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Switching from Bloom to the Medicine Wheel: creating learning outcomes that support Indigenous ways of knowing in post-secondary education

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ABSTRACT

Based on a review of works by Indigenous educators, this paper suggests a four-domain framework for developing course outcome statements that will serve all students, with a focus on better supporting the educational empowerment of Indigenous students. The framework expands the three domains of learning, pioneered by Bloom to a four-domain construction based on the four quadrants of the Medicine Wheel, a teaching/learning framework that has widespread use in the Indigenous communities of North America (Native American, First Nation, Metis, Inuit, etc.). This paper expands on the cognitive (mental), psychomotor (physical) and affective (emotional) domains to add the fourth quadrant, spiritual, as being essential for balance in curricular design that supports students in their learning goals. The description of the spiritual quadrant includes a progression of learning outcomes and suggested verbs for developing learning outcome statements. Evaluation and practical implications are also discussed.

KEYWORDS

Indigenise; spiritual; affective; intercultural; multicultural; cross-cultural; Native American; First Nations; Indigenous

What good is education without love? (Catherine Adams, Kwakiutl, born 1903 Smith's Inlet, B.C¹)

As I entered, was welcomed through ceremonial dance, and heard personal stories of both tragedy and triumph in the longhouse of the Sumas people of the Stó:lō Nation, I pondered (and still do) how I could take what I was experiencing and use it to enhance my teaching. The event was part of a professional development opportunity for new faculty to assist in indigenising the academy. Indigenising the academy, I found out, meant **changing the system so that the 'public post-secondary education system is relevant, responsive, respectful and receptive to Aboriginal learners and communities'** (Ministry of Advanced Education 2013, 7) and 'to make the academy both responsive and responsible to the Indigenous peoples' goals of self-determination and well-being'. (University of the Fraser Valley 2007, 10) and

working to change universities so they become places where the values, principles, and modes of organization and behaviour are our people [Indigenous peoples] are respected in ... and integrated into, the larger system of structures and processes that make up the university itself. (Alfred 2004, 88)

The current article is one result of my journey towards indigenising my classroom practices over the subsequent five years, and posits the use of the Medicine Wheel rather than Bloom's taxonomy of learning domains for developing post-secondary curriculum.

Being a communications instructor, some of my thoughts during the longhouse visit were, 'Well, my public speaking students should know how and when to acknowledge First Nation territories when giving speeches'; and perhaps, 'I could find some opportunities to invite First Nation community members to talk about worldview for my intercultural communication class'. I realised pretty quickly this might be a start for me but it really didn't answer the broader question of 'How do we indigenize the academy in our day-to-day practice as instructors?'

Not long after my visit to the longhouse, I was teaching an instructional communication course. Throughout the course each student practised creating and delivering lesson plans based on the three-domain taxonomy of learning pioneered by Bloom (1956).² The course was constructed to concentrate on just one of the learning domains at a time (cognitive; psychomotor; affective). While this is really a false set-up for how we learn, it forces the students to go beyond the default 'cognitive' domain lessons that are most often the norm in a university classroom. The other two domains are often confined to specific disciplines such as in counselling (affective) and in trades (psychomotor).

Charlene Leon,³ one of the students in the class, was from the Cree Nation and we had the bounty of learning about drumming (psychomotor), smudge ceremony (affective) and in her final (cognitive) lesson, the Medicine Wheel. As this student started her last lesson she asked us to think back to when I had been explaining Bloom's taxonomy at the beginning of the term. As we named off each of the domains, she matched them to the Medicine Wheel: mental (cognitive); emotional (affective); and physical (psychomotor). The Medicine Wheel⁴ has four equal sectors and it was obvious that there was a domain missing from the structure that we had been working with: spiritual. Although I knew about both Bloom and the Medicine Wheel, I had never made this connection and it sparked in me a desire to answer two questions: What implications does the spiritual quadrant of the Medicine Wheel have in indigenising post-secondary education, and; what learning objectives/outcomes can be defined as part of a spiritual domain?

Challenges as a non-Indigenous researcher

In taking on the task of answering these questions related to the spiritual quadrant of the Medicine Wheel I faced several challenges as a non-Indigenous researcher (Stirrup 2012). Some of the challenges I identified in relation to doing this work were:

- The danger of reinforcing colonisation by including anything from the three-domain taxonomy rather than starting from scratch.
- Implications for replacing instructional methods to fully meet the need for honouring spiritual learning outcomes.
- The need to fully consider the implications for assessment/evaluation.
- The need to reinterpret instructor & learner roles.
- Making sure to clarify the difference between spirituality and religion (Phipps and Benefiel 2013).

To deal with these challenges I made particular decisions that serve as parameters for this current article. First, I decided that it was important to recognise that teachers in North American culture have been grounded in the use of Bloom's taxonomy for a long time and would be able to grasp the ideas of the spiritual domain within this context just as my student had shown me the parallels and divergence with the Medicine Wheel. The Medicine Wheel model is not the only cultural framework available to use and is not a model all Indigenous peoples will resonate with but because of its widespread use can be a helpful model for bridging non-Indigenous faculties' understanding of Indigenous ways of knowing and being. Also, while I gathered materials related to the need to adopt Indigenous instructional methodologies such as using long-term mentoring, it is beyond the scope of this particular paper to include the whole range of these teaching practices other than where they help to explain learning outcomes.

Additionally I try, wherever I can, to treat the instructor as a learner and the 'student' as a teacher. I know that I often learn very valuable lessons from my students, as in the one Charlene taught me, and therefore try to remain open to that possibility at all times. Finally, I found that as I read through many materials on spirituality there was often a conflation between spirituality and religion, as well as a recognition of a fear of having religion as a construct that defines a classroom. Therefore, the definition I offer and use in this paper is meant to distinguish **spirituality as a universal human condition and internal moral guidance system**, in contrast to religion as the practices that particular groups of people use to define moral rules and practices for a relationship with an unknowable creator or divine realm.

Subsequently, I define spirituality, summarise what has already been written about spirituality in secular educational institutions, and discuss the move towards Indigenisation in lesson design and teaching practices. In the concluding sections I posit a four-domain learning outcome framework and provide initial suggestions for evaluation/assessment as one of the major challenges implicated in including spiritual learning in higher education.

The spirit in post-secondary education

To further explore and operationalise the spiritual quadrant of the medicine wheel for post-secondary educational contexts a working definition is necessary. An Indigenous definition of spirituality offered with the assistance of Manitoba elders Art Shofley, Angus Merrick, Charlie Nelson, and Velma Orvis provides a way of thinking about the place of the human spirit in daily life. In an online guide the elders explain that this **spiritual is 'a belief in the fundamental inter-connectedness of all natural things, all forms of life with primary importance being attached to Mother Earth'** (RCMP Aboriginal Policing Services 2010). Senior Advisor on Indigenous Affairs for the University of the Fraser Valley, Shirley 'Swelchalot' Hardman [Personal correspondence] says that for her;

... spirituality is not a separate compartment ... it is with me and present with every step I take each and every day. An example of this is when I arrive at work every day. In the parking lot there is a cedar tree ... the Cedar is our sacred tree – it is integral to our world – and so when I arrive at campus I always try to park close to the cedar tree – Xpá:y. When I walk near the tree ... I say, Ey Si:yam. Hoych'ka Si:yam. Tsetsel ey Si:yam. Hoych'ka Xpá:y. I thank the tree. Express my highest gratitude. That giving of thanks, to us as Stó:lō it is our prayer – that is the English word for it. We believe that Creator, Good Grandmothers, Good Grandfathers hear what is in our minds and in our hearts – our very thoughts are a prayer. It is all the time, not just in ceremony or when we are gathered as a group. It is in how we interact with everything that is around us.

For post-secondary education this definition has implications for connecting fields of study and collegial relationships to a long-term view of how university knowledge and activities impact the self, families, communities and the world in a holistic way. For example, asking Charlene to separate drumming and smudging from each other by dividing them into separate lessons and from their true connection to any other personal experiences and knowledge based in her community and relationships, was asking her to deny the spiritual tie that bound them together.

This ability to separate and compartmentalise is reflected in a Euro-based, dictionary definition in that 'spiritual' means 'relating to, or affecting the human spirit or soul as opposed to material or physical things' or, not (being) concerned with material values or pursuits.⁵ Focus is centred on individual, inner self-development with no indication of how it is connected with the material world. In post-secondary education this might mean paying attention to internal feelings of well-being and attention to finding life's purpose rather than only to getting a high grade point average, a degree, or a high-paying job. Often this distinction is seen in definitions of what motivates students to pursue particular career paths (LaFever and Samra 2014). While the Indigenous definition provides a worldview where human values are intricately woven with all the material aspects of life, the Oxford dictionary definition conveys a worldview whereby human self-development is separate and disconnected from the material circumstances in which they live.

In consideration of these definitions and how they relate to changing the post-secondary classroom, scholar Karlberg's (2004) explanation of how society can go about changing, from one where competition is the goal to one that recognises our interdependence with all of humanity, captures the essence of whether or not a spiritual aspect of learning is taking place in the university classroom. Karlberg's definition states that the spiritual part of human nature can be understood essentially as the source of the ability and desire to rise above self-interest to the attend to the welfare of others.

In post-secondary education the student's ability to transcend narrow self-interest in the classroom and in academic products can be assessed by things such as their willingness to support the work and aspirations of other students, their interest in creating projects that consider the good of their community, and their ability to reflect on positive impacts of new cultural experiences. The discussion of spirituality in education is gaining momentum, boosted by contemporary issues such as with the concept of *laïcité* and its relation to radicalisation of marginalised youth in France (Chrisafis 2016), and with widespread efforts of colonial governments to make changes in the K-12 curriculum to reconcile for past educational injustices such as those in New Zealand (Fraser 2004), in Australia (O'Loughlin 2014), and in Canada (Kagle 2014). The investigation of spirituality in post-secondary education is also increasing (Barbezat and Pingree 2012; Holmes 2014; Ritskes 2011; Schneider 2014; Tisdell 2003; van de Wetering 2011). Important for the current article, one large research project focused on post-secondary education, demonstrated statistical significance in finding that students are expecting and looking for the inclusion of spirituality in their post-secondary education (Astin, Astin, and Lindholm 2010; Lindholm 2014).

Indigenisation and spirituality in post-secondary institutions

The current paper proposes a move from using Bloom's three-domain framework to use of the four-domain framework of the Medicine Wheel both to meet the needs of students and

in working towards Indigenisation as discussed earlier. Despite public acknowledgement of the oppressive legacy of education imposed on Canada's first peoples, as in the 11 June 2008 apology by Canadian Prime Minister Stephen Harper and the report of the Truth and Reconciliation Commission (2015), the legacy continues in subtle and not-so-subtle forms of institutional racism (Clément 2014; Horseman 2000; Loppie, Reading, and de Leeuw 2014). This educational legacy is one that made every effort to separate the First peoples from their families, communities and cultures, including in post-secondary institutions (Cote-Meek 2014; University of the Fraser Valley 2007).

Much of the literature on teaching and learning is very broad in offering a critique of the post-secondary education system as it relates to Indigenous peoples and its disconnection to their culture and view of the world (Alcorn and Levin 1998; Battiste 2000, 2002; Chrisjohn, Maraun, and Young 2006; Grant 1995; King and Schielmann 2004). While there is abundant material that concentrates on the K-12 system in Canada and the United States (Ball 2004; Berryman et al. 2015; Kagle 2014; Kawagley 1995; Kehoe 1994; Philpott 2006; Zehr 2008) as well as in other countries (Durie 1994; Fraser 2004; O'Loughlin 2014; Peré 1997),⁶ there is a scant but growing body of literature that focuses on the post-secondary environment (Guenette and Anne Marshall 2008; Hards 2006; King 2008; Kunkel and Schorcht 2014; Mixon 2008; Pence 2007; Ritskes 2011; Schneider 2014).

Some scholars have included the Medicine Wheel (Bopp et al. 1989; Calliou 1995; Dapice 2006; Ermine 1995; Holmes 2014; Nelson and Clark 2005; Regnier 1995) as a framework for thinking about teaching practices and curriculum design but are not always specific about practices that lead to a progression of spiritual learning. The current paper uses materials written by Indigenous scholars that contribute to an explanation of pedagogical philosophies and practices related to spiritual development and spiritual learning outcomes for a post-secondary learning context. The following sections outline five outcomes repeated in this body of literature and which are not typically included in curricular design or course outlines.

Honouring

Honouring is a spiritual foundation that supports other learning outcomes. Essentially, the concept of honouring is about being present and aware of one's own thoughts and feelings without making judgements about being 'right or wrong' as well as being open to learning from new experiences (Shapiro et al. 2006). As a first level spiritual learning outcome this means learners being able to recognise 'a creative force flowing in and around them at all times' (Kawagley 1995, 89); to respect other ways of knowing (Battiste and Henderson 2000); to honour emotional experience and expression (Gone 2004); to identify harmful thoughts and then be able to put them aside (Calliou 1995); to reflect on 'internal' development unalienated from the self (Hampton 1995) in a way that supports an inner power that continues to guide and provide inner security (Nelson and Clark 2005) for the learner throughout their educational path.

An example of this might be that when a learner can be attentive to their own inner reactions such as to hearing about the isolation and abuse of First Nation children in residential schools, recognise their own response, reflect authentically on the impact to their self-concept and incorporate that experience into being open to a new way of seeing others' experiences, then they may be ready to progress further in their spiritual development in an educational setting. In the sciences this may mean something such as listening to the

Stó:lō teaching⁷ 'S'olh temexw te ikw'elo. Xolhemet to mekw'stam it kwelat' (This is our land. We have to look after everything that belongs to us) and be able to honour this as a spiritual worldview lens for making decisions about ethical science.

Attention to relationships

The attitude of openness that a student develops at the first level of spiritual learning supports each student in feeling that their identity is honoured and they can begin to build supportive relationships with classmates, teachers, community members and others whose paths they will encounter in their educational journey (Barbezat and Pingree 2012). Attention to relationships in the learning environment is an initial step of thinking beyond the self and is reinforced continually in explanations of the importance of interdependence in an Indigenous worldview. Hampton (1995) explains that 'The individual does not form an identity in opposition to the group but recognizes the group as relatives included in his or her own identity (21)'. Attention to relationships involves a striving for unconditional respect (Calliou 1995); the use of a dialogic approach where the students are in conversation with each other (Fiordo and Violato 1993); and building trust among students by each telling one's own story while giving attention to respectful listening of others (Guenette and Anne Marshall 2008).

Adding outcomes that help learners pay attention to their relationships reinforces what they have learned about being mindful and open to new experiences and knowledge. Not only can students tell their own story and expect to be listened to, they can engage in listening that indicates to others that they are engaged in caring about them and what they have to say. A talking circle (Wolf and Rickard 2003) can be powerful for accomplishing this and can be used in any discipline where discussion is a typical classroom practice such as in the humanities, social work or health care. Attention to relationships in the physical or virtual classroom provides an interpersonal skill base for students' journey into a career and service outside of academia.

Sense of belonging

Sense of belonging is initially built in paying attention to relationships in the classroom but reaches beyond that setting to one that includes the broader community, from the post-secondary institution to the daily life of the community. Cajete (2000) notes that for Indigenous peoples, education is about helping community members to find their unique talent and being able to express it in the work they do. As a spiritual learning outcome students need to be able to explore their interests and passions as they come to know how those interests connect to the wider community and their desire to contribute to that community (Kawagley 1995). A cultural and personal grounding within both the educational institution and the community instills a sense of connection and belonging to both (Kovach 2009).

For instructors, this means including course outcomes that allow the learners to draw on their interests to focus assignments no matter what the field of study. Outcome statements for a particular course, whether in business, graphic design or international development, may be about working collaboratively on a team and practising skills that encourage work partners or team members. Outcomes about connecting outside of the classroom might be about proposing new ideas based on knowledge gathered about community needs.

Feeling empowered

Honouring, paying attention to relationships, and gaining a sense of belonging are all supports to feeling empowered to pursue a unique path in education and in life. Poonwassie and Charter (2001) provide an extended definition of empowerment and its importance in education. They note that empowerment is represented by such things as feeling in control of one's life and being able to make a difference in the world; gaining greater control over resources to attain personal aspirations; helping to create collective social action; and, recognising one's own competence and feeling able to act on that competence by making decisions about one path or another. These notions of the spiritual aspect of empowerment are also noted by Haig-Brown (1995) whereby the concept of empowerment as an outcome is explained in terms of students being able to take control and make decisions about directing and using their education in ways that were particular to their needs.

Instructors have a vital role in the empowerment process. Battiste and Henderson (2000) observe that the very act of recognising and activating Indigenous Knowledge is empowering for Indigenous learners. Instructors have a responsibility to create an atmosphere of support for learners to truly feel empowered. Instructors can ask for students to come up with projects that relate to them personally but then the instructor needs to be able to provide feedback in a way that encourages refinement rather than dismissal of an idea, followed by providing support of the learner through all the steps it takes to see an idea to fruition. As an example, for women in disciplines such as computer science or the trades where their numbers are low and instructors are often male, gaining this kind of support can be critical in continuing their career path (Varma and LaFever 2007). Students can express an idea, advocate for their own idea, and even defend that idea as a demonstration of feeling empowered. The classroom support helps prepare the student to maintain that sense of ability once they transition to new projects.

Self-knowledge of purpose

Ultimately developing self-knowledge of purpose is what will sustain the learner as they continue down their unique path (Ermine 1995; Hampton 1995; Marker 2006; Mihesuah 2006). Ermine's definition of self-actualisation as 'the individual's ability as a unique entity in the group to become what she or he is ultimately meant to be (108)' is central to the idea I posit. Hampton (1995) also makes the point that Indigenous pedagogy is oriented to 'a spiritual centre that defines the individual as the life of the group' and where 'the freedom and strength of the individual in the strength of the group (21)'. Michael Marker provides a clear example in his article *After the Makah Whale Hunt* in which he explains that the ancestors 'knew that true education came from helping young people understand the relationships of the world around them' which assisted them to 'discover the meaning of their own life's journey' (503). Mihesuah (2006) too gives numerous examples of how students became personally excited when they found a topic they saw as contributing to their community.

Instructors have a lot to contribute in assisting students to develop self-knowledge of purpose. Creating a curriculum that draws on experiential, service, project/problem-based learning and other high-impact practices (AAC & U 2015) helps learners to explore their passions and interests within the context of their own community or region. Creating assignments where students work with community partners can be done in any field of study. For

example, in the communication discipline this can include numerous types of message design needs from written, video or social media to public speaking and meeting facilitation; there are many ways to connect skills and theory to the community.

As we continue developing the spiritual learning domain as part of the Medicine Wheel framework, this progression of outcomes described above becomes the foundation:

- honouring,
- attention to relationships,
- developing a sense of belonging,
- feeling empowered to pursue unique path,
- developing self-knowledge of purpose.

Moving from three learning domains to four

The basic idea of the learning domain as pioneered by Bloom is that the learner builds from foundational knowledge or skills to higher order processes. For example, in the cognitive or knowledge domain, moving from recall to comprehension to applying the knowledge, analysing the result, and then creating something new based on that analysis (Wilson 2015). In the affective (emotion) domain, the one most closely related to spiritual perhaps, the progression goes from receiving stimuli, to responding to the stimuli, to valuing the experience, to internalising the values and beliefs, and behaving in a way that expresses that belief and value system.

It is possible to argue that the affective domain includes both emotional and spiritual, especially in the light of the inclusion of value and belief systems in that domain. However, even if this were the case, the spiritual dimension is certainly not balanced with the physical, mental and emotional dimensions, as it is in the four-domain configuration of the Medicine Wheel. Affective learning in instructional communication has typically been seen as whether students value (liking/satisfaction/contentment) the topic they are studying (Bolkan 2015) or how they react emotionally to a particular instructor, through such concepts as teacher immediacy and clarity (Myers and Goodboy 2015; Thweatt and Wrench 2015). Gaffney and Dannels (2015) suggest that a better question in the affective domain would be to find out, long after the fact, whether former students have actually put their knowledge and skills into practice; thus demonstrating a valuing of that learning. None of this discussion of the affective domain touches on honouring, attention to relationships, developing a sense of belonging, feeling empowered to pursue unique path, developing self-knowledge of purpose, and ultimately transcendence of narrow self-interest.

Charlene's observation that the spiritual domain was 'missing' is supported. Combining definitions, academic research on spirituality, practices noted by Indigenous elders, teachers, scholars and researchers, I posit here a possible Medicine Wheel Framework (Figure 1) to guide curriculum development that adds outcomes for spiritual learning to course design. As in each of the domains in the three-domain taxonomy, this four-domain framework provides a progression of learning where spiritual development is built one upon the other. This progression moves from honouring, an awareness of the world as interdependent, to self-actualisation. The progression I offer here acknowledges that the role of the instructor and that of the learner are inextricably tied to achieving the desired outcomes. Both the

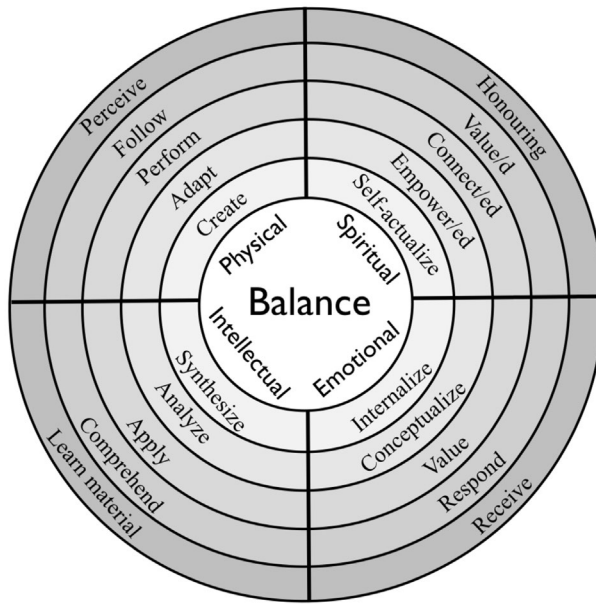


Figure 1. Four-domain framework.

instructor and the learner should see their roles and responsibilities in the learning environment reflected in the following conceptualisations of the outcome progression.

- **Honouring:** conscious or aware of learning that is not based in material or physical things, and transcends narrow self-interest;
- **Value/d:** building relationships that honour the importance, worth, or usefulness of qualities that are related to the welfare of the human spirit;
- **Connect/ed:** build/develop a sense of belonging (group identity/cohesion) in the classroom, community, culture, etc.;
- **Empower/ed:** provide support and feel supported by an environment that encourages strength and confidence, especially in controlling one's life and claiming one's rights;
- **Self-Actualise/d:** ability as a unique entity in the group to become what one is meant to be.

As in the literature on the three learning domains, I want to offer here some possibilities for sample verbs (Figure 2) that can assist curriculum designers in creating outcome statements that will help in realising success in including spiritual outcomes in lesson plans. The samples are meant to bring out the intent of each step in the progression of spiritual growth and maturation, but are not meant to be definitive or to exclude other possibilities. For example, outcome statements in a group communication course that works across the progression might go something like this: (a) be aware of the emotional needs of other group members; (b) acknowledge that other's feelings and desires are as important as your own; (c) work with group members to create an atmosphere that supports everyone's input to a project; (d) advocate for group members when you see that they are not being heard; (e) remain committed to the completion of your group's project.

Spiritual Domain (transcend self-interest)

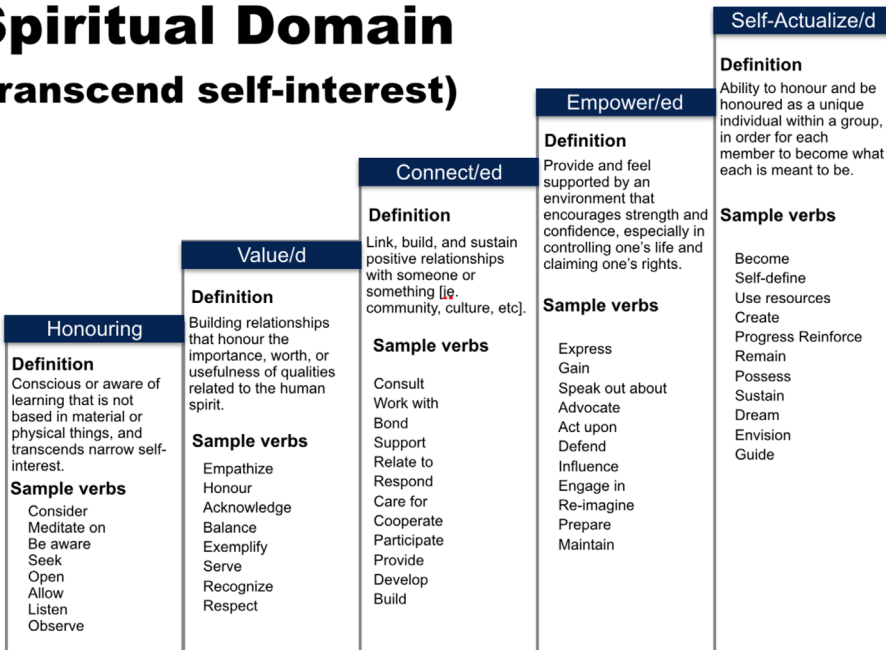


Figure 2. Sample verbs and progression for creating outcome statements.

The example of outcome statements given in the previous paragraph could be seen as being within one course. It is however not necessary to do this for every course; the progression may be spread out across an entire degree. A first-year student might only be expected to gain the first two outcomes and add the rest as they move through their programme, or may become more adept as they grow spiritually and can apply their learning across new experiences. The important thing is to make sure there are some spiritual outcome statements in an instructor's practice so that the learners can see and feel the care for their own and others' well-being.

Creating spiritual outcome statements for both the course and individual lesson plans is vital in truly engaging with the Medicine Wheel as a learning domain framework. Planning ahead, being continually aware, and listening for indicators of growth in the spiritual domain could help meet the present and future needs of students engaged in intercultural communication interactions. This awareness and listening would be critical in assessing whether students are meeting the planned outcomes as well as in evaluating course design.

A word about spiritual outcome assessment

Given that there is so much 'inner' work involved for learning in the spiritual domain and for transcending narrow self-interest, the assessment of outcomes will probably look quite different. A starting place for having the students assess their own growth may be to consider the following:

- Reflect via class discussion or through writing modes such as journaling and activity responses;

- Relate feelings through oral or written stories about experiences;
- Demonstrate communication and honouring skills related to supportiveness, listening, relationship building, empathy, etc.;
- Role-play, videotape, and self-assess for skills as mentioned above. For example, using activities such as those incorporated into the practice of 'Theatre of the Oppressed' (Boal 1979) are certainly related to moving beyond self-interest.
- Propose methods/plans for future self-growth.

Designing questions that lead students through a process of reflection is an important part of getting them to do the inner work required. Oral interactions with learners on a one-to-one basis are also critical in getting students to open up. Asking for stories of experiences is one way to start.

Assessment of spiritual outcomes does not fit easily with typical modes of university assessment. Giving a 'mark' to spiritual growth is, at the very least, counterproductive and may be more about the instructor engagement than the learner outcomes. Assessment in the spiritual quadrant is inextricably bound with all of the other quadrants and raises complex issues for evaluation. Student engagement in the process of reflection throughout the course, whether oral or written, may make up the full measure.

Conclusion and future directions

This model is ready to use on a trial basis. Indigenous scholars are advocating for change in post-secondary education and there is abundant evidence that students want a more holistic education as part of student-centred learning (Astin et al. 2010; DeRuy 2015; LaFever and Samra 2014). Instructors who are interested in Indigenising their curriculum, and who understand the benefits to all students, can begin to design and redesign lesson plans using the Medicine Wheel while paying careful attention to where, when and how the spiritual domain is included in individual lessons and throughout a certificate or degree programme.

Even though we can begin to use this model, there is much work still to be done. As instructors replace Bloom's taxonomy of three learning domains with the four domains of the Medicine Wheel, we need to gather stories and thoughts from both students and instructors asking:

- In what ways do instructors already incorporate spiritual learning objectives in their practice?
- What classroom practices do post-secondary students express as supporting their spirit?
- What classroom practices do post-secondary students express as suppressing their spirit?
- How are post-secondary instructors using the Medicine Wheel to practise across curricula/disciplines?
- What forms of assessment and evaluation work the best to measure and meet the intended outcomes of the spiritual domain?

In answering these questions and sharing with other scholars we can start to build a solid body of knowledge. Engaging in the practices of incorporating the spiritual quadrant will begin to transform the university, along with individual learners and teachers. When the spirit has a legitimate place in the classrooms, halls, and digital spaces, it may necessarily

also take hold in collegial relations, administrative practices, budgeting decisions, and faculty, staff, and management interactions. Using all four domains of this learning framework will assist post-secondary institutions to achieve critical degree outcomes and will contribute to a more interdependent civic society,

'Spiritual matters are difficult to explain because you must live with them in order to fully understand them'. (Thomas Yellowtail, Crow ⁸)

Notes

1. Garnier (1990, 58).
2. Eventually expanded to three domains as Krathwohl et al. (1964).
3. Charlene Leon is a community helper, educator, activist, mother and grandmother and resides in British Columbia. She is Anishinaabe kwe and comes from the Peguis First Nation in Manitoba. She now holds a BA Adult Education from University of the Fraser Valley (2010) and a Master in Social Work from Wilfrid Laurier University (2013).
4. Stó:lō Elder Terry 'Pu'ulsemet' Prest (Skwah) explains, 'while there are stages in life, and parts of ourselves: Mind (mental), Body (physical), Spirit (spiritual), and Heart (emotional), rarely do we find ourselves in just one of these places. We don't understand in just one of these ways. We move freely back and forth, listening and learning.' From the University of the Fraser Valley proposal for a Bachelor of Arts program in Indigenous studies. (8).
5. 2015 Oxford English Dictionary [Apple online version].
6. While Maori concepts are based in conceptions of pathways to learning (Peré 1997) or the four walls of the traditional Maori meeting house (Durie 1994), rather than the Medicine Wheel, they all include spiritual aspects.
7. Stó:lō Tribal Council guiding principle in Halq'eméylem upriver dialect retrieved from <http://stolotribalcouncil.ca/>.
8. Yellowtail and Fitzgerald (1991, 10).

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Marcella LaFever, PhD (University of New Mexico, 2005) is an associate professor in Communications at the University of the Fraser Valley. Marcella's main programme of research focuses on the social exclusion that results in public dialogue and decision-making where cultural ways of speaking are outside the norms expected in dominant Canadian culture. Her 9P Planning model posits a process that builds intercultural relationships to increase social inclusion in public dialogue. LaFever's current work explores two areas of intercultural communication (a) use of First Nation storytelling as a form of dialogic participation and (b) indigenisation of classroom instructional practices. Marcella's doctoral dissertation work focused on intercultural communication in the British Columbia treaty process. Her interest in this topic stemmed from her consultation work in community development within Ktunaxa and Secwepemc unceded territory and her home community of Golden, British Columbia.

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