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New pathways for teaching and learning: the posthumanist approach

Prepared for the Canadian Commission for UNESCO
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Table of Contents

Introduction	1
Alternative approaches to teaching and learning.....	2
What the future of education could be.....	3
Re/turning to holistic ancestral and Indigenous ways of knowing.....	3
Reframing relationships between scholars, teachers, and learners.....	4
The importance of learning settings	4
Towards holistic system thinking.....	5
Conclusion.....	5
References	6

Introduction

In the midst of the COVID-19 crisis, our lives and what is considered “normal” have been disrupted. As populations are required or requested to stay at home under various orders of social distancing, the education system is being affected at all levels. At the time of writing, although some countries have started reintegrating students in school, many around the globe are still not back in the classroom (UNESCO 2020). Instructors have been asked by their various institutions to adopt distance teaching to ensure that learning continues.

Pedagogy, the method and practice of teaching, is relational and complex, situated in the conditions of each moment. While online distance learning may seem like a sensible thing to do, systematically resorting to it as a suitable replacement for face-to-face instruction indicates a misunderstanding of what education is, narrowly understanding it as content delivery. The logic at work in the current crisis is that since content cannot be delivered in classrooms, instructors and their students can rapidly adopt alternate technological tools to engage in teaching and learning at a distance. This approach requires students to learn in something of a vacuum, and their parents, guardians or caregivers need to take on roles as educators—often without access to hardware, the internet, or the ability, time and interest to facilitate learning (Cerna 2020, UN 2020).

This approach is problematic in many ways; it assumes that everyone has a reliable and accessible internet connection, for example. It doesn't take into account relationships between teachers and students in real-world contexts, with the various ways in which teaching and learning are relational and situated in time and space. It also limits the experiential component of learning that can introduce other elements, such as the natural world.

In all cases, we question this approach that narrowly construes pedagogy as efficient delivery of knowledge from an informed teacher to an uninformed—and yet to be formed—pupil. This view of education is grounded in a patriarchal humanist worldview of the developed Western world and its colonial outreaches (Murriss 2018). The humanist subject emerging from this worldview is a white, able-bodied, cisgendered, heterosexual male, which places all other humans in positions of inferiority, and thereby justifies regimes of oppression (e.g., residential schools) that continue to plague our societies. Via industrialization and globalization, this view has become dominant. It erases collective memories, territorial and cultural identities, and relationships between places and people where traditional knowledges encompass and form essential infrastructures and meanings in our lives (Colonna 2020).

The humanist view of education operates on the basis of hierarchies and binaries that separate the mind from the body, the human from nonhuman lives, and humans from the natural world as a whole. This view justifies the use and exploitation of some humans, nonhumans and the environment – and is therefore responsible for the manifold crises we face (Braidotti 2013, 2019; MacCormack 2020). Creating the new ideas that our world urgently needs requires new modes of teaching that disrupt old ways of thinking and create new knowledges. This is what a posthumanist perspective can bring to our education systems¹

Posthumanism² offers new ways of conceiving humans, including teachers and learners, as non exceptional and entwined with other beings. Posthumanism's key idea is “entanglement” (Alaimo 2016, Barad 2007, Bennett 2010, Coole & Frost 2010, Cielemecka & Daigle 2019). It refers to an assemblage of entities and beings (think of the microbiome in your intestine, for example) that are also part of various other assemblages (the ecosystem it inhabits, the cities and countries it lives in, the technology it uses and is entangled with, and so on). We are beings with permeable boundaries (such as our skin or lung membranes) and are not distinct or autonomous from the world around us, as construed by the

humanist worldview. Every being, from the atom to the earth system, is itself an agent, and its actions can have significant impacts on any other agent or system. For example, the body's cells and organs, the gut bacteria, the organisms living on the surface of our skins all exercise some action and sometimes act against our own conscious intentions. We see this in our world in the global impact of the tiny COVID-19 virus.

How does one "posthuman" teach another? Applying a posthumanist approach to education involves rethinking pedagogy, knowledge production and dissemination. If there is a need to understand the world differently, we must "defamiliarize [our] mental habits" (Braidotti 2019, 77) by moving away from a humanist worldview. This worldview has not only shaped our thoughts, but also our institutions. Universities and education systems are structured around binaried teacher-learner relationships, as well as seeing disciplines and school subjects as discrete entities with their own objects and methods of study and practices. **What changes must we bring about so that we can imagine and understand the world and ourselves in new ways?** A posthuman approach can change the way we value ourselves, other species, the planet, and beyond. It requires thinking about the system as a whole instead of each agent as a perfect independent entity; it requires valuing all agents and their relationality.³

Alternative approaches to teaching and learning

In the nineteenth century, humanist western education viewed the child as a passive recipient of knowledge. Teaching was founded on prescribed canons of great works – written largely by male scholars, writers, scientists and artists. The teacher was an authoritative, detached, knowledgeable other. Still today, some view the child as in the "process of becoming-adult (Man)" (Murriss 2018, 2). The child is viewed as simplistic, ignorant, inexperienced and inert, with few ideas or experiences to offer: a (grateful) vessel to be filled with discipline specific information. This perspective, unfortunately, continues today.

In the twentieth century, alternative models of western pedagogy began to emerge. For example, John Dewey's progressive education (1938) featured teaching through a child-centric lens, using an experiential inquiry-based approach. Here the child builds capacity by engaging in co-creating self-directed learning experiences in order to develop as a reflexive learner. Play and discovery are key to learning, especially in early childhood. This practice is foundational in Montessori schools⁴, and A.S. Neill's (1960) exemplary *Summerhill*⁵, a private school founded in the 1920s, which continues at Lyme Regis, England. Summerhill's experiential pedagogy, located in play and discovery, offers a unique "free range" learning experience, in and beyond the classroom. Alongside these progressive views, the sociologist of education George Counts (1969) proposed that educators engage in pedagogical reflection with their students as a political and moral exercise, with social reform as a key goal of education. He proposed that public schooling be a vehicle for critiquing society and moving towards a "new social order", thus preparing students to reimagine democracy and work towards more socially just and equitable societies in the US and beyond. Simultaneously, during World War II, Herbert Read (1943) proposed a pedagogy of peace and social justice to be achieved through learning centred in and through the arts and humanities.

A Canadian example of an alternative pedagogical approach is Greenwood College School⁶, a private environmentally focused school which began operating in 2002 in Toronto. Another example is the School Without Walls, which started in 1971 at the George Washington University. School Without Walls offers a different educational experience where the city is reflected in the classroom. However, it has been considered elitist as entry requirements are strict, reinforcing that even an alternative education system may promote a Western neoliberal worldview.

The School Without Walls has been adapted in Ontario with some schools in the Peel District School Board embracing what they call “classrooms without walls”⁷, managed by the Peel Field Centre. Students are involved in environmental education through workshops, outdoor classes, activities such as vermicomposting, experimenting in nature, and so on.

Other examples of alternative curriculum or modes of delivery exist⁸, but these remain quite marginal, and the vast majority of children and young adults are educated through a system that is discipline-based and organized around big data testing.

What the future of education could be...

In turning to posthumanism, we propose a conception of pedagogy that is holistic, where boundaries are porous, and students develop capacities to feel, think, and imagine themselves relationally. Indeed, relationality is at the heart of pedagogy: it is not only between students and teachers⁹ but also in relation to the settings in which teaching and learning take place. In a posthumanist approach, we view learners as “entangled” with, connected to, and responsible for themselves, alongside the life and habitats of all humans, non humans, the environment, the planet, and space, including entities beyond our planet.

A posthumanist approach to education challenges us to interrogate and dismantle humanist structures upon which many current education systems rest. As Bayley claims, “How we ‘do’ education, arguably, lies right at the heart of rising to the challenges of developing thinking-strategies for participating in the complexities of 21st century living and working” (2018, 20). We propose that a posthuman pedagogy explores and features the following key elements:

- Re/turning to holistic ancestral and Indigenous ways of knowing;
- Reframing relationships between scholars, teachers, and learners;
- Considering material physical learning environments in which knowledge is co-created; and
- Embracing the need to move toward postdisciplinary conceptions of knowing, curriculum, and knowledge creation
 - (Darbellay, 2020; Ferreras, Bidwell and Pernecky, 2020).

Re/turning to holistic ancestral and Indigenous ways of knowing

Indigenous ways of knowing differ fundamentally from humanist approaches to teaching and learning, which exacerbate the disconnections we experience from ourselves, from one another, from nature, and from the Earth as a holistic integrated entity. In Canada, Indigenous peoples’ ways of knowing is linked to two tenets in education: “everything is alive, and we are all related” (Restoule and Chaw-win-is 2017, p. 12). For Moré people in Burkina Faso, the word “environment” does not exist: everything is “part of the same system,” the environment, and soil, plants, water, animals, etc. are not differentiated as concrete and separate entities (Vasseur, pers. experience). There are therefore interesting similarities and differences between Indigenous ways of knowing and posthumanist pedagogies. They should not be lumped together as one view though, just as Indigenous ways of knowing and worldviews are not one and the same across cultures and peoples. More work remains to be done in unearthing potential alliances.

Nevertheless, many of posthumanism’s holistic and relational ideas can be found in ancestral modes of thinking (Bignall & Rigney 2019, Murriss 2018¹⁰). Scholars interested in points of convergence between Indigenous ways of knowing and posthumanist pedagogy point out that for both there is a critical

stance, and sometimes an outward rejection of pedagogy located in the intellect rather than in instinct, affect and experience.

Reframing relationships between scholars, teachers, and learners

In a humanist perspective, learners—children, adolescents and adults—are treated as individual minds waiting to be filled with the more complete knowledge of teachers (Murriss 2016, 4), and by extension, the knowledge of scholars. Posthumanism, however, considers scholars, teachers and learners to be co-creators of knowledge. The learner is no longer seen as occupying an inferior position (Moss 2016), aligned to and restricted by nature. A posthumanist approach therefore moves us away from what Murriss refers to as the view of the “child as deficit”(2018), which considers learners as limited, not yet knowledgeable, skillful, cultured, or fully adult. In such a view, it is the job of teachers and all humans to support learners (children) in becoming part of the world, facilitating their full participation (2018, 8).

Such a stance poses important questions about teachers, and by extension, about scholars. Murriss explains “If the teacher is neither a guide, nor an instructor, nor a trainer, nor a discipliner, nor a facilitator, nor a socializer, nor a protector, nor a diagnoser, nor a medicator, then what kind of teacher is s/he/it?” (2018, 19) Therefore, a re-evaluation of the teacher’s role is essential. For example, the notion of “flipping” the classroom is popular in posthumanist approaches to education, but the point is to recalibrate teacher-learner relations so they are neither hierarchical, nor potentially oppressive. Therefore, pedagogy can be seen as a co-created journey of discovery, rather than simple content delivery.¹¹

Scholars who advance this approach to pedagogy are interested in pushing further and reviving some views of education that have remained marginal and alternative,¹² and they seek to position these approaches at the center of a posthuman pedagogy. They are passionately interested in a posthuman conception of pedagogy that situates humans in multi-modal contexts beyond the intellect, to consider other species, place and space¹³, and the planet as a whole, and the important role of physical learning environments.

The importance of learning settings

The settings in which we engage in pedagogy are expansive and inclusive. They range from informal spaces and activities such as chatting around the dinner table at home to school-related activities such as learning how to garden, field trips, sewing, sports, learning online, thinking through a problem, attending formal lectures and doing group work in a kindergarten setting.

From a posthumanist perspective, the objects, bodies, and spaces in which we engage in pedagogy as scholars, teachers and learners, all do things: they are agents that actively shape teaching and learning, in that we learn in and from spaces and places. Posthumanist pedagogy asks us to be attentive to these settings and attempt to create new ways of thinking by disrupting the spaces we traditionally use for teaching, by recognizing and attuning to the spaces and places that have always been pedagogical – like the kitchen at home. The school buildings, the windowless concrete classrooms in which we meet our students, the enrolment sizes dictated by budget concerns, and other very mundane and concrete factors all impact how we teach and learn. Settings teach as much as the teacher does. Verlie points to this by indicating that the classroom in which she was teaching is the co-author of the paper she wrote on her pedagogical experience (Verlie & CCR 15, 2018).

Therefore, posthuman pedagogy is not simply a matter of taking a class outside into nature and open spaces. Posthumanism invites us to understand how learners are interconnected with space. This takes

us into the realm of thinking about pedagogy holistically, an approach that differs fundamentally from discipline-based pedagogies of the mid-twentieth century.

Towards holistic system thinking

As discussed earlier, the “back to the disciplines” movement, also known as academic rationalism (Vallance, 1986), called for greater rigour within disciplines as discrete entities, in the sciences especially. Faculty silos, like disciplinary silos, continue to dominate current education systems in universities and schools. Since the 1970s, the use of terms such as multidisciplinary, interdisciplinarity and transdisciplinarity have become more widespread. In a strange twist, interdisciplinarity has been relegated to niche programs such as specialist arts high schools and Indigenous Studies programs at universities.

We need to move beyond disciplines to a much more radical approach that is not discipline centric, but rather holistic. This is what posthumanist thinkers advocate. The problems we are facing in the world today are complex, and only modes of thinking that acknowledge, remove, and bridge disciplinary divides and in fact operate beyond them, considering many intricate aspects of problems, offer workable possibilities. Exposing learners from kindergarten to graduate level to such thinking will allow them to think about the world and all of its beings, spaces and places, as entangled, as interconnected. It will prevent silo thinking and foster the capacity to experiment, explore, and discover, letting the creativity of children and educators thrive.

Teaching via themes rather than disciplines could promote holistic systems thinking. For example, consider a theme such as “water” in a variety of settings, ranging from elementary school to undergraduate studies programs: It could be addressed across arts and science disciplines, which would allow for genuine learning in complexity. Such a shift in teaching and learning could facilitate new ways of thinking, feeling, and taking responsibility for ourselves, one another, non humans and the planet.

Conclusion

In the context of the global crisis of COVID-19, it is important to reflect on how we can shift our approach to teaching and learning. But we also have to be careful and avoid the trap of thinking that everything can be done virtually. More broadly, we must ask ourselves: How can we engage all teachers and learners, in fact, all humans, in thinking, feeling and being responsible for ourselves, one another, and the planet? This shift includes abandoning humanist worldviews, embracing a posthuman pedagogy and returning to holistic, ancestral and Indigenous ways of knowing; non-hierarchical relationships between teachers and learners; recognizing the importance of learning environments, and creating learning opportunities that offer holistic system thinking and feeling. A curriculum that values the interconnected existence of all beings and their actions, rooted in and beyond classrooms, and truly by innovative pedagogical methods, will truly support globally minded citizens who are able to think and act holistically.

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¹Strom et al. examine education doctoral programs in particular and say "we argue that to pursue actual changes that will help create a more just world, we need to think differently about ourselves, the world, and our connections with/in it, and apply that thinking to educational practice and systems change." (2018, 270) They explain that while some education doctoral programs emphasize systems-thinking and communities of practice perspectives, they miss the extra step taken by critical posthumanism which sees the organizational collective in terms of human and nonhuman groupings in which all elements share agency (271). This is why they think it is necessary to adopt posthumanist perspectives.

² Posthumanism is to be distinguished from transhumanism. Transhumanism is a movement that seeks to go beyond the human because it considers it to be fallible. By using technology and science, the hope is to surpass the fallible bodies and minds that we are. Posthumanism, by contrast, focuses on humans as materially embodied and interconnected with all beings and examines the potential of the multiple relations we are always entangled with.

³ It should be noted that part of the posthumanist approach, especially among material feminists, is to extend agency to nonhuman beings such as nonhuman animals, natural phenomena, and objects such as rocks. This is key to posthumanist material feminist proposals and informs the posthumanist pedagogical approach we discuss here.

⁴ It is of note that these approaches are also similar in spirit to Waldorf and Rudolf Steiner

⁵ See: <http://www.summerhillschool.co.uk/books-by-asneill.php> accessed April 26 2020

⁶ See: <https://www.greenwoodcollege.org/about/mission-and-vision> accessed July 14th 2020.

⁷ The classrooms without walls program at Peel District School Board in Ontario can be viewed here: <https://www.peelschools.org/schools/fieldcentres/commprogramming/Pages/default.aspx> accessed on July 14th 2020.

⁸ For example, the International School of Hellerup in Denmark (<https://ish.dk/academics/primary-years-programme/>) focuses on the acquisition of social and personal skills in addition to academic skills. Based on student-to-student learning and a project-based approach, this alternative system seeks to produce well-rounded students. The programme is structured around six transdisciplinary themes (Who we are; Where we are in place and time; How we express ourselves; How the world works; How we organize ourselves; Sharing the planet). The documentary *School's Out* (<http://schoolsoutfilm.com>) about a kindergarden that is held in the forest also explores alternative approaches. Likewise, the UNESCO Associated Schools Network (<https://aspnet.unesco.org/en-us/>) seek to use alternative methods to pursue education on global peace.

⁹ Obviously, the pandemic has forced a shift in the student-teacher relation as it has moved it in the virtual space of online teaching. While it puts it under stress, it does not eliminate that relation.

¹⁰ For example, she points out that African humanism does not embrace the nature/culture dichotomy (e.g. Ubuntu) (Murriss 2018, 12). The child in Africa never grows out of childhood: one is always the child of a parent.

¹¹ As mentioned above, this is very challenging in a pandemic context where distance online learning is the main educative tool. The digital settings in which teaching and learning increasingly happen alters the pedagogical experience. Settings matter as we argue in the next section.

¹² See for example Miller's (1996) holistic view of education as transformation which extends Nel Noddings' ethic of care for self, others and the environment, across species and across cultures. Such a position can be seen as bridging the path between early ethics of care and contemporary posthumanist thinking.

¹³ See e.g. Narve (2001) for whom a pedagogical goal for all citizens is to value animal, human and plant life as interconnected.