Chapter 13
Using Universal Design for Learning to Create Inclusive Provisions for Indigenous Students in Higher Education: Decolonizing Teaching Practices

Frederic Fovet
https://orcid.org/0000-0003-1051-4163
Royal Roads University, Canada

ABSTRACT

The decolonization of the curriculum has become a much-discussed process in higher education, and it is particularly pertinent to the inclusion of Indigenous students in the tertiary sector. While the momentum grows for a rapid integration of decolonization of the curriculum into higher education practices, the literature suggests that these efforts so far have tackled content rather than pedagogy itself. Universal design for learning (UDL), on the other hand, appears as a promising framework to support instructors as they engage more deeply with the process of decolonizing pedagogical practices. The chapter explores the phenomenological insights of the author regarding the ways UDL is contributing to this reflection on the inherently Euro-centric nature of classroom practices. The chapter also examined wider repercussions the implementation of UDL to the Indigenous student experience will have on UDL advocacy generally, on higher education reform, and on the future format of support services for this clientele.

GOALS AND INTENTIONS

Universal Design for Learning (UDL) has been a revolutionary lens, over the last decade, in the way Higher Education (HE), as a sector, has shifted its views and practices with diverse learners (Fovet, 2016). In this sense, it rightfully deserves a central stage in this volume. So far though, UDL has been mostly used as a framework when exploring the inclusion of students with impairments (La, Dyjur &

DOI: 10.4018/978-1-7998-5557-6.ch013

Bair, 2018). At times, it has more recently been used to explore best practices with International Students within a landscape of intense internationalization (Fovet, 2019). UDL has yet, however, to be fully explored with regards to the needs of Indigenous students and it is this dimension that will be discussed and examined in this chapter.

The decolonization of the curriculum is now discussed at length in Higher Ed to the extent that it relates to Indigenous students, but so far discussions have remained very much focused on the decolonization of the actual content of the curriculum (Gaudry & Lorenz, 2018). This chapter will examine how a distinct task must now be tackled: the decolonization of teaching practices. The chapter will examine how instruction and assessment remain largely euro-centric in HE, in most Global North countries, and hence discriminate against Indigenous learners, among others (Semper & Blasco, 2018).

The first section of the chapter will situate the landscape and review the literature. The second part of the chapter will examine, in practical details, the ways UDL can be used by HE instructors as a lens to decolonize teaching and assessment practices. This section of the chapter will draw extensively on a phenomenological reflection by the author: he has for several years – before becoming faculty – been involved within Student Services in promoting and implementing UDL across a large campus, and has worked extensively with the Indigenous support services within that institution. The third section of the chapter will consider management of change and, looking ahead, the challenges that remain - from a leadership stance - in fully and systematically implementing the process of embracing UDL to decolonize teaching and learning.

INTRODUCTION AND CONTEXT

Universal Design for Learning is a framework for inclusion which has appeared three decades ago in the K-12 field, and has progressively gained momentum in the HE sector (Dalton, Lyner-Cleophas, Ferguson & McKenzie, 2019). It is not unique in its goals, which are to provide students with disabilities inclusive and equitable access to learning. Differentiation, individualized learning and even simple retrofitting - in the form of accommodations – are all frameworks that seek to achieve the same objective and which have been developed in HE since the 1970s (Johnstone & Edwards, 2019). UDL is unique, however, in the sense that it places the focus not on individualized learner differences but on the instructor's role in creating fully accessible learning experiences (Sari Dewi, Anwar Dalimunthe & Faadhil, 2019).

UDL draws its roots from Universal Design, an architectural movement which started querying, from mid-20th century, architecture's over-focus on aesthetics (Gonzales, 2018). Instead Universal Design advocates encouraged architects and developers to consider the use the actual occupiers of the building would wish to enjoy (Mortice, 2019); this led to the emergence of the notion of user experience (UX) as a central premise in the design of spaces and products (Skarlatidou, et al., 2019). UDL has adapted this perspective to the classroom; it sees the role of the educator as that of a designer who must seek to increase accessibility and flexibility as optimally as they can in order to include the greatest number possible (Hunt, 2019).

UDL, in this sense, draws from the social model of disability; it can even be suggested it in fact translates the social model of disability into classroom practices (Fovet, 2014). The social model of disability indeed argues that disability is not an inherent label or a characteristic of individuals, but rather that is situated in the interaction between people's personal embodiment and the expectations of the environment (Berghs, Atkin, Hatton & Thomas, 2019). If individuals face barriers, it is argued that this is due

to a design of the environment which does not take into account diversity. Inclusive design on the other hand can remove most barriers by embedding a reflection on user diversity and UX at the very heart of each design blueprint (Kummitha, 2019).

UDL supports educators in creating inclusive classroom provisions by encouraging them to adopt and sustain a design thinking perspectives. The three principles of UDL (multiple means of representation, multiple means of action and expression, and multiple means of engagement) offer instructors a lens on their practice (Kennette & Wilson, 2019). It gives them tangible tools to begin, sustain, and develop a design exploration of their teaching practices, assessment processes and choice of educational resources (Qazi, Mustafa & Ali, 2018). It encourages instructors in HE to inject optimal flexibility in each of these three dimensions of learning, in order to allow students to choose their own pathway to the course objective (Nieminen & Pesonen, 2020). UDL is seen a life-long, or career-long, process of reflection on how best to widen access through flexible design (Tobin, 2019b); the principles can be applied to all academic disciplines and teaching environments in diverse ways and may lead to different outcomes. The outcomes are not prescriptive, and do not constitute a checklist; it is the process itself which is of interest for Inclusion purposes (Smith, et al., 2019).

Although it has initially been developed to increase accessibility for students with disabilities, the potential of UDL for inclusion is not limited to this clientele. UDL has recently been used with success to create inclusive provisions for first generation learners (Bracken & Novak, 2019) and for international students (Fovet, 2019). This has led to a degree of momentum in research around the relevance of UDL as a lens around multiculturalism in the classroom and culture responsive pedagogy (Kieran & Anderson, 2018; Ammon, 2019). There is also increasing interest in how UDL can serve the needs of Indigenous students in HE (Katz, n.d.; Lethbridge School Division, 2018; Gray, Hogan & Benton Kearley, 2019).

DECOLONIZING THE CURRIULUM

Attempting to Define the Notion of Indigenous Student

It may be important to define the notion of Indigenous students before embarking on a wider reflection around the notion of decolonization of the curriculum. As this chapter discusses mostly the author's phenomenological analysis of his lived experience as UDL advocate on Canadian campuses, it might be tempting to turn to Federal Canadian definitions for this sub-group of the HE student population (Ottmann, 2017). This is problematic, however, in many ways. First Canadian Federal definitions of Indigeneity make explicit reference to the Indian Act, and perpetuate colonist attitudes, terminology and perceptions. It is therefore possibly the worst possible starting point to engage in a reflection around decolinization (Bains, 2014; Indigenous Affairs and Northern Development Canada, 2016).

Federal classification and terminology around Indigeneity is also extremely problematic because it denies status to many Indigenous people. Indigenous people who have left their communities and adopted urban lifestyle tend to be erased from data on Indigeneity altogether or face considerable challenges in proving heritage and status (Bingham, Moniruzzaman, Patterson, Distasio, Sareen, O'Neil & Somers, 2019; Neeganagwedgin, 2019). In what amounts to the culmination of colonial attitudes, Indigenous people are construed as having status solely if they comply with Eurocentric preconceptions as to their lifestyle, location and life choices (Belanger & Awosoga & Head, 2013). Current legislation on status also fails to recognize the sixties scoop, and its contemporary repercussion for many Indigenous people.

Social work policies have in the 1960s allowed the forced removal of Indigenous students from their communities and families, and their adoption by Caucasian families (Russel, 2016; Valiquette, 2019). Many Indigenous adults in Canada therefore find themselves deprived of affiliation with community, use of Indigenous language, access to cultural heritage, and also face considerable challenge in obtaining status (Morin, 2019; Smith, 2019). Finally Metis people in Canada, individuals of mixed heritage from long-standing communities in the Prairies, face considerable challenges in having their status recognized (Leroux & Gaudry, 2017).

The notion of Indigeneity is therefore much more about lived experience, affiliation to a community, and feeling of identity than it is about official governmental categorization (Gover 2016). Of course, this phenomenological approach has presented challenges too with cases of cultural appropriation a frequent occurrence in the neo-colonial Canadian landscape. Euro-Canadian have indeed been known to claim Indigenous heritage to challenge the process of decolonization (Barrera & Deer, 2019). An indigenous community's willingness to recognize, embrace and afford affiliation to an individual who identifies as being part of that community will therefore have to be the ultimate test of the term 'Indigenous student' (Muir, 2011; Garrison, 2018; Watt & Kowal, 2019).

While this chapter will discuss the experiences of Indigenous students from Canada in Canadian HE, it would be unrealistic to see the notion of Indigeneity as being defined solely on a regional level. While neo-liberalism and globalization have not been a friend for most Indigenous communities, Indigenous people have nonetheless taken this phenomenon in their strides and sought to seek benefits, visibility and voice from these processes (Hershey, 2019). Indigeneity is hence increasingly also defined globally in terms of international networks and dialogue between communities who share commonalities (Clemens, 2019; Ozer, Meca & Schwartz, 2019). This in particular means that we in all likelihood have International students in our HE classroom who are not domestic but also identify as Indigenous (Doyle & Prout, 2012).

The Realities of Indigenous Students' Experiences

This chapter is going to focus on the decolonization of classroom practices, by a process of erosion of euro-centric formats of delivery and assessment. It would be too narrow to focus on this process without acknowledging the wider challenges Indigenous students face in HE. First there is the issue, in Canada, of long distance separation from communities and families (Gakavi, 2011; Restoule, Mashford-Pringle, Chacaby, Smillie, Brunette & Russel, 2013). Before students face the hurdle of euro-centric classroom practices, they first face issues with regards to access to HE: admissions processes implicitly discriminate against Indigenous students because they fail to acknowledge and take into account the significant challenges these students have experienced in the K-12 sector (Timmons, 2013). There is then the issue of endemic racism in attitudes and micro-aggressions on campus (Canel-Çınarbaş & Yohani, 2019). Students will have to develop considerable resilience to all these factors before the issue of Eurocentric class practices even registers in their sight.

Intersectionality is also a concept that must be kept in sight when examining the experiences of Indigenous students in HE (Nichols & Stahl, 2019). Intersectionality is a concept within Critical Theory which encourages scholars and practitioners to consider the fact that marginalization is often experienced at different level, from the perspective of distinct identities (Linder, 2019). Any exploration of the challenges these students face as Indigenous individual, solely from the perspective of this identity, may have the result of hiding and even dismissing preoccupations these students may also have, within other

identities, as females, ass LGBTQ2S+ individuals, or as students facing significant socio-economic challenges. The notion of Indigenous students must therefore always be considered under the lens of Intersectionality as being complex and multilayered (LaPierre, 2019).

Decolonizing the Higher Education Curriculum

Any exploration of inclusive provisions for Indigenous students in HE needs to be contextualized in a wider context of decolonization of the curriculum. The Truth and Reconciliation Commission (TRC) report has led to growing interest around this process in Canada (Madden, 2019). In fact there is a distinct overlap between the process of including international students and Indigenous students in HE – both very topical issues at present-, and both processes involve a reflection around decolonization of the curriculum. In one instance it is decolonization of our relationship with Global South students in a context of increased internationalization of HE (SOAS, 2017; Charles, 2019); in the other, it is decolonization of our relationship with Indigenous communities within the academy in a context of neo-colonialism (Miles, 2018).

Decolonization of the curriculum requires an examination of the euro-centric nature of the content being taught in HE. This process has begun in many HE campuses, through a reflection around authors, readings, theories, stances, and the absence of representation of non-Caucasian voices in the fields in question (Schmidt, 2019). This highlights, as a process, the lack of representation of both Global South voices (van Jaarsveldt, de Vries & Kroukamp, 2019), and Indigenous voices (Louie, Pratt, Hanson & Ottmann, 2017) in our choices of perspectives in the Academy. This has meant a re-examination of educational material, course outlines, reading lists, and of race and ethnicity in the hiring of instructors (Allen, 2012; Kimmermer, 2013).

What has perhaps been missing so far in this reflection is the desire to go beyond just a decolonization of the content of the curriculum, to explore the Eurocentric flavour of our teaching practices themselves (Zembylas, 2018). Decolonizing pedagogical practices is a reflection which will take a lot longer as a process, and requires specific tools to guide instructors. This is the context within which UDL offers very specific assistance, as HE begins to tackle this journey.

DECOLONIZING TEACHING PRACTICES WITH UDL

UDL is a particularly convenient tool to guide instructors as they reflect on the Eurocentric nature of their teaching practices. Because the three UDL principles encourage instructors to embed as much flexibility as possible in each dimension of their teaching and assessment, it is likely to give them the space necessary to explore the diverse needs of students from other cultures. It is likely to enable them to break the cycle which otherwise, in many cases, leads educators to perpetuate classroom practices they have themselves experienced and that have proven to be congenial to them. This section of the chapter will examine how the three UDL principles can, on terrain, prove powerful to support instructors while they decolonize their pedagogy and create inclusive provisions for Indigenous students.

Methodological Stance

This section of the chapter will be relying on the author's direct experiences with the implementation of UDL with Indigenous students. The author is an associate professor within a faculty of education; his practice is focused on UDL and as result he is often asked to provide UDL consultancy to universities and colleges. Over the period of his PhD., he also took on the role of director of an accessibility unit on a large Canadian campus, where for four years he led a drive to implement UDL across the institution. The methodology adopted within this section will, explicitly, be phenomenology (Sandi-Urena, 2018), as the chapter will capitalize on the author's own experiences supporting instructors towards UDL implementation, both currently as a colleague and, previously, as an accessibility specialist within Student Services.

Use of UDL in a Reflection on the Process of Decolonizing Teaching Practices

Generally speaking, UDL is useful as a lens in the process of decolonizing teaching practices, because it places instructors squarely into a designer stance; it also leads them to keep the user experience of the learner squarely in their sight. There are three UDL principles and each will be considered here in turn (Rao & Meo, 2016). A practitioner's reflection around UDL may of course involve more than one principle; at times, these principles overlap considerably. Here they are considered individually, in a slightly artificial fashion, in an effort to provide clarity for the reader. The author will provide examples of the ways he has seen the three principles of UDL applied for the benefit of Indigenous students, but these illustrations are offered anecdotally only; this list is by no means exhaustive and there will be many more examples, and more complex illustrations in the field, of UDL being applied in this context.

Universal Design for Learning scholars and practitioners have traditionally broken down their reflection around accessible and inclusive learning on the basis of the three UDL principles. These principles are themselves grounded on three distinct functions which early UDL authors have identified within learning. They normally talk about three cognitive dimensions which are inherently part of teaching and learning – and three parts of the brain which come into play in each respective case (CAST, 2018). One dimension of learning involves receiving information (representation); another involves producing meaning (action and expression); a third amounts to an act of affective connection with learning (engagement). UDL argues that for teaching and learning to optimally address the needs of all learners, it is essential for the greatest possible degree of flexibility to be afforded to learners in each of these three dimensions (CAST, 2019).

Multiple Means of Representation

A specific dimension of learning, according to UDL scholars, is the act of receiving information (Allen, 2018). Learners are diverse in the way they perform this function and, in order for an optimal number of learners to find learning accessible, instructors need to embed as much flexibility as they can to this dimension of teaching and learning (Schreffler, Vasquez III, Chini & James, 2019). When UDL examines accessibility with regards to students with disabilities, much of this reflection focuses solely on the accessibility of the information offered within courses: is this material offered in multiple formats? Can it be accessed through assistive software? Does it avoid obvious web accessibility barriers (Axelrod, 2018)?

The reflection around 'multiple means of representation' may be a little different when it comes to the inclusion of Indigenous learners, but it no less effective or powerful. A comment often noted by

first generation Indigenous students is the great extent to which higher education teaching and learning focuses on written information (Black & Hachkowski, 2019). Indigenous cultures have been far more reliant on oral forms of communication, and storytelling than the Eurocentric tradition has ever allowed in the academy (Fernández-Llamazares & Cabeza, 2018). University teaching and learning, on the other hand, is anchored in writing as a means of transmitting and demonstrating knowledge. There is now a progressive awareness emerging within HE around the fact that this may not always be congenial for Indigenous students. Decolonizing the curriculum therefore necessarily involves reconsidering this over-focus on the written word. There is now growing – but still very limited - willingness to accept that academic knowledge can be demonstrated in oral format and through storytelling (Ketelle, 2017); Canadian universities have started accepting PhD. defences that are entirely verbal and, more recently, even theses that are entirely submitted solely in oral format (University of Calgary, 2018).

When it comes to shifting HE instructors away from a narrow focus on written transmission of knowledge, UDL is going to be central in this reflection and is going to encourage instructors to offer information and material to learners in flexible and diverse ways. This will increasingly include storytelling and oral transmission of knowledge through videos and podcasts, which can be embedded in our Learning Management System (LMS) platforms with a fair degree of ease using technology (Staley & Freeman, 2017; Loewen, Kinshuk & Suhonen, 2018). The author has supported instructors involved in a reflection of this kind, in his past capacity as director of an accessibility service, and it has been clear to these educators that their reflection around storytelling and oral traditions of knowledge transmission have proven extremely beneficial in supporting Indigenous students in these courses (Datta, 2018). Implementing UDL within the HE class will mean systematically ensuring that our resources in class and on our LMS, are composed of a healthy and diversified diet of text, videos, podcasts, and digital stories – of various levels of complexity. This guarantees a greater flexibility of access for Indigenous students, as well as other diverse learners.

Multiple Means of Action and Expression

Redesign of the In-class Group Work Requirements

One of the three UDL principles encourages instructors to inject as much flexibility as possible in the way they design tasks that require the student to be creating and communicating content. This principle normally includes a look at the design of participation in class, of contribution to discussions and forums, of assessment of skills needing to be demonstrated, and of the production of artifacts and products (Boothe, Lohmann, Donnell & Hall, 2018). Often, scholarship around this UDL principle focuses on assignments since the redesign of assessment is often the most pressing task for students facing accessibility issues. There is no doubt that examples could be given of ways assessment is euro-centric and often inherently penalizes Indigenous students in higher education. On this occasion, however, the author will try to offer examples beyond assessment, and revisit a pedagogical reflection which he witnessed being carried out by colleagues while supporting faculty in his capacity as director of accessibility services.

This involved the scheduling of in-class peer discussion groups, a teaching practice often adopted at Masters level teaching (Brame & Biel, 2015). He encountered several instructors who engaged in a reflection around the need to redesign their requirements for classroom participation and group work. They were beginning to query the equitable nature of this requirement and had observed a number of students being clearly ill at ease with this format of class engagement, and this often included Indigenous students.

As a result, students for whom this format of discussion was congenial, took the limelight, excelled and took much of the floor, leaving others stuck in fairly passive roles. These roles and their limitations were being perpetuated and accentuated by the requirement for classroom group work and discussion – a format itself endless reiterated, through a process that is almost transgenerational, by instructors who have been subjected to it and have not necessarily taken the time to reconsider its effectiveness.

In this case, the instructors in question used UDL as a lens on their practice and, without altering their overarching teaching objectives, came up with alternatives that offered more flexibility for students. Instead of insisting on oral contribution in class within live groups, they shifted this course requirement to include another space, and offered the alternative of contributing to virtual forums. The instructors felt this had the desired effect, and they observed many of the students reluctant to take the floor in class contribute actively once the virtual forum alternative had been offered. Often these contributions did take place in real time within the class, but still took the form of virtual interactions – often abundant – instead of a traditional oral contribution in the classroom space. These instructors noted that this was particularly effective with Indigenous students who perhaps had hesitations about taking the floor to make their contributions.

Acknowledgement has to be given here to the antagonism many Indigenous students still experience in the HE class and to their possible reluctance to draw attention and engage in such an environment (Canel-Çınarbaş & Yohani, 2019). Scholars also point to the radically different ways Indigenous communities involve themselves in group discussions through a circle format that has its own specific etiquette (Chomat, et al., 2019); the chaos of our HE group discussions does not align in any way with the respect, reciprocity, and humbleness of the Indigenous circle. The literature highlights our inability thus far to demonstrate sensitivity to these traditions in our HE discussion formats (McMahon, Griese & Kenyon, 2019).

Use of PhotoVoice as a Formative Tool in the Classroom

The author has himself engaged in a pedagogical reflection around the 'multiple means of action and expression' principle in his own classroom as an instructor in Masters level courses. This has led him to introduce a specific classroom practice that has shown to be extremely congenial to Indigenous students and very powerful as a tool towards inclusion. In order to inject a degree of flexibility in the class when asking students to demonstrate their individual engagement with the subject matter, he has begun the course with the use the PhotoVoice format. PhotoVoice is a global movement which has sought to use photography to encourage marginalized minority students to find their voice, showcase their identity, and express their perspective on phenomena that affect them directly (Switzer, 2019; Wass, Anderson, Rabello, Golding, Rangi & Eteuati, 2019). While this redesign of the traditional classroom discussion may seem benign, it has dramatic effects in giving students who may feel disempowered in traditional hegemonic structures a highly personalized way to express their own stance and lived experience (Behrendt & Machtmes, 2016). The author has used PhotoVoice for formative purposes in Global Education, Critical Pedagogy and Professional Portfolio courses; the impact has been powerful for a variety of students, and it is clear that Indigenous students have, as a rule, found this innovative way of engaging with their class and of demonstrating their engagement with the subject matter extremely transformative.

Multiple Means of Engagement

The last of the three UDL principles encourages instructors to inject as much flexibility as possible into the ways they wish their students to engage with learning; they are asked to provide multiple ways of engagement to guarantee inclusion and accessibility (Tobin, 2019). UDL scholars connect this third principle to the section of the brain where, they argue, the affective part of learning takes place (Bedrossian, 2018). Implementing this UDL principle in higher education can be delicate as many educators will wave it off with a little too much ease, assuming that they have already done the necessary ground work around student engagement (Howard, 2015). What this UDL principle targets is a little more complex, however, than keeping students engaged through a lecture; it is about learners genuinely connecting with interests that are their own; it is about offering them motivational ownership over their learning.

Here UDL overlaps a fair deal with Critical Pedagogy. Critical Pedagogy indeed encourages educators to consider the extent to which traditional educational institutions marginalize minority students and oppress them in the way they expect them to fit compliantly into uncongenial structures and power dynamics (Serrano, O'Brien, Roberts & Whyte, 2018). The aim of this third UDL principle is a politically charged objective, and it fully acknowledges that some learners may have been so deeply alienated by educational institutions that it may be a very tenuous task to attempt to remedy this damage. UDL, in this respect, is extremely ambitious and fully recognizes the alienation Indigenous students - along with LGBTQ students, racialized students, students suffering from poverty, female students suffering from gender discrimination, and students with disabilities – are experiencing in HE. The act of providing 'multiple means of engagement' therefore needs to go a little further than varying one's assignment format or varying lecture techniques. It is about fundamentally reinventing the way one connects with learners through teaching and learning.

A way the author has explored to implement this UDL principle with some authenticity in his Masters level courses has been curriculum co-creation; this has proved particularly powerful for the Indigenous students he has supported within these courses. Curriculum co-creation is a process which attempts to offer some ownership to the students over what is taught in a course, and how it is taught (Huxham, Hunter, McIntyre, Shilland & McArthur, 2015; Kandiko Howson & Weller, 2016). In some cases, curriculum co-creation can extend to assessment and take the form of co-creation of marking rubrics (Deeley & Bovill, 2017; Doyle, Buckley & Whelan, 2019).

The concept of curriculum co-creation can appear overwhelming and daunting to many instructors in HE because it suggests a degree of freedom on the part of the students, and instructors may feel that they are unable to relinquish control over content (Mercer-Mapstone, et al. 2017). Curriculum co-creation in fact, however, can be fairly simple and does not need to be time consuming. Initial classes are used to create a rapport with the students and to offer them space within which to express their preferences. Even if course objectives are pre-determined, there is often still a fair degree of lea way as to the specific authors, illustrations, readings and examples which are used in the classroom (Rock, Foster & Lamb, 2015; Bovil, 2019).

This is extremely powerful as a process for Indigenous students as it offers them a space within which to demand the recognition of Indigenous content, the acknowledgement of Indigenous scholars, and the active integrations of Indigenous ways of knowing and methodologies (Gone, 2019). When they are offered this space to express preferences, Indigenous students are more likely to feel that the course connects with their lived experiences and their reality. This has momentous impact on motivation and engagement. The author has, in the past, used a curriculum co-creation approach in a Graduate Seminar

course, as well as in an Introduction to Theory course, and in an Action research course. Curriculum co-creation leads to proactive integration of topics and themes that are directly relevant to the lived experiences of Indigenous students, and results in heightened affective involvement in the running of a course.

MANAGING CHANGE: LEADERSHIP LENS ON DECOLONIATION WITH UDL

The benefits of UDL for Indigenous students is clear in terms of decolonization of pedagogical practices. However, there are other variables around this process of change that must also be acknowledged, examined and discussed.

Issues with Management of Change and UDL Implementation

Even if the benefits of UDL for the inclusion of Indigenous students are clear, the task of implementing it as a pedagogical framework in HE remains complex and fraught with challenges. Campus that have begun this process have often underestimated its complexity (Fovet, in print), as well as the degree of resistance it can be met with. Whether UDL is seen as benefitting students with disabilities, international students or Indigenous students, the resistance is the same, and the implementation will often have to be radically rethought and re-energized before it becomes systemic and sustainable. So far, indeed, UDL implementation has been tackled solely from the 'benefits' angle, with implementation drives and strategic scaling-up campaigns limiting themselves to highlighting the benefits of UDL for the student population.

This makes the grave mistake of ignoring the complexity of the HE landscape. It is rooted in tradition and history, and fairly resistant to change (Birx, 2019); it is complex and multidisciplinary and hence will need to be considered with subtlety as perspectives are not shared and backgrounds and training vary greatly, as do the theoretical stances of the various stakeholders. It is not about the 'why' at this stage of UDL implementation in HE, but rather should be about the 'how'. For this reason it is suggested that an ecological outlook on the process of change and UDL implementation needs to be adopted before a blue print for wider development can be tailored to each institutional context (Fovet, in print).

Using the Indigenous Perspective to Give UDL Momentum

The Indigenous student perspective may actually bring new energy to the current UDL implementation drive in HE. So far, UDL has been so closely associated to students with disabilities that it has been easy for many stakeholders on campuses to ignore this discourse or to dismiss it. The emerging literature showing the impact it can have for international students has gone some way to change this perspective and has begun reframing this voice as something far different than a minority discourse (Fovet, 2019). It has indicated that it is an agenda that matters to a fair percentage of our campus population. The fact that UDL now appears as clearly pertinent to the inclusion of Indigenous students will add political momentum to its adoption in higher education. In Canada notably, the TRC has become a major political priority. This carves out a very important space for UDL to be deployed with urgency (Walsh Marr, 2019).

Finding Allies and Developing Collaborative Interdisciplinary Practices

This shift in the landscape means that the personnel of support services for Indigenous students in HE find themselves at an exceptionally opportune time to create and shape new relationships with other student services and student affairs personnel (Wilks, Wilson & Kinnane, 2017). Indigenous support is no longer seen in a fragmented way as a stand-alone specialized unit on campuses. Commonalities appear, and one of these shared priorities is the need to transform pedagogy to address learner diversity (Remenick, 2019). The need for pedagogical reform becomes a shared discourse for the personnel who support Indigenous students that now also connects them with the staff of accessibility services and of services for international students. In many ways, all of these services can now be seen as collectively supporting non-traditional learners within institutions that are tackling traditionalism in pedagogy (Witkowsky, Mendez, Ogunbowo, Clayton & Hernandez, 2016).

This is a momentous change since it radically revolutionizes the nature of the work these individuals carry out, and gives it a powerfully innovative flavour. When Indigenous students contact their support services, they are no longer tapping into an over-specialized resource but instead are plugging into an array of services that see the diverse learner as ill-served in the traditional academy, and as needing access to a more inclusively designed pedagogy. UDL serves as the cement in this discourse and in these demands for the re-design of pedagogy practices (Remenick, 2019). With this breaking of the silo, also comes a recognition of Intersectionality, a greater awareness that Indigenous students also have accessibility issues, financial struggles, mental health challenges, etc. (Mitchell, Simmons & Greyerbiehl, 2014). Institutions are hence becoming increasingly aware that the categorization of student services is a fiction that serves our needs as professionals, but often makes little sense for the student needing support. This changing vision around the fragmentation of support services for students, combined with the shared priority that pedagogy must be adapted and made more inclusive, has the potential to radically transform the HE support services landscape, and its modus operandi, in the coming years (Banks & Dohy, 2018).

OUTCOMES

The challenges identified in the previous section lead to certain specific calls for action and recommendations. This closing segment of the chapter will examine implications with regards to reform in HE, looking to the future.

Need for Meaningful Literature in this Area

One important outcome of this chapter is that it highlights the pressing need for literature on this topic. The literature review showed how slim findings still are in this area, and it will be important and urgent for UDL scholars to tackle this issue. This is particularly timely, as writing around the TRC recommendations is intensifying (Treleaven, 2018). UDL has a place in HE with regards to the inclusion of Indigenous students, and sits squarely at the center of this call for action. It will mean that the UDL movement will have to evolve and modify its discourse in order integrate the work that is being done with Indigenous students. This has begun, and UDL is increasingly being presented as benefiting diverse learners, and there has been a shift in the literature away from just focusing on disability and impairment. It will be

crucial, however, to see Indigenous starting to be mentioned explicitly in this literature. UDL needs to be explicitly positions within the ways the TRC recommendation will be addressed in HE.

Development of Interdisciplinary Approaches around Indigenization of the Curriculum

It is striking that efforts to decolonize the curriculum have thus far remained very fragmented. On the one hand a scholarship has begun to emerge with regards to the decolonization of the curriculum in relation to the Global South (Stein & Andreotti, 2016). A distinct scholarship has developed around decolonization of the curriculum with regards to Indigenous students (Attas, 2019). Many of these latter efforts have actually been triggered and driven by student services or student affairs personnel, not faculty, which has created a further fragmentation in approaches and writing. There is often little effort currently being made for these various initiatives and perspectives to be seen as one, and woven together (Pidgeon, 2016; Macdonald & Markides, 2019). On another level still, work around flexible and accessible pedagogy is being carried out by UDL practitioners, mostly disability specialists (Kennette & Wilson, 2019) and this work does not either connect with the rest of the efforts deployed on campuses regarding the inclusion of diverse learners more generally. It will be important to see these various voices come together and adopt a common discourse in order to gain political and strategic momentum. This chapter suggests that UDL may be the vehicle needed to bring these voices and perspectives together.

Transformation of the UDL Advocacy Process

The UDL implementation drive and advocacy process which has begun on most campuses, also needs to undergo a metamorphosis. So far it has been driven mostly by accessibility services (Houghton & Fovet, 2012), but this strategic deployment now makes no sense considering its possible wider scope that is becoming apparent. Ownership of the UDL drive on campuses will have to be renegotiated and rethought. Considering the fact that UDL is now just as appealing to non-traditional students, students with disabilities, international students and Indigenous students, a new format of advocacy will need to be created on campuses to allow for this novel interdisciplinary approach (Fovet, 2019). There will need to be an ecological reflection around the complexity of the process of pedagogical transformation, when so many stakeholders are involved (Fovet, in print). There is also now a clear political opportunity for the personnel of support services for Indigenous students to begin voicing an explicit message and specific demands regarding pedagogy and its transformation, something which so far has been more or less out of bounds (Fredericks, Kinnear, Daniels, Croft-Warcon & Mann, 2017).

REFERENCES

Allen, C. (2012). *Trans-Indigenous: Methodologies for global Native literary studies*. University of Minnesota Press. doi:10.5749/minnesota/9780816678181.001.0001

Allen, M. (2018) *Multiple Means of Representation*. Humber College. Retrieved from: http://www.humber.ca/centreforteachingandlearning/assets/files/Teaching%20Methods/UDL%20Principle%201%20-%20Multiple%20Means%20of%20Representation.pdf

Ammon, L. (2019). *Decolonising the University Curriculum in South Africa. A Case Study of the University of the Free State* (MA Thesis). Department for Social Studies, Linnaeus University. Retrieved from: http://www.diva-portal.org/smash/get/diva2:1348966/FULLTEXT02

Attas, R. (2019). Strategies for Settler Decolonization: Decolonial Pedagogies in a Popular Music Analysis Course. *Canadian Journal of Higher Education / Revue canadienne d'enseignement supérieur, 49*(1), 125–139.

Axelrod, J. (2018). Making materials accessible to students in higher education institutes: Institutional obligations, methods of compliance, and recommendations for future action. *Learned Publishing*, *31*(1), 39–44. doi:10.1002/leap.1148

Bains, R. (2014). *The myths and realities of First Nations education*. Centre for Aboriginal Policy Studies.

Banks, T., & Dohy, J. (2018). Mitigating Barriers to Persistence: A Review of Efforts to Improve Retention and Graduation Rates for Students of Color in Higher Education. *Higher Education Studies*, *9*(1), 118–131. doi:10.5539/hes.v9n1p118

Barrera, J., & Deer, J. (2019, October 10) 4 federal candidates accused of Indigenous identity appropriation by Halifax academic. *CBC*. Retrieved from: https://www.cbc.ca/news/indigenous/federal-candidates-claims-indigenous-identity-1.5314614

Bedrossian, L. (2018), Understand and promote use of Universal Design for Learning in higher education. *Disability Compliance for Higher Education, 23*(7).

Begum, N., & Saini, R. (2019). Decolonising the Curriculum. *Political Studies Review*, *17*(2), 196–201. doi:10.1177/1478929918808459

Behrendt, M., & Machtmes, K. (2016). Photovoice as an evaluation tool for student learning on a field trip. *Research in Science & Technological Education*, *34*(2), 187–203. doi:10.1080/02635143.2015.1124410

Belanger, Y., Awosoga, O., & Head, G. (2013). Homelessness, urban Aboriginal people, and the need for a national numeration. *Aboriginal Policy Studies*, *2*, 4–33.

Berghs, M., Atkin, K., Hatton, C., & Thomas, C. (2019). Do disabled people need a stronger social model: A social model of human rights? *Disability & Society*, *34*(7-8), 1034–1039. doi:10.1080/09687599.2019.1619239

Bingham, B., Moniruzzaman, A., Patterson, M., Distasio, J., Sareen, J., O'Neil, J., & Somers, J. (2019). Indigenous and non-Indigenous people experiencing homelessness and mental illness in two Canadian cities: A retrospective analysis and implications for culturally informed action. *BMJ Open*, *9*(4), 9. doi:10.1136/bmjopen-2018-024748 PMID:30962229

Birx, D. L. (2019). Rethinking Higher Education: Integration as a Framework for Change. *New Directions for Higher Education*, *2019*(185), 9–31. doi:10.1002/he.20309

Black, G., & Hachkowski, C. (2019). Indigenous learners: What university educators need to know. *Journal of Further and Higher Education*, *43*(8), 1092–1108. doi:10.1080/0309877X.2018.1450495

Boothe, K., Lohmann, M., Donnell, K., & Hall, D. (2018). Applying the Principles of Universal Design for Learning (UDL) in the College Classroom. *The Journal of Special Education Apprenticeship*, *7*(3). https://files.eric.ed.gov/fulltext/EJ1201588.pdf

Bovill, C. (2019). Co-creation in learning and teaching: The case for a whole-class approach in higher education. *Higher Education*.

Bracken, S., & Novak, K. (2019). *Transforming Higher Education Through Universal Design for Learning: An International Perspective*. Routledge. doi:10.4324/9781351132077

Brame, C. J., & Biel, R. (2015). *Setting up and facilitating group work: Using cooperative learning groups effectively*. Retrieved from http://cft.vanderbilt.edu/guides-sub-pages/setting-up-and-facilitating-group-work-using-cooperative-learning-groups-effectively/

Canel-Çınarbaş, D., & Yohani, S. (2019). Indigenous Canadian University Students' Experiences of Microaggressions. *International Journal for the Advancement of Counseling*, *41*(1), 41–60. doi:10.100710447-018-9345-z

CAST. (2018) *UDL and the learning brain*. Wakefield, MA: Author. Retrieved from http://www.cast.org/our-work/publications/2018/udl-learning-brain-neuroscience.html

CAST. (2019) *The UDL Guidelines.* Wakefield, MA: Author. Retrieved from: http://udlguidelines.cast.org/

Charles, E. (2019) Decolonizing the curriculum. *UKSG Insights*. Retrieved from: https://insights.uksg.org/articles/10.1629/uksg.475/

Chomat, A. M., Menchú, A. I., Andersson, N., Ramirez-Zea, M., Pedersen, D., Bleile, A., Letona, P., & Araya, R. (2019). Women's circles as a culturally safe psychosocial intervention in Guatemalan indigenous communities: A community-led pilot randomised trial. *BMC Women's Health*, *19*(1), 53. doi:10.118612905-019-0744-z PMID:30943958

Clemens, I. (2019). Comment: Cultural Identities in Multilocal Spaces: Bringing in Multiplicity. *Diaspora, Indigenous, and Minority Education*, *13*(1), 68–72. doi:10.1080/15595692.2019.1554841

Dalton, E. M., Lyner-Cleophas, M., Ferguson, B. T., & McKenzie, J. (2019). Inclusion, universal design and universal design for learning in higher education: South Africa and the United States. *African Journal of Disability*, *8*, 519. doi:10.4102/ajod.v8i0.519 PMID:31392169

Datta, R. (2018). Traditional storytelling: An effective Indigenous research methodology and its implications for environmental research. *AlterNative: An International Journal of Indigenous Peoples*, *14*(1), 35–44. doi:10.1177/1177180117741351

Deeley, S. J., & Bovill, C. (2017). Staff-student partnership in assessment: Enhancing assessment literacy through democratic practices. *Assessment & Evaluation in Higher Education*, *42*(3), 463–477. doi:10.1080/02602938.2015.1126551

Doyle, E., Buckley, P., & Whelan, J. (2019). Assessment co-creation: An exploratory analysis of opportunities and challenges based on student and instructor perspectives. *Teaching in Higher Education*, *24*(6), 739–754. doi:10.1080/13562517.2018.1498077

Doyle, T., & Prout, S. (2012). Indigenous student mobility, performance and achievement: Issues of positioning and traceability. *International Journal of Educational Research*, *54*, 41–49. doi:10.1016/j.ijer.2011.12.002

Fernández-Llamazares, Á., & Cabeza, M. (2018), Rediscovering the Potential of Indigenous Storytelling for Conservation Practice. *Conversation Letters, 11*

Fovet, F. (2014) Social model as catalyst for innovation in design and pedagogical change. Widening Participation through Curriculum. *Open University 2014 Conference Proceedings*, 135-139

Fovet, F. (2016) Accessibility and Universal Design for Learning. The 2016 Key Issues in Teaching and Learning. *ELI – 7 things You Should Know About…* https://library.educause.edu/~/media/files/library/2016/2/eli7129pdf.pdf

Fovet, F. (2019). Not just about disability: Getting traction for UDL implementation with International Students. In K. Novak & S. Bracken (Eds.), *Transforming Higher Education through Universal Design for Learning: An International Perspective*. Routledge. doi:10.4324/9781351132077-11

Fovet, F. (in press) Developing an Ecological Approach to Strategic UDL Implementation in Higher Education. *Journal of Education and Learning*.

Fredericks, B., Kinnear, S., Daniels, C., Croft-Warcon, P., & Mann, J. (2017). Perspectives on Enabling Education for Indigenous Students at Three Comprehensive Universities in Regional Australia. In J. Frawley, S. Larkin, & J. Smith (Eds.), *Indigenous Pathways, Transitions and Participation in Higher Education*. Springer. doi:10.1007/978-981-10-4062-7_8

Gakavi, T. (2011). *The transition to post-secondary education for Canadian Aboriginal and non-Aboriginal students: A focus on adjustment, fit and anticipated persistence* (PhD. Thesis). University of Saskatchewan.

Garrison N. (2018) Genetic Ancestry Testing with Tribes: Ethics, Identity and Health Implications. *Daedalus, the Journal of the American Academy of Arts and Sciences,* 60-69.

Gaudry, A., & Lorenz, D. (2018). Indigenization as inclusion, reconciliation, and decolonization: Navigating the different visions for indigenizing the Canadian Academy. *AlterNative: An International Journal of Indigenous Peoples*, *14*(3), 218–227. doi:10.1177/1177180118785382

Gone, J. P. (2019). Considering Indigenous Research Methodologies: Critical Reflections by an Indigenous Knower. *Qualitative Inquiry*, *25*(1), 45–56. doi:10.1177/1077800418787545

Gonzales, M. (2018, December 14) 16 things you should know about universal design. *Building Design + Construction*. Retrieved from: https://www.bdcnetwork.com/universal-design

Gover, K. (2016). Indigenous membership and human rights: When self-identification meets self-constitution. In *Handbook of Indigenous Peoples Rights* (pp. 35–49). Routledge. doi:10.4324/9780203119235-4

Gray, E., Hogan, L., & Benton Kearley, D. (2019). *A Practical Approach to UDL.* Paper presented at the Chiefs of Ontario | Sharing Forum. Retrieved from: http://education.chiefs-of-ontario.org/upload/documents/a-practical-approach-to-udl-coo-2019.pdf

Hershey, R.A. (2019) 'Paradigm Wars' Revisited: New Eyes on Indigenous Peoples' Resistance to Globalization. *Indigenous Peoples' Journal of Law, Culture & Resistance, 5*(1).

Houghton, M., & Fovet, F. (2012). Reframing Disability, reshaping the provision of services. *Communiqué*, *13*(1), 16–19.

Howard, J. (2015). How to hold a better class discussion. *The Chronicle of Higher Education*. Retrieved from: https://www.chronicle.com/interactives/20190523-ClassDiscussion

Hunt, C. (2019, April 16) Design Thinking and Universal Design for Learning as a way to Combat Unwanted Behavior in the Classroom. *UDL-IRN*. Retrieved from: https://udl-irn.org/implementation/design-thinking-and-universal-design-for-learning-as-a-way-to-combat-unwanted-behavior-in-the-classroom/

Huxham, M., Hunter, M., McIntyre, A., Shilland, R., & McArthur, J. (2015). Student and teacher co-navigation of a course: Following the natural lines of academic enquiry. *Teaching in Higher Education*, *20*(5), 530–541. doi:10.1080/13562517.2015.1036730

Indigenous Affairs and Northern Development Canada. (2016). *Indian Act CHAP. 18. An Act to amend and consolidate the laws respecting Indians*. Retrieved from https://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/textetext/1876c18_1100100010253_eng.pdf

James, K. (2018) Universal Design for Learning (UDL) as a Structure for Culturally Responsive Practice. *Northwest Journal of Teacher Education, 13*(1), Article 4.

Johnstone, C., & Edwards, P. (2019). Accommodations, Accessibility, and Culture: Increasing Access to Study Abroad for Students With Disabilities. *Journal of Studies in International Education*.

Kandiko Howson, C., & Weller, S. (2016). Defining pedagogic expertise: Students and new lecturers as co-developers in learning and teaching. *Teaching & Learning Inquiry*, *4*(2). Advance online publication. doi:10.20343/teachlearninqu.4.2.6

Katz, J. (n.d.). The Connection: FNMI/Aboriginal Education & The Three-Block Model of UDL. *Home of The Three Block Model of UDL & The RD Program.*

Kennette, L., & Wilson, A. (2019). Universal Design for Learning (UDL) Student and faculty perceptions. *Journal of Effective Teaching and Learning in Higher Education*, *2*(1).

Ketelle, D. (2017). Introduction to the Special Issue: What Is Storytelling in the Higher Education Classroom? *Storytelling, Self, Society*, *13*(2), 143–150. doi:10.13110torselfsoci.13.2.0143

Kieran, L., & Anderson, C. (2018). Connecting Universal Design for Learning With Culturally Responsive Teaching. *Education and Urban Society*, 1–15.

Kimmermer, R. W. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teaching of plants*. Milkweed Editions.

Kummitha, R. K. (2019). Design thinking in social organizations: Understanding the role of user engagement. *Creativity and Innovation Management*, *28*(1), 101–112. doi:10.1111/caim.12300

La, H., Dyjur, P., & Bair, H. (2018). Universal Design for Learning in Higher Education. Taylor Institute for Teaching and Learning. Calgary: University of Calgary

LaPierre, I. (2019) *Mapping the landscape of indigenous students success* (pp. EdD Thesis). Faculty of Educational Studies, University of British Columbia.

Leroux, D., & Gaudry, A. (2017, October 26). Becoming Indigenous: The Rise of Eastern Métis in Canada. *The Conversation*. Retrieved from: https://theconversation.com/becoming-indigenous-the-rise-of-eastern-metis-in-canada-80794

Lethbridge School Division. (2018). *First Nations, Métis, Inuit Education for All*. 3 year Strategic Plan (Year 2) - 2019-20. Retrieved from: https://www.lethsd.ab.ca/download/218338

Linder, C. (2019). Power-conscious and intersectional approaches to supporting student activists: Considerations for learning and development. *Journal of Diversity in Higher Education*, *12*(1), 17–26. doi:10.1037/dhe0000082

Loewen, J., Kinshuk, & Suhonen, J. (2018) I-DIGEST framework: towards authentic learning for indigenous learners. *Smart Learning Environment, 5*(4).

Louie, D., Pratt, Y., Hanson, A., & Ottmann, J. (2017) Applying Indigenizing Principles of Decolonizing Methodologies in University Classrooms. *Canadian Journal of Higher Education Revue canadienne d'enseignement supérieur, 47*(3), 16 – 33.

Macdonald, J., & Markides, J. (2019) Called to action: Dialogue around praxis for reconciliation. *McGill Journal of Education / Revue des sciences de l'éducation de McGill, 53*(2).

Madden, B. (2019). A de/colonizing theory of truth and reconciliation education. *Curriculum Inquiry*, *49*(3), 284–312. doi:10.1080/03626784.2019.1624478

McMahon, T. R., Griese, E. R., & Kenyon, D. B. (2019). Cultivating Native American scientists: An application of an Indigenous model to an undergraduate research experience. *Cultural Studies of Science Education*, *14*(1), 77–110. doi:10.100711422-017-9850-0 PMID:30976360

Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K. E., Abbot, S., Cheng, B., Felten, P., Knorr, C., Marquis, E., Shammas, R., & Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners*, *1*(1), 1–23. doi:10.15173/ijsap.v1i1.3119

Miles, J. (2018). Teaching history for Truth and Reconciliation: The challenges and opportunities of narrativity, temporality, and identity. *McGill Journal of Education / Revue des sciences de l'éducation de McGill, 53*(2).

Mitchell, D., Simmons, C., & Greyerbiehl, L. (2014). *Intersectionality & higher education: Theory, research, & Praxis*. Peter Lang. doi:10.3726/978-1-4539-1407-6

Morin, B. (2019, February 21). Sixties Scoop Survivors Then and Now; Stories of Separation and Healing. *APTN News*. Retrieved from: https://aptnnews.ca/2017/02/21/sixties-scoop-survivors-then-and-now-stories-ofseparation-and-healing/

Mortice, Z. (2019, October 14). Design for all requires a culture change in architecture. *AIA*. Retrieved from: https://www.aia.org/articles/6215411-design-for-all-requires-a-culture-change-i

Muir, S. (2011). Australian Alternative Spiritualities and a Feeling for Land. *The Australian Journal of Anthropology*, *22*(3), 370–387. doi:10.1111/j.1757-6547.2011.00151.x

Neeganagwedgin, E. (2019). The Land Since Time Immemorial: A Review of the Assimilation Policies on Indigenous Peoples Through Canada's Indian Act. *Ab-Original*, *3*(1), 136–142. doi:10.5325/aboriginal.3.1.0136

Nichols, S., & Stahl, G. (2019). Intersectionality in higher education research: A systematic literature review. *Higher Education Research & Development*, *38*(6), 1255–1268. doi:10.1080/07294360.2019.1638348

Nieminen, J., & Pesonen, H. (2020). Taking Universal Design Back to Its Roots: Perspectives on Accessibility and Identity in Undergraduate Mathematics. *Education in Science*, *10*(1), 12. doi:10.3390/educsci10010012

Nyoni, J. (2019). *Decolonising the higher education curriculum: An analysis of African intellectual readiness to break the chains of a colonial caged mentality*. Transformation in Higher Education.

Ottmann, J. (2017). Canada's Indigenous Peoples' Access to Post-secondary Education: The Spirit of the 'New Buffalo. In J. Frawley, S. Larkin, & J. Smith (Eds.), *Indigenous Pathways, Transitions and Participation in Higher Education*. Springer. doi:10.1007/978-981-10-4062-7_7

Ozer, S., Meca, A., & Schwartz, S. J. (2019). Globalization and identity development among emerging adults from Ladakh. *Cultural Diversity & Ethnic Minority Psychology*, *25*(4), 515–526. doi:10.1037/cdp0000261 PMID:30614715

Pidgeon, M. (2016). More Than a Checklist: Meaningful Indigenous Inclusion in Higher Education. *Social Inclusion (Lisboa)*, *4*(1), 77–91. doi:10.17645i.v4i1.436

Qazi, A., Mustafa, Y., & Ali, S. (2018). Integrating universal design for learning as a pedagogical framework to teach and support all learners in science concepts. *International Journal of Innovation in Education*, *5*(2), 127. doi:10.1504/IJIIE.2018.097854

Rao, K., & Meo, G. (2016). Using Universal Design for Learning to Design Standards-Based Lessons. *SAGE Open*, *6*(4). Advance online publication. doi:10.1177/2158244016680688

Remenick, L. (2019). Services and support for non-traditional students in higher education: A historical literature review. *Journal of Adult and Continuing Education*, *25*(1), 113–130. doi:10.1177/1477971419842880

Restoule, J., Mashford-Pringle, A., Chacaby, M., Smillie, C., Brunette, C., & Russel, G. (2013). Supporting successful transitions to post-secondary education for indigenous students: Lessons from and institutional ethnography in Ontario, Canada. *International Indigenous Policy Journal*, *4*(4), 1–10. doi:10.18584/iipj.2013.4.4.4

Rock, R., Foster, E., & Lamb, S. (2015). *Putting students at the heart of the curriculum change process*. Higher Education Academy.

Russel, A. (2016, August 23). What was the '60s Scoop'? Aboriginal Children Taken from Homes a Dark Chapter in Canada's History. *Global News*. Retrieved from: https://globalnews.ca/news/2898190/what-was-the-60s-scoop-aboriginal-childrentaken-from-homes-a-dark-chapter-in-canadas-history/

Sandi-Urena, S. (2018). Phenomenological approaches to study learning in the tertiary level chemistry laboratory. *Quimica Nova*, *41*(2), 236–242. doi:10.21577/0100-4042.20170176

Sari Dewi, S., & Anwar Dalimunthe, H., & Faadhil. (2019). The Effectiveness of Universal Design for Learning. *Journal of Social Science Studies*. *Macrothink Institute*, *6*(1), 112–123.

Schmidt, H. (2019). Indigenizing and Decolonizing the Teaching of Psychology: Reflections on the Role of the Non-Indigenous Ally. *American Journal of Community Psychology*, *64*(1-2), 59–71. doi:10.1002/ajcp.12365 PMID:31355969

School of Oriental and African Studies. (2017). Decolonising SOAS Vision. *Legal and Governance Directorate.* Retrieved from: https://www.soas.ac.uk/decolonising-soas/

Schreffler, J., Vasquez, E. III, Chini, J., & James, W. (2019). Universal Design for Learning in post-secondary STEM education for students with disabilities: A systematic literature review. *International Journal of STEM Education*, *6*(8), 8. doi:10.118640594-019-0161-8

Semper, J. V. O., & Blasco, M. (2018). Revealing the Hidden Curriculum in Higher Education. *Studies in Philosophy and Education*, *37*(5), 481–498. doi:10.100711217-018-9608-5

Serrano, M. M., O'Brien, M., Roberts, K., & Whyte, D. (2018). Critical Pedagogy and assessment in higher education: The ideal of 'authenticity' in learning. *Active Learning in Higher Education*, *19*(1), 9–21. doi:10.1177/1469787417723244

Skarlatidou, A., Ponti, M., Sprinks, J., Nold, C., Haklay, M., & Kanjo, E. (2019). User experience of digital technologies in citizen science. *Journal of Science Communication*, *18*(01). Advance online publication. doi:10.22323/2.18010501

Smith, C. M. (2019, May 21). Opinion: Where is Home? A Perspective from a Sixties Scoop Survivor. *Anishinabek News.* Retrieved from: https://anishinabeknews.ca/2019/05/21/opinion-where-is-home-a-perspective-from-asixties-scoop-survivor/

Smith, S. J., Rao, K., Lowrey, K. A., Gardner, J. E., Moore, E., Coy, K., Marino, M., & Wojcik, B. (2019). Recommendations for a National Research Agenda in UDL: Outcomes From the UDL-IRN Preconference on Research. *Journal of Disability Policy Studies*, *30*(3), 174–185. doi:10.1177/1044207319826219

Staley, B., & Freeman, L.A. (2017). Digital storytelling as student-centred pedagogy: empowering high school students to frame their futures. *Research and Practice in Technology Enhanced Learning, 12*(21).

Stein, S., & Andreotti, V. D. O. (2016). Decolonization and higher education. In M. Peters (Ed.), Encyclopedia of educational philosophy and theory. Singapore: Springer Science+Business Media. doi:10.1007/978-981-287-532-7_479-1

Switzer, S. (2019). Working With Photo Installation and Metaphor: Re-Visioning Photovoice Research. *International Journal of Qualitative Methods*, *18*. Advance online publication. doi:10.1177/1609406919872395

Timmons, V. (2013). Aboriginal students' perceptions of post-secondary success initiatives. *The Canadian Journal of Native Studies*, *33*(1), 231–237.

Tobin, T. (2019, August 12). Taking IT Way beyond Accessibility: 5 + 4 = 1 Approach. *Educause Review*. Retrieved from: https://er.educause.edu/articles/2019/8/taking-it-way-beyond-accessibility-5-4-1-approach

Tobin, T. (2019b). Reaching all learners through their phones and universal design for learning. *Journal of Adult Learning, Knowledge and Innovation.*

Treleaven, S. (2018, December 7). How Canadian universities are responding to the TRC's Calls to Action. *MacLean's*. Retrieved from: https://www.macleans.ca/education/how-canadian-universities-are-responding-to-the-trcs-calls-to-action/

University of Calgary. (2018). Decolonizing Dissertations. *Faculty of Graduate Studies*. Retrieved from: https://grad.ucalgary.ca/current-students/thesis-based-students/thesis/decolonizing-dissertations

Valiquette, S. (2019). *Sixties Scoop, Historical Trauma, and Changing the Current Landscape about Indigenous People*. Major Papers 106, University of Windsor. Retrieved from: https://scholar.uwindsor.ca/major-papers/106

van Jaarsveldt, L. C., de Vries, M. S., & Kroukamp, H. J. (2019). South African students call to decolonize science: Implications for international standards, curriculum development and Public Administration education. *Teaching Public Administration*, *37*(1), 12–30. doi:10.1177/0144739418790779

Walsh Marr, J. (2019). An English Language Teacher's Pedagogical Response to Canada's Truth and Reconciliation Commission. *Teaching and Learning*, 91-103.

Wass, R., Anderson, V., Rabello, R., Golding, C., Rangi, A., & Eteuati, E. (2019). Photovoice as a research method for higher education research. *Higher Education Research & Development*.

Watt, E., & Kowal, E. (2019). To be or not to be Indigenous? Understanding the rise of Australia's Indigenous population since 1971. *Ethnic and Racial Studies*, *42*(16), 63–82. doi:10.1080/01419870.2018.1546021

Wilks, J., Wilson, K., & Kinnane, S. (2017). Promoting Engagement and Success at University Through Strengthening the Online Learning Experiences of Indigenous Students Living and Studying in Remote Communities. In J. Frawley, S. Larkin, & J. Smith (Eds.), *Indigenous Pathways, Transitions and Participation in Higher Education*. Springer. doi:10.1007/978-981-10-4062-7_13

Witkowsky, P., Mendez, S., Ogunbowo, O., Clayton, G., & Hernandez, N. (2016). Nontraditional student perceptions of collegiate inclusion. *The Journal of Continuing Higher Education*, *64*(1), 30–41. doi:10.1080/07377363.2016.1130581

Zembylas, M. (2018). Reinventing critical pedagogy as decolonizing pedagogy: The education of empathy. *Review of Education, Pedagogy & Cultural Studies*, *40*(5), 404–421. doi:10.1080/10714413.2019.1570794

ADDITIONAL READING

Bracken, S., & Novak, K. (Eds.). (2019). *Transforming Higher Education through Universal Design for learning: An International Perspective*. Routledge. doi:10.4324/9781351132077

Burgstahler, S. (2019*) Universal design in Higher Education. Promising Practices*. DO-IT. Retrieved from: https://www.washington.edu/doit/sites/default/files/atoms/files/Universal%20Design%20in%20Higher%20Education_Promising%20Practices_0.pdf

KEY TERMS AND DEFINITIONS

Decolonizing the Curriculum: A process of reflection which seeks to identify the remnants of colonial domination in the format of instruction, its content, its assessment, the resources used, and the language of instruction. Decolonizing the Academy takes two shapes. It is occurring on a Global North-Global axis when developing countries challenge post-colonialism in their educational institutions, as well as when Global North campuses are led to question their willingness to treat Global South stakeholders as equal partners. It is also occurring in countries where neo-colonialism is still ongoing in the marginalization and oppression of Indigenous communities. Here the work amounts to Indigenizing the curriculum. Indigenization of the curriculum.

Multiple Means of Action and Expression: This UDL principle – one of three – supports educators as they examine the ways they are expecting learners to provide content. It can relate to class contribution and participation, the completion of assignments, teamwork, the production of artifacts and original content or messaging. This UDL principle encourages instructors to consider flexible and diverse ways learners can fulfill these expectations.

Multiple Means of Engagement: This is one of the three UDL principles which guide instructors towards inclusive design of instruction and assessment. This principle allows faculty to query the way they interpret 'learner engagement' as a construct and helps them detect ways they are being teacher-centric in when they formulate their expectations with regards to this component of learning. It encourages them to inject as much flexibility as possible in their conceptualization of learner engagement and its manifestation in class.

Multiple Means of Representation: This is one of the three UDL principles. It guides instructors to examine the way they offer material, resources, and content to learners. It encourages faculty to inject optimal flexibility in the design of the ways they present information to the student, in order to cater for learner diversity.

Retrofitting: Retrofitting describes an approach to accessibility in the classroom which focuses on removing barriers encountered by students with disabilities, after the facts, through individual support measures. In Higher Education, these measures are often called 'accommodations. They are legally mandated and go some ways to providing inclusive learning environments, but they are still based on a medical model approach which requires disclosure by the learner and a proof of diagnosis. These measures are never entirely inclusive as they require access to specialized support services, and lead to a degree of stigmatization.

Truth and Reconciliation Commission Report: The Truth and Reconciliation Commission was given the mandate within Canada in 2008 to explore and document the lasting repercussions of the Ca-

nadian residential schools on the lives and culture of Indigenous people. The Report of the Commission was published in 2015 and offers 94 recommendations regarding the process of reconciliation between Euro-Caucasian settler populations and Indigenous communities.

Universal Design for Learning: Is a framework for the management of accessibility which focuses on inclusive design rather than retrofitting or accommodations. It does not place the burden on the individual to disclose a diagnosis and seek services and accommodations, but rather presumes that learner diversity is ever present and that it must be addressed through inclusive design when creating instruction format and assessment or selecting teaching resources.