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EXPLORING ALTERNATIVE FORMATS OF UNIVERSITY-COMMUNITY ENGAGED KNOWLEDGE MOBILIZATION

Abstract

This paper discusses the use of alternative formats (e.g., videos, clear language summaries, infographics) in scholarly communication and knowledge mobilization. We draw upon two examples: 1) a community-engaged learning project (2019–present) and 2) a multiyear research project (2018–2023), both connected to a larger university-community initiative to make research accessible to non-university audiences. We focus on the use of alternative formats within these projects and efforts to evaluate their value for various constituents, e.g., students, instructors, researchers, and community participants. We report on what we have learned through these projects and argue that it is critical to understand the utility of alternative formats to motivate scholars to mobilize their work and to support research use amongst community knowledge users.

Introduction

Knowledge mobilization (KMb), “the reciprocal and complementary flow and uptake of research knowledge” between academic and non-academic constituents (SSHRC, 2021) is central to achieving societal research impact (Carson & Given, 2021; Shaxson et al., 2012). Mobilizing research takes many forms depending on the intended audience (e.g., employees of non-profit organizations, policymakers, patients) and research goals (e.g., change a health behaviour, influence policy, contribute new knowledge). Traditionally, scholars have mobilized research through outputs like books and journal articles produced for and evaluated by their peers (Borgman, 2010). These outputs, typically published in proprietary databases and containing technical terminology (Allen et al., 2017; Tachino, 2012), are largely inaccessible to people outside of universities or the subject domain, curbing their potential for impact. Today, scholars are being asked to translate and reenvision scholarly outputs into alternative formats, e.g., data sets, blogs, podcasts, infographics, videos, and to make these available through open access repositories, personal websites, and social media platforms to (e.g., Academic.edu, Instagram) (Herman et al., 2020; SSHRC, 2023; Work et al., 2015). Alternative formats may help enhance

awareness and uptake of research findings in industry, community, and education settings (Neil-Sztramko et al., 2023).

Despite the increased impetus on KMb and guidance on how to create and disseminate alternative formats (Public Humanities Hub, n.d.; Research Impact Canada, n.d.), researchers may not integrate them into their research practice for many reasons. Scholars must invest time to make and share alternative formats; this may include learning how to use tools to make infographics or videos, but they must also carefully consider the fit between the format and the needs of knowledge users (Hébert et al., 2020; Cattlin & Given, 2024). Scholars may be discouraged if this investment is not recognized in academic evaluations like promotion and tenure (Acord & Harley, 2013; Alperin et al., 2019). Further, the pathway from KMb to impact is complex, non-linear, and longitudinal (Elliot et al., 2023; Morton, 2015; 2021), leaving researchers uncertain about whether alternative outputs are being discovered and used by intended audiences.

Existing studies on the use and evaluation of alternative outputs has been limited, with greater attention in health and science domains than the humanities and social sciences. Existing studies have tended to focus on educated participants, such as students and health practitioners, mainly interacting with videos and completing comprehension or knowledge tests (Dudley et al., 2023; Hébert et al., 2020; Knapp et al., 2022; Li et al., 2023). This reveals gaps in terms of how humanities and social science research may be translated through alternative formats, how alternative outputs resonate with academic and non-academic communities, and what outcomes, aside from knowledge retention, might be important to achieve in different settings. In this research we begin to explore these gaps through two projects. The first project describes alternative outputs produced in the university classroom to enhance access to research materials in a specialized digital library. The second project experimented with alternative outputs as part of a funded research partnership grant aimed at making research more accessible for non-academic communities. Both projects are affiliated with a larger university-community initiative, the Making Research Accessible Initiative (MRAi), which seeks to encourage greater reciprocity in research and increase meaningful access to research findings.

Background: The Making Research Accessible Initiative (MRAi)

The Making Research Accessible Initiative (MRAi) is a formal partnership between the University of British Columbia (UBC) Library and UBC Learning Exchange (UBCLE). The UBCLE, situated in the Downtown Eastside (DTES) of Vancouver on unceded Coast Salish territory, serves as a bridge between UBC and the local community. The DTES was the site of the first Vancouver City Hall, main library, and retail core and has historically been made up of ethnically diverse, working-class neighbourhoods (“Downtown Eastside,” n.d.). Over time, gentrification, housing shortages, changes to income assistance, global health crises and other

factors have led to increased homelessness, substance use, and poverty (“Downtown Eastside,” n.d.; McCauley & Towle, 2022).

The DTES draws considerable attention from researchers and journalists. This can be useful for highlighting important social issues that need to be confronted. Yet, it has also perpetuated stigma and led to over-research in this community. DTES community members have documented their experience of research as extractive, repetitive, and lacking in reciprocity; research is undertaken and published in paywalled scholarly journals, conferences, and books that are inaccessible to community members and organizations (Boilevin et al., 2019; MRAi, 2020). To try to address some of these challenges, the MRAi developed the DTES Research Access Portal (DTES RAP) (McCauley & Towle, 2022). The DTES RAP is a user-friendly portal containing research articles, information about community-related projects, news, and resources, and a directory of researchers (DTES RAP, n.d.). The collection continues to grow on a range of topics (e.g., arts, culture, history and heritage; health and well-being; environment and sustainability), and research articles are enhanced by alternative formats, such as clear language summaries, infographics, and multimedia content (e.g., podcasts, videos).

Figure 1. Screen shot of record for an infographic with the original research article linked bottom left (under “Related Materials”) in the DTES RAP.

Search Result



DTES RAP / Search / Factors associated with low neighborhood cohesion am...

Factors associated with low neighborhood cohesion among women living with HIV impacted by social-structural inequities in British Columbia: infographic

Dewar-Pratt, Mackenzie; Walde, Remi; Gupta, Revika; Liu, Betty; Ni, Neo; Hodges, Eli; Kaur, Maneet; Withoef, Leonie

2021-04-30

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Description

This undergraduate student work is a product of a collaboration between the Making Research Accessible initiative (MRAi), researchers, Dr. Evan Mauro and the students of ASTU 100 at UBC. This student work has been reviewed by the lead author of the original item. Revisions provided by the lead author have been incorporated into the student work with support from the UBC Learning Exchange and members of the MRAi. The reader should bear in mind that this is a student research report and is not an official document of UBC.

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Related Materials

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Scholarly Article



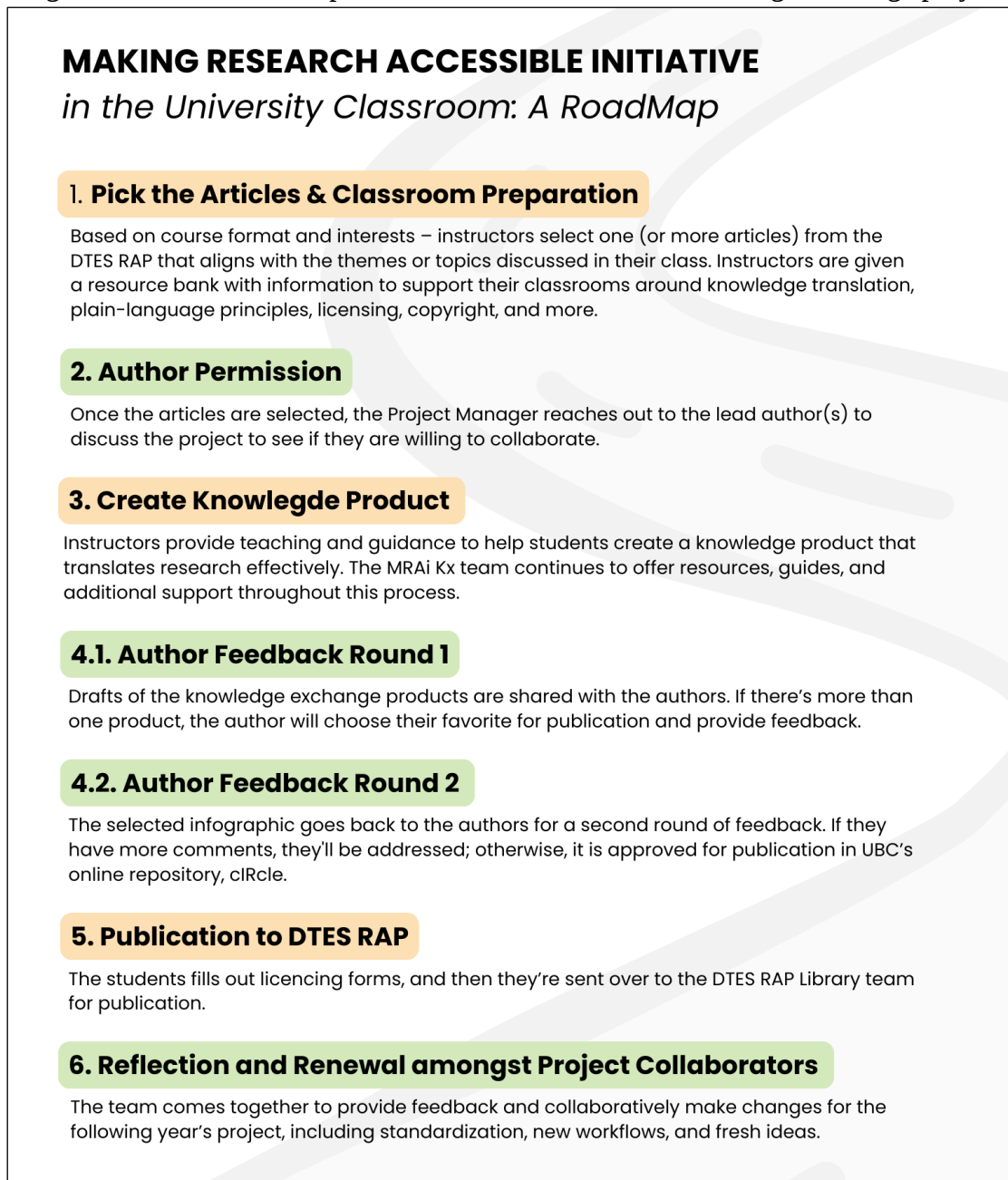
The MRAi has been a “living lab” (McCauley & Towle, 2022) for collaborations related to its core mandate of enhancing access to research for DTES constituents and working toward more reciprocal research practices. Over the past few years, the paper authors have worked with or as part of the MRAi’s Steering Committee (comprising librarians, staff and faculty from different institutions) on projects to connect alternative outputs to community-engaged learning and research. Two of these projects are described in the following sections.

Alternative formats in the university classroom

In 2019, two of authors initiated a course-based writing assignment in the Coordinated Arts Program (CAP) at UBC to support the creation of alternative outputs for the DTES RAP in collaboration with the MRAi. Teams of first year undergraduate students selected research articles available in the DTES RAP (with the support of article authors) and created clear language, community-oriented infographic summaries of the papers (Mauro et al., 2024). Between 2019–2024, 437 undergraduate students participated in the project, resulting in 26 author-approved published infographics. With the acquisition of competitive funding, the pilot project expanded in 2025 to include 8 instructors across 3 academic units, 27 DTES RAP authors, and 149 first-year, upper-level undergraduate, and graduate students. In the latest iteration of the project, students worked on infographics (static and web-based) and videos, and partnerships extended beyond the MRAi to Vancouver Public Library’s náca?mat ct Strathcona Branch (located in the DTES) and UBC Studios.

A resource library, maintained in UBC’s Learning Management System, was created to support resource sharing amongst instructors. The project typically unfolds in six stages over a 13-week term involving: 1) selecting articles and background preparation, e.g., learning about the UBCLE, MRAi, and the DTES RAP; 2) author outreach to participate in the project; 3) students creating the alternative output; 4) two rounds of author feedback; 5) licencing and publishing in the DTES RAP; and 6) reflecting amongst project collaborators (i.e. instructors, librarians, MRAi) (Figure 2). Pedagogically, the multistage process focuses on acquiring practical skills such as selecting, reading and interpreting a research article, writing a clear language summary, and designing an infographic, video, etc. Yet it also socially situates the learning by orientating students to the role of KMB in research reciprocity and asset-based research methodologies. Students learn to write for different audiences, build relationships with peers and article authors, and are exposed to aspects of the publishing process e.g., licensing, copyright, attribution. (Mauro et al., 2024).

Figure 2. Overview of the process followed in the CAP knowledge exchange project



Early evaluation efforts included a student survey in 2020 and two focus groups in 2020, one with two UBCLE staff members and the other with two peers with lived community experience. Students were largely positive about the project: they showed newfound understandings of the impact of research on communities and the intrinsic value of writing assignments focused on

real-world issues. Focus group participants from the DTES community provided feedback on the wording and visuals used in the infographics and, despite some usability issues, perceived the infographics were helpful. Other stakeholders, such as the authors of the articles and academic library staff, were not formally surveyed, but their enthusiastic participation was acknowledged as an indication of success (Mauro et al., 2024). In the latest (2025) iteration of the project further evaluation efforts have been undertaken with student, instructor, and author surveys to learn from multiple project participants. A showcase of the student-produced multimedia was held at VPL's nōcā?mat ct Strathcona Branch at the end of the academic term to bring together university and community-constituents. Attendees were invited to leave written comments about the alternative formats and the event. Analysis of the survey and showcase comments is currently underway and will be used to inform a community workshop this summer as well as next year's iteration of the project.

Alternative formats in and as research

Supporting Transparent and Open Research Engagement and Exchange (STOREE) was a Social Science and Humanities Research Council (SSHRC) funded project that ran from 2018–2023 (STOREE, n.d.). The STOREE team consisted of librarians, university staff, students and researchers from UBCLE, UBC Library, SFU Library, BC Centre on Substance Use, and UBC's School of Information. Some of STOREE's participants overlapped with the MRAi Steering Committee and the MRAi provided inspiration and direction to STOREE. STOREE's goals were to enhance non-university communities' access to and engagement with research; support academic researchers to change scholarly practices; and highlight library and information professionals' roles in KMb.

STOREE generated traditional research products, like journal and conference papers, book chapters and theses, but also experimented with alternative formats, including clear language summaries, infographics, video abstracts, blog posts, workshops, and open education resources (STOREE, n.d.). Alternative formats served different purposes in the project. First, the STOREE team archived all scholarly activity in UBC's institutional repository and project website, creating alternative outputs to complement traditional outputs, e.g., blog posts summarizing research papers and presentations. Alternative outputs were especially important in cases where original work was inaccessible due to copyright restrictions or ephemerality. Second, some projects encouraged other scholars to use alternative formats. Student research assistant Shannon Murray collaborated with the MRAi, the UBC CAP pilot project, and UBC Public Humanities Hub to develop an infographics toolkit (Murray, 2021; Public Humanities Hub, n.d.). Third, STOREE examined actual use of alternative outputs. The "Sharing Science" sub-project interviewed 16 senior science and social science researchers to examine their use of genres and media in sharing research (Huvila & Sinnamon, 2022). Finally, STOREE investigated potential avenues for evaluating alternative formats. Master's student Alice Li gathered a corpus of social science video abstracts as part of her thesis work to explore crowdsourced participants'

comprehension of and engagement with the research presented (Li, 2022; Li, O'Brien & Sinnamon, 2022).

The culmination of STOREE's work revealed insights about the use and effectiveness of alternative scholarly outputs. Empirical studies confirmed previous research findings related to KMb challenges; i.e., researchers feel increased pressure to engage in KMb, but may lack in-depth understanding of knowledge users outside of their discipline or academia more broadly (Huvila & Sinnamon, 2022). There were also tensions between engagement and comprehension for participants engaging with video abstracts, i.e., capturing people's attention through multimedia scholarly translations may not result in knowledge acquisition (Li, 2022; Li et al., 2022). This reiterates the importance of how alternative outputs are designed to meet the needs of different audiences (Elliot et al., 2023; Hébert et al., 2020), as well as what outcomes of engagement are important and how we document them. In addition to formal research on alternative outputs, we gathered insights from team members through end-of-project interviews. This exercise demonstrated how making and sharing alternative formats through the project changed team members' own research and teaching practices: co-investigators developed alternative outputs alongside traditional outputs for STOREE but also other projects, they incorporated KMb into courses through weekly topics, readings, and assignments in alignment with the subject matter (e.g., research methods, scholarly communication), and they became more creative in their KMb approaches. For instance, one sub-project, focused on conducting literature reviews in non-academic contexts, crafted and mailed a postcard to non-profit staff who might find it helpful for writing grant applications, informing evidence-based practice, etc. However, while engaging with alternative formats firsthand allowed deeper, more critical reflection on scholarly dissemination practices, there was limited tangible affirmation of the extent to which the alternative outputs reached intended audiences and what their longer-term effects might be.

Conclusion

This paper explored the creation and use of alternative formats (infographics, videos, clear language summaries, etc.) under the umbrella of a unique community-university initiative, the MRAi. In one project, students translate published research papers into infographics and videos to enhance research access in the DTES RAP; in the second project, the research team explored new ways to mobilize research in their own and other scholars' practices. These examples demonstrate the use of alternative formats to support teaching, learning and research, and expand students', instructors' and researchers' worldviews of research and knowledge production. Through these projects we learned how difficult it can be to communicate using clear and accessible language and to match modes of communication with diverse audiences. Yet, we have also seen dedication to making research accessible in action within our university and local community; the desire to make a meaningful contribution in our work can motivate us all to engage differently in scholarly communication and pursue socially relevant research outcomes.

Lingering questions for both projects described here relate to the long-term uptake and use of alternative outputs, particularly amongst non-academic affiliated people. Through sharing what we have learned and what we have yet to discover, we emphasize the need for iterative, longer-term assessment activities to provide more robust understandings of how people can make meaningful use of research outside of university environments and the role of alternative formats in supporting this goal.

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