

A Pedagogical Venturing into the Three Sisters' Garden: Lessons of Attunement and Reciprocity in Education

Tim Skuce¹ & Sharon Pelech²

Abstract

This paper explores the connections the authors make between their experiences in the classroom and the powerful work of Robin Wall Kimmerer (2013) in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants*; specifically, her chapter entitled “The Three Sisters.” Through Kimmerer’s work, we interpret our own experiences within the classroom. We also draw upon Hans-Georg Gadamer’s philosophical hermeneutics in general and his notion of *Erfahrung* in particular. We were inspired by the author’s insights into how she happened upon a “new teacher” for her students. As a result, this paper explores her work, as it provides an image of what it is to be present among students while honouring the topic’s own being and becoming--staying open to *its* future possibilities not yet known. The pedagogical turn away from predetermined outcomes to reciprocity, interconnectedness, and relationships is examined in how they help us understand teaching and learning.

Keywords

Three Sisters; Kimmerer; hermeneutics; curriculum; *Erfahrung*; reciprocity; education; pre-service teachers; land-based curriculum

Prologue

And you've got to understand that you don't make the timeline, the virus makes the timeline. So you've got to respond, in what you see happen. And if you keep seeing this acceleration, it

1 Brandon University

2 University of Lethbridge

Corresponding Author:

Tim Skuce, PhD

Email: skucet@bu.ca

doesn't matter what you say. One week, two weeks, three weeks – you've got to go with what the situation on the ground is.

*Dr. Anthony Fauci, the nation's top infectious disease expert
(CNN: March 25, 2020)*

We write this paper during extraordinary times. In response to the exponential rates of infection and deaths attributed to the global pandemic induced by COVID-19, many governments, as a means to “flatten the curve,” have declared states of emergency and have demanded that citizens practice social distancing. However, despite warnings from the nation’s top infectious disease experts, United States president Donald Trump wants the country “opened up and just raring to go by Easter” (Liptak, Vazquez, Valencia, & Acosta, 2020). In response to the president’s comments, Dr. Fauci, the Director of the National Institute of Allergy and Infectious Diseases contends, “You've got to understand that you don't make the timeline, the virus makes the timeline” (cited in LeBlanc, 2020). Dr. Fauci’s response is a stark reminder of the limits of modern science to predict, control, and manipulate the spread of the virus. Rather, in order to stave off the rapid spread of infection induced by COVID-19, it is critical to learn and respond according to *its ways*. In other words, we need to learn to listen to, and respond to what is happening in the world in spite of what we would like to be able to do.

Introduction

This paper explores the connections the authors make between their experiences in the classroom and the powerful work of Robin Wall Kimmerer (2013) in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants*, specifically, her chapter entitled “The Three Sisters.” As educators who originally taught in the public school system for years (Tim as a Social Studies teacher; Sharon as a Biology/Science teacher) and then both moved to preservice/graduate teaching in different faculties of education, we have experienced and often discussed the irresolvable but necessary tension that resides between curriculum-as-planned and curriculum-as-lived experience, as Aoki (2005) described. We also draw upon Hans-Georg Gadamer’s philosophical hermeneutics in general and his notion of *Erfahrung* in particular. To be and to become an experienced teacher is not merely the accumulation of strategies and knowledge, but rather it calls for one to confront one’s previous understanding. It is in and through venturing with others where one comes to acknowledge their finitude. And it is in the recognition of one’s finitude where one may come to garner more fulsome understandings of self, other, and the world. We also draw upon the seminal work of curriculum theorists Ted Aoki and William Pinar and how their understanding of curriculum deepens our reading of Kimmerer’s work and her connections to the complex venturing that an enlivened curriculum demands.

We have both experienced the push from the dominant discourse of fragmented curriculum, and specifically, preservice educators’ often narrowly-conceived concept of teaching as an act of transmission—the covering of predefined outcomes/objectives as articulated in provincially mandated curriculum guides. Given such a construal of curriculum and teaching, we have found that preservice teachers are often preoccupied with accumulating knowledge regarding the subject matter and learning “tips and tricks” on how to teach. This may partially account from students’ desires to control their new environments in the classroom, and to disseminate fragmented bits of information which renders the curriculum a noun--an object. Perhaps this may

partially explain students' recurring questions: "How do I teach World War One? How do I teach food chains/webs?" Underlying these questions is often a demand for particular methods that will render the subject matter fixed and stable. Such an orientation often stymies student desire to question their own and their students' relation to the topics. Further, this orientation to curriculum and teaching is an image they have often experienced throughout their formal education. The curriculum topics are "covered" and students are held accountable through regularly scheduled examinations. It is no surprise, then, that many preservice teachers seek surefire methods that will ensure the smooth "delivery" of course content. This view of curriculum often severs students from exploring how they are always and already embedded in a particular time and place; always and already imbued with understandings of topics such as citizenship, identity, and ecosystems.

While reading the chapter "The Three Sisters" in Kimmerer (2013), we were struck and inspired by the author's insights into how she happened upon a "new teacher" for her students. As a result we want to explore her work, as it provides an image of what it is to be present among students while honouring the topic's own being and becoming--staying open to *its* future possibilities not yet known. We hope that through our writing, we convey our reverence and respect for the lessons that Dr. Kimmerer offers. We are both so moved by how her teachings spoke to many of the questions and wonderments about school, curriculum, and pedagogy that have provoked us throughout our experiences as educators. As a result, we wish to explore more deeply her writings to help us provide a deeper understanding of what it means to lean into the lessons the Three Sisters have provided.

Coming to Understand the Three Sisters

In her essay, "The Three Sisters," Kimmerer (2013) describes how she was gifted a small packet from Awiakta, a Cherokee writer, and was instructed to open the small bundle in the spring where she found the Three Sisters: the corn, bean, and squash seeds. Along with this gift came the wisdom of generations of Indigenous agricultural practice from "Mexico to Montana" (p. 129). Kimmerer shares the stories and lessons of reciprocity that are written in a Three Sisters garden and how Indigenous agricultural practices for generations have planted these three plants together. Historically, the Three Sisters are planted together in "May-moist earth," and as a result have the opportunity to grow collectively through their interaction and interdependence both above ground and also amongst their root systems spawning and sprawling beneath the ground. This method of growing the three plants together was seen by the colonists as evidence that the "savages did not know how to farm. To their minds, a garden meant straight rows of single species, not a three-dimensional sprawl of abundance" (p. 129). Kimmerer's chapter resonated with us on a pedagogical level. We were intrigued by the connections between her experience with the Three Sisters as a botany professor and our own consideration of pedagogy and how it is enacted in the classroom. As a result, we explore how Kimmerer's work has helped us to understand our own practice differently.

Being Pulled up Short

Being drawn into the garden...the eventfulness of the garden "It jolts us, knocks us over, and sets up a world of its own, into which we are drawn, as it were."

(Gadamer, 2001, p. 71)

As a beginning high school social studies teacher many years ago, one of the disciplines I (Tim) was entrusted to teach was geography. A central task was to cover the specific curriculum outcomes as articulated in Alberta provincial curricula. I remember taking great solace in the fact that my generous colleagues offered me unrestricted access to their materials--binders bursting with ready-made assignments and corresponding examinations. I also had a class set of textbooks replete with teacher's resources to help guide my work.

However, throughout my undergraduate studies in political science, philosophy, history, literature, etc., I had come to recognize the contingency, ambiguity, and precarity of the lifeworld. I appreciated the unfinishedness of these disciplines--that understanding of the topics will always be on the way. Further, I believed that there was no *terra firma*--no stable or immutable truths. Although I embraced such an ontological understanding, perhaps given my nascence as a teacher, I was often unable to create spaces for students to linger with the subject matter, to pursue their wonderments.

As a means to cover the course content, I would ask students to fill out retrieval charts with information extracted from their textbooks regarding the names and characteristics of Canada's physiographic regions. In common educational parlance, I was frontloading knowledge so we could eventually move on to something more interesting. For the most part, students would willingly memorize the content and demonstrate their knowledge on prescheduled examinations. Within such a construal of teaching, I was simply teaching "about" geography. Unknowingly, I had turned the living discipline of geography into an object by dispensing inert and fragmented bits of abstract knowledge. Such pedagogical practices rendered students merely passive recipients devoid of physical contact with earthly elements. Further, such an orientation often foreclosed on the pregnant possibilities that abounded as I gathered with my students. I was often unable to be open to, or opened by, the eventfulness of classroom life. Rarely, if ever, did I provide opportunities for students to share their lived experiences of the natural world. Perhaps this may partially explain students' recurring questions: "Can we do something fun today?" "Is this going to be on the test?" "Do I need to write this down?"

Although many students came to accumulate factual information about Canada's geographic regions, its landforms, flora and fauna, this information did not necessarily give students a deeper sense of what it might mean to belong to a place--to learn *its* ways. Such an orientation severed students from the calls and obligations that reverberate from earthly sounds and silences that inhabit a place. Cynthia Chambers (2008) contends that "being is constituted through the tasks that he or she conducts as he or she dwells in a particular place within a region of places" (p. 116). Further, such practices provided little opportunity for students to foster an understanding of the interdependence and interconnectedness of the living world. How might students learn to cultivate a sense of history about a place and to become enchanted and attuned to its songs--to its eternal becoming? How might students foster a sensitivity and sensibility to care for all human and non-human life that honours the fragility of the world?

Welcoming a New Teacher

Understanding begins...when something addresses us.
(Gadamer, 1960/2004, p. 299)

Kimmerer reflects on teaching a first-year university class in General Botany in a large lecture hall. For many years her main pedagogical practice consisted of displaying slides, diagrams, and the telling of stories that attempted to reveal the marvels of photosynthesis. However, on this day, somewhat frustrated, she asked her students: “How many of you have ever grown anything?” (p. 135) Many students responded that they had little or no experience “of seeds and soil, they had never watched a flower transform itself into an apple” (p. 135). It was here where she suddenly awakened to her students’ boredom. She vowed to herself: “They needed a new teacher” (p. 135). As a result, each fall she now begins her class in a garden. For the month of September, she sits with her students among the Three Sisters. Kimmerer describes the new teacher she invites to come forth and speak:

They [students] measure yield and growth and get to know the anatomy of the plants who feed them. I ask them first to look. They observe and draw the way the three live in relationship to one another and other forms of life. Sitting among the Three Sisters the students learned to pay attention, to look, to observe and to draw the way the three live in relationship. (p. 135)

We are struck by the seeming serendipity of Kimmerer’s pedagogical decision to first ask the students, “in a bit of frustration,” if they had ever grown anything. On this particular day, with these particular students, the everydayness of classroom life was interrupted. Her pedagogical practices suddenly put into question. Perhaps it was a sensitivity to the students’ silences, their disinterestedness, or an overall mood that permeated the lecture hall, that she could no longer bear to endure. Here, on this day, in the lifeworld of the classroom Kimmerer is confronted by the limits of slides, diagrams, and stories. The efficacy of well-rehearsed lessons delivered year after year, suddenly and irrevocably shattered. A university classroom cannot honour the earthy habitat of the Three Sisters. Detached from the lifeworld of the garden, students were unable to foster an embodied attunement to the sisters’ ways, unable to witness the beautiful reciprocity that exists among the sisters, unable to venture forth from a common place--from their own varied, limited, and fragmented experiences. And it is here, as Gadamer (1960/2004) suggests, that one discovers “the limits of the power and the self-knowledge of [one’s] planning reason” (p. 365).

Kimmerer had also become severed from how she had come to know and care for the world of plants--the living world. Although she had come to learn the anatomy of plants by heart, there was more, so much more than simply amassing verifiable knowledge. She had fostered an attunement to the natural world by becoming increasingly alive to its nuances, to its variances, and to the particularities that lived in a place. She had spent many hours immersed in conversation with Elders and in gardens learning to pay attention, not simply in the form of a passive presence but a “function of the fullness and intensity of attention and engrossment” (Ross, 2006, p. 109). She would lay among ripening pumpkins to hear the sound of them yearning, growing. “A microphone in the hollow of a swelling pumpkin would reveal the pop of seeds expanding

and the rush of water filling succulent orange flesh” (p. 128). And with practice she had come to know her way around; she had learned to carry herself in such a way that Derby (2015) describes as an understanding education as a home-coming, home-making (ecopoiesis) “as finding ourselves already home in a world thrumming with resonant meaning [what he calls the voice of the world]. Then the question is only: are you going to take part, and if so, how?” (p. 9).

Venturing into the Garden, into the World

In the garden, Kimmerer graciously prepares to venture with her students, a readiness to be open to and opened by her students’ questions, worries, wonderments and, at times, their reluctances. Her September afternoons are now spent with her students among the Three Sisters. In this new place, she has had to abandon the familiar--she can no longer rely on the repeatability and predictability of teaching strategies once implemented within the confines of a lecture hall. It is in the lived reality of being in the garden with students where the study of botany is no longer an abstraction, but rather it is something concretely experienced. In the worldliness of the garden, Kimmerer comes to encounter her students face-to-face where she is called to decide, to enact pedagogical decisions that are not derived from a rationality that permits her to simply fix them a priori. As she encounters her students in the concrete situation, through conversation she comes to exchange ideas, thoughts, mysteries. And perhaps, in the midst of life, she may continue to foster an attunement, a pedagogical praxis that embraces the vulnerability of her own understanding, to gracefully respond to the multifariousness of students entrusted to her care, and to nurture an eternal vigilance to inquire into the fleshy wonderments of ecological life.

Gadamer (1960/2004) observes all adventures require that one’s preunderstandings are put at risk by opening them to questions. Kimmerer’s journeys into the garden created opportunities to interrupt life’s customary course of events, to feel its “breath and strength” and “Here lies the fascination of an adventure. It removes the conditions and obligations of everyday life. It ventures out into the uncertain” (Gadamer, 1960/2004, p. 63). In venturing, Gadamer (1960/2004) suggests that one must leave home, to put at risk one’s previous understanding, to feel estranged from one’s home and then to return home, but in a new way, a different way, a way more attuned to the ever-emerging sights, sounds, and demands of a place.

In many instances, being prepared to teach is conceived in accordance with an epistemological focus that requires teachers to acquire fidelity to specific and general learning outcomes prescribed by mandated curriculum. According to Pinar (2004), such a focus often forces teachers to “mime others’ conversations, ensuring that countless classrooms are filled with forms of ventriloquism rather than intellectual exploration, wonder, and awe” (p. 186). Further, epistemological concerns often foreclose ontological considerations.

Although knowing and adhering to the “whatness” of teaching is essential, we also want to consider how teachers may become experienced in venturing with students that embraces and ethically responds to the roils of classroom life. In part, we draw upon Gadamer’s (1960/2004) notion of *Erfahrung* that calls for the cultivation of attunement, taste, and ethical judgement that exceeds the strictures of method, an orientation that often relies on rational and empirical knowledge that fails to capture the full scope of human experience. Rather, Gadamer’s philosophical hermeneutics offer an ontological orientation of a self-becoming, and the potential for

possibilities not yet known. Gadamer (1960/2004) proffers that hermeneutics is also concerned with knowledge and truth. He asks: “But what kind of knowledge and what kind of truth?” (p. xx). To honour and respond to the chance noticings, to the to and fro motion of classroom life, and to the eternal movements and inexhaustibility of the curriculum topics. The lifeworld of the classroom calls for a constant mediation among teachers, students, and the subject matter, “the true locus of hermeneutics is this in-between” (Gadamer, 1960/2004, p. 306). The concrete situation of being in the garden--a living and breathing context that provides a space for an exchange of ideas, of possibilities--and engaging in direct conversation with one another is an opportunity to extend one’s understanding, as “self-understanding always occurs through understanding something other than the self” (Gadamer, 1960/2004, p. 86).

It is in this in-between where opportunities abound for educators and students to uncover “the knowing and appreciative eye to worlds hitherto unseen and unknown” (Pinar cited in Magrini, 2016, p. 174). Learning to live well in the in-between is not accessible by merely gathering and implementing universal pedagogical strategies, but rather calls for the cultivation of a situational praxis that requires an eternal commitment to deliberation and discernment. According to Gadamer (1960/2004), this profoundly relational space constitutes the heart of education, where educators need to “exercise above all is the ear, the sensitivity for perceiving prior determinations, anticipations, and imprints that reside in concepts” (Gadamer, 2007, p. 21). Being in the garden with students calls for practical actions and practical reasoning that is attuned to the everydayness of classroom life. Kimmerer’s careful and thoughtful pedagogical encounters with two students in the garden points to and honours the multiplicity of students’ voices as she responds with care to the unfolding demands of the present moment.

One Student: An Artist

Kimmerer designed a learning task which began with the materiality of the lifeworld; she invited her students to “first look” and then draw the way the sisters live in relationship--in reciprocity. This task created an opportunity for students to draw upon their capacities to observe and to reflect on their previous understanding and perhaps in venturing they might come to uncover something unfamiliar through the familiar--through their lived experiences. The provocation to create an aesthetic presentation of the Three Sisters required students to engage in a multi-sensory phenomenon that honoured the ever-emerging vibrancy of the garden’s colours, textures, motions, smells and other living and non-living forms. Although Kimmerer may have had a sense as to what her students might bring forth, their responses were unknown and unknowable. What might become of this venture was, and is, susceptible and sensitive to the flow of time--each venture full of a creative and necessary tension between what has already appeared and possibilities not yet known.

As mentioned above, prior to Kimmerer’s venture into the garden, her teaching was solely concentrated on the dissemination of knowledge and understanding delivered through slides and stories. Pinar (2004) describes that such an epistemological orientation to curriculum that focuses on the implementation of predefined outcomes stultifies the process of education. Rather, he suggests that curriculum ought to be a complicated conversation where students and teachers connect academic knowledge to their “own subjectivities, to societies, and to the historical moment” (p. xiv). And it is through such study that “subjective and social reconstruction” (Pinar,

2011, p. 2) is enabled. In Kimmerer's new context, she is confronted with the contingencies and frailties of the unceasing flow of life and the perpetual being and becoming of students in relation to the subject matter, the Three Sisters. Such an ontological orientation eludes ontic certainty--mastery.

As means to honour an ontological orientation, we ally with Gadamer's notion of experience--*Erfahrung*--as it illustrates a commitment to embark on a journey, an encounter with the other in conversation as a means to elucidate more expansive understandings of self, other, and the world. Further, *Erfahrung* calls for one to venture, to return to the lifeworld--the world among living relations. Venturing to the garden and dwelling among the Three Sisters provided Kimmerer and her students with an opportunity to question the way they had come to know the world and to extend their understandings of the world in which they live as human beings. This questioning, as Gadamer (1960/2004) insists, requires humility and the willingness to lovingly embrace alterity, to be open to that which is unfamiliar, to live in tension, and to believe that things could always be understood anew. Thus, an experienced teacher proves to be one who is "radically undogmatic" (Gadamer, 1960/2004, p. 364). It is in and through encounters with others where one is confronted with one's own finitude, as one's understandings are always limited, always embedded with a specific time and place.

According to Gadamer (1960/2004), becoming experienced is not simply oriented toward the accumulation of verifiable knowledge, or a sequence of predictable and repeatable occurrences, but rather *Erfahrung* pulls in the opposite direction where one's taken-for-granted assumptions of everyday life are brought up short. This is no soloist or narcissistic adventure but a journey with fellow interlocutors where one suffers one's inherent and finite understandings. However, as Gadamer (1960/2004) suggests, it is in and through our encounters with others where we gain new insights, and "insight is more than knowledge of this or that situation. It always involves an escape from something that had deceived us and held us captive. Thus, insight always involves an element of self-knowledge" (pp. 364-365). And as Jardine, Friesen, and Clifford (2006) contend, it is through one's sojourns with others where "you *become someone* (not just anyone) as a consequence of how you carry yourself in the world. With practice, you become more experienced in experiencing things in their abundance" (p. xxv, original emphasis). And perhaps as Kimmerer ventures into the garden with her students they will become ever more alive to the worldliness and spirit of the arrival of unknown and unknowable future possibilities.

Coming alongside one of her students, an artist, Kimmerer notices, "the more she looks the more excited she becomes. 'Look at the composition.' she says, 'It's just like our art teacher described the elements of design in the studio today. There is unity, balance, color. It's perfect.'" As Kimmerer glances at her student's notebook, she notices that the student has a deep aesthetic appreciation. Kimmerer states: "she's seeing it like a painting. Long leaves, round leaves, lobed and smooth, yellow, orange, tan on a matrix of green. 'See the way it works? Corn is the vertical element, squash horizontal, and it's all tied together with these curvilinear vines, the beans. Ravishing,' she claims with a flourish" (p. 135).

On this particular day, with this particular student, Kimmerer recognizes that her student is enchanted by the natural world, drawn into its spell--lost in its play--succumbing to its ways while making connections to her previous understandings. This interaction between Kimmerer-

er, her student, and the Three Sisters, reminds us, yet again, that it is in our primordial condition that we always and already find ourselves in the world as learners, continually seeking to understand ever more fully the world in which we are immersed. To honour our students being-in-the-world, we are called to listen more attentively to their calling, to approach them, and invite them to approach us as a means to create opportunities to dwell in learning and to appreciate the unknowability of human and non-human existence.

A Second Student

As Kimmerer approaches a second student, she observes that the student is “dressed for the allure that might work in a dance club, but not a botany field trip. She has avoided any contact with the dirt so far” (p. 135). Standing side by side, Kimmerer and her student “simply [follow] a squash vine from one end to another and diagramming the flowers. Way out at the young tip of the vine are orange squash blossoms” (p. 135). Kimmerer points out the swollen ovary of the flower after it has been pollinated. And then together they pick a ripe butternut squash and slice it open so the student can see the seeds in the cavity within (p. 135). In the conversation that follows, the student says incredulously, “‘You mean a squash comes from a flower?’

‘Yes,’ I tell her, ‘this is the ripened ovary of that first flower.’ The student responds, ‘I love this kind of squash at Thanksgiving.’
Her eyes widen in shock. ‘You mean all these years I’ve been eating ovaries? Blech--I’ll never eat squash again.’” (p. 136)

As we travel into the world, we are often unaware of the possibilities and the wealth that resides in places. The second student, during a dialogic encounter with Kimmerer, is surprised, awakened, and transformed by what had always and already existed, but had been concealed from her hitherto experiences. Experience in such cases is not the result of one’s will or intention, but rather emerges through the ways the world presses itself upon us--where an unexpected and an unanticipated *truth* shines through. Suddenly a part of a whole has imposed itself upon us, reconfiguring an experience. Moreover, such an event is not simply the application of a method; it is not, as Aoki (2005) reminds, a matter of skill and technique, but rather a way of being.

As educators dwelling in the in-between, we are thrust into the temporality of our lives as we are always mediating a world contemporaneously. Though there are family resemblances, kinships, and kind-nesses, each encounter is unique--our lives have never been lived out in this space with these students and it will never be repeated. Nothing simple returns. Gadamer’s (1960/2004) notion of the festival points to the temporality of the lifeworld of the classroom--a form of remembering in relation to time and topic’s perpetual movement. Thus, the garden “has its being only in becoming and returning” (p. 126). And perhaps we might conceive of each new day as a journey, as Mendelson (2017) reminds, “just one day’s worth of movement was a significant enough activity, an arduous enough enterprise, to warrant a name of its own: *journey*” (p. 21). As we prepare to teach, our daily lessons will anticipate that the young in our midst will beckon us to attune ourselves to the particularity of their voices, to listen, to respond, and to share together as we wander and wonder. And it is in the uniqueness of each venture that our daily routines may burst asunder the mundane as we engage the garden’s endless and constant activity--its meaning never fully disclosed. Further, happenstances and chance noticings of classroom life are never

guaranteed. How students might respond to our offerings is contingent and uncertain. Kimmerer's invitation to her students to venture requires a leap of faith. As educators, we can never know in advance how students will respond to our offerings. As Pinar (2004) reminds, "Education is an opportunity offered, not a service rendered" (p. 5).

Regardless of how students respond to the generous offering of their teachers, there remains a pedagogical question: what are we to do in this concrete moment? And as Gadamer (1981) suggests, there are "no learned and mastered technique[s that] can spare us the task of deliberation and decision" (p. 92). Kimmerer's encounters with her students point to a conviviality, an opportunity for students to recognize and make meaning from a world already familiar to them. Perhaps Kimmerer's recognition that her student was "dressed for the allure that might work in a dance club, but not a botany field trip" called for her to reconsider her initial intentions of having all of her students come into contact with the soil. An attunement to a concrete situation--to graciously and gracefully respond to particular students in her midst--at times may call for a letting be and a letting go, at other times might demand a leaning toward--to question, to provoke--or still at other times to remain in silent repose. To respond to this student, in this moment, in the right measure, in the proper proportion, Kimmerer, perhaps to avoid any contact with the soil, decides to invite her student to "simply [follow] a squash vine from one end to another and diagramming the flowers. Way out at the young tip of the vine are orange squash blossoms." Perhaps it was Kimmerer's attunement to this student that enabled her to maintain possibilities, to keep the subject matter in play, and perhaps in this instance the "to-and-fro movement [was] not tied to any goal that would bring it to an end" (Gadamer, 1960/2004, p. 108).

At the end of each class, of each semester, my hopes are that although we have reached an end, as all courses must do, the end does not represent closure. Rather, *study*, as Pinar (2015) suggests, is a capacity to recognize "our particularity, that we become more than we have been influenced to be, that we refashion ourselves by engaging freely and creatively our circumstances" (p. 14). Also, it is a possibility through study that we, and our students, may come to appreciate the topic's unfinishedness, its inexhaustibility, and as a result, we feel compelled to tarry, to wonder as to what might become of the Three Sisters. And, as Anne Michaels (1996) suggests in her novel, *Fugitive Pieces*, perhaps "If you know one [garden] well, you will look at all other [gardens] differently. And if you learn to love one place, sometimes you can also learn to love another" (p. 82).

Attunement to the Land as Curriculum

Similar to Kimmerer's move to the garden, I (Sharon) have tried to create opportunities for a new teacher (the land) to make itself known to preservice teachers. Each year in my science curriculum course I take the students out on a field trip to sit and pay attention to the land, an experience introduced to me by Dr. Darron Kelly (Kelly, 2007; Pelech & Kelly, 2017). During one particular trip I had been asked by our public relations person to allow a photographer to join us on our field trip to capture "an innovative way to teach." I reluctantly agreed, but only on the condition that the field trip be allowed to go as planned and not be disrupted. I explained that this is not a typical class where I will be giving information, or directing students on what to do or what to pay attention to.

As we arrived at the top of the coulee overlooking the Oldman River, I invited students to spread out along the outcrop that stretches toward the river valley and to find a place to sit and “use their senses to notice.” Some students moved to the edge of the coulee, a couple of students laid on their back, while others began to look closely at the grass that they were sitting on. Most students gazed outwards to the vista spread out at their feet. While the students were spread out the photographer came over to me and asked, “Aren’t you going to be teaching the class at all out here?” I was speechless. How could I explain to him in a few minutes that the purpose of this experience was to create the space for learning to take place in relationship with the land? The photographer’s question points to what Aoki (2005) describes as the business metaphor of curriculum implementation, where it is assumed that as a “producer-consumer paradigm” (p. 112) the role of the teacher is to provide an unidirectional flow of information, and implementation is simply finding ways to increase the effectiveness of communication. As a result, the focus on testing, management by objectives, only requires teachers to have skills and techniques that focus on technological thought/action frameworks, providing the best way to put a program into practice. Instead, my purpose was to create an opportunity for the students to wonder, to notice, and to open themselves to the land as their teacher, as Kimmerer described. Aoki (2005) explains implementing curriculum “must be seen not in terms of a being-as-thing but as a human being interested in their becoming” (p. 120). The worldliness of curriculum is not simply a means to a putative end. And perhaps, as Jardine (2006) suggests, “each one of us who ventures to this place becomes someone who, in different and multiple ways, has come to know her or his way around this place--someone ‘experienced’ in it” (p. 217).

Instead of explaining this to the photographer, I replied, “no, I was not going to be doing any teaching.” So he asked that we stage a teaching moment for the magazine article. When the image of the artificial photo shoot of me “teaching” was published, it represented everything I was hoping to disrupt from this experience. The students were arranged to stand in a semi-circle focused on me, their backs to the true teacher that the coulee and the land had become during their short time on the land. My inability to respond to the photographer’s assumptions within his question allowed me to recognize that if, as an experienced teacher, I struggle to respond to this dominant narrative of what teaching looked like, how much harder it must be for new teachers entering the field faced with similar questions. It was a pivotal moment of insight provided to me, and it allowed a deeper understanding of the difficulties preservice teachers have in being open to a new experience in how learning can unfold. It is important to note that by allowing the experience of inviting the land to become the “new teacher,” I did not forfeit my role or responsibility as a co-teacher. The experience allowed the students, the teacher, and the land to “co-dwell within the insistent presence of a ‘curriculum X to-be-implemented’” (Aoki, 2005, p. 116). In other words, it opened up the experiential world of *situational praxis* (Aoki, 2005) where “praxis is a way of knowing in which the subject within a pedagogic situation (like a classroom) reflectively engages the objective world guided by the telos of ordering human action. Here, theory and practice are seen to be in dialectic unity” (p. 116). It is within this dialectic unity a newer understanding of the complexity of curriculum can emerge.

The dialectic experience opened up the possibility of learning from and with each other: students, teacher(s), and land, just as the Three Sisters support each other in a dialectic relationship of uniqueness and strength. After the field trip the students developed beautiful, unexpected questions that I could never have predicted; questions that then led us to explore how the curriculum

can come alive when it is allowed to dwell “in the midst of a multiplicity of curricula” (Aoki, 2005, p. 214). Curriculum theorist Dwayne Huebner (1999) suggests that the young need to be continually invited to interpret the world, an opportunity “to feel wonder, amazement, a sense of mystery” (p. 5). This orientation calls for educators and students to venture, to engage and learn with the world in a profoundly relational encounter with human and non-human others. This, in turn, fosters care and attunement to the ever-unfolding ways of the world, and as a result our role within the world remains interpretable. The preservice teachers realized that they do not have to create interdisciplinary curriculum, but that mathematics, science, social studies already have natural connections when they are allowed to emerge from place; in other words, the lived curricula. The new teacher had much to say to the preservice teachers and offered countless ways to ensure that studying curriculum can come from a place of meaning and context.

In schools, there are current discussions on competency-focused curriculum. Aoki (2005) explores the root etymology of “competence” from the Latin root of “com-petere.” *Com* means “together” and *petere* means “to seek.” Kimmerer’s pedagogical act of bringing students into the garden embodies the original meaning of competency—which is to seek together, or “be able to venture forth together” (Aoki, 2005, p. 130). Aoki’s understanding of venturing forth together resonates with the concept of *Erfahrung*. By allowing the students to become experienced in the garden with the Three Sisters, Kimmerer offered an opportunity to venture together into the process of learning; what to pay attention to, how to make decisions on which way to go, knowing when to abandon one direction and move to another. In other words, the messy processes of what it is to come to know one’s way around a topic. By creating the space to venture together, student teachers are invited to the complicated conversations (Pinar, 2004) of curriculum, relationships, and thoughtful considerations. Such seeing may eclipse a teacher’s cultivated practice that is not simply to be in possession of technical skills, but a practice on learning to wield such tools with the knowledge of the end itself, the “what for.”

The Richness of a Polyculture Classroom

*The lived curriculum is not the curriculum as laid out in a plan,
but a plan more or less lived out.
(Aoki, 2005, p. 201)*

In teacher education, there is often a desire for certainty that is compelling for preservice teachers to help navigate within the complex world of a classroom. Aoki (2005) describes the “seductive appeal of these understandings--of suggestions of simplicity and pragmatic usefulness” (p. 197). Kimmerer shows us that certainty is the opposite of what is needed to create the space that allows for learning to unfold. How tools are used and the impact they have on relationships must be considered thoughtfully and critically. Kimmerer provides a beautiful example of a reorientation away from focusing on tools that Aoki (2005) also contends educators rely upon to and instead to “see and hear our doings as teachers harbored within pedagogical being” (p. 197). From his many years of studying agriculture, Wendell Berry (1965) observes, “that the same information, tools, and techniques that in one farmer’s hands will ruin land, in another’s will save and improve it” (p. 65). Under such a gaze, they often neglect the relational--the response of how the students may be experiencing the lifeworld of the classroom. How might preservice teachers learn to look, to see, to pay attention? How might we meld theory and practice that calls

for a renewed engagement that fosters perceptual acuity as we come face-to-face with Myrian's struggles to read, or Jamil's incessant questioning, or Brook's residual fascination and continued pensiveness on yesterday's conversation. Here teachers' noticings need to be applied in response to the worldly happenings of classroom life: What am I to do?

If one is focusing on the uniqueness of students in an instrumentalist/efficiency way, then the assumption may be to make the students conform to the needs of the outcomes in the lessons that have been predetermined: Jamil needs to stop asking so many questions, Myrian needs to be coded and directed to levelled readers, and Brook needs to be taught to move on because we don't have time to dwell in yesterday's lesson. The uniquenesses of the students are seen as problems that need to be solved, and if they cannot be solved, then we need to find ways to differentiate the lesson so that the students can be successful, or students need remediation; deeper interventions to bring them up to grade level. This reminds us of the conventional rows of corn that Kimmerer describes in her neighbours' fields.

There must be millions of corn plants out there, standing shoulder to shoulder, with no beans, no squash, and scarcely a weed in sight. The relationships disappear and individuals are lost in anonymity. You can hardly recognize a beloved face lost in a uniformed crowd. (p. 138)

The corn is grown as huge monocultures to fit the needs of the large machines—tools to harvest, to meet the demands of the market. To increase yield, the tank sprayers need to constantly add new fertilizer, herbicides are needed to suppress weeds, and pesticides are required to remove any bugs. Any plant other than the corn plant is seen as something that gets in the way and needs to be eradicated.

Conversely, in the Three Sisters gardens, not only are the unique gifts of each sister needed, but so are all of the other species of plants and animals that live amongst them. Kimmerer describes this as a polyculture where what is often seen as pests and weeds in rows of corn are actually welcomed plants and animals because, through the diversity, a beautiful balance emerges and polyculture crops are less susceptible to pest outbreaks. Amongst the plant-eating bugs are also insects that eat the crop eaters, and as a result the crop eaters are kept under control. By creating a rich, diverse environment all living things are able to live in harmony and, as Kimmerer states, these relationships ensure that “more than people are fed by this garden, but there is enough to go around” (p. 139).

The Three Sisters communicate their readiness and do not simply adhere to preestablished times. Rather, the Three Sisters require that we learn to pay attention. Coming to understand anew is “never a subjective relation to a given object, but to the history of its effect; in other words, understanding belongs to the being of that which is understood” (Gadamer, 1960/1989, p. xxxi). Such an understanding is akin to how naturalist writer Trevor Herriot (2016) describes picking berries. One does not simply pick berries on a predetermined date established by the picker, but rather one must learn to pay attention, to cultivate a sense of when it is most fitting, in the proper proportion, a readiness that is silently spoken by the berry--giving it a sense of agency. The picker's grace Herriot observes honours the proper measure of the world. “They knew the times for things--when to pick the berries and when not to” (p. 51). A polycultural classroom requires

this attunement to the needs and readiness of the students so that the students' unique gifts can flower to maturity when they are ready, as opposed to trying to force the readiness under artificial preestablished times.

Embracing a rich, diverse environment can be daunting for teachers who have only experienced the straight row of desks and the monoculture of one curriculum for all within a classroom. Often teachers worry about how they are going to create 30 lessons for 30 students if they are to take into consideration students' ostensible learning styles. This, on the surface, is an impossibility, and it assumes that the needs of individual students are as isolated learners, like rows of corn in a sterile field. Yet, the Three Sisters can help teachers understand the relationships between the students, the curriculum, and the teacher in a new light. Kimmerer describes how the lessons of interrelationships and reciprocity are most evident at the height of summer in a Three Sisters garden, and how these relationships provide a blueprint of balance and harmony for the world.

The corn stands eight feet tall... No leaf sits directly over the next, so that each can gather light without shading the others. The bean twines around the corn stalk, weaving itself between the leaves of corn, never interfering with their work... Spread around the feet of the corn and beans is a carpet of big broad squash leaves that intercept the light that falls among the pillars of corn. Their layered spacing uses the light, a gift from the sun, efficiently, with no waste. Respect one another, support one another, bring your gift to the world and receive the gifts of others, and there will be enough for all. (p. 131)

What if we allow time to explore how we create classrooms as a relational place where students' unique gifts and talents not only flourish, but also work with others' gifts so that they can support and nurture each other in a place of reciprocity. Kimmerer describes how the Three Sisters embodies the fundamental teachings of her people.

The most important thing each of us can know is our unique gift and how to use it in the world. Individuality is cherished and nurtured, because, in order for the whole to flourish, each of us has to be strong in who we are and carry our gifts with conviction so they can be shared with others. Being among the sisters provides a visible manifestation of what a community can become when its members understand and share their gifts. (p. 134)

Reciprocity and *Erfahrung* are intimately connected in that the relational in-between spaces that reciprocity creates is required for one to embark on a journey of self becoming and venturing which are at the heart of *Erfahrung*. Hammersley, Bilous, James, Trau, and Suchet-Pearson (2014) describe reciprocity as an ethical approach that is formed through interpersonal relationships that "promote mutuality, reflexivity and a respect for multiple ways of knowing" (p. 209). This definition points to a mutual exchange that flows backward and forward, a sharing in which creates a dialectic encounter. Buitendag (2012) states that within the reciprocal process of understanding the horizons of the self and the other, along with the present and the past, create the space to fuse. *Erfahrung* occurs within the space of reciprocity as we are opened up to new possibilities that emerge from the unique gifts that each person brings to the classroom. The corn does not demand the bean and squash to conform to how it lives in the world; instead the corn gains strength and support from the reciprocal relations that are intimately interwoven together. It is through their differences that the Three Sisters are stronger. As Kimmerer states "we are

bound in a covenant of reciprocity, a pact of mutual responsibility to sustain those who sustain us” (p. 382). This way of being in the classroom with students calls on teachers to recognize the tensions created amongst the interrelationships of Aoki’s curriculum-as-planned and curriculum-as-lived. This requires a move from a singular curriculum that is to be delivered to recognizing the dynamics and interplay of curricular landscapes “which vary depending on the situated lives of teachers and students” (Aoki, 2005, p. 299), where they are understood differently as “lived multiplicity-in-its-unfolding” (p. 298). By teachers allowing an opportunity to dwell within the space where they invite their students to reattune and reawaken so that they can experience how they are integral parts of the curriculum and the landscape in which they live (Magrini, 2014) and where their unique gifts may blossom.

Conclusion

We would like to express our gratitude to Dr. Kimmerer and to the Three Sisters for the lessons they have provided us by her sharing of their pedagogical journey. Kimmerer and the sisters invite us to attend to sets of relations that call for educators to nurture capacities that include the naming the world of botany, however, it also calls for reciprocity, renewal, generativity, supplementation, transformation, interdependence, interconnectedness, traditions, experience, attention, and love. Kimmerer provides a beautiful example of a reorientation towards reciprocity and relationships that Aoki (2005) also contends, where we can “see and hear our doings as teachers harbored within pedagogical being” (p. 197). Through *Erfahrung*, students and teachers alike become transformed by the pedagogical venture within the Three Sisters garden. Creating the space for learning to happen in relation to the topic, instead of focusing on predetermined outcomes of what will be learned, opens up the possibilities that the learning may end up somewhere they could never have imagined, “over and above our wanting and doing” (Gadamer, 1960/2004, p. xxvi).

Just like the Three Sisters, there are many lessons that the COVID-19 virus and pandemic is currently teaching us. A difficult lesson for many is that our response to the virus is not already known, and how we respond and continue to respond must be worked out in relation with others; we must creatively and imaginatively adapt to *its* ways. Ultimately, we will need to respond to the urgent and pressing questions posed by the pandemic that call for us to work in solidarity to question our previous understandings--which ones might we grasp more firmly, which ones might we abandon, and which ones need to transform our previous understanding of what it means to live well in a global community? As Gadamer (1960/2004) argues, “the way we experience the natural givenness of our existence and of our world, constitute a truly hermeneutic universe, in which we are not imprisoned... but to which we are opened” (p. xxii). Globally we are venturing into a garden that is new and uncertain, one in which we will all be transformed. As a result, we must respond in a way that is thoughtful by recognizing the deep connections we have with the virus and with each other.

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