


# Research Ethics in Decolonizing Research With Inuit Communities in Nunavut: The Challenge of Translating Knowledge Into Action

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## Abstract

Research failures are not readily disclosed in research representations. This exclusion is a missed opportunity to practice reflexivity, a practice otherwise crucially important to social science inquiry, and share the learning that was inspired by the failure. In this paper I present and reflect on a research failure that occurred during my doctoral research into alternative, Inuit-centered models of fisheries governance in Nunavut. While working on defining the research, I experienced a far-reaching impasse due to the lack of community response and academic guidance. Eventually, despite the best intentions to engage in decolonizing research, I chose to forgo meaningful community consultation before embarking on my fieldwork. Decolonizing research centers collaboration and local research needs from the outset. At the same time, what it means to negotiate a research relationship is in itself negotiable. Further, the negotiating is often challenged by time constraints, institutional restrictions, and limited financial resources. Lessons learned from my case study include a) that a nonideal start does not mean that the entire research project will fail and b) that participating Indigenous communities have the sovereignty, irrespective of existing protocols, to set the terms under which research can take place. Above all, negotiating a research relationship is about relational work which requires commitment and continuous engagement.

## Keywords

cross-cultural research, decolonizing research, Indigenous research protocols, mutual learning, reflexivity, research ethics, research failure, research relationship, settler ally

## Introduction

Failure is widespread and inevitable. At the same time, there is increased recognition that human fallibility is a rich source for practice-based learning, be it in education, business, working life, health care, sport, society, or biography (Bauer & Harteis, 2012). In education particularly, the shift from avoiding failure to embracing failure as an enabler and stimulus for learning has led to a mistake-friendly teaching and learning culture in the classroom (e.g. Borasi, 1994; Donaldson, 2019; Mathan & Koedinger, 2005; VanLehn, 1988). Despite the fact that research on failure as a motivator is still limited (Bauer & Harteis, 2012), everyone from kindergarten students and graduate students to employees and employers is urged to overcome setbacks with resistance, persistence, perseverance, dedication, and passion. We are encouraged to discuss our failures in the context of how we overcame them and what we learned from

them, be it in scholarship applications or job interviews. Yet not in our academic research.

Drucker (1959), describing the societal changes in the previous two decades, coined the term “knowledge work” to describe work that is based on knowledge rather than skills. Knowledge work involves more creativity, messiness, and complexity than manufacturing work and is thus highly susceptible to failure. Clark and Sousa (2018) deemed academic work to be “extreme knowledge work” and thus extremely prone to failure. In other words, research failure is a daily certainty.

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Indeed, conversations among researchers often revolve around personal and professional failings; however, these failures are ignored in researchers' sterilized papers, presentations, and speaker biographies (Sousa & Clark, 2019). While reflexivity is crucial for our social science research, we do not apply the same thoroughness and deliberations to our research failures, and even less so to sharing the failings (Sousa & Clark, 2019). Having recently been in a phase of intense reflexivity about deficiencies of my fieldwork, I accept Sousa and Clark's (2019) challenge to rectify the curious coupling of ubiquity and invisibility of research failures, that is, to follow their call for papers for this special issue. At the same time I am answering a similar call by Morton Ninomiya and Pollock (2017) to discuss unforeseen challenges for both researchers and Indigenous communities in operationalizing ethical research principles.

I present and reflect on a research failure that occurred during my doctoral research into knowledge systems and wildlife management systems in Nunavut. The Inuit knowledge system is known as Inuit Qaujimagatuqangit (IQ) or simply Inuit Knowledge (IK), as IQ roughly translates to "what Inuit have always known." Since 1993, Nunavut wildlife management has been under a co-management regime in which government appointees and resource user representatives share in the decision making. My research explores the role of Inuit Knowledge in Nunavut fisheries co-management and its implications for the design of an alternative, Inuit-centered model of fisheries governance. While working on defining the research and preparing for my fieldwork, I experienced a far-reaching impasse. The dilemma manifested as follows: While I tried to adhere to decolonizing research principles, particularly with regard to collaboratively negotiating the research process with the Inuit research partners, I found myself troubled with the lack of response from Inuit rightsholders in the communities where I wanted to do research as well as the lack of guidance and support from academic mentors. Once I had obtained ethics approval for my proposed research, the pressure to commence the field research mounted and I eventually embarked on my fieldwork without meaningful consultations with the communities. However, the lack of communication on the part of the community representatives never meant they were opposed to my research or did not care about it. Once I was physically present in the communities, the collaboration and relationship building with community members was fruitful and lasting.

## Background and Positionality

My doctoral research was part of a larger project examining and evaluating the relative incorporation, influence, and effectiveness of Western and distinct Indigenous knowledge systems in Canadian fisheries management decision making. Fisheries—Western and Indigenous Knowledge Systems (Fish-WIKS) was a 7-year partnership research program that aimed at examining how knowledge systems influence fisheries governance at multiple levels and understanding how distinct Indigenous knowledge systems can improve the current

fisheries management approaches given the complexities of ecosystems. Engaged in collaborations and research in four coastal regions of Canada, namely Atlantic, Pacific, Arctic, and inland, Fish-WIKS' overall goal was to improve the sustainability of Canadian fisheries through meaningful partnerships between academia and Indigenous organizations. My research took place in the Arctic region, specifically in Nunavut, where I focused on the territory's fisheries co-management and collaborated with the Fisheries and Sealing Division of the Nunavut Department of Environment.

I am a white settler living and working in the unceded ancestral territory of the Mi'kmaq. I am a geographer, teacher, marine biologist, and most recently marine manager with a long-standing interest in the Arctic, its peoples, and their cultures as well as social justice and cultural sustainability. My current research as part of a PhD degree in the Interdisciplinary PhD Program at Dalhousie University combines these interests with concerns about culturally relevant and community-based resource management. I explored the relationships between Inuit and Western knowledge and management systems in Nunavut fisheries governance, specifically through a rights-based lens. The data gathering took place in three Nunavut communities, namely Nauyasat (Repulse Bay), Pond Inlet (Mittimatalik), and Igloodik (Iglulik), where I interviewed Elders and harvesters about their traditional fishing and hunting practices, the introduction of the quota system, subsistence harvesting versus commercial fishing, the hunters' role in today's fisheries management decision making following the signing of the Nunavut Land Claims Agreement, and their visions for the future of Nunavut and its fisheries management.

While I had always been very excited about this research, particularly due to its social justice aspects and the collaboration with Inuit, these facets also frightened me. It was and continues to be an honor and a privilege to work alongside the Indigenous inhabitants of what is commonly known as the eastern Canadian Arctic. It comes with a lot of responsibility and the fear of not living up to the hopes and expectations inherent in the decolonization and reconciliation projects.

## Decolonizing Research With and in Inuit Communities

Decolonization is about a redistribution of land, resources, sovereignty, and self-determination; thus, it is a challenging and unsettling endeavor that necessarily requires novel approaches and frameworks (Tuck & Yang, 2012). It is an all-encompassing effort to create a new social order and, as such, necessitates the collaboration of the colonizer and the colonized (Beaman-Cadwallader et al., 2011). An important aspect of the decolonization project is a decolonizing approach to research. Rooted in a Eurocentric worldview, both academia and Western scientific research have a history of oppressing non-Western knowledge systems (Battiste, 2000; Chilisa, 2012; Kovach, 2009; Sefa Dei, 2000; Smith, 2012; Wilson, 2008). To decolonize research involves a liberatory process of repositioning research so that it honors and centers the

concerns, worldviews, and knowledge systems of Indigenous peoples, thereby asserting their land, rights, and sovereignty (Chilisa, 2012; Denzin et al., 2008; Smith, 2012). Expressed in the context of decolonizing education for Indigenous students at institutions of higher education, the 4 Rs—respect, relevance, reciprocity, and responsibility—put forward by Kirkness and Barnhardt (1991) are equally applicable for decolonizing research (Castleden et al., 2012). Applying the 4 Rs to research with Indigenous peoples translates into respecting them for who they are, engaging in inquiries that are relevant to their perspectives and experience, fostering reciprocal, trust-based relationships, and empowering Indigenous communities and organizations to participate in research on their terms (Kirkness & Barnhardt, 1991). An additional R—relationality—is a concept not easily translated into Western approaches to research. It is, however, a key element of research framed as decolonizing (cf. Gerlach, 2018). Indigenous knowledge is highly relational; hence, Indigenous research paradigms and methodologies are rooted in relationality (Chilisa, 2012; Wilson, 2008). While respect, relationships, and reciprocity are undoubtedly crucial cornerstones of any engagement with Indigenous peoples, they can only be guiding principles in shaping the research process. Decolonizing research is not a set of prescribed steps to take but a complex and non-linear endeavor that will not necessarily be successful (Mutua & Swadener, 2004). How Indigenous research and research with Indigenous partners is (co-)designed and implemented is continually evolving and manifests differently for distinct Indigenous knowledge systems and in particular geographical contexts (Beeman-Cadwallader et al., 2011; de Leeuw et al., 2012; McGregor et al., 2018; Morton Ninomiya and Pollock, 2017). Yet regardless of local differences in definition and form, engaging in decolonizing research needs to center Indigenous peoples, their ways of knowing, their sovereignty, and their land. Only then can such research have a sustained positive and political impact on the Indigenous community and its individuals (Beeman-Cadwallader et al., 2011; Datta, 2017).

Anyone planning on conducting field research in Nunavut must be authorized to do so by the Nunavut Research Institute (NRI) in accordance with Nunavut's *Scientists Act* (Nunavut Research Institute, 2015). This authorization is to ensure that the proposed work is ethically sound and acceptable to the communities involved. Such approvals, along with a review from the relevant university's research ethics board, are necessary safeguards. Historically, Indigenous peoples know science, education, and research as a form of violence, forcibly assimilating them into the society of the colonizer who named and claimed not only their land, but their community members, their knowledge, and their culture (Coburn et al., 2013; Smith, 2012). Yet with suppression comes resistance, and in the wake of the human rights movement, many Indigenous peoples began asserting their knowledge and ways of knowing; their research goals and methodologies; their emotional, physical, mental, and spiritual wellbeing—all aspects that were grossly disregarded during colonial research geared solely to assimilating Indigenous peoples.

Today, there is no shortage of guidelines on how to conduct research with Indigenous communities in a respectful and culturally safe manner. The main concerns include community consultations at all stages of research, to seek and obtain informed consent before conducting research involving living people, and to respect and recognize the local knowledge. In the Canadian context, examples of ethical guidelines include the OCAP<sup>®</sup> principles<sup>1</sup> that established how to deal with First Nations data regarding ownership, control, access, and possession (First Nations Information Governance Centre, 2014) and the human research ethics policy (specifically Chapter 9 on research involving Indigenous peoples) of the three federal research granting agencies which is relevant for all institutional researchers (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council, 2018). Most guidelines, however, focus on a specific people, nation, or community (e.g. Mi'kmaw Ethics Watch, n.d.; Nuu-chah-nulth Tribal Council Research Ethics Committee, 2008). This focus on the local, as opposed to attempting a pan-Indigenous approach, stems from the fact that Indigenous knowledge, and with it Indigenous research, is rooted in the local and thus highly place-based and context-specific (e.g. Battiste, 2000; Sefa Dei et al., 2000).

For research in Inuit Nunangat, the Inuit homelands in what is now called Canada, a guide<sup>2</sup> compiled by the national Inuit organization Inuit Tapiriit Kanatami (ITK) and the Nunavut Research Institute (NRI) provides practical advice for researchers working in and with Inuit communities (ITK & NRI, 2006). According to this researcher guide, central aspects voiced by the communities include understanding their concerns and expectations, particularly regarding consultations, local involvement, compensation, and the generalization/decontextualization of local knowledge. Addressing data storage and ownership issues, ensuring the research is relevant and beneficial to the local community, and returning the results to the research partners are also of high importance to communities. It is further crucially important to start research from a foundation built on trusting relationships, mutual accountability, and meaningful outcomes (de Leeuw et al., 2012; Morton Ninomiya & Pollock, 2017; Wilson, 2008).

### **Failing to Collaboratively Conceptualize a Community-Driven Research Project**

Before planning my research and engaging in my fieldwork, I had familiarized myself with the above mentioned guidelines and standards, specifically the Tri-Council Policy Statement and the researcher guide on negotiating research relationships with Inuit communities. Further, I had read extensively on how to conduct research with and among Indigenous peoples, both from an academic as well as from an Indigenous/community point of view. I had also grappled with the history and the consequences of Indigenous research as part of the colonial project (cf. Smith, 2012). Subsequently, I had every intention

to engage in decolonizing research that is culturally safe, community based, and Inuit-led from the start of my PhD.

As requested by Inuit research partners (ITK & NRI, 2006), I contacted the communities—through the local Hunters and Trappers Organizations (HTOs)—regarding my Fish-WIKS research well in advance of potential start dates. I introduced the Fish-WIKS project, proposed a few research ideas, and invited their input and collaboration on the development of the research. While the concept of the overall Fish-WIKS proposal was originally conceived by Canadian Indigenous organizations who then involved academic actors, my specific research project as part of Fish-WIKS was not initiated by the communities with which I collaborated. Unfortunately, it is still the norm that research based in Indigenous communities is researcher-initiated (Castleden et al., 2012).

However, I had the opportunity to spend time in one of the communities prior to engaging in field work, namely in Naujaat which is a partner community in the Fish-WIKS project. The fact that they had hosted a Fish-WIKS master's student the year before aided in building rapport as various relationships between the research project and community members had already been established. Building relationships and trust in the other two communities was more demanding. The biggest challenge was initiating and maintaining a dialogue without being physically present in the community. Emails were not answered, phone calls not returned. When I did get through to someone, the HTO contacts were either out of town, out of office, or had moved on to a new position. I wondered to myself, how long do you wait? How long are you required to wait? Or in other words, what takes precedence, the obligation of the researcher to apply research principles in their intended way or the obligation of the Indigenous community to assert their rights and invest resources into holding researchers and their institutions accountable (Morton Ninomiya & Pollock, 2017)?

After delaying the start date of my field work twice in order to have more time to initiate the consultations, I eventually forwent trying to stimulate communication with the communities. I contented myself with the fact that they had not opposed my proposed research during the ethics review conducted by the Nunavut Research Institute. That meant, however, that I had failed to involve the communities in formulating the research questions and designing the study.

Without input from the involved communities, I was unable to collaboratively identify local research needs to center my doctoral research. A common reservation among Inuit about Western research is concerned with the types of questions asked and the methodologies proposed by scientists, as Inuit often perceive Western studies as unnecessary and irrelevant, not providing knowledge beyond what Inuit already know (ITK & NRI, 2006). I developed the research questions in collaboration with my PhD advisory committee and without community input. As such, it was unclear if my research reflected a community-based research need.

More consultations may have ensured that the research questions were truly based on community interests and needs.

This is a crucial aspect of engaging in research with Indigenous peoples from a decolonizing point of view, as “[t]here will be no reconciliation without total inclusion” (Chiefs of Ontario, 2016). What the Chiefs of Ontario expressed regarding the participation of Indigenous leadership at a First Ministers’ Meeting is equally applicable to full inclusion in every stage of a research project. This ethical practice is paramount to ensure the research is relevant and beneficial. Breaking the cycle of approaching research in a top-down, paternalistic, and colonial way will allow it to become an empowering endeavor that fosters healing and reconciliation (McGregor et al., 2018).

### **The Bigger Picture of My Research Failure**

The list of requirements that researchers who are working with and in Inuit communities need to address is long and growing. There is also a recognition that not all concerns and expectations voiced by the communities are relevant to each and every research project (ITK & NRI, 2006). So what it means to negotiate a research relationship with Inuit communities is in itself negotiable. While daunting, engaging in a negotiation process benefits the entire research project. By addressing concerns and expectations in a collaborative way, the researcher and the community can make sure that the research being planned is relevant to the Indigenous partners and undertaken in a responsible and reciprocal way (ITK & NRI, 2006).

Relevant and beneficial research projects are based on a community-identified research need, can yield knowledge that is useful to the Indigenous community, and imperatively advance community development goals (Ball & Janyst, 2008; Datta, 2017). The reciprocity of a research relationship between researcher(s) and an Indigenous community or Indigenous individuals is not only reflected in mutual benefits, but also in mutual learning which is a cornerstone of reconciliation and decolonization (Levac et al., 2018; Truth and Reconciliation Commission of Canada, 2015). As I have argued elsewhere, the entire process of defining what decolonizing research means needs to be a mutual undertaking, if it is to serve the decolonization project (Held, 2019).

The practicality of the collaboration between academics and Indigenous communities, however, is often vulnerable due to the relationship building being complicated by misconceptions, mistrust, and misunderstandings as well as financial and time constraints. Exploring Canadian university researchers’ perspectives on community-based participatory research involving Indigenous peoples, Castleden and her colleagues (2012) found that all respondents agreed that spending time in the communities to engage in listening and building trusting relationships is an essential aspect of decolonizing research. However, the same researchers, most of them tenured and with many years of experience in partnering with Indigenous communities, also stated that finding that time was one of the greatest challenges. Apart from time constraints, oft-cited challenges include institutional restrictions and limited financial resources (Castleden et al., 2012). These have also been my challenges.

Reflecting on my failure to co-develop the research with the communities, there were three factors that played a key role in the decision to move ahead with field work based on my own proposal and foregoing true consultations. First, as a student researcher new to qualitative and decolonizing research, I felt insecure and unable to cope with the various, sometimes contradicting, demands. I did not dare insist on pursuing decolonizing research the way I had—likely naively—envisioned it at the beginning of my research journey, namely that the research questions would be co-created between the communities and the researcher. Asserting more engagement with the HTOs and the communities could have included pushing for pre-fieldwork visits to the communities to engage in workshops to collaboratively develop the scope and nature of the research.

In hindsight, I believe that pre-fieldwork visits and workshops would have been instrumental in fostering collaboration from the outset. Once I was able to communicate and discuss ideas and plans on the ground, HTO board members and managers as well as research participants embraced the research topic, focus, and methods. Their enthusiasm grew as our relationships deepened and particularly once they learned more about the findings. On the one hand, this acceptance of my research project felt like a retroactive justification of the latter. On the other hand, it exemplified the need for outsider researchers to communicate and collaborate with Indigenous partners in their way. The procedure of emailed requests for written consultation is a Western approach that inevitably failed.

Second, university deadlines were looming and my advisory committee seemed impatient and wanted to see results rather than have me spend more time creating and nurturing researcher-community relationships. Most of my committee members were new to decolonizing research and unable to help me fulfill its seemingly unorthodox demands (cf. Castleden et al., 2012). Third, my frustration and anxiety over the inability to connect with HTO managers was somewhat eased when one of them encouraged me to “just come and we’ll figure everything out” (field notes, February 1, 2017). This encouragement provided some impetus to move forward. I was still reluctant to forgo consultation, yet I finalized my fieldwork travel plans. I arrived in the community to collaborate with the aforementioned HTO manager less than 2 months after receiving the encouraging message.

Decolonizing research is challenging; for the researcher(s), the academic institutions, and also for the Indigenous communities. It is a process that requires learning, unlearning, and relearning (Datta, 2017). Today’s researcher-community relationships can only be understood and developed in light of the colonial history (Brunger & Wall, 2016; Castleden et al., 2012). Researchers engage in decolonizing research to counter past and present colonization. At the same time, naming the colonial legacy and addressing power inequalities makes decolonizing research a delicate undertaking, for everyone involved.

## Lessons Learned

When planning and executing a research project, it can be extremely challenging to reconcile all the requirements, best practices as well as seasonal and institutional timelines that affect the decision making, even more so when the priorities are conflicting. Research planning is further complicated when engaging in decolonizing research with Indigenous partners, for what this looks like in the field is still a work in progress (see McGregor et al., 2018, for examples from across Canada). While a plethora of requirements and guidelines have been put forward by universities, funding agencies, and Indigenous organizations and communities to ensure that research involving Indigenous peoples is ethically sound and centers their goals and aspirations, the participating communities can determine how strictly they want to implement their own protocols. Not all requests and expectations are equally important and relevant to each and every research project (ITK & NRI, 2006). Having control over the implementation of their own research protocols affords Indigenous communities, institutions, and peoples “sovereignty over the decolonization process” (Datta, 2017, p. 2).

Non-Indigenous researchers, on the other hand, may view Indigenous research protocols as a list of requirements that need to be ticked off. Of course, Indigenous research protocols were not put in place to make outsider researchers feel at ease. Negotiating a research relationship is about entering ethical space which Ermine and colleagues (2004) describe as a process that unfolds as the dialogue—ultimately aimed at bridging the divide between the Indigenous and Western spheres of culture and knowledge—continues. Such negotiating is an open-ended and potentially unsettling involvement. Being a settler ally can indeed be a rather uncomfortable experience. We need to be able to bear and accept this.

Another lesson I learned from my research failure is that a nonideal start does not mean the entire research project will fail. As the research relationship develops and changes, there is room for adjustments and improvements. In my experience, it was extremely helpful to be able to return to the communities after the fieldwork data was analyzed in order to review what I had heard in the interviews, as this allowed everybody involved to build on the relationships and the trust established during my fieldwork. Snow (2018), another settler ally engaged in decolonizing research, concluded that her “ongoing relationship with the research participants is a sign of mutual respect and gives the work credibility” (p. 9). Given the relationality of Indigenous knowledges, epistemologies, and research methodologies, the importance of relationships is evident. However, the crucial step of sharing research results in person is often neglected by researchers, and is one of the longstanding and frequent criticisms expressed by Inuit about research with their communities (ITK & NRI, 2006). It may be obvious, but it is worth reiterating, that “relationships require work, commitment, energy, communication, and continuous engagement; they do not happen just because we want them to” (McGregor, 2018, p. 307). Relational work is never

done, nor can it be taken for granted (Kovach, 2009; Morton Ninomiya & Pollock, 2017).

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### Notes

1. OCAP<sup>®</sup> is a registered trademark of the First Nations Information Governance Centre (FNIGC). A more comprehensive definition of the OCAP<sup>®</sup> Principles can be found on their website ([www.FNIGC.ca/OCAP](http://www.FNIGC.ca/OCAP)).
2. The National Inuit Strategy on Research (ITK, 2018) had not been released when I planned my research and engaged in fieldwork; hence, it is not discussed in this context. As the name implies, it is a strategical document addressing governments and research institutions rather than researchers in the field.

### References

- Ball, J., & Janyst, P. (2008). Enacting research ethics in partnerships with Indigenous communities in Canada: "Do it in a good way". *Journal of Empirical Research on Human Research Ethics*, 3(2), 33–51. <https://doi.org/10.1525/jer.2008.3.2.33>
- Battiste, M. A. (2000). *Reclaiming indigenous voice and vision*. University of British Columbia Press.
- Bauer, J., & Harteis, C. (Eds.). (2012). *Human fallibility: The ambiguity of errors for work and learning* (Professional and practice-based learning). Springer. <https://doi.org/10.1007/978-90-481-3941-5>
- Beeman-Cadwallader, N., Quigley, C., & Yazzie-Mintz, T. (2011). Enacting decolonized methodologies: The *doing* of research in educational communities. *Qualitative Inquiry*, 18, 3–15. <https://doi.org/10.1177/1077800411426414>
- Borasi, R. (1994). Capitalizing on errors as "springboards for inquiry": A teaching experiment. *Journal for Research in Mathematics Education*, 25(2), 166–208. <https://doi.org/10.2307/749507>
- Brunger, F., & Wall, D. (2016). "What do they really mean by partnerships?": Questioning the unquestionable good in ethics guidelines promoting community engagement in Indigenous health research. *Qualitative Health Research*, 26(13), 1862–1877. <https://doi.org/10.1177/1049732316649158>
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council. (2018). *Tri-council policy statement: Ethical conduct for research involving humans*. <http://www.pre.ethics.gc.ca/eng/documents/tcps2-2018-en-interactive-final.pdf>
- Castleden, H., Sloan Morgan, V., & Lamb, C. (2012). "I spent the first year drinking tea": Exploring Canadian university researchers' perspectives on community-based participatory research involving Indigenous peoples. *The Canadian Geographer/Le Géographe canadien*, 56(2), 160–179. <https://doi.org/10.1111/j.1541-0064.2012.00432.x>
- Chiefs of Ontario. (2016, December 8). "Nothing about us, without us": First Nations must be fully included in tomorrow's First Ministers Meeting on health and climate change. [http://www.chiefs-of-ontario.org/news\\_item/nothing-about-us-without-us-first-nations-must-be-fully-included-in-tomorrows-first-ministers-meeting-on-health-and-climate-change/](http://www.chiefs-of-ontario.org/news_item/nothing-about-us-without-us-first-nations-must-be-fully-included-in-tomorrows-first-ministers-meeting-on-health-and-climate-change/)
- Chilisa, B. (2012). *Indigenous research methodologies*. Sage.
- Clark, A. M., & Sousa, B. J. (2018). *How to be a happy academic*. Sage.
- Coburn, E., Stewart-Harawira, M., Moreton-Robinson, A., & Sefa Dei, G. (2013). Unspeakable things: Indigenous research and social science. *Socio*, 2, 121–134.
- Datta, R. (2017). Decolonizing both researcher and research and its effectiveness in Indigenous research. *Research Ethics*, 14(2), 1–24. <https://doi.org/10.1177/1747016117733296>
- de Leeuw, S., Cameron, E. S., & Greenwood, M. L. (2012). Participatory and community-based research, Indigenous geographies, and the spaces of friendship: A critical engagement. *The Canadian Geographer/Le Géographe canadien*, 56(2), 180–194. <https://doi.org/10.1111/j.1541-0064.2012.00434.x>
- Denzin, N. K., Lincoln, Y. S., & Smith, L. T. (Eds.) (2008). *Handbook of critical and Indigenous methodologies*. Sage.
- Donaldson, M. (2019). Harnessing the power of fantastic attempts: Kindergarten teacher perspectives on student mistakes. *The Journal of Educational Research*, 112(4), 535–549. <https://doi.org/10.1080/00220671.2019.1598329>
- Drucker, P. F. (1959). *Landmarks of tomorrow*. Harper.
- Ermine, W., Sinclair, R., & Jeffery, B. (2004). *The ethics of research involving Indigenous peoples*. Report of the Indigenous Peoples' Health Research Centre to the Interagency Advisory Panel on Research Ethics. Indigenous Peoples' Health Research Centre. [http://iphrc.ca/pub/documents/ethics\\_review\\_iphrc.pdf](http://iphrc.ca/pub/documents/ethics_review_iphrc.pdf)
- First Nations Information Governance Centre. (2014). *Ownership, control, access and possession (OCAP<sup>®</sup>): The path to First Nations information governance*. [https://fnigc.ca/sites/default/files/docs/ocap\\_path\\_to\\_fn\\_information\\_governance\\_en\\_final.pdf](https://fnigc.ca/sites/default/files/docs/ocap_path_to_fn_information_governance_en_final.pdf)
- Gerlach, A. (2018). Thinking and researching relationally: Enacting decolonizing methodologies with an Indigenous early childhood program in Canada. *International Journal of Qualitative Methods*, 17, 1–8. <https://doi.org/10.1177/1609406918776075>

- Held, M. B. E. (2019). Decolonizing research paradigms in the context of settler colonialism: An unsettling, mutual, and collaborative effort. *International Journal of Qualitative Methods*, 18, 1–16. <https://doi.org/10.1177/1609406918821574>
- Inuit Tapiriit Kanatami. (2018). *National Inuit strategy on research*. <https://www.itk.ca/wp-content/uploads/2018/03/National-Inuit-Strategy-on-Research.pdf>
- Inuit Tapiriit Kanatami, & Nunavut Research Institute. (2006). In S. Nickels, J. Shirley, & G. Laidler (Eds.), *Negotiating research relationships with Inuit communities: A guide for researchers*. Inuit Tapiriit Kanatami and Nunavut Research Institute. <https://www.itk.ca/negotiating-research-relationships-guide/>
- Kirkness, V. J., & Barnhardt, R. (1991). First Nations and higher education: The four R's—respect, relevance, reciprocity, responsibility. *Journal of American Indian Education*, 30(3), 1–15. <https://www.semanticscholar.org/paper/First-Nations-and-Higher-Education%3A-The-Four-Kirkness-Barnhardt/e2f363fbaa25f2f5f193fe1954f270853fabb420>
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts*. University of Toronto Press.
- Levac, L., McMurtry, L., Stienstra, D., Baikie, G., Hanson, C., & Mucina, D. (2018). *Learning across Indigenous and Western knowledge systems and intersectionality: Reconciling social science research approaches*. <https://www.criaw-icref.ca/images/userfiles/files/Learning%20Across%20Indigenous%20and%20Western%20KnowledgesFINAL.pdf>
- Mathan, S. A., & Koedinger, K. R. (2005). Fostering the intelligent novice: Learning from errors with metacognitive tutoring. *Educational Psychologist*, 40(4), 257–265. [https://doi.org/10.1207/s15326985ep4004\\_7](https://doi.org/10.1207/s15326985ep4004_7)
- McGregor, D. (2018). Indigenous research: Future directions. In D. McGregor, J.-P. Restoule, & R. Johnston (Eds.), *Indigenous research: Theories, practices, and relationships* (pp. 296–310). Canadian Scholars.
- McGregor, D., Restoule, J.-P., & Johnston, R. (Eds.). (2018). *Indigenous research: Theories, practices, and relationships*. Canadian Scholars.
- Mi'kmaw Ethics Watch. (n.d.). *Mi'kmaw research principles and protocols: Conducting research with and/or among Mi'kmaw people*. <https://www.cbu.ca/wp-content/uploads/2019/05/MEW-Principles-and-Protocols.pdf>
- Morton Ninomiya, M. E., & Pollock, N. J. (2017). Reconciling community-based Indigenous research and academic practices: Knowing principles is not always enough. *Social Science & Medicine*, 172, 28–36. <https://doi.org/10.1016/j.socscimed.2016.11.007>
- Mutua, K., & Swadener, B. B. (2004). *Decolonizing research in cross-cultural contexts: Critical personal narratives*. State University of New York Press.
- Nunavut Research Institute. (2015). *Research licensing applications*. <https://www.nri.nu.ca/research-licensing-applications>
- Nuu-chah-nulth Tribal Council Research Ethics Committee. (2008). *Protocols and principles for conducting research in a Nuu-chah-nulth context*. <https://icwrn.uvic.ca/wp-content/uploads/2013/08/NTC-Protocols-and-Principles.pdf>
- Sefa Dei, G. J. (2000). Rethinking the role of Indigenous knowledges in the academy. *International Journal of Inclusive Education*, 4(2), 111–132. <https://doi.org/10.1080/136031100284849>
- Sefa Dei, G. J., Hall, B., & Rosenberg, D. G. (Eds.) (2000). *Indigenous knowledges in global contexts: Multiple readings of our world*. University of Toronto Press.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples* (2nd ed.). Zed Books.
- Snow, K. (2018). What does being a settler ally in research mean? A graduate student's experience learning from and working within Indigenous research paradigms. *International Journal of Qualitative Methods*, 17, 1–11. <https://doi.org/10.1177/1609406918770485>
- Sousa, B. J., & Clark, A. M. (2019). The ubiquity and invisibility of research failures: A call to share more. *International Journal of Qualitative Methods*, 18, 1–3. <https://doi.org/10.1177/1609406919846977>
- Truth and Reconciliation Commission of Canada. (2015). *Calls to action*. [http://nctr.ca/assets/reports/Calls\\_to\\_Action\\_English2.pdf](http://nctr.ca/assets/reports/Calls_to_Action_English2.pdf)
- Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, 1, 1–40. [https://www.researchgate.net/publication/277992187\\_Decolonization\\_Is\\_Not\\_a\\_Metaphor](https://www.researchgate.net/publication/277992187_Decolonization_Is_Not_a_Metaphor)
- VanLehn, K. (1988). Towards a theory of impasse-driven learning. In H. Mandl & A. Lesgold (Eds.), *Learning issues for intelligent tutoring systems* (pp. 19–41). Springer.
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Fernwood.