

Journal of
Higher Education Policy
And
Leadership Studies

JHEPALS (E-ISSN: 2717-1426)

<https://johepal.com>

Culturally Responsive Pedagogy: A Canadian Perspective

Stephanie Chitpin *

Email: steph.chitpin@uottawa.ca

Olfa Karoui *

Email: okaro067@uottawa.ca

* *Faculty of Education, University of Ottawa, CANADA*

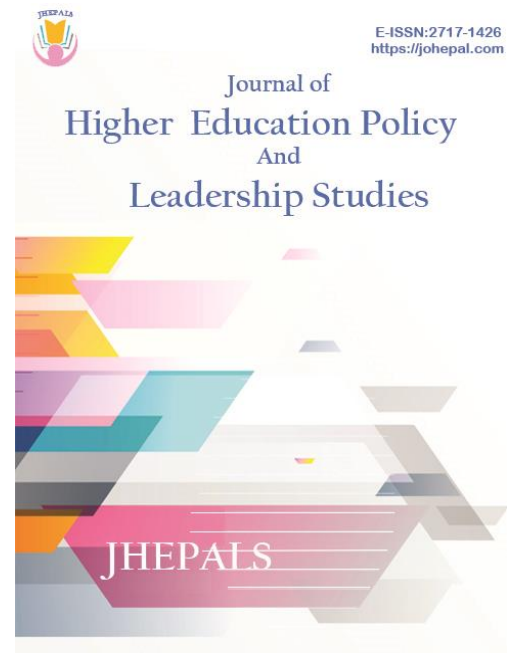
Article Received
2021/01/21

Article Accepted
2021/04/01

Published Online
2021/04/10

Cite article as:

Chitpin, S., & Karoui, O. (2021). Culturally responsive pedagogy: A Canadian perspective. *Journal of Higher Education Policy and Leadership Studies*, 2(1), 45-62. DOI: <https://dx.doi.org/10.29252/johepal.2.1.45>



Chitpin, S., & Karoui, O.

Culturally Responsive Pedagogy: A Canadian Perspective

Journal of Higher Education
Policy And Leadership
Studies (JHEPALS)

E-ISSN: 2717-1426
Volume: 2 Issue: 1
pp. 45-62
DOI:
10.29252/johepal.2.1.45

Abstract

In the Canadian province of Saskatchewan, the Ministry of Education has encouraged sociocultural and linguistic diversity within schools. Yet, as is typical within neoliberal societies, standardized assessments continue to be promoted for evaluating student progress and for the validity of in-school assessments. Standardized testing is designed using a monolingual Eurocentric perspective which ultimately discounts many cognitive processes used by non-Canadian EAL students. This study describes ways in which educational leaders work towards incorporating culturally responsive pedagogy into their practices so as to increase representativeness within their schools. Six principals in rural Saskatchewan were interviewed. Results revealed three common themes: the use of standardized data to assess student progress and in-school testing, integration of cultural competence practices, and initiation of individualized intervention strategies.

Stephanie Chitpin *
Olfa Karoui

Keywords: Indigenous Peoples, Immigrants, Culturally Responsive Schooling, Educational Leadership

*Corresponding author's email: steph.chitpin@uottawa.ca

Introduction

The province of Saskatchewan is in the centre of Canada's heartland and is renowned for its system of education. Saskatchewan's educational system is comprised of 27 school divisions, including public, francophone, and catholic divisions (Saskatchewan Ministry of Education, 2020) which, together, oversee 767 schools serving more than 184,000 students (Canadian E-Learning Network, 2019). In recent years, Saskatchewan's educational system has faced increasing numbers of English as an additional language (EAL) learners.

The Ministry of Education for Saskatchewan defines EAL learners as students whose primary language is other than English and who require additional services or specific programming to achieve successful educational outcomes (Ministry of Education, 2013). These EAL students include First Nations and Métis students (FNMI), refugee students, Canadian-born children of immigrants and recently arrived immigrant students (Ministry of Education, 2013). With this change in demographic, the province has adopted various frameworks in order to address the growing achievement gaps experienced by FNMI and immigrant students. The frameworks work towards appropriately addressing the sociocultural and linguistic needs of FNMI and EAL students within schools and the taught curriculum. For instance, the Inspiring Success First Nations and Métis PreK-12 Education Policy Framework (Ministry of Education, 2018) aims at sharing and integrating "the teaching of First Nations and Métis languages, cultures and histories in ways that affirm cultural identity, value diversity and build positive relationships between and amongst teachers and students" (p. 9). This framework is designed to address First Nations, Métis and Inuit (FNMI) achievement gap by increasing the three-year graduation rate from 35% in 2012 to 65% by 2020 and the five-year graduation rate to 75% by 2020 (Ministry of Education, 2018). To do so, the framework makes use of a comprehensive approach to increase FNMI student achievement and engagement through the infusion of FNMI content, perspectives and ways of knowing by aligning policy, curriculums and accountability practices with the goals of the Educator Section Strategic Plan (Ministry of Education, 2018).

In addition, a three-tiered Response to Intervention (RtI) model is recommended to address the higher percentages of dropout rates amongst FNMI and EAL students (Saskatchewan Learning, 2004). The Response to Intervention model recommends an initial tier which includes a universal screening and research-based instruction to assess a given student's educational and cultural background. Following this, the second tier implements intensive support to provide supplementary interventions to support reading, speech, and language development. Finally, the third intervention tier includes intensive individual instruction to provide educational support (Kemp-Koo & Claypool, 2011).

Overall, the RtI model aims to be a culturally sensitive educational intervention strategy which considers the unique experiential backgrounds of EAL and FNMI students, as well as, how their culture impacts their world views and approaches to learning (Johnston & Claypool, 2010). These intervention models are particularly relevant when considering the performance disadvantage of immigrant students in Canada, as reported by the Program for International Student Assessment (PISA) (Volante et al., 2017). This is significant due to the fact that Saskatchewan reports a significant performance gap of 20 points between first-generation immigrants and non-immigrant students (O'Grady et al., 2019).

As reported by Huddleston et al. (2015), one of the most significant factors determining the educational attainment of migrant pupils is the composition of their school, as well as the general

structure and quality of the education system. More specifically, school systems with a high degree of differentiation tend to produce negative effects on the educational achievement of EAL and FNMI students, compared to schools adapting a more comprehensive system (Bilgili et al., 2015) of instruction. Additionally, research has shown that Indigenous achievement gaps are best explained by in-school factors as opposed to socioeconomic differences (McEwan & Trowbridge, 2007; Richards et al., 2010) These in-school factors include the taught curriculum, the quality of management within schools and the quality of teaching (Anderson, 2006; Rivkin et al., 2005). In addition, Ryan and Whitman (2013) report that schools may benefit from the adoption of a critical multiculturalism perspective in which the tension between school structure and culture, as well as between cultural groups and common interests, are problematized (Awad, 2011). By adopting such a perspective, the needs of FNMI and EAL students could be addressed through the reflection of diversity in the classroom and the curriculum's content.

This study aims at exploring whether the principles presented within Saskatchewan's Ministry of Education's frameworks are actually being applied within schools. To do so, this study will describe the ways in which principals in Saskatchewan support the needs of their FNMI and EAL students through the usage of culturally responsive pedagogy within their schools in order to address the observed provincial achievement gap.

Literature Review

It is widely believed that education is meant to foster knowledge, responsibility and open-mindedness in hopes of establishing a democratic, equitable and just society (Shaefer, 2019). However, with the rise of neoliberalism in education (Apple, 2011), these principles of equity and social justice have gradually been overridden by the introduction of standardized assessment methods, control of curricula, and increased emphasis on competition and efficiency (Zeichner, 2010). One method of addressing these issues is through the adoption of social-justice oriented education (Maloney et al., 2019). The goals of social justice education are to recognize and understand oppression, acknowledge one's position within a social system, and to commit to developing resources and skills to create lasting change (Adams & Zuniga, 2016). Additionally, adopting social justice and equity within educational leadership and teaching requires engaging learners in critical thinking, fostering relationships with their families and communities, valuing and building on the experiences of students in the classroom, and noticing and challenging inequities and injustices that prevail in education, as well as working with and for diverse learners in order to advocate for just and equitable life chances for all students (Kaur, 2012). To do so, Gay (2013) advocates for the use of culturally responsive pedagogy (CRP) as a way to improve student achievement by teaching through the student's own cultural filters.

According to Gay (2013), the education of culturally diverse students should promote equity and student empowerment, and create a sense of community among individuals of varying cultural, social and ethnic backgrounds. By adopting CRP, Gay (2013) argues that the content of the curriculum becomes more personally meaningful to students and is thus easier to master. This educational practice is particularly relevant for FNMI and EAL immigrant students in Canada. When considering newly immigrated students, Garcia and Barlett (2007) show that the incorporation of students' linguistic and cultural experiences in the classroom is a strong predictor of their future academic success. Furthermore, as reported by Ryan et al. (2013), educational partners must provide FNMI students with the opportunities for fair and equitable education and should ensure that FNMI

Culturally Responsive Pedagogy

students feel that their needs are being met. In addition, according to McCarty and Lee (2014), educational leaders should also integrate the concept of culturally sustaining/revitalizing pedagogy (CSRP) within their schools, especially when working with Indigenous youth. CSRP is a pedagogical approach which addresses the FNMI socio-historical context by attending to asymmetrical power relations, revitalizing what has been disrupted by colonization and recognizing the need for community-based accountability (McCarty et al., 2014). In this way, adopting CSRP within one's leadership, whether it be administrative or teacher-led, and integrating its values into the school has the potential to facilitate language reclamation and ultimately help students connect meaningfully to their cultural communities (Lee, 2014; Wyman et al., 2014).

In addition to integrating CSRP into educational leadership, differentiation strategies have proven beneficial in supporting individual student needs. Differentiation is a pedagogical practice which aims at transcending inequalities in student instruction and promoting social justice by ensuring equal access to knowledge (Koutselini, 2008; Valiandes, 2015; Valiandes & Koutselini, 2009). Furthermore, differentiation is thought to make educational offerings equally beneficial for culturally diverse student bodies (Roe & Egbert, 2010). Thus, through the differentiation of instruction, students' opportunities for learning and personal growth are maximized (Landrum & Mcduffie, 2010) and education leaders may come closer to implementing social justice and equity within their schools (Koutselini & Agathangelou, 2009). However, in counterpoint, increased popularity and use of standardized assessment methods are hindering schools' abilities to foster equitable opportunities.

In the current educational zeitgeist, norm-referenced standardized assessment methods are increasingly being used to assess where a given student is academically located, compared to their peers. These forms of assessment are usually administered in the country's official language(s) of instruction (De Angelis, 2014) and make use of a Eurocentric approach to learning (Ryan et al., 2013). However, many studies have demonstrated the need for more culturally appropriate assessment methods specifically with regard to newly immigrated EAL students and FNMI students (De Angelis, 2014; Sefa Dei & McDermott, 2014; James, 2017; Ryan et al., 2013). In fact, monolingual biases resulting from the administration of standardized assessments (Brown, 2013) have been shown to be an unfair practice regarding multilingual students as they are asked to perform in a second language and thus have lower chances of succeeding, compared to their monolingual peers (May, 2011). More specifically, standardized tests use a monolingual construct to define the normal path of acquisition and, in so doing, tend to discount cognitive processes, such as code-switching and translation (Lengyel, 2010), used by multilingual students. Moreover, Ghafournia and Afghari (2014) report that observed scores on a reading comprehension test do not reflect the true ability of EAL learners as language fluency directly impacts students' abilities to use successful test-taking strategies. Beyond the language barrier, non-Canadian students may also face difficulties in standardized assessment due to cultural diversity.

In fact, standardized testing has been criticized for the degree to which they can assess the intellect and cognitive processes of students from diverse backgrounds (Rhodes et al., 2005). Indeed, Kearns (2016) argues that standardized testing is biased and builds upon masculine domination and colonialism when ranking students and results in the artificial construction of deficient youth identities. Furthermore, the belief held by standardized assessments that all children reach a given level of cognitive development at the same age across cultures is not universally true (Cole, 2006). In fact, these differences can be explained through the interaction of language, cognition and culture in the early years of development (Cole, 2010). Additionally, there is a need to recognize that children

Chitpin, S., & Karoui, O.

develop cognitive abilities in specific ways that depend upon their own culture. Thus, assessment methods should always be built in accordance with the characteristics of a student's culture (Greenfield, 2000).

To illustrate this point, one could consider a study conducted by Cole (2006), which tested the abilities of children from various cultures to complete Piaget's conservation task. The author of that study found that children failed to distinguish between their knowledge of reality and the nature of reality since, according to their culture, only the actual action held meaning rather than their perception of the action (Cole, 2006). Therefore, culture and language play a critical role in the cognitive development of children and subsequently impacts their performance on Eurocentric standardized assessments.

When considering FNMI students, the achievement gaps observed through standardized testing can also be explained by differences in culture. As reported by Ryan et al. (2013), Indigenous students hold a different worldview as compared to Eurocentric students and, thus, address the world and its knowledge in different ways. Vandenberghe and Gierl (2001) also emphasize the need for assessment designers to recognize that Indigenous and non-Indigenous students use different cognitive processing skills, due to cultural differences. For instance, research conducted by Nelson-Barber et al. (2008) demonstrates how an Indigenous Hawaiian student's culture permeated their answers on a standardized assessment item. When asked about the disadvantage of using bacteria over laboratory animals in scientific research, the student asserted that all animals are spiritual teachers and, thus, humans do not have the right to use or kill them for reasons other than food (Nelson-Barber et al., 2008). The student's answer would be considered incorrect if one solely made use of a Eurocentric perspective and discounted the student's own cultural beliefs.

In this way, the use of standardized testing could lead to reproduction of dominant social relations. This phenomenon is also further propagated through the practice of presenting classroom knowledge as isolated facts devoid of personalized meaning, which is typical in standardized testing-centered teaching (Au, 2008). In addition, McCarty (2009) demonstrates that the use of standardized testing can have detrimental effects on FNMI students through the elimination of low-stakes subject matters such as Native languages and cultural instruction in the classroom. Finally, when adopting a culturally responsive pedagogical approach, a tension arises between the need to integrate monolingual/cultural norms embedded in standardized testing, while also ensuring community-based values are included (Paris & Alim, 2014). As such, it is vital that educational leaders recognize and integrate the sociocultural and linguistic norms of their diverse student bodies in their decision-making process and assessment choices to ensure that the needs of their FNMI and EAL students are properly addressed.

Research Methodology

This article draws upon empirical evidence resulting from a Social Sciences and Humanities Research Council (SSHRC) grant. The research was guided by the following broad questions:

1. What data sources are used within the school?
2. How are achievement gaps defined within the school and how are they addressed?
3. What strategies are used, if any, to address the needs of FNMI and EAL students?

A qualitative case study methodology was used to identify the parameters of the research (Merriam & Simpson, 2000). This was done as case studies are particularistic in nature, in that they examine a specific instance while illuminating a general problem (Merriam, 1998). The case study

Culturally Responsive Pedagogy

methodology, employed for this study, is not based on developing generalizations, concepts or hypotheses grounded in systematically obtained data (Abercrombie, Hill, & Turner, 1990). Rather, it goes beyond these limiting notions, as no researcher can enter a situation free from preconceptions but must fit existing perceptions into a pre-existing discourse.

This study aimed at exploring the ways in which six principals from Saskatoon, Saskatchewan, addressed FNMI and EAL diversity within their schools. The selected principals reflected varying backgrounds including gender, years of administration, school type, and percentage of FNMI and EAL students within schools. All participants provided written consent and were assured anonymity and confidentiality within the research report through the use of pseudonyms. Each of the six principals, having agreed to take part of the study, represents a case study, resulting in a total of six case studies.

Participants

The following table (Table 1.) describes the specific participants' characteristics.

Table 1
Participants' Characteristics

Participants	Gender	Experience (years)	School Student Population	School Type	% FNMI students	% EAL students
Caleb	Male	22	327	Christian Private	10	N/A
Jessica	Female	27	145	Elementary Public	28	33
Jacinda	Female	17	400	Public Community	40	50
Derek	Male	29	700	Secondary Public	8	10
Thomas	Male	14	240	Public Community	65	12
Matthew	Male	5	475	French Immersion	15	25

Caleb has been a principal at his private Christian school for a little under a year. Caleb's overall experience spans 22 years, eight years of which he spent as a teaching principal and 15 years as a principal. Caleb's school has been established for 35 years. The school enrolls 327 students with fairly diverse backgrounds such as Caucasians, recent EAL newcomers, and students from Asia and Africa, as well as FNMI students.

Jessica has been principal at her current public elementary school for two years. Prior to this appointment, she has had 25 years of experience in education, specifically working in First Nation communities with Métis, Dene and Cree students. Jessica's school comprises 145 students and includes combined classrooms, as well as four adult classrooms. In terms of the school's demographic, there is a considerable number of low socioeconomic families, and one third of students identify as FNMI while another third are EAL students.

Jacinda was a principal at the community public school for three years. Prior to that, Jacinda held a vice-principal's role for three years at the community school. She also held the position of classroom teacher for eight years at a public school before the aforementioned appointment to the vice-principalship. Jacinda's community public school counts 400 students of which around 200 are EAL students and 40% identify as FNMI. The school also enrolls 50 intensive support students.

Derek has been a principal at his current secondary public school for four years. Derek has a total of 29 years of experience, of which he spent nine years as a teacher and twenty years as a principal or vice-principal. Derek's school enrolls a total of 700 students of whom 8% are self-declared

Chitpin, S., & Karoui, O.

as FNMI and 10% are EAL newcomer students. Another characteristic of Derek's school is its inclusion of a fine arts program to the curriculum.

Thomas has been a principal at his current public community school for five years. Overall, Thomas has one year of experience as a vice-principal and seventeen years of experience as a principal within the Saskatchewan public school system. Thomas's school serves 240 students of which 65% are FNMI and 30 require EAL support, as they are newcomers to Canada.

Matthew has been a principal at his dual stream English and French Immersion public school for three years. Matthew's professional experience also includes two years as a vice-principal at a French stream public school. Matthew's current school holds 475 students from preschool to grade 8. The student body is quite diverse, with students coming from 38 different countries, speaking 52 different languages, and includes students from 28 different First Nations areas across Western Canada. In addition, the school counts 103 newcomers to Canada receiving EAL support and 15% of the student body are declared FNMI students.

Findings

The participants in this study articulated three main themes which reflect the conflict between implementing culturally responsive practices and using standardized assessment data for decision-making. The three themes are: 1) Using standardized data to assess student progress and validity of school-based assessments, 2) An integration of cultural competence practices within schools, and 3) A move towards individualized intervention strategies.

Use of Standardized Data

As reported by Johnson and Johnson (2006), standardized assessment tools have become a widely used mechanism to test, monitor and improve student achievement and to demonstrate that a given school is working towards producing literate citizens. When interviewed, the participants of this study unanimously reported using the Canadian Achievement Test-4 (CAT-4) assessments and PISA results to keep track of their students' academic progress. CAT-4 is a testing system which aims at assessing reading, language, spelling, and mathematics learning outcomes (Canadian Test Centre, 2008). This norm-referenced standardized assessment tool is used to compare how well a given student performs in comparison to other students across the school's district, region, and the rest of Canada (Canadian Test Centre, 2008). On the other hand, PISA is also a norm-referenced computer-based standardized test which aims at assessing a given student's reading, mathematics and science knowledge, as well as their ability to extrapolate and apply that knowledge in unfamiliar settings (OECD, 2019). Similar to CAT-4, the PISA results are used by educational administrators to determine where a given student stands in comparison to the global average.

When asked about the data generated by these two assessment methods, participating educational leaders had varying opinions regarding the appropriateness of the results. For instance, educational leaders who had previously worked in provinces endorsing the use of standardized assessment felt that the lack of standardized data was a significant hindrance in accomplishing their duties. As Caleb states, "This is a big issue, I am coming from a province that has way more data available, so I am finding it very challenging to try to accomplish anything with so little data." These sentiments are echoed by Derek, who states, "I think there is room to have a little more standardized assessment. How do I compare a kid who is in another school to a kid at my school?"

Culturally Responsive Pedagogy

However, the perceived need for additional standardized data was not felt by the majority of the participants. In fact, some criticized the lack of cultural and sociolinguistic diversity in standardized assessment, as explained by Jessica, who states, “I don’t really like it [CAT-4] very much. It’s not reflective of the needs of our children... It’s very eastern-based and First Nations and Métis students aren’t reflected there...and nothing from an EAL perspective either.”

Jessica’s statement is in accordance with Ryan et al.’s (2013) position that standardized literacy tests in Canada fail to meet the needs of First Nations students and could inadvertently impede their chances for educational success. In addition, the statement reflects findings reported by Gandara and Rumberger (2008) that inequitable access to culturally appropriate assessment is one of the seven dimensions of inadequate schooling for EAL learners. Furthermore, the statement highlights the requirement for test developers to take into account linguistic demands of EAL students to meet the learning needs of students (Cummins, 2005). As stated by Jacinda “One of their [EAL students] blocks in terms of barriers for math for newcomer children is again language.... With our newcomer students, the achievement gap is language, the intelligence is often there.”

Moreover, Lesko (2001) warns that the use of standardized testing can increase the likelihood that students find themselves being described using statistics and record-keeping. This was proven to ring true with the interviewed participants. As Derek describes, “After the first mark capture comes in, our data team will look at the results and that’s when we start coding kids.... Kids that are coded red will very quickly be coded yellow and maybe even green.” In addition, leaders reported using CAT-4 data to determine the effectiveness of their own teachers’ assessment methods, as reported by Caleb, who says, “If the standardized assessments, as a class average, was within 5% of the report card marks, within a five-class average, then I would know that our assessments as teachers are actually accurate.” This practice is further echoed by Derek, who says, “We find that the gaps we find in the classroom data shows up in the CAT data and usually it’s a reinforcement of ‘Okay we’ve got our sights on the right kids.’”

According to Darling-Hammond (2010), standardized test-driven approaches have narrowed the spectrum of the curriculum taught in classrooms and has the potential to disengage students from higher-order skills such as critical thinking and in-depth learning. This is reflected by Jessica, who comments, “[The achievement gap was due to] Disengagement. I think that our First Nations Métis children are invisible.” This statement also reflects what Ladson-Billings (2014) coined “academic death” in which dehumanizing of the knowledge presented in class results in the disengagement and academic failure of culturally diverse students. Nonetheless, the participants were cognizant of the impact that linguistic and cultural diversity have on the achievement of their students. To counter these effects, the participants showed evidence of culturally responsive pedagogy in their decision-making and in their advocacy for individualized interventions.

Integration of Cultural Competence

According to Ladson-Billings (2014), cultural competence is applied when students are supported in maintaining their community and heritage through language and other cultural practices. Moreover, Paris (2012) argues for culturally sustaining pedagogy (CSP) as a means to support multilingualism and multiculturalism in order to perpetuate and foster linguistic, literate, and cultural pluralism as part of a democratic school. These beliefs are also maintained by the Rtl, Inspiring Success First Nations and Métis PreK-12 Education Policy Framework, as proposed by the Ministry of Education of Saskatchewan. The participants in this study reported a desire to implement changes towards CSP in both their staff and physical environments, as stated by Jessica, who says;

Chitpin, S., & Karoui, O.

I encourage my teachers to find out as much as we can about the children and where they are coming from and how best we can understand them.... I am trying to get our staff to understand and get to know our students and get to understand where they are coming from and to figure out what their barriers are before you can actually get through the academic piece of their education.

This focus is further echoed by Jacinda, who states:

Teachers] have to figure out how you are going to teach a model that makes sense to you that is going to take in all the needs of your students. The diversity of your students in their levels and also their culture and everything else that goes with it.

In addition, Obondo (2018) reports that, through CSP, both teachers and students acquire new relationships and new respect for peoples of diverse cultures from all around the world. This finding is reflected by Jacinda, who states;

We have children from 80 different world nations...our school beliefs are all around inclusivity. Our motto is "We believe, we achieve together." It isn't just something that we hang on the wall for fancy, but we said that we lived it every day with our teachers, with families and that builds overtime.... We now have all sorts of celebration throughout the year and contributions from people all over the world. It's about bridging, as well, because there is misconception and stereotypes among groups in our community.

McCarty et al. (2014) further refines the concept of CSP for leaders working with an Indigenous population. According to the authors, CSRP should be used to serve the needs of indigenous communities, as defined by those communities. However, some questions remain. Are the frameworks mandated? And how are the participants using them in their schools? For instance, McCarty et al. propose that staff should focus on integrating activities into the curriculum which reflect Indigenous values and teaching methods (McCarty et al., 2014). Moreover, Ladson-Billings (2014) warns against shallow implementation of CSP through the posting of diverse images or haphazard classroom celebration. Instead, CSP and CSRP should integrate cultural diversity into everyday pedagogical practices. Evidence of CSRP was found in this study. For example, Jessica shares how she encourages her staff to implement CSRP practices at the school. She says;

When I walked into the school last year, there was nothing on the walls, nothing I could visibly see that would tell me that First Nations was here or Métis children. So, I challenged the teachers to stand in their doorways and look through the eyes of First Nations and Métis. "Do you see yourself in this building? ...So, I challenge you to find what is interesting to your kids from First Nations/Métis."

Through this statement, Jessica is also portraying evidence of perspective-taking. According to Warren (2018), perspective-taking encourages teachers to react differently to diverse youth in ways that are consistent with culturally relevant pedagogy and facilitates favorable student outcomes. Furthermore, Thomas describes the ways in which he integrates indigenous values and practices into the school;

We are investing money in our library to have an Indigenous touch in there; we are setting up a teepee, getting artefacts, trying to bring some of that culture alive within our library.... We embedded this year, recognizing at every assembly every morning, an

Culturally Responsive Pedagogy

announcement that we are on Treaty 6 Land, the traditional homeland of the Métis, trying to make that relevant. We bring indigenous songs instead of *Oh Canada*.... The focus embedded into our assemblies for the past couple of years has also been the Seven Grandfather teachings.... We are going to start smudging this year to bring some of those cultural aspects into the school.

This statement also reflects the importance of integrating language and cultural practices in schools in an effort to sustain Indigenous knowledge systems, spirituality, cultural identity, and connections to land (Benally & Viri, 2005). Thus, both CSP and CSRP seem to be implemented in the leadership practices of the interviewed participants. Beyond these practices, educational leaders also showed evidence of using differentiation strategies as a means to meet the needs of their increasingly diverse student bodies.

Differentiation Strategies

Differentiation strategies require the use of varying pedagogical approaches to maximize the achievement of all students, regardless of their socioeconomic, cultural and academic backgrounds (Roe et al., 2010). As demonstrated by Berninger and Nagy (2008), individual students respond differently to a given instructional method and, thus, teachers should differentiate their practices in some way in order to meet the needs of all students. The participants in the study reported an array of differentiation strategies used to meet the needs of their students. For example, Derek explains;

We are dealing with individual learners...what we are trying to say is there must be two or three different opportunities to show that you've mastered an outcome. If you blew the outcome in the first half of the learning and you've mastered it now, do you still have to penalize that kid with what they didn't know back then?

Other leaders focus their differentiation practices to promote equity of learning. Equity, according to Valiandes (2015), should be viewed in a holistic manner in such a way that it promotes equity of results, access, treatment and opportunity. Furthermore, differentiation strategies have been shown to successfully promote equity through providing students with the opportunity to improve their achievement, regardless of socioeconomic status (Koutselini, 2008; Valiandes, 2015). This is reflected in Mathew's statement, who shares;

You know lots of things that are common around like economic needs; supporting student's primary needs, whether it's food, clothing. We support the family to make sure they have what they need. When kids are healthier at home, they do better at school and they take up more.

Moreover, the successful implementation of differentiation practices requires shaping the beliefs of teachers and encouraging continuous improvement of their teaching practice (Nicolae, 2014). However, accountability measures based on standardized achievement tests and traditional curricula can result in teachers becoming accustomed to tailoring their classroom workshops towards test preparation and, thus, they may become resistant to implementing culturally responsive teaching (Blaise, 2018; Obondo, 2018). Jessica explains how she is managing the change towards differentiation with her staff. She states;

[This is] the biggest challenge for me because I have people who, to be blunt, are resisting change and have their feet planted in concrete.... I have spent a lot of the year

Chitpin, S., & Karoui, O.

building relationships and, in the meantime, maintaining such high standards of saying. “No, you are doing it this way with students at the center.”

Finally, the educational leaders reported integrating notions of CSP into their differentiation strategies. Cultural competency includes being able to comprehend how different cultures approach learning and how individual students then interpret instruction and assessment (Del Rosario Bastera, 2011). This integration of cultural competence into differentiation strategies is explained by Mathew who says;

One of the things in intervention we try to do, as a whole, is figure out what is differentiation instruction and how we do it in the classroom because it is good for everybody within that. We know our First Nation, Inuit, Métis students there are certain kinds of differentiation that can be quite culturally responsive and so I feel this plays out in the classroom.... I would say every kid should be treated with equal consideration and I think they are all different; one size doesn't fit all, one thing that this is important is that everybody's cultural needs be valued.

Discussion & Conclusion

In Saskatchewan, achievement gaps persist between migrant and non-migrant students (OECD, 2018) and between FNMI students and non-FNMI students (Ministry of Education, 2013). While no mandatory standardized testing is required in Saskatchewan, this study revealed that educational leaders still rely on standardized assessment methods to evaluate their students' progress and the appropriateness of their own in-school evaluation methods. More specifically, leaders reported using CAT-4 and PISA assessments. However, some educational leaders within this study reported being displeased with the effectiveness of CAT-4 on assessing the competency of their EAL and FNMI students.

Multiple studies support the inefficacy of these types of testing in assessing students from cultural and sociolinguistically diverse backgrounds (Cole, 2006; Ghafournia et al., 2014; Saalback & Imai, 2007). In fact, as socio-cultural groups create meaning from experiences as determined by their culture, individuals are predisposed to respond to questions and solve problems in ways which are consistent with their own culture (Solano-Flores & Nelson-Barber, 2001). For instance, the multiple-choice format used in one section of the CAT-4 may be biased against students from certain cultures, as they force a single answer and hinder the reflection and respect for more than one perspective (Nelson-Barber & Trumbull, 2007).

One could extrapolate from this study's first finding and consider the impact sociolinguistic diversity may have within all educational contexts including higher education. For instance, one could consider the experience of international students attending the University of Regina in Saskatchewan which represent 14.2% of the student body (University of Regina, 2017). In their study, Ge et al. (2019) document the experience of Chinese international students attending the University of Regina and reveal that language barriers and social shock due to western behaviours and teaching methods were significant barriers towards the international students' academic success. In this way, even higher education institutions should reconsider their use of Eurocentric methods of testing and teaching in favour of including their student body's socio-cultural diversity in an effort to work towards establishing an equitable and inclusive learning environment.

To address the cultural and language impacts on traditional schooling methods, educational leaders within this study chose to adopt CSP and CSRP approaches into their leadership practices.

Culturally Responsive Pedagogy

CSP is an educational approach which requires pedagogies to be more responsive to the cultural experiences and practices of students in the aim of supporting them in sustaining their cultural and linguistic competence (Paris, 2012). CSRP, on the other hand, further specializes CSP in relation to FNMI students. CSRP aims at serving the needs of Indigenous communities through attending to asymmetrical power relations, recognizing the need to reclaim what has been displaced by colonization and incorporating respect, reciprocity, responsibility and relationships in pedagogical practices (McCarty et al., 2014). As outlined by this study, educational leaders first focused on implementing changes within their schools, which would reflect the cultural and sociolinguistic diversity of their student body. For instance, leaders chose to include culturally diverse and Indigenous texts in libraries and classroom content, as well as Indigenous songs during school assemblies. The educational leaders in this study also facilitated cultural tolerance and respect by inviting teachers to partake in perspective taking and encouraging families, students and staff to participate in school assemblies celebrating various cultural events.

Once again, one can consider how the implementation of CSP and CSRP could be done within the broader educational context. For instance, universities in Australia have been working towards embedding Indigenous culture and competencies into their programs to ensure that all students engage with indigenous materials within each of their courses in an effort to sustain Australian Indigenous values and knowledge (Bodkin-Andrews et al., 2019). Furthermore, Alfred (2009) demonstrates that CSP, within the context of higher education, can be used to incorporate the culture and history of individual learners in order to create a space in which both immigrant and native students can freely participate in the learning discourse. As such, CSP and CSRP practices are beneficial to students and the community across all levels of education especially when considering the vast diversity of students within Canadian schools.

Finally, the leaders in this study made use of individualized differentiation strategies to promote equity and social justice within their schools. Many studies have revealed the effectiveness of differentiated instruction and interventions in closing achievement gaps (Chamberlin & Powers, 2010; Muthomi & Mbugua, 2014). The leaders in this study implemented differentiation by first addressing the specific needs of their students, ranging from basic necessities such as food and clothing to more complex interventions aimed at ensuring a sense of belongingness in their FNMI and EAL immigrant students. The leaders also demonstrated attributes of social justice leadership in their efforts to build a school vision around social justice and equity. Together, the practices implemented by the leaders in this study highlight findings by Willie (2006) who states that the goal of education is to foster excellence through equity in all students.

Acknowledgement

The author would like to thank **Paul Newton** of the University of Saskatchewan for collecting the data for this article. Additionally, the author would like to acknowledge that this research was made possible through a Social Sciences and Humanities Research Council of Canada Insight grant entitled principals' decision making in Canada and the UK.

References

- Abercrombie, N., Hill, S., & Turner, B. S. (1990). *Dominant Ideologies*. London: Unwin Hyman.
- Adams, M. & Zuniga, X. (2016). Getting started: Core concepts for social justice education. In M. Adams, & L. A. Bell, (Eds.) *Teaching for Diversity and Social Justice* (pp. 143-184). New York, NY: Routledge. <https://doi.org/10.4324/9781315775852>
- Alfred, M. V. (2009). Nonwestern immigrants in continuing higher education: A sociocultural approach to culturally responsive pedagogy. *The Journal of Continuing Higher Education*, 57(3), 137–148. <https://doi.org/10.1080/07377360903262168>
- Anderson, S. E. (2006). The school district's role in educational change. *International Journal of Educational Reform*, 15(1), 13-37. <https://doi.org/10.1177/105678790601500102>
- Apple, M. W. (2011). Democratic education in neoliberal and neoconservative times. *International Studies in Sociology of Education*, 21(1), 21-31. <https://doi.org/10.1080/09620214.2011.543850>
- Au, W. W. (2008). Devising inequality: A Bernsteinian analysis of high-stakes testing and social reproduction in education. *British Journal of Sociology of Education*, 29(6), 639-651. <https://doi.org/10.1080/01425690802423312>
- Awad, I. (2011). Critical multiculturalism and deliberative democracy: Opening spaces for more inclusive communication. *Javnost: The Public*, 18(3), 39-54. <https://doi.org/10.1080/13183222.2011.11009061>
- Benally, A., & Viri, D. (2005). Diné Bizaad [Navajo language] at a crossroads: Extinction or renewal? *Bilingual Research Journal*, 29(1), 85-108. <https://doi.org/10.1080/15235882.2005.10162825>
- Berninger, V. W. & Nagy, W. E. (2008). Flexibility in word reading: Multiple levels of representations, complex mappings, partial similarities, and cross-modality connections. In K. B. Cartwright (Ed.) *Literacy Processes: Cognitive Flexibility in Learning and Teaching* (pp. 114-141). New York, NY: The Guilford Press.
- Bilgili, O., Huddleston, T., & Joki, A. L. (2015). The Dynamics between Integration Policies and Outcomes: A Synthesis of the Literature. Available online at https://www.mipex.eu/sites/default/files/downloads/files/mipex_literature-review_the-dynamics-between-integration-policies-and-outcomes.pdf
- Blaise, J. G. (2018). The effects of high-stakes accountability measures on students with limited English proficiency. *Urban Education*, 53(9), 1154-1181. <https://doi.org/10.1177/0042085915613549>
- Bodkin-Andrews, G., Page, S., & Trudgett, M. (2019). Working towards accountability in embedding Indigenous studies: Evidence from an indigenous graduate attribute evaluation instrument. *Australian Journal of Education*, 63(2), 232–260. <https://doi.org/10.1177/0004944119863927>
- Brown, A. (2013). Multicompetence and second language assessment. *Language Assessment Quarterly*, 10(2), 219-235. <https://doi.org/10.1080/15434303.2013.769551>
- Canadian E-Learning Network (2019). State of the nation: K-12 E-learning in Canada. Available online at <https://k12sotn.ca/sk/>
- Canadian Test Centre (2008). Raising the bar on Canadian assessment. Available online at <https://www.canadiantestcentre.com/CAT4/CAT4-About.php>

Culturally Responsive Pedagogy

- Chamberlin, M., & Powers, R. (2010). The promise of differentiated instruction for enhancing the mathematical understandings of college students. *Teaching Mathematics & its Applications*, 29(3), 113-139. <https://doi.org/10.1093/teamat/hrq006>
- Cole, M. (2006). Culture and cognitive development in phylogenetic, historical, and ontogenetic perspective. In D. Kuhn, R. S. Siegler, W. Damon, & R. M. Lerner (Eds.), *Handbook of Child Psychology: Cognition, Perception, and Language* (p. 636-683). New Jersey: John Wiley & Sons Inc.
- Cole, M. (2010). What's culture got to do with it? Educational research as a necessarily interdisciplinary enterprise. *Educational Researcher*, 39(6), 461-470. <https://doi.org/10.3102/0013189X10380247>
- Cummins, J. (2005). A proposal for action: Strategies for recognizing heritage language competence as a learning resource within the mainstream classroom. *The Modern Language Journal*, 89(4), 585-592. <http://www.jstor.org/stable/3588628>
- Darling-Hammond, L. (2010). *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*. New York, NY: Teachers College Press.
- De Angelis, G. (2014). A multilingual approach to analysing standardized test results: Immigrant primary school children and the role of languages spoken in a bi-/multilingual community. *Intercultural Education*, 25(1), 14-28. <https://doi.org/10.1080/14675986.2014.883167>
- del Rosario Basterra, M. (2011). Cognition, culture, language, and assessment: How to select culturally valid assessments in the classrooms. In M. del Rosario Basterra, E. Trumbull, & G. Solano-Flores (Eds.) *Cultural Validity in Assessment: Addressing Linguistic and Cultural Diversity* (pp. 72-95). New York, NY: Routledge.
- Gandara, P., & Rumberger, R. W. (2008). Defining an adequate education for English learners. *Education Finance and Policy*, 3(1), 130-148. <https://www.jstor.org/stable/educfinapoli.3.1.130>
- García, O., & Bartlett, L. (2007). A speech community model of bilingual education: Educating Latino newcomers in the USA. *International Journal of Bilingual Education and Bilingualism*, 10(1), 1-25. <https://doi.org/10.2167/beb364.0>
- Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry*, 43(1), 48-70. <https://doi.org/10.1111/curi.12002>
- Ge, L., Brown, D., & Durst, D. (2019). Chinese international students' experiences in a Canadian university: Ethnographic inquiry with gender comparison. *Journal of International Students*, 9(2), 582-612. <https://doi.org/10.32674/jis.v0i0.272>
- Ghafournia, N., & Afghari, A. (2014). The interaction among using test-taking strategies, level of language proficiency, and test performance. *Research in English Language Pedagogy*, 2(1), 83-94. http://relp.khuisf.ac.ir/article_533609_256cc03fdb97cfd289479009445e7b0e.pdf
- Greenfield, P. M. (2000). Culture and universals: Integrating social and cognitive development. In L. P. Nucci, G. B. Saxe, & E. Turiel (Eds.), *Culture, Thought and Development* (pp. 231-278). New York: Lawrence Erlbaum Associates.
- Huddleston, T., Bilgili, O., Joki, A. L., & Vankova, Z. (2015). Migrant Integration Policy Index 2015. Available online at <http://mipex.eu/sites/default/files/downloads/files/mipex-2015-book-a5.pdf>
- James, C. E. (2017). The schooling of marginalized students in urban Canada: Programs, curricula, and pedagogies. In C. Reid, & J. Major (Eds.), *Global Teaching* (pp. 35-57). New York: Palgrave Macmillan.

Chitpin, S., & Karoui, O.

- Johnson, D. D., & Johnson, B. (2006). *High Stakes: Poverty, Testing, and Failure in American Schools*. USA: Rowman & Littlefield Publishers, Inc.
- Johnston, A., & Claypool, T. (2010). Incorporating a multi-method assessment model in schools that serve First Nations, Inuit, and Métis learners. *Native Studies Review*, 19(2), 121-138.
- Kaur, B. (2012). Equity and social justice in teaching and teacher education. *Teaching and Teacher Education*, 28(4), 485-492. <https://doi.org/10.1016/j.tate.2012.01.012>
- Kearns, L. L. (2016). The construction of 'illiterate' and 'literate' youth: The effects of high-stakes standardized literacy testing. *Race Ethnicity and Education*, 19(1), 121-140. <https://doi.org/10.1080/13613324.2013.843520>
- Kemp-Koo, D., & Claypool, T. (2011). Response to intervention (RTI) in the province of Saskatchewan. *Communiqué*, 39(6), 4-6. <https://www.nasponline.org/publications/periodicals/communiqué/issues/volume-39-issue-6>
- Koutselini, M. (2008). Listening to students' voices for teaching in mixed ability classrooms: Presuppositions and considerations for differentiated instruction. *Learning and Teaching*, 1(1), 17-30. <https://gnosis.library.ucy.ac.cy/handle/7/38165>
- Koutselini, M., & Agathangelou, S. (2009). Human rights and equity in teaching. In A. Ross (Ed.) *Human rights and citizenship education*: London: CiCe, 237-243. Available online at <https://ucy.ac.cy/release/documents/Publications/English/HumanRightsAndEquityinTeaching.pdf>
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a the remix. *Harvard Educational Review*, 84(1), 74-84. <https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- Landrum, T. J., & McDuffie, K. A. (2010). Learning styles in the age of differentiated instruction. *Exceptionality*, 18(1), 6-17. <https://doi.org/10.1080/09362830903462441>
- Lee, C. D. (2007). *Culture, Literacy and Learning: Taking Bloom in the Midst of the Whirlwind*. New York, NY: Teachers College Press.
- Lengyel, D. (2010). Language Diagnostics in Multilingual Settings with Respect to Continuous Procedures as Accompaniment of Individualized Learning and Teaching. *The Linguistic and Educational Integration of Children and Adolescent from Immigrant Backgrounds*. Strasbourg: Council of Europe. <https://rm.coe.int/16805a1cac>
- Lesko, N. (2001). *Act Your Age: A Cultural Construction of Adolescence*. New York, NY: Routledge/Falmer.
- Maloney, T., Hayes, N., Crawford-Garrett, K., & Sassi, K. (2019). Preparing and supporting teachers for equity and racial justice: Creating culturally relevant, collective, intergenerational, co-created spaces. *Review of Education, Pedagogy, and Cultural Studies*, 41(4-5), 252-281. <https://doi.org/10.1080/10714413.2019.1688558>
- May, S. (2011). The disciplinary constraints of SLA and TESOL: Additive bilingualism and second language acquisition, teaching and learning. *Linguistics & Education*, 22(3), 233-247. <https://doi.org/10.1016/j.linged.2011.02.001>
- McCarty, T. L. (2009). The impact of high-stakes accountability policies on Native American learners: Evidence from research. *Teaching Education*, 20(1), 7-29. <https://doi.org/10.1080/10476210802681600>
- McCarty, T. L., & Lee, T. S. (2014). Critical culturally sustaining/revitalizing pedagogy and Indigenous education sovereignty. *Harvard Educational Review*, 84(1), 101-124. <https://psycnet.apa.org/doi/10.17763/haer.84.1.q83746nl5pj34216>

Culturally Responsive Pedagogy

- McEwan, P. J., & Trowbridge, M. (2007). The achievement of Indigenous students in Guatemalan primary schools. *International Journal of Educational Development*, 27(1), 61-76.
<https://doi.org/10.1016/j.ijedudev.2006.05.004>
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.
- Merriam, S. B., & Simpson, E. L. (2000). *A Guide to Research for Educators and Trainers of Adults*. USA: Krieger Publishing Company.
- Ministry of Education (2013). Frequently Asked Questions: Procedural Guidelines for English as an Additional Language. Available online at
<https://publications.saskatchewan.ca/api/v1/products/74104/formats/82985/download>
- Ministry of Education (2018). Inspiring Success: First Nations and Métis PreK-12 Education Policy Framework. Available online at
<https://publications.saskatchewan.ca/api/v1/products/90278/formats/107115/download>
- Muthomi, M. W., & Mbugua, Z. K. (2014). Effectiveness of differentiated instruction on secondary school students' achievement in mathematics. *International Journal of Applied Science and Technology*, 4(1), 116-122. <http://karospace.karu.ac.ke/handle/20.500.12092/1684>
- Nelson-Barber, S., & Trumbull, E. (2007). Making assessment practices valid for Indigenous American students. *Journal of American Indian Education* 46(3), 132-147.
<https://www.jstor.org/stable/24398547>
- Nelson-Barber, S., Huang, C., Trumbull, E., Johnson, Z., & Sexton, U. (2008). Elicitory test design: A novel approach to understanding the relationship between test items features and student performance on large-scale assessments. Paper presented at the annual meeting of the American Educational Research Association, New York, NY, March.
- Nicolae, M. (2014). Teachers' beliefs as the differentiated instruction starting point: Research basis. *Procedia - Social and Behavioral Sciences*, 128, 426-431.
<https://doi.org/10.1016/j.sbspro.2014.03.182>
- O'Grady, K., Deussing, M. A., Scerbina, T., Tao, Y., Fung, K., Elez, V., & Monk, J. (2019). Measuring up: Canadian Results of the OECD PISA 2018 Study: The Performance of Canadian 15-Year-Olds in Reading, Mathematics, and Science. Canada: Council of Ministers of Education. Available online at
https://www.cmec.ca/Publications/Lists/Publications/Attachments/396/PISA2018_PublicReport_EN.pdf
- Obondo, M. A. (2018). Teachers of newcomer immigrants in provincial schools in Sweden: A quest for culturally responsive teaching in the era of homogenization. *Diaspora, Indigenous, and Minority Education*, 12(3), 111-123. <https://doi.org/10.1080/15595692.2017.1414794>
- OECD (2019). What is PISA? Available online at <https://www.oecd.org/pisa/>
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93-97.
<https://doi.org/10.3102/0013189X12441244>
- Paris, D., & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, 84(1), 85-100.
<https://psycnet.apa.org/doi/10.17763/haer.84.1.982l873k2ht16m77>
- Rhodes, R. L., Ochoa, S. H., & Ortiz, S. O. (2005). *Assessing Culturally and Linguistically Diverse Students: A Practical Guide*. New York, NY: The Guildford Press.

Chitpin, S., & Karoui, O.

- Richards, J. G., Vining, A. R., & Weimer, D. L. (2010). Aboriginal performance on standardized tests: Evidence and analysis from provincial schools in British Columbia. *Policy Studies Journal*, 38(1), 47-67. <https://doi.org/10.1111/j.1541-0072.2009.00344.x>
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458. <https://doi.org/10.1111/j.1468-0262.2005.00584.x>
- Roe, M. F., & Egbert, J. (2010). Four faces of differentiation: Their attributes and potential. *Childhood Education*, 87(2), 94-97. <https://doi.org/10.1080/00094056.2011.10521452>
- Ryan, T. G., & Whitman, A. (2012). The inequity and effect of standardized literacy testing for First Nations students – An Ontario (Canadian) outlook. *Journal of Educational Thought*, 46(2), 163-181. <https://doi.org/10.11575/jet.v46i2.52206>
- Saalbach, H., & Imai, M. (2007). Scope of linguistic influence: Does a classifier system alter object concepts? *Journal of Experimental Psychology: General*, 136(3), 485-501. <https://doi.apa.org/doi/10.1037/0096-3445.136.3.485>
- Saskatchewan (2020). *K-12 school divisions in Saskatchewan*. Available online at <https://www.saskatchewan.ca/residents/education-and-learning/prek-12-education-early-learning-and-schools/k-12-school-divisions-in-saskatchewan>
- Saskatchewan Teachers' Federation (2013). Response to intervention (RTI): Resources to meet your needs. Available online at https://www.stf.sk.ca/sites/default/files/bibliography/bibliography_rti.pdf
- Sefa Dei, G. J., & McDermott, M. (2014). Introduction to the politics of anti-racism education: In search of strategies for transformative learning. In G. J. Sefa Dei, & M. McDermott (Eds.), *Politics of Anti-Racism Education: In Search of Strategies for Transformative Learning* (pp. 1-11). Netherlands: Springer.
- Shaeffer, S. (2019). Inclusive education: A prerequisite for equity and social justice. *Asia Pacific Education Review*, 20(2), 181-192. <https://doi.org/10.1007/s12564-019-09598-w>
- Solano-Flores, G., & Nelson-Barber, S. (2001). On the cultural validity of science assessments. *Journal of Research in Science Teaching*, 38(5), 553-573. <https://doi.org/10.1002/tea.1018>
- University of Regina. (2017). Statistics. Available online at <https://www.uregina.ca/orp/assets/statistics/fact-brochures/campus-facts-fall-winter-2017.pdf>
- Valiandes, S. (2015). Evaluating the impact of differentiated instruction on literacy and reading in mixed ability classrooms: Quality and equity dimensions of education effectiveness. *Studies in Educational Evaluation*, 45, 17-26. <https://doi.org/10.1016/j.stueduc.2015.02.005>
- Valiandes, S., & Koutselini, M. (2009). Application and evaluation of differentiation instruction in mixed ability classrooms. Paper presented at the 4th Hellenic Observatory PhD Symposium, 25-26 June 2009. <https://www.ucy.ac.cy/release/documents/Publications/English/DifferentiationInstructionInMixedAbilityClassrooms.pdf>
- Vandenberghe, C. N., & Gierl, M. J. (2001). Differential bundle functioning on three achievement tests: A comparison of aboriginal and non-aboriginal examinees. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), 10-14 April 2001. <http://files.eric.ed.gov/fulltext/ED452271.pdf>
- Volante, L., Klinger, D., Bilgili, O., & Siegel, M. (2017). Making sense of the performance (dis)advantage for immigrant students across Canada. *Canadian Journal of*

Culturally Responsive Pedagogy

- Education/Revue Canadienne De l'éducation*, 40(3), 329-361.
<https://journals.sfu.ca/cje/index.php/cje-rce/article/view/2557>
- Warren, C. A. (2018). Empathy, teacher dispositions, and preparation for culturally responsive pedagogy. *Journal of Teacher Education*, 69(2), 169-183.
<https://doi.org/10.1177/0022487117712487>
- Willie, C. V. (2006). The real crisis in education: Failing to link excellence and equity. *Voices in Urban Education*, 10, 11-19.
<http://vue.annenberginstitute.org/sites/default/files/issues/VUE10.pdf>
- Wyman, L. T., McCarty, T. L., & Nicholas, S. E. (Eds.) (2014). *Indigenous Youth and Multilingualism: Language Identity, Ideology, and Practice in Dynamic Cultural Worlds*. New York, NY: Routledge.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89-99. <https://doi.org/10.1177/0022487109347671>

Dr. Stephanie Chitpin is a Professor of Leadership at the Faculty of Education, University of Ottawa, Canada. Dr. Chitpin's principal contribution to leadership and to the professional development of principals rests on her rejection of the inductive method. She argues that knowledge is acquired by hypotheses deductively validated as "falsifiability criteria". Her research funded by The Social Sciences Humanities Research Council of Canada (SSHRC) and The Ontario Ministry of Education, Canada, are international in scope, and includes the analysis of the Objective Knowledge Growth Framework (OKGF) based on Sir Karl Popper's critical rationalism, as a new tool for understanding principals' decision-making. Dr. Chitpin's works include *Decision Making in Educational Leadership: Principles, Policies, and Practices (2015)*, *Popper's Approach to Education: A Cornerstone of Teaching and Learning (2016)*, *Confronting Educational Policy in Neoliberal Times: International Perspectives (2019)*, *Understanding Decision-Making in Educational Contexts: A Case Study Approach (2021)*. She is also the Series Editor of *Transformation Education Through Critical Leadership, Policy and Practice* published by Emerald Insight Publishing: <https://books.emeraldinsight.com/page/series-detail/transforming-education-through-critical-leadership-policy-and-practice/?K=e202010071341434789>

Ms. Olfa Karoui is a Ph.D. student at the University of Ottawa, Canada. She holds a B.Sc. in Biomedical Sciences, a B.Sc. in Psychology, and a M.A. in Education in Leadership, Evaluation, Curriculum, and Policy Studies. She is also the Co-Director of the Equitable Leadership Network within the Faculties of Education and Medicine at the University of Ottawa. Her research interests are centered around educational leadership and decision-making.



This is an open access article distributed under the terms of the [Creative Commons Attribution-NonCommercial 4.0 International](https://creativecommons.org/licenses/by-nc/4.0/) (CC BY-NC 4.0) which allows reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator.