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Experiences and insights on Bridging Knowledge Systems between Indigenous and non-Indigenous partners: Learnings from the Laurentian Great Lakes ☆

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ABSTRACT

Willingness to engage in equitable and ethical relationships with Indigenous partners is becoming more commonplace within public and academic spheres around the globe. However, insufficient training and attention is being given to produce better outcomes for Indigenous partners. This article is a curation of insights and experiences shared during the virtual talking circle held during the "Bridging Knowledge Systems between Indigenous and non-Indigenous communities" session at the 2021 Annual Conference of the International Association for Great Lakes Research. Through dialogues and exchanges within this circle, we identified core themes, actionable recommendations, and questions worth considering for those wishing to bridge knowledge systems and engage in co-learning processes involving Indigenous and non-Indigenous partners. We describe herein what appreciating Indigenous knowledge systems, understanding colonial histories and realities, respecting the histories and identities of Indigenous communities, building and valuing good relationships, and committing to mutual benefit look like through the eyes of circle participants and authors of this paper. We see, through the consideration of examples from throughout the Great Lakes and beyond, positive signs of change as well as areas in need of much improvement in how relationships with Indigenous partners are being conceptualised and realised and recognize that much work lies ahead before the complete implementation of the calls and recommendations made by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Truth and Reconciliation Commission of Canada (TRC), and the National Inquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) are no longer aspirational, but reality.

Introduction

Context

Willingness to engage in equitable and ethical relationships with Indigenous partners is becoming more commonplace within professional and academic spheres around the globe. A growing number of institutions, governments, and businesses are now encouraging or mandating partnerships with Indigenous Peoples,

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organisations, and communities in work that relates to or affects those groups. This change in partnership dynamics is exciting in terms of opening up new research directions (Henson, 2021; Mantyka-Pringle et al., 2017; Tondu et al., 2014) and long overdue given the calls advanced by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP; United Nations General Assembly, 2007) and the Truth and Reconciliation Commission of Canada (TRC; Truth and Reconciliation Commission, 2015). It is important to caution that this movement can bring about a great pressure upon Indigenous groups, including scholars, to assume additional burdens while also carrying out their own work and living their own lives as Indigenous Peoples (Schnarch, 2004). This can also perpetuate colonial harms to Indigenous Peoples and communities if this engagement does not hinge on their "free, prior and informed consent" (UNDRIP, 2007), advance equitable benefit sharing between parties, and get carried out in the spirit of co-learning and transformative change to harmful structures and institutions.

Given the complex histories and realities of Indigenous existence in a settler colonial society, how can we begin to work together towards building truly equitable and ethical relationships? This question will likely be answered (or attempted) time and again with every new generation coming into such relationships, and as with reconciliation efforts across disciplines and sectors, it will never be resolved through easy step-by-step checklists or how-to guides (Mantyka-Pringle et al., 2017; Wotherspoon and Milne, 2020). Adaptation to the context and situation is needed when building out initial pathways for co-developing genuine ethical and equitable relationships. However, we can begin to work together to untangle the nuances of these relationships and collectively decide how we should continue working ethically towards realising UNDRIP and TRC goals (e.g., Wong et al., 2020).

Endeavouring to begin such conversations, a virtual talking circle was held at the 2021 Annual Conference of the International Association for Great Lakes Research (IAGLR). The scope of the IAGLR Annual Conference is Great Lakes of the world, with regional emphasis focused on the Laurentian Great Lakes of North America (see Fig. 1). The typical IAGLR audience includes Great Lakes researchers, managers, and academics and to a lesser extent, often influenced thematically, representatives from outside of North America. The theme of the 64th Annual Conference of IAGLR in May 2021 was "Bridging: Knowledges • Seven Generations • Land to Lake." A focus on this theme was never previously covered at an IAGLR conference. Gagnon et al. (2020) provides context on this theme in the Fall 2020 Lakes Letter of IAGLR. Additionally, the website for the 64th IAGLR conference states "this theme evokes our goal of connection. Today we see an urgent need for people to connect across divides of race, culture, and political viewpoint, as well as across scientific disciplines and levels of scientific literacy" (https://iaglr.org/iaglr2021/). As a result of the COVID-19 pandemic, the 2021 meeting was held as a virtual forum to adhere to public health guidelines in place. While not necessarily congruent with the theme of "bridging" through trust and relationship building, which often require face-to-face interaction and unstructured time together, this virtual platform did facilitate a broader and more diverse group of participants to come together than may otherwise have been possible and effectively provided a forum for safe, inclusive, and open dialogue (Sarabipour, 2020).

Prominently featured during the 2021 IAGLR Annual Conference was a session on "Bridging knowledge systems between Indigenous and non-Indigenous communities" (hereafter bridging knowledges session), which included the virtual talking circle. The circle began by identifying experiences, insights, and recommendations in bridging knowledge systems to advance equitable work among Indigenous and non-Indigenous communities in the Great Lakes region. Concepts such as bridging knowledge systems

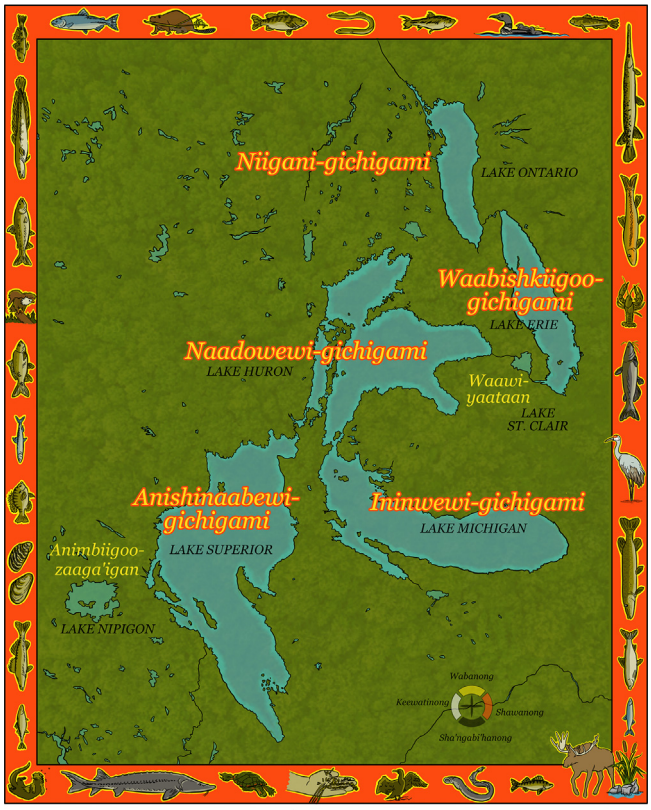

Fig. 1. Artist Nicole Marie Burton has illustrated this map of the Laurentian Great Lakes from the perspective and understanding of Indigenous Peoples who live and have lived in relationship with these lakes since time immemorial.

may be unfamiliar to many readers; and are explicitly defined in depth below. For now, it is helpful to note that bridging knowledge systems is a process of recognizing multiple knowledge systems, and their corresponding worldviews, as valid on their own terms and useful, in adapting to an understanding of our present and future. The circle highlighted work informed by diverse ways of knowing, understanding, and interacting with natural systems of the Great Lakes, drawing on examples that transcend boundaries between knowledge systems. The purpose of the circle was to appreciate how and why Indigenous values and perspectives create space for synergistic relationships to develop at all scales; to learn about partnerships that co-produce knowledge between Indigenous and non-Indigenous scholars, knowledge-holders, and communities; and to better understand how Indigenous knowledge can be applied equitably and ethically to balance and support sustainable freshwater ecosystem management for the benefit of all. In the spirit of co-learning, our intent was to generate new knowledge on how to effectively bridge knowledge systems and work together through sharing experiences, strategies, and methods (this circle was co-chaired by co-authors KA, NB, AD, and AJR, and supported by all co-authors).

A critical part of the "Bridging Knowledges" virtual talking circle, and one element contributing to its uniqueness, was the inclusion of an open dialogue among peoples from multiple backgrounds and histories in relation to their experiences with bridging knowledge systems. This article synthesises this important dialogue and reflects the diverse perspectives of participants from both Indigenous and non-Indigenous communities and groups from around the Laurentian Great Lakes and beyond. The authors of this article (both Indigenous and non-Indigenous) acted as curators of spoken themes and experiences from the circle

participants. While it is impossible to capture adequately in writing the rich place- and time-based experiences and passionate sentiments of circle participants, we hope that our synthesis begins to appropriately convey some of the salient outcomes and guidance resulting from the associated discussions on bridging knowledge systems between Indigenous and non-Indigenous communities and groups. The guidance synthesised herein is broad in scope and centred on being good partners in caretaking for our ecosystems as opposed to focused on particular geography or specific resources. The broad nature of guidance and recommendations reflects the nature of discussions in the talking circle and the notion that lessons for bridging knowledge systems are equally relevant across aquatic, terrestrial, and aerial environments within and beyond the Great Lakes.

Gratitude

The authors whole-heartedly thank all virtual talking circle participants and organisers, as well as IAGLR conference organisers for their collective and collaborative efforts. We are especially grateful to the elders and knowledge keepers who brought us into ceremony. We recognize and call attention to the supports provided by the Great Lakes Fishery Commission (GLFC) and IAGLR which fully sponsored conference registration for Indigenous participants. The virtual talking circle hosted 97 Indigenous registrants, the most ever in attendance at an IAGLR Annual conference.

Key concepts

To situate readers in an appropriate context, we illustrate a number of key terms and concepts central to this paper (Fig. 2). During early discussions with the artist Nicole Marie Burton, Fig. 2 was created to be able to print well in colour and in black and white in recognition that not all who may wish to print this paper have access to reliable or affordable colour printing.

Positionality

As an Indigenous scholar, Kasey Stirling is keenly aware of her responsibility in leading the writing of this paper. She is a status member of the Lower Nicola Indian Band (Nłeʔkepmxc Nation) from her paternal line. Maternally, she is *lnu'sgw* (a Mi'kmaw word for Indigenous woman), though the maternal side of Kasey's family lost their Indian status in the context of the *Indian Act* of Canada via the process of "marrying out." She was raised in the territories of the Tŝilhqot'in Nation and the T'exelcemc Nation before attending Simon Fraser University, whose campuses are situated on the territories of the xʷməθkʷəy̓əm, Sḵwx̱wú7mesh Úxwumixw, səl̓ilw̓ətaʔɬ, qíc̓əy̓, kʷikʷəƛ̓əm, Qayqayt, qʷa:nƛ̓ən̓, Semiahmoo, and Tsawwassen Nations. Given Kasey's experiences of living within Indigenous communities for whom she is an uninvited guest, she understands the care she must take to listen to the voices of those communities she works with and to represent their words as they were told to her, without modification. Kasey Stirling was a graduate student note-taker during the IAGLR conference, and had compiled much of the information shared by participants during the session, along with many other co-authors on this paper. She expresses her personal gratitude to the participants of the conference session and to the organising team for placing their trust in her ability to humbly portray their experiences in bridging knowledge systems. All co-authors support Kasey in these efforts.

Process of knowledge gathering

The many Indigenous Nations and Tribes that reside within and surrounding the Laurentian Great Lakes and associated lake ecosystems were highlighted, given the topic of the IAGLR Annual Meeting and the need for amplifying Indigenous expertise and voices. The co-chairs of the bridging knowledges session intentionally included ceremony within the virtual talking circle to create a safe and respectful platform for the exchange of knowledges. Beginning in this way acknowledges and celebrates all knowledge systems from the start. To enter a conference space, often dominated by academics and governmental representatives, those outside of these spheres often face barriers, such as the lack of appropriate funding, use of inaccessible language and disciplinary jargon, imposter syndrome, and other power imbalances (Guo et al., 2022). To overcome some of these deterrents, circle co-chairs worked with the GLFC and IAGLR to fully sponsor conference registration for Indigenous participants. Furthermore, the bridging knowledges session was structured to include ample alternative opportunities for dialogue and knowledge exchange for those not wanting to share their knowledge in a standard conference presentation format, which is often restricted by time and can be less personal or from-the-heart than an informal conversation. This was accomplished through an invited expert panel (Mussett et al., this issue) and subsequent discussion, and a facilitated open dialogue, the topic of this article.

To broaden the sphere of participation at IAGLR and in the virtual talking circle, a call for participation was sent out widely to Indigenous communities and groups through representatives, employees, researchers, and community members from both the United States and Canada. Co-chairs drew from their existing connections with Indigenous communities and groups, as well as communities to which there was no connection prior to this event. The circle provided an opportunity to build relationships, facilitated co-learning, and generated recommendations on how to ethically and equitably practise learning from multiple perspectives and knowledge systems (such as through the process of *Etuaptmumk* (Two-Eyed Seeing); Bartlett et al., 2012; Martin, 2012; Reid et al., 2021; Wright et al., 2019) to support sustainable stewardship of Great Lakes ecosystems. (The concept of *Etuaptmumk* is mentioned here as an example of a relevant framework for bridging knowledge systems, but its definition is beyond the scope of the context of this paper. We encourage the readership to learn about this framework by reading Reid et al., 2021) Sponsorship by the GLFC and IAGLR was key to convening diverse representatives from government, academia, and Indigenous communities and groups from around the Great Lakes.

The circle involved a conversation with conference participants who came from various cultural and disciplinary backgrounds and was facilitated by session co-chairs and members of this authorship team. Participants included Indigenous scholars, professionals, and community members from around the Great Lakes, and non-Indigenous scholars and professionals who have experience or interest in working on the Great Lakes with Indigenous communities and groups. Participants were from many organisations, government agencies, lands and resources departments, and Indigenous community members from First Nations and Métis communities as well as US Tribes and other groups. Some participants also attended the circle from beyond the Laurentian Great Lakes.

Process design was important to critically consider how best to enable effective and equitable participation from every-one involved in our discussion (de Vente et al., 2016). At the beginning of the circle, a purpose statement was shared (by KA) to create a clear understanding of how the information from the gathering was to be curated into potential outputs. There were two aims

Fig. 2. Artist Nicole Marie Burton has illustrated this figure which contextualises certain key terms for understanding this paper. We provide definitions for the terms: Indigenous Peoples, Indigenous communities, Indigenous knowledge systems, and bridging knowledge systems. An illustrated scene follows these definitions to better situate them within contemporary topics in the Laurentian Great Lakes. The asterisk refers to a quote from the United Nations Declaration on the Rights of Indigenous Peoples (2007).

for the circle; one was the development of a shared learning experience from dialogue between the various groups involved and facilitating relationship building between those engaged, and the second was the curation of trends and insights with the purpose of contributing this synthesis paper to this Special Issue of the *Journal of Great Lakes Research*. During the introduction and purpose statement, co-chairs also shared guiding principles for participation, which included the affirmations that: every-one has wisdom to share; every-one will be heard and hear others; there are no wrong or right questions, answers, or views; and to maintain an awareness of cultural burden and sensitivities. In this way, participants were encouraged to speak from their heart, but also to be

attentive to how comments and questions can be emotionally taxing or potentially harmful for other participants. An open-dialogue approach and facilitated talking circle structure afforded all participants the opportunity to safely and equitably hear and share experiences and insights from bridging knowledge systems between Indigenous and non-Indigenous communities within the Great Lakes context and beyond.

The virtual talking circle was facilitated over the Zoom® platform that began in plenary followed by small breakout groups to facilitate "virtual visiting." Seven breakout groups were convened (with an average of six participants per breakout group) and structured with the intention of having a diversity of participants in each group. Each group had an appointed facilitator (e.g., co-chair) and notetaker (e.g., student volunteer) to jointly guide the discussion. Notetakers were instructed to record key discussion points in a cloud-based document before reporting back to the main group on the opportunities, challenges, and recommendations identified by participants in each breakout room with respect to their experiences working across multiple knowledge systems. This conversational approach followed the Focus Conversation Methodology from the Technology of Participation facilitation toolkit (developed by the Institute of Cultural Affairs (Oyler and Harper, 2006)) which builds upon experience and discusses implications before determining recommendations (Holman et al., 2007).

Following time for personal introductions, the first part of the conversation in breakout groups focused on the two following questions: *(1) What has been your experience in bridging knowledge systems between Indigenous and non-Indigenous communities? (2) What opportunities and challenges do you see stemming from these experiences?* Breakout groups were then given allocated time to document or "harvest" any recommendations from the initial discussion in response to a third question: *(3) What recommendations do you have as we advance this topic* [bridging knowledge systems] *among Indigenous and non-Indigenous communities in the Great Lakes region? What is needed?* Groups were then convened in a final circle that was moderated (by KA, AR) with participants from each group reporting back on the key ideas and themes from their breakout group. An additional participant from each breakout group was also asked to add anything to the summary. The virtual talking circle closed with a summary and reflection on what was heard. Participants were thanked for their contributions to the dialogue. The shared cloud-based document into which notetakers entered discussion themes and answers was subsequently coded into overarching themes by several co-authors of this paper (KS, AR, AD, NB, and KM) in a shared spreadsheet. These themes are identified herein by subheadings under the section titled Outcomes of the Virtual Talking Circle. This qualitative coding organised information from individual breakout rooms into a common digital location to facilitate additional thematizing by the co-authors which led to the construction of an outline document that later became this paper.

The structure of this article reflects, in earnest, what was shared during the virtual talking circle, and was crafted with the intention of being accessible to broad audiences. This kind of accessibility necessitates an approach that minimises jargon, and also situates the information shared within the knowledges and experiences of participants, rather than anchoring the paper exclusively within the published literature (although connections to the literature are established where appropriate, with open access resources noted in the references section). The following sections demonstrate collective knowledges and experiences in bridging knowledge systems between Indigenous and non-Indigenous communities and groups on what is now known as North America, informed by the lived experiences of the Indigenous and non-Indigenous co-authors, while being guided by the talking circle participants and their respective experiences within the Laurentian Great Lakes context.

Outcomes of the virtual talking circle

We emphasise caution that the outcomes described from this talking circle should not be used as a checklist or a one-size-fits-all solution for navigating the often, challenging landscape of bridging knowledge systems between Indigenous and non-Indigenous partners. Instead, these experiences, opportunities, challenges, and action examples are intended to serve as ideas or possibilities for initial pathways for co-developing genuine ethical and equitable relationships which need to be adapted or contextualised to appropriately fit a given context or situation. We demonstrate this need for adaptation and context by including additional bullet points at the end of each Example Actions Figure (Figs. 3–7), each ready to be filled with further examples of actions to be taken, if appropriate. The kind of work we describe here requires clear intentions from the outset of relationship building and a high degree of dedication to see the work through to completion and maintain relationships in the long-term. It is work that is therefore not for every-one, given competing interests to adhere to strict timelines, or to answer only to one's own or institutional or organisational agenda. However, the outcomes of the circle still bear relevance for those who do not work directly within the space of co-learning and knowledge co-generation. The outcomes of the talking circle are elaborated upon in the following sections, titled according to the major themes that arose from participants: *appreciating Indigenous knowledge systems*, *understanding colonial histories and realities*, *respecting the histories and identities of Indigenous communities*, *building and valuing good relationships*, and *committing to mutual benefit*.

We all exist at a time when 'truth and reconciliation' and 'Indigenous Knowledge in federal decision making' are of global interest, when relationships between Indigenous and non-Indigenous people are shifting. We all share in a collective responsibility to uphold the rights defined by UNDRIP as well as the commitments made through the TRC and related mass movements, culminating in calls for justice such as those framed in "Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls" (MMIWG, 2019). Now in 2022, the United Nations Decade for Indigenous Languages (2022–2032) is implemented as a global commitment for actions that promote Indigenous Languages which often is a direct reflection of Indigenous knowledges (Noodin, 2019).

> "We move mountains by first moving ourselves, and the way we educate makes all the difference in the world. The choice is ours. We make the difference. It is we who decide to live, or not to live, our visions. We are the creators of the world and the realities that we live in. We are the ones who must choose the path of our own learning."
>
> [Gregory Cajete (1994)]

Appreciating Indigenous knowledge systems

Critical to being able to bridge knowledge systems is an appreciation for Indigenous knowledge systems in all their plurality. Each unique Indigenous Nation and Tribe has their own knowledge system, so it is crucial to recognize that fact and actively avoid falling into the common fallacy of pan-Indigeneity. Central to this is challenging the misconception that all Indigenous Peoples of a region, large or small, hold the same beliefs and experiences. By listening deeply and carefully in the context of specific Indigenous partnerships, we can avoid making assumptions or setting expectations based on experiences or understandings from

Examples of actions to appreciate Indigenous knowledge systems:

- Engage and involve knowledge holders in your work when appropriate
  - Apply culturally appropriate protocols to request the support of Indigenous knowledge holders, e.g., offer a gift, such as sweet grass or tobacco, if appropriate and depending on the community and situation
  - When rights holders are not participating, find out why; there may be a relationship conflict with the other group(s) at the table
- Learn about cultural values and sacred relationships to land and water
  - Create safe and welcoming spaces and events that acknowledge and respectfully consider different knowledge systems; this can enable learning about Nation-specific or tribe-specific concerns and identities
  - Participate in sharing of cultural practises (e.g., exchange of food and music; attending events as invited) and spend time on the land and water together to develop experiential and personal relationships, not only professional relationships
  - Apply cultural humility (carrying an attitude of open and humble engagement)
  - Ask for permission and actively listen to the response
- Expand or adjust expectations of timing and budget
  - Be flexible with timelines
  - Commit funding to establish long-term processes of engagement that allow for adaptive management and re-framing
- Recognize and award (literally) leadership that comes in many forms
  - Confer awards and honoraria appropriate to the level of work
  - Support intergenerational exchange and learning between elders and youth
- Untrain or retrain to change the way we think
  - Train, recruit, and hire Indigenous youth in natural resources fields
  - Develop programming that speaks to Indigenous Peoples in urbanised areas
  - Bridge knowledge in school curricula with land-based teachings and field trips in early education
- Begin by framing the issue collectively
  - Engage Indigenous communities and groups early to generate research questions of mutual interest
  - If a project is currently underway, consider ways to revise your work to adapt to community needs
- Present information in a way that is accessible to the whole community
  - Identify how data and results can be presented in ways that are familiar and desirable to the community
  - Present findings in plain language or in the language of the audience where possible and desirable
- _____
- _____
- _____

Fig. 3. Example Action Figures are presented at the end of each thematic section of this paper to demonstrate what expressions of embodying these values could look like. As noted previously, these concepts are not an exhaustive list, nor are they to be treated as one-size-fits-all solutions—instead, they must be considered within the specifics of a given context and carefully adopted and adapted to meet associated needs. This Example Action Figure relates to the theme of appreciating knowledge systems. At the end of this Figure are blank spaces intended for use by the reader to consider for themselves what important actions they might take up in the spirit of appreciating knowledge systems.

an altogether distinct context or setting. The examples from Fig. 3 reflect the following section on appreciating Indigenous knowledge systems.

Sharing knowledge and working from different knowledge systems can be beneficial for all involved, but there are both barriers and risks that come alongside knowledge bridging (Huntington, 2000). For instance, there is often resistance to accepting Indigenous knowledge as reliable or valid in Western societies (Gratani et al., 2011). Because Indigenous knowledge may not always be written or depicted graphically (though sometimes it may be), it has largely been excluded from what Western science considers to be its currency: peer-reviewed journal articles. Often, Indigenous knowledge is carried down orally between generations in carefully maintained systems of storytelling and *trans*-generational teachings, and in this way, knowledge is less so a commodity or something to consume, but an entity unto itself which must be protected and respected by all who have the responsibility of knowing it (Berkes, 2018).

The co-authors have noticed within their work, recently, that there is much discussion about "braiding together" or "weaving" or "integrating" Western knowledge and traditional ecological knowledge (TEK) or Indigenous knowledge, more broadly. Despite good intentions, in practice it can be very difficult or impossible to "braid" knowledge systems together. Some knowledge systems may run parallel to each other in certain circumstances, but some knowledge systems may conflict dramatically with each other in others. In those cases, knowledge cannot be "braided" together. Perhaps another term used often in these situations more accurately describes this work: *bridging* (Alexander et al., 2019; Rathwell et al., 2015). When knowledge systems come together, and are each valid in their own right, whether or not they are in alignment or agreement, a bridge between them may be created for the purposes of understanding each other, communicating, and allowing both to co-exist.

Western academic training often runs counter to appreciating Indigenous knowledge systems, as the pursuit of knowledge is often the goal, regardless of the purpose for acquiring that knowledge (Kovach, 2021; Smith, 2021; Whyte et al., 2017; Wilson, 2008). Many Indigenous knowledge systems centre the purpose for receiving knowledge as a critical reason for the learning. Western academic institutions are also fundamentally organised in ways that segregate knowledge, such as separate colleges or departments. While a siloed organisational structure has some benefits, allowing specialised expertise to flourish, it exists in stark contrast to the understanding common to many Indigenous knowledge systems in that nothing exists in isolation or that everything is connected (Atleo, 2007). Indigenous conceptualizations can aid in knowledge bridging, where we can learn from the Mi'kmaw teaching of *Etuaptmumk* (Two-Eyed Seeing), for instance, or draw inspiration from the *Kaswentha* (Two-Row Wampum (McGregor, 2002)) Tawagonshi Treaty between the Five Nations of the Haudenosaunee and Dutch settlers (Reid et al., 2021).

The fundamental differences in understanding between Indigenous and non-Indigenous people contribute to the difficulty in communicating across Western science and Indigenous knowledge paradigms. Further, a juxtaposition between the processes and priorities frequently prevails. For instance, talking circle participants shared that Western science and funding and research timelines are often not conducive to long-term relationship building and working between knowledge systems. Obtaining permission from communities, caretakers of lands, and elders along with institutional and organisational requirements takes additional time (see KP Whyte, Sciences of Consent, 2020), often longer than what is anticipated when planning project deliverables. Yet, permission is an essential first step when working with Indigenous Peoples and communities. For Indigenous academics specifically, selling a project from the institution as a good idea to Indigenous communities and groups, on top of already feeling pressured to act as a mediator between Western science and Indigenous Peoples can feel like a burden. Mounting evidence points to Indigenous scholars carrying much of the burden of Indigenizing the academy, and bearing the majority of the responsibility for creating university–community bridges (Federation of the Humanities and Social Sciences, 2021). Understanding these additional pressures experienced by Indigenous scholars and professionals is critical to working more equitably together.

Talking circle participants noted that many stressors and challenges arise when a project begins between an Indigenous organisation and Western institution, for instance, when deciding on hiring contractors for a project. Timelines required by Western funding protocols are not always complementary to the work that must be undertaken when deciding together with Indigenous partners who to hire for a project. These working relationships are frequently beholden to funding protocols that contribute to the unique stresses associated with collaborative research. Obtaining funding is often also laborious, and it is expended rapidly when working in what are considered "remote" settings where travel and associated costs are often heightened. Most funding review boards are not adequately equipped or trained for reviewing proposals that employ Indigenous methodologies or respect Indigenous data sovereignty (e.g., the First Nations principles of ownership, control, access, and possession: OCAP® (First Nations Information Governance Centre, 2022)). However, when funding is obtained, it is important to recognize the privilege that comes with being an academic or professional with available funding in a working relationship. Most academics and professionals are paid to do their work; so, when they partner with Indigenous communities and groups, it is critical that they adequately and equitably budget for community participation.

While many Indigenous communities are remote, talking circle participants noted that urbanised Indigenous communities and groups need to be included in collaborative projects as well. Indigenous individuals may not live in their community for many reasons, some of which are directly related to a legacy of centuries of colonialism and policies created to disenfranchise Indigenous Peoples. Urbanised Indigenous Peoples and groups often face unique challenges; however, their experiences create opportunities that would allow for more diverse input on novel collaborative projects that can then better reflect the lived experiences of one of the fastest growing populations in Canada (Indigenous Services Canada, 2020).

Again, looking at Western academic institutions, participants shared that many barriers prevent equitable power dynamics between Indigenous faculty, staff, and students and the institutions themselves. University instructors, for example, must often have PhD degrees and extensive CVs (curriculum vitaes) to be hired, or even considered for a position, at an academic institution. Outdated Western standards prevent many Indigenous experts from sharing knowledge gained through years of experience, simply because they do not hold a PhD. Indigenous knowledge holders and Indigenous community and group representatives also often cannot sit on graduate committees in most academic institutions, which fails to recognize their knowledge and potential contributions as valid (Braith et al., 2020). Indigenous Peoples need to have equity in representation and decision-making on all aspects of research. Indigenous representation in research can be facilitated by the strategic hiring of Indigenous scholars and staff in universities who can speak to more varied experiences in a multitude of disciplines. Institutions recruiting Indigenous students into academic programs need to be prepared to offer them the cultural, financial, and academic supports they need to thrive in their stud-

ies. Accommodating needs of Indigenous students includes changing the framework of teaching to be more inclusive of multiple knowledge systems, and not expecting Indigenous students to assume the role of a teacher in the classroom setting, i.e., there to speak on all things Indigenous (Indspire, 2018). Some suggestions by participants included bridging knowledges in school curricula with land-based teachings and field trips in early education. In this way, Indigenous students can participate in lessons rather than teach lessons.

Within Western academia, the legacy of harmful histories with Indigenous Peoples needs to be addressed honestly and openly (Blair, 2015; Smith, 2021). This history is not purely an artefact of the past; the academy continues to benefit from many facets of past decisions and actions. For equitable relationships to exist between Indigenous Peoples and Western academia, histories and realities need to be laid bare and acknowledged truthfully.

Understanding colonial histories and realities

Understanding colonial histories and realities is necessary in work centred around bridging knowledge systems. This gap in understanding presents a learning opportunity for those involved, namely settlers, to reach a new level of appreciation and awareness of their identities and the lands upon which they reside and work. While this awareness is both beneficial and needed, there are challenges to reaching an understanding of these histories and realities, namely due to a lack of trust between Indigenous and settler communities and a legacy of harmful relationships between them.

Lack of trust is pervasive where Western society and Indigenous communities and groups intersect, requiring uncomfortable conversations to be had in order to reach understandings between Indigenous and non-Indigenous groups (or even within those groups) talking circle participants shared. Initiating this process can be difficult with new communities and partners, where a relationship or understanding of one another does not yet exist. Relationships between Indigenous and non-Indigenous partners have, and continue to, set a negative precedent, further propagating mistrust. Indigenous Peoples, knowledges, Nations, and Tribes have historically been used as a means to an end, especially in research. Indigenous Peoples often were (and are) given false promises and misled by researchers in order for the researchers to pursue their hypotheses and studies, regardless of the associated ethical considerations (Dalton, 2002; Wiwchar, 2013).

Non-Indigenous people may also feel uncomfortable in approaching communities and building relationships, due to the overwhelming nature of colonial histories and realities. Relationship building is complicated by a lack of spaces where knowledge systems can be shared and different knowledges exchanged, and where (un)learning can occur. Here, cultural humility is key (Greene-Moton and Minkler, 2019). A lack of Indigenous representation in such spaces also hinders this process by creating an environment in which Indigenous individuals are uncomfortable speaking up, as described by many talking circle participants. Creating positive, representative spaces in which difficult conversations can be had on colonial histories and realities is therefore important to building the trust and good relationships required to bridge knowledge systems. These spaces are required to overcome misconceptions, for instance, those over treaty rights or the difference between moderate livelihood and commercial enterprise. Fig. 4 further elaborates on examples to aid in understanding colonial histories and realities.

A legacy of mistrust extends to state and provincial governments as well, talking circle participants noted. For instance, Canada operates under a legal framework of "duty to consult," which can feel transactional to Indigenous communities and groups as they are often only engaged to fulfil a legal requirement. This legal requirement translates into engagement late in the planning process where Indigenous communities have little input to the project and meaningful discussion cannot occur. Implementing *Etuaptmumk* through co-developing plans with Indigenous communities and groups from the inception of the planning process, and inviting communities to help define issues can instead be a tool for building trust and moving beyond mere consultation into an equal partnership (Almack et al., this issue). Here, we emphasise the TRC's Call to Action 57:

> "We call upon federal, provincial, territorial, and municipal governments to provide education to public servants on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal–Crown relations. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism." TRC (2015)

Going beyond duty to consult toward co-developing projects represents a philosophical and practical shift from transaction-based research to values-based research. Research ethics boards exist to guide institutions through these kinds of relationships and protocols when working with Indigenous communities and groups. However, many colonial institutions still heavily assess research and projects based on their transactional value (i.e., material outputs over process). Relationship building is not often considered a valuable outcome of research. University ethics boards need to be ready to re-write their policies in order to accommodate Indigenous communities' requests (particularly around the conservation of data) and Indigenous data sovereignty. Research boards need to learn and implement established principles of data ownership and sovereignty (e.g., OCAP®) and how that may differ from other projects involving non-Indigenous communities. Partners in bridging knowledge systems within provincial, federal, and transboundary agencies must come together to understand colonial histories and realities, build trust, and implement this knowledge in their work.

Respecting the histories and identities of Indigenous communities

Participants stressed the importance of recognizing the inherent sovereignty of Indigenous Peoples to start any equitable relationship with Indigenous partners. This recognition, however, is often prevented by a pervasive lack of understanding and awareness on the part of settler populations of reconciliation, past and present traumas experienced by Indigenous Peoples, and Nation-specific or Tribe-specific histories and identities. Every-one shares a responsibility to understand and learn about Indigenous histories and realities, and the latter must be achieved in ways that minimise additional burden and emotional labour on the part of Indigenous Peoples. Many resources exist that were created by Indigenous Peoples throughout (what is now commonly known as) North America which can help in this endeavour (e.g., Indspire reports https://indspire.ca/about/reports/; MMIWG reports; TRC reports). Indigenous rights must be understood quite fundamentally as human rights, and the articles and calls to action outlined by UNDRIP, MMIWG, and TRC serve as the baseline for where we need to be *now*, rather than aspirational goals to work towards over generational timescales.

It is crucial, as noted earlier, to be responsive to local contexts as each Nation and Tribe is unique in their experiences, histories, treaties, and protocols. Within the Laurentian Great Lakes basin, numerous treaties (e.g. Robinson-Huron, 1850; Robinson-Superior, 1850; Treaty of La Pointe, 1842 & 1854, Treaty of St.

Examples of actions to understand colonial histories and realities:

- Learn, acknowledge, and be respectful toward Indigenous perspectives and histories
  - Connect with Indigenous Peoples of different backgrounds and experiences
    - Memorial University of Newfoundland has a great resource that is kept up-to-date on their website that can help direct actions related to this point: https://www.mun.ca/research/Indigenous/faq.php
  - Understand whose land you are situated upon before starting work
  - Be humble; cultivate cultural humility
- Do what you can to allow for better coordination between municipal, state, and federal government agencies, and Indigenous communities and groups
  - Be less administrative
- Do not commodify TEK as a way to "check a box" in regards to legal duty to consult obligations when conducting projects on Indigenous territories
  - Go beyond duty to consult obligations by engaging early with Indigenous Nations and tribes, ensuring equal decision-making power, and respectfully bridging TEK into all aspects of a project, where appropriate
- Understand that Western science is based on reductionism and objectivism which has led to an understanding of the world that is different from Indigenous knowledge systems (knowledge through action: reflective, land-based, holistic)
- Include more than one Indigenous partner or representative in a project to prevent them from feeling tokenized and uncomfortable when speaking out
- Be aware of data sovereignty
  - Recognize the sovereignty, inherent rights, and protocols of partner communities
  - Obtain training in principles of ownership, control, access, and possession–such as as OCAP® (https://fnigc.ca/ocap-training/) to understand what can be shared and with whom
- _____
- _____
- _____

Fig. 4. This Example Action Figure demonstrates what understanding colonial histories and realities could look like. This figure is not an exhaustive list, and must be considered within the specifics of a given context and carefully adopted and adapted to meet associated needs. At the end of this Figure are blank spaces intended for use by the reader to consider for themselves what important actions they might take up in the spirit of understanding colonial histories and realities.

Peters, 1837; Treaty of Washington, 1836; Upper Canada Treaties, 1781–1862; and Williams Treaties, 1923, see references) exist and it is important to understand their historic and contemporary implications (e.g. 2000 Great Lakes Consent Decree).To rebuild lost trust in local contexts, we all need to ensure adequate time for a project to be done well, as determined by the partnering Indigenous community or group. In many Indigenous communities and contexts, the high turnover of researchers, contractors, and workers creates a widespread perception that all who arrive and are not internal to the community will also "parachute" or "helicopter" in and also leave without notice or accountability, talking circle participants noted. We must all work collaboratively to break this harmful cycle and help communities (if they expressly ask for help) to overcome capacity and resource issues that they may be experiencing. Shaw et al. (this issue) describes an example of a collaborative local project that bridges knowledge systems between Indigenous and non-Indigenous partners (Shaw et al., 2022); they highlight historical and current cycles of harm, support by invitation, increasing capacity, and sharing knowledge in co-produced resources. Understanding these histories and ongoing patterns are crucial to changing our courses of action now to do our work in an honourable and respectful way. We provide examples in Fig. 5 for actions that can help in respecting the histories and identities of Indigenous communities.

Building and valuing good relationships

The fact that relationship-building takes a lot of time and dedication to do well was a sentiment widely shared and repeated by both Indigenous and non-Indigenous talking circle participants. Taking the appropriate time, and moving at the pace set by community partners, must therefore form the foundation of all projects positioned towards co-learning. Non-Indigenous partners should also take time to do their own learning and reflection so as not to place that burden on Indigenous partners. As noted above, Indigenous communities or community members and other groups must be equal partners with non-Indigenous organisations and institutions also engaged in a project. Equal partnership, in this context, means engaging in dialogues to steer projects from their outset to their close, recognizing that in many instances, these

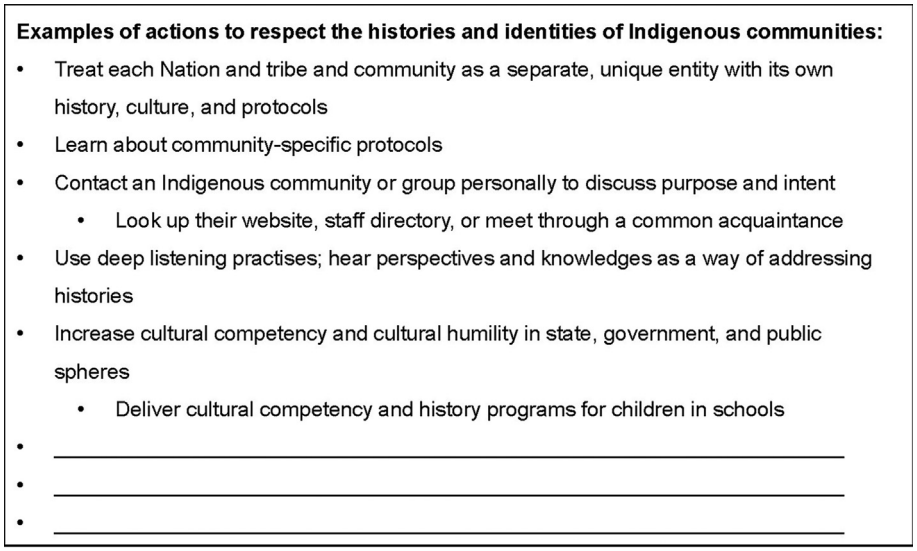

Fig. 5. This Example Action Figure demonstrates what respecting the histories and identities of Indigenous communities could look like. This figure is not an exhaustive list, and must be considered within the specifics of a given context and carefully adopted and adapted to meet associated needs. At the end of this Figure are blank spaces intended for use by the reader to consider for themselves what important actions they might take up in the spirit of respecting the histories and identities of Indigenous communities.

relationships require sustained and long-term commitments, which do not have a specified end time in sight. Instead, projects may be cyclic, starting from a place of mutual research interest, jointly identifying the research tools required, co-developing the research process, co-evaluating outcomes and ensuring community validation is part of the results interpretation process, and sharing the recognition and benefits that emerge from any given project (Reid et al., 2021). In these ways, strong and long-term relationships figure centrally into the entire research process. Fig. 6 outlines examples for how to build and value good relationships in this way.

Though we stress that engagement needs to start early in project planning (preferably at the outset), the mechanisms for reaching out to communities are not always apparent or obvious. The Talking Circle participants noted that many non-Indigenous people are concerned with appearing or being disrespectful by saying or doing the wrong thing in front of Indigenous partners. Here, we stress the importance of being honest, humble, and suspending judgement. Admitting to not knowing, questioning, and keeping an open mind are great first steps in the learning process. As Indigenous communities and groups are each unique and hold specific knowledge systems and protocols relevant to themselves, the way to reach out to one Indigenous community or group is not going to be applicable to all. Once a community member has been identified as a contact person or partner for a project, asking them for guidance on how to appropriately begin the process of working together in a way that will build and maintain a good relationship is often a great place to start. Alternatively, there are many communities that already have great relationships with researchers, academic institutions, and other government institutions; new scientists who would like to work with communities could approach those who are already trusted by the community to seek advice on how to begin building a relationship with a community.

Consent for one project or initiative cannot be assumed consent for all projects or initiatives. Some communities may only want to participate minimally in one project, but more collaboratively in another. The level of engagement by a community is often reflective of the importance of a particular issue to that community, and that must be respected. Levels of participation should be discussed early on in the relationship, and consent must be recognized as an ongoing process which could change as conditions evolve. Key to a healthy working relationship is ensuring that an appropriate and desired level of engagement on the part of *every-one* in the relationship is maintained throughout all phases of the project from conception to completion. An added complexity is how well any individual or even an entire decision-making body (e.g., elected Chief and Council) can represent whole community interests, when those very interests may vary person to person and context to context. We therefore suggest that whenever possible and appropriate, partners should try to engage community members from as many disciplines and knowledge bases as possible. Broad participation should be facilitated by holding culturally relevant events such as community information sessions and discussions at hours that accommodate those who work long hours and need childcare, for example. We also suggest offering food and refreshments in these kinds of settings to support willing and enthusiastic participation, and incorporating ceremony where appropriate (Mussett et al., this issue).

An effective tool for dealing with the complexities of consent and engagement, and a space to articulate the nature of the relationship, is in the scope of memoranda of understanding (MOUs) or research protocol agreements. Examples and research guides demonstrate the important questions and items to attend to in these sorts of relationship-guiding documents (e.g., consent processes, data sovereignty concerns, benefit sharing). For instance, the Heiltsuk Integrated Resource Management Department (HIRMD, https://www.hirmd.ca/uploads/9/8/3/9/9839335/hirmd_research_application_newblank.pdf), outlines a research application process that precedes the establishment of any agreements, and includes core questions that help shape the nature and structure of subsequent agreements. Also from the British Columbia Central Coast, the Kitasoo/Xai'xais Stewardship Authority has created a question-centred guide to help natural science researchers looking to partner in First Nations contexts: a document entitled "Informing First Nations Stewardship with Applied Research – Key questions to inform an equitably beneficial and engaged research process" (Kitasoo/Xai'xais Stewardship Authority, 2021). Additionally, Shaw et al. (this issue) contains a comprehensive review and list of resources created by Indigenous Peoples in the last few decades. These guides can help inform the process, but

Examples of actions to build and value good relationships:

- Build and maintain connections to the land and each other
  - Where possible, engage in on-the-land and water experiences as opposed to in-the-boardroom meetings
  - Participate in sharing food and having informal conversations—laughter and humour is valued and helps build relationships
  - Identify peers in the community and work with and via them
- Identify intent from the outset
  - Be honest and upfront with everyone involved in a project, including yourself
  - Take a long-term view rather than a project-focused view
  - Reshape project timelines:
    - Consultation as a foundation, not an afterthought
      - Ask questions from the start – early engagement
    - Community interests, values, and concerns need to be at the fore of the work; recognise spiritual and cultural values as valid
- Have a clear understanding of positionality before engaging in work (early career researcher, ECR, perspective)
  - Focus on respectful dialogue and building good relationships first
- Honestly consider concrete outcomes for community
  - Create a space for elders to share knowledge
  - Create experiential learning opportunities for youth
  - Co-create a toolkit for guiding the way forward
  - Create safe spaces for active participation (especially by Indigenous partners) and safe spaces in communities for accepted external partners
  - Create a neutral setting for developing relationships between institutions/researchers and communities/community members
    - For example, for conferences: in addition to having a poster session about research, have one about opportunities for future projects
- _____
- _____
- _____

Fig. 6. This Example Action Figure demonstrates what building and valuing good relationships could look like. This figure is not an exhaustive list, and must be considered within the specifics of a given context and carefully adopted and adapted to meet associated needs. At the end of this Figure are blank spaces intended for use by the reader to consider for themselves what important actions they might take up in the spirit of building and valuing good relationships.

ultimately an agreement must be co-developed in partnership with an Indigenous community or group to meet their unique needs and protocols.

Relationships with Indigenous Peoples should reflect an opportunity model (also called the Appreciative Inquiry Method; Stowell, 2013) rather than a deficit model. Often, Indigenous Peoples are characterised as being in some form of deficit or another, e.g., lower socioeconomic status, less access to certain services, little funding available for projects, lack of capacity. While these can be true in certain circumstances (and they certainly can be true for non-Indigenous partners as well), if a partnership is based upon solely providing for or "making-up" for Indigenous partners and not for the purpose of sincere collaboration, any ensuing relationship will reflect these saviour attitudes and result in continued inequities. To build trust and excitement for a project, we must all focus on the opportunities which are only available to each other when working together collaboratively and equitably. Talking circle participants suggested that highlighting and leveraging the strengths of each partner is a great place to begin.

Taken together, participants emphasised how trust cannot be established and expected to last throughout a project without care and maintenance, but that bolstering and maintaining trust in a working relationship with Indigenous partners can occur in many ways. Thinking long-term is key: past the project end date, to future projects and partnerships that can be enacted together, as was noted above. Always ask for permission and consent before making decisions, large or small, depending on preferences expressed by the community. Communicating respectfully with each other and being aware of the implications of the language used in such communications are also important practices. Language choices may be steeped in centuries of colonialism and institutionalised racism (e.g., the term 'stakeholder'), and this is felt

often fiercely by Indigenous partners. Involving community members beyond council and board members can be key to engaging a community in a more inclusive and holistic way. Providing opportunities for Indigenous youth and elders to participate in a project in ways that are meaningful to them can lead to projects with intergenerational knowledge and enrich the experiences of every-one involved. Working together on the land can be a positive way of building strong relationships with every-one involved in a project. Even better is spending non-working time together on the land to develop better relationships.

An example of building and valuing good relationships within the Laurentian Great Lakes context is the application of *Etuaptmumk* to invasive sea lamprey (*Petromyzon marinus)* stewardship in the Great Lakes (Nonkes et al., this issue). The Saugeen Ojibway Nation and the Great Lakes Fishery Commission brought Indigenous and non-Indigenous knowledge to undertake a culturally sensitive barrier rehabilitation project on the Saugeen River, Ontario to maintain sea lamprey control in Lake Huron (see Nonkes, 2022).

Committing to mutual benefit

Collaborative work between Indigenous Peoples and non-Indigenous individuals and organisations is a commitment to mutual benefit. This kind of work allows every-one involved to centre land-based relationships and to acknowledge Indigenous Peoples as the original knowledge holders of what is now known as North America, with knowledge sustained and practised intergenerationally since time immemorial. With this thinking core to the work between such parties, community-focused methods naturally flow.

While community-focused work and research can aid in the development of mutual goals such as building capacity, opening lines of communication, and planning for the long-term, it can also be taxing on people working in this space for long periods, talking circle participants shared. Indigenous communities and groups may feel burdened by many incoming and competing requests for collaboration by various individuals and organisations, especially as interest and excitement grows for collaborative work and research with and for Indigenous Peoples. It is therefore critical to be aware of this pressure when reaching out to Indigenous communities and groups for collaboration and consultation. Every community will react in unique ways according to their capacity and goals, further reflecting that this is an on-going learning process for every-one working in this sphere.

When work begins between Indigenous and non-Indigenous partners, and conversations about possible mutual goals take place, there is an opportunity to discuss the ways that outputs of the work may be presented. It is important to note that outputs can take a range of forms, and an academic paper or government report may not be the top or even a desired output from collaborative work. Of course, academic publishing is an expectation for researchers operating within that system; the same can be said for government reports and government workers. Therefore, careful attention needs to go towards how manuscripts are built, who is involved, and how they are involved. Co-authorship of papers should be considered if Indigenous community or group partners are interested and excited to participate in such writing, or if this writing is related to critical elements that underpinned and facilitated the research (Cooke et al., 2021). If academics and government institutions are to pursue meaningful, long-term, mutually beneficial relationships with Indigenous communities and groups, and these communities are accepting of such efforts, the academic and governmental reward systems must be changed to value process, partnerships, trust, and other atypical academic and governmental outputs as valued products. Researchers must be rewarded as opposed to penalised during performance review for such activities.

Information can be presented in many other formats that may be more consistent with the goals of a partnering Indigenous community or group. For instance: podcasts, presentations, and other forms of oral communications may better align with cultures centred around oral histories; art works and performances might better connect with the emotional intellect of audiences; non-academic writing, technical reports, and graphic facilitation can all be effective alternatives for making outputs meaningful for those involved. By creating these other resources, often wider or more appropriate target audiences can be reached. These and further examples for committing to mutual benefit are described in Fig. 7.

Within academia, departments and committees can begin taking steps to build bridges between their institutions and Indigenous Peoples. As examples, they can hire Indigenous professionals and scholars to lead research, teach in the classroom (or outside of it!), and build relationships with community partners. Our team is encouraged by the precedents being set by some institutions and departments creating new positions that do not require a Ph.D. but instead recognize other signifiers of Indigenous expertise (e.g., University of Windsor "Permanence-Track Position, Learning Specialist, Ancillary Academic Staff I in the Field of Indigenous Knowledge Keeper"), or those that have developed entire strategic plans to guide their department in creating the right environment for an Indigenous hire to thrive (e.g., University of British Columbia Institute for the Oceans and Fisheries "UBC IOF Aboriginal Fisheries Research Unit Strategic Plan 2017"). These institutions must likewise broaden considerations around who has the expertise to serve on a graduate advisory committee, or to examine a student's thesis (Braith et al., 2020). Many more avenues for partnering with Indigenous Peoples exist, and many more will appear when collaborative work has begun between Indigenous and non-Indigenous Peoples. These suggestions serve only to inspire institutions to commit to concrete changes for mutual benefit with Indigenous Peoples. Owing to the multi-cultural mosaic of the Great Lakes and the shared respect for our aquatic resources, tremendous opportunities exist to further the vision of bridging knowledge systems through education (See Bardwell and Woller-Skar, this issue).

Closing

Our intent as authors of this article was to act as curators of knowledge and experiences shared during the virtual talking circle held during the "Bridging Knowledge Systems between Indigenous and non-Indigenous communities" session at the 2021 Annual Meeting of the International Association for Great Lakes Research. Through dialogues and exchanges during this circle, we identified core themes, actionable recommendations, and questions worth consideration for those wishing to bridge knowledge systems and engage in co-learning processes involving Indigenous and non-Indigenous partners. We describe herein what appreciating Indigenous knowledge systems, understanding colonial histories and realities, respecting the histories and identities of Indigenous communities, building and valuing good relationships, and committing to mutual benefit look like through our eyes and from our experiences, shared and divergent. We see

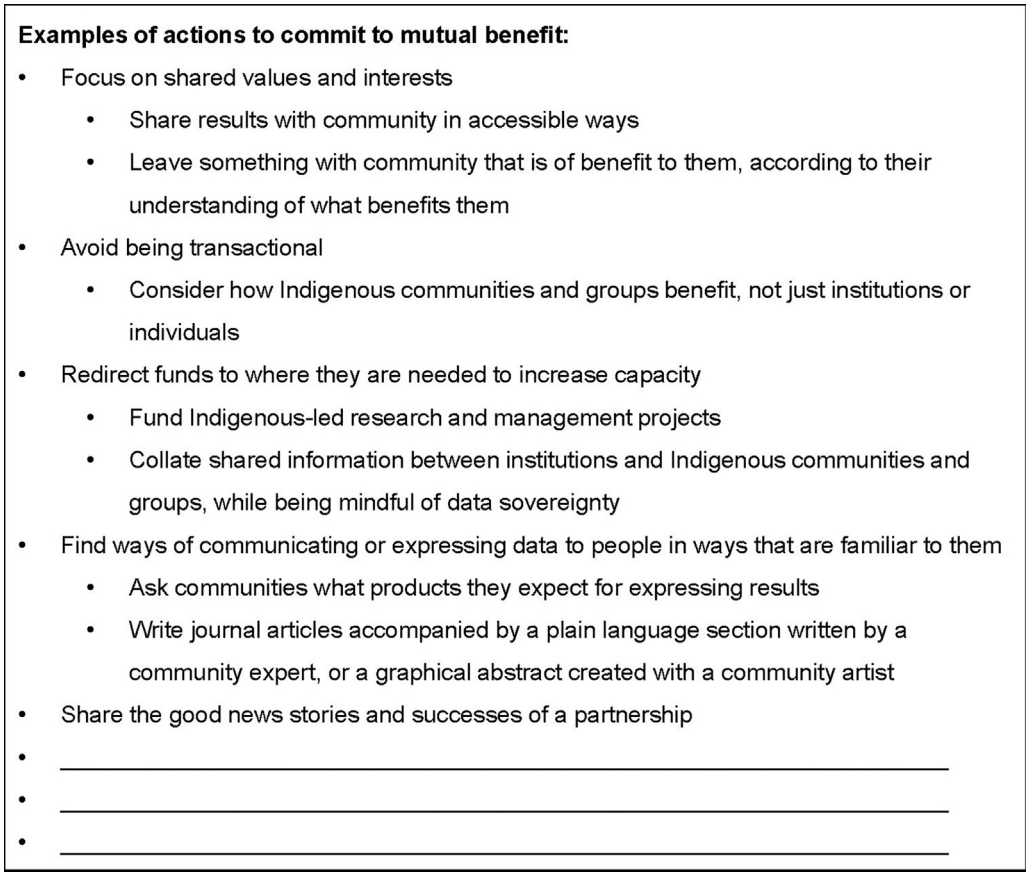

Fig. 7. This Example Action Figure demonstrates what committing to mutual benefit could look like. This figure is not an exhaustive list, and must be considered within the specifics of a given context and carefully adopted and adapted to meet associated needs. At the end of this Figure are blank spaces intended for use by the reader to consider for themselves what important actions they might take up in the spirit of committing to mutual benefit.

through the consideration of examples from throughout the Great Lakes and beyond as positive signs of change and we recognize the need to greatly improve how relationships with Indigenous partners are being conceptualised and realised, recognizing that much work lies ahead before the complete implementation of the recommendations made by UNDRIP, TRC, and MMIWG is no longer aspirational, but a reality.

Implementing the recommendations listed in the sections of this paper requires time, intent, and humility. We recognise that this work is ever-changing and the recommendations we make here may no longer apply throughout the lifetime of a project, with different communities, and with different projects and partnerships. This is where we invite readers to continue the work outlined within this paper (as demonstrated by the empty bullet points in the Example Actions Figures) and to understand that the desired outcome of these recommendations is to guide those who partner with Indigenous Peoples to co-create equitable partnerships for the benefit of every-one involved and to create new standards for work within this sphere.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgement

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