Work-Integrated Learning and Indigenous Educational Philosophy: A Review of the Literature

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Abstract: This literature review examines the current research into Work-Integrated Learning and Indigenous Educational Philosophies and how the two can be woven together. This was done by examining the theoretical backing, benefits and future direction of work-integrated learning as well as the Indigenous philosophical concepts of land, rationalism, and holism as well as and the cyclical and experiential educational concepts. It is shown how a relational and holistic perspective can support students in work-integrated learning and how the concept of iteration is core to strong work-integrated learning experiences. This will be helpful for educators developing or improving work-integrated learning programs and wish to focus on person centered benefits rather than labour market improvements.

Keywords: Work-Integrated Learning, Experiential Learning, Indigenous Educational Philosophy, Indigenous Knowledge, Relational, Indigenous Paradigm, Constructivist, Humanistic, Transformative

Introduction

This literature review explains the concepts behind work-integrated learning (WIL) and Indigenous educational philosophy in Canada and attempts to weave the two of them together to improve the work-integrated learning experience for future post-secondary students and support future developments in WIL and experiential learning.

Work-Integrated Learning

The term work-integrated learning (WIL) (CEWIL Canada, n.d.) is used by many postsecondary institutions to denote a group of experiential learning (EL) opportunities (figure 1) that are connected to curriculum and involve engagement in authentic workplace experiences. Some postsecondary institutions expand their use of the term to include co-curricular EL (McRae & Johnston, 2016). In WIL opportunities students gain experience in a real-world, authentic (Choy, 2009), setting that both draws from their educational program and provides an opportunity to build skills and abilities that students can bring with them back to their program in an iterative process.

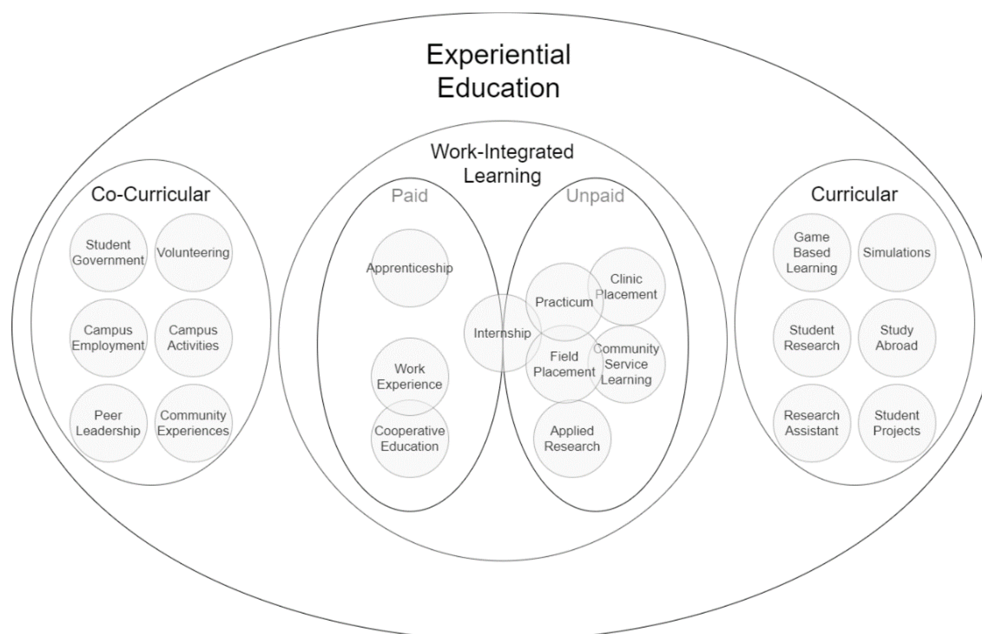

Figure 1. Experiential Education Model

The concept of WIL and EL are based in the constructivist paradigm (Mcrae & Johnston, 2016). Drawing from the experiential education theories of Dewey (1938) and Kolb (1984) and adding to those the transformational education theories of Mezirow (1991). Most WIL programs explicitly use Kolb's Experiential Learning Cycle (Kolb, 2014; McRae & Johnston, 2016) to guide their practice. As part of this, they include reflective and abstract thinking opportunities integrated into the WIL opportunity and then, giving students the chance to put their new and emerging ideas into practice.

The constructivist theories that support WIL explain how we learn from our experiences (Merriam & Bierema, 2014) by reflection. The past experiences then become our context (Jarvis, 2007) for future experiences. Because of this, every person has a different context (Engeström, 1987) because of their history and socio-cultural background and thus a different socially constructed reality (Bruner, 2009). For this reason, WIL is a more complex learning environment than classrooms, as holistic individuals interact with other holistic individuals in an authentic working situation where solutions and answers are not predetermined.

WIL Benefits and Concerns

With the international focus on WIL the benefits have been well studied. These benefits are first and foremost improved technical and transferable skills (Babacan & Babacan, 2015; Ferns et al., 2019; Jackson, 2013; Lim et al., 2020; McRae et al., 2019; Sambell et al., 2020) and better connections to and understanding of the labour market and workplace (Lim et al., 2020; Sambell et al., 2020). However, other benefits such as better grades and retention (Ramji et al., 2016) and gaining access to a community of practice (Martin & Rees, 2019) have been identified as well. It increases student's confidence (Sambell et al., 2020) and helps them construct their identities (Bowen, 2018; Ferns et al., 2019) and develop "passion for the role" (Martin & Rees, 2019, pp. 197-198) that they wish to be in.

There has been recent research (Babacan & Babacan, 2015; Choy, 2009; McRae, 2015) into how WIL can provide transformative experiences. The focus is on how WIL allows students to explore "theories, ideas, practices, concepts" (Babacan & Babacan, 2015, p. 173) in a place where they are both supported and challenged (Ward et. al., 2005) which may create a space for transformative learning.

Although improved employment outcomes are often cited as the reason for encouraging WIL, the direct impact remains debated (Jackson, 2013; Jackson, & Collings, 2018). Some studies have shown improved employment outcomes as being an end result of WIL (Jackson, 2013; Johnston, 2011; Wyonch, 2020), but other studies (Jackson & Collings, 2018; Wilton, 2012) have contradicted that, instead saying that WIL is for the gaining of skills and that improving those skills could lead to better employment outcomes. Still other authors are worried that too much of the discourse around WIL is too connected to a "human capital perspective" (Milley, 2016, p. 104). This worry is that WIL, and especially the focus on it as directly connected to employment outcomes, is used to reinforce a neoliberal concept in postsecondary education (Hyslop-Margison & Naseem, 2007; Johnston, 2011) to the detriment of personal development. Hyslop-Margison and Naseem argued that the use of WIL as a method of career training is squandering what it could be. If the purpose of education is to improve humans and human understanding then WIL can support that by "fostering critical and politically participatory dispositions in students" (Hyslop-Margison & Naseem, 2007, p. 355) who participate in it.

Indigenous Educational Philosophies

Indigenous educational philosophies (Styres, 2017) and Indigenous paradigms (Kovach, 2010; Pidgeon, 2019) align in some ways with the constructivist, humanistic and transformative paradigms that inform WIL, however, the differences are important and can inform future practice. The core concepts in Indigenous educational philosophies are land, relationalism, and holism. These ideas are present in nearly all of the varied Indigenous educational philosophies from across what is now Canada. In addition to these three concepts, the ideas of circularity in education and experiential education are two of the most prominent methods of Indigenous educational practice.

Land

Land as a concept means more than simple place, and it is upon land that Indigenous philosophy rests (Styres, 2011). Connecting with the concepts brought forward by Jo-ann Archibald (2008) Styres explained land is an active participant in our lives, it is always changing, always transforming (Styres, 2011) within a cycle. Land includes the

concept of place, as Ray Barnhardt explained, and shows that learning is directly "embedded in the environment" (Barnhardt as cited in Marule, 2012, p. 131). His implication is that in Indigenous educational philosophy the location of teaching and the contextual and relational connections there is the important part of the concept of land, that the land both supports teaching and is a teacher. Styres expanded upon this by seeing land as a philosophical concept upon which is based a relational and holistic education (Styres et al., 2013, p. 41). Leroy Little Bear in "Traditional knowledge and humanities: A perspective by a Blackfoot" (2012) wrote that "space is a major referent in the mind of Aboriginal peoples as opposed to time" (Little Bear, 2012, p. 522). The core of this concept, then, is that we are connected to the natural environment, the land, not separate from it (Chartrand, 2012), and that the land impacts our relationships.

Rationalism

The concept of humans as being part of nature, rather than separate from it, leads to a relational understanding of education. As Linda Akan (1999) explained, education must be rooted in a relational understanding, that the learner is connected and part of nature, and is connected to those who came before and those who will come after (Akan, 1999). Or, as Bill Cohen put it, the "belief that humans are not the supreme beings on the planet; and that although humans are special, our health and vitality are directly related to the health and vitality of the natural world of which we are a part" (Cohen, 2001, p. 142). Styres (2017) used the concept of "self-in-relationship" (p. 56) to describe this "interrelatedness… interdependence… and interconnectedness" (p. 57). Relational is used in this method frequently in the literature (Antone, 2003; Cajete, 2005; Battiste, 2013).

Holism

A land based, relational, understanding requires that the individual must be seen from a holistic, or wholistic (Pidgeon, 2016), and humanistic perspective (Chartrand, 2012). Cajete (2016) described this as "Indigenous forms of traditional education within the context of tribal community were a holistic and integrated process" (p. 365). In an earlier work, Cajete explained that this transformation of the individual is not for the benefit solely of the individual but is for the benefit of the community (Cajete & Pueblo, 2010).

The core conceptual framework often utilized to explain holism most often is the medicine wheel (Antone, 2003; Chartrand, 2012; Morcom, 2017), with its four parts of Spiritual, Emotional, Intellectual/Mental, and Physical. The positioning of the four parts depends on the tradition in which the philosophy is based (Antone, 2003; Morcom, 2017). Morcom (2017) explained that a "full understanding of the Medicine Wheel teachings takes years of study" (p. 124) and that that the medicine wheel is a deceptively simple concept. She continued by saying that "its application to the nature of personhood gives us insight into one element of Indigenous holistic educational philosophy" (Morcom, 2017, p. 124).

Holism is not separate from land and relationalism, as previously discussed, instead holism connects them together with the individual (Morcom, 2017; Pidgeon, 2014). Pidgeon's (2014) Indigenous wholistic framework built on the work of Archibald, Kirkness, and Barnhardt (1991) to unite relationalism and wholism. This framework (Pidgeon, 2014, 2016) described how the individual, with their spiritual, emotional, physical, and intellectual needs is connected with family, community, and nation and their spiritual, emotional, physical, and intellectual needs, and how that links in with the four Rs described by Kirkness and Barnhardt (1991) of Respect, Relevance, Reciprocity, and Responsibility (p. 100).

Cyclical and Experiential

The educational practice of cyclical, or iterative, learning is core to Indigenous teaching methods. This cyclical knowledge concept (Akan, 1999; Battiste, 2013) explains how stories, concepts, and knowledge must be returned to again and again to learn more from them. This cyclical nature, based on the constant transformation and flux in nature (Little Bear, 2012; Styres, 2011), is the expression, or practice, of the philosophy discussed so far. Cajete wrote that "that there are always deeper levels of meaning to be found in every learning-teaching process" (Cajete, 2005, p. 70). About circularity Styres (2017) said "although it may at first glance appear repetitive, particularly if one is unfamiliar with circularity, each cyclical journey adds dimension to the concepts as they are examined, explored, and connected across contexts" (p. 31).

In her thesis "Creating an Indigenous Experiential Learning Model" Molly Bigknife Antonio (2006) focused on the intentionality of experiential learning in Indigenous educational philosophy. Experiential and participatory learning (Cajete, 2005; Battiste, 2013; Brayboy, 2014; Marule, 2012) are core aspects of the method of Indigenous education. The way a person learns is by doing and by action, and that the spoken teaching, while important, is less important than the actual action. This ties into the concept of cyclical learning by the process of bringing new knowledge and experiences to bear each time a person revisits (Styres, 2017) an experience either through action or reflection. It is this revisit that forms the core of the learner's educational journey.

Bringing Work-Integrated Learning and Indigenous Educational Philosophies Together

The core concepts of relationalism, holism, cyclical, and experiential learning all align closely with WIL, while land can be connected, but it is not seen by western theorists as being in as close alignment. This may be an area where more work can be done, as the concept of land or place-based education (Smith & Sobel, 2010) has been a growing area of educational research. Bringing in this concept may improve the community connections of WIL programs, discussed by Kennedy et al. (2020), or could provide a better understanding of the contextual factors that affect students in WIL.

WIL is an iterative (Kolb & Kolb, 2013) experiential learning process, which connects to the whole person and their context (Engeström, 1987). This can be supported by the Indigenous paradigm, with its holistic and relational view of education (Morcom 2017; Pidgeon, 2014, 2016). This view is best expressed by Kirkness and Barnhardt's (1991) concept of respect, relevance, reciprocity, and responsibility, which is echoed across most of the Canadian literature into Indigenous education (Archibald & La Rochelle, 2017; Kennedy et al., 2020; Mcrae et al., 2018; Pidgeon, 2014, 2016, 2019; Peltier, 2018; Ragoonaden & Mueller, 2017; Ramji et al. 2016). This concept can support a relational, experiential, and iterative understanding of WIL programs. The Indigenous paradigm and philosophies resonate strongly with WIL programming in the focus on experience and the linking of doing and knowing, (Kovach, 2010) as well as the as the reflective circularity (Styres 2011) that underpins good experiential learning. The addition of relational (Cajete, 2016) understandings of students and connections can improve WIL programs substantially, not only for Indigenous students (Kennedy et al., 2020), but for non-Indigenous students as well. By uniting these concepts, we can support transformative learning that transforms both the individual and the community (Cajete & Pueblo, 2010) and lead to the development of self-actualized students with improved understanding of themselves, those with whom they are in relationship with, and their wider context. This may improve employment outcomes, but more importantly, it will improve whole people.

Acknowledgement

I wish to acknowledge the Indigenous Elders and Knowledge Keepers who I was unable to reference in this paper, but who have taught me so much. This includes but is not limited to N'kixw'stn James of the Nlaka'pamux, Lilly Whonnock of the 'Namgis, Joanne Brown of the Cheslatta, and Miiksika'am of the Siksiká. I am an immigrant to Canada, Mennonite, and a settler in Niitsitapi territory.

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