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The Indigenous Knowledge Implementation Packsack: A Handbook for Embedding Indigenous Ways of Knowing in Your Teaching

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Preface: About Indigenous Knowledge

This handbook is based on the experience and wisdom of Indigenous people doing this work at Confederation College over many years. It is the product of authentic relationships between Indigenous and non-Indigenous people, in conversation with each other and with Indigenous Studies as a discipline. In a real sense, it is the Indigenous Knowledge of this specific community that we now wish to share.

There will be those who, upon reading the title of this handbook, ask questions about how workers in a mainstream college, part of a Euro-Canadian postsecondary education system embedded in colonial structures and policies, can offer legitimate opinions on implementing Indigenous Knowledge. How can we presume to define Indigenous Knowledge when it is the cultural and spiritual heritage of Indigenous communities, varying by geographical location and, in many cases, solely transmitted from person to person through oral tradition?

These are entirely necessary questions.

We are in no way trying to impose a definition of Indigenous Knowledge that could apply anywhere and at any time. This would be contrary to our understanding of Indigenous Knowledge*(s)*, as plural and place specific. As you read, you will see that there are some general themes and practices foregrounded, but this in no way detracts from any individual or community right to determine for themselves what knowledge belongs or is appropriate in their institution or their classroom.

Please bear in mind that this handbook is very specifically addressed to postsecondary (predominantly non-Indigenous) teachers, who have a mandate to include Indigenous Knowledges in their practice. Many colleges and universities are adopting mandatory Indigenous content in some form, be it through institutional learning outcomes, prescribed coursework or a decolonization framework. For these teachers, bringing Indigenous Knowledges into the classroom is a professional and personal requirement. This handbook is an offering to those who would take up that responsibility.

Introduction

If you are an instructor in Ontario's postsecondary system, you are probably aware of the Truth and Reconciliation Commission (TRC) Calls to Action regarding education. Very likely, your institution is working towards developing and implementing a decolonization strategy, which may include mandatory Indigenous content. As an instructor, you may be anxious, confused or just curious about what this means in your own teaching practice.

At Confederation College, we have been working towards the implementation of a set of seven Indigenous Learning Outcomes (ILO) since 2007, when they were written and gifted to us by community representatives. The purpose of the ILO is to ensure that, before graduating from Confederation College, every graduate will be able to:

1. Relate principles of Indigenous Knowledges to their career field.
2. Analyze the impact of colonialism on Indigenous communities.
3. Explain the relationship between land and identity within Indigenous societies.
4. Compare Indigenous and Canadian perceptions of inclusion and diversity.
5. Analyze racism in relation to Indigenous peoples.
6. Generate strategies for reconciling Indigenous and Canadian relations.
7. Formulate approaches for engaging Indigenous community partners.

We are aware that some institutions have adopted ILOs; in fact, some have adopted these exact ILOs. While we at Confederation College are still working on our own ILO implementation, we have learned a great deal on the journey, and it is this learning that informs this handbook.

This handbook presents the culmination of our ongoing research project, initiated in 2016. Our objective was to develop an assessment tool aligned with Indigenous perspectives on critical thinking and to understand how the knowledge, skills and attitudes within the ILO have informed the critical-thinking skills of both Indigenous and non-Indigenous learners in a variety of college programs. The intermediate outcome of this project was the creation of a meta-rubric or 'Packsack' that faculty could use to generate other classroom-specific rubrics as a means of including and measuring Indigenous-specific Ways of Knowing. To further our investigation, we collected qualitative data from faculty members who engaged in professional development related to the initial Packsack we developed. Their valuable insights served as a catalyst for our continued efforts in this field. Consequently, this handbook builds on the foundation laid by our previous work, *An Indigenous Knowledge Mobilization Packsack*, a collection of documents intended for faculty use.

We call the tools in this handbook a 'Packsack' because, like any bag that you might take with you out hiking, it contains a collection of necessary and useful items that will enable you to navigate an unfamiliar environment. The term 'packsack' is used by Indigenous peoples in northern Ontario and references the canvas pack that hunters and trappers carried in the bush. It is familiar to Indigenous community members who grew up with this term, as opposed to the modern 'backpack.' It offers you, as an instructor, some guidance to increase your confidence in a new version of the classroom that recognizes the relevance and importance of Indigenous Knowledges and encourages critical thinking. We call the new version of the classroom you will help create an Indigenous Knowledge Environment.

To be clear, the document you are reading right now cannot replace a full, program-level implementation process. Perhaps your institution is working on a version of ILO implementation, or the inclusion of Indigenous content as part of a decolonization strategy, but such implementation is the job of academic administrators. In particular, any ILO implementation must happen as a program-wide process that seriously considers what specific content needs to be included, what should go where and the key elements to be included to consider outcomes achieved. Such a process will take time and is best carried out as part of a Comprehensive Program Renewal and other quality assurance processes. It cannot be the responsibility of faculty alone.

While this handbook is not about ILO implementation per se, it is about *Indigenous learning*. It is about decolonizing the classroom. If you are a teacher at an Ontario college, regardless of your status, then this is for you. We are starting with the assumption that, as an instructor in the Ontario postsecondary system, one of your roles is to bring Indigenous Knowledges into your classroom. Perhaps your course outline identifies Indigenous content or Indigenous Knowledges as part of the course learning outcomes; as an instructor, you are expected to incorporate that material. Of course, it is not just up to you, any more than completely meeting a vocational learning outcome is up to you. Your job is to be a *contributor* to your program or school's overarching strategy for Indigenous learning, whatever that may be. The purpose of this Packsack is to help you contribute.

Even if you do not have such material explicitly in your course outline, you can still use this handbook to prepare, to become more in tune with your institutional mandate towards Indigenous communities and, most of all, think differently about your teaching. There is more to decolonization than just squeezing certain topics into your lesson plans. We are asking you to think not just about *what* you teach but also about *how* you teach: how you prepare, how you present, how you evaluate students and even how you evaluate your own progress in handling this material. This is an emotional, spiritual and psychological challenge, not solely an intellectual one.

This handbook proposes changes and enhancements to your teaching based on Indigenous Knowledges and Indigenous Ways of Knowing,[1] not because this change is necessary to teach specific Indigenous-related content (although it will definitely increase your capacity to do so), but because these are Ways of Knowing that can truly benefit your teaching practice. They can also help you be more confident in meeting your responsibilities as a teacher in a Canadian classroom after the *Calls to Action* of the Truth and Reconciliation Commission of Canada (2015).

Knowledge and Teaching as Relational

Our Packsack is intended to help you navigate and facilitate an Indigenous Knowledge Environment. Before continuing, let us delve further into what we mean by 'knowledge.'

Information comes to us from all directions, in a variety of modes. Our task as learners, community members and citizens is to interpret this information and turn it into knowledge. Not

[1] At this point, many people will ask questions like: "But am I allowed to teach this?" Rest assured we will address these questions, but for now, bear with us.

all information we encounter, especially in the digital sphere, is true. We must have a system for sorting it out — a knowledge system. These systems are what make the world make sense.

In other words, knowledge is not an apple hanging on a tree waiting to be plucked. Knowledge is formed by a process that is dictated by who you are and where you come from.

In the western approach, for example, the process of arriving at knowledge (i.e., thinking) is normally referred to as something separate from other ways of experiencing the world. Thinking is treated as a kind of activity that can be isolated and described, defined and worked like a muscle to make it stronger. Importantly, thinking is generally attributed to one individual at a time. My thinking belongs to me and while I can share it with others, my ability to keep my thinking to myself is part of who I am.

The individual nature of thinking in the western system makes for a compelling contrast with Indigenous Ways of Knowing, which are explicitly based on relationships (Kirkness & Barnhardt, 1991; Madden, 2015; Pidgeon, 2016). Another way of putting it is that the Indigenous worldview is 'relational.' You may have heard this term before in connection with Indigenous ideas and Indigenous education. You may have thoughts and feelings about it already. It is an idea that is easy to say and easy to agree with, but very difficult to put into practice, and this is partly because it is very much 'running upstream,' in direct contrast with a dominant way of thinking that we call 'western.' It is also a lot more complicated than it sounds, and there must be a tremendous amount of work done to understand its complexities.

But let's stick with the program, which is to make the idea of relational knowledge authentic *and* workable for the teacher in the classroom.

We start with the fundamental recognition that every person exists within and through a web of relationships. These relationships are not only with other people but with all of nature and the world. Because it will become relevant to teaching and learning, we are going to suggest that we also have relationships to ideas and schools of thought, and even to the books that contain them. When I read someone's opinion or listen to them speak, I enter into a kind of relationship with them. It may not be as intimate as the relationships I have with family and friends, but it is a relationship and it does inform who I am.

A relational worldview directly implies each of the Four Ways of Being/Knowing, which we described in our previous report as being components of an Indigenous Knowledge Environment. The work of the Packsack (and this report) is to translate elements of a relational way of knowing into what we call the Four Ways of Navigating. For those who wish to, each of the Four Ways is explained in greater depth, with academic references, in subsequent sections of this report. Right now, our focus is to introduce you to the Indigenous Knowledge Environment.

The presence of the Indigenous Knowledge Environment does not override or annul the learning environment already prevailing in our classrooms. The two can overlap, inform and complement each other. They are both contributing to the student acquiring useful, important skills that are sometimes grouped under the category of critical thinking. In a sense, the entire purpose of this handbook and the Packsack itself is to outline a relationship-based vision of critical thinking skills, which we consider to be of fundamental value to all students and graduates of a postsecondary education.

The table below (Figure 1) elucidates this idea: a knowledge system based in relationships can be 'mapped' onto the skills of critical thinking as understood from a western context. Each of the Four Ways of Knowing found in the Packsack (left column) are correlated with an aspect of critical and analytical skills, using a relationship-centered lens (middle column). For instance, The Fourth Way: Practicing Humility can be seen in terms of "relationship-based reflection and decision-making" because, in a very real way, this is what it encompasses. It is also highly congruent with the teaching of ethics. The right column gets more specific as to learning objectives for the teacher and student.

Table 1:

Four Ways of Navigating and Relationship-based Critical Thinking Equivalents

Way of Knowing	**Relationship-based Activity**	**Corresponding (Western) Skillset**
Wholistic Teaching and Learning	Relationship-based Learning	• Appreciating knowledge as an ongoing process • Developing the ability to apply one's learning to new situations • Learning in a lifelong, applied and practical way
Communicating Through Story	Relationship-based Communication	• Practicing and developing listening, interpretation, communication and comprehension skills • Maintaining skills of memory and interpretation (deriving meaning from stories)
Strong Relational Thinking	Relationship-based Verification	• Maintaining a healthy and self-confident skepticism • Having a critical understanding of how knowledge works • Accomplishing a rational, logical and comprehensive assessment of facts/issues on their own merits
Practicing Humility	Relationship-based Reflection and Decision-making (Ethics)	• Identifying one's own standpoint in the world • Understanding there is more than one way of knowing • Being aware of one's assumptions and biases • Engaging empathically with other perspectives

Hopefully, by this point you are interested and maybe even excited to join us in the Indigenous Learning Environment. In our experience, most teachers are on board with the concept of incorporating Indigenous Knowledges in their teaching. Politically, socially and culturally, they understand why it is important, and embrace the goals espoused by those who would decolonize the classroom.

However, it is usually at this point when things grind to a halt, which is why we must take a bit of a detour in the next section to discuss the very real obstacle presented by white fragility.

Ask yourself, do any of the following sentences apply to you?

- I can always choose whether or not to include Indigenous content in my lessons.
- Indigenous students in my class don't speak often, and when they do, I get nervous.
- I don't use Indigenous words in class, even if they are relevant, because I am afraid I will mispronounce them.
- I see the importance of including Indigenous perspectives in my teaching, but I just don't know where to start.
- I don't want to teach Indigenous content until I feel confident about it.
- I would much rather discuss diversity than decolonization. Diversity is positive and I prefer to be positive.
- I am white, therefore I am not allowed to speak about Indigenous culture and knowledge.
- I would much rather skip the topic than risk making a mistake. I dread being called a racist by a student.
- I do not feel equipped to teach about racism in class, even though I have taken as much training about it as I could.
- Being respectful means not sharing my opinion, even when asked.

If any of these statements sound familiar, the next section is for you.

Anxiety About Working in an Indigenous Knowledge Environment

Before we proceed with an in-depth review of each of the Four Ways of Navigating, we must take a brief detour into a subject that pertains directly to the development of capacity in an Indigenous Knowledge Environment: faculty anxiety and white fragility. In our experiences working with postsecondary faculty, there is a widespread and significant anxiety about starting to teach elements of Indigenous Knowledges, to the point that they would rather avoid it.

The overwhelming majority of teachers in the college system are non-Indigenous and, of these, the majority are white (Statistics Canada, 2020), complemented by only a handful of Indigenous teachers as colleagues. As colleges work to increase diversity, they must ask you, the faculty, to commit to teaching Indigenous content, which will often mean unsettling yourself and relearning through the process of decolonization. There is no way to overstate the difficulty of dismantling structures that are so deeply embedded that they appear natural and immoveable. Even as we offer this handbook with its possible paths for faculty development, we appreciate that the process of unlearning white, western, hegemonic knowledges, contexts and processes is not an undertaking that can be completed in a single afternoon of professional development. It is an ongoing journey.

It is understandable for faculty to feel some anxiety about engaging with the Indigenous Knowledge Environment. However, there is a notable element to the anxiety that must be reflected upon. After nearly 15 years of official efforts to fully integrate the ILO at Confederation College, we can attest that the majority of faculty do want to increase their capacity and have requested (and taken) professional development opportunities. And yet, while workshops and discussions have occurred, we have not seen the inclusion of Indigenous content to the levels we had hoped. There is a somewhat fraught conversation to be had — fraught, and difficult, because it requires you, as faculty, to reflect upon your own privilege.

Before, during and after faculty engaged in workshops and discussions, our efforts have been hampered by what J.P. Restoule (2011) and others would describe as “benign resistance”: a phenomenon whereby white faculty express doubt, hesitation and concern to the extent that they retreat into non-action. We repeatedly hear the same questions. Some of them appear in the guise of mechanical concerns about how faculty members are meant to accommodate the new content in their own course or program. More often, the questions are variations on the themes: Am I allowed to teach this? Where should I start?

It is our contention that this is indeed resistance and that it is a manifestation of white privilege, and more specifically, white fragility. The term “white fragility” was first coined by Dr. Robin DiAngelo (2011) and is defined by the author as:

> a state in which even a minimum amount of racial stress becomes intolerable, triggering a range of defensive moves. These moves include the outward display of emotions such as anger, fear, and guilt, and behaviors such as argumentation, silence, and leaving the stress-inducing situation. These behaviors, in turn, function to reinstate white racial equilibrium. (p. 54)

The “white racial equilibrium” has the effect of maintaining the status quo. While there is no ill intent to this, it is a manifestation of privilege. Remember that privilege works by remaining unconscious and invisible. It has nothing to do with choice, but it *is* a luxury that all white people have by virtue of simply *being*; for instance, the luxury of doing nothing and saying nothing in the face of injustice. Sometimes, white privilege is inseparable from a kind of cultural modesty. White educators maintain that they are not best situated to teach this knowledge without lived experiences, and that those with lived experiences should be the ones teaching this information. That may be true but, beneath these expressions of humility, there may very likely be — acknowledged or unacknowledged — guilt and shame. Shame is not, in this case at least, a useful emotion. Motivated by shame, and under the banner of ‘being respectful’, white educators will sometimes forego their actual responsibility, which is to engage with and teach Indigenous concepts in the classroom. This may not feel good, yet it is privilege, because it has the effect of shifting necessary work onto Indigenous educators who already bear the burden of educating their white colleagues. As expressed by Evans and Moore (2015), white privilege shifts the responsibility of dismantling systemically racist structures to those who are most oppressed, under the guise of uplifting and creating space for marginalized voices.

We know you have good intentions, but we ask you to consider that you have existed within a state of privilege and safety that Indigenous peoples, including fellow faculty and students, have not had access to. It is not your normal experience to examine your personal privilege in the context of Canadian society. In fact, this may lead to ongoing insecurity about your capacity to learn about and teach elements of Indigenous Knowledges. This is a process that can cause

you discomfort, pain and anxiety. You may have always 'othered' Indigenous peoples, and their knowledges, even as you are being asked to learn about them.

There is nothing easy about this work, but the only answer we have is to affirm that you must sit in the discomfort (DiAngelo, 2011). We are asking non-Indigenous teachers to accept that experiencing discomfort is a necessary part of the work (Donsky, 2018).

In the spirit of beginning or continuing this difficult journey, we offer the following responses to several of the questions we have heard most often.

Do I Really Have to Give Up Space in my Course for This?

No, you really don't!

One of the most common anxieties about including Indigenous content into a course or program has to do with logistics. How can we fit more into these courses? They are already filled with very necessary material and there is not enough time to cover it. In many cases, this material must be covered in order for students to receive the professional accreditation or certification that they need. We wouldn't want graduates doing the work of being a pilot, cook or social worker without learning everything necessary to be successful in those careers!

We understand how much pressure faculty are under to deliver all the necessary content within shrinking classroom hours. However, including Indigenous Knowledges in your course doesn't necessarily mean adding a new lecture or module. We know that your classroom time is precious and increasingly pressed upon. So, we may need to get extra creative. We can look at methods, assignments and teaching approaches. This is in part a matter of building capacity, not 'what fits' or 'what doesn't belong.'

There are a couple of ways to solve the time crunch. First of all, it's possible to do two things at the same time. We do it when developing curricula, in fact. This requires comfort with the material, of course, and the confidence to be creative, and that is where this handbook can help. Second, Indigenous Knowledges don't have to be delivered strictly in the form of additional content. It can be part of an assignment or in-class learning experience. It can be modelled by teachers.

In fact, decolonizing the classroom means a lot more than a collection of new content; it means a new way of thinking and teaching. Thus, it can be approached by adjusting your methods for presenting material, the types of assignments you give and how you evaluate them. Aspects of Indigenous Knowledges could be incorporated through an approach to hands-on learning activities as much as through theoretical concepts. (See the paths suggested in the Navigation Guides, as well as the infographics appended to this report.)

Isn't This Cultural Appropriation?

Let's be clear: cultural appropriation is real and something to be avoided. At the same time, it is a concept that can be marshalled to serve white fragility, particularly when it is used as an excuse to not engage at all.

Just so we're all on the same page, cultural appropriation is taking, without permission and often discriminately, the traditional knowledge, cultural or spiritual practices or artifacts of a culture (Antoine et al., 2018). Cultural appropriation does not work towards a broader goal of integrating

Indigenous pedagogy or involving Indigenous community members (Antoine et al., 2018). Simply put, it is the exploitation of a culture. A classroom-related example of this might be when a non-Indigenous teacher smudges with their students. Choosing to 'bring in' some element of someone else's culture, even if it seems innocuous, is tied to privilege as well. When you are a part of the dominant culture, it is easy to take an action without examination or reflection.

This is not what we are asking faculty to do. We are not asking you to present traditional or ceremonial knowledge in an 'authentic' manner; we are asking you to weave certain subjects appropriately through your curricula as an effort to support engagement and success of all learners.

What If I Just Teach the Medicine Wheel?

We would answer this question with another question: Why do you think this is a solution?

Circles are everywhere in Indigenous learning, and for good reason; they are viewed as a metaphor or symbol for wholistic experience. The problem is that the Medicine Wheel is sometimes treated by outsiders like a safe, iron-clad tenet of Indigenous belief. In fact, the term 'Medicine Wheel' was coined by non-Indigenous people in response to the Bighorn Medicine Wheel in Wyoming. Certainly, sacred circles (of which the Medicine Wheel is one example) are found in many cultures and many different expressions of cultural knowledge, including Indigenous. Please understand, however, that there is no one 'official' version of the Medicine Wheel, and that it has become a 'pan-Indigenous' symbol — which is not a good thing. That which is pan-Indigenous is a misappropriation, an idea that somehow stands in for everything Indigenous and distorts the true richness and sophistication of Indigenous Knowledges.

Think of this: Indigenous Ways of Knowing are described by scholars as plural and specific to locations and communities. Indeed, Indigenous scholars have not established a common usage of the term "Indigenous Knowledge" (Battiste & Henderson, 2000) because it is said that knowledge originates from experiences that are deeply personal and particular (Kovach, 2021). Given this, surely no single idea or image can be an accurate representation.

As you grow in confidence within the Indigenous Knowledge Environment, you *may* choose to present one or more examples of a sacred circle or Medicine Wheel as options for understanding some aspect of the content you are presenting. The important aspect would be to place this in the context of a wider conversation about where the Medicine Wheel comes from, and how difficult it is to define an entire culture with a single image.

Am I Expected to Use Medicines in My Classroom?

Please don't.

Remember the definition of cultural appropriation. There are certain practices that are sacred and ceremonial, and these should not be presented by a non-Indigenous person. In fact, they aren't meant to be included in ILO or Indigenous content requirements. These are areas of Indigenous experience that are best approached outside the classroom.

Besides, you cannot make assumptions as to what a person believes based on their identity as Indigenous. To present an activity in the classroom as 'this is what these people believe' would be very inappropriate. Just as in western cultures, there is a great diversity of belief, practice and identity within the culture.

Am I Allowed to Teach Indigenous Knowledge?

Yes, you can and you should.

This is not to contradict the messages above about cultural appropriation but to say that we are carefully defining what we consider to be Indigenous Knowledges for the purposes of our classrooms and our strategic mandates in the wake of the *Calls to Action*.

We want all our students to be acquainted with Indigenous Knowledges, but these are Indigenous Knowledges as you would find them in the writings of a number of Indigenous scholars. These scholars have seen fit to present their understanding to the world in a book, so you can present these understandings to your students. Now, if you have read many such books or articles and you have noticed that there is a common thread to how these writers define Indigenous Knowledges, then it would be better to present *that thread* to students.

How about this? There are writings about how the Meso-Americans adapted and cultivated corn as a food crop, and its importance in their culture and diet. So, it would be quite appropriate to discuss this in a class on food history or dietary staples in different cultures, or even just about Indigenous contributions to world culture since corn is found all around the world. This much is fine to bring into the classroom. But as you read further on the subject, you uncover differences in expert opinion about where corn was cultivated or perhaps how it was changed from a wild grass to an edible crop. In this case, depending on the class, an even better approach would be to present the entire conversation to your students. In this way, they are learning not only some details about Indigenous cultures and history, but also about the very process by which knowledge is formed.

We understand that you may still feel uncomfortable, but you need to approach it in the same way that you would keep abreast of new developments in your field or a topic that you need to 'brush up on.' The key is to acknowledge that you are not Indigenous and you are not approaching the subject as an expert. After you have done your preparation, you will have something to share with students, and that is the material that can be found in the library. Indigenous Studies is a discipline, like sociology or organic chemistry, that can be learned. There are many Indigenous scholars and knowledge keepers who have written down or recorded their voices with the intention that others may hear them. You can present these voices in the classroom, much as you would other topics. As teachers, we do this all the time; we present material and indicate where it came from, giving acknowledgement.

It also needs to be said that a great deal of the content that we would want you to present can easily fall under the label of 'Canadian' knowledge. For example, residential schools are not Indigenous Knowledge so much as they are Canadian history — as are the existence and impacts of colonial policies and the reality of anti-Indigenous racism. Still, you can present the experience of these things from the Indigenous perspective, acknowledging that this is not your voice, but theirs.

In the words of J.P. Restoule, an Indigenous scholar in the field of education, the question that you should ask is not "Am I allowed?" but "What is my responsibility?" (2013, p. 35).

Where Do I Start?

Start with the library — specifically, the Learning Portal, which is a collaborative project created by College Libraries of Ontario (CLO). In fact, CLO is working on an enhanced, community-informed version of an Indigenous Learning Portal called “Maamwi” that is available to all Ontario students and educators.

Your college may also offer a variety of professional development opportunities throughout the year. This means — as we have been trying to show — that we can’t do the work for you. As many colleges are making decolonization part of their vision, it is just as much incumbent on every faculty to be prepared to teach this material as they must be to teach the essentials of their own vocation.

With this said, consider that it may not be as difficult as you think. In fact, you may already be doing some of it. You may find when you read our descriptions of the Four Ways of Navigating the Indigenous Knowledge Environment that some of it sounds perfectly familiar, because these are very human ways of engaging with the world and the environment around us. Since we as teachers are very much concerned with ways of knowing, we may have already given considerable thought to the best ways to present knowledge and adopted some of them. For instance, experiential learning is a popular topic within pedagogical circles for a reason. Stories are ubiquitous in teaching and learning for a reason. The difference here is for you to identify and recognize what is Indigenous, and to celebrate it.

How Do I Know I’m Doing This Right?

The first answer to this question is: study. Just as you are obligated to be well-versed on the latest discoveries or trends in the field you usually teach, you can acquire a working knowledge of the field of Indigenous Studies and *keep up with it*. When you study a field, you learn the state of the important conversations within that field. These nodes of agreement are your guide as to what is accepted as ‘correct.’ Keep studying and reading and you will be aware of the major conversations, and then all you need to do is present these conversations accurately to your students — as you already do with other topics.

A second answer is to ask someone else who knows. You can consult some of the resources available at your college. Again, there is the library, but you may also have a colleague you can talk to. Decolonizing postsecondary learning depends on relationships between people, particularly those between Indigenous and non-Indigenous people. These are relationships in which authentic conversations can happen and difficult topics can be approached, and re-approached.

We ask that you do not fall back upon the solution of asking an elder to speak to your class. There are many reasons for this. The first is that the elders have important work to do for their own people and they are inundated with requests to be guest speakers. Second, one person cannot represent an entire culture and it is unfair to ask them. Third, the elder may not be the most appropriate person to speak on the subject at hand. Suppose that your course outline speaks of “Indigenous technologies around the world.” You would do better to visit the library and construct a presentation on this subject than to ask an elder who may or may not be versed on the topic even though they are wise and experienced and have counselled many people.

Finally, use our Packsack! It was developed specifically to guide teachers like you to become more confident on your journey through the Indigenous Knowledge Environment.

Packsack Contents

Your Packsack began with introductions to each of the Four Ways of Navigating. Consider these introductions analogous to route descriptions or a guidebook you might bring hiking. They are intended to get you acquainted with the concept and thinking creatively about it in relation to the classroom. Please also note that while each of the four sections is meant to stand alone, it makes a certain amount of sense to read them in the order presented: wholistic teaching and learning, communicating through story, strong relational thinking and, finally, practicing humility. There is something of a natural flow from each into the other.

The Navigation Guides are your maps to each of the Four Ways of Knowing. The table and infographic versions of the guides are embedded in this document, but they can also be downloaded in a printable PDF format from the HEQCO website.

Each Guide comprises four **milestones**, and each milestone contains three **waypoints** to guide your progress. It is intended that you go in the direction indicated by the arrows, from the top down, but that does not mean that you can't go back and forth between each milestone and each waypoint as you feel necessary.

Under each waypoint, you will find a few specific suggestions as to what to do. These suggestions are intended to be generic and adaptable to any content or specific expertise. It will be up to you to decide when you have achieved each waypoint and milestone. We have tried as much as possible to direct you, but make no mistake: the work must be yours. We can't do it for you. There is a reason that the very first thing we want you to do in each Guide is *study*.

If you get lost along the way, refer to the "Guide to the Guides." This section gives a more direct explanation of the meaning of milestones and waypoints; you may consider it your compass.

Four Ways of Navigating

Our first stage of HEQCO-funded research connected the fundamental principle of relationships to four aspects of knowledge formation: **wholistic teaching and learning**, **communicating through story**, **strong relational thinking** and **practicing humility**. These are not meant to be a comprehensive and definitive version of Indigenous Knowledges. Our goal is to connect relational constructs with major modes of western critical thinking. They are also not watertight. Although they each describe a particular style of Indigenous knowledge-making, they overlap and support each other; this is consistent with a wholistic worldview.

Instructors are not expected to pursue all Four Ways! In fact, we would like you to pick one that fits with your style and teaching expertise and then follow the corresponding guide. For example, wholistic teaching and learning may be very congenial to teachers in trades and technical fields where experiential learning is emphasized; meanwhile, communicating through story is very familiar within the worlds of media, marketing and culinary arts. Strong relational thinking should match up well with general arts and sciences or liberal arts courses that include elements of critical thinking or a strong emphasis on research. Practicing humility could apply in

nearly any teaching context but could be especially meaningful whenever the course of study includes working with diverse clients.

Also, we cannot emphasize enough that these guides are not to be completed in a single day. We would prefer that you view the journey as circular and recursive (i.e., you learn from it and apply that learning the next time around) rather than strictly linear. Finally, each Way of Navigating has its own anchor section in the pages that follow, which includes a Navigation Guide summarizing the suggested itinerary for you to take as a teacher.

The First Way: Wholistic Teaching and Learning

In the western educational context, things are usually separated, divided, categorized and isolated. We separate subjects from each other, for example. We separate theory from 'hands on,' school from 'real life.' We even separate people into classrooms, groups, cohorts and functions — like teacher and student. The structure of western knowledge is such that we are constantly drilling down from the general to the increasingly specific, and expertise is a function of one's mastery over details. As an individual proceeds through the education system, they often become more and more focused on smaller and smaller areas of knowledge.

Like any knowledge system, the western one has strengths and weaknesses. One strength of this system is that it enables us, as both teacher and learner, to get a handle on the world, and it helps us to survive in relative comfort. One (big) weakness is how it treats the world as a result — parcelled up into subject headings.

In a wholistic educational context, relationships are the absolute foundation of knowledge itself. As we have already emphasized, the Indigenous approach to the world is based on relationships. An Indigenous epistemology avoids the idea of individual knowledge and instead emphasizes the concept of relational knowledge and, moreover, a deep accountability and responsibility to the world (Battiste & Henderson, 2000).

Consider that a self built on relationships with the world means that we are not really separate from anything in the world. This idea is usually expressed as 'interdependence.' Our interdependence is based on all our relationships with other people, animals, plants and inanimate entities in the natural environment. If we are defined by these relationships, we cannot possibly be separate, and since we are not separate, everything we do affects everything else and ourselves. The idea of wholeness thus encapsulates interdependence, responsibility and a radical equality between all things. Blackfoot scholar Leroy Little Bear (2000) beautifully captured the nexus between wholeness, interconnectedness and responsibility:

> Wholeness is like a flower with four petals. When it opens, one discovers strength, sharing, honesty, and kindness. Together these four petals create balance, harmony, and beauty. Wholeness works in the same interconnected way. The whole strength speaks to the idea of sustaining balance. If a person is whole and balanced, then he or she is in a position to fulfill his or her individual responsibilities to the whole. If a person is not balanced, then he or she is sick and weak — physically, mentally or both — and cannot fulfill his or her individual responsibilities. (p. 70)

The following are some ideas about methods and practices that enable wholistic education.

Make the Learning Experience Whole

Now that we understand how we tend to parcel earning in mainstream education — theory from application, general from specific, classroom from real world — we can imagine how to 'reunite' these things. In this, we already have some models, as suggested in the writings of scholars on wholistic education (Anuik & Gillies, 2012; Assembly of First Nations, 2010; Augustus, 2015; Chartrand, 2012). Collectively, these and other authors suggest that wholistic education is an ongoing process, one that is not confined to artificial constructions of time (semesters, programs) and space (classrooms). In other words, wholistic education is experiential, contextual, lifelong and, ideally, it happens in the real world.

The confrontation between western and Indigenous (and other) knowledge systems has been ongoing for centuries, and the epistemological 'move' of colonizing structures, over and over, is to treat Indigenous Knowledges as not being knowledge at all precisely because of its experiential, embodied qualities. To make the learning experiences whole as we are suggesting, teachers must first appreciate that Indigenous pedagogies are "embedded in complex systems of knowing, inclusive to their own suppositions about knowledge and being" (Friedel, 2010). In other words, they are every bit as legitimate and sophisticated as western ways of knowing.

To reiterate, wholistic education can be achieved by adopting approaches that are experiential, contextual, practical and lifelong. As workers in an applied learning context, college teachers have the benefit of already being somewhat familiar with these ideas.

Teach the Whole Student

When engaging in an experiential teaching method, there are methods and models that speak to how the teacher 'relates' to their students, and there is a crossover between these writings and those of scholars in the field of Indigenous pedagogy. For instance, Rebecca Chartrand (2012) identifies Indigenous pedagogy as having a focus that explores interrelationships among all things, considering their feelings, attitudes and values. These values can add affective components to conventional subject matter curricula while specifically being defined in Indigenous language, culture and relationship to land, space and being.

Opportunities for self-reflection must be incorporated into any experiential learning, for both Indigenous and non-Indigenous students. Consider that, in traditional Indigenous learning situations, the 'student' is expected to watch, listen and follow as a 'knowledge keeper' demonstrates how to do something or make something. To consolidate their learning, the student will have to attempt to repeat the lesson. It is understood that they will make mistakes, and that they should learn from their mistakes by repeating their efforts. However, it is not merely the act of repetition that makes for the learning; there must necessarily be a meta-cognitive element, assessing where one went wrong, adjusting and observing one's own learning. There will very likely be related lessons in areas such as personal regulation, problem solving and cultivating self-awareness.

To sum up, teaching "the whole student" means that the teacher must provide opportunities for the student to examine different aspects of themselves (i.e., not only the intellectual but also the physical, emotional, psychological and even the spiritual). For example, after presenting new knowledge, a teacher could address the psychological, spiritual and emotional by incorporating reflection, peer conversations and any other kind of activity that requires the student to engage with their whole selves as opposed to just their intellect. It must be admitted that this can be

difficult, in that students have spent their whole educational careers within a certain kind of learning framework, and thus may present some resistance to the prospect of bringing their personal feelings and experiences into the classroom. Addressing this resistance is not easy but can be learned as a skill just like many others. It has to start with the confidence that such activities *are* valuable, *are* relevant and *are* learning.

Make the Knowledge Whole

A final approach to wholistic teaching and learning is to make the knowledge whole. This could include such simple strategies as taking an interdisciplinary approach, looking at a topic from different angles, and introducing differences of opinion about an issue.

The option of a problem-based or case-based learning method is an attempt to 'reunite' all the pieces of knowledge that would, in mainstream education, be separated into subjects and classrooms. Rather than teaching all these pieces and then challenging the student to recombine them in a practicum or even after leaving school, a truly wholistic and experiential exercise might pose the student with a problem, question or challenge and require them to solve it. This is naturally quite a demanding approach, both for teachers and for students, especially in the early part of their program. However, there may be ways of including it on a smaller scale initially through a single exercise or assignment.

Please refer to the wholistic teaching and learning Navigation Guide at the end of this document.

The Second Way: Communicating Through Story

Since time immemorial, people have looked up at the sky, sometimes during the day, sometimes during the night, and wondered about the universe they were a part of. They tried to understand what the movements of the sun, the stars and the moon meant, and how they fit into it. Why did the seasons change in relation to the sun's position in the sky? Why were there humans at all? These were not idle questions, but necessary and critical to survival. To make sense of their world, people constructed stories about the sun, moon and stars (and so much more), which they shared with each other.

Human beings are hardwired to be storytellers. Every moment of every day, we are inundated with information of every kind: sensory input, ideas, images, messages … not to mention the news and social media. In order to make sense of all this, we organize information into patterns, the most familiar of which is called 'narrative.' We turn patterns into a story, and thus storytelling is a primary and powerful way of transferring knowledge and is recognized and applied by Indigenous scholars writing on the subject. As Gregory Cajete (1994) explains, narratives of events and experiences make the basis of stories that are fundamental to all human understanding, teaching and learning.

Not all stories are labelled as such. Within the Indigenous Knowledge Environment, stories would include both fiction and non-fiction, and those told in diverse forms. Stories are not told only in books, movies and television. They are also told through images, objects, performances and actions. A curriculum is a kind of story, as is a lesson, or even the choice of evaluation. Moreover, one of the greatest things we can teach someone is how to recognize when they are being told a story, and then to properly interpret it. Hence, this way of navigating includes critical interpretive skills. Communication skills are also important — reading, writing, observing,

remembering and, especially, listening. The opportunity to listen, we would argue, has been relatively scant for most learners in the western educational system, and turning to an Indigenous Knowledge Environment provides an entry point through its cultural emphasis on orality. In short, storytelling has tremendous potential as a teaching and learning method.

There is, of course, no one way to apply storytelling to teaching practice. In the sections that follow, we suggest a few and delve into the scholarly conversations around them.

Storytelling as a Way of Knowing

Storytelling is a way to transfer knowledge. In Indigenous cultures, stories have been used to bind communities. Creation stories, historical narratives, traditional ecological knowledge, sacred Indigenous teachings and the languages themselves have been retained by Indigenous culture keepers through oral traditions (Eigenbrod & Hulan, 2008). When applying the storytelling mode, educators could begin by understanding the function and meaning that storytelling has for Indigenous peoples; for example, it is described as an art form of the people and "a part of the fabric of our lives" (Collins & Cooper, 1997, p. 24). The interwoven stories narrated by Kokum (a Cree word for grandmother), Moshum (a Cree word for grandfather) or other teachers provide a historic glimpse into the lives of others. The focus can extend to communal, societal, civic, historical and political happenings. At times, the stories are humorous and a source of amusement (Iseke, 2013).

Likewise, classroom instructors can draw on storytelling as a communicative and learning tool. For example, all students can be invited to share stories about themselves, both Indigenous and non-Indigenous, and in this way get closer to understanding each other. Meyer (1996) explains the value of sharing traditions in this way:

> Talk about your life, the stories that make your family so unique, your experiences, and how you got to be you and not someone else. It's important that we value our oral stories — our oral traditions — because they tell us and others who we are. (p. 140)

Not coincidentally, story-sharing enables all those involved to get closer to the model of wholistic education; in the act of sharing a story about themselves, the student learns something about their own identity, regardless of who they are. This, in turn, connects them to the project of decolonizing the classroom.

Storytelling as a Way of Teaching

Bringing stories into the classroom as a teaching tool creates connections by deploying narrative to make content relatable to all involved, creating a "community of relationships" (MacLean & Wason-Ellam, 2006). The weaving of words and images in the classroom weaves associations; Dyson and Genishi (1994) argue that there is "the potential for forging new links in local, classroom 'cultures' in which individuals are interconnected and new 'we's' are formed" (p. 5). As a teaching strategy, stories can open space for self-expression and help develop skills like interpretation, as the journey of learning through storytelling is a process of ''reweaving rather than in simply receiving'' (Smith, 1999, p. 532).

As all English teachers know, the study of story provides many intellectual benefits. For example, story can promote the development of analytical skills by teaching students about metaphor and analogy. Indigenous peoples have used stories as analogies to explain the connections with people and the natural world (Bighead, 1997) but, as suggested in the

beginning of this section, the use of story to explain our world is fairly universal, and the first approach to scientific understanding. In other words, there are no limits to the power of story as a teaching tool.

Storytelling as Decolonization

We would be remiss if we did not address the learning potential in bringing into the classroom Indigenous peoples' experience, in their own words. Oral stories and Indigenous literature can be safe entry points into Indigenous Knowledges because they "offer insight into particular communities, places, cultures, and identities in an accessible and celebratory way" (Hanson et al., 2020, p. 64). When stories of colonization and residential schools are recounted, listeners are compelled to pay attention and to 'live through a crisis.' Identification, which follows from storytelling, compels students to share in another's perspective and to understand that their own perspective can (and should) be questioned.

For Indigenous students in the classroom, storytelling may become an educational practice that aids in retaining historical memories, serving as an empowering link to identity and the traditional knowledge of Indigenous peoples. Indigenous stories can be "anchors of resistance" and ways of preserving the language as well (Anderson, 2000, p. 131). MacLean and Wason-Ellam (2006) recorded an interview with a teacher, who recalls stories heard about her mother picking rocks, her grandfather trapping, living on the reserve and then coming to an urban school and experiencing poverty. These are stories of strength and resilience, stories of anticipation, confidence, hope, accomplishments and pride.

At the same time, there will be stories of trauma, and it is understandable that educators may struggle with how to manage these stories, and reactions to them, in the classroom. We know from speaking with teachers that they may sometimes choose to avoid the subject entirely, to avoid conflict and emotional outbursts. Shame at being called out as 'the colonizer' could then be compounded by shame as a teacher failing to handle the situation.

We can only reiterate that by not providing an opportunity to hear such stories we run the risk of reinforcing the trauma that they express, a point which has been expressed by Indigenous scholars for many years. Many of these scholars have come through their own trauma and then engaged their pedagogical and academic energies in helping the educational system to understand the importance of speaking (telling) their experiences and helping another generation of students who are still struggling to speak their own truth (Cote-Meek, 2014, p.115). We can begin to prepare ourselves by learning from them.

There are no easy answers when it comes to being prepared to invite and respond to difficult stories (histories), but we can offer this: This, too, can be studied. You can and should prepare yourself. There will be mistakes — that must be accepted — but please do not wait until you feel ready, because you will never be ready. You can only become more experienced, and that is always an improvement.

Please see the communicating through story Navigation Guide at the end of this document.

The Third Way: Strong Relational Thinking

Strong relational thinking means being a good researcher: finding one's way through a sea of information and coming to know things in a way that is both verifiable and grounded in relationships. It is analogous to the educational goal of being an 'independent' thinker. Without

denying the ability or importance of being able to judge truth for one's self, strong relational thinking requires both teachers and students to negotiate contradiction and find their own safe road between extreme individualistic thinking and 'group think' — neither of which is ideal nor a path to the truth. The two concepts key to navigating this Third Way of Knowing are the interdependence of knowledge and credible conversations.

The Interdependence of Knowledge

Knowledge is relational by nature.[2] In relational conceptions, knowledge is more verb than noun, defining ways of being in the world (our sense of who we are and what we are) in relation to everything else. It is continually in process, socially and culturally grounded, acquired via communicative relationships and made relevant by experience.

This relational conception of knowledge may at first appear to run counter to classical western conceptions of knowledge, which privilege knowledge grounded in objective and measurable evidence (i.e., 'scientific knowledge'). But consider the scientific method's continual effort at self-correction, to base its conclusions only on reliable (verifiable) evidence and sound reasoning. The Third Way of Strong Relational Thinking requires us to arrive at knowledge through a process, not unlike the scientific method, whereby evidence is verified and conclusions are reached *within an Indigenous Knowledge Environment*.

In an Indigenous Knowledge Environment, students are asked to perform research, to identify themes and/or controversies, to understand issues and to develop their own views. Students come to form their views by way of verification through relationships — with experts (through research) and with communities of knowledgeable people (through consultation and conversation).

Verification should include perspectives of knowledge-keepers, elders, family and community members via their oral testimony (e.g., interviews and recorded stories). These perspectives are important despite being discounted by western educators and experts in the past for not being objective enough. Verification can also include personal experience, including the embodied experience of the land.

In addition to relating to other people, students should form knowledge through relationships with ideas, institutions, group structures and books, as well as the conversations, stories and knowledge sharing that they contain.

Credible Conversations

A credible conversation is had among knowledge-keepers, who are people who know something about a subject (they are sometimes called experts); when knowledge-keepers converse and come to agree that certain things are true and other things need more investigation, they engage in credible conversations. Of course, this implies that there are non-credible conversations. Part of a teacher's role is to enable students to identify such conversations; when we teach students to conduct thorough research, we guide them to find

[2] This claim has precedent in western scholarship in several branches of philosophy (existential phenomenology, for instance), feminist theory and environmental theory. An example is the definition of critical reflection adopted by the pragmatist philosopher John Dewey: "a meaning making process that moves the learner from one experience into the next with a deeper understanding of its relationship and connection to the other experiences and ideas" (Rodgers, 2002, p. 845). Moreover, relational approaches to knowing have also been explored in some depth in fields such as nursing, social work and environmental studies.

important conversations within a particular subject or field and identify areas of agreement that can act as a guide to what is and is not credible.

By using the term ‘credible conversation’ we deliberately include sources that may have been rejected in the past or deemed subjective, personal or not reliable because they were not written down. Credible sources could include dreams, personal experiences, cultural norms and stories that have been orally passed down through generations. To include all these sources is to expand our understanding of reliability in a way based in reciprocity, respect for elders/knowledge holders and listening (oral tradition).

In learning about credible conversations — the importance of gathering and discussing data — students will also learn that truth is provisional and open to questioning. For example, students might be asked to share opinions about a recent local news report first by discussing it with each other and then with knowledge holders (experts, teachers). This exercise encourages students and teachers to exercise their judgement and practice the process of forming an opinion (based on credible information) while learning to respect the experience, wisdom and acquired know-how of others. Once we have fully appreciated the knowing of others and acknowledged our reliance on it, then we can truly take our own position.

Please see the strong relational thinking Navigation Guide at the end of this document.

The Fourth Way: Practicing Humility

Humility is infused throughout this entire handbook in the way that we ask teachers to approach their journeys through the Indigenous Knowledge Environment as well as how we are asking them to convey knowledge to students. To ‘know’ means to understand ourselves and how we are shaped by a web of connections. When meeting others who do not necessarily share our connections, we are required to see ourselves and to accept that our biases, assumptions and values are variable. Fundamentally, humility is about de-centering ourselves and looking from a different position.

Indigenous Teachings of Humility

Humility is a one of the components of the Anishinaabe teachings, known as The Seven Grandfather Teachings or Seven Sacred Teachings.[3] These teachings, including wisdom, love, respect, bravery, honesty, humility and truth, are essential for a well-balanced and healthy life. Each is represented by specific teachings and animal symbols.

At the same time, humility is a value that, like relationships, wholistic knowledge and storytelling, can be found across Indigenous cultures in general. Our proposed understanding of humility arises from our notions of wholism and interdependence. It suggests a profound equality between all living things.[4]

To practice humility is also to focus on ethics. Once you accept that we are built from relationships, and that our ways of knowing are grounded in relationships, we are led inevitably

[3] The Seven Grandfather Teachings, along with other elements of Indigenous culture familiar to Canadians, are not without controversy. Multiple versions exist, and we recognize that not all Indigenous communities embrace these teachings, but we believe that the concept of humility can be found across multiple communities, cultures and nations. Additionally, we aim for the ideas presented in this handbook to resonate with various locations in Ontario.

[4] As the late elder and author Basil Johnston has said: “Until we can look at that squirrel sitting on the branch and know we are no greater and no less than her, it is only then that we have walked with humility” (Borrows, 2016, p. 149).

to think about the impact of our decisions in the world. To practice humility means, above all else, to practice — and it will take a lot of practice — a relationship-based ethics.

Cultural Humility

The essence of cultural humility[5] is in acknowledging that your worldview is one of many and not necessarily better than others. It is fundamentally about respecting differences as well as honouring lived experiences (Van Tongeren et al., 2019). The term, introduced by Tervalon and Murray-Garcia in 1998, implies continually assessing and addressing power imbalances while forming mutually beneficial and non-paternalistic relationships with diverse groups and cultures. Tervalon and Murray-Garcia (1998) emphasize that 'culture' encompasses more than just racial or ethnic identity, extending to individual, familial and local community differences.

To pursue cultural humility, faculty must participate in learning or training that raises their awareness of Indigenous worldviews and experiences. To recognize how our culture may inform the ideas that we take for granted requires a certain amount of self-examination, which includes an examination of our beliefs about race, ethnicity, class, religion, immigration status, gender roles, age and sexual orientation (Luna De La Rosa, 2019). We need to acknowledge what we do not know and seek out new learning opportunities. By doing so, we can enhance our understanding and the quality of education we are providing to students.

We need to be very clear that, when we speak of humility, we are not necessarily equating it with modesty — especially a modesty founded on anxiety or fragility. Humility, from an Indigenous perspective, is intimately connected with responsibility. As we have tried to emphasize throughout this handbook, non-Indigenous teachers in particular have a responsibility to speak and act. Perhaps the western connotations of the word 'humility' would hint at silence; dictionary definitions of humility focus on the devaluation of the self (i.e., "humility is the state of condition of being humble in the sense of lowly or insignificant, submissive, ranking low in a hierarchy or scale, having modest opinion or estimate of one's own importance" (Waks, 2018, p. 430)). Meanwhile, an understanding of humility drawn from an Indigenous perspective would remind us that the 'egoless' teacher may have to make the responsible and ethical choice to speak when they would prefer to protect themselves with silence.

Please see the practicing humility Navigation Guide at the end of this document.

[5] We prefer the idea of cultural humility to the more widely known concept of 'cultural competence,' a term that can be considered misleading as we cannot ever be truly competent in another's culture (Chavez, 2018; Tervalon & Murray-Garcia,1988). At its best, cultural competence is not something we achieve or fail to achieve but a reminder to continue to strive and educate ourselves to know more about the communities of all groups we work and interact with, which is also a goal of cultural humility.

Guide to the Guides

MILESTONE ONE: KNOWLEDGE BUILDING In which the teacher is developing their capacity to teach in the Indigenous knowledge environment by engaging in three activities: study, understand and reflect		
You start with **study** …	So you can **understand** …	And be sure to **reflect**
In this space, you will find two groups of topics that you must investigate and learn about if you choose this way of navigating. You are learning about the subjects you intend to teach and ideas for *how* to teach them. The first group represents the essential ideas for the way you have chosen. The second group contains other necessary topics. These subjects may not be as critical as those in the first group, but they are still very important to your understanding.	In this space, you will find a short list of ideas that you must understand from your study before moving on. You should ask yourself: Do I really understand this? Could I explain this to someone else? Try explaining it to a colleague as a test exercise.	In this space, you have some suggested themes/questions to reflect upon. Reflection can happen solo or in conversation with colleagues, or even with the resources you are digesting. (Can you talk to a book? Absolutely!) Group conversation is always recommended. This step will also prepare you for questions that may arise in the classroom.
MILESTONE TWO: KNOWLEDGE SHARING In which the teacher is preparing and actually going into the classroom with their developing knowledge by engaging in these three steps: practice, include and discuss		
You **practice** your new knowledge …	As you prepare to **Include** …	And prepare to **discuss**
In this space, you will find suggestions to put your new knowledge into practice, such as by trying out your skills or checking in with experienced colleagues. Talk to a fellow teacher or seek out someone at your library to verify what you are presenting.	Prepare your teaching materials, however you like to do it. Ideally, make the lesson experiential and practical. Include some material from Indigenous perspectives. Incorporate land-based lessons if possible, but note that this may require some additional study to be meaningful.	Being in the Indigenous Knowledge Environment is not only about acquiring knowledge. Even more, it is to further students' critical thinking and lifelong learning skills, so the lesson you deliver should include conversations about key issues that arise, whenever possible. Also, students will be curious and ask questions, so you want to be ready!

MILESTONE THREE: KNOWLEDGE DEVELOPMENT In which the students are receiving assignments based on these three goals: experience, exploration and expression		
The students **experience** their new knowledge with an assignment …	That includes **Exploration** …	And an opportunity for **expression**
Whatever the assignment is (and it can be anything, including in-class participation), it should be a chance for the student to model, demonstrate or reproduce the new learning.	The learning activity should be a chance for the student to not just absorb information but to engage in the material in a way that requires them to use higher level learning skills, such as investigating, inquiring and even hands-on practice.	This could simply refer to the student putting something into their own words or their own hands. Whenever possible, the student should be expected to do or try something. In many cases, this is also an opportunity to develop a personal style, voice or identity.
MILESTONE FOUR: KNOWLEDGE ASSESSMENT In which the student's work is evaluated based on three standards: comprehension, analysis and consolidation		
The teacher creates a rubric to assess student **Comprehension** …	And **student analysis** …	And **consolidation** of knowledge/skills
We strongly recommend that the teacher develop a rubric prior to giving the assignment. A rubric will help students know what is expected of them as well as ensure that certain benchmarks are reached. The rubric should assess different levels of student learning, starting with basic understanding of the material presented to them or capacity with the material being demonstrated.	At the next level, the student is expected to demonstrate skills of analysis. The rubric should assess the level of success in the analysis. Is it clear, reasonable and sound? Is it explained or just assumed? Is it complete? If the student was asked do a comparison, is it thorough and convincing? Is it based on an accurate understanding?	Finally, the rubric should look for signs that the new learning has been fully synthesized and incorporated into the student's knowledge. For example, perhaps the student is able to put the new knowledge to use in some practical but creative way.

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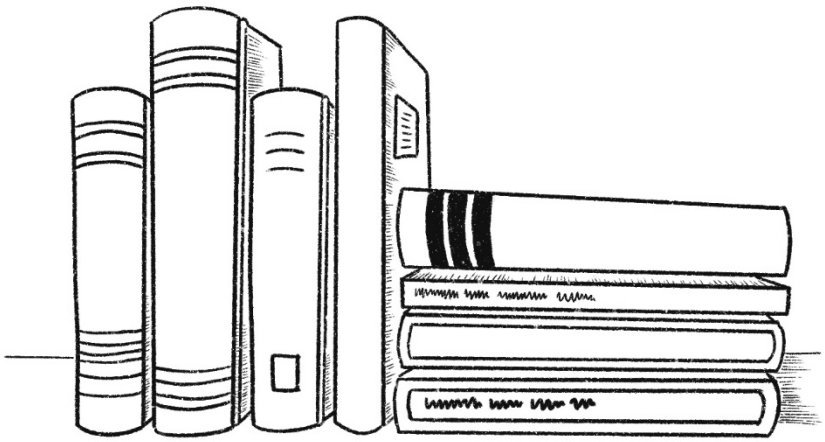

The Indigenous Knowledge Implementation Packsack: A Handbook for Embedding Indigenous Ways of Knowing in Your Teaching

Appendix: Navigation Guides

Wholistic Teaching and Learning:

A Way to Navigate an Indigenous Knowledge Environment

A Teacher's Journey Begins

Knowledge Building: Teacher Develops Capacity with Relevant Content

Study → **Understand** → **Reflect**

Study	Understand	Reflect
Indigenous learning portal: wholism; wholistic knowledge; Indigenous knowledge; land-based learning	The meaning of 'wholistic' knowledge	How conventional (Western) pedagogies have been non-wholistic
Other necessary topics: experiential learning; wholistic approaches; Indigenous pedagogy; applied teaching and learning	The benefits of using a wholistic approach	How experiential learning is used in education systems and in your own teaching
	The connection between wholism, experiential knowledge and applied knowledge	

Knowledge Sharing: Teacher and Student Engage in the Learning Environment

Practice → **Present** → **Discuss**

Practice	Present	Discuss
Teaching grounded in a wholistic approach to knowledge	Give an applied learning opportunity via modelling or demonstration	The necessity of making and learning from missteps
Looking for contextual and local applications of knowledge	Include land-based methods if possible	The value of repetition for learning
Presenting a story through demonstrated experience and applied knowledge	If not land-based, give students an opportunity to apply learning from a real-world, practical, independent and hands-on activity	

Knowledge Development: Teacher Creates Learning Experience for Student

Experience → **Exploration** → **Expression**

Experience	Exploration	Expression
A learning exercise in which students are required to perform a task, complete an activity or create something based on prior observation of skills/knowledge modelled by the teacher	Students are required to complete an activity based on a real-world situation or a hands-on requirement (to build, fix or make something)	Students may have a chance to demonstrate creativity or personal voice in the completion of the activity
	Students are expected to apply all of their learning to the activity	

Knowledge Assessment: Evolution of Student Learning Process

Comprehension → **Analysis** → **Consolidation**

Comprehension	Analysis	Consolidation
Students successfully reproduce the skills and knowledge demonstrated by a teacher or knowledge holder (without necessarily having to explain what they are doing)	Students may have an opportunity to reflect on the learning process, including a description of the challenges encountered and what they learned from them	Students can use the challenges they faced as an opportunity to develop their problem-solving skills
Students demonstrate a relationship to the teacher through their actions		Students acquire skills that enable them to add to their experience/learning over time, even after leaving their formal education (lifelong learning)

Make a Rubric

A Teacher's Journey Continues

Communicating Through Story:

A Way to Navigate an Indigenous Knowledge Environment

A Teacher's Journey Begins

Knowledge Building: Teacher Develops Capacity with Relevant Content

Study	Understand	Reflect
Indigenous learning portal: Indigenous storytelling; storytelling; oral traditions	Stories that relate to land/natural law	How teaching is storytelling
Other necessary topics: types, forms, genres and methods of storytelling; listening; oral comprehension; discourse	The nature of story as a human activity	How storytelling is based on communication skills (i.e., listening, reading, writing)
	The stories hidden beneath words/images	How to incorporate land-based storytelling

Knowledge Sharing: Teacher and Student Engage in the Learning Environment

Practice	Present	Discuss
Creating a teaching grounded in storytelling	Stories of Indigenous peoples in their own voices	Ways to improve storytelling skills
Looking for contextual, local stories	Stories that highlight worldview	The usefulness of comparing stories
Presenting a story through actions/ performance		

Knowledge Development: Teacher Creates Learning Experience for Student

Experience	Exploration	Expression
A learning exercise in which students reproduce stories given to them by the instructor or by knowledge keepers	Students explore a number of (possibly conflicting) stories about a topic	Students must appreciate and demonstrate listening skills
A learning exercise in which students compare stories from Western and Indigenous cultures	Students experience and practice rich description (subjective storytelling)	Students may present their learning in the form of a story

Knowledge Assessment: Evolution of Student Learning Process

Comprehension	Analysis	Consolidation
Student work demonstrates accurate comprehension of written, oral or visual stories	Students accurately identify Indigenous perspectives on historical or contemporary issues	Students develop their own voice
Student work successfully recognizes stories from Indigenous cultures	Students successfully evaluate a story from the perspective of another	Students improve their communication skills, particularly listening
	Student work recognizes that the same story can be told different ways	Students engage in reflection on the reliability of story as a means of conveying knowledge

Make a Rubric

A Teacher's Journey Continues

Strong Relational Thinking:

A Way to Navigate an Indigenous Knowledge Environment

A Teacher's Journey Begins

Knowledge Building: Teacher Develops Capacity with Relevant Content

Study	Understand	Reflect
Indigenous learning portal: relational worldview; Indigenous knowledge; knowledge keepers	The reliability of contextual, local or personal knowledge	The difference between information and knowledge
Other necessary topics: acquiring knowledge from reliable sources; distinguishing information, facts and opinions; argument; reasoning; logic	How to create a strong thesis/argument	How to foster students' abilities as strong relational thinkers
	How to identify a credible conversation about a topic or question	How the reliability of knowledge is verified through communicative relationships

Knowledge Sharing: Teacher and Student Engage in the Learning Environment

Practice	Present	Discuss
Respecting knowledge and knowledge keepers	A teaching that demonstrates contextual, local or personal knowledge	The responsibility of the students as they practice becoming knowledge keepers
Identifying credible conversations	Encourage students' sense of themselves as strong relational thinkers grounded in and shaped by the world of ideas/ knowledge/experience	The importance of communicative relationships in identifying credible conversations
Creating a teaching that demonstrates the differences between information, facts, opinion and knowledge		

Knowledge Development: Teacher Creates Learning Experience for Student

Experience	Exploration	Expression
A learning exercise that reinforces appropriate, active and effective skills for acquiring knowledge from diverse sources	Students explore an issue, question or topic with the goal of identifying a credible conversation about it	Students must use diverse sources to understand and articulate a credible conversation about a topic or issue
A learning exercise in which the teacher models skills for seeking and acquiring knowledge in a world of multiple and contradictory ideas/ opinions	Students practice finding their way in a credible conversation and entering the conversation using strong relational thinking	Students must demonstrate the reliability of subjective, Indigenous or oral testimony

Knowledge Assessment: Evolution of Student Learning Process

Comprehension	Analysis	Consolidation
Students successfully identify and accurately describe a credible conversation about a topic or issue	Students use a reliable, relationship-based process in ensuring the reliability of information/sources while valuing each source based on its own standards	Students grow in their ability to introduce their own voice into a credible conversation
Students demonstrate the breadth and completeness of their research, particularly as it relates to the use of subjective, Indigenous or oral testimony	Students engage in strong relational thinking	Students demonstrate awareness of knowledge as a process based on relationships

Make a Rubric

A Teacher's Journey Continues

Practicing Humility:

A Way to Navigate an Indigenous Knowledge Environment

A Teacher's Journey Begins

Knowledge Building: Teacher Develops Capacity with Relevant Content

Study	Understand	Reflect
Indigenous learning portal: Indigenous learning portal: humility; respect; Indigenous values; Indigenous ethics	The way that identity reflects specific worldviews and cultural values	On your own identity in the world
Other necessary topics: worldviews; cultural bias; identity; difference	The concept of openness to difference	On how your teaching may include cultural biases
		How to model humility through your teaching

Knowledge Sharing: Teacher and Student Engage in the Learning Environment

Practice	Present	Discuss
Creating a teaching that models/demonstrates humility	Case studies or examples of cultural assumptions affecting how others are judged	How to identify one's own biases, cultural assumptions and privilege
Appreciating lifelong learning and openness to change	Examples where students value the experiences and viewpoints of other beings	The way that worldviews can lead to ongoing assumptions and unfairness
Demonstrating tolerance for difference and contradiction	Examples that expect students to shift their viewpoint	

Knowledge Development: Teacher Creates Learning Experience for Student

Experience	Exploration	Expression
A learning exercise in which students question their values, assumptions and teachings	Students are asked to accurately and fairly describe an alternative point of view to their own	Students can articulate their own biases and question them
A learning exercise in which students identify their standpoint in the world	Students experience and practice empathy for others	Students develop self-reflection skills

Knowledge Assessment: Evolution of Student Learning Process

Comprehension	Analysis	Consolidation
Students successfully describe the concepts of worldview, cultural bias, identity, assumptions and privilege	Students successfully question their own standpoints	Students can practice humility towards other viewpoints/perspectives
Students describe the negative impacts of cultural assumptions	Students successfully identify a conflict between worldviews	Students account for the presence of cultural bias in their own work
		Students can appreciate difference and express openness

Make a Rubric

A Teacher's Journey Continues