Naming method: "This is it, maybe, but you should talk to …"

Lisa Lunney Borden
St. Francis Xavier University
Canada

David Wagner
University of New Brunswick
Canada

This conversation between a former doctoral student and advisor examines the student's choice to use a Mi'kmaq word to describe her methodology for her research in Mi'kmaw communities. The power relations associated with names and their sources were important in her choice, especially because of the colonialist history of the community and the tradition of generalisation in the academy. Nevertheless, the declaration of a methodology raises issues about the relationship among contexts in any research. In the search for the right word, community members always hedged their suggested words and referred the doctoral student to others in the community. This pattern of articulating a good description, recognising its limitations, and directing further conversation-based investigation was evident in her search for the word, but also relates to the methodology itself, to her findings about mathematics teaching and learning, and to the reporting of her work and of this conversation.

Wagner: Lisa, your search for a word to describe your methodology in your doctoral research is illustrative of the tensions faced by researchers in Indigenous communities, and possibly of socio-cultural research in education in general. Therefore, I would like to engage you in a public conversation about your experiences, to explicate those tensions. I have had a relatively intimate knowledge of your story so far, as your doctoral advisor. From this I know that you have more to say than you wrote in your dissertation.

Before I ask you to give an overview of the context and results of your research, and a description of your quest to find the best word to describe your methodology, I will reflect on the power of naming. I found it interesting that you sought a name for your methodology from within the linguistic context of your work. I know that various respected scholars suggested to you that your work could fit into Western academic methodological traditions, yet you persisted in your attachment to an Indigenous word you found for your research methodology.

In Judeo-Christian cultures, naming is related to power. In one of the Jewish creation stories, Adam (the first human) is authorized by God to name the animals, and, in the same breath, to exercise dominion over them – to rule them. In a related piece of modern fiction, Leguin (1988) turns this dominion on its head and has man unnaming the animals, indicating a release of power. With the abandonment of names, came a newfound attention to experience:

I could not chatter away as I used to do, taking it all for granted. My words now must be as slow, as new, as single, as tentative as the steps I took going down the path away from the house, between the dark-branched, tall dancers motionless against the winter shining. (p. 196)

In colonised settings, names index power and dominion as well, especially as they point to their sources. For example, the river that flows near my home is called the Saint John River. English settlers named it after a Christian saint, though the river already had a name among the Indigenous people. It was called the Wolastoq by the people now known as the Maliseet First Nation. Even the word *Maliseet* was assigned by colonisers borrowing an expression from a neighbouring First Nation. The Maliseet community refers to itself as *Wolastoqiyik.* These names and their sources index power relations.

Naming is more than power; it also represents intimacy and knowledge. Names associate with stories and experience. Van Manen, McClelland, and Pilhal (2007) described the significance of naming in the context of personal names:

The stories of who named us and why that particular name was chosen are a link to our origin and take on significant meaning for us. When someone calls us by our name […] then we may feel addressed in our singularity. (p. 85)

Van Manen et al. (2007) illustrated the intimacy associated with the knowledge and use of a correct name, and also the profanity of using a name outside of this intimacy or using it carelessly or incorrectly. An extreme case of this abuse in the Judeo-Christian tradition is the use of God's name in vain, as referenced in the Ten Commandments.

Van Manen et al. (2007) noted the centrality of naming to phenomenological inquiry by recognising that the names of people and the naming of experiences are mere indices of experience. Names are sacred because they point to stories and experiences that are paramount. The intimacy and knowledge associated with well-spoken language extends beyond the names of people. With the intimacy of naming, thoughtfulness in choosing and saying a name is a way of connecting to the direct experience itself, similar to the unnaming as described by Leguin (1988). Especially in Indigenous cultures (whether it is English speakers in England or Mi'kmaq speakers in Cape Breton), there is a sense of guardianship of the language. It is important to choose one's words well because it demonstrates connection to the experience but also to knowledge of how that experience connects to history in the culture. In the tradition of Anishinaubae (an Aboriginal community in Canada), Johnston (1999) identified this sensibility of the limits of language and the foregrounding of experience:

Words have a range but they also have limits to their meaning; they can express only so much, and I suppose that this is so because men and women have limits to what they can know and how they can describe it. The word *w'daebawae* describes […] the limits of perception and description. *W'daebawae*, in its literal sense, conveys the notion 'he/she casts his/her voice to the very limits of its range.'(p. 47)

Names are important and the identity or cultural position of the person who gives a name is very important. So I think it is very interesting that you wanted to use a Mi'kmaw word to describe your methodology. Please tell us about the power of names and naming in Mi'kmaw culture and tell us your story of coming to describe your research using the Mi'kmaw verb *mawikinutimatimk*.

Lunney Borden: I like the questions you raise about the power of naming. I believe that naming can have power in many different contexts, yet my experiences learning the Mi'kmaw language have had the greatest impact on my awareness of the power and complexity of naming. I will tell you a bit about how I came to a place where I felt it was appropriate to ask for a word for my methodology, and then I will share the story of coming to the word itself.

Over the 10 years that I was living in the community, I often asked for Mi'kmaw words to represent ideas or concepts. Because we were transforming the school into a Mi'kmaw school, it was a common practice amongst our staff and was highly encouraged by the Mi'kmaq speakers on staff. The community had recently taken control of education from the Federal Government and, as a staff in relation with the community, we were collectively going through a process of determining what it meant to be a community school that was reflective of community values, culture, language, and identity. In this climate, revitalising Mi'kmaw words and giving the language a place of greater prominence within the school was an act of decolonisation – a way to reclaim identity and power and revitalise a language that has been forcibly taken away.

More recently, a Truth and Reconciliation Commission (TRC) has been travelling across Canada to gather the stories of residential school survivors as a way to help all Canadians understand the horrors experienced in the residential school system and to begin a process of healing and reparation between Aboriginal peoples and the rest of Canadian society (Truth and Reconciliation Commission of Canada, 2012). These stories remind Canadians of the efforts that were made on the part of the Federal Government, in conjunction with religious organisations, to eliminate Indigenous languages and culture. Many of the Mi'kmaw residential school survivors reclaimed their language when they came home. Others did not. They all speak about the importance of the survival of the Mi'kmaw language.

Language revival became important to me too, having grown up with my own story of language loss. I am the granddaughter of two French Acadian women who both married Anglophone men and, because of societal pressures, raised their children to speak English. In one generation, our language was lost. I always wanted my students to know that I valued their language, and that it deserved to be valued. I thought this would be a respectful way to show students they should have pride in their language. I made an effort to learn the language which proved also to be a way to come to know and connect with the community members on a deeper level.

Learning the language in this way also helped me to develop a deeper understanding of a Mi'kmaw worldview and through discussions about language, I began to truly understand the contextualised way Mi'kmaw words are used. Inglis (2004) has explained that "the Mi'kmaw language grammatically encodes details concerning how speakers experience the world and how a speaker and the person spoken to connect with and evidence this experience" (p. 400). In Mi'kmaq, if a word is dependent on how the speaker experiences the phenomenon, different speakers may have very different words for the same concept because their experiences with that concept have been different. My numerous journeys of looking for words helped me to gain insight into the worldview embedded in the language and also helped me to understand the complex nature of translating between Mi'kmaq and English.

Translation from English to Mi'kmaq is often complex due to very different language structures. You and I have written elsewhere about the fact that there is no Mi'kmaw word for mathematics (Lunney Borden & Wagner, 2011; Wagner & Lunney Borden, in press), but I recall a time early in my teaching career searching for a Mi'kmaw word that meant mathematics to put above my classroom door. The word I was given by my Mi'kmaw speaking colleagues was *ekeljemkewel,* which is not really a word for "mathematics" but means "working with numbers" or "interpreting numbers." This word was seen as sufficient for the purpose – labeling classrooms and making the Mi'kmaw language more visible in the school. We acknowledged that the word was consistent with how many people construe mathematics but there was also an acknowledgement that it was insufficient to describe all the things we do in mathematics.

The fact that this word reflects an active process is also significant. Mi'kmaq is a verb-based language and, consequently, actions and processes are much more commonly spoken about than things. By contrast, English is a noun-based language. This can create challenges when seeking a name for something. Barton (2008) has detailed similar complexities with translating mathematics terms into Maori. As an English speaker I realised the mere act of asking for a word often had an implied request for a noun, when in fact a verb was far more likely to be used to describe a given concept in Mi'kmaq. So while I believed it was appropriate to ask for a word, I was also well aware that finding the best word could be incredibly complex.

A significant tension in my doctoral research arose from the need to choose a research methodology that would be respectful of the community context yet still accepted within the academy. Because of my interest in decolonising education for Mi'kmaw students, my belief in the inherent right of self-determination for Mi'kmaw people, and my work toward transformation of educational practices, I had concerns about how I would conduct my research respectfully. Research in the Mi'kmaw community has often brought with it many detriments and very few benefits. For many Aboriginal people, as Smith (1999) stated, research has been intimately connected with colonisation and imperialism:

> From the vantage point of the colonized, … the term 'research' is inextricably linked to European imperialism and colonialism. The word itself, 'research', is probably one of the dirtiest words in the Indigenous world's vocabulary. When mentioned in many Indigenous contexts, it stirs up silence, it conjures up bad memories, it raises a smile that is knowing and distrustful. (p. 1)

I was keenly aware of this mistrust of research within the Mi'kmaw community context, regularly reminded of it by one friend who would often ask me during this process how my "research" was going. He used his fingers to indicate the quotation marks around the word, and spoke in a tone that dripped with cynicism and distrust. However, he was not distrustful of me; in fact, he was one of my most supportive allies in this work. Rather, he was distrustful of the institution that calls the work I do "research." He told me that he did not intend to belittle my work but wanted simply to remind me that he does not want to be studied. He was willing to talk *with* me and share ideas, to work together to find solutions to problems but he is very distrustful of the kinds of research that he has seen being done *to* and *on* his community and his people.

I knew that I would need to name a methodology in order to be able to do the research and I recognized value in naming my methodology so that I could reflect on it in relation to established practices and also in relation to my own research intentions. However, I believe

that it is more important for ethical research conversations to have a name (methodology) that is meaningful in the context of the research rather than in the context of the academy. I drew inspiration from Maori researchers who have taken a similar view; they refer to their methodology as *Kaupapa Maori* (Maori-centred) research and it has been said that "This form of naming is about bringing to the centre and privileging Indigenous values, attitudes and practices rather than disguising them within Westernized labels such as 'collaborative research'" (Smith, 1999, p. 125). I too wanted my research to be Mi'kmaq-centred and I felt the best way to do this was to seek an approach to the research that was authentically used in the community.. I hoped that in choosing a methodology from within the community it would help to mitigate some of the negative effects of traditional colonising research.

As I thought about naming my own methodology, I wanted to honour the tradition of reclaiming words; I also wanted to honour community ways of dealing with issues. So I sought the advice of many elders in the community as I searched for a word to describe a culturally appropriate methodology. In true community fashion, I just started asking people for a word that would be used to describe the activity of people coming together to discuss an issue or solve a problem. I had a few informal conversations with Mi'kmaq speakers at the school who suggested some words but also suggested I ask others. During a conversation I had with the Grand Chief about my work, he suggested that I might want to use the word *mawkinutimatimk,* which means "coming together to learn together." He told me I should check with Phyllis and Tiny, the two language teachers at the school. I did and they revised the word to *mawikinutimatimk* with the same meaning but they believed the addition of the "i" was more in line with the way it would have been historically said. I checked with other community members as well who confirmed that this would be an appropriate word to describe the approach to research that I was seeking. However, each person who confirmed its appropriateness said "you should also talk to ___ about this," not always suggesting the same people, but encouraging me to consult other elders and language experts in the community – which I did. And that is how I came to the word, through conversation with community members.

Wagner: I have heard your account of this before, but every time I hear or read it, I find it powerful, sometimes for new reasons. My current research focus is authority and how it works in mathematics classrooms (e.g., Herbel-Eisenmann & Wagner, 2009, 2010; Wagner & Herbel-Eisenmann, 2012). In order to understand authority in classrooms I notice how it works in other contexts as well, including the context you are describing here.

I find it interesting the way each person you talked with deflected authority. Even the Grand Chief, when he suggested the word *mawkinutimatimk*, tacked on the deflection "but you should talk with Phyllis." Everyone said you should talk with someone else. No one said, "This is it; this is the word you should use." However, when you wrote your dissertation, you had to say (or imply) "This is it; this is the word that I am using." Perhaps this relates to a difference between oral and written traditions – in writing you have to commit to a word and, furthermore, in a dissertation you have to justify your choice. When speaking one has to choose particular words and reject others, but the fluidity of conversation allows for modifications of word-choice in action.

In the Mi'kmaw communities, every Mi'kmaq speaker you talked with knew words that were possibilities for you, but they did not claim full authority to know. Perhaps they would say the word belongs to the community. In your writing, when you chose the word

mawikinutimatimk, from where did you get the authority to use the word and to say that it is the right word? With this question, I am asking about your authority to use the word in each of two communities – the Mi'kmaw community at large and the academic community. In the academic tradition, how do you justify your use of *mawikinutimatimk*, and in Mi'kmaw communities, how do you justify your use of *mawikinutimatimk*? How do you see those authorities supporting you and how did you negotiate these two sources of authority?

Lunney Borden: That is an interesting question, because, as you know, it was hard for me to commit the word to writing; it was hard for me to say, "This is it!" I grappled with that for a long time. As observed by Dauenhauer and Dauenhauer (1995) in their transcription of oral Tlingit and Haida literature, once something is written it is inevitably fixed or frozen and may lose the nuances of meaning. It may be this resistance to fixing or freezing words that resulted in my resistance to commit to the one word. In the conversation I had with the elders, no one said "This is it!" rather they said "This might be it but you should go and ask [someone's name]," to verify that this might be it. Of course, this may also be closely tied to the idea that words emerge from experiencing the phenomenon. Thus *mawikinutimatimk* might have been the right word for me in that moment, and in another moment there may be a need for a different word.

In my searches I was very clear about why I wanted the word. The people with whom I discussed it knew that I was doing doctoral studies and that I would need to write about research in order to do that. So there was an awareness that I would be writing about this word and using this word in my work. I also was known as someone who was skilled at Mi'kmaw reading and writing. I had developed a good understanding of the phonemic system and had learned the Smith-Francis orthography which is the official system of writing Mi'kmaq. In 1999-2000, I was the only non-Mi'kmaw staff member permitted to take a course called "Mi'kmaw reading and writing for speakers" that was being offered as a way to increase capacity in reading and writing in Mi'kmaq. There were many times when I was called upon to help determine the spelling of a word or help students sound out words they were learning. So I have proven myself capable of writing the language.

I should also say that there is no community opposition to writing the language, in fact the opposite is true. There have been great efforts made to develop a common system of writing and to teach students to read and write in Mi'kmaq. There is a great desire to preserve the knowledge of the elders, as far too many are passing away before they have had a chance to pass on their knowledge to younger generations. Though there was no opposition from the community with respect to writing the word, I was well aware of the resistance to fixing words and I was aware of the importance of having words reflect one's personal experience, so it was a tension for me as I was writing the dissertation.

Wagner: And probably a tension for them too because they understood your tension.

Lunney Borden: Yes, I think so. I chose to ask people what gave me the right to do this work. What gives me the authority to represent these ideas? Who was I, to speak about the community?

I had grappled with my place in this research as a non-Mi'kmaw person. I had openly questioned my authority to respond to community concerns, my authorisation to represent

people and ideas, and my responsibility to remain connected to the community after the research. During my doctoral course work, people within the academy questioned my position in this research because they saw me as a community outsider. Yet, within the Mi'kmaw community, I knew my identity was much more complex.

Lipka, Mohatt, and The Ciulistet Group (1998) have used the term "fictive kin" to describe the kin-like relationships that often develop between long-term outsiders and insiders. This term struck a chord with me as it connected to my own experience. I consider many of the people within the community where I worked to be like family; in many ways, this relationship extended beyond that community to the larger Mi'kmaw community. I feel that it is only because of these relationships that I was able to do this work. As Lipka et al. (1998) said of their own work with Yup'ik communities in Alaska: "It was the importance of being 'related' that allowed a research agenda to evolve" (p. 209). My research agenda had also evolved from my experience within the community.

I met with two colleagues to share my concerns about my role in this work prior to beginning the research conversations. Their responses were reassuring. One colleague spoke about the time I had spent in the community and the way I had learned the language and the culture, and assured me that he knew that I had come to work *with* the community. This long-standing relationship is significant. The other colleague jokingly asked me if I wanted to quit now. His teasing was a way of reminding me of our many long conversations about the research I might do some day that would allow us to explore some of these educational issues and questions on a deeper level. They both gave me the sense that not only did I have the privilege to do this work, moreover, I had an obligation. They had shared with me the language, the culture, and the ways of knowing and being, and now I was in a position to give back in a way that honoured the community. This was healthy reciprocity.

That is what gave me the authority of the community, knowing that I was doing it with the blessing of the community members with whom I had been working for so long, but also knowing that they saw it as my sense of obligation to the community. They had invested a lot of time in me, they knew I was on the verge of doing some interesting work, and they wanted to be sure to reap the benefits of that work. That reassured me that I was not just taking the word and going off and doing my own thing, I'm doing something for the community with the community, and in that sense the word (and the work) belonged to all of us. So this is it! Maybe. I had the authority from the community to use the word and to do the research but I also had to be mindful of my obligations to the community and my need to continue to live within the tensions in a respectful manner.

To justify my use of *mawikinutimatimk* in the academic tradition was a little more complex. Some of my doctoral course instructors wanted to name it something else. Some professors said that what I proposed to do was participatory action research, and others said it is ethnography or critical theory. While I could see connections between *mawikinutimatimk* and these other research traditions, I also saw differences. Participatory action research may be the closest methodology because people work together to solve a problem and inquire into an issue in a collaborative manner which is similar to *mawikinutimatimk*, but *mawikinutimatimk* carries a certain spiritual quality that is not inherent in other practices. With *mawikinutimatimk* there is an embedded understanding that the importance of relationships and the interconnectedness of participants must be honoured. With *mawikinutimatimk*, the collective shares responsibility; everyone brings

knowledge that will help solve the problem and together the knowledge is stronger. Everyone has something to bring, everyone has something to learn, and there is a commitment to honour each other's spirits.

I could have taken a more traditional paradigm and used it to conduct similar research. Certainly some people have done this with Indigenous research and some people have successfully incorporated aspects of spirituality in so doing. Yet, such pasting of Indigenous perspectives onto Eurocentric paradigms has not been proven effective in the decolonisation of these paradigms and has not been effective in giving voice to the Indigenous community (Bishop, 2005; Denzin, 2005; Smith, 1999). These practices, despite best intentions, through their demands for validity and generalisability have essentialised the Indigenous other. Indigenous research is "a highly political activity" (Smith, 1999, p. 140) because it seeks to negotiate and transform institutional practices and research frameworks in addition to developing a research programme. This is often construed as a "threatening activity" (Smith, 1999, p. 140) causing the research community to dismiss frequently such work "as 'not rigorous,' 'not robust,' 'not real,' 'not theorized,' 'not valid,' 'not reliable'" (Smith, 1999, p. 140). Smith has claimed that this institutionalised dismissal presents real challenges for Indigenous research:

> Sound conceptual understandings can falter when the research design is considered flawed. While researchers are trained to conform to the models provided for them, Indigenous researchers have to meet these criteria as well as Indigenous criteria which can judge research 'not useful', 'not Indigenous', 'not friendly', 'not just'. Reconciling such views can be difficult. The Indigenous agenda challenges Indigenous researchers to work across these boundaries. It is a challenge which provides focus and direction which helps in thinking through the complexities of Indigenous research. (Smith, 1999, p. 140)

What has emerged as a response to the challenge is a new paradigm of decolonising research or indigenist research. Decolonising and indigenist methodologies are seen as ways to "research back to power" (Smith, 2005, p. 90). The indigenist approach to research "is formed around the three principles of resistance, political integrity, and privileging Indigenous voices" (Smith, 2005, p. 89). There is a "purposeful agenda for transforming the institution of research, the deep underlying structures and taken-for-granted ways of organizing, conducting, and disseminating research and knowledge" (p. 88). There is an underlying "commitment to moral praxis, to issues of self-determination, empowerment, healing, love, community solidarity, respect for the earth, and respect for elders" (Denzin, 2005, p. 943). Indigenist research paradigms create space to privilege Indigenous knowledge (Denzin, 2005; Smith, 2005) and acknowledge that knowledge production must happen in a relational context (Denzin, 2005). Indigenous research methodologies manifest themselves through a variety of methods that draw on Indigenous epistemologies and existing community practices.

Choosing a traditional Western methodology didn't fit well with me. I had a good Mi'kmaw word, and I had the blessing of the community, so I used the word to honour the community by using a methodology that was authentic to the community, and understood by community members. That being said, it is still challenging to have such an indigenist methodology be accepted within the academy, but it is slowly becoming more accepted with the help of Indigenous researchers such as Smith (1999) and Kovach (2009) who have written about Indigenous methodologies. Their work has enabled new researchers to

connect their work to this emerging indigenist tradition. So *this is it*. As this field continues to grow and gain greater acceptance within the academy, it will be easier to defend Indigenous methodologies, *maybe*.

Wagner: I am always a little worried when people export artefacts from an Indigenous tradition. To illustrate, I reflect on my experience of living in Swaziland and then returning to Canada. When I brought things from Swaziland home it was hard to decide what to do with them. If I display my Swazi things in my home or my office, it could appear that I am showing off. With this exoticism I would be saying, "Look at the reach I have in the world." It would demonstrate the extent of my authority, which might be called my dominion. This has for me worrisome parallels with the storylines of colonialism in which small countries exercised dominion over people and places far away and brought home artefacts, including treasures, from these exotic places. On the other hand, I want to have some memories from Swaziland around me to remind me of my experiences there, especially because my experiences there inform my interpretation of things here in Canada.

When I use my knowledge or experience from Swaziland in Canada, I am suggesting to others, "I can speak about this and you cannot" because I have access to this specialised knowledge while others around me do not. I wonder how you reconcile this aspect of using the word *mawikinutimatimk*, which is a word that other scholars cannot easily question.

Lunney Borden: I used the word because it was an authentic way to conduct the research. I might expect scholars to question whether using an indigenist methodology is appropriate, but it is not the prerogative of scholars to challenge my use of the word itself. My permission to use the word comes from the community. I have taken the time to learn about it and have asked permission to use it. I have checked repeatedly with various community elders and respected speakers of the language to ensure that I am using it properly and interpreting it correctly.

My greater concern is that the word might be co-opted by scholars and others who do not understand the context, who have not been part of the journey. I struggled with the decision to use the word in print, fearing that once it is written, others may choose to cite my work and use this word, which is not mine, particularly if they choose to use this methodology for their own purposes. This would be wrong. I have no ownership over this word; it belongs to the Mi'kmaw people, to the Mi'kmaw language. I am not the source for the word and should not be given credit for it. I have been given the gift of this word from the community. My use of this word has involved a journey of learning for me; thus, it would not be appropriate to use the word in another context. Rather, what is appropriate is for others to take a similar journey within their own context to find the words, processes, or ideas that can be used to guide their work within that context. Some Mi'kmaw scholars or others working with Mi'kmaw communities may choose to practise *mawikinutimatimk* too, yet, even still, I think there is a process of discovery involved in determining whether or not this will serve them well for their context.

I am protective of the word and I am careful about how and when I use it. I try to mitigate any potential exoticism by being mindful of my responsibility to the community. Kovach (2009) has argued that "Indigenous methodologies, by their nature, evoke collective responsibility" (p. 178). Furthermore, Kovach has stated:

> Specific responsibilities will depend upon the particular relationship. They may include guidance, direction, and evaluation. They may include conversation, support, and collegiality. Responsibility implies knowledge and action. It seeks to genuinely serve others, and is inseparable from respect and reciprocity. (p. 178)

I take my responsibility to the Mi'kmaw community very seriously and I continue to work within the Mi'kmaw Kina'matnewey (MK) communities on educational research. Through these ongoing conversations, I regularly seek to reaffirm my authority received from the community. I have shared the story of coming to the word with my Mi'kmaw colleagues and they have confirmed for me that it was, and continues to be, a good word to use.

MK is currently in the midst of the First Nation Student Success Planning (FNSSP) program, a proposal-driven program that is designed to improve the educational outcomes of Aboriginal students across the country (Aboriginal Affairs and Northern Development Canada, 2010). A unique feature of the MK FNSSP initiative is an ongoing partnership with the Faculty of Education, here at St. Francis Xavier University. Together, the FNSSP team and the faculty, myself included, work with teachers and administrators in the MK schools to bring the FNSSP program goals to fruition. Many people on our FNSSP team are seeing the connection to the idea of *mawikinutimatimk* as we work together to continue and extend research and professional learning in mathematics, literacy, Mi'kmaw language and culture, early childhood development, student retention, and instructional leadership.

When I was taking the Mi'kmaw language course, one of our assignments was to speak with elders and gather old words that had fallen out of common use as a way to reclaim these words and ensure they can live on. In using *mawikinutimatimk* with our FNSSP research initiatives, I feel like the word has similarly been reclaimed.

So again, there is this constant tension between protecting and sharing; it is important to protect the word from being co-opted or being seen as something exotic, but there have been benefits within the Mi'kmaw community from revitalising the word. As a group, we are mindful of that notion of respect for one another. Although in many of the research projects under FNSSP people may not be using *mawikinutimatimk* as a methodology, there is a mindfulness of respecting one another and conducting the research in a way that honours community members.

Wagner: You describe how *mawikinutimatimk* has power in the community, and more so as it is being used. Also, as you use the word in the community, your confidence in your authority to use the word increases. These are, however, community-based experiences. How do you develop the sense of authority to use this word outside the community in your conversations with people who are not Mi'kmaq? How do you justify *inflicting* the word on people outside of Mi'kmaw culture?

These questions are not particular to research in Aboriginal contexts. With any research, we ought to ask how we have the authority to distribute particulars from the local context. The question has two sites – the source and the destination. How do we have the authority to represent the local culture or situation? But also, how do we have the authority to say that this knowledge drawn out of a particular cultural context can speak to other contexts? Again this relates to colonialism. In Europe, people said that what happened there and the worldviews established there should speak to what happens across the Atlantic Ocean.

Lunney Borden: I refer back to Kovach's notion that this work is ultimately about genuine service, respect, and reciprocity. It may be perceived as problematic by some, but I don't see my audience as academia. In fact, I often find it strange to consider myself an academic having grown up in a working-class family living in a community fraught with poverty. Kids from my neighbourhood didn't aspire to become academics; that was a career for people who had far more privilege than I did. I suppose I still find it surprising when academics take an interest in my work and I'm beginning to see how my writing might have some power to make change. Ultimately though, I see my audience as other Aboriginal communities across the country, and the communities here in Nova Scotia grappling with questions of how to create opportunities for greater academic success for Aboriginal children.

The need for improvements in Aboriginal Education is a long-standing issue. In 1972, the National Indian Brotherhood (now the Assembly of First Nations, AFN) released *Indian Control of Indian Education* (ICIE), which outlined a new vision for Indigenous education. They argued that the Federal Government should transfer control of education back to the communities and allow Aboriginal people to begin the process of reclaiming language, culture, and traditions while providing their children with a high-quality education that would allow them to live in both native and non-native worlds. The AFN released a follow-up report in 1988 claiming that very few of the recommendations had actually been implemented and things were progressing far too slowly. It argued that local control of education was intimately tied to self-government. While many of the recommendations of ICIE were never implemented by the government, this document proved to be profoundly influential and many of its recommendations are still being fought for today by Aboriginal communities across the country, as evidenced in the 2002 report by the Minister's National Working Group on Education (Indian and Northern Affairs Canada, 2002) and, most recently, the report of the National Panel on First Nation Elementary and Secondary Education for Students on Reserve (Aboriginal Affairs and Northern Development Canada, 2012).

Mi'kmaw Kina'matnewey is often pointed to as an example of things going well in Aboriginal Education in Canada, yet the MK staff remain eternally aware that funding is always contingent on showing success. The MK agreement is renegotiated every five years, and the FNSSP program runs on a three-year cycle. The FNSSP program is proposal-driven so the research we conduct in relation to this initiative supports the arguments made for new rounds of funding. If MK is not showing success their funding could be cut or, worse still, the Federal Government could choose not to renew the agreement. It can feel like a matter of life or death with respect to this agreement, so to not share these stories, to not share the emerging research, and to not share the successes would seem wrong. The government controls the purse strings and the government ultimately gets to decide whether or not these communities continue to educate their own children.

I do not see myself as someone who is going out to speak about this by presenting myself as an expert, but rather I see myself as a part of a larger community of educators and researchers, many of whom are Mi'kmaq, who work together to advance the goals of MK. We share our stories with other Aboriginal communities as a way to support other communities but also as a way to ensure our continued support.

I think that sharing the good things that are happening, doing work to support these community efforts, and helping the communities to share their successes bring more

power to the community rather than taking power away. When the stories of MK are told across the country, when other people are looking to MK as an example of how to do things right in Aboriginal education, it allows the government to see that the Mi'kmaw people should continue to be allowed to control Mi'kmaw education. So in that sense I don't see it as a colonising process but rather a way to decolonisation. I see it as researching back to power (Smith, 1999) and regaining power for the communities through telling their stories.

Wagner: This story is a part of all research reporting in education. We researchers take specificities from one context and suggest that it has something to say to other contexts. Your research highlights the phenomenon well because of the tension between the Aboriginal and coloniser contexts, but the phenomenon is present in other research nevertheless. Every piece of research comes from a context. It comes from the questions raised in one context and it investigates those questions in a context, which may or may not be the same context from which the questions arose. I would say that some traditions of research reporting mask this contextual gap more than others by using grammar that suggests more generalisability than warranted. One way of doing this is by making claims that are not hedged with qualifiers.

   The Mi'kmaw people with whom you talked with about your methodology hedged their claims to knowledge in two ways. As I mentioned earlier, they referred you to others, which is a way of deflecting authority. In addition to this, many of them used the hedging word *maybe*. "This is it. Maybe. But you should talk with …"

   In your research reporting, how have you embodied the hedges? How have you said *maybe* and how have you referred your readers to others? In other words, if you said the following to your readers, how would you fill in the blank? "This is the way this Mi'kmaw community has been working at making their mathematics teaching more culturally responsive. Maybe. But you, who are researching in other places, should _____." And, "You, who are teaching in other places, should ____."

Lunney Borden: In my doctoral research (Lunney Borden, 2010) I say a lot of "This is it, maybe, but you should…" even to myself. It might be useful here to briefly describe the model that emerged from *mawikinutimatimk* (the research) first before moving on to talk about the hedges.

   The project was conducted in two Mi'kmaw Kindergarten-to-Grade-6 schools over a nine-month period. Teachers, support staff, and elders were invited to participate in after-school sessions about their challenges and successes with teaching mathematics. Through our conversations, four key areas of attention emerged as themes: 1) the need to learn from Mi'kmaw language, 2) the importance of attending to value differences between Mi'kmaw concepts of mathematics and school-based mathematics, 3) the importance of attending to ways of learning and knowing, and 4) the significance of making ethnomathematical connections for students. Within each of these categories, teachers identified conflicts that arise when worldviews collide and identified potential strategies to address these tensions. The work created a framework for thinking about culturally responsive mathematics pedagogy in relation to these themes and the resulting sub-themes.

   I could say that "This is it!" with respect to the model that was developed, yet even in developing the model, there was a sense of "Maybe, but we should explore this issue in

more depth." There is more work to be done to clarify and refine the model. For example, in our research conversations we found that spatial reasoning is important for survival and numbers are used for play in Mi'kmaw culture. So it may be that playing with number is a good thing to do in the classroom but we need to do more work. In particular, we know that it will be important to see how children respond to this idea. We also need to see what this kind of play would look like in a classroom and how effective it turns out to be.

One episode that I wrote about in the dissertation was a classroom experience with third-grade students (8- and 9-year-olds) learning about prisms and pyramids. In Grades 2 and 3 in the Atlantic Canada Curriculum (Nova Scotia Department of Education and Culture, 1998) students are expected to talk about how prisms and pyramids are similar and different. The expectation is that students will recognise that prisms have two bases and pyramids only have one, and that the faces of prisms are rectangles, whereas the faces of pyramids are triangles. They are also expected to make observations about the number of faces, edges, and vertices. So one might think that this description of prisms and pyramids is the important thing for students in these grades—that this is *it*. But the conversations in my research show that teachers should listen to how students talk about these shapes. The prism and pyramid properties are the *it* in "This is it" but my research shows that it is important to say "but you should talk with the students." The structure of my quest for a word for my methodology parallels the findings in the research. Perhaps this suggests *mawikinutimatimk* (working together to learn together) in one context uncovers the need for *mawikinutimatimk* in other contexts. Perhaps the structure of "This is it, maybe, but you should talk to …" is a component of *mawikinutimatimk*. Mawikinutimatimk implies that we all have something to learn and all have something to contribute. This class on prisms and pyramids exemplified this notion as we, the teachers, learned from listening to the students who contributed a new way of seeing these prism and pyramid properties. Teachers and students were learning together.

In this particular Grade 3 lesson on prisms and pyramids, the classroom teacher and I paid attention to how the students spoke about these shapes. We provided students with shapes and asked them to identify whether their shapes were prisms or pyramids and to say how they knew. The children did not talk about bases and faces but rather spoke how the shapes were "forming." One pair of students declared that they had a pyramid because "it looked like a pyramid." When prompted to explain what they meant by that they said "well it goes like this, forming into a triangle." With this, they made a hand gesture showing how the sides were merging to a point. Their description correlates with a Mi'kmaw word, *kiniskwikiaq,* which means "coming to a point." Another student also used a hand gesture to explain her declaration that her group had a prism "because it goes like this" and motioned her hands up and down in uniform fashion, following the parallel faces.

Another student, when asked to share something she knew about prisms, placed the prism on the floor and stated, "It can sit still!" This was interesting as it reminded me of how an elder had spoken about the bottom of the basket when I asked if we could describe it as flat when attempting to find a Mi'kmaw word for flat. The elder said, "Well no, it's just the bottom of the basket, it lets it sit still." There is no Mi'kmaw word for flat but flatness has a purpose, namely sitting still. When I later recounted this story during an ad hoc session at the Canadian Mathematics Education Study Group (CMESG) Conference in Sherbrooke, Quebec (May 2008), Walter Whitely (personal communication) mentioned to me that the word polyhedron is derived from the Greek word *hedron* which means "seat."

So curriculum would declare "This is it": A polyhedron means "many sides" or "many faces"; but through my research I have learned to see that *polyhedron* means many seats or many ways to sit.

Curriculum documents declare what students need to learn; these documents clearly outline provincial ideas in the form of "this is it," or "These are the things you must know." But my study shows that there should be a "maybe" in these documents and that there should be a sense in the curriculum saying "you should talk to students and the community," "you should listen to how they are making sense of concepts." The way the students in Grade 3 spoke about prisms and pyramids was consistent with Mi'kmaw language structures and Mi'kmaw ways of knowing even more than it was consistent with the curriculum expectations. I believe this is an important awareness with respect to culturally responsive mathematics teaching.

Another example of inconsistencies between curriculum expectations and the findings of the research also emerged from listening to students. I have written about the role of *verbification* (Lunney Borden, 2011), speaking about mathematical concepts using verb-dominant phrases, in mathematics education for Mi'kmaw students. Mathematics as taught in most schools has a tendency toward noun phrases and turns even processes such as multiplication, addition, and square root into things (Schleppegrell, 2007). This is referred to as *nominalisation*.

By contrast, in my teaching experiences, I often heard my students turn nouns into verbs, saying things like "camera me" meaning "take my picture." This preference for verbs reflects the verb-based structure of the Mi'kmaw language. Through years of teaching, I realised that the more I used verb-based descriptions in teaching mathematics the more comfortable my students were with the concepts. For example, rather than talking about the slope as the ratio of the rise to the run, I would ask my students to tell me how the graph was changing. They would speak about going up and over as they moved from one integral point to the next. I have argued that this type of verbification holds promise for helping Mi'kmaw students, and perhaps many Aboriginal students, to develop a greater understanding of mathematics, but this also needs to be explored in greater depth through more research. Maybe it works well for some Mi'kmaw students but not for others, or maybe it will be more effective with students who are Mi'kmaq speakers than with those who are not. The truth is, it might not work in every classroom or with every student. So there are a lot of hesitations in the work. So I might say "Verbification is it! Maybe. But we should talk to more students and community members in various contexts," we should explore this in more depth, in different contexts, for different linguistic communities.

This example is just one of many hedges (or open questions) in my discussions about the implications of this work for other contexts because while I think the issues outlined in the model are important to think about in other contexts, they may not have the same level of importance. For example, in my work, language was one of the strongest factors impacting Mi'kmaw students when learning mathematics. But maybe language is not the biggest issue for children in other Indigenous communities or there are different issues with language that are evident in other contexts. Certainly there is more research emerging about the role that language plays for Aboriginal students in learning mathematics (e.g. Barton, 2008; Meaney, Trinick, & Fairhill, 2012) but it is necessary to determine what the language issues might be in each context. Perhaps there is a word for *flat* in other contexts

but no word for some other taken-for-granted mathematical concept that will create a tension for a student in a different context.

So, as you can see, I have a lot of "This is it, maybe, but you should…" kinds of hesitations. But I believe the story in my research was really a story of process rather than product. This is one of the reasons why I like the word *mawikinutimatimk*; it is a verb, a process, an action. It is consistent with the verb-based worldview embedded in the Mi'kmaw language. I think the message is about the processes that we went through to uncover these tensions in our contexts, rather than the tensions themselves. Even from one school to another there were different issues that took predominance. In the school where there were more speakers, language emerged as a more critical issue. In the school where students go to middle school and high school outside of the community, there were many more tensions about ensuring consistency with public schools.

I think the whole work is not so much a "This is it" but a "This is how"; this is how we did this work, in another context you would need to find your own ways of working together, but this might help you to think through some of the issues you might encounter. There are questions that were there for us as participants in the work and these might be good questions for others to ask themselves but maybe there are other questions. Furthermore, maybe there are other questions for the Mi'kmaw communities that will emerge as the work continues.

There was a point in my research when I was told, by one participant in particular, that we were done this round of conversations and it was time for me to go write. So there was a sense of authority telling me "This is it" however, I was also told "*keluk tlatekn*" (It is good what you have done) which carries with it an implied sense of "…but you are never finished."

Wagner: To close our conversation, I would like to think reflexively. In a sense, with our conversation here, we are pitching a story for others following the structure you developed in your research. We are saying, "This is it. Maybe. But you should talk to …" First of all I reflect on the word *it* in "This is it." What is the *it* in our conversation in this chapter? I believe that our conversation will be useful for people who research outside of their home contexts, especially if they are researching in Aboriginal contexts. Thank you for sharing your story so that others can learn from your experience.

In addition to this applicability to research in Aboriginal contexts , our advisory relationship may be relevant to others. With my role as your doctoral supervisor, the questions I asked you here are a sampling of the questions I have asked you along the way. It was challenging for me to advise and guide you in your work that was done in a context that you know much better than I know. Nevertheless, I could advise by asking challenging questions, asking you to justify your decisions in terms of academic traditions but also in terms of the traditions you described in your research context (even though I do not know those traditions as well as you). It is often the case that a supervisor knows less than the student about the student's research context. The focus of our chapter has been on choices for naming method and on guidance that could inform such choices.

Secondly, I reflect on the word *maybe*. I ask how our conversation here is hedged. By structuring our chapter as a conversation, we render our experience as a "maybe." The conversation format recognises the fluidity of the story. We could write about the experience in many different ways, but our choice presents your experience and our

experience as a story, which allows readers to take it in their own way. They can do what they want with the story, from trying to emulate parts of it, to rejecting parts of it as being irrelevant to their particular context.

Finally, I reflect on the closing *you should*. In our conversation, what are we together saying other researchers and research advisors should do? I know we agree in saying to other researchers, "You should talk to the people in the communities in which you are doing research." It is powerful to understand the ways of coming to know in a community and to model one's inquiry on these ways. And we agree in saying, "You should consider the ways in which your research relationships connect to colonialist storylines."

References

Aboriginal Affairs and Northern Development Canada. (2012). *Nurturing the Learning Spirit of First Nation Students: The Report of the National Panel on First Nation Elementary and Secondary Education for Students on Reserve*. Ottawa, Canada: Author. Retrieved April 30, 2012 from: http://firstnationeducation.ca/home/

Assembly of First Nations. (1988). *Tradition and education: Towards a vision of our future*. Ottawa, Canada: Author.

Barton, B. (2008). *Language and mathematics*. New York: Springer.

Bishop, R. (2005). Freeing ourselves from neocolonial domination: A Kuapapa Māori approach to creating knowledge. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 109–138). Thousand Oaks, CA: Sage.

Dauenhauer, R., & Dauenhauer, N. (1995). Oral literature embodied and disembodied. In U.M. Quasthoff (Ed.), *Aspects of oral communication* (pp. 91-111). Berlin: DeGruyter.

Denzin, N. (2005). Emancipatory discourses and the ethics and politics of interpretation. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 933–958). Thousand Oaks, CA: Sage.

Herbel-Eisenmann, B., & Wagner, D. (2010). Appraising lexical bundles in mathematics classroom discourse: Obligation and choice. *Educational Studies in Mathematics, 75*(1), 43-63.

Herbel-Eisenmann, B., & Wagner, D. (2009). (Re)conceptualizing and sharing authority. In M. Tzekaki, M. Kaldrimidou, & H. Sakonidis (Eds.), *Proceedings of the 33rd Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, pp. 153-160). Thessaloniki, Greece: Psychology of Mathematics Eeducation.

Indian and Northern Affairs Canada. (2002). *Our children – Keepers of our sacred knowledge. The final report of the minister's national working group on education*. Ottawa, December 2002. Retrieved July 14, 2009, from http://dsp-psd.pwgsc.gc.ca/Collection/R41-9-2002E.pdf

Inglis, S. (2004). 400 years of linguistic contact between the Mi'kmaq and the English and the interchange of two world views. *The Canadian Journal of Native Studies, 24(*2), 389–402.

Johnston, B. (1999). How do we learn language? What do we learn? In L. Murray & K. Rice (Eds.), *Talking on the page: Editing Aboriginal oral texts* (pp. 43-52). Toronto: University of Toronto Press.

Kovach, M. (2009). *Indigenous methodologies*. Toronto: University of Toronto Press.

Leguin, U. (1988). *Buffalo gals and other animal presences*. New York: Penguin.

Lipka, J., Mohatt, G., & The Ciulistet Group (1998). *Transforming the culture of schools: Yup'ik Eskimo examples*. Mahwah, NJ: Lawerence Erlbaum Associates.

Lunney Borden, L. (2010). *Transforming mathematics education for Mi'kmaw students through* mawikinutimatimk. Unpublished dissertation. University of New Brunswick.

Lunney Borden, L. (2011). The "verbification" of mathematics: Using the grammatical structures of Mi'kmaq to support student learning. *For the Learning of Mathematics, 31*(3), 8-13.

Lunney Borden, L., & Wagner, D. (2011). Show me your math. *CMS Notes, 43*(2), 10-11.

Meaney, T., Trinick, T., & Fairhill, U. (2012). *Collaborating to meet language challenges in Indigenous mathematics classrooms.* New York, NY: Springer.

National Indian Brotherhood. (1972). *Indian control of Indian education*. Ottawa, Canada: Author.

Nova Scotia Department of Education and Culture. (1998). *Atlantic Canada mathematics curriculum: Grades Primary-3*. Halifax, NS: Author.

Schleppegrell, M. (2007). The linguistic challenges of mathematics teaching and learning: A research review. *Reading and Writing Quarterly, 23*, 139-159.

Smith, L. T. (1999). *Decolonizing methodologies*. London: Zed Books.

Smith, L. T. (2005). On tricky ground. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 85–108). Thousand Oaks, CA: Sage.

Truth and Reconciliation Commission of Canada. (2012). *Truth and Reconciliation Commission of Canada*. Retrieved April 30, 2012 from www.trc.ca.

Van Manen, M., McClelland, J., & Pilhal, J. (2007). Naming student experiences and experiencing student naming. In D. Thiessen & A. Cook-Sather (Eds.), *Internaional handbook of student experience in elementary and secondary school* (pp. 85-98). New York: Springer.

Wagner, D. & Herbel-Eisenmann, B. (2012). Mathematics students trying to be democractic. Vancouver, Canada: American Educational Research Association.

Wagner, D., & Lunney Borden, L. (in press). Common sense and necessity in (ethno)mathematics. In K. Sullenger & S. Turner (Eds.), *CRYSTAL Atlantique: A story of informal learning research in science, mathematics, and technology*. Rotterdam, NL: Sense Publishers.