IN THE KNOW

A Resource Guide
for Knowledge Mobilization

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IN THE KNOW

A Resource Guide for
Knowledge Mobilization

ICER Press

Front Matter

This resource guide was prepared for the Institute for Community Engaged Research (ICER) by Madelaine Lekei, Robin Metcalfe, Joanne Carey, and Christine Schreyer with contributions from the individuals listed below. As a community engaged project and collaborative publication, all listed contributors have reviewed the manuscript, offered edits, and approved its publication.

Contributors (in alphabetical order): Norah Bowen, Gideon Dante, Aleksandra Dulic, Rachelle Hole, Bowen Hui, Carrie Jenkins, Donna Langille, Jordan Marr, Leyton Schnellert, Jamie Stuart, Cathy Stubbington, Miles Thorogood, UBC Studios, Caitlin Voth, and James Wood.

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THE UNIVERSITY OF BRITISH COLUMBIA
Institute for Community Engaged Research

Dedication

To everyone who is brave enough to forge connections and learn new ways of sharing knowledge

Image Credit: Joanne Carey, 2021.

Acknowledgements

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An Introduction to
Knowledge Mobilization

A few years ago, a headline for an article in The Conversation read, "Academics can change the world - if they stop talking only to their peers."[1] Access to knowledge and to the insights of current research is an important and multifaceted issue. One way to provide access to research and knowledge is through open access academic publications, but knowledge mobilization is also about using new and innovative ways to communicate research in order to co-create and share knowledge with a wider audience. When more people have access to research, it impacts policies and community plans, and overall, the way people live their lives on a daily basis. For those involved in community-engaged research, knowledge mobilization is even more important since our research is often an answer to a problem or question a community has and is done in collaboration with community members.

> When more people have access to research, it impacts policies and community plans, and overall, the way people live their lives on a daily basis.

Since its inception, the Institute for Community-Engaged Research (hereafter ICER) has had an interest in Knowledge Mobilization. We made it the focus of our programming in the 2019-2020 academic year on the request of our members, who were looking for innovative ways to share their research results with the communities they were working with. ICER is "dedicated to knowledge creation and exchange that promotes equality, equity, and justice at the local, national, and international levels."[2]

Another reason we have focused on Knowledge Mobilization is that funders increasingly consider knowledge mobilization a form of best practice, even if this is not explicitly stated within the funding application. Additionally, some research funding agencies often make knowledge mobilization plans an explicit part of their funding applications, with an emphasis on open access publications.

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1. https://theconversation.com/academics-can-change-the-world-if-they-stop-talking-only-to-their-peers-55713
2. https://icer.ok.ubc.ca/about/#undefined

For example, the Social Sciences and Humanities Research Council (SSHRC) defines Knowledge Mobilization in the following way:

> The reciprocal and complementary flow and uptake of research knowledge be-tween researchers, knowledge brokers and knowledge users—both within and beyond academia—in such a way that may benefit users and create positive impacts within Canada and/or internationally, and, ultimately, has the potential to enhance the profile, reach and impact of social sciences and humanities research.[3]

Applications to SSHRC are strengthened when their knowledge mobilization plans are concrete and responsive to the needs of the public. The appropriateness of a knowledge mobilization strategy is tied to both form and content. This means that the strategy is informed by those engaging with the knowledge being shared.

Before we go much further, we should define a series of terms related to knowledge mobilization. Knowledge mobilization is focused on activating research insights and knowledge out in the world to contribute to social change, whether that is in academia or outside of it. Knowledge exchange is a give and take relationship between stakeholders and researchers of their knowledge. In other words, these groups exchange knowledge and expertise so that they can make decisions on policies or make plans that are based on the widest set of knowledge possible. Knowledge translation, on the other hand, is when academic research is translated to everyday language and is available in acces-sible formats. This ensures that the content is available to a diverse audience as a way of reporting to communities. This knowledge can then be used by community members and stakeholders in their decision making processes and projects. In this publication, we approach knowledge mobilization as the overarching term under which knowledge exchange and knowledge translation activities are situated.

In the following pages, we will discuss the many different approaches to knowledge mo-bilization that were featured in ICER's knowledge mobilization workshops in the 2019-2020 academic year. These include: 1) Games; 2) Graphic Novels, Animation, Chap-books, and Zines; 3) Podcasting; 4) Theatre; and 5) Social Media. Throughout the guide you will see bolded key terms with definitions of these terms compiled in a glossary at the end of the guide. WIthin each section, you will also find open-access resources included in an annotated bibliography as well as a Notes + Reflection space so that you can actively engage with each approach. We have also included the knowledge mobili-zation workshop posters so that you can see how ICER put each approach into action. Join us as we get "in the know" about knowledge mobilization!

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3. https://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx-#km-mc

Got Games?!

Games can create accessible and supportive spaces for community members, research-ers, and educators to communicate, experiment, and imagine new possibilities in a low stakes environment. As a creative and collaborative approach, games can bring in di-verse voices and perspectives that may be overlooked when using traditional research methods. On November 26, 2019, ICER held an interactive workshop "Got Game(s)?" which was an introduction to using games as a research and knowledge mobilization tool. This workshop was led by four facilitators who discussed their different approaches to designing and using games in a variety of research and learning contexts. This event was designed to offer participants short, informal presentations. There was also the op-portunity to break into small groups with each facilitator to brainstorm and learn more about game design.

The workshop started off with Miles Thorogood from the Faculty of Creative and Critical Studies at UBC's Okanagan campus. Thorogood presented on game theory and the central components that create 'good games' through a framework of mechanics, dynamics, and aesthetics. Mechanics refers to the resources within a game that a play-er interacts with while the dynamics of the game are how the mechanics behave and influence a player's behaviour. A player, for example, can build, purchase, or earn a re-source such as points according to the dynamics of a game. Aesthetics includes the sensory and emotional responses that a player experiences within the game.

In designing the flow, challenge, rewards, novelty, and immersive qualities of a game, Thorogood noted that "if [games] have a high level of skill, but there is not much challenge, it kind of ends up in this idea of boredom; whereas if the challenge is too high compared to the skill to solve it, then the [player] will feel a sense of anxiety." He empha-sised that when "those two things are matched—matching challenge with skill—then we are in the optimal flow area, where skills are being used for good effect in solving what-ever the challenge might be." When it comes to games, these components influence the conditions and experience of a "good game" by creating a space where people are immersed in a cognitive, narrative, sensory, or physical experience.

A line drawing of game boxes and controllers. One box is based on the board game that Christine Schreyer developed with the Taku River Nation and shared during the games workshop.
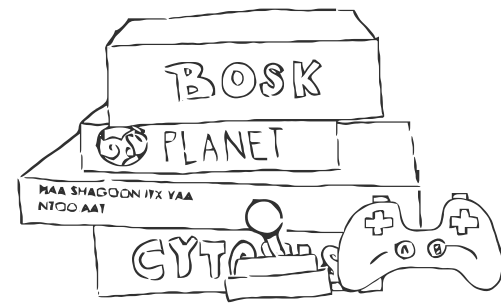
Dr. Christine Schreyer, an associate professor of Anthropology at UBC's Okanagan campus, shared her experiences of designing and using games as culture and language revitalization tools with communities. As part of her PhD in 2005, Schreyer worked with the Taku River Tlingit First Nation whose offices are located in Atlin, British Columbia, to create a board game for language revitalization. The game facilitates learning about the Tlingit language, resources on the land, and Tlingit place names. Schreyer shared her process from consultation, to constructing the game, to beta testing, and board game production. One key part of the game was that the design was done in close consultation with the Taku River Nation in order to reflect the needs and desires of the community. For example, they collaboratively designed the game for users to be curious, work together, and succeed in learning the language. As part of the game, Schreyer included a CD of Elders speaking the Tlingit language in order to increase users' exposure to the spoken language in an accessible and interactive manner. Since then, the community has produced and distributed the game among community members.

The second game that Schreyer presented was created through collaboration with a coastal community in Papua New Guinea, Kala speakers. The game also focused on language learning and representing the ways that the community used the land. The cooperative card game about growing a garden was culturally informed and involved complexities like drought, animals, and personal behaviours that influence the ecosystems within the garden. The game was informed by the cooperative dynamics of local Kala society, and incorporates key cultural knowledge, practices, and rituals. Using these examples, Schreyer led participants through brainstorming and transforming a research project into a board or card game in her small group workshops.

Dr. Bowen Hui, from the department Computer Science, Mathematics, Physics and Statistics at UBC Okanagan, presented on the structure of digital game design and mobile education games with a focus on youth engagement. Digital games allow designers and researchers to use a wide range of graphics, activities, and game structures to support user engagement and knowledge sharing. Digital games offer participants opportunities to play in simulated and augmented realities in a safe, structured, and predictable environment. As Hui shared, this approach to game development allows users to learn

concepts through simulation of experiences and processes that may be complicated or inaccessible in a real life setting. Dr. Hui outlined various ways to embed digital games with teaching principles and practices like instructions, solving multiple choice problems, categorization, and even longer quest styled games in a manner that supports users and game players in learning and solving problems.

When thinking through ways to create engaging and effective games for educational purposes, Hui emphasized that it's important to tailor the game to the intended users and to offer opportunities for personalized feedback within the game. Game tailoring considerations can include: planning how information is displayed, ensuring the design is age level and skill appropriate, aiming for balanced cognitive load across the game, and responding to the user's needs. In her small group workshop, Hui emphasized that taking a flexible design approach that integrates user-generated content can help address challenges in game design.

Jamie Stuart, from the Okanagan Regional Library in Kelowna, British Columbia, presented several approaches to understanding narratives within board games and described real-world applications of gaming. As a game designer and reference librarian, he shared a number of ways that one can use gamification to engage with and exchange knowledge in research and learning environments. Stuart's insights from his experience working with GMT Games[1] illustrated how strategy games are used in military training to better understand conflict resolution and complex decisionmaking in war settings.

A line drawing of Jamie Stuart explaining and playing a strategy game during the interactive portion of the workshop.

1. https://www.gmtgames.com/

Stuart emphasized the value of games as pedagogical tools that can contribute to social movements by equipping people with the skills, insights, and tools to enact change within their communities. In board games, the narrative structure is one key component that actively engages users and promotes hands-on learning within a simulated, enjoyable experience. Stuart highlighted the tactile and immersive qualities of games for enhancing learning experience, "you touch it, feel like you see it. You experience the contradictions, and the give-and-take between the different forces that are at play in the world, which could be forces that are at play in your data." In his small group workshop, Stuart used the board game Next War to demonstrate how conflict simulation games can be pedagogical tools that explore concepts through their design, structure, embedded narratives, and players' own immersion which shapes how co-generated knowledge emerges. Read through the resource section below if you are interested in learning more about how you can use games in the classroom as well as for research and knowledge mobilization!

Resources for Games

AnthropologyCon. 2020. "Resources." https://anthropologycon.org/resources/

> Anthropology Con is a collaboration between social science researchers who are interested in the meaning and function of games in our daily and academic lives today. From tabletop, card, role playing, and computer games, this collective focuses on social practices such as play, cooperation, change, and power dynamics in gaming. Within the resource section, they offer helpful worksheets to start planning and designing games, as well as guides on game theory, design approaches, and research insights.

Centre for Game Science. 2020. "Centre for Games Science Homepage." http://centerforgamescience.org/

> The Centre for Game Science is based at the University of Washington and focuses on solving social and scientific problems with STEM games. This resource links to them and the game Foldit (https://fold.it/portal/), a game about protein folding, and an open access paper about Foldit. These games are designed to rely on public engagement and contribute to scientific advancements while improving science literacy across diverse communities.

Duckworth, Anthony. 2019. "Playing games? It's a Serious Way to Win Community Backing for Change." https://theconversation.com/playing-games-its-a-serious-way-to-win-community-backing-for-change-116171

> This article outlines one way that the Australian Urban Design Research Centre created and used the game Freo to consult with community members in order to develop new public policy. The goal of this game was to find ways to involve communities meaningfully in participatory planning processes in their local neighborhoods. By using three-dimensional, interactive boards, participants were able to design, explore, debate, and change proposed plans for their urban neighborhoods. The tactile process of playing and discussing the game helped both community members and city officials come to important agreements about the common future of their city in relation to community wellbeing, sustainability and economic feasibility.

Ed-Surge. 2020. "Game Based Learning: Preparing Students for the Future." https://www.edsurge.com/research/guides/game-based-learning-preparing-students-for-the-future

> Ed-Surge produced a resource guide for game-based learning informed by explorations into new ways that technologies can engage diverse learners and

audiences. Through a series of articles, videos, and infographics, this guide illustrates how games can support creativity, critical thinking, communication, collaboration, and digital literacy across diverse learning environments. This resource guide brings a big picture focus to the power and impact of using games to teach, share, and learn new concepts. By providing example lesson plans, this guide offers a framework that helps users visualise how popular games, such as Minecraft, can be used as learning tools to co-create and share knowledge.

Engasser, Florence and Tom Saunders. 2018. "How to Use Games to Involve the Public in Decisions About Research and Innovation Policy." https://www.nesta.org.uk/blog/how-use-games-involve-public-decisions-about-research-and-innovation-policy/

In this article researchers ask, "how can games enable inclusive conversations around research and innovation policy?" There is growing research interest and policy-maker willingness to use creative methods like games in order to start discussions and consultations about larger social issues. The use of games in public policy planning and evaluation has allowed researchers to include, inform, and collaborate with the public regarding changes within their communities. Additionally, this article outlines a wide range of initiatives that successfully used different types of games to start conversations, present data, share knowledge, and improve public engagement.

The Games Institute, University of Waterloo. 2020. "The Games Institute." https://uwaterloo.ca/games-institute/

The Games Institute at the University of Waterloo is an interdisciplinary research centre that seeks to understand game design, user engagement, and game application across entertainment, education, health, and research contexts. Founded by Dr. Neil Randall and Dr. Mark Hancock, the Games Institute focuses on what we do when we play games and how these interactions help us think through social problems and imagine new possibilities. The Games Institute explores video, computer, and phone games as well as traditional board, card, and social games. Innovations in game approaches, applications, and technologies are a main focus around which the Games Institute collaborates with partners at games-related conferences and through publications and research journals. Follow the Games Institute on Instagram (@The_Games_Institute) and Twitter (@GamesInstitute) or check out their podcast, The Games Institute Podcast, to learn more about gaming and game research.

Northern Power Grid. 2020. "Activating Community Engagement with GenGame." Accessed February 23, 2021. https://www.npg-ace.com/

GenGame is a collaborative project led by the Northern Power Grid in Newcastle, UK. The project uses gamification as a tool to both investigate, teach, and contribute to positive changes in electricity use and sustainability. This approach encourages consumer engagement, improves public consultation, and targets reducing electricity consumption. This resource includes information about participant recruitment, game design, implementation, and project impact summaries.

Parker, SG. 2015. "Health Games Research: Advancing Effectiveness of Interactive Games for Health." https://www.rwjf.org/en/library/research/2011/03/advancing-the-field-of-health-games.html

Health Games Research focuses on new and creative ways to share information and initiatives in order to support health and wellness. From 2007-2013, the Games for Health project researched different ways to design effective games in order to improve individual and community health outcomes. The project's final report offers a snapshot of the main objectives, process, and results of 21 different health programs that used a variety of games to teach and support wellness goals.The project looks at a wide-range of health topics, demographics, and game types (video games, mobile phones, physical activities etc.) in order to better understand ways to support the health and wellbeing.

Shueh Jason. 2014. "Gaming: A New Way to Engage Citizens in Problem-Solving." https://www.govtech.com/dc/articles/Gaming-A-New-Way-to-Engage-Citizens-in-Problem-Solving.html

The Engagement Lab at Emerson University studies how games and gamification of resource tools can increase engagement, promote collaborative problem solving, and improve civic interaction. Researchers at the Engagement Lab understand games as an entry point to larger, difficult, and more complex conversations about social problems in their communities.The Community PlanIT platform is one example that integrates community surveys into a game and allows community members to share what is important to them in an accessible and approachable format.

The University of British Columbia. 2020. "Indigenous New Media: Games." https://guides.library.ubc.ca/c.php?g=701008&p=4978589#s-lg-box-15666914

This is a resource guide compiled by the University of British Columbia Library that focuses on Indigenous media, including a variety of games that are used for education, decolonization, and knowledge sharing purposes.

Notes + Reflections



Image Credit: Madelaine Lekei 2021.

Graphic Novels, Animation, Chapbooks, and Zines

Scholars of community engaged research (CER) routinely look for inviting, accessible ways to share their work with broader audiences. Graphic novels, chapbooks and animation—motion or comics—offer compelling storytelling that engages audiences through both text and image. On January 20, 2020, ICER hosted a workshop at the Okanagan Regional Library in downtown Kelowna, British Columbia. Four facilitators, Dr. Norah Bowman, Jamie Stuart, Caitlin Voth, and James Wood each spoke to an alternative medium to traditional academic journals or books: graphic novels, chapbooks, and animation.

Jamie Stuart, a reference librarian with the Okanagan Regional Library, provided the audience with an historical overview of the graphic novel. He noted that the use of images to tell a powerful story in sequential order dates back to the Egyptians and is an enduring and impactful means of communication. For example, Käthe Kollwitz, a German artist from the inter-war period created artworks intended to be viewed in a sequential series. Her work identified, documented, and communicated messages about social solidarity and resistance happening at that time.

Both show how complex stories can be effectively portrayed through visual storytelling. Stuart acknowledged that cartoons and graphic novels have a branding issue, in that they have often been perceived as targeted to children or teen audiences. Some people might overlook them or see them as inappropriate pedagogical communication tools for adults. He argues that they are, in fact, powerful art forms and teaching tools that can be effectively used across generations. This point is illustrated by the widespread adoption of the graphic novel V for Vendetta, and the Guy Fawkes mask, which have become global symbols of resistance. The popularity of Persepolis by Marjane Satrapi, a graphic novel memoir about growing up in Iran and Austria is another example. Both show how complex stories can be effectively portrayed through visual storytelling. Stuart concluded that we live in an increasingly visually-based communication world and that graphic novels are growing in popularity.
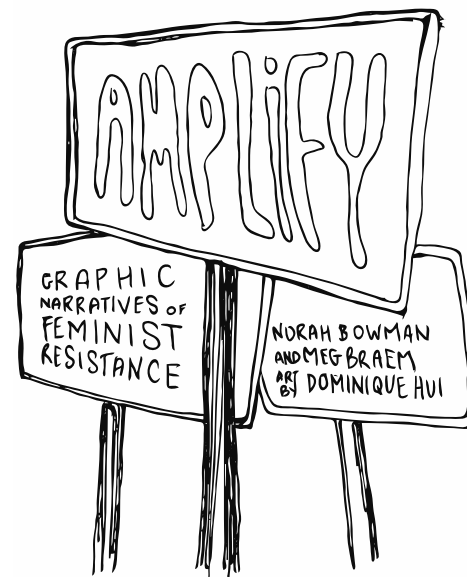
A line drawing of Norah Bowman's graphic novel cover and key points within her presentation.

As a professor of English Literature, Gender and Sexuality, at Okanagan College, Dr. Norah Bowman had trouble finding a book that detailed the biographies of feminist activists, and which linked their personal and activist lives, in an accurate and engaging format. When told no such book existed, she was invited to write it. And so began a six year journey ending with the publication of Amplify: Graphic Narratives of Feminist Resistance. This was the first graphic novel she had worked on, and she shared some important tips she learned from her experience. First, the collaboration process between the author and the artist is crucial. She worked with the artist, Dominique Hui, in Toronto, and with her cousin, the Calgary-based playwright, Meg Braem. Bowman noted, while working collaboratively across three time zones is possible, one should recognize the practical challenges of this when assembling their team[1]. Braem took Bowman's first draft, which Bowman described as "heavily researched and presented in mostly chronological order," and transformed it into a script.

The process involved much drafting and back and forth between all three collaborators. Bowman suggested that everyone involved in a graphic novel should accept that there will be many edits, and the process will take longer than you think. Writers who work with artists on a novel should be aware of the out-of-pocket expenses of the artist in terms of tools and make an arrangement with them for payment. She concurs with Stuart's observation that graphic novels are an increasingly popular medium in both pop culture and in academia. The graphic novel Amplify was used in over 70 classrooms in the US in the 2019-20 academic year.

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1. Bowman's graphic novel collaboration took place under the limitations of pre-pandemic technology.

James Wood, an animation instructor at Okanagan College, introduced the benefits of animation as a means of effective, engaging communication. Wood described animation as moving images that communicate a concept, which we can think of as "an information delivery system that works by putting characters and narrative together to make memorable content." Animation allows information to be delivered clearly and succinctly, and sometimes with incredible brevity and poignancy—qualities that are desirable to anyone considering knowledge mobilization. He emphasized that information presented via animation is well understood and retained by those who view it, only if it is delivered clearly. Animation can show anything and can be used for any topic. Creators can choose how to focus the viewers' attention, but to create engaging animation, the creator needs to be clear about their message from the beginning of their project.
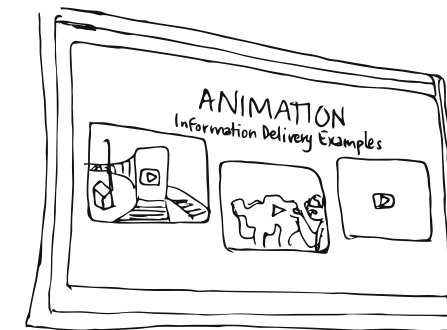

A line drawing of James Wood's presenation on animation and information delivery.

When dealing with topics that might be difficult or highly charged, animation allows the creator to take a step back from the content matter and consider how to deliver information in gentler ways that might foster curiosity and acceptance rather than defensiveness. Wood noted that animation can communicate about difficult topics in ways that the viewer doesn't feel they are being preached at. They are not being told 'don't do that'. Animation offers many accessible entry points for diverse subjects, and the opportunity to shift conversations on important social topics. He suggested that those interested in using animation, begin by creating a storyboard to work out the partnering of images and content.

What is a chapbook and why would researchers want to consider using them to disseminate their research? Caitlin Voth, proprietor of Bite Harder Press, explained that chapbooks are essentially "very small books". Historically, they were one sheet of paper with printing on both sides slipped between a cover. They became increasingly popular among the lower classes in the 18th Century as literacy rates began to rise, and because

they were small and light they were easily sold by "chapmen", also known as travelling sales people. Like graphic novels and animation, chapbooks marry text and image by using print and wood cut images to convey stories and information. Quoting Roy Bearden-White, Voth noted how historically chapbooks were important in writing and communicating stories that were largely marginalised by more powerful classes in society:

Chapbooks represented the ideas and the ideals of the lower ranks and orders, they expressed the interest and passions that many times differed from those of the ruling class. They established a historical record of the everyday life of the common person. A life which the history of the upper-class has often overshadowed[2].
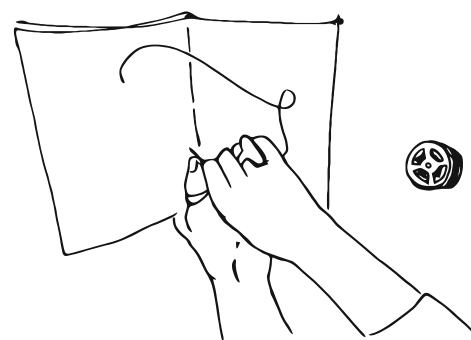
A line drawing of Caitlin Voth's hands sewing a chapbook.

Modern day chapbooks are considered to be any book with a soft cover and can be stapled or sewn together. There are multiple reasons why chapbooks might be an ideal form for sharing research results.

Voth noted that chapbooks are:

- designed to be shared easily;
- can be very affordable to produce and
- distribute;
- can complement more formal academic presentations. For example, they can be used to provide additional background information or definitions when giving a presentation;
- give the researcher more control in deciding how their research will be presented (ie. the inclusion of images, and the formality of the language used);
- and are an easy way for people to reference your work.

A line drawing of Caitlin Voth putting a chapbook together.

All four facilitators spoke to the importance of using images and storytelling together, and how this combination has the potential to transform information into a meaningful and impactful experience of knowledge sharing, be it through graphic novels, animation or chapbooks. You can learn more about how to create graphic novels, animation and chapbooks, please check out the resources in the annotated bibliography below.

A line drawing of Norah Bowman sitting with a collection of grpahic novels from the workshop.

2. Bearden-White, Roy. (2009). A History of Guilty Pleasure: Chapbooks and the Lemoines. The Papers of the Bibliographical Society of America. 103. 284-318. 10.1086/pbsa.103.3.24293816. https://www.researchgate.net/publication/290706442_A_History_of_Guilty_Pleasure_Chapbooks_and_the_Lemoines

Resources for Graphic Novels

Boudreault-Fournier, Alexandrine. 2015. "Making' Graphic Novels as a Creative Prac-
tice in Anthropology: Learning Outcomes From the Classroom." http://imaginativeeth-
nography.org/wp-content/uploads/2016/01/Boudreault-Fournier-CIE-Blog-Jan10.pdf

Developed by Dr. Alexandrine Boudreault-Fournier in 2015, this guide outlines the process of developing and making graphic novels in a social science research context. She describes the process of designing and facilitating a seminar on graphic-based media with students at the University of Victoria. In a series of illustrations and text based instructions, Boudreault-Fournier describes both making and leading a seminar on graphic media design. She discusses how she developed the seminar, her teaching approach, as well as tools and materials. She explains the guiding narrative and storytelling components, the importance of reflexivity, and how to design for a specific audience. Boudreault-Fournier also provides a reference list on her guiding methods and resources related to graphic based media.

Burke, Sarah. 2018. "A Beginners Guide to Making Zines." https://www.vice.com/en_
us/article/d3jxyj/how-to-make-a-zine-vgtl

If you ever were curious about making a zine or chapbook, this is a step by step guide for you! This article covers the basic components of zine making from initial brainstorming to layout and formatting to printing and finally binding and distributing. With handy graphics and straight forward instructions, this guide is a great starting point to begin making zines and chapbooks.

The Comic Book Project. N.D. "The Comic Book Project: Research." http://www.
comicbookproject.org/research.html

Founded in 2001 by Dr. Michael Bitz, The Comic Book Project brings creativity and innovation into the classroom through comic books designed and published by youth. The Comic Book Project engages students across North America in brainstorming, designing, sketching, and publishing comics about issues impacting their lives and communities today. As a youth led urban education program, these issues include community conflict resolution, leadership, identity, language revitalization, unemployment, drug and alcohol consumption, immigration and refugee experiences, and environmental literacy. As a program from Columbia University's Teachers College, the Comic Book Project has resulted in a large body of open-access research on the use of comics in community-based projects and learning environments.

Firth, Sarah. 2020. "Graphic Recording." http://www.sarahthefirth.com/graphic-record-
ing

Sarah Firth is a comic book artist and graphic recorder who uses visual media to communicate complex ideas, engage in nuanced dialogues, and actively share information with large audiences. Graphic recording is a real-time facilitation and note taking practice that synthesizes the key ideas from a conversation or presentation and then represents them in an engaging and visual format. Graphic recording takes components of comics and graphic novels in order to visually facilitate engagement with content, communicate complex ideas, and translate ideas into actions. By using graphic recording, participants are able to see a visual map of the key points of a presentation, conversation, or research project. Graphic recording is one example of the different ways that components of graphic novels and comics can aid community engagement, public
consultation, and knowledge mobilization.

Journal of Graphic Novels. 2020. "The Journal of Graphic Novels." https://www.tand-
fonline.com/toc/rcom20/current

The Journal of Graphic Novels was established in 2010 in order to enhance the study of comics and graphic novels in academic contexts. The journal focuses on the cultural, institutional, psychological, and autobiographical dimensions of visual media like graphic novels. By representing a wide spectrum of graphic novels and comics, the journal aims to expand the understanding, study, and applications of comics. As a resource, the Journal of Graphic Novels is a great starting point that offers valuable insights, reflections, and research.

Gonzalez, Jennifer. 2016. "Pedagogical tool: Graphic novels in the Classroom: A
Teacher Roundtable." https://www.cultofpedagogy.com/teaching-graphic-novels/

In this roundtable discussion, four teachers discuss the role of graphic novels as learning tools in their classrooms. From elementary school to university lectures, this discussion covers a wide range of learning environments, perspectives, and approaches to teaching and engaging with graphic novels. Participants also provide many recommendations and examples of educational graphic novels alongside their insights and the successful approaches they took in bringing these tools into the classroom.

Graphic Medicine. 2020. "Graphic Medicine Homepage." https://www.graphicmedi-
cine.org/

Graphic Medicine is a collective hub of graphic novels, comics, and visual media that discuss, represent, and share experiences about medicine and healthcare. Graphic Medicine, in relation to the medical humanities, is an emerging interdisciplinary field that looks to visual media as a way to communicate, question, and represent experiences throughout healthcare and medical systems. Graphic Medicine is a starting point to facilitate conversations about the cultural perceptions of medicine, the relationships between patients and health care providers, and to think through new methods of care through comics, graphic novels, and other visual media.

Maughan, Shannon. 2016. "Graphic Novels Go Back to School." https://www.publish-
ersweekly.com/pw/by-topic/industry-news/libraries/article/71237-graphic-novels-go-
back-to-school.htm

This article discusses how graphic novels can be used in both classroom and research environments to share knowledge, generate interest in new or complex ideas, and improve information comprehension. Educators and researchers share different ways that graphic novels can be a helpful starting point for deeper learning and information sharing. By pairing visual media with text, graphic novels and comics can reach a large audience while promoting diverse types of literacy to engage with material in a less intimidating and more accessible manner. This article also provides a resource guide for teachers, librarians, researchers, and anyone interested in learning more about graphic novels and comics.

Open Library of Humanities. 2020. "The Comics Grid: Journal of Comic Scholarship."
https://www.comicsgrid.com/

The Comics Grid is an open access and peer-reviewed journal that focuses on research about comic books, graphic novels, and other visual media like zines and chapbooks. By contributing to the field and study of graphic narratives, the journal aims to share knowledge in an accessible format. As guiding criteria, the journal promotes digital research, collaborative publishing, and public engagement. The Comics Grid contributes to the appreciation of comics and graphic novels by highlighting innovative ways that comics can be used across different research and community contexts.

Annabel P. 2020. "Pamphlet Bindings: A History & DIY Activity." https://publish.illinois.
edu/conservationlab/2020/04/03/pamphlet-bindings-a-history-diy-activity/

This resource describes the pamphlet stitch with a little history on chapbooks. The website provides a demo on how to do the pamphlet stitch that Caitlin demonstrated later in the workshop.

Telgemeier, Raina. N.D. "How Do You Make a Graphic Novel?" https://goraina.com/
how

Raina Telgemeier is an illustrator, author, and comic book artist. In a combination of videos, illustrations, and written instructions, Raina guides the reader through the first steps of brainstorming and creating a graphic novel. She also offers her own process and helpful shortcuts when developing a graphic novel. This resource offers multiple starting points for entering the world of graphic novel creation while also providing a snapshot of the overall process of making a graphic novel. Additionally, Raina also created resource guides for using graphic novels with children and teens, based on her own experience authoring graphic novels.

Notes + Reflections

Image Credit: Madelaine Lekei, 2020.
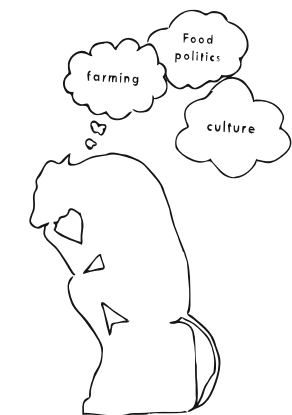
Listen up:
It's time to Podcast!

In the spring of 2020, we had hoped to host one more knowledge mobilization workshop that focused on podcasting. The plan was to have a mix of podcasters and technical experts share their best practices. We also planned to introduce participants to the software Audacity and to UBC Okanagan Studios, which includes a podcasting booth. However, the world-wide pandemic (COVID-19) meant postponing the in-person workshop. Instead, we asked the presenters to pivot their presentations to text and these are presented below. As a bonus, they have also shared some of their favourite podcasts. You will notice there are some points that are mentioned by more than one author, and we have chosen to keep the repetition as we believe it gently reaffirms the message.

Jordan Marr (Farmer), The Ruminant podcast

I've been an avid podcast listener and a podcast producer for 12 and 9 years, respectively. As a farmer, I have lots of time to listen to other podcasts while I work, and since 2011 I've produced around 110 episodes of a podcast, The Ruminant, about farming, food politics, and culture.

My tips for podcasters:

1. Take the time to figure out a decent audio setup, and/or always be striving for high quality sound to your podcast. I say this as a producer and as a listener. When

A line drawing of the Ruminant podcast logo with thought bubbles, showing a cow sitting and ruminating about farming, food politics, and culture.

you're trying to attract listeners, bad sound is going to scare away people who stumble across your show. Hint: have a good microphone for yourself, and figure out how to maximize its potential to make your voice sound rich (sub-hints: proper microphone placement is important, and a foam windscreen/pad over the mic does wonders to avoid pops). For recording phone interviews, the Zoom H5N is what I use. It simultaneously records a pretty good feed of my guest through the phone, and my own live voice into a separate mic built right in.

> "... the foremost question in my mind is whether each given clip would be genuinely interesting to my listeners, ..."

2. Edit your recordings! We should take editing as seriously as most writers do. As a listener, I'm put off by shows that are pretty clearly produced in a record-and-dump format. I don't want to hear the host do a self-involved 15-minute introduction or hear a host and guest engage in an inside joke or something not very related to the main theme. I've edited just about every episode of my show, and when I do, the foremost question in my mind is whether each given clip would be genuinely interesting to my listeners, and/or whether a clip advances the overall theme of that episode. Warning: this is super time-consuming. But your listeners will appreciate it. If you want to hear the pros discuss this idea at length, go find the Gimlet show called Startup, and listen to the episode called The Secret Formula.

3. If you're interviewing a stranger, do some research and have an interview outline in front of you during the interview. Their time is valuable and an outline will help you get the best from your guests.

4. No brainer #1: be consistent with your show, and tell your listeners how frequently to expect your episodes. And be realistic! Better to put out one episode per month, than put out episodes three weeks in a row and then ghost your audience for 3 months. I should know.

5. No brainer #2: remember to turn on your recorder, and ideally, have a backup recording. It is very, very embarrassing to tell a guest who just bared their soul that you failed to record it. Again, I should know.

Podcasts I enjoy:

1. Bullseye with Jesse Thorn: Jesse is an exceptional interviewer, so it doesn't matter who he's interviewing. Awesome show.

2. Beef & Dairy Network podcast: an absurdist, fictional show that imagines a world where the beef and dairy industries are the most important thing in our culture. Most of you will hate this. A small percentage will be obsessed. To those people: you're welcome. Oh, and start from the beginning.

3. To the Best of Our Knowledge from Wisconsin Public Radio is awesome. And it seems like it flies underneath people's radar.

4. Heavyweight, hosted by former CBC personality Jonathan Goldstein. It frequently makes me cry.

5. Canadaland. The best media-criticism podcast Canada's got.

6. This is one of the more obvious ones, but Reply all is the podcast everyone loves. I sure do.

Carrie Jenkins (UBC Professor, Philosophy), Labels of Love podcast

My tips for podcasters:

I think it's worth going the extra mile to make the audio quality as good as possible. Like a badly-designed website, a podcast with dodgy sound projects an amateurish vibe. It can also put people off listening at all, as it's just not a nice experience to listen to bad audio. Unfortunately, getting this right does require some up-front investment of time and/or money: a decent mic, working knowledge of basic audio software (such as Garageband), and access to a quiet recording environment are minimal requirements.

A line drawing of overear headphones.

I also recommend leaving plenty of time for editing—it always takes longer than you think. So, relatedly, my second tip is if you are based at an institution where there are resources available to you, such as a studio and/or people who can assist you with editing, use them!

My third tip is to experiment with different ratios of scripted versus improvised content. I think it's generally good to have some sort of outline of a script, to keep things on track, but reading out word-for-word content tends to sound artificial and stilted.

Podcasts I enjoy:

I enjoy the UnMute podcast, with host Myisha Cherry. She has interesting guests, and she engages them in lively conversations that apply philosophy to real life issues.

I also really like The Allusionist, with Helen Zaltzman, which explores fun facts about etymology. Zaltzman has a wonderful soothing voice (a great advantage for any podcaster!) and her deadpan delivery is hilarious.

Donna Langille (Community Engagement Librarian and Open Education Librarian, UBC Okanagan), Okanagan QueerStoryPodcast

My tips for podcasters:

My first podcasting tip is a very logistical one—try and aim for the best sound quality that you can while you're recording your audio. A common mistake for beginners is thinking that sound errors can be corrected in the editing room but that is rarely the case. It's not imperative that you spend thousands of dollars on equipment to get good quality sound. There are many low-cost or free alternatives, such as borrowing equipment from your public library or recording in a local sound booth. Regardless of the

A line drawing of a micrphone.

microphone, there are a few helpful strategies that will ensure you're recording the best sound quality as possible.

The first strategy is to record in a quiet room. It probably goes without saying but even the quietest room has some sort of background noise. A fan? The air conditioning? Humming from your computer? Professional sound booths are built to prevent these types of sounds from creeping into your audio. They're also built to prevent sound from echoing and bouncing off the walls. You can try and mimic this architecture by recording in a location with soft furniture or blankets (a clothes closet will do the trick).

The other strategy is to check your audio levels and play back the audio before you begin to record your episode. Remember to use headphones to listen to the playback. The last strategy, which can be difficult to remember, is to always speak towards the microphone at the same distance. Depending on your microphone, you may want to position it slightly to the side of your mouth to avoid making intense "S" or "P" sounds when you're talking. If you're a loud laugher (like me) you may want to try and remember to laugh away from the microphone, otherwise your audio levels will peak too high.

These are just a few strategies that will help you record better audio—and I've learned them all by trial and error. The main point to remember is not to underestimate the sound quality of your podcast. It might take a few tries to find what works best for you but in the end, it will be worth it for both you and your listeners.

My second podcasting tip is to write a transcript for each of your episodes. Podcasts are not inherently accessible to all. If you want to be inclusive and reach as many people as possible, make sure that you include a transcript of each episode and release it at the same time as the audio version. Transcribing a podcast episode can

take a lot of time but it is completely worth it! If you have some funding for your podcast, consider hiring a transcriptionist to prevent you from delaying the release of your episodes.

My last tip is about formatting and structure. There are many different podcast formats (e.g. interview, non-fiction narrative, etc.) each with their own prescribed set of best practices. If you're new to podcasting, it can be helpful to become familiar with these formats in order to choose which one might be the most suitable for your idea. However, I believe it is important to keep in mind that there is no right way to tell a story. The format, structure, and length of your podcast depends entirely on your audience and the story that you want to tell.

Podcasts I enjoy:

Witch, Please, hosted by Hannah McGregor and Marcelle Kosman, was the first podcast that I ever consistently listened to and I still consider it one of my favourite podcasts. Throughout the series, Marcelle and Hannah, two "lady-scholars", discuss specific books or movies of the Harry Potter franchise through a critical, feminist lens. Despite being a podcast hosted by two academics, the podcast is aimed at a wider audience—the Harry Potter fandom. The conversations are critical, reflective, and intelligent but the best part for me is listening to the heart-warming friendship between the two co-hosts. Each episode is filled with roars of laughter and they refrain from editing out the sounds of everyday life like their pets and children. They have done a remarkable job of making their listeners feel part of a community.

UBC Studios Okanagan, UBCstudios.ok.ubc.ca

UBC Studios at the Okanagan campus is located in room 203 of the Commons Building. The studio staff can answer your questions and assist with equipment loans and booking the sound booth on campus. The following tips are taken from their Podcast Tips from the Loans Counter guide (2020) which is available on request from UBC Studio Okanagan.

Equipment: UBC Studios has a variety of quality gear available to borrow for your recording projects. For example, if you're recording three people at once, they can supply a mixer and three extra mics. This way each person has a distinct channel that can be edited, and you won't have to worry about one voice sounding less professional than the others. UBC Studios even has equipment available you might not expect, such as pop filters. You may have seen these when watching a radio show host broadcast or a voice over artist record sounds for a movie. As the name suggests, pop filters mitigate and eliminate hard popping sounds that could lead to clipping and poor quality. So if you're examining a subject which has a lot of words featuring the letter P (Peru, paleontology, prisoner rights), this will help you sound more

professional.

Comfort: They also recognize the importance of being comfortable - both the podcast interviewer, and developing the skills to help put the interviewee at ease. They note that people tend to reveal more when they are feeling relaxed. For interviewers, take time well ahead of your first interview to make sure that you know how the equipment works, practice with it, explore recording at different frequencies and have fun! Another way to put yourself as the interviewer at ease, is to ensure you have backup and double-checks. Begin by asking conversational questions to loosen your guest up. This can include questions on things such as how they are doing, shared interests, small talk, etc. It will also give you a barometer as to how they're feeling that day. Let your guest(s) know that you will be pausing to make sure everything is recording properly. Build this into the expected time of the interview. When you are recording, remember to keep an eye on sound levels, battery levels, and that you are actually recording the interview. When the interview is complete, remember to back up your recording with multiple copies.

Some good general practices and recording techniques that will help improve the quality of the recording include:

Mic Placement: Start with your mic a finger width or two from your mouth as a starting point. Depending on the style of your podcast, you might want to move it closer or further away (for instance, will there be exuberant yelling as part of the show?). Ideally, you want to reach -6 decibel (db) range, so that you can be heard clearly without clipping or modulation.

Sync Points: It's useful in the editing process to have everyone with their own mic, countdown from three and clap, so that it's easier to sync the audio files.

Vocals: Match your vocal style to the style of the podcast and check your voice to see if it will need modifying in the editing process. Is the podcast asking hard-hitting questions? Use a firm voice. Is the style calm and reflective? Try a soft voice that's still picked up well by the mic. Experiment and find the voice that suits your podcast style and content.

Environmental Factors: If you can use a soundbooth, take advantage of the noise reducing qualities. During non-COVID times, check out the soundbooth available at UBC Studios Okanagan. However, perhaps the person you're interviewing will be interviewed remotely. In which case, consider the following tips:

(1) Ask the person to record their own voice using software like Quicktime or Windows voice recorder, and then send it to you.

(2) If using phones, try to use landlines, if possible. If you are using cellphones, try to ensure you both have excellent service.

(3) Try to match your equipment for your recording environment. Be aware that it might be possible to remove outside sounds/background noise through editing, but not always. USB mics might be ok in some situations, and lav mics might be the better option in other contexts, such as walk-and-talks or other areas where sitting down with a mic may not be feasible.

We hope that the advice and examples shared by the authors in this section have given you the confidence to consider venturing into the world of podcasting. Collected in the guide below are podcast resources that give some more step-by-step information about the technical aspects of podcasting. Some sources also discuss the relationship of podcasting and the academy, podcasting as debate, and podcast accessibility. If the prospect of creating your own podcast is still too daunting, perhaps you can begin your podcast journey as an interviewee - pitch your idea to a podcaster, and see what happens!

Resources for Podcasting

Amplify Podcast Network. 2021. "Additional Resources." Wilfrid Laurier University
Press. Accessed July 22, 2021. https://amplifypodcastnetwork.ca/Additional-Resourc-
es

The Amplify Podcast Network is a SSHRC-funded project that developed out of the Wilfrid Laurier University Press. Through podcasting, this network is committed to collaborative and innovative approaches to scholarship and knowledge mobilization. This resource links to a host of resources to introduce scholars, researchers, students, and community members to podcasting development and production.

Carillo, Sequoia. 2020. "How to keep making your podcast even if you're stuck
at home." National Public Radio. Accessed February 23, 2021. https://www.npr.
org/2020/03/25/819229185/how-to-keep-making-your-podcast-even-if-youre-stuck-
at-home

This article, released by National Public Radio (NPR), is a guide for podcasting from home. It offers a simple step-by-step guide on setting up a podcast recording space that uses basic materials and tools that are fairly easy to acquire. If you are feeling overwhelmed at the thought of recording a podcast, this guide breaks down how it can be straightforward, cost effective, and fun.

Copeland, Stephanie and Hannah McGregor. 2021. "A Guide to Academic Podcast-
ing." Amplify Podcast Network. https://amplifypodcastnetwork.ca/Guidebook

This open access guidebook was developed by Stephanie Copeland and Hannah McGregor who host their own SSHRC funded podcast, Secret Feminist Agenda. As leaders in scholarly podcasting, Copeland and McGregor share how to brainstorm, start, and launch a high quality podcast. Whether you are an avid podcast listener or just starting out in podcasting, this book offers a straightforward overview about all of the ins and outs in launching a podcast.

ECampus Research Unit, Oregon State University. 2020. "Research in Action: How to
Create a Podcast." Accessed February 23, 2021. https://ecampus.oregonstate.edu/re-
search/podcast/how-to-create-a-podcast/

ECampus Research Unit, Oregon State University. 2020. "Research in Action: Instruc-
tor Guides." Accessed February 23, 2021. https://ecampus.oregonstate.edu/research/
podcast/instructor-guides/

The Oregon State University "Research in Action" podcast team developed multiple resource guides to answer the top questions they have received about starting and producing a podcast within academia. For people interested in learning about launching their own podcasts, this resource covers everything from initial design to pre-production to recording to editing and publishing a podcast. These quick tips and guides are based on the podcast team's own experience, as well as the current best practices within both podcasting and interdisciplinary research.

Gray, Colin. 2020. "Record a Podcast on Zoom." The Podcast Host. Accessed Febru-
ary 23, 2021. https://www.thepodcasthost.com/recording-skills/record-a-podcast-on-
zoom/

This article outlines how to podcast using Zoom, an online video conferencing program. It offers straightforward instructions on the features of Zoom, as well as tips and tricks to make sure that your show runs smoothly and sounds great.

Iquani, Mehita and Balungile Mbenyane. 2016. "Podcasts can Drive Debate and Break
Down Academia's Ivory Towers." Accessed February 23, 2021. https://theconversation.
com/podcasts-can-drive-debate-and-break-down-academias-ivory-towers-64131

As an alternative to traditional publishing, podcasts create new spaces to enter conversations about difficult subjects and share knowledge with diverse audiences. Podcasts can help prompt crucial conversations and critiques about academia, politics, and larger social issues. This article highlights the ways that podcasting offers many creative opportunities to facilitate deeper engagement with information, collaborators, and larger social systems.

Landman, Todd. 2016. "Podcasting is Perfect for People with Big Ideas. Here's How
To Do It." Accessed February 23, 2021. https://www.theguardian.com/higher-educa-
tion-network/2016/jan/13/podcasting-is-perfect-for-big-ideas

As a notable political scientist, Dr. Todd Landman discusses the importance of finding alternative ways to communicate research and social issues outside of lecture halls and academic journals. When it comes to researching and better understanding human rights, Landman is committed to bridging the gap between academia and the general public. Podcasting, Landman shares, is a great option to engage with the human side of academia, research, and knowledge sharing because participants get to discuss and share their insights in their own words and conversation style. Podcasting is a great way to share, communicate, and collaborate with diverse participants, subjects, and experiences.

Lewis, Daniel. 2019. "Getting Started with Podcasting." https://theaudacitytopodcast.
com/getting-started/

As an award winning podcast about podcasting, the Audacity Podcast is a go-to resource for open access podcast publishing. Through a combination of podcast episodes, blog entries, and videos, Daniel Lewis outlines each step of podcasting from brainstorming, to equipment. to setting up a website, and to navigating the legal dynamics of publishing. Lewis emphasizes that starting a podcast does not have to be overwhelming, complicated, or expensive. Throughout this guide, Lewis provides a thorough summary of each component of podcast production alongside his own tips and tricks when it comes to podcasting.

Linder, Kate. 2017. "Ever Thought of Podcasting Your Research?" https://thesiswhis-perer.com/2017/03/22/podcasting/

Linder, Kate. 2017. "How to Start Podcasting Your Research.". https://thesiswhisperer.
com/2017/07/19/how-to-start-podcasting-your-research/

In this two part series, Associate Professor, Dr. Inger Mewburn interviews Dr. Katie Linder about her role as the research director for the podcast Research in Action at Oregon State University. In part one, Mewburn and Linder talk about what it can be like to create a podcast within an academic institution as a researcher. They emphasize that podcasts can be used for research networking, knowledge sharing, and public engagement. They also discuss how one of the benefits of podcasting is accessibility which enables improved research literacy with a broad audience. In part two, Linder provides insights into what it's like to produce a high quality pod-cast and her top podcasting tips.

Maxwell, John. 2019. "Podcasting as a Feminist Method." https://publishing.sfu.
ca/2019/12/podcasting-as-feminist-method-publishing-sfu-prof-hannah-mcgre-gor-speaks-to-scholarly-communication-and-research-at-green-college-ubc/

McEnemy, Siobhan. 2020. "Scholarly Podcasting Open Peer Review." https://www.wlu-press.wlu.ca/Scholarly-Podcasting-Open-Peer-Review

These two articles discuss the ways that podcasting can be a form of public schol-arship. The first article features a conversation with Dr. Hannah McGregor, an As-sistant Professor of Publishing at Simon Fraser University. Drawing on her expe-rience co-creating the podcast Secret Feminist Agenda, McGregor reflects how podcasting can be a tool that facilitates accountability, critique, conversation, and new applications of scholarly thinking. The second article outlines the open peer review process that McGregor created with the Wilfrid Laurier University Press. Mc-Gregor and her colleagues are continuing to develop an editorial methodology to evaluate podcasts through scholarly peer review. Each season of Secret Feminist Agenda includes scholarly peer reviewer commentary, as well as McGregor's re-sponse to these reviews, which are available in both audio and text-based formats. As a resource for public scholarship, McGregor shares that podcasts can break down barriers in academia through the art of conversation, the practice of active listening, and by representing diverse voices and experiences.

Mollett, Amy, Cheryl Brumley, Chris Gilson and Sierra Williams. 2017. "Reasons Why Your Research should be a Podcast." Sage Publications. https://study.sagepub.com/mollett2/student-resources/chapter-1/reasons-why-your-research-should-be-a-pod-cast

This resource is part of the Sage Publishing series about communicating research using social media. Authors Amy Mollett, Cheryl Brumley, Chris Gilson and Sierra Williams discuss how podcasting became popular and reasons why podcasts are important research tools and platforms. Additionally, producing podcasts can also become an important site and form of research. In this article, authors reference academic and research podcasts such as the political science podcast, The Rights Track, to highlight how podcasts can accessibly share knowledge and expand a research audience.

National Public Radio. 2018. "How to Start a Podcast: A Guide for Students." https://www.npr.org/2018/11/15/662070097/starting-your-podcast-a-guide-for-students

As part of National Public Radio's (NPR) 2018 student podcast challenge, a straight-forward podcast guide was compiled that outlines everything from the basics of a podcast to the components that make a good interview, as well as how to have a good podcast "voice" when recording. Because this guide is directed towards stu-dents and first-time podcasters, the essentials are unpacked thoughtfully, includ-ing quality audio recording and post-production. There are multiple links to further readings, videos, resources, and examples within the guide.

Pando, Derek. 2017. "We asked pros how to run your podcast on Zoom." Zoom.US. https://blog.zoom.us/we-asked-pros-how-to-run-your-podcast-on-zoom/

In this article, seven top podcasters share their tricks and tools of the trade for podcasting remotely. The podcasters outline the reasons why they use Zoom, their top equipment recommendations, and key pieces of advice. This is a great starting point for approaching a video conferencing platform to record a podcast.

Reed, Mark and James Daybell. 2019. "How to Make a Podcast that Generates Research Impact." https://www.fasttrackimpact.com/single-post/2019/06/26/Podcasting-for-impact

Researcher and podcast creator Mark Reed explains ways that podcasting can make research more approachable, accessible, and engaging. In this resource, Reed outlines the foundational but simple steps to beginning a podcast. To illustrate these points, Reed interviews Dr. James Daybell, who created the highly successful research podcast Histories of the Unexpected. Daybell's podcast began as a project to make history accessible, engaging, and appealing to an audience outside of academia. Reed and Daybell discuss the process of choosing a podcast subject or concept, formatting and recording a podcast, growing an audience, and Daybell's key lessons learned through his podcasting experience. This blog post is also available as an episode on Reed's own productivity and research podcast Fast Track Impact.

Podcast Accessibility. 2020. "Welcome to Podcast Accessibility." https://podcast-accessibility.com/

As an audio-based medium, podcasting presents unique challenges in being accessible for listeners of all abilities. This resource provides an overview and how-to guide on the components that make up an accessible podcast. By clearly outlining how to create and implement an accessibility framework for podcasting, this resource ensures that all of the content and knowledge can be accessed, used, and shared by everyone who interacts with the podcast.

Spoken Web. 2020. "Podcast Resources." https://spokenweb.ca/podcast/resources/

This resource from the Spoken Web Podcast is an educational poster on podcasting as well as access to a collaborative Google Doc on podcasting production resources.

Wheldon, Glen. 2021. NPR's Podcast Start Up Guide: Create, launch, and grow a podcast on any budget. https://www.penguinrandomhouse.com/books/635199/nprs-podcast-start-up-guide-by-glen-weldon/

This resource from NPR provides a step-by-step guide that shares the best tips from the many expert producers and podcasts hosts at NPR about how to find your next podcast topic and how to begin your own podcast.

Notes + Reflections

Image Credit: Madelaine Lekei, 2020.

Research on the Stage

As Shakespeare famously said, "All the world's a stage," and some community engaged researchers take this to heart and use collaborative theatre as both a form of research, as well as a way to share their research with a wider audience. On February 12th, 2020, ICER hosted a workshop titled "Research on the Stage!" at the Creekside Theatre in Lake Country, British Columbia. The tagline on the posters for this workshop read, "learn how to put your research centre stage! Come to an interactive workshop about using theatre to share knowledge." One of the main goals of this workshop was to have those attending become comfortable in theatres and on the stage. This meant the workshop space including the seating for participants was arranged directly on the stage. Having facilitators and participants on the stage together ensured that everyone felt like they were a part of "the show."

Dr. Rachelle Hole an associate professor in the department of Social Work at UBC's Okanagan Campus, and Dr. Leyton Schnellert an associate professor in the department of Curriculum and Pedagogy at UBC's Vancouver Campus opened the workshop with an introduction to their participatory theatre project Sex, Lies, and Citizenship. The goal of this collaborative theatre project was to facilitate conversation about sexual citizenship among self-advocates and to co-create a theatre production to offer unique narratives and disrupt stereotypes about sex and sexuality. It also aims to expand knowledge about sexual citizenship within the disability community and the wider community. Hole and Schnellert described how they view their research project, which eventually was re-named Romance, Relationships, and Rights through input from the community, as a form of "knowledge creation with participants from the community."

Schnellert emphasised that the theatre production "is not just research translation, but research creation as partner work, where you are developing concepts and ideas with performers as co-creators." He explained this project is a form of devised theatre. The performance included "some opportunity for engagement and dialogue with the audience" through talkbacks where the actors and community members could
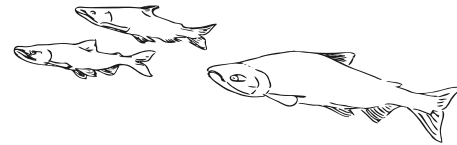
share their experiences as part of the show, if they felt comfortable doing so. Schnellert explained that one of the key pieces of the project is developing a safe space, even before the collaborative process begins so that people feel comfortable both in the space and comfortable to leave if they choose. The interactive portion of their part of the workshop involved finding commonalities between participants as they moved about the stage, as well as moments of tension. These interactive theatre activities used some of the techniques that Hole and Schnellert engaged in with their co-creators.

The second half of the workshop was facilitated by Cathy Stubbington, Artistic Director of Runaway Moon Theatre, located in Grindrod, British Columbia. Cathy described her experiences collaboratively developing theatre projects and puppet shows with the Splatsin First Nation, located in Enderby, British Columbia. These theatre projects highlight issues such as addictions, colonization, cultural stories, and histories of the Splatsin people.

A line drawing of arrowleaf balsam root, smúk a xn (nsyilxcn), and ? Secwepemctsín, a plant indigenous to the Okanagan valley.

Stubbington opened by inviting participants to unroll a large quilted map of the lands we call Canada that took up most of the stage. The map had originally been made for the production Swati7 ra7 Skwast? | What is Your Name?, which was co-directed by James Fagan Tait and Rosalind Williams, an Elder of the Splatsin First Nation. Williams was unable to attend the workshop and so Stubington described many of the projects that they had championed together over a period of 20 years. Stubbington provided images and detailed description of many of the

A line drawing of sockeye salmon, ntyitix in nsyilxcn, and ? in Secwepemctsin, which are central within Splatsin oral histories and food systems.

community plays she has instigated, co-written, and designed along with community participants. As Stubbington says in her own words, "each of these stories had a different starting point and each one had a learning that came out of it" including the significance of water, the seasonal cycles of food, and Settler-First Nations relations.

Stubington gave considerable attention to "how to get people on stage." These community engaged theatre projects, she explained, "always had a principle that everyone is welcome, and that in practice is quite rigorous—and it means continuing to invite, continuing to invite, continuing to invite." She emphasised that "there are always the first people who come forward, whether they have been here before or because they are extroverts or because they heard about the projects, but, not everybody, assumed

that [when] everyone is welcome [it] means them." In these kinds of theatre projects, she explained, when an entire community is invited, people end up working with others who they might not have met before and a new, or intensified, sense of community can develop. Stubbington closed her portion of the workshop by inviting participants to help her roll-up the map again, visually facilitating a closing.

Both sets of facilitators emphasized the role of community members in all aspects of theatre from acting to designing, from building sets to sewing costumes. (Thus there are many entry points for people with all interests.) As well, all of the facilitators understood theatre as co-creation rather than knowledge mobilization specifically. With their advice and the resources provided below you can find inspiration on how research projects that are already underway or near completion could also add theatre as a form of knowledge mobilization.

Resources for Theatre

Art for Social Change Research Project. 2015. "Cathy Stubington." Artists Speak (blog).
December 5, 2015. https://artists-speak.ca/?p=36.

> This blog post contains an interview with Cathy Stubington, who is a community-based artist and the artistic director of Runaway Moon Theatre. In the interview, Stubington provides excellent insights into how she uses arts-based practices to develop collaborative, engaging, and educational performances.

Alexander, Bryant Keith. 2005. "Performance Ethnography: The Re-enacting and Inciting of Culture" in The Sage Handbook of Qualitative Research, 3rd ed. Los Angeles: Sage Publishing.

> This book chapter on performance ethnography is one of the resources that Dr. Leyton Schnellert referred to in his workshop presentation on using theatre as a research process and knowledge mobilization tool.

Erel, Umut, and Tracey Reynolds, and Erene Kaptani. 2017. "Participatory Theatre for Transformative Social Research." Qualitative Research, 17(3): 302-312. https://journals.sagepub.com/doi/full/10.1177/1468794117696029

> As an embodied research method, participatory theatre can help build safe communities by sharing, communicating, and representing marginalized experiences. This article outlines how participatory theatre is a collaborative practice that can contribute to social change. Specifically, the authors use participatory theatre to explore migrant mothers' experiences in Britain. They provide a roadmap for how to bring theatre into social science research by sharing their insights, process, and the larger applications of using theatre as a research method.

Fels, L. & Belliveau, G. 2008. Exploring Curriculum: Performative Inquiry, Role Drama and Learning. Vancouver, British Columbia: Pacific Education Press.

> Drs. Hole and Schnellert referred to this text when they presented on using theatre as a form of knowledge mobilization within community engaged research. They used this resource in their research and theatre production Romance, Relationships, and Rights, which was co-created with self advocates within the disability community.

Finely, Susan. 2005. "Arts-based Inquiry: Performing Revolutionary Pedagogy" in The Sage Handbook of Qualitative Research, 3rd ed. Los Angeles: Sage Publishing.

> This book chapter focuses on using arts-based approaches to teaching and pedagogy. It is one of the resources that Dr. Leyton Schnellert suggested for anyone wanting to look at research frameworks that use various forms of art-making to approach co-creation and collaborative, community engaged research.

Griffith University School of Education and Professional Studies. 2017."Impact of Applied Theatre." Accessed February 23, 2021. https://www.youtube.com/watch?v=ie3hR0fMX-4

> In this video Professor Michael Balfour discusses the main components of applied theatre. According to Balfour, applied theatre refers to performances that happen outside of a traditional theatre or formal production company. Applied theatre is a collaborative storytelling process that engages the audience as co-creators in the production. Balfour provides examples of how he has used applied theatre in performance, education, research, and community settings. The importance of applied theatre, Balfour emphasizes, is how it uses interactive storytelling to better understand participants' experiences, communities, and the dynamics that influence these relationships.

High, Steven, Edward Little, Liz Miller. 2018. Going Public: The Art of Participatory Practice. University of British Columbia Press.

> In Chapter Three: It's Complicated, Edward Little explores the potential of participatory oral history performance to—in the words of social psychologist Jonathan Haight— "flip the hive switch" and generate shared intentionality directed towards localized sociopolitical change. The chapter sketches the role of oral history performance in the development of community engaged theatre in Canada with particular reference to practitioners who are represented in the online Going Public with Oral History[1], Documentary Media, and Performance interview database. The chapter considers the impact and legacy of the Collaborative Community Play movement in Canada and the role of what William Cleveland describes as "partnership technologies" in building sustainable Relationships across socioeconomic, cultural, and ideological differences. Finally, in keeping with community arts' key principle of geographically defined inclusivity— the chapter focuses on the growing recognition among community engaged artists of the urgent need to address Indigenous—settler—immigrant relationships through arts-based partnerships, alliances, and collaborations.

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1. https://goingpublicproject.org/

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a vision with stakeholders and practitioners, this series thoroughly outlines how to use theatre to merge research, history, community, and performative arts.

Notes + Reflections

Sahnchez-Shumway, Dianne. 2014. "Beginners Guides to Community Based Art."
Accessed February 23, 2021. https://www.youtube.com/watch?v=ZM7RPoPynVc

This video is an animated guide about community-based art. It outlines the core components, practices, processes, and theories that guide art educators when they use community-based art in their projects. The video discusses each step of a community-based art project, which includes contact, research, action, feedback, and teaching. This fun and engaging how-to guide is a great first step to learn about community-based art and start thinking about ways to integrate components into yo ur research or community project.

Splatsin Tsm7aksaltn. 2020. Swati7 Ra7 Skwast - What Is Your Name? Youtube.
https://www.youtube.com/watch?v=IZ9p-iEEq1o&ab_channel=SplatsinTsm7aksaltn.

This video is a recording of Swati7 Ra7 Skwast - What is Your Name?, a recent collaborative and community-based theatre production created by Splatsin Tsm7aksaltn and Cathy Stubbington. The outdoor production ran from June 20-24, 2019 in multiple locations on the unceded and ancestral Secwepemculucw territory.

Image Credit: Madelaine Lekei, 2020.

Experiential Spaces as Vehicles for Knowledge Mobilization

Aleksandra Dulic and Miles Thorogood

Editors' Note: While ICER did not host a workshop on the use of experiential spaces, members of ICER's community engage in this form of Knowledge Mobilization and we felt it important to include a discussion on this approach and the Waterways case study example in this guide.

Experiential venues such as museums and public spaces provide a rich platform to directly engage and educate people with the concepts and findings generated by research. Spaces such as Science World in Vancouver and regional museums are examples of places with high impact for this form of engagement because they receive hundreds of thousands of visitors every year. By positioning knowledge mobilization in venues such as these researchers can influence many people in their day-to-day lives. This chapter will broadly outline the framework for engaging with these venues for successfully creating outstanding publicly accessible knowledge mobilization output.

Museums and public spaces are always on the lookout for new opportunities to engage visitors. Keeping things fresh and exciting ensures the sustainability of these institutions. Typically, the director and curator of a museum or public space plan and program the next show one to two years before opening to the public. Such a planning process includes identifying the exhibit's topic and bringing together people that can make it happen to a level of professionalism so that it can be displayed to the public for a potentially long time. Although possible to engage with venues as the research is underway, planning for a research output such as this should be considered at the proposal stage. It is also critical to approach the directors and curators of venues early on to begin establishing working relationships. People in these positions can advise on the opportunities and constraints of presenting in their spaces. Successfully working with these venues can result in developing rich and long-lasting relationships and provide continuing support for future projects.

Visiting a museum, one can analyze the general form of a typical exhibit. There are some tangible artifacts such as a physical object or interactive digital display at the foreground. Accompanying the artifact, the explanatory text provides further attraction to the visitor and insights into the thing being addressed. Additionally, there may be an accompanying

> Successfully working with these venues can result in developing rich and long-lasting relationships ...

activity and information package that museum staff use to engage with educators and school groups. More profoundly, museum exhibits are a complex design problem requiring expertise from a range of disciplines. While data gathered and analyzed for dissemination in traditional knowledge mobilization platforms, such as journal and conference publications, provide stimulation for some people, these types of presentations do little to experientially engage everyday learners and museum visitors. As such, in enabling museums to harness their spaces towards the production of meaningful, active, and ethical visitor experiences, it is critical the research presented be significant, expressive, and engaging for the public context. Along with text panels, displaying images, photographs, video, and sound recordings provide an approachable means for a broad range of people to access and engage in the significance of what the research describes. The quality of the media and how it communicates in context is essential to the success of the work. One must therefore ensure the research team has the necessary Highly Qualified Personnel (HQP) capacity to support both fundamental research, and media acquisition and design.

Some questions for positioning research toward experiential venues include:

- How can our research findings be presented in a museum (or other public space)?
- How does generating the material for an exhibition inform our research process?
- What team members will I need on the project to gather data, design, and build the work?
- What are the relationships needing to be fostered for the context and cultural setting of the museum?

As an example, the Waterways project represents a four-year collaborative undertaking toward a museum exhibit between the University of British Columbia Okanagan (UBCO), Elders and Knowledge Keepers of the Syilx Okanagan community, Kelowna Museums Society, Okanagan Basin Water Board, and the Okanagan Collaborative Conservation Program. Waterways was led by Dr. Aleksandra Dulic (Principal Investigator), and Co-Investigators Drs. Jeannette Armstrong, John Wagner, Lael Parrott, and Miles Thorogood from UBCO and other essential partners, including the En'owkin Centre, whose input was vital in ensuring a rich cross-cultural Indigenous perspective on water. The exhibition presents interviews and original video footage of Indigenous leaders and Elders, water experts, government officials, and community members speaking about water ecosystems. It also includes immersive interactive visualizations of Okanagan waterscapes over time by employing an interactive audio and multi-channel video installation. The exhibition brings together multiple perspectives – Indigenous and non-Indigenous – on water challenges and solutions, as well as historical, anthropological, and sociological dimensions of water in the Okanagan using engaging, immersive media methods.

The Waterways mobilization plan employs experiential learning strategies to involve communities in considering local sustainable water practices within an interactive media exhibition to help visualize the relationship between local water knowledge, scientific understanding, and community resilience. In partnership with the Okanagan Heritage Museum and En'owkin Centre we prepared the exhibition for touring. The target museums include local venues such as the Vernon Museum, Penticton Museum, Sncewips Heritage Museum, Nk'Mip Desert Cultural Centre, and Summerland Museum have sufficient space and technical requirements to host the exhibition as well as regional venues such as the Museum of Anthropology in Vancouver and the BC Royal Museum in Victoria. Another core element of the knowledge mobilization plan is to evaluate participant experiences of the interactive media exhibition in different venues using visual matrix evaluation methods to obtain rich qualitative data. Following the evaluation phase, the knowledge mobilization plan includes sharing evaluation results with academic and practitioner audiences at conferences and symposia.

Image of the Waterways exhibition at the Okanagan Heritage Museum.
Photo credit Joanne Gervais, 2021.

The Waterways exhibit features Syilx Indigenous-led best practices in water management and ecological resilience, including the return of the salmon to the Okanagan waterways and flood bank restoration along Shingle Creek and Okanagan River. These restoration initiatives demonstrate how Traditional Ecological Knowledge is applied along with Western science, and show how Indigenous institutions have worked effectively with provincial and federal government agencies to co-manage and co-lead these restoration efforts. To communicate these stories, we recorded audio and video documentation of the environmental and cultural detail of the Okanagan landscape, soundscape,

and community events, along with interviews toward designing an immersive installation.

The Waterways project aims to facilitate a multi-directional exchange of insights emerging from this interdisciplinary research and resulting multimedia exhibition. To achieve this goal, the team uses artistic research/creation strategies, tools, and public engagement activities to reach a broad range of local community members and audiences in the Okanagan Valley and beyond. Working with the Kelowna Heritage Museum curator and a team of HQP including designers, media artists, and fabricators, we designed and built the exhibit from the ground up. The iterative process included contributions from all members of the team to steer the design from the idea of an informative multimedia experience, toward the final goal of an interactive multimedia exhibition aimed at increasing awareness of the fragile relationship between people and water in the Okanagan Valley. The resulting exhibition draws on the power of multi-channel sound and video media to immerse, provoke, destabilize, transform, and move participants to act responsibly and sustainability.

Image of the Waterways exhibition at the Okanagan Heritage Museum.
Photo credit Joanne Gervais, 2021.

The interdisciplinary team necessary to accomplish the goals of a public exhibition such as Waterways fosters a diverse and fertile research environment. Additionally, the data gathering and design process toward the immersive mediated experiences provides new opportunities for building relationships with institutional and community partners. Finally, aligning the research objectives and knowledge mobilization plan for community-engaged research projects that connect with experiential venues provides unique opportunities to engage and impact many people every day.

Resources for Experiential Spaces

Ambrose, Timothy, and Crispin Paine. 2006. Museum basics: The International
Handbook. Oxfordshire: Routledge.

This book, written by two leading curators and museum consultants, explores the best practices associated with museum and exhibition work. Taking a module approach, the book presents core concepts and ideas within museum work from organization to collection management to marketing and engagement. If you are new to museum work or wish to supplement your understanding of creating engaging exhibitions, this book is a great starting point!

Bedford, Leslie. 2016. The Art of Museum Exhibitions: How Story and Imagination
Create Aesthetic Experiences. Oxfordshire: Routledge.

In this book, a researcher and museum director Leslie Bedford draws on her professional experience to articulate how exhibitions can share diverse, embodied, and expansive knowledge. Through discussions on narrative, imagination, and aesthetics, Bedford illustrates the ways that interactive exhibits can bring together art and education to invite visitors to experience, rather than simply view, knowledge. This book is a terrific companion if you are interested in learning more about the power of interactive exhibits.

Ciolfi, Luigina, and Liam Bannon. 2002. "Designing Interactive Museum Exhibits:
Enhancing Visitor Curiosity through Augmented Artifacts." Eleventh European
Conference on Cognitive Ergonomics. Vol. 7.

This article discusses current work from the Interaction Design Center, which focuses on developing immersive and interactive museum collections and exhibits. Taking a design-centered and culturally aware approach, authors discuss their experiences integrating technology within museum exhibits. They discuss their own process and approaches to designing exhibits in a way that meaningfully engages the presented knowledge and artifacts as well as the museum participants.

Diamond, Judy, Michael Horn, and David H. Uttal. 2016. Practical Evaluation Guide:
Tools for Museums and other Informal Educational Settings. Lanham: Rowman &
Littlefield.

This book presents practical ways to better understand the effectiveness of informal and interactive learning spaces like exhibits and museums. Throughout the guide, the authors share how to develop and evaluate exhibits so that readers can harness

the capacity and excitement of such spaces. This guide can be used as a handbook for people who are interested in learning more about exhibits and informal learning spaces as tools for facilitating knowledge mobilization.

Falk, John H., and Lynn D. Dierking. 2016. The Museum Experience. Oxfordshire: Routledge.

This book offers insights into experiential museum exhibits from a visitor's perspective. Drawing on their original research and experience as museum practitioners, Falk and Dierking illustrate the different ways that people engage with museums and how museums can be designed for visitors to experience the knowledge on display. This book is a great reference for anyone interested in museum studies and better understanding how to communicate information in an inviting and collaborative manner.

Hall, Tony, and Liam Bannon. 2005. "Designing Ubiquitous Computing to Enhance Children's Interaction in Museums." Proceedings of the 2005 conference on Interaction Design and Children.

This article shares different ways to integrate technology to increase participation and learning within museums. Through scenario-based design and design-based research, Hall and Bannon explore the potentials of interactive learning environments within museums and exhibits. They explore themes such as materiality, narrative, engagement, and pedagogy to better understand the history as well as the contemporary applications of interactive learning environments.

Monti, Francesca, and Suzanne Keene. 2016. Museums and Silent Objects: Designing Effective Exhibitions. Oxfordshire: Routledge.

The book raises questions about how museums handle the display of less visually striking objects. By drawing on the fields of architecture, design, cognitive science and museology the authors offer practical tips on doing audience research, assessing museum displays and creating new exhibitions which center the visitor-object experience.

Muller, L., Bennett, J., Froggett, L., & Bartlett, V. 2015. "Understanding Third Space: Evaluating Art-Science Collaboration." In Proceedings from the 21st International Symposium on Electronic Art. Vancouver, B.C.

This article introduces the ideas of C. Snow's work on third culture, where art and science come together to explore complex issues through both scientific and aesthetic investigation. The authors then report on a new methodology for evaluating the effectiveness of third culture spaces for both expert collaborators and audiences who interact with their work. The article explores these topics with a specific focus on their application to exhibitions.

Schön, D. 1983. The Reflective Practitioner: How Professionals Think in Action. London: Temple Smith.

Schön queries the practitioners of engineering, architecture, management, psychotherapy and town planning to explore how people practically engage in creativity and reflection in their work in ways that are not taught but rather developed in the process of their work. This work argues this is a previously unexamined process which the author seeks to illuminate.

Sandifer, Cody. 2003. "Technological novelty and open-endedness: Two characteristics of interactive exhibits that contribute to the holding of visitor attention in a science museum." Journal of Research in Science Teaching 40.2: 121-137.

This article reports on a study that tracked 47 variables over two exhibits which had 67 items to determine the qualities that are most effective in attracting and sustaining the attention of science museum visitors.

Notes + Reflections

Data Storytelling:
A How-To for Infographics

On February 7, 2020, ICER hosted an interactive workshop "Data Storytelling: A How-to for Infographics," which was an introduction to creating and using infographics. This workshop was led by Donna Langille, the Community Engagement Librarian at UBC's Okanagan campus. Drawing on influential designers like Randy Krum (see resources below), Langille explained that an infographic is a visual representation of numbers, words, charts, graphs, and images that are designed to tell a story or capture an idea. It's more than simply displaying information; infographics are a form of storytelling that incorporate key narrative and design elements in order to concisely explain information, concepts, or data. An infographic should be accurate, engaging, capture people's attention, and communicate information in an accessible and easy to follow manner.

When thinking through how to design an effective, engaging, and accurate infographic, Langille emphasized that it's important to first ask:

> An infographic is a visual representation of numbers, words, charts, graphs, and images that are designed to tell a story or capture an idea.

- What is the key message that you want people to remember? and

- Who is your audience?

From there, the components of an infographic include an introduction to the issue or concept, the main message with three supporting points, a call to action or tangible application, and a conclusion that emphasizes the importance of this information. When thinking through infographic layout, Langille suggested using a simple and minimalist design. This starts with a logical structure and reading order to facilitate ease of understanding. Some further engagement strategies include integrating headers to divide the main sections of text, keeping fonts legible and colours consistent, and using plain language rather than specialized or field specific language.

INFOGRAPHIC

DATA & WORDS

WORDS GO HERE
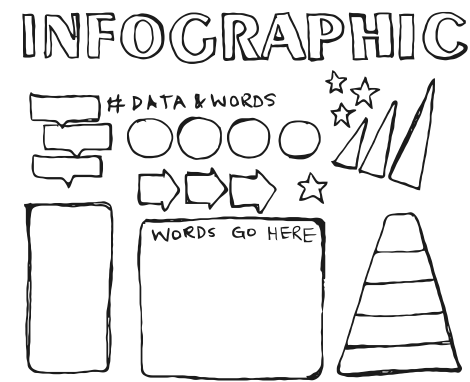
Line drawing of some exmaples of the visual components that are used in creating an effective and visually pleasing inforgraphic.

As an interactive component, Langille provided an overview and demonstration of the main design features and data visualization tools in Piktochart, a free online program for designing infographics and visuals. Additional online programs such as Canva or Easely can also be used to make infographics and data visuals. She also emphasized the importance of accessibility and shared some best practices for designing and ensuring your infographics are accessible. You can find these outlined in the resources section and in her PowerPoint slides, which are both linked below. At the end of the day, creating a good infographic involves telling a story about data or information in an accurate, concise, and compelling manner.

Resources for Data Storytelling

Canva. 2020. "Canva Homepage." www.canva.com

> Canva is an online design program to make visuals and infographics. It offers a free 30 day trial and multiple pricing options after the trial ends. It's a great resource for creating all sorts of visuals from power points to posters to infographics.

California State University Universal Design Centre. 2020. "Digital Media: Accessible Infographics." https://www.csun.edu/universal-design-center/accessible-infographics

California State University Universal Design Centre. 2020. "Accessible Infographics and Flyers Checklist." Accessed February 23, 2021. https://www.csun.edu/universal-design-center/accessible-infographics-and-flyers-checklist

> This two part resource specifically discusses accessibility of visual materials and infographics. The first link provides an overview from the Universal Design Centre about how to make digital media accessible. This includes tutorials for multiple digital media formats. The second link provides a checklist for ensuring that your infographic and flyers meet the current accessibility standards and best practices. As an assessment and evaluation tool, it outlines the main accessibility components for digital and printed infographics. This is a valuable resource to better understand how to make content accessible and usable for all members of your audience and community.

Easely. 2020. "Easel-ly Homepage." https://www.easel.ly/

> Easely is a free online program that helps create visuals like infographics. Like other online programs, Easely offers subscription pricing options to give users more flexibility and storage capacity.

Krum, Randy. 2013. "Cool Infographics: Effective Communication with Data Visualization and Design." Indiana: John Wiley & Sons Inc.

> This book, mentioned by Donna Langille in the workshop, utlines the principles of telling a visual story with data. Randy Krum discusses the science behind infographics, the different functions of infographics, and how to design infographics effectively. This book is an informative guide if you are wanting to gain a deeper and better understanding of how infographics work. Randy Krum also has a helpful website that explores the basics and gives a snapshot of what his book discusses in-depth (https://coolinfographics.com/).

Langille, Donna. 2020. "Data Storytelling: A How To for Infographics." PowerPoint presentation, University of British Columbia, Okanagan, Kelowna, BC, February 7, 2020. https://tinyurl.com/infographicubco

> This resource is a link to the PowerPoint slides from the Data Storytelling workshop.

Piktochart. 2020. "Piktochart Homepage." https://piktochart.com/

> Piktochart is an online program to create infographics and data visuals from over 600 design templates. The program has a free version as well as a "pro"
> subscription that allows users more flexibility and increased data storage. Piktochart Pro offers a reduced rate for educators, students and non-profit organizations. This is the primary program that was used and discussed in the Data Storytelling workshop.

Ritchie, Josh and Ross Crooks and Jason Lankow. 2012. "Infographics: The Power of Visual Storytelling." New Jersey: Column Five Media. Accessed February 23, 2021. https://www.amazon.ca/Infographics-Visual-Storytelling-Jason-Lankow/dp/1118314042

> This book, mentioned by workshop facilitator Donna Langille, discusses how infographics and data visualizations can communicate information in a concise and engaging manner. The book provides insights into how to better understand and share data. By pairing data with design, this book shows how to make informative, compelling visuals.

University of Guelph, McLaughlin Library. 2020. "Create Infographics."https://guides.lib.uoguelph.ca/infographics

> This resource explains the basic components of an infographic, how infographics can be useful, how to evaluate infographics, and offers some tools for making infographics. Additionally, there are links to other tutorials about how to communicate and visualize data.

Walsh, Anna. 2020. "What is Data Storytelling?" https://narrativescience.com/resource/blog/what-is-data-storytelling/

> It can be difficult for businesses, organizations, or researchers who work with big data sets to accurately and effectively communicate important information with a diverse audience. Data storytelling contextualizes data while ensuring it is easily and readily understood by a broad audience. This article describes what data storytelling is and how it can be used to communicate a story, engage audiences, and share information.

Viola, Romina. 2017. "How to Create an Infographic in 5 minutes." https://piktochart.com/blog/how-to-create-an-infographic-and-other-visual-projects-in-5-minutes/

> This article explains how to make an infographic using Piktochart in under five minutes. Using straightforward and thorough instructions, this article is a great place to start if you are thinking about creating an infographic or visual for your research or idea.

Notes + Reflections

Image Credit: Madelaine Lekei, 2020.

Instagram +
Magnet Fragements

Instagram is a popular image and video-based social media platform that users typically access through an app on their mobile phones. As a visually driven micro-blog, Instagram can communicate a message in an informative, relatable, and relaxed manner. Instagram is a growing yet well-established social media platform that combines the strengths of other popular social media platforms and offers users multiple ways of engaging with both content and other users. Download-ing the Instagram app and making an account allows users to share photos and videos on their profile, follow other ac- A line drawing of the Instagram logo. counts and hashtags, and engage with other users through comments and direct messaging. Instagram also provides straightforward privacy controls as well as the flexibility to edit and manage content, which contributes to a more secure, pleasant, and positive experience within the platform. Because of these dynamics, people often view Instagram as a low stakes environment where they connect with, learn alongside, and benefit from various digital communities.

As a visually driven micro-blog, Instagram can communicate a message in an informative, relatable, and relaxed manner.

Hashtags are powerful engagement and broadcasting tools within social media platforms. A hashtag is made up of a word or phrase that is preced-ed by the pound or number sign (#). Hashtags function to organize trending topics and connect individual posts to larger conversations or events. By using a metadata tag, hashtags link related informa-tion together according to a broader theme or event, which makes information on social media platforms easier to discover, follow, and reference. Capitalizing each word within the hashtag (also known as "camel case") is one acces-sibility measure that makes the hashtag easier to read, especially for people who use screen readers or have cognitive disabilities. Examples of using "camel case" in common hashtags in-clude: #ThrowBackThursday, #Travel, #UniversityLife, or #AcademicChatter. When used effec-tively, hashtags can connect diverse groups of people who share common interests and want to access similar information on social media platforms.

In 2019, ICER expanded our social media presence by creating an Instagram account (@icer_ubco). We used Instagram to promote events, share university and community news, and familiarize people with ICER's resources and research space. The ICER Mag Frag project originated from a brainstorming session about new ways of engaging communities in digital spaces. A Mag Frag (magnet fragment) post uses small, individual magnetic words to make a statement. These posts typically reflect on local and global events while also showcasing some part of ICER's community, research, or resources.

Hashtags are an important feature of Instagram, which led ICER to designate #MagFragMonday and #ICERMagFrag as the primary hashtags for the project. Encouraging other Instagram users and collaborators to participate by making their own magnet fragment reflections is an ongoing goal for this project. You can join in by adding the hashtags #ICERMagFrag and #MagFragMonday to link your magnetic poetry post to ICER and participate in a collaborative conversation across social media accounts.
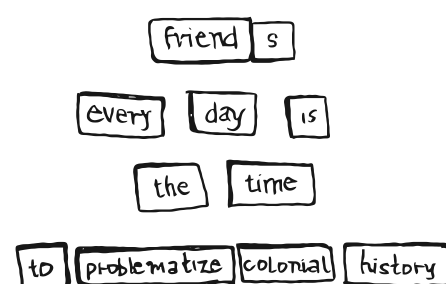
A line drawing of a #MagnetFragment.

The focus of the Mag Frags from March 2020 to the summer of 2021 shifted slightly in response to the pandemic. We recognized that in the era of Zoom and increased isolation, there was an opportunity to focus on place-based images in Mag Frag posts. The use of place-based images allowed for reflection on the importance of place and of locating oneself. This practice acknowledges the complex relationships of where we live and how we conduct research. ICER is located on the unceded, ancestral, and traditional territory of the Syilx people. Therefore, we use the hashtag #SyilxTerritory to recognize our relationship to this place. We are grateful for the ongoing stewardship of the Syilx people and for the opportunity to learn from them and from these lands.

Resources for Instagram + Magnet Fragments

Addyson-Zhang Ai. 2017. "Using Instagram as a Teaching and Research Tool." https://medium.com/@aiaddysonzhang/using-instagram-as-a-teaching-research-tool-tips-re-sources-best-practices-8f1e2ae7bc20

This article is part of Dr. Ai Addyson-Zhang's series, #ClassroomWithoutWalls. In this conversation with Paige Brown, a Science Communication Specialist, they discuss the ways that you can use Instagram to improve digital and science literacy. Brown shares tips and best practices for using Instagram as an educator and researcher including assignment ideas and additional social media resources.

Alrubail, Rusul. 2017. "An Academic Use for Social Media." https://www.edutopia.org/article/academic-use-social-media

This article focuses on how concise and focused micro-writing within Instagram and other social media platforms improves communication, public engagement, collaborative learning, and critical thinking skills. It follows the experiences of Hannah Menendez, an instructor of composition, who brings social media into the classroom to engage students in sharing knowledge through meaningful writing.

Brown Jarreau, Paige and Nicole Smith Dahmen and Ember Jones. 2019. "Instagram and the Science Museum: A Missed Opportunity for Public Engagement." Journal of Science Communication, 18(2): 1-22. https://jcom.sissa.it/archive/18/02/JCOM_1802_2019_A06

This open access article explores how social media can be a useful, effective, and engaging tool in communicating information and improving science literacy. For museums and libraries, Instagram can be an informal learning space that can bolster public engagement and visibility outside of institutional spaces. In the case of this research, Instagram was a key tool that promoted knowledge co-creation with the public while communicating important scientific work both within and outside of a formal academic setting.

Caplehorne, Josie. 2018. "Using Social Media to Promote Your Research." https://blogs.kent.ac.uk/osc/2018/08/23/using-social-media-to-promote-your-research-insta-gram-for-beginners/

The University of Kent released this short guide on how to start using Instagram as an academic and researcher. It provides a basic overview of Instagram, some best practices for using Instagram as a researcher, and starting points to begin engaging in academic work on Instagram. It also offers links to further reading on issues

such as copyright on social media, the practice of hashtagging, and how to take great photos for Instagram.

Hines, Hunter and Sally Waring. 2019. "How we use Instagram to Communicate Micro-biology to the Public." Accessed February 23, 2021. https://www.nature.com/articles/d41586-019-00493-3

This article shares how microbiologists Hunter Hines and Sally Waring use Instagram as a public engagement tool to share knowledge and improve science literacy. They view Instagram as a tool to easily and equitably share their research, collaborate with other projects, and increase public awareness regarding biodi-versity. Hines and Waring find Instagram a useful platform to share their work with diverse auiences. This can be an asset when amplifying new research and sharing about the real-time developments within scientific research.

Moreau, Elise. 2020. "What is Instagram and Why Should You be Using it?" https://www.lifewire.com/what-is-instagram-3486316

If you have no idea what Instagram is or are unsure where to start, this article is for you! It provides an easy to follow overview of the social media platform, as well as an explanation on how to use the main functions of the platform. This article is the introduction to a larger series titled "The Ultimate Guide to Instagram" by LifeWire. It links to further readings and tutorials on the varied tools and benefits of using Instagram.

Olafson, Karin. 2020. "How to Use Hashtags: A Quick and Simple Guide for Every Net-work." Accessed February 23, 2021. https://blog.hootsuite.com/how-to-use-hashtags/

As a companion to the previous hashtag (#) article, this post discusses how to use hashtags across social media platforms like Facebook, Twitter, and Instagram. It outlines how to find relevant hashtags for your purposes, the best approaches to finding your hashtag niche, and top tips on effectively using hashtags. It also provides examples of how various social media accounts use hashtags in order to illustrate each point within the tutorial.

Read, Ash. 2020. "Instagram Stories: The Complete Guide to Using Stories." Accessed February 23, 2021. https://buffer.com/library/instagram-stories/

One of the features of Instagram includes short 60 second videos called "Stories." This resource discusses and outlines how to plan, design, create, and use Insta-gram Stories. Within Instagram Stories, users can add things like hashtags, polls, and event countdowns. This guide outlines the best practices and strategies for using Instagram Stories in an effective and engaging manner.

The Leveraged PhD. 2019. "Academic Hashtags for Instagram." https://theleveraged-phd.com/academic-hashtags-for-instagram/

The Leveraged PhD, a blog dedicated to supporting academics, provides a list of relevant research-oriented and academic hashtags to follow and use. This resource is a great starting point to explore how hashtags can be used to share knowledge and research on social media.

Williams, Sierra. 2014. "Five Ways Libraries are Using Instagram to Share Collections and Draw Public Interest." https://blogs.lse.ac.uk/impactofsocialsciences/2014/04/16/five-ways-libraries-are-using-instagram/

This article from the London School of Economics and Political Science outlines five different ways that libraries have used Instagram to share knowledge, improve public engagement, and show people library resources and services. It is one example of the ways that organizations and researchers can use social media in an effective manner for their projects and initiatives.

Williams, Sierra. 2014. "Five ways Universities are Using Instagram." https://blogs.lse.ac.uk/impactofsocialsciences/2014/04/08/five-ways-universities-are-using-instagram/

Similar to the previous article from the London School of Economics and Political Science, this post discusses five ways that universities have used Instagram to engage with students and researchers while mobilizing knowledge.

Notes + Reflections

What do you Meme by that?

Memes are a form of visual media that, in their circulation, become widely popular and recognizable across a large and diverse population. On the internet, memes are made up of a static picture, usually from popular culture or a stock image bank, and a portion of text that embellishes, juxtaposes, or adds a humorous or satirical dimension to the image. When put together well, the image and text create a new image that is socially relevant, funny, readily recognizable, and makes a comment on what is happening in the world today. While there are people who professionally make memes, memes are generally made and enjoyed by average social media users through free online generator programs like IMGFlip, MemeGenerator, or MakeAMeme. Because these tools are free and easy to use and access, anyone with an idea and access to the Internet can make and distribute a meme. Memes can serve as a low-stakes, inexpensive, and approachable entry point for starting discussions or commenting on larger issues.

I HAD FUN ONCE

IT WAS AWFUL

On January 15, 2020, ICER hosted "What Do You Meme by That?" an interactive workshop about how to use social media and memes to engage audiences and share knowledge. The workshop was led and facilitated by Madelaine Lekei, ICER's Community and Knowledge Mobilizer. This workshop was an open conversation that discussed how using memes on and offline can be an effective, accessible, and simple strategy for critical engagement and sharing information in a fun and creative way.

In the workshop, Madelaine emphasized that memes are a unique research tool to engage with diverse audiences. For example, if someone reads a meme that captures the key points of a project or concept, it invites them to learn or participate in the research. Memes have become a form of communication shorthand because they build on an

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Above image: a line drawing of a popular meme format known as "Grumpy Cat."

Memes are often created and used as a form of social critique or commentary that addresses a particular behaviour, system, or topic in a light-hearted manner.

already existing cultural knowledge base by using nostalgic and popular images that people immediately recognize. Due to this flexible dynamic, memes can help people quickly communicate a message and share important information in an appealing, humourous, flexible, and clever manner.

Memes are often created and used as a form of social critique or commentary that addresses a particular behaviour, system, or topic in a light-hearted manner. Because they can quickly illustrate a difficult idea in basic and recognizable terms, memes can show areas of common frustration, gaps in understanding, or whether an idea is widely accepted. Using memes in research or education settings can also help promote knowledge co-creation and collaboration between participants.

As a highly relevant engagement tool, memes can help break down barriers that often impede or discourage people from accessing academic resources or participating in research or education environments.

Madelaine shared her top five tips when making and using memes:

(1) Learn - Learn what memes already exist within your field. This will help you see what is trending and the gaps and niche areas where you can contribute. Start following social media accounts related to the content you want to make and explore the memes that other people are already creating.

(2) Images - Use images that have a broad appeal and that your intended audience will recognize and understand.

(3) Text - Keep the text in the meme short, simple, and to the point. Make sure that your tone is light and conversational; memes are supposed to be fun and easy to understand even if the subject is complicated or intimidating.

(4) Research - Google the image or meme before you use it. Just like images and symbols, some memes have negative connotations (racism, sexism, ableism, homophobia, etc.) or have been used for purposes that may not align with what you are trying to communicate. KnowYourMeme is an Internet meme database that provides an overview of each meme's history, context, and usage.

(5) Reference - Be sure to cite the creator and account whenever you use someone else's meme. There is more information about referencing memes in the resource guide below.

For more ideas about how to use memes and what you can do with memes, visit the following resources!

Resources for Memes

Creative Action. 2019. "Using Memes a 21st Century Research Tool." https://creative-action.org/ca-blog/memes-21st-century-research-tool/

> This article is an example of how to use memes in research settings. It introduces a project that addresses the health and legal consequences of teen vaping. This collaborative public health project used memes as an approachable and socially relevant research tool to engage teen participants. Activities included making and discussing memes which led to guided conversations about public health, targeted advertising, and misinformation around vaping products. In supporting teens' critical thinking and digital literacy skills, memes were one key tool that encouraged teens to synthesize important information in a low stakes, relatable, and accessible way.

Edelmeyer, Shianne. 2019. "How to Make Use of a Meme: 6 Steps to Follow." https://www.makeuseof.com/tag/how-to-make-a-meme/

> This article outlines and illustrates how to make a meme in seven straight-forward steps. As a guide, it provides additional free tools, links, and explanations to start and support your meme making!

Gibson, Michele. 2018. "Are Internet Memes a Valid Form of Social Commentary?" https://www.uhclthesignal.com/wordpress/2018/10/01/are-internet-memes-a-valid-form-of-social-commentary/

> This article discusses the history of memes and the ways that memes have gained popularity in society. Memes have power and social value when people identify with, and share, them. Because of their viral popularity and engaging visual qualities, internet memes have influenced the way that people share information, communicate their opinions, and form community bonds. Memes are an important way to communicate information, to understand the ways that people interact with that information, and to facilitate conversations about society, politics, and new knowledge.

Indiana University. 2020. "Create Accessible Social Media Content." Accessed February 23, 2021. https://kb.iu.edu/d/awqm

> This guide, published by Indiana University, is an overview of the main components that relate to the common visual media and accessibility requirements for popular social media platforms. Many social media accounts have built in accessibility features that can be utilized to describe visual content or caption audio content

Creating accessible content online is important to ensure that every person can interact with, use, and enjoy the information or the experience equally. This article provides an overview of the current best practices and primary ways that information can be made more accessible within online spaces.

McCroskey, Colleen. 2018. "Copyright and Fair Use for Meme-Makers." https://www.publicknowledge.org/blog/copyright-for-meme-makers/

When making, using, and reposting memes it is important to understand the dynamics that influence the legal copyright of memes. This article breaks down the principles of fair use and outlines the distinctions between making memes and reusing (or reposting) a meme that someone else made. With plenty of examples and illustrations, this article is a great place to learn best meme-making practices, including how to ensure a meme maker's intellectual property is properly attributed.

Morris, Sean Michael. 2012. "Memes are the New Canon." https://hybridpedagogy.org/memes-are-the-new-canon

This article outlines new and innovative ways that memes can be used as pedagogical tools. As a popular form of visual media on the internet, memes are based on existing social practices, humour, and language; they are like containers that carry a significant amount of condensed cultural knowledge. Because of this, memes can be an effective tool to illustrate, preserve, and share important moments, ideas, and critiques because they use an established, pop-culture knowledge base.

Reyes, Marc, Kristi Kaeppel, and Emma Bjorngard-Basayne. 2018. "Memes and Gifs as Powerful Classroom Tools." . https://www.facultyfocus.com/articles/teaching-with-technology-articles/memes-and-gifs-as-powerful-classroom-tools/

This article outlines different ways that memes and gifs can be used as tools to share important information, improve engagement, and facilitate collaboration in the classroom and other educational environments. It outlines three simple ways to use memes in classroom or group settings. As a low-risk way to enter a conversation, memes are great icebreakers, check-ins, announcements, or starting points for complex or difficult dialogues. Because memes are typically based on pop-culture and humour, they can be effective in introducing new or intimidating material and can be a great way to illustrate key concepts. Overall, memes are an easy and flexible tool that can offer a fun way to engage in deeper conversations about a variety of topics.

Tenove, Chris. 2019. "The Meme-ification of Politics: Politicians and Their 'lit" Memes." Accessed February 23, 2021. https://theconversation.com/the-meme-ification-of-politics-politicians-and-their-lit-memes-110017

In this article, political scientist Dr. Chris Tenove discusses the meme-ification of politics and the ways the memes have been used in political campaigns. Tenove says that political memes are memes about a public figure or popular idea that will create a sense of "in-group" belonging when they are shared. Tenove also touches on how memes have been used for controversial political reasons such as gaining support for white supremacy groups. It's important to understand these political and social dynamics when using memes.

Volpe, Allie. 2018. "It's Not All Pepes And Troll Faces — Memes Can Be A Force For Good." Accessed February 23, 2021. https://www.theverge.com/2018/8/27/17760170/memes-good-behavioral-science-nazi-pepe

On the internet, memes can act as a light-hearted commentary to communicate and influence what society views as acceptable behaviour. For example, mental health memes have been noted to help identify, communicate, and normalize the realities of living with mental health struggles. Often memes can be used to diffuse a tense situation, address microaggressions, or quickly give a snapshot into a larger, more complex social issue through satire and humour.

Notes + Reflections

Image Credit: Madelaine Lekei, 2020.

It's Time to get
on Twitter

Twitter is a social media platform, also known as a micro-blogging site, which allows users to share tweets in 280 characters or less. A tweet can be a personal story or opinion. It can also be used to share other information, including links to other articles or media (photographs, videos, gifs etc.). Individuals are also able to retweet others' tweets, which shares the original tweet or provides the opportunity for the user to share it and add some text of their own. One way to link information together on Twitter is through the use of hashtags. Hashtags utilize the # symbol with text, which then hyperlinks the tweet to all other tweets that have used that hashtag. There are numerous ways to use Twitter, including networking, teaching, at conferences, or to promote research and publications.

On October 29th, 2019, ICER hosted a workshop led by Dr. Christine Schreyer, an associate professor of Anthropology at UBC's Okanagan campus, on using Twitter in Academia. The interactive workshop focused on how to share research and connect on Twitter. Schreyer began by sharing her own Twitter profile and explaining the choices she had made in developing it, such as her Twitter handle, choice of photo, and how she crafted her bio. She also discussed the importance of maintaining a professional approach to Twitter, while at the same time showcasing your personality and individualism. She recommended finding Twitter role models, or following people on Twitter that you like, in order to learn how to tweet and interact with others until you develop your own style.

A line drawing of a Tweet by @AcademicBatgirl.

Schreyer recommended that academics begin by following fellow academics, from their home institutions and others in their field, as well as the academic associations (local,

national, and international ones). She also recommended academic hashtags and accounts, such as: #AcademicTwitter, #AcademicLife, #AcWriMo (Academic Writing Month, which occurs in November), @AcademicsSay, @AcademicBatgirl, @AcademicChatter, @GradHacker. Academics need to think carefully about who to follow and when to follow someone back on Twitter. Another tip Schreyer gave to researchers planning to use Twitter to network and share their work, is that it is beneficial to have a public rather than a private account as this can be a venue for open-access research. One thing to note is that there is no edit function on Twitter and as this is a public forum, you may want to delete any tweets with typos and re-do them rather than leaving them up unedited.

Schreyer discussed using Twitter in her classes, including making hashtags for each class (i.e. #ANTH474) after first making sure that the hashtags weren't already in use for another topic. Class hashtags allow instructors to share information on topics related to their class and encourage students to see the relevance of what they are learning beyond their classroom.

She also discussed tweeting at conferences. For example, following the conference hashtag in order to find out information, both official and unofficial. If you aren't attending the conference, Schreyer suggested following the conference hashtag from home. Relatedly, she introduced the role of live tweeting, which means tweeting about a presentation as it occurs in real time, emphasizing the importance of citing the presenter in the tweets. Some presenters will even include their Twitter handle on the introduction slide of their presentations to help facilitate this. You can clarify the conference hashtag on the organization's social media profiles, websites, or conference materials. Some conferences, particularly virtual conferences, which are more common in the COVID and post-COVID era, will have social media and photography policies. These provide details on how to respectfully and ethically interact on social media as part of the conference experience. Another key aspect of using Twitter at conferences is self-promotion; letting people know when you will be presenting and your presentation topic. Finally, tweet-ups are opportunities to meet up with others using Twitter at the conference.

Schreyer concluded the workshop explaining how tweeting about your publications increases citations[1] and is associated with greater public impact[2]. Participants spent time practicing the use of hashtags and live tweeting; you can begin your Twitter journey by exploring the resources on the next page!

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7. Finch Tom, O'Hanlon Nina, and Dudley Steve P. 2017. "Tweeting birds: online mentions predict future citations in ornithology." Royal Society Open Science 4: 171371. http://doi.org/10.1098/rsos.171371
8. Lamb C, Gilbert S, Ford AT. 2018. "Tweet success? Scientific communication correlates with increased citations in ecology and conservation." PeerJ: Biodiversity and Conservation 6:e4564. https://doi.org/10.7717/peerj.4564

Resources for Twitter

Academic Positions. 2019. "Why Academics Should Use Twitter." https://academicpositions.com/career-advice/why-academics-should-use-twitter

> This short article offers six reasons to use Twitter as an academic, researcher, or educator. It also suggests how to join online conversations in your own research field and the ways that using social media can help both your career and your research.

Boesel, Whitney Erin. 2013. "Twitter Still isn't a Backchannel." https://thesocietypages.org/cyborgology/2013/08/16/twitter-still-isnt-a-backchannel/?utm_source=twitterfeed&utm_medium=twitter

> This article discusses the role and best practices of using Twitter and social media at a conference, workshop, or event. By sharing her reflections, Whitney Boesel explores how Twitter has shifted the collective atmosphere of conferences by renegotiating what it means to participate and effectively communicate in traditional research environments.

Common Craft. 2008. "Twitter in Plain English." March 5, 2008, Youtube. Accessed February 23, 2021. https://www.youtube.com/watch?time_continue=10&v=ddO9id-max0o

> Twitter is a micro-blogging website that uses short messages to communicate and share knowledge with an online audience and community. This three-minute video outlines the main features, basic mechanics, and the different ways that people use Twitter.

Dickinson, Elizabeth Evitts. 2019. "The Promise and Peril of Academia Wading into Twitter." Accessed February 23, 2021. https://hub.jhu.edu/magazine/20 19/spring/more-academics-turn-to-twitter/

> In this article, three academics reflect on the ways that they use Twitter as researchers and educators. Twitter can be used as a research and archival tool, a means to engage in public scholarship and dialogue, and as a way to share information. In looking beyond traditional sources, Twitter is a space that can be used for communal learning, professional development, research, advocacy, and networking. Throughout the article, academics and students share the process of developing their own online presence as well as their key online best practices and strategies.

Footnotes Editor. 2019. "#AcademicTwitter: A How-To Guide." https://footnotesblog.
com/2019/03/08/academictwitter-a-how-to-guide-for-anthropologists/

This blog post explains the main features and functions of Twitter while offering helpful tips to have a successful tweeting experience. Start here if you have already set up a Twitter account and are wondering what to do next!

Hawks, John. 2012. "Best Practices and Tips for Twitter in the Higher Education Class-
room.". http://johnhawks.net/weblog/topics/teaching/resources/twitter-best-practic-
es-2012.html

In this article, Professor John Hawks outlines five key strategies for using Twitter in the classroom. He also provides a helpful glossary of the main terms used within Twitter and other social media platforms, as well as additional resources related to Twitter, teaching, and research. This article offers a thorough introduction on how Twitter works and the ways that you can use it as a researcher, academic, or teacher.

Iber, Patrick. 2016. "How Academic Can Use Twitter Most Effectively." https://www.
insidehighered.com/advice/2016/10/19/how-academics-can-use-twitter-most-effec-
tively-essay

Twitter is a valuable space for community engagement, public scholarship, and sharing knowledge. In this article, Professor Paul Iber discusses the main reasons why academics use Twitter. Not only can Twitter help academics be better and more concise writers, it can also connect researchers with a larger intellectual community while sharing knowledge and engaging in diverse public dialogue. Dr. Iber also offers his top tips, as well as how-to insights for using Twitter as a researcher and academic.

Priego, Ernesto. 2012. "Live-Tweeting at Academic Conferences: 10 Rules of Thumb."
https://www.theguardian.com/higher-education-network/blog/2012/oct/03/eth-
ics-live-tweeting-academic-conferences

Live tweeting can be a form of note taking, reporting, and online interaction at a presentation or live event. With this in mind, this article provides ten best practices to follow when using Twitter at a conference or event. It also outlines how to apply journalism practices for establishing professional and ethical etiquette for live tweeting at conferences.

Thomas, Jacqueline. 2016. "Twitter for Teachers: A Practical Guide to get Started To-
day." https://www.fusionyearbooks.com/blog/twitter-for-teachers/

This practical guide explains how to get started on Twitter and outlines some of the ways that educators can use the social media platform in their classrooms. From explaining what Twitter is and taking you through how to start an account, this is a great place to start if you are curious about using social media in learning environments to share knowledge and connect with others in your field.

Schmitz, Kelsey. 2015. "Twitter Pedagogy: An Educator Down the Twitter Rabbit Hole.".
https://hybridpedagogy.org/twitter-pedagogy-educator-twitter-rabbit-hole/

In this article, researcher and educator Kelsey Schmitz reflects on the ways that she integrates technology into the classroom and the influence that these technologies have within learning environments. Schmitz discusses her pedagogical practice of using digital and technological tools within diverse learning and community spaces. Schmitz notes that using new tools like Twitter requires flexibility, reflection, curiosity, and a willingness to renegotiate one's own teaching practice.

Warwick, Claire. 2013. "The Terror of Tweeting: Social Medium or Academic Message?"
https://www.theguardian.com/higher-education-network/blog/2013/feb/05/academ-
ic-twitter-technology-social-media-universities

In this article, Claire Warwick, a professor of digital humanities, discusses the dynamics and realities of using Twitter as an academic and researcher. Warwick explores how using social media is a practice of trust, transparency, and vulnerability for many researchers. While there are many concerns and critiques about academic Twitter, Warwick emphasizes the importance of communicating broadly with one's intellectual community. Twitter, she concludes, is an accessible tool that can help facilitate both academic and public engagement.

Notes + Reflections

Image Credit: Madelaine Lekei, 2019.

Conclusion

The year long ICER knowledge mobilization workshop series was a whirlwind of learning and creativity. These workshops brought together community members and researchers around knowledge mobilization activities undertaken by people and organizations in our community. The workshop series, and this publication, have been an opportunity to showcase some of the incredible work of community members in many capacities, both independently and with community groups, local organizations, and in association with Okanagan college and the University of British Columbia, Okanagan campus.

From games to graphic illustration, to theatre, to podcasting, to social media outlets, the series traversed disciplines and reflected the many ways that we can come to knowledge mobilization as a practice. We'd like to take this opportunity again to thank all of the wonderful facilitators, contributors, and workshop participants; we could not have offered our workshops or written this guide without them.

We've considered some of the places where these activities can be undertaken, modalities through which audiences can be reached, and experiences of expanding conversations that integrate ongoing learning. We have also discussed how, as we bring creativity and collaboration with knowledge mobilization on our projects, we can enhance research dialogue, reciprocal relations, and impact. Ultimately, these are avenues for inviting more people in and improving our wider research system. We hope that the content from these workshops, and the accompanying resources, will spark ideas for you about co-creating and communicating knowledge in new ways. We look forward to hearing about your knowledge mobilization endeavours!

Glossary

CamelCase: the use of capital letters at the start of each word in a hashtag to increase accessibility for machine readers or individuals with reading
 impairments.

Chapbook: a small book of less than 40 pages, which are often stitched together. They were originally sold as cheap "street literature" by "chapman", which is where the name comes from.

Clipping: (see also modulation) when the mic picks up a sound wave that is too strong for the recording system to handle, it will distort the sound. When speaking into the mic, aim for -6dp, the sweet spot for voices.

Co-creation/Co-creator: co-creation is the joint development of a project, in this case a research project, which includes equal contributions to the development of knowledge and to research dissemination. A co-creator is a person who participates in co-creation.

Community Engaged Research: a term used to refer to a range of participatory research activities that are collaborative between community members and researchers. This approach aims to answer research questions in support of the community's interests and well-being.

Community Theatre: theatre productions which involve community members in all aspects of production (acting, directing, design) rather than paid professionals.

Cooperative Games: games where players work towards a shared goal as opposed to competitive games, where one player will win.

Data Visualization: developing ways to make research results, or data, visually appealing through charts, tables, animations, or graphics.

Devised Theatre: theatre performances that are focused on creating social change, revising history, or starting conversations with the audience. The script or focus of an improvised performance develops from the collaborative practice of the performers.

Experiential venues: indoor or outdoor venues that are specifically designed to enhance the visitors' sensory, embodied experience of both the space and the content of events like exhibits and installations.

Fair use: a condition within copyright law that allows for limited use of copyrighted material without needing to get permissions from the copyright holder. Fair use balances the interests of copyright holders and public interest because it allows for the limited distribution and use of copyrighted work for creative and educational purposes.

Game Aesthetics: aspects of a game which focus on the design of the game, such as images, sound, music, video etc.

Game Dynamics: aspects of a game which focus on how players will interact with each other and with the challenges that arise in the game.

Game Mechanics: aspects of a game which focus on how players will move through the game, such as the completion of tasks. These tasks may entail rolling dice, playing cards, completing a mission etc.

Gamification: the process of making something into a game; this might include turning a story into a game or turning research results into a game. This process might include considering game aesthetics, game dynamics, and game mechanics.

Game Tailoring: when a game creator or game players adjust components of a game in order to 1) suit their needs and purposes, and 2) to create a more engaging and efficient experience. Some considerations in tailoring a game include: being conscious of the intended audience, considering opportunities and challenges within the game, planning how information is displayed, balancing the cognitive load across the game, and ensuring that the game responds to the users' needs.

GIF or Graphics Interchange Format: an animated soundless image file on an animated loop that lasts a few seconds. Often GIFS are short clips from a cartoon or movie and are typically circulated on social media or in text conversations.

Hashtag: a single word or phrase that is preceded by the pound or number (#) sign. Hashtags are a metadata tag that organizes content and trending topics on social media platforms. Using hashtags makes it easier for users to explore, filter, find, and reference information related to a specific topic or event.

Handle: the primary username of an account or person on a social media platform.

Infographic: a visual image or representation of numbers, words, charts, graphs, images, and data that are designed to communicate an idea, concept, or story.

Instagram: a popular social media platform that is used for photo and video sharing.

Knowledge Mobilization: a way to reciprocally share knowledge and insights between researchers, knowledge brokers, and knowledge users within, and beyond, academic settings to contribute to social change; overarching term for sharing knowledge that includes knowledge exchange and knowledge translation activities.

Knowledge Exchange: the process of sharing information between knowledge stakeholders or brokers and researchers. These groups contribute their knowledge and expertise so that they can collaboratively make decisions, policies, or plans based on the widest set of knowledge and experiences possible.

Knowledge Translation: when academic research is translated into plain, jargon-free language and is available in accessible formats. This ensures that knowledge is available to a large audience so that research can be readily available to knowledge stakeholders or brokers and used in decision-making processes or projects. Knowledge translation is sometimes known as research translation.

Lav or Lavalier Mic: a microphone that is pinned or clipped onto an individual's lapel or near their mouth. These discrete mics are used widely in filmmaking and broadcasting to unobtrusively record dialogue.

Live Tweeting: the practice of commenting and sharing posts on Twitter (a social media platform) about a presentation or event as it occurs in real time.

Memes: a form of visual media that circulates and becomes popular on social media platforms. A meme is usually a combination of a static picture from popular culture or a stock image bank, and a portion of text that adds a humorous or satirical dimension to the image.

Metadata Tag: a tag is a key word assigned to information or files and helps it to be organized and easily located in a database.

Modulation: when a voice has noticeable variation in strength, tone or pitch. While some modulation can be used to convey meaning (adding emphasis on a word), in podcasting, you want to check that the sounds stay within a pleasant range (see clipping).

Participatory Theatre: a form of theatre where the audience interacts with the performers and the performance.

Partner Work (in relation to theatre): when individuals in pairs work through scenes when developing a play or theatre experience; this might involve trying different emotions as they deliver the scene or different blocking (the physical position of the actors), or even different lines.

Pedagogy/Pedagogical Practice: the way(s) that teaching occurs, influenced by different theories on teaching.

Plain English/Plain Language: the use of clear, jargon-free vocabulary and the presentation of ideas that are well organized so that a message is understood on first reading.

Pop Filter: a filter used in front of a microphone when recording to eliminate popping sounds created by exhalations, lip smacking etc.

Research Creation: an academic research project which results in the development of creative materials, such as a film, a play, dance, or an art exhibit.

Research Translation: see Knowledge Translation

Stock Image: existing generic photograph or icon that is licensed for use, usually for either a fee, the creator's credit, or both.

Storyboard: a tool used in storytelling (writing, animation, film, or marketing) that allows the creator to logically work through the flow of the story. Usually using boxes, which allows for notes regarding plot, image etc.

Strategy Game: a type of game, often a board game, that allows players to have the ability to make decisions and strategize, rather than relying on chance.

Tweet: a post made on the social media platform Twitter.

About the Authors

Madelaine Lekei is a Master's student at UBC Okanagan. When not writing, you can find Madelaine with her cat Sage and their many plants.

Robin Metcalfe is a PhD student at UBC Okanagan and working with the Canadian Institute for Inclusion and Citizenship. She likes building sand castles.

Joanne Carey is the coordinator for the Institute for Community Engaged Research at UBC Okanagan. She and her doggo Maggie can be found hiking or happily lazing about.

Dr. Christine Schreyer is an associate professor of Anthropology at UBC Okanagan. She loves taking every chance she gets to step onto a stage - all the world's a stage.

Our "Dream Team" imagined the workshop aspect of the project into being in 2019 around a table in ICER with cake and coffee. This guide was completed as we moved onto Zoom in the pandemic. The cake, coffee, and each other's smiling faces kept us company throughout all the transitions during the "panic at the disco".