? A replication. *Journal of Applied Social Science*. URL: <http://jax.sagepub.com/content/early/2015/01/19/1936724414566509.abstract> [August 10, 2015].
- Barwick, Melanie, Phipps, David, Johnny, Michael, Myers, Gary, & Coriandoli, Rossana. (2014). Knowledge translation and strategic communications: Unpacking differences and similarities for scholarly and research communications. *Scholarly Research and Communication*, 5(3), 1–14.
- Bertram, Rachael, Paquette, Kyle, Duarte, Tiago, & Culver, Diane. (2014). Assessing the value created through participating in a graduate studies community of practice. *Transformative Dialogues: Teaching & Learning Journal*, 7(1), 1–14.
- Bringle, Robert G., & Hatcher, Julie A. (2009). Innovative practices in service-learning and curricular engagement. *New Directions for Higher Education*, 147, 37–47.
- CIHR. (2015). *More about knowledge translation*. URL: <http://www.cihr-irsc.gc.ca/e/39033.html> [August 20, 2015].
- Farkas, Nicole. (1999). Dutch science shops: Matching community needs with university R&D. *Science Studies*, 12(2), 33–47.
- Featherstone, Robin. (2014). Visual research data: An infographics primer. *Journal of the Canadian Health Libraries Association*, 35, 147–150.
- Fischer, Corinna, Leydesdorff, Loet, & Schophaus, Malte. (2003). *Science shops in Europe: The public as stakeholder*. URL: <http://www.leydesdorff.net/sshopso3/> [August 20, 2015].
- Graham, Ian D., Logan, Jo, Harrison, Margaret B., Straus, Sharon E., Tetroe, Jacqueline, Caswell, Wenda, & Robinson, Nicole. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26, 13–24.
- Hart, Angie, Davies, Ceri, Aumann, Kim, Wenger, Etienne, Aranda, Kay, Heaver, Becky, & Wolff, David. (2013). Mobilizing knowledge in community-university partnerships: What does the community of practice approach contribute? *Contemporary Social Science*, 8(3), 278–291.
- Hawkins, Linda (2011). The research shop. *International Journal of Community Based Research*, 9, 18.
- Hynie, Michaela, Jensen, Krista, Johnny, Michael, Wedlock, Jane, & Phipps, David. (2011). Student internships bridge research to real world problems. *Education and Training*, 53(2/3), 237–248.
- Lave, Jean, & Wenger, Etienne. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Manojlovich, Milisa, Squires, Janet E., Davies, Barbara, & Graham, Ian D. (2015). Hiding in plain sight: Communication theory in implementation science. *Implementation Science*, 10(58). URL: <http://implementationscience.biomedcentral.com/articles/10.1186/s13012-015-0244-y> [August 15, 2015].
- Masuda, Jeffrey R., Creighton, Genevieve, Nixon, Sean, & Frankish, James. (2011). Building capacity for community-based participatory research for health disparities in Canada: The case of “Partnerships in Community Health Research.” *Health Promotion Practice*, 12(2), 280–292.
- Mayhew, Matthew J., & Engberg, Mark E. (2011). Promoting the development of civic responsibility: Infusing service-learning practices in first-year “success” courses. *Journal of College Student Development*, 52(1), 20–38.
- Ministry of Agriculture, Food and Rural Affairs. (2010). Knowledge translation and transfer plan: A toolkit for researchers to accelerate their research into action. URL: [http://www.uoguelph.ca/omafra\\_partnership/ktt/en/agrifoodruralink/resources/omafrakttoolkitoctober2010.pdf](http://www.uoguelph.ca/omafra_partnership/ktt/en/agrifoodruralink/resources/omafrakttoolkitoctober2010.pdf) [August 20, 2015].
- Newman, Kristine, Van Eerd, Dwayne, Powell, Byron J., Urquhart, Robin, Cornelissen, Evelyn, Chan, Vivian, & Lal, Shalini. (2015). Identifying priorities in knowledge translation from the perspective of trainees: results from an online survey. *Implementation Science*, 10(1), 1–4.

- Phipps, David. (2011). A report detailing the development of a university-based knowledge mobilization unit that enhances research outreach and engagement. *Scholarly Research and Communication*, 2(2), 1–13.
- Tallman, Rebecca, & Smith, Heather A. (2014). Pass the ketchup: Assessing the role of conversation in the professional development of graduate student teaching assistants. *Transformative Dialogues: Teaching & Learning Journal*, 7(2), 1–15.
- UNU-INWEH. (2012). Concept paper and case studies: Expanding our understanding of K\*. URL: [http://inweh.unu.edu/wpcontent/uploads/2013/05/KStar\\_ConceptPaper\\_FINAL\\_Oct29\\_WEB.pdf](http://inweh.unu.edu/wpcontent/uploads/2013/05/KStar_ConceptPaper_FINAL_Oct29_WEB.pdf) [August 20, 2015].
- Wade, Amy, & Demb, Ada. (2009). A conceptual model to explore faculty community engagement. *Michigan Journal of Community Service Learning*, 15(2), 5–16.
- Wenger, Etienne. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Wenger, Etienne, McDermott, Richard A., & Snyder, William (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press. URL: [http://inweh.unu.edu/wpcontent/uploads/2013/05/KStar\\_ConceptPaper\\_FINAL\\_Oct29\\_WEB.pdf](http://inweh.unu.edu/wpcontent/uploads/2013/05/KStar_ConceptPaper_FINAL_Oct29_WEB.pdf) [August 10, 2015].