International Journal of
Education Policy & Leadership

www.ijepl-online

Volume 14 (1-10) 2019

Special Issue: Education Research in the Canadian Context

IJEPL

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(1-10)
2019

IJEPL 14(1-10)

IJEPL is a joint publication of **PDK International**, the Faculty of Education at **Simon Fraser University** and the College of Education and Human Development at **George Mason University**.

Cover

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International Journal of
Education Policy & Leadership

IJEPL
Volume 14(10)
2019

Editorial
Special Issue: Research in the Canadian Context

This special issue of the *International Journal of Education Policy & Leadership* (*IJEPL*), Research in the Canadian Context, marks a significant milestone for the journal. Throughout our twelve-year history, we have sought to publish the best research in leadership, policy, and research use, allowing authors to decide the topics by dint of their research. While this model still serves as the foundation for *IJEPL* content, we decided to give researchers a chance to engage in deeper conversations by introducing special issues. In our first special issue, researchers discuss their work within the scope of education policy, leadership, and research use within the Canadian context.

While many aspects of leadership, teaching, and learning can be seen as similar across contexts, there are also issues of particular concern within national, regional, provincial, or local spheres, particularly when looking at policy and system changes. The researchers featured in this issue provide an important look into education in Canada.

Policy

In the policy realm, Sue Winton and Lauren Jervis examine a 22-year campaign to change special education assessment policy in Ontario, examining how discourses dominant in the province enabled the government to leave the issue unresolved for decades. Issues of access and equity play out within a neoliberal context focused on individualism, meritocracy, and the reduced funding of public services. While Winton and Jervis highlight the tension between policy goals and ideological contexts, Jean-Vianney Auclair considers the place of policy dialogues within governmental frames, and the challenge of engaging in broadly applicable work within vertically structured governmental agencies. One often-touted way to move beyond

Daniel Laitsch (2019). Editorial. Special Issue: Research in the Canadian Context. *Journal of Education Policy & Leadership 14*(10). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/887 doi: 10.22230/ijepl.2019v14n10a887

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such ideological or hierarchical silos is to focus on research-based models and systems. Brenton Cyriel Faubert, Anh Thi Hoai Le, Donna Swapp, Kaitlyn Watson, and Georges Wakim report on their work exploring the adaptation of an Evidence-Based Adequacy Model for use in Ontario, with the goal of informing leaders and the public to depoliticize decision-making. Finally, Theresa Gemma Shanahan explores another aspect of the policy realm in her examination of the legal framework in which Canadian university boards operate, and the tensions that exist between fiduciary responsibility and collegial governance.

Research use

Within the scope of research use, Sarah L. Patten examines how socioeconomic status (SES) is defined and measured in Canada, the challenges in defining SES, and potential solutions specific to the Canadian context. In looking at knowledge mobilization, Joelle Rodway considers how formal coaches and informal social networks serve to connect research, policy, and practice in Ontario's Child and Youth Mental Health program.

Leadership

Turning to leadership, contributing researchers explored the challenges involved in staff development, administrator preparation, and student outcomes. Keith Walker and Benjamin Kutsyuruba explore how educational administrators can support early career teachers to increase retention, and the somewhat haphazard policies and supports in place across Canada to bring administrators and new teachers together. Gregory Rodney MacKinnon, David Young, Sophie Paish, and Sue LeBel look at how one program in Nova Scotia conceptualizes professional growth, instructional leadership, and administrative effectiveness and the emerging needs of administrators to respond to issues of poverty, socioemotional health, and mental health, while also building community. This complex environment may mean expanding leadership preparation to include a broader consideration of well-being and community. Finally, Victoria Handford and Kenneth Leithwood look at the role school leaders play in improving student achievement in British Columbia, and the school district characteristics associated with improving student achievement.

Taken together, the research in this special issue touches on many of the challenges in policy development, application, and leadership practice, and the myriad ways that research can be used to address these challenges. We hope you enjoy this first special issue of *IJEPL*!

Dan Laitsch, Editor, International Journal of Education Policy & Leadership

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(1)
2019

Preparing Instructional Leaders: Evaluating a Regional Program to Gauge Perceived Effectiveness

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Abstract An instructional leadership program (ILP) has offered education and support to three cohorts of educational leaders in Nova Scotia, Canada, amounting to approximately 130 participants. Quantitative and qualitative feedback from a convenience sample (n = 90) suggests that the ILP offers an extremely useful practical program; in fact, 95 percent of the sample indicates advances in the categories of professional growth, improved instructional leadership, and tangible progress in administrative effectiveness. Systemic and school environment trends have dictated that educational leaders need a skill set that positions them to respond more aptly to issues of poverty, socioemotional health, and mental health while attending to improved community building both within the school and in the greater public. This study uses surveys, interviews, and focus groups to identify emerging and impending challenges.

Keywords Instructional leadership; Program review; Professional development

Gregory Rodney MacKinnon, David Young, Sophie Paish, & Sue LeBel (2019). Preparing Instructional Leaders: Evaluating a Regional Program to Gauge Perceived Effectiveness. *International Journal of Education Policy & Leadership 14*(1). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/866. doi: 10.22230/ijepl.2019v14n1a866

Introduction

With the challenges facing modern schools (Van de Werfhorst, 2014) and the changing dynamic of the student population (Allen & Jackson, 2017; Dede, 2005, 2007), it has become increasingly important to prepare effective leaders for the public school system. While school leadership may have been identified in the past as "managing" the workings of a school, an administrative role, it may be argued, has never been more important for principals to provide instructional leadership that allows faculty to adequately respond to the pedagogical aims of school development plans. This article attempts to deconstruct the qualities and weaknesses of a particular instructional leadership program in eastern Canada. The study contributes to the literature by illuminating the tension between programs that emphasize leadership strategies and those that might consider more carefully the affective domain of relationship building in the school community. The tenets of this particular leadership program have been described in order to nest the work in the literature concerning best practices. It remains, in the ensuing discussion, to undertake a cursory consideration of what has already been studied in this professional development category in order to situate this regional work in the context of prior understandings.

Given that the role of the principal is constantly being revisited and is inherently linked to the school's community, the notion of the principal solely as instructional leader may seem narrow according to some standards (Day, Gu, & Sammons, 2016; Mombourquette, 2017). Ellen Reames (2010) suggests that any principal training should also align with "leadership based on school improvement and student achievement and creating schools as socially just, democratic learning communities" (p. 436). One might posit that a leadership curriculum in itself is insufficient to instantly transform a would-be leader. In fact, research has established (Liang & Augustine-Shaw, 2016) that the coaching of principals in authentic contexts during a program is often most valuable in providing an induction period as they enter the administrative profession. An induction period in an educational setting (e.g., beginning teachers) is not a new idea but, unfortunately, instructional leadership programs do not always have the human resources to track and assist new administrators (Fullan, 2002). Furthermore, many administrators exist in a very complicated reactive job environment that leaves little room for professional development in a traditional setting. Gina Ikemoto (2007) asserts that "principals' sense making is inhibited by such district conditions as limited time and resources …" (p. 3). Considering the sometimes-chaotic context of principals' work, alternate delivery modes of instructional leadership programs have been explored (Gurley & Mendiola, 2016), with mixed indicators of success.

While leadership programs are prevalent in the literature, most professional development of this description lacks in post-program support. An important outcome of a representative report (Patterson, Jiang, Chandler, & Chan, 2012) offered the following comment: "We acknowledge the need to provide continuous professional support to our program graduates to ensure their success particularly in their early years as beginning school administrators" (p. 51).

Linda Darling-Hammond, Michelle LaPointe, Debra Meyerson, Margaret Orr, and Carol Cohen (2007) undertook arguably the most comprehensive study of instructional leadership programs. It examined "eight exemplary pre- and in-service

program models designed to address key issues in developing strong leaders" (p. 7). The analysis suggests that it is not only possible to create responsive, relevant, practical, and high-quality pre-service and in-service programs but, moreover, that these programs share common features (Darling-Hammond et al., 2007). In the realm of pre-service programs, the following features were noted:

- A comprehensive and coherent curriculum aligned to state and professional standards;
- A program philosophy and curriculum that emphasize leadership of instruction and school improvement;
- Active, student-centered instruction employing pedagogies that facilitate the integration of theory and practice and stimulate reflection, such as problem based learning; action research; field-based projects; journal writing; and portfolios that feature substantial use of feedback and ongoing self, peer, and faculty assessment;
- Faculty who are knowledgeable in their subject area, including practitioners who have had experience in school administration;
- Social and professional support in the form of a cohort structure as well as formalized mentoring and advising from expert principals;
- Vigorous, carefully targeted recruitment and selection processes that proactively bring expert teachers with potential for leadership into the principalship; and
- Well-designed and supervised administrative internships that provide opportunities for candidates to engage in leadership responsibilities for substantial periods of time under the tutelage of expert veterans. (quoted verbatim, p. 145)

Within the exemplary in-service programs, Darling-Hammond et al. (2007) concluded that "In addition to offering extensive, high-quality learning opportunities focused on curriculum and instruction, the programs typically offered supports in the form of mentoring, participation in principals' networks and study groups, collegial school visits, and peer coaching" (p. 146). Further, these programs had the following shared characteristics:

- A learning continuum operating systematically from pre-service preparation through induction and throughout the career, involving mature and retired principals in mentoring others;
- Leadership learning grounded in practice, including analyses of classroom practice, supervision, and professional development using on-the-job observations connected readings and discussions and organized around a model of leadership; and
- Collegial learning networks, such as principals' networks, study groups, and mentoring or peer coaching, that offer communities of practice and sources of ongoing support for problem solving. (quoted verbatim, p. 146)

These findings serve as a foundation for the range of program outcomes that might be expected in a well-designed professional development effort directed toward instructional leadership in schools.

Context

This study is a mixed-methods analysis of an instructional leadership program (ILP) offered in Nova Scotia, Canada:

> The Nova Scotia Instructional Leadership Academy (NSILA) Program is offered by the Nova Scotia Department of Education and Early Childhood Development in partnership with the Nova Scotia Educational Leadership Consortium. The goal of the Academy's program is to improve the capacity for school-based instructional leadership, aimed at increasing student learning and achievement in Nova Scotia public schools. The NSILA program extends over three years and leads to a Diploma in Instructional Leadership. The diploma is granted by the Department of Education and Early Childhood Development. It signifies that holders of the Diploma in Instructional Leadership have achieved and demonstrated competency in instructional leadership. Under the Education Act Regulations, the Instructional Leadership Program is a means for a teacher to upgrade his/her teacher certificate level. (NSILAa, 2018)

The core content of the Nova Scotia Instructional Leadership Academy's (NSILA) ILP focuses on increasing knowledge, skills, and competencies around the seven standards of excellence in instructional leadership (see Table 1).

Table 1. Instructional leadership standards*

Standard	Description
1. Vision for instruction	The instructional leader facilitates the development, implementation, and stewardship of a shared vision for instruction that supports learning for all.
2. Leading and managing change	The instructional leader identifies and articulates the urgency for instructional improvement and is knowledgeable and strategic about change management and systems thinking.
3. Collaborative learning culture	The instructional leader builds a school culture that is characterized by caring, trust, and respectful relationships that motivates teachers to engage in collaborative inquiry for instructional improvement.
4. Professional learning	The instructional leader facilitates high-quality and job-embedded learning for teachers based on research, best practices, and teacher development needs.
5. High quality instruction	The instructional leader is knowledgeable about and deeply involved in the effective implementation of curriculum, instruction, and assessment.
6. Understanding and using data to improve instruction	The instructional leader uses data to ensure a consistent and continuous school-wide focus on improving instruction and student achievement.
7. Positive learning environment	The instructional leader promotes the success of every student by ensuring that staff acts with integrity, fairness, and in an ethical manner to create and sustain an inclusive and equitable school learning environment.

*(NSILAb, 2018) Note: The three-year course schedule, including the six modules that respond to these standards, is listed in Appendix A.

Research aims

In an effort to understand the impact of ILP on the practice of educational leaders, the NSILA approached an independent group to sample feedback from participants in the first three years (cohorts) of the program. It is important to note the ILP is now engaging its seventh cohort and, as such, is in a continuous and systematic self-review of program strengths and concomitant improvements.

In an action research mode (Beaulieu, 2013; Sagor & Williams, 2017), the research team chose to access both quantitative and qualitative indicators to access feedback on the tangible impacts of the program on professional practice, as well as perceived strengths and weaknesses of the current program. This cycle, based on Valsa Koshy's (2005) notion of plan-act-observe–reflect, is best represented in Figure 1 (Interactive Design Foundation, 2016).

Figure 1. An action research cycle

A longitudinal study of the impact on a wider range of stakeholders (and in particular the long-term influence on student achievement data) may be implied, but that was beyond the scope of this introductory work. Rather, this study focuses solely on the impressions of the ILP participants with regard to the perceived professional impact on their practice in the schools that they led at the time of the study.

In all programs, there are intentional goals that shape both the content and delivery. As an extension to the primary research questions, this research also sought to access the general educational literature and pose possible content for future program offerings. In this research context, it is important to note that in accessing both the impacts and the qualities of the program, researchers also prompted participants to consider program components that were not necessarily intended in the initial design. The nature of this particular participant feedback is forward-looking rather than inherently evaluative and may offer some direction to the curriculum design team.

Methods

The research employed a mixed-methods approach. An introductory survey of the sample was undertaken to identify trends, whereas interviews and focus groups

served to deconstruct the rationale behind the observed survey results. The surveys in themselves were not deemed sufficient to understand the complexities of curriculum designers' intentions or participants' experiences and perceptions. Further, it was not the intent to use surveys to establish statistical significance but rather to drive the qualitative investigation. After the empirical materials were analyzed, it was decided that a further survey would be useful in categorizing specific areas of growth. The details of this additional survey are outlined below.

Characteristics of the initial survey sample

The study was initiated by survey sampling the impressions of leaders in the ILP program spanning three cohort groups. The total participant number included 130 leaders from the region A survey was developed to probe the following: 1) leadership demographics; 2) program impact features; 3) the quality of component courses; 4) attention to leadership standards; 5) attention to the furthering of the public school program; and 5) the encouragement of professional reflection. It was administered to the sample (n = 130) with 90 leaders responding (21% cohort one, 43% cohort two, and 36% cohort three). The 90-leader sample was characterized in several ways. The sample declared itself as 58.9 percent female and 41.1 percent male, with 42 percent residing in elementary schools only and 11 percent residing in high schools only (the remainder of the group was spread across mixtures of experiences as administrators). In terms of ancestry, 81 percent declared European descent, eight percent Acadian, three percent Indigenous North American, and two percent African. Of those surveyed, 51.1 percent reported that they had taught for more than 15 years. In the same sample, 24.4 percent suggested that they had been teaching for six to ten years. This was indicative of a good to excellent measure of pedagogical experience in the group as they undertook a study of leadership.

In terms of administrative experience, 38.3 percent reported seven to ten years, while 43.3 percent suggested they had spent more than 11 years at an administrative post. With regard to participation in the ILP, as reported above, 21 percent were from cohort one, 43 percent from cohort two, and 36 percent from cohort three.

Interviews and focus groups

Based on the trends identified in the surveys (Patton, 2002), a standardized open-ended interview schedule was developed (see Appendix B) to ascertain the reason why participants responded the way they did in the surveys. The interview questions were piloted with three education faculty members and a research assistant to remove any ambiguity in the language and validity of purpose. Based on informed consent and appropriate ethics approval, audio recordings were made of the approximately one-hour interviews conducted with 12 ILP participants who were secured by invitation: a convenience sample from across the region. Two independent analysts coded the transcribed interviews for themes (Huberman & Miles, 2002) to enhance inter-rater reliability. In an iterative process that invoked open coding, axial coding, theory memos, and selective coding, the researchers discussed and compared their themes, formalized the code relationships through notes, and collapsed similar trends, all the while adding more inclusive categories as necessary (Strauss & Corbin, 1998).

In order to corroborate or refute the views of interview participants, two focus groups of three leaders each engaged in a conversation based on a standardized series of findings statements (Kreuger & Casey, 2009). The focus group questions are listed in Appendix C.

Iterative analysis invokes a second survey

The initial survey requested participants to assess the overall impact of the ILP in the categories of professional growth, improved instructional leadership, and tangible progress in administrative effectiveness. In all three domains, over 95 percent of the sample (n = 90) agreed or strongly agreed that they had developed in these aspects of their work.

A further survey of an invited convenience sample (n = 48) of the original population (n = 90) was invoked to unpack the specific areas of improved practice among leaders.

Results

Surveys, interviews, and focus groups served as the triangulated basis for determining the strengths and weaknesses of the ILP program.

The survey and ensuing interviews and focus groups posed questions that, in some cases, delved into possible improvements beyond the intended aims of the ILP as it was designed. For instance, the program was intended to offer strategies for the "principal as instructional leader" as opposed to an emphasis on school management, so it was not a surprise when ILP participants quite emphatically stated management strategies were not the focus. Nonetheless, the researchers were interested in exploring possible supplemental foci that perhaps intrinsically related to instructional leadership.

Initial survey

In several core areas, the survey results were very positive. Examples include, but are not limited to:

- The ILP program has helped me grow as an instructional leader: 100 percent in agreement.
- The ILP program has improved my understanding of what constitutes effective instruction in the classroom: 98 percent in agreement.
- The ILP program has clearly identified the qualities of an effective administrator: 98 percent in agreement.
- Embedded within the ILP program were adequate elements of best practices in instruction: 99 percent in agreement.
- Embedded within the ILP program were adequate elements of best practices in assessment: 98 percent in agreement.

Overall, while the respondents were very positive about the content of the ILP, given that less than two-thirds of participants agreed with these statements, these were considered suggested areas of improvement. Table 2 indicates areas of further consideration that were either: 1) not a planned component, or 2) a planned com-

ponent that might require revisiting. The table entries were addressed quite specifically in interview questions so as to uncover the rationale for the response trend.

Table 2. Areas to consider for possible review or inclusion

Topic	Percent of the cohort that either strongly agreed or agreed with the statement
The ILP introduced strategies to reduce time on administration management.	47
The ILP introduced strategies to be more systematic in my conversations with community members.	46
The ILP introduced strategies to be more sensitive in my conversations with community members.	56
The ILP introduced strategies to be more sensitive in my conversations with central office personnel.	62
The ILP adequately addressed school issues associated with high poverty.	45
The ILP adequately addressed issues associated with rural schools.	37
The ILP adequately addressed issues associated with urban schools.	51

Note: Those survey items below 66 percent overall agreement were arbitrarily included in the table. All survey questions with a greater aggregate score of 66 percent were considered to be a very positive reflection of the program in a range of areas (see survey questions, Appendix A).

The survey ranked the core curriculum of ILP as perceived by the sampled participants in cohorts one to three. The ILP courses deemed the most valuable were in assessment and instruction. Those deemed less valuable focused around school improvement and developing a community in schools and with parents.

The survey identified the least common school-achievement indicators observed in respondents' schools as: a) engagement with parents, and b) engagement with community. Categories of entirely missed indicators (i.e., added by respondents) included but were not limited to: mental health, teacher engagement, family dynamics, relationships with students, school climate, and student support.

Participants were asked to rank those aspects of the ILP that empowered them to advance the public school program. Assessment for learning was ranked strongly, whereas socioemotional learning and culturally sensitive pedagogy were ranked lower.

The survey asked participants to rank the instructional-leadership standards that were best promoted by the ILP in terms of their capacity to enact the standard. "High-quality instruction" was most frequently ranked the highest, whereas "properly using data" and "professional learning" were among a group ranked the lowest.

Qualitative interviews

It is important to consider that the convenience sample (n = 90) was drawn from cohorts one to three, and as such, some opinions reflect changes suggested from earlier cohorts whereas responses in later cohorts may be to changes already made by the

time their cohort undertook the program. The analysis of the interview data through iterative coding culminated in representative categories that accurately convey the concerns and perspectives of the sampled group.

Expectations of the participants

From the initial sample of 90 survey respondents, a convenience sample of 12 was invited for an interview (see Appendix B). After interview transcripts were reviewed and coded (as per the methodology above), two focus groups of three participants each were convened, again a convenience sample by invitation (see focus group statements, Appendix C).

These feedback instruments in tandem with survey results established that participants engaged in the ILP with the full expectation that the emphasis would be:

1. Instructional leadership as opposed to managerial strategies; and
2. Instructional leadership strategies rather than relationship building, community building, and contexts/characteristics of students.

The sample was near unanimous in suggesting that while the emphasis was not efficiency models for managing schools, the ILP was very helpful in setting priorities and, moreover, redefining their role of "principal as instructional leader." Participants also suggested that without some emphasis on managing their time in schools, they would find it difficult to employ the instructional leadership strategies. A representative comment was: "with the confusion of schools and my job managing the day to day barrage of immediate issues … without time management strategies the instructional leadership piece is irrelevant, I will never realistically get to it!"

Perceived strengths of the ILP

In the interviews and focus groups, the expressions of the perceived strengths of the ILP were very consistent in conversations and mapped onto the survey results quite well:

- Assessment for learning
- Coaching process
- Instructional strategies
- Community building through coaching
- Useful to all administrators (early and late career), but participant should have at least five years' experience
- Most effective for those who assume reflective practitioner stance
- Much more useful than a master's of education program because of the practical slant
- Use of research data to support approaches builds confidence
- Networking with peers in the cohort addressed urban and rural differences
- Practical assignments
- Prioritizing work as a principal

Perceived weaknesses in the ILP

In the interviews and focus groups, the expressions of the perceived weaknesses of the ILP included the following (note that interviewees made it clear that some of the components they would like to see may have never been intended in the initial design of the ILP):

- Not enough consideration of the issues of diversity (mitigated to some extent by the addition of a "culturally sensitive pedagogy" focus in later cohorts)
- Culturally sensitive pedagogy course an improvement but the least favorite course (not effective as an add-on—very repetitive ideology; much better to integrate across courses—and the course should focus more on what classrooms look like)
- Lack of diversity of instructors
- Better to avoid instructors that are not currently teachers/administrators; credibility issue (tried and true approaches better)
- Use of technology in early cohorts was disastrous
- Mismatch of curriculum with reality (e.g., learning communities advanced in ILP, but not adopted by some school boards)

Extended trends

While not immediately evident in the surveys, ensuing interviews uncovered some trends worth corroborating. Many interviewees expressed a preconception that the ILP was to address exclusively their need for practical strategies in providing instructional support. When it was suggested that issues of poverty, mental health, and socioemotional learning are arguably inextricably linked to leadership, there was considerable feedback that suggested the participants would delegate that to others and saw it as beyond the scope of their definition of a principal. A representative comment included, "my job is to manage the instruction in the school, I don't have time or see it within my purview to be a nurse and counselor too. … I delegate pretty quickly." Conversely, the culturally sensitive pedagogy focus—in that it dealt directly with instruction—was readily accepted as relevant to the ILP training.

When the topic of parental relationships was addressed, many participants felt that this developed as a natural extension of their relationship with the children and that it did not require special consideration. Paraphrasing a number of respondents, "I deal with children and by necessity this may involve parents or not. … I don't make it a priority to connect with parents; usually I interact most with parents of children with difficulties." In a similar vein, few participants saw any relevance in considering the differing dynamic of urban versus rural schools. Those that conceded it was worthy of attention were quick to suggest that the interaction participants had of different contexts within cohorts was adequate for considering any logistical differences.

Closing the loop: Corroborating the views of the sample through focus groups

The interviews yielded emergent trends based on individual opinions as outlined above. The focus groups offer a different dynamic in terms of congealing or challeng-

ing the interview trends. The focus groups were asked to comment on ten findings that the surveys and interviews seemed to indicate (see Appendix C). The statements and consensus responses from two focus groups are listed in Table 3.

Table 3. Focus group responses

Research statement	Consensus response
Purpose discussion	
Participants have perceived the ILP to be primarily about coaching teachers to invoke research-based instructional strategies.	Coaching was an important part of the program that warranted one year of practice. Because the ILP was later offered to a mix of principals and vice principals, a distinction in the reality of their roles as instructional leaders in schools would be useful.
While managerial strategies are not central content to the ILP, participants have suggested that the program has helped them to prioritize how their time is applied as principal in a school. This has, in turn, helped them define more clearly their role as principal.	Seeing the priorities and being able to realistically respond are a challenge. The constraints to providing good instructional leadership remain significant in two areas: day-to-day managerial pressures and moving from an evaluative administrator to a comfortable principal-teacher coaching relationship.
Content discussion	
ILP participants, while appreciating the importance of considering issues of poverty, mental health, and parental communication, did not see these topics as central to their study of instructional leadership.	These topics not overtly addressed and with increasing importance in the system, the ILP should reflect increased focus. Vice principals tend to deal with more of these areas and the program may offer a distinction in roles.
ILP participants have suggested that community building within the school is a natural extension of building up relationships with teachers through the effective instructional coaching process they have learned.	There is increasing focus in the public system on building community, so the ILP should reflect that emphasis. Those current ILP activities and assignments in this realm were particularly useful.
The exposure to differences in the leadership contexts of rural and urban schools was primarily through informal conversations within the cohort.	Overt coverage was not evident, but informal discussions tended to bring about discussions of elementary/ secondary school differences more often than rural/urban comparisons. As such, the comparisons only arose based on the cohort demographic. Visits to schools were alluded to as being particularly illuminating.
ILP participants saw issues of socioemotional and mental health as being the purview of health professionals and not strictly within their scope or expertise as instructional leaders. They were content to "direct" concerned individuals to the appropriate supports.	The system emphasis on responding to the socioemotional and mental health of children is an important one that is placing more responsibility on both principals and vice principals. In recent years, administrators have taken an increased role and the ILP should reflect the growth that is necessary in this area. In the past, administrators reacted to behavioral challenges; ILP should assist them to access school-based support and only direct mental health issues to professionals as necessary.

Table 3 (continued)

Research statement	Consensus response
Responses to needs in the program	
The instructional faculty and delivery of the ILP was from a perspective that did not specifically include or address diversity in earlier cohort offerings. The culturally sensitive pedagogy course has responded to this weakness, but a range of instructors from diverse backgrounds would be a helpful addition to the ILP.	The participants in the cohorts were not culturally diverse in themselves, so differences in "ways of knowing" was not explored. Accessing culturally diverse instructors would improve credibility and align well with a system focus on culturally relevant pedagogy.
ILP participants, in later years, appreciated the emphasis on culturally relevant pedagogy, although they suggested it should be embedded across the program and not included as a single course. Some felt the content was not only an add-on but also repetitive at times.	The addition of a course, while moving in the right direction, appears as "lip service." The preference is to integrate culturally relevant pedagogy across the ILP.
Preparation and suitability for ILP	
Interviewees felt that those considering the ILP should have significant teaching experience (at least five to ten years in the classroom) so that they had context in which to situate the instructional leadership training. Furthermore, ILP graduates suggested that for maximum impact, the participant had to be self-reflective, regardless of their experiential base.	Participants should have significant school experience to understand the nature of children, their psychological development, and their socioemotional needs. Participant should not only be reflective, but they should also have some leadership experience (e.g., vice principal, lead teacher, etc.) that allows them to understand how hierarchal systems can be accessed and managed to assist with instructional growth in schools.
Principals with a range of career experience (young vs. veteran) were united in feeling the ILP offered useful practical advice and approaches.	The practicality of the ILP has served participants far better than their experiences in master's of education programs. The ILP inherently creates a network—a professional learning community of leaders that extends beyond the program to support in the system.

A second survey identifying growth areas

As noted above, the initial survey requested that participants assess the overall impact of the ILP in the categories of: 1) *professional growth*, 2) *improved instructional leadership*, and 3) *tangible progress in administrative effectiveness.* In all three domains, over 95 percent of the sample (n = 90) agreed or strongly agreed that they had developed in these aspects of their work.

A survey of an invited convenience sample (n = 48) of the original population (n = 90) was invoked to unpack the specific areas of improved practice among leaders.

Figure 2 (2a and 2b) shows the distribution of responses in the three aforementioned categories namely: professional growth, improved instructional leadership, and tangible progress in administrative effectiveness. In each category, respondents were asked to rank the possible impacts on their practice. Figure 2a identifies the

highest-ranked impact, whereas Figure 2b identifies the lowest-ranked impact. For example, in Category 1, the bar graph (Figure 2a) shows that the b response (i.e., creating learning opportunities for teachers to serve as instructional leaders in the school and across networked learning communities) was the most popular in the sample (n = 48). Likewise, in Figure 2b, under Category 1, the "c" response was most often ranked the lowest.

Figure 2a. Highest impact on practice

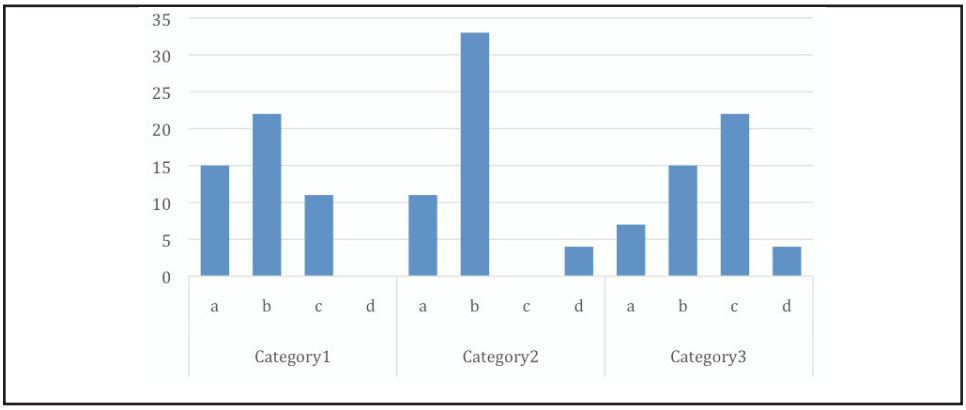
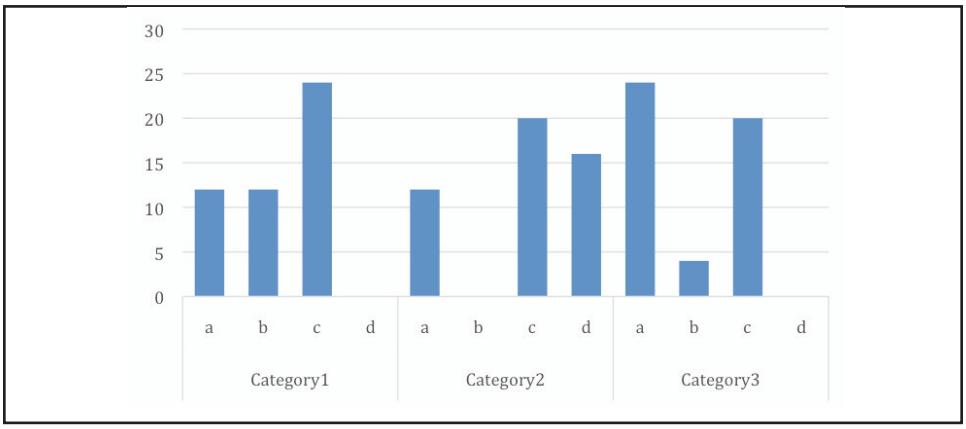


Figure 2b. Lowest impact on practice



Category 1: Professional growth

As a result of your experiences with the ILP, in which areas do you feel that you have experienced the greatest growth?

a. Modelling working collaboratively with staff in communities of practice
b. Creating learning opportunities for teachers to serve as instructional leaders in the school and across networked learning communities
c. Clarifying and developing agreement around the underlying beliefs and assumptions that affect teaching and learning
d. Other

Category 2: Improved instructional leadership

As a result of your experiences with the ILP, in which areas do you feel that you have experienced the greatest growth?

a. Collaboratively developing and acting upon a shared vision of effective instruction
b. Maintaining high visibility and engaging in ongoing teacher conversations and coaching to monitor instructional practices and to gather data about student learning
c. Challenging under-performance at all levels and ensuring effective corrective action and follow-up
d. Ensuring that instructional and assessment practices and resources are equitable, inclusive, and culturally responsive

Category 3: Progress in administrative effectiveness

As a result of your experiences with the ILP, in which areas do you feel that you have experienced the greatest growth?

a. Using data and evidence to answer the question: why change?
b. Examining student achievement data as the foundation for teacher conversations about teaching and learning
c. Believing and communicating that high-quality instruction will close the achievement gap
d. Other

Reflections

While administrators have received the ILP as a most impactful program, an action research model invokes a consideration of how to use feedback to move forward. Many perceive the strength of the program as an ability to afford research-based practical instructional strategies for administrators. A certain portion of the sample participants was decidedly less concerned with extended responsibilities of assisting students with challenges associated with the learning context. Given the inextricable link between school performance and both the socioeconomic background and socioemotional place of students, it is recommended that the ILP further develop an emphasis that squarely associates instructional leadership with the well-being of the student and, further, quality relationships with parents and community. The analysis of this unique program provides a further case study of leadership programs, their design and concomitant impact. This work adds to the literature in suggesting that administrators, in order to address the complex social systems (Shapiro & Stefkovich, 2016; Starr, 2015) inherent in schools, must undertake professional development that goes beyond instructional and management strategies. The program is now in its seventh iteration, and it is duly recognized that many changes have been implemented that respond to the research findings established here.

References

Allen, R.N., & Jackson, A. (April 1, 2017). Contemporary teaching strategies: Effectively engaging millennials across the curriculum. *University of Detroit Mercy Law Review 95*(1), 2–34. Retrieved June 30, 2018, from https://ssrn.com/abstract=2985145.

Beaulieu, R. (2013). Action research: Trends and variations. *Canadian Journal of Action Research, 14*(3), 29–39.

Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M.T., & Cohen, C. (2007). *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute. Retrieved June 30, 2018, from http://seli.stanford.edu.

Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, *52*(2), 221–258.

Dede, C. (2005). Planning for neomillenial learning styles: Implications for investments in technology and faculty. In D. Oblinger & J. Oblinger (Eds.), *Educating the net generation* (pp. 15.1–15.22). Boulder, CO: EDUCAUSE.

Dede, C. (2007). Introduction: A sea of change in thinking, knowing, learning & teaching. In G. Salaway & J. Borreson Caruso (Eds.), *The ECAR study of undergraduate students and information technology* (pp. 19–26). Boulder, CO: EDUCAUSE.

Eduction Leadership Consortium of Nova Scotia Ltd. (2018). The Leadership Academy: Instructional Leadership Program (ILP). *Curriculum overview.* Retrieved April 25, 2018, from: https://www.nselc.ca/nsila/curriculum-overview .

Fullan, M. (2002). The change. *Educational leadership*, *59*(8), 16–20.

Gurley, D.K., & Mendiola, B. (2016). Instructional leadership programs in Alabama: Results of a survey of Alabama association of professors of educational leadership. Retrieved April 24, 2018, from https://files.eric.ed.gov/fulltext/EJ1120645.pdf.

Huberman, A.M., & Miles, M.B. (2002). The qualitative researcher's companion. London, UK: Sage.

Ikemoto, G.S. (2007). Supports for principals' sensemaking: Lessons from the Institute for Learning's instructional leadership program in Baltimore, Maryland [Doctoral dissertation]. Retrieved April 24, 2018, from https://drum.lib.umd.edu/bitstream/handle/1903/7676/umi-umd-4951.pdf?sequence=1.

Interactive Design Foundation. (2016). Action research cycle. Retrieved April 29, 2018, from https://www.interaction-design.org/literature/article/an-introduction-to-action-research.

Koshy, V. (2005). *Action research for improving practice: A practical guide*. London, UK: Sage.

Krueger, R.A., & Casey, M.A. (2009). *Focus groups: A practical guide for applied research*. Newbury Park, CA: Pine Forge Press.

Liang, J., & Augustine-Shaw, D. (2016). Mentoring and induction for new assistant principals: The Kansas Educational Leadership Institute. *International Journal of Mentoring and Coaching in Education*, *5*(3), 221–238.

Mombourquette, C. (2017). Principal leadership: Blending the historical perspective with the current focus on competencies in the Alberta context. *Canadian Journal of Educational Administration and Policy*, 147, 1–19.

NSILAa. (2018). *Welcome*. Retrieved April 29, 2018, from https://www.nselc.ca/nsila/nsila-home.

NSILAb. (2018). *Program content*. Retrieved April 29, 2018, from https://www.nselc.ca/nsila/program-content.

Patterson, J., Jiang, B., Chandler, M., & Chan, T.C. (2012) Educational leadership program effectiveness: Evaluation from graduates and their principals. *Georgia Educational Researcher*, *9*(1), 40–60.

Patton, M. (2002). *Qualitative research and evaluation* (3rd ed.). Thousand Oaks, CA: Sage.

Reames, E. (2010). Shifting paradigms: Redesigning a principal preparation program's curriculum. *Journal of Research on Leadership Education*, *5*(12.5), 436–459.

Sagor, R.D., & Williams, C. (2017). *The action research guidebook: A process for pursuing equity and excellence in education*. Thousand Oaks, CA: Corwin Press.

Shapiro, J.P., & Stefkovich, J.A. (2016). *Ethical leadership and decision making in education: Applying theoretical perspectives to complex dilemmas*. Abingdon, UK: Routledge.

Starr, K. (2015). Small rural school leadership: Creating opportunity through collaboration. In Clarke & O'Donoghue (Eds.), *School leadership in diverse contexts* (pp. 49–62). Abingdon, UK: Routledge.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Van de Werfhorst, H.G. (2014). Changing societies and four tasks of schooling: Challenges for strongly differentiated educational systems. *International Review of Education*, *60*(1), 123–144.

Appendix A: Course content of the ILP

ILP curriculum	Critical content	Three-year course schedule
ILP 1 Best practices in instruction and assessment, Part I	Course content will include: developing an understanding of how the brain processes information; theories and principles of learning; learning styles and preferences; motivation; multiple intelligences; barriers to learning and their implications for teaching and learning; student engagement concepts and strategies; vocabulary development and concept attainment; skills and approaches for constructing understanding; literacy development across content areas; research-based instructional strategies; and how these methods connect to current learning theory.	Year 1: September –December
ILP 2 Best practices in instruction and assessment, Part II	Building on ILP 1, course content will include: formative (assessment for) and summative (assessment of) learning; assessment research and strategies related to effective grading practices and evaluation; how to develop a balanced assessment system; and staying focused on the learner and the learning.	Year 1: January–April
ILP 3 Coaching for instructional improvement	ILP 3 is a blended learning experience that includes coursework, laboratories/workshops, and practicums. A distinctive element of the Nova Scotia Instructional Leadership Program is the Skillful Observational Coaching Laboratory™ workshops and the Artisan Teacher™ institute intended to help instructional leaders learn to use descriptive and specific feedback for teachers focused on their teaching talents. Participants will learn and become proficient at four coaching techniques practiced in a school setting. Practicums include practice using coaching tools, the completion of learning logs, and reflections on the coaching process. The curriculum focuses on best practice, theory, and research. ILP 3 is introduced in the two-day Artisan Teacher ™ institute, scheduled for August (Year 2). This institute is held in the Halifax-Dartmouth area.	Year 2: September –January
ILP 4 Instructional design: culturally responsive teaching and leadership	Course content includes a focus on culturally responsive instructional design, teaching strategies, and leadership practices. The course will examine the big ideas, essential questions, and unifying concepts in instructional design from the perspective of the culturally proficient instructional leader and teacher. It will also include an examination of effective practices for community building in the classroom and the school, lesson and unit planning through a culturally responsive and inclusive lens, and positive classroom management strategies.	Year 2: January–April
ILP 5 Using data for instructional and school improvement	Building on the first four courses, participants will learn how to collect different kinds of data using multiple data sources, how to organize and disaggregate data, how to analyze data for instructional themes and patterns. They will present and communicate data findings, use data to influence instructional changes, and lead data-driven discussions for improving instruction.	Year 3: September –December

Appendix A: (continued)

ILP curriculum	Critical content	Three-year course schedule
ILP 6 Developing a community of practice	Course content will focus on understanding the characteristics and components of professional learning communities (PLCs) and collaborative learning teams (CLTs); developing strategies for initiating, moving, and sustaining PLCs and CLTs; developing strategies for teacher learning (study groups, peer visitation, coaching, action research, networks); and developing learning plans for the school. The course will also include knowledge and skill building related to culture shaping and leadership factors that help to build professional learning communities.	Year 3: January–April
Final culminating assessment	Participants will be expected to demonstrate knowledge, skills, and competencies acquired from the six courses, their practicum experiences, coaching experiences, and their action research.	Year 3: April–May

Source: The Leadership Academy: Instructional Leadership Program, Education Leadership Consortium of Nova Scotia Ltd., 2018

Appendix B: Interview questions

1. How many years have you been teaching?
2. How many years have you been an administrator? Years as a principal? Years as a vice principal?
3. Where is most of your administration experience, in urban schools or rural schools?
4. The ILP survey results suggest that two-thirds of participants would like to see reduced time spent on managerial tasks in schools. What components of the ILP helped you to better manage your time as an administrator so you could attend to things such as community building, school improvement, and a progressive curriculum?
5. The survey data suggested that the ILP was weak in its consideration of relationships with parents. Was this your perception? If so, what would you recommend that ILP leaders include in the program in order to directly deal with this weakness?
6. The survey data suggested that the ILP was weak in its consideration of mental-health issues in schools. Was this your perception? If so, what would you recommend that ILP leaders include in the program in order to directly deal with this weakness?
7. The survey data suggested that the ILP program was weak in its consideration of poverty and its impact on schooling. Was this your perception? If so, what would you recommend that ILP leaders include in the program in order to directly deal with this weakness?
8. The survey data suggested that the ILP program was weak in its consideration of community building within the school. Was this your perception? If so, what would you recommend that ILP leaders include in the program in order to directly deal with this weakness?
9. The survey data suggested that the ILP was weak in its consideration of the disparate nature of urban versus rural schools and how an administrator might prepare for this. Was this your perception? If so, what would you recommend that ILP leaders include in the program in order to directly deal with this weakness?
10. The survey seemed to suggest that the ILP content was more weighted toward instructional techniques and assessment in comparison to school improvement and building school community. I would be interested in your opinion of the balance of these components within the program.
11. In what ways did you improve in your professional work as a direct result of the ILP?
12. As a follow-up, identify the most pressing issues that the ILP could do a better job to cover in these four areas (i.e., instructional techniques, assessment, school improvement, and building school community).
13. In the ILP survey, the least frequently noted indicators of school achievement were a) engagement with parents and b) engagement with community. How did the ILP prepare you to improve in those areas? What would you suggest they include in the program to address this?

14. With regard to empowering the public school program, survey respondents suggested the ILP was weak in providing preparation for leaders to promote culturally sensitive pedagogies in their respective schools. How could the ILP improve in this area?
15. With regard to empowering the public school program, survey respondents suggested the ILP was weak in providing preparation for leaders to promote socioemotional learning in their respective schools. How could the ILP improve in this area?
16. You are at a particular point in your career where you thought the ILP would be useful. Do you think the program is more helpful for early career administrators than late career principals? Explain your rationale.
17. At least a third of the ILP participants had less than ten years of teaching experience. Would you suggest that had a bearing on the impact the ILP might have? Why or why not?
18. If you had to choose, would you suggest the ILP is more apt to prepare you as an effective manager or as an instructional leader? Give the rationale for your choice.
19. Within the ILP, it may be argued that the early career leaders are more preoccupied with getting practical leadership training versus late career administrators, who would like to tease out more philosophical questions/theory around leadership. Do you think this is true about yourself? Why do you think there might be a difference?
20. Discuss whether you think the ILP is well designed to assist leaders who themselves are of diverse backgrounds, for example, the case of ILP participants of Indigenous or African Nova Scotian heritage. How could the ILA program be improved to take this into consideration?

Appendix C: Focus group statements

Participants have perceived the ILP to be primarily about coaching teachers to invoke research-based instructional strategies.

While appreciating the importance of considering the issues of poverty, mental health, and parental communication, ILP participants did not see these topics as central to their study of instructional leadership.

Participants of the ILP have suggested that community building within the school is a natural extension of building up relationships with teachers through the effective instructional coaching process they have learned.

While managerial strategies are not central content to the ILP, participants have suggested that the program has helped them to prioritize how their time is applied as principal in a school. This has, in turn, helped them define more clearly their role as principal.

Exposure to the differences in the leadership contexts of rural and urban schools was primarily through informal conversations within the cohort.

In earlier cohort offerings, the instructional faculty and delivery of the ILP was from a perspective that did not specifically include or address diversity. The culturally sensitive pedagogy course has responded to this weakness, but a range of instructors of diverse backgrounds would be a helpful addition to the ILP.

In later years, ILP participants appreciated the emphasis on culturally relevant pedagogy although they suggested it should be embedded across the program and not in a single course. Some felt the content was not only an add-on but also at times repetitive.

Participants in the ILP saw issues of socioemotional and mental health as the purview of health professionals and not strictly within their scope or expertise as instructional leaders. They were content to "direct" concerned individuals to the appropriate supports.

Interviewees felt that those considering the ILP should have significant teaching experience (at least five to ten years in the classroom) so that they had context in which to situate the instructional leadership training. Furthermore, ILP graduates suggested that for maximum impact, the participant had to be self-reflective regardless of their experiential base.

Principals with a range of career experience (young vs. veteran) were united in feeling the ILP offered useful practical advice and approaches.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(2)
2019

The Role of School Administrators in Providing Early Career Teachers' Support: A Pan-Canadian Perspective

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Abstract This article is based on an extensive mixed-methods pan-Canadian study that examined the differential impact of teacher induction and mentorship programs on the retention of early career teachers (ECTs). It discusses the findings from the analysis of publicly available pan-Canadian documents detailing the mandated roles, duties, and responsibilities of school administrators in teacher induction and mentorship. It then describes the results of the Teacher Induction Survey (N = 1,343) and the telephone interviews (N = 36) that elicited the perceptions of Canadian early career teachers regarding the school administrator's role and engagement in effective teacher induction and mentoring programs.

Keywords Early career teachers; Pan-Canadian; School administrator; Teacher induction; Teacher retention

Introduction

Scholars have found that administrators' commitment to mentoring programs for new teachers either supports and promotes the retention of novice teachers or undermines the success of induction and results in teacher attrition (Bleach, 1998; Jones, 2002; Wechsler, Caspary, & Humphrey, 2008). Nevertheless, there is limited empirical evidence directly linking the role of the principal with the retention of

Keith Walker & Benjamin Kutsyuruba (2019). The Role of School Administrators in Providing Early Career Teachers' Support: A Pan-Canadian Perspective. *International Journal of Education Policy & Leadership 14*(2). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/862 doi: 10.22230/ijepl.2019v14n2a862.

early career teachers within the pan-Canadian scope. As education is a provincial/territorial responsibility in Canada, with attendant variations in school systems and policies, responses to the needs and concerns of early career teachers tend to be compartmentalized and often remain unavailable to other jurisdictions.

This article discusses results that pertain to the mandated roles, duties, and expectations of school administrators and early career teachers' perceptions of school administrators' engagement in the teacher induction and mentoring processes. Upon detailing the review of the literature and research methodology, this article presents the findings from a pan-Canadian analysis of publicly available documents pertaining to school administrators' roles in teacher induction and mentoring, a Teacher Induction Survey (N = 1,343) with early career teachers (ECTs), and semi-structured interviews with a subsample of the survey participants (N = 36).

Review of the literature

The research literature clearly shows that due to the overall school leadership role, school administrators are responsible for ensuring that adequate teacher development and learning takes place in their schools. The principal's role thus becomes critical in directly supporting early career teachers and in creating a structure supportive of the induction process. Michael Totterdell, Lynda Woodroffe, Sara Bubb, and Karen Hanrahan (2004) suggested that the high quality of induction support, the district policy of and commitment to mentor assignment, working conditions, professional development for second-year teachers, and strong instructional leadership among principals had consequences for the retention levels in the districts involved in their study. Furthermore, scholars have argued that principals' engagement in induction and mentoring positively affects beginning teacher retention and the reduction of wasted resources and human potential associated with early career attrition. For instance, Susan Wynn, Lisa Carboni, and Erika Patall (2007) highlighted the importance of principal leadership, finding that "teachers who were more satisfied with the principal leadership in their schools were more likely to report planning to stay in the school district and at their school site" (p. 222). However, as Julie Long and colleagues (2012) concluded, there was limited empirical evidence directly linking the role of the principal with the retention of teachers.

The literature revealed that the assignment of mentors to beginning teachers was the most widely detailed aspect of a school administrator's role in the teacher induction and mentoring processes (Abu Rass, 2010; Bianchini & Brenner, 2010; Bianchini & Cavazos, 2007; Bickmore, Bickmore, & Hart, 2005; Fantilli & McDougall, 2009; Gordon & Lowrey, 2016; Roberson & Roberson, 2009). School administrators were found to influence directly the frequency of novice-mentor interactions through mentor selection and assignment, the provision of mentor training, facilitating meeting times and guiding topics, the oversight and supervision of mentoring relationships, the evaluation of program quality (Pogodzinski, 2015), and in some cases directly mentoring beginning teachers (Tillman, 2005). Other direct duties included the implementation of a policy or program aimed at supporting beginning teachers, providing resources, managing workload, offering professional development opportunities, and assigning classrooms and supporting staff (Desimone, Hochberg,

Porter, Polikoff, et al. 2014; Glazerman, Isenberg, Dolfin, et al., 2010; Gordon & Lowrey, 2017; Hellsten, Prytula, Ebanks, & Lai, 2009; Roberson & Roberson, 2009).

Indirectly, school administrator engagement in the development of ECTs is manifested through exhibiting supportive and shared leadership, promoting professional relationships among novice teachers and experienced teachers, building school culture, and creating the opportunity for shared values and vision. As a result, beginning teachers' morale can be improved and their self-concept strengthened (Cherian & Daniel, 2008; Wood, 2005; Wynn et al., 2007). Administrators need to ensure that structural supports for beginning teachers are realized in the intended manner (Birkeland & Feiman-Nemser, 2009. Administrators were found to indirectly shape mentoring through influencing general workload manageability, carrying out administrative duties, ensuring access to resources, and enhancing the quality of administrator-teacher relations (Pogodzinski, 2015). Administrators' beliefs, actions, and policies shape the work environment and school culture and, therefore, impact specific teacher outcomes (Johnson & Birkeland, 2003).

Besides the supportive role of school administrators, several studies highlighted the expectations of school principals to supervise and evaluate the work of new teachers (Abu Rass, 2010; Chatlain & Noonan, 2005). Hence, there is potential for tensions between the principal's responsibility to foster growth-oriented professional development for new teachers and the principal's administrative or evaluative capacity (Cherubini, 2010). The dual relationship of mentor-evaluator can raise difficult issues for both school administrators and early career teachers. The distinctions between the constructs of formative and summative assessment can be blurred, ignored, or even misrepresented. On the other hand, relational trust and role clarity, together with timely, reciprocal communication can alleviate or ameliorate difficulties.

Research methodology

This multi-year pan-Canadian research project examined the differential impact of induction and mentorship programs on early career teachers' retention across the provinces and territories. This study used a mixed-methods approach to research methodology (McMillan & Schumacher, 2010), namely document analysis, survey, and telephone interviews.

Document analysis

First, document analysis (Bowen, 2009; Prior, 2003) was conducted in 2016 to examine the publicly available documents from provincial and territorial educational authorities, teacher associations/federations/unions, and individual school districts/boards to uncover the mandated roles, duties, and responsibilities of school administrators in teacher induction and mentorship processes in each jurisdiction. These publicly available policy, planning, and curriculum documents were considered external communication, and included government communiqués, websites, program/policy memoranda, newsletters, handbooks, agenda, and the minutes of meetings. The documents were analyzed in a complementary fashion and in relation to the research objectives; data were highlighted, recorded into charts, and organized according to themes related to the program type and level of provision.

Online survey

Second, this study used data from the pan-Canadian New Teacher Survey administered in 2016 (Kutsyuruba & Walker, 2017). The online survey instrument was developed by the researchers, based on suggestions and recommendations from an expert panel of researchers and practitioners, the relevant literature, and adapted items from related instruments. Overall, the survey contained 77 closed and 12 open-ended questions. The invitation to participate in the online survey for new teachers within their first five years of employment in a publicly funded school in Canada was widely distributed through various venues (e.g., teacher associations, ministries, community organizations, social media), across all provinces and territories in the spring and summer of 2016. The researchers received over 2,000 survey responses with various degrees of completeness from all Canadian jurisdictions. The researchers removed surveys with minimal responses or missing data that did not allow for further analyses. For the final sample (N = 1,343), the researchers obtained descriptive statistics, including percentages, means, and standard deviations for questions in the demographics section. The closed and open-ended responses were examined in a separate, but complementary, manner. A descriptive statistics analysis of closed items was conducted; whereas open-ended responses underwent thematic analysis. This article reports on the items related to the role of school administrators in teacher induction and mentoring programs.

Table 1. Demographic information for survey participants

Province currently teaching in		**Province of accreditation**	
Ontario	33%	Ontario	38%
Alberta	27%	Alberta	23%
British Columbia	18%	British Columbia	18%
Québec	5%	Québec	5%
Manitoba	4%	Manitoba	5%
Saskatchewan	6%	Saskatchewan	4%
Newfoundland and Labrador	2%	Newfoundland and Labrador	3%
New Brunswick	0.4%	New Brunswick	1%
Nova Scotia	0.4%	Nova Scotia	1%
Prince Edward Island	0.4%	Prince Edward Island	1%
Nunavut	1%	Nunavut	0.3%
Northwest Territories	1%	Northwest Territories	0.2%
Yukon	1%	Yukon	2%
Age range		**Overall years teaching**	
19–22	1%	In Their First Year	20%
23–26	34%	In Their Second Year	23%
27–30	35%	In Their Third Year	21%
31–34	14%	In Their Fourth Year	16%
35+	17%	In Their Fifth Year	20%
Gender		**Length of occasional teaching**	
Female	81%	Less Than One Year	28%
Male	19%	Full Year	19%
Occasional Teaching Experience		Two Years	22%
Yes	85	Three Years	15%
No	15	Four Years	8%
		Five Years	9%

The demographic data showed that the mean age of the respondents was 29 years, with 19 percent being male and 81 percent being female. Significantly, 96 percent of the respondents had a Bachelor of Education degree, and 27 percent of the respondents had other forms of credentials (Master of Science, Bachelor of Arts, Bachelor of Science, etc.). While the current teaching location for the majority of participants represented three provinces, Ontario (33%), Alberta (27%), and British Columbia (18%), all of the provinces and territories were represented in this study. This trend also reflected the province in which the respondents obtained their teacher certification/accreditation. For the overall years of teaching experience, data showed an almost equal distribution of respondent teaching experience, across span of one to five years. Eighty-five percent had occasional teaching (OT) experience, with almost a third of ECTs having taught occasionally for less than one year, while the rest had taught for up to five years in OT positions. Over a third of the respondents (37%) had been at their current school for less than a year. Twenty-three percent had been at their school for a full year, 22 percent for two years, ten percent for three years, five percent for four years, and four percent for five years. Moreover, the majority of these schools were located in small cities (with a population of about 100,000). See Table 1 for detailed demographic information.

Telephone interviews

As part of the online New Teacher Survey, participants had an option to express their willingness to participate in the follow-up interviews. From the survey sample, volunteer participants were randomly selected with the purpose of pan-Canadian representation: 36 teachers from nine provinces (except Prince Edward Island) and three territories in Canada (33 in English, three in French). Table 2 provides the demographic information for interview participants.

Table 2. List of interview participants

#	Pseudonym	Province/ territory	Language	Gender	Age	Teaching experience
1	Mike	NS	English	Male	33	5 years
2	Lise	ON	French	Female	26	2 years
3	Maira	NL	English	Female	27	5 years
4	Kamille	ON	French	Female	26	3 years
5	Mackenzie	ON	English	Female	24	2 years
6	Evelyn	AB	English	Female	26	Less than 1 year
7	Kandace	AB	English	Female	31	2 years
8	Alli	QC	English	Female	26	2 years
9	Stewart	SK	English	Male	29	4 years
10	Nick	SK	English	Male	27	3 years
11	Ashish	NT	English	Male	32	1 year
12	Charlotte	AB	English	Female	38	4 years
13	Maribelle	SK	English	Female	39	1 year
14	Christina	ON	English	Female	24	1 year

Table 2. (continued)

#	Pseudonym	Province/ territory	Language	Gender	Age	Teaching experience
15	Andrea	ON	English	Female	28	3 years
16	Mark	AB	English	Male	31	Less than 1 year
17	Ken	ON	English	Male	26	3 years
18	Lily	NS	English	Female	24	2 years
19	Lois	NB	English	Female	27	3 years
20	Myles	MB	English	Male	25	2 years
21	Cassie	MB	English	Female	51	3 years
22	Gladys	ON	English	Female	49	5 years
23	Tennae	BC	English	Female	49	4 years
24	Anya	NU	English	Female	24	1 year
25	Ruth	ON	English	Female	33	Less than 1 year
26	Edward	ON	English	Male	42	3 years
27	Shana	NU	English	Female	46	5 years
28	Jane	NU	English	Female	36	Less than 1 year
29	Marilyn	YT	English	Female	32	5 years
30	Noor	BC	English	Female	34	4 years
31	Helen	BC	English	Female	28	4 years
32	Alessandra	BC	English	Female	41	2 years
33	Barbra	BC	English	Female	55	4 years
34	Lebert	BC	English	Male	34	5 years
35	Shelle	BC	English	Female	29	3 years
36	Françoise	ON	French	Female	27	3 years

Interview questions were framed using the strengths-based, positive development approach of an appreciative inquiry (Cooperrider & Whitney, 2007; Tschannen-Moran & Tschannen-Moran, 2011). Five open-ended questions, pertaining to teacher experiences with development, resilience, mentorship, and leadership in schools, served as the initial organizing framework for the responses. Most of the interviews lasted approximately 20 minutes. The interviews were recorded and transcribed verbatim, with all proper names changed to pseudonyms and all identifiers removed. Participants' responses were compiled by the researchers and analyzed both deductively and inductively following standard coding processes for etic and emic approaches to data analysis. Both etic and emic codes were then combined into categories, and from categories into patterns or concepts (Lichtman, 2010). The findings below include verbatim responses where possible.

Research findings

The following sections present key findings from each of the research phases: a) document analysis, b) survey, and c) telephone interviews.

Document analysis data: Mandated roles and expectations

Document analysis revealed that mandates and expectations for school administrator engagement in teacher induction and mentoring programs were evident in varying de-

grees across all four types of programs found across Canada: policy-mandated government-funded programs; programs offered by provincial teacher associations, federations, or unions; hybrid programs based upon cooperation between the provincial and territorial governments, teacher associations, universities, First Nations, or local communities; and decentralized models maintained by local school boards/divisions. However, not all documents from the provinces and territories included references to the school administrator role in ECT support. The levels of support for teacher induction and mentoring vary across the Canadian provinces, and a summary of these findings is outlined in Table 3. The columns include school administrator roles in relation to the type of program (i.e., induction (I), mentoring (M), or both (IM)), the number of school boards with decentralized supports (out of the total number of school boards in the jurisdiction), and specific roles (*), as identified in the documents.

Table 3. Pan-Canadian scope of school administrator role in induction and mentoring

Provincially mandated /ministry support	Provincial teacher association/ federations/ union-level support	Hybrid programs	Decentralized programs (school district-level support)
Northwest Territories (IM) Ontario (IM) Nunavut (IM)	Nova Scotia (IM) Saskatchewan (IM)	Alberta (IM) Newfoundland and Labrador (IM) Yukon (IM)	Alberta (8/58) *3 as evaluator Manitoba (7/38) *5 as evaluator Newfoundland and Labrador (1/2) *1 as evaluator Québec (2/9) * undetermined role Saskatchewan (2/29)

The analysis indicated that the role of the administrator was inconsistently and infrequently mentioned in publicly available documents across Canada. The administrators in various jurisdictions were mandated to be responsible for mentor selection and mentor-protégé matching, for providing adequate professional development opportunities and release time for beginning teachers, for overseeing the mentorship process, for monitoring the progress of beginning teachers, and most importantly, for being mentoring role models in their everyday activities in schools. In some provinces and territories, the role and responsibility of the administrator in supporting beginning teachers and/or the implementation of mentoring programs were outlined (or at least suggested), while in others, the administrator's role was more implicitly mentioned within a larger context of early career teacher support.

Separate handbooks or sections in program resources were found specifically for administrators in working with early career teachers in documents from Saskatchewan, Ontario, Northwest Territories, and Newfoundland and Labrador. The handbook produced by the Saskatchewan Teachers' Federation (2009) contains information on how the administrator can support new and beginning teachers. This comprehensive document includes a theory-based rationale citing relevant academic literature. The doc-

ument provides the administrator with detailed, monthly considerations of how to best support new and beginning teachers through a comprehensive policy implementation process. In Ontario, the *Resource Handbook for Principals* (Ontario Ministry of Education, 2010) outlines the roles and responsibilities of the principal in the implementation of the New Teacher Induction Program (NTIP) at the school level. The principal's role encompasses responsibility for the consultation and development of individual NTIP strategy, school-level orientation, individual professional development and training, the selection of mentors, mentoring relationships, and teacher performance appraisal. The principal is also responsible for final approval in most of the same categories, except for mentoring relationship. However, the handbook contains a caveat stating that the use of the handbook material by principals is optional. The Northwest Territories Mentorship Program outlines specific responsibilities for school administrators, including matching experienced teachers with protégés, approving the mentorship plan developed by mentors and protégés (the superintendent must also approve it), informing potential mentors and protégés about the mentoring program, and identifying staff suitable to become mentors (Northwest Territories Teacher Induction, 2016). In addition, administrators are accountable for providing release time for the mentoring pairs and for arranging necessary training. Emphasis is placed upon administrators to create a culture of mentoring in their schools through the careful matching of mentor and protégé, offering support and encouragement for the mentoring process, intervening if the mentoring relationship is not working, and supporting team orientation to the community culture. Finally, and as foreshadowed earlier, school administrators have to ensure the mentorship is not associated with evaluation. In the Newfoundland and Labrador documents, there is a mention of an information and guidance booklet for administrators (Newfoundland and Labrador Teachers' Association, 2007); however, because the document is not available publicly, it was outside of the search parameters of this study.

Some of the provisions found in relation to new teachers include details about the administrator's role, but only in relation to evaluation. This mainly occurred at the decentralized level, where school districts would include individual administrative roles. In many cases, details provided regarding the role of the administrator were purely posed from an evaluative perspective toward new and beginning teachers' performance and competence (Beautiful Plains School Division, 2008; Mountain View School Division, 2011). In contrast, other documents identify the administrator's role as supportive (Newfoundland and Labrador Teachers' Association, 2007; Nova Scotia Teacher's Union, 2012; Saskatchewan Teachers' Federation, 2009), with the Northwest Territories specifically identifying the administrator's role within new and beginning teacher induction as being non-evaluative (Northwest Territories Teacher Induction, 2016).

Survey data: Administrator engagement in induction processes

The role and importance of the administrator in the induction process yielded mixed responses across Canada. A considerable number of participants (35%) could not comment about the administrators' engagement due to their lack of direct experience. Across Canada, one-fifth of the respondents (21%) strongly disagreed that their

school administrator had played a key role in their relationship with their mentor. Almost 45 percent agreed or strongly agreed that their school administrator took an active interest in their successful induction into teaching. As part of this active interest, 53 percent of respondents were in agreement that their administrator had observed their teaching, with approximately 47 percent agreeing that these observations had led to feedback that helped improve their teaching. When asked if they were encouraged to question their beliefs about teaching, 45 percent of respondents agreed and 40 percent indicated that they were given the opportunity to observe

Table 4. Perceptions of administration support

Perception	SD %	D %	N %	A %	SA %	N/A %	M	StD
My school administrator plays a key role in my professional relationship with my mentor.	21	17	14	8	4	35	1.5	1.5
My current school administrator has taken an active interest in my successful induction to teaching.	12	15	18	28	16	11	2.9	1.6
My current school administrator clearly communicates school expectations.	6	13	15	38	22	8	3.3	1.5
My current school administrator values the role my mentor plays in my induction to teaching.	8	8	24	17	8	36	2.0	1.8
I believe my working conditions are appropriate for a beginning teacher.	15	20	14	31	12	8	2.8	1.5
I am encouraged to questions my beliefs about teaching.	6	16	26	34	11	7	3.1	1.4
I am given opportunities to observe models of good teaching and learning.	14	25	15	30	10	6	2.8	1.4
I have adequate time to reflect on student learning.	12	27	20	29	7	5	2.8	1.3
My mentor and I are given adequate time to meet.	15	18	15	13	6	33	1.8	1.6
My current school administrator shares leadership and promotes a collaborative culture in our school.	8	10	15	36	24	7	3.4	1.5
My current school administrator observes my teaching.	12	17	11	37	16	8	3.0	1.5
My school administrator gives me feedback based on observation(s) to help me improve my teaching.	13	18	12	31	16	11	2.9	1.6
My current school administrator is part of the reason I am still a teacher.	21	16	21	19	14	9	2.6	1.5
I feel comfortable talking to my school administrator(s) about problems I am experiencing.	10	12	11	38	25	5	3.4	1.5
As a new teacher, I feel supported by my school's administrative team.	9	10	17	34	25	5	3.4	1.5

Note: SD = Strongly Disagree, D = Disagree, N = Neither Agree nor Disagree, A = Agree, SA = Strongly Agree, N/A = Not Applicable, M = Mean, StD=Standard Deviation.

other methods of teaching. Additionally, 60 percent of the respondents agreed or strongly agreed that their school administrator shared leadership and promoted a collaborative culture in their school. Almost two-thirds (63%) of the respondents

agreed or strongly agreed that they felt comfortable talking to their school administrator about problems they were experiencing, with 59 percent agreeing or strongly agreeing that, generally, they felt supported by their school's administrative team (See Table 4).

In the open-ended survey responses, beginning teachers shared mixed feelings when asked about their school administrator and whether or not this person had shown evidence of wanting them to succeed. Some beginning teachers provided a *neutral* response by indicating that they did not know whether their administrator wanted them to succeed, but some felt their administrator did not care. The following quotation illustrates one respondent's experience:

> I honestly don't know that. I feel my administrators have their own agendas and I am just a piece of their puzzle. I feel that I am replaceable. I do have a good relationship with them and feel that I can ask them questions or advice; but I honestly feel that they only want me to succeed to make them look better, not for my own personal growth. (MB)

Beginning teachers shared that their administrators had *espoused* their desire for beginning teachers to succeed. Espoused desires entailed administrators giving beginning teachers advice, encouragement, and positive feedback. Some beginning teachers noted that their administrators had explicitly expressed their desire to keep them on staff, and many beginning teachers also noted that administrators were clear about their goals and hopes for beginning teachers. Administrators also verbally assured beginning teachers that it was okay when things did not go as planned in the classroom.

> She has checked in and asked about my future teaching plans/goals, where do I see myself, encouraging comments about my rapport with students and teaching style, offered positive and constructive feedback following an interview. (AB)

Beginning teachers also shared that their administrator had *demonstrated* their desired intentions to help beginning teachers succeed. Demonstrated desire included administrators providing support, collaborating with beginning teachers, observing their teaching, and assisting them through the evaluation process. Administrators who demonstrated this desire were available to talk, checked in regularly, listened to beginning teachers' concerns, and generally cared about them. Administrators also demonstrated desire by offering a contract, recommending a beginning teacher for work, and by covering classes and offering relief time when possible. Administrators gave beginning teachers opportunities for professional development, pushed and challenged them to improve, trusted them to succeed, and gave them freedom to experiment with their teaching. Some beginning teachers also reported that administrators wanted them to succeed because they wanted the school and students to succeed.

> They check in on my classes and ask what I needed. They volunteered their time to talk with me about challenges I might be facing with my kids. They're kind and involved. My current administration is awesome. (BC)

The mixed responses with respect to beginning teachers knowing whether their administrator wanted them to succeed shed light on the types of relationships that various administrators had with their novice staff members, as well as the styles with which they operated in leading their schools.

Interview data: Leadership and support from school administration

When study participants were asked about the administrative relationships or behaviours that supported their development, some of them shared stories about how school leaders played a supportive role; some suggested that school administration roles were supportive, but only in certain areas. Others indicated that their needs for support went unanswered. An analysis of their responses is presented below under two categories: *supportive roles* and *little or no support*.

Supportive roles

Interview participants emphasized that varied supports were both needed and appreciated. Principals have a role to play in the support of new teachers, from being accessible, to providing resources, to guiding teachers. Many teachers believed that principals should be approachable and accessible, responsive, and also be effective communicators. Maira appreciated judgement-free leadership: "they would give me every resource, and they would never judge me for saying I need help." Maira made the link between her needs as a teacher and sound pedagogy, stating, "that's the same thing I expect from my kids in my class. If I ask them a question, I want them … to feel comfortable enough to say, I don't know." Data showed that principals made a positive impact upon teachers in supporting them through "tricky" situations. Several teachers discussed the crucial role that a principal or vice principal had played in facilitating their interactions with parents. Jane stated that "having the principal stick up for you when the parents can be difficult, that's important." Christina appreciated the coaching that had taken place in her interactions with parents, "I had to make a few uncomfortable phone calls, and she [the principal] was very supportive about practicing what I could say and making sure that I came off in the most professional way." Evelyn liked her vice-principal's proactive approach since he guided her on how "to properly answer emails or phone calls. If I ever had to phone home for a parent, he said he could be there, with me just to be giving me tips and stuff, so I think that was great." Another participant, Charlotte, "really appreciate[d] that they make themselves available and they're always willing to take the time to help [her if she had] a problem."

For some new teachers, it was beneficial if principals checked in with them, visited classrooms, provided feedback, and challenged them to be better teachers. Ken praised his principals:

> They challenged me to be a better teacher, and they challenged me based on my individual goals. They didn't give me generic feedback. … Their comments were always authentic … they really made me want to work the extra mile for them.

Ken surmised that when principals supported teachers it was really a strategy to put students first; this was the case of professional relationships that affirmed the teachers and benefited students. A few teachers found their administration supportive with

time and money for professional development. Cassie benefited from a "budget that permitted her to attend one conference annually." Kandace benefited from a mentoring program that her school district was offering, noting that her administration "was very supportive, and [she] really appreciated that he allowed … to take that time to work with a mentor."

While many interviewees hoped for a supportive leadership team to assist them in finding their way, some teachers, such as Lise, identified having the freedom to experiment, and, indeed, to be able to make mistakes as part of a learning curve, without fear of reprisal. When she made mistakes, Lise trusted that her administrator would support and guide her throughout the experimental processes: « elle est là pour me soutenir, mais elle me laisse quand même essayer de nouvelles choses … qui nous soutiens si jamais qu'il y a des erreurs qui sont faits. » Similarly, Kamille wanted administrators to develop relationships of trust with teachers and to lead by suggestion and not by orders:

> Des relations de confiance, des relations de quelqu'un qui écoute à nos idées, mais … j'ai besoin vraiment des personnes qui suggèrent et qui font faire leur point de vue sans nécessairement donner des ordres.

In addition, the willingness of experienced leaders to help, guide, share, and support early career teachers proved invaluable in the development of their confidence and resilience.

Little or no support

Some of the interviewees conveyed that they had received little, limited, or no support in their early years of teaching. Their responses pointed to the complex relationships between new teachers and administrators. For example, Françoise believed that although most teachers aimed to please, the relationship with the administration was not fully transparent, thus causing problems. Her principal expected her to keep in touch, yet not approach him with needs, since he expected her colleagues to provide this kind of support:

> C'est toujours bizarre la relation avec les directeurs, on veut absolument leur plaire. … J'ai pas l'impression que ce soit une relation à 100% transparent … la responsabilité d'accueillir les nouveaux enseignants à d'autres enseignants plutôt que du directeur lui-même.

Françoise understood that her principal supported her growth by using the mentorship program, thus delegating mentorship tasks to another colleague. But the lack of transparency led her to pretend that she knew what she was doing in order to avoid administrative disapproval, which might, in turn, lead to nonrenewal of her contract. The lack of transparency and mixed messages eroded Françoise's trust in her employers. When she discovered her assigned mentor listening to her teaching her class out of sight from the hallway and without her knowledge, she did not know if the mentor's secrecy was being used to support her growth or to report her to the school board for reprisal. Thus, she concluded that the best mentorship support would come from a like-minded colleague with whom there were mutual values and trust.

Some teachers did not get a formal evaluation that might have helped them in terms of their development. Helen and Anya both needed more help than what was afforded by daily routines. Anya projected frustration when she noted:

> I didn't get any professional development from them. They didn't come and check me as I taught … I was in my first year … I know that they're busy, but I really found that I didn't get … any assistance with my actual teaching. No one ever came to watch me ever. No reviews or anything.

Nick received a formal evaluation, but not from his principal. A retired teacher was brought in to observe and write up the evaluation because "the superintendents were overloaded."

Alli, Françoise, and Maribelle each noted the work overload that characterized administrative roles, with the effect that leadership tasks became the obligation of colleagues. They observed that these supportive tasks were downloaded from administration to teachers who were already busy. Alli speculated, "I don't think that responsibility really lies with my grade-alike teachers." Her experience echoed the sentiments of a number of participants that principals were so busy that they assumed their teachers did not need support. For Mark, "it was more the other teachers in my department who really reached out and helped and gave suggestions and such." Teachers cited the lack of support in important areas such as low literacy, low socioeconomic status, and special needs. For example, Ruth argued for her need of increased "support in special education as well as socio-economic awareness."

Finally, several teachers cited a lack of support from school administrators as the reason they had considered leaving the profession. At the time of interviews, one teacher had already left (Andrea), two teachers (Alessandra and Nick) were in the process of leaving, and a few others were thinking about it. Alessandra shared that she considered leaving the profession because of the negative and challenging relationship she had with her principal:

> The lack of support from my administrators was a major issue for me and has been the largest factor in me considering leaving the profession. My school principal was dismissive of my concerns. She was not supportive. She did not set up any structure that would help a new teacher find their feet. Anytime I tried to take initiative, I was shot down. Anytime I tried to ask questions, I was dismissed.

It is clear, then, that just as the supports new teachers received had led to a sense of increased confidence and resilience in the face of this demanding profession, the lack of leadership supports was disempowering and demotivating.

Discussion of findings

The combination of data obtained from the analysis of documents, surveys, and interview responses afforded the creation of a pan-Canadian window into the mandated and perceived roles of school administrators in supporting early career teachers. Although acknowledged as vital in creating a structure supportive of the induction process (Cherian & Daniel, 2008; Wood, 2005; Wynn, Carboni, & Patall, 2007),

the role of the administrator was inconsistently and infrequently mentioned in the documents examined. The role of a leader is seen to be crucial in supporting the implementation of a mentoring culture within an organization (Zachary, 2005), and the lack of publicly available information about the principal's role in ECT support would seem particularly relevant at the school district level. Given the empirical support for the importance of a leader's role in successful mentoring, there is the risk that a lack of information might be interpreted as a lack of mentoring, an important issue for new and beginning teachers undertaking job searches for their first teaching position. While it is assumed that administrators would have some level of involvement with the induction of ECTs, this study's findings suggest further examination is warranted. The inconsistencies regarding how administrators' roles are defined within the induction and mentorship of new and beginning teachers is concerning. Role identification and role clarity are crucial elements of school administrators' work with early career teachers. Administrators' commitments to mentoring programs for new teachers can either support or undermine the success of early career teachers (Bleach, 1998; Jones, 2002; Turner, 1994; Wechsler et al., 2008).

In particular, further investigation is needed to clarify the evaluative role of administrators, which was frequently identified in this study. Research highlights how tensions can arise between the principal's responsibility to support and nurture professional growth and development for new teachers when combined with an evaluative capacity (Cherubini, 2010). A deeper analysis of the evaluative role of administrators within new and beginning teacher support could help to ensure that future policy regarding teacher induction and mentoring concentrates on development and growth rather than performance and competence. Helpful insights might be gained if the conditions and the nature of the psychological contract between mentor-evaluators and the mentee-evaluated were better understood. This study found that early career teachers have uneven experiences of support from their school administrators; some perceive receiving support and some do not. Because administrators' beliefs, actions, and policies shape the work environment and, therefore, impact specific teacher outcomes (Johnson & Birkeland, 2003), these school leaders are instrumental policy interpreters, translators, and enactors for ECTs: "by understanding the complexities of doing policy work in schools, leaders are situated in powerful positions to support early career teachers as they face the recognized challenges during the transition to the profession" (Sullivan & Morrison, 2014, p. 616). Robert Shockley, Eliah Watlington, and Rivka Felsher (2013) reminded their readers that principals set the tone for the commitment to any professional development efforts in a school setting. Thus, they urged that principals create multi-level opportunities for teacher development through longer-term and more comprehensive induction programs. They concluded that sharing responsibility and authority, encouraging collaborative planning and reflection, offering team leadership roles, and building a school culture as a learning organization address motivational factors, demonstrate principals' trust in their teachers, and positively impact teacher retention in schools. The findings from this survey concur with these observations.

As noted by Ruth Baker-Gardner (2015), in order for principals to be able to lead and implement exemplary programs, they require specialized knowledge about

the process of induction, the components of the program, and the needs of the new teachers, as well as an in-depth knowledge of the mentoring process. If "specialized training is not provided for principals to garner such skills, they will continue to be at a disadvantage regardless of how good their intentions are" (Baker-Gardner, 2015, p. 58). Furthermore, in training educational leaders, relationships should be discussed and problematized to raise awareness of the influence of a principal's words and actions on teachers' work (Lassila, Timonen, Uitto, & Estola, 2017). The generous insights from the stories shared through this interview process of a cross-section of early career teachers across Canada, enrich our understanding of their experiences with leadership and supports from school administration in the formative years of their careers. Although not generalizable to a broader population of new teachers, interview findings add to the extant literature on the impact of principals' leadership on early career teachers' retention and attrition in Canada. The pan-Canadian narratives show that despite geographic, contextual, and policy differences in the lived experiences of the participants, there were striking similarities among experiences of many of the teachers.

The majority of teachers in the sample expressed their appreciation for their supportive and positive administrators; these were non-judgemental leaders who encouraged trusting relationships, were engaged in their development, provided feedback and resources, allowed experimentation, and created favourable working conditions. Positive relationships and interactions with administrations facilitated novices' development, increased their satisfaction and efficacy, and enhanced their confidence and resilience. Nienke Moolenaar, Alan Daly, and Peter Sleegers (2012) noted the relational reciprocity in which principals maximize teachers' skills and knowledge. In return, teachers seek out their principal more often for work-related and personal advice, and thus benefit from their knowledge, resources, and expertise. Researchers found that principals' personal interactions with individual teachers tend to promote positive school climate and student outcomes, whereas unsupportive or negative interactions may lead to teachers' dissatisfaction, attrition, or a move to a different school (Bickmore & Bickmore, 2010; Guarino, Santibañez, & Daley, 2006; Scherff, 2008).

On the negative side, participants noted that a lack of administrative support, lack of transparency, lack of understanding of ECTs' needs, and off-loading administrative responsibilities onto beginning teachers resulted in some teachers battling stress and anxiety amid daily school events. Similar to others, this study found that when administrators were unresponsive to teachers' needs, their well-being was affected, and their sense of isolation and frustration increased (Brindley & Parker, 2010; Cherubini, Kitchen, & Hodson, 2008; Frels, Zientek, & Onwuegbuzie, 2013). These experiences had a common impact on teachers' predispositions toward professional growth and their decisions to stay or leave the profession. Therefore, beyond their direct involvement in the establishment and coordination of induction and mentoring programs, school administrators have an indirect impact on teacher retention and attrition by nurturing a supportive school climate characterized by shared values and trust (Bickmore & Bickmore, 2010; Catapano & Huisman, 2013; Cherian & Daniel, 2008).

Conclusion

School administrators' engagement is vital for the socialization and induction of early career teachers; however, a high percentage of early career teachers in this Pan-Canadian study reported that they had not received direct or facilitative support. The manner by which novice teachers are acclimated to schools is commonly understood to be a part of the responsibility of the principal, who works with staff and community to establish and operationalize the vision, mission, and goals of the school (Delp, 2014). Programmatically, principal engagement is thought to be a critical aspect of induction and mentoring supports for ECTs, because the effectiveness of those programs depend on school context and the alignment of programs with the vision, instructional focus, and priorities stewarded by the principal (Moir, Barlin, Gless, & Miles, 2009). This article provides a description of the centralized and decentralized provincial and territorial policies with respect to early career teacher support. In documents examined, the role of the administrator was inconsistently and infrequently mentioned. There were varied accounts of ECTs' perceptions and experiences of support from school administrators from both survey results and interviews. Early career teachers appreciated supportive and positive administrators who encouraged trusting relationships, provided feedback and opportunities for their development, allowed experimentation, and created favourable working conditions. Positive and supportive administrators were credited with increasing the satisfaction, efficacy, confidence, and resilience of ECTs.

Acknowledgement

This work was supported by a grant from the Social Sciences and Humanities Council of Canada (SSHRC).

References

Abu Rass, R. (2010). The new teacher induction programme in Bedouin schools in the Negev, Israel. *Journal of Education for Teaching, 36*(1), 35–55. doi:10.1080/02607470903462008

Baker-Gardner, R. (2015). The role of the principal in new teacher induction: A Jamaican perspective. *International Studies in Educational Administration, 43*(3), 43–61.

Beautiful Plains School Division. (2008). *Policy statement: Staff probation and evaluation.* Retrieved November 14, 2014, from http://www.bpsd.mb.ca/PDF/GCD-StaffProbation.pdf.

Bianchini, J.A., & Brenner, M.E. (2010). The role of induction in learning to teach toward equity: A study of beginning science and mathematics teachers. *Science Education*, *94*(1), 164–195. doi:10.1002/sce.20353

Bianchini, J.A., & Cavazos, L.M. (2007). Learning from students, inquiry into practice, and participation in professional communities: Beginning teachers' uneven progress toward equitable science teaching. *Journal of Research in Science Teaching, 44*(4), 586–612. doi:10.1002/tea.20177

Bickmore, D.L., Bickmore, S.T., & Hart, L.E. (2005). Interdisciplinary teaming as an induction practice. *NASSP Bulletin, 89*(644), 30–53.

Bickmore, S.T., & Bickmore, D.L. (2010). Revealing the principal's role in the induction process: Novice teachers telling their stories. *Journal of School Leadership, 20*(4), 445–469.

Birkeland, S., & Feiman-Nemser, S. (2009). Developing comprehensive induction in Jewish day schools: Lessons from the field. *Journal of Jewish Education, 75*(3), 240–257. doi:10.1080/15244110903079078

Bleach, K. (1998). Off to a flying start? Induction procedures for newly qualified teachers in secondary schools in the Republic of Ireland. *Mentoring and Tutoring, 6*(112), 55–65.

Bowen, G.A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27–40. doi:10.3316/qrj0902027

Brindley, R., & Parker, A. (2010). Transitioning to the classroom: Reflections of second-career teachers during the induction year. *Teachers and Teaching, 16*(5), 577–594. doi:10.1080/13540602.2010.507967

Catapano, S., & Huisman, S. (2013). Leadership in hard-to-staff schools: Novice teachers as mentors. *Mentoring & Tutoring: Partnership in Learning, 21*(3), 258–271. doi:10.1080/13611267.2013.827833

Chatlain, G., & Noonan, B. (2005). Teacher induction in Catholic schools. *Journal of Catholic Education, 8*(4), 499–512.

Cherian, F., & Daniel, Y. (2008). Principal leadership in new teacher induction: Becoming agents of change. *International Journal of Education Policy and Leadership, 3*(2), 1–11.

Cherubini, L. (2010). An analysis of the implications between the theoretical framework and the policy context of Provincial Education Policy in Ontario. *Journal of Contemporary Issues in Education, 5*(1), 20–33.

Cherubini, L., Kitchen, J., & Hodson, J. (2008). Aboriginal epistemologies and new teacher induction: The context of a bi-epistemic research endeavour. *Brock Education, 18*, 79–89.

Cooperrider, D.L., & Whitney, D. (2007). Appreciative inquiry: A positive revolution in change. In P. Holman & T. Devane (Eds.), *The Change Handbook* (pp. 73–88). San Franscisco, CA: Berrett-Koehler.

Delp, S.C. (2014). The high school principals influence on novice teacher induction within a distributed leadership framework. *Journal of School Public Relations, 35*(2), 176–206.

Desimone, L.M., Hochberg, E.D., Porter, A.C., Polikoff, M.S., Schwartz, R., & Johnson, L.J. (2014). Formal and informal mentoring: Complementary, compensatory, or consistent? *Journal of Teacher Education, 65*(2), 88–110.

Fantilli, R.D., & McDougall, D.E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and Teacher Education, 25*(6), 814–825. doi:10.1016/j.tate.2009.02.021

Frels, R.K., Zientek, L.R., & Onwuegbuzie, A.J. (2013). Differences of mentoring experiences across grade span among principals, mentors, and mentees. *Mentoring & Tutoring: Partnership in Learning, 21*(1), 28–58. doi:10.1080/13611267.2013.784058

Glazerman, S., Isenberg, E., Dolfin, S., Bleeker, M., Johnson, A., Grider, M., & Jacobus, M. (2010). *Impacts of comprehensive teacher induction: Final results from a randomized controlled study (NCEE 2010-4027)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

Gordon, E., & Lowrey, K.A. (2016). The mentoring web: Coming together to make a difference. *Improving Schools*, *20*(2), 1–13. doi:10.1177/1365480216650310

Gordon, E., & Lowrey, K.A. (2017). The mentoring web: Coming together to make a difference. *Improving Schools, 20*(2), 178–190.

Guarino, C.M., Santibañez, L., & Daley, G.A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research, 76*(2), 173–208. doi:10.3102/00346543076002173

Hellsten, L.-a.M., Prytula, M.P., Ebanks, A., & Lai, H. (2009). Teacher induction: Exploring beginning teacher mentorship. *Canadian Journal of Education, 32*(4), 703–733.

Johnson, S.M., & Birkeland, S. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal, 40*(3), 581–617.

Jones, M. (2002). Qualified to become good teachers: A case study of ten newly qualified teachers during their year of induction. *Journal of In-Service Education, 28*(3), 509–526.

Kutsyuruba, B., & Walker, K.D. (Eds.). (2017). *The bliss and blisters of early career teaching: A pan-Canadian perspective*. Burlington, ON: Word and Deed.

Lassila, E.T., Timonen, V., Uitto, M., & Estola, E. (2017). Storied emotional distances in the relationships between beginning teachers and school principals. *British Educational Research Journal, 43*(3), 486–504. doi:10.1002/berj.3280

Lichtman, M. (2010). *Qualitative research in education: A user's guide*. Thousand Oaks, CA: Sage.

Long, J.S., McKenzie-Robblee, S., Schaefer, L., Steeves, P., Wnuk, S., Pinnegar, E., & Clandinin, D.J. (2012). Literature review on induction and mentoring related to early career teacher attrition and retention. *Mentoring & Tutoring: Partnership in Learning, 20*(1), 7–26. doi:10.1080/13611267.2012.645598

McMillan, J.H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). New York, NY: Pearson.

Moir, E., Barlin, D., Gless, J., & Miles, J. (2009). *New teacher mentoring: Hopes and promise for improving teacher effectiveness*. Cambridge, MA: Harvard Education Press.

Moolenaar, N.M., Daly, A.J., & Sleegers, P.J. (2012). Exploring patterns of interpersonal relationships among teachers. In T. Wubbels, P. den Brok, J. van Tartwijk, & J. Levy (Eds.), *Interpersonal relationships in education* (pp. 87–101). Rotterdam, NL: Sense.

Mountain View School Division. (2011). *Chapter 3: Personnel supervision and evaluation of teachers 3.2*. Retrieved Novembert 17, 2014, from http://www.mvsd.ca/governance.cfm?subpage=434.

Newfoundland and Labrador Teachers' Association. (2007). *Mentoring beginning teachers handbook*. Retrieved October 7, 2014, from https://www.nlta.nl.ca/files/documents/tchrmntr_hdbk.pdf.

Northwest Territories Teacher Induction. (2016). *New teacher induction: A program for beginning teachers*. Retrieved June 23, 2016, from http://www.newteachersnwt.ca.

Nova Scotia Teacher's Union. (2012). *Handbook for early career teachers: Helping you to survive in the classroom*. Retrieved January 7, 2015, from http://www.nstu.ca/images/pklot/early%20career%202012%20NEW%20web.pdf.

Ontario Ministry of Education. (2010). *A resource handbook for principals*. Retrieved December 2, 2014, from http://www.edu.gov.on.ca/eng/teacher/NTIPPrincipal.pdf.

Pogodzinski, B. (2015). Administrative context and novice teacher-mentor interactions. *Journal of Educational Administration, 53*(1), 40–65. doi:10.1108/jea-06-2013-0073

Prior, L. (2003). *Using documents in social research*. Thousand Oaks, CA: Sage.

Roberson, S., & Roberson, R. (2009). The role and practice of the principal in developing novice first-year teachers. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 82*(3), 113–118.

Saskatchewan Teachers' Federation. (2009). Creating a supportive environment: An administrator's handbook for working with beginning teachers. Retrieved October 3, 2014, from https://www.stf.sk.ca/portal.jsp?Sy3uQUnbK9L2RmSZs02CjV/LfyjbyjsxsrMsbr4vaaHA=F

Scherff, L. (2008). Disavowed: The stories of two novice teachers. *Teaching and Teacher Education, 24*(5), 1317–1332.

Shockley, R., Watlington, E., & Felsher, R. (2013). Out on a limb. *NASSP Bulletin, 97*(4), 350–377. doi:10.1177/0192636513510595

Sullivan, A.M., & Morrison, C. (2014). Enacting policy: The capacity of school leaders to support early career teachers through policy work. *The Australian Educational Researcher, 41*(5), 603–620. doi:10.1007/s13384-014-0155-y

Tillman, L.C. (2005). Mentoring new teachers: Implications for leadership practice in an urban school. *Educational Administration Quarterly, 41*(4), 609–629. doi:10.1177/0013161x04274272

Totterdell, M., Woodroffe, L., Bubb, S., & Hanrahan, K. (2004). *The impact of newly qualified teachers (NQT) induction programmes on the enhancement of teacher expertise, professional development, job satisfaction or retention rates: a systematic review of research literature on induction*. London, UK: EPPI-Centre, Social Science Research Unit, Institute of Education.

Tschannen-Moran, M., & Tschannen-Moran, B. (2011). Taking a strengths-based focus improves school climate. *Journal of School Leadership, 21*(2), 422–448.

Turner, M. (1994). The management of the induction of newly qualified teachers in primary schools. *Journal of Education for Teaching, 20*(3), 325–341.

Wechsler, M.E., Caspary, K., & Humphrey, D.C. (2008). *State-funded induction and mentoring programs in Illinois: Findings from the original ten programs*. Menlo Park, CA: SRI International.

Wood, A. (2005). The importance of principals: Site administrators' roles in novice teacher induction. *American Secondary Education, 33*(2), 39–62.

Wynn, S.R., Carboni, L.W., & Patall, E.A. (2007a). Beginning teachers' perceptions of mentoring, climate, and leadership: Promoting retention through a learning communities perspective. *Leadership & Policy in Schools, 6*(3), 209–229.

Zachary, L. (2005). *Creating a mentoring culture: The organization's guide.* San Francisco, CA: Jossey Bass.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(3)
2019

Measures of Socio-Economic Status in Educational Research: The Canadian Context

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Abstract This study aims to recommend and test a conceptual model for socio-economic status (SES) and variables to measure it that are available to researchers in Canada and applicable in other countries. Recommendations for quantitative researchers are presented to address issues that arise with including SES in analyses. The study analyzed data linking student achievement in mathematics and literacy to both economic and social factors. Results from hierarchical linear modelling showed that the use of intersecting variables was better served to answer research questions than any individual SES measure or a composite measure. Using SES measures at the school and neighbourhood level is also recommended.

Keywords Socio-economic status; Student achievement; Hierarchical linear modelling; Canadian context

Introduction

One purpose of educational research is to determine factors that influence student academic success in order to recommend changes to policy and approaches to leadership. Over the last three decades, quantitative researchers have come to depend

Sarah L. Patten (2019). Measures of Socio-Economic Status in Educational Research: The Canadian Context. *International Journal of Education Policy & Leadership 14*(3). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/858 doi: 10.22230/ijepl.2019v14n3a858

on measures of socio-economic status (SES) as part of this process. Michael Harwell and Brandon LeBeau (2010) note that:

> Analyses of educational data often include student background variables as statistical controls to enhance the credibility of inferences. One of the most frequently used student variables is socioeconomic status. (p. 120)

In order to determine if interventions, leadership actions, and policy decisions have an impact, "SES is taken into account statistically to ensure that the program's effectiveness is evaluated independent[ly]" (Harwell, 2018, p. 3). Data about income levels and poverty are also used to allocate resources in many jurisdictions. As well, by controlling for SES, researchers are able to compare results across schools, districts, provinces, states, and even countries. However, the use of student SES as a variable in statistical analysis is complicated by the fact that researchers do not always have access to the same measure. As well, SES can be measured at different aggregate levels (individual, school, neighbourhood, and district). There is a need for accessible, reliable, and valid measures of SES because of the important decisions being made in education with this data. One option for a consistent measure is to use federal-level data based on family income. For example, in the United States there is a measure of whether students qualify for a free or reduced-price lunch (FRL) based on family income. In the United Kingdom there is an income-based measure to determine whether students receive a free school meal (FSM). However, a similar measure of SES does not exist for studies based in the Canadian context. In Canada, education is the purview of provincial and territorial governments, which means that there is not a consistent measure across the country. Researchers in Canada, and in other countries, need reliable, valid, and consistent measures of SES. The purpose of this article is to review past practices and options for SES measures that are available in Canada and then develop a conceptual model. Data from a previous study (Leithwood, Patten & Jantzi, 2010) will be reanalyzed using hierarchical linear modelling to test the model and determine measures of SES that are available in the Canadian context and can be recommended for use by quantitative researchers.

Theoretical background

The assertion that SES is an influential factor began in the United States with a report by James Coleman (1966) and in the United Kingdom with a report by Gilbert Peaker (1971). In both reports it was "concluded that family background was more important than school factors in determining children's educational achievement" (Buchmann, 2002, p. 166). This perspective continues to inform research as:

> the theoretical framework sociologists use to examine inequalities presumes that academic attainment, and ultimately occupational attainment, are largely determined by family origins and educational experiences. (Willms, 1999, p. 9)

The Coleman (1966) and Peaker (1971) reports and other studies that have followed, suggest that the "socioeconomic status (SES) of families explains more than half of the difference in student achievement across schools" (Leithwood, Louis,

Anderson, & Wahlstrom, 2004, pp. 46–47). Other research has determined that family related factors account for as much as 50 percent of the variation in student achievement across schools (Kyriakides & Creemers, 2008). Larger studies, including meta-analyses, have found a strong link between socio-economic factors and student academic achievement (Caro, McDonald, & Willms, 2009; Fan & Chen, 2001; Fan & Williams, 2010; Nagy, Traub, & Moore, 1999; Sirin, 2005). In a report Michael Harwell (2018) states:

> SES is a core facet of much educational research and policy because of the perceived importance of taking into account disparities in SES among students, classrooms, and schools to help ensure accurate inferences about student learning and achievement. (p. 6)

A literature review of leadership effects on student achievement determined that empirical evidence supported four claims about family background:

1. A family's SES is strongly related to student learning and behaviour.
2. A family's SES influences learning indirectly by shaping educational culture in the home.
3. Strong family educational culture provides children with intellectual, social, and emotional capacities that improve their chances of being successful in school.
4. Wider communities in which children live also contribute to the capacities needed for school success. (Leithwood et al., 2004)

There is an entrenched belief in data-based educational research that SES must be accounted for when quantitatively evaluating student achievement in response to interventions, leadership actions, and policy. This article seeks to recommend conceptual models for SES measures that are available in the Canadian context and will be useful for research in education.

Literature review

For such an essential measure, there is little agreement about how to represent and measure SES both within and between countries. As well, the selection and availability of SES factors has changed over the last five decades. Once SES was found to have an impact on students' achievement throughout the 1970s, researchers began to rely on single measures beginning in the 1980s. With the development of more sophisticated data analysis, the use of a single, dichotomous variable has been challenged. More researchers are testing the use of composite variables or including multiple measures of SES to address many sources of variance. The literature review gives an overview of measures that have been previously used, as well as an evaluation of those that are most useful for educational researchers in the Canadian context.

Single measures

A variety of studies choose to represent and measure the effect of SES using a single variable. As seen in Selcuk Sirin's (2005) meta-analysis, two of the most prevalent single measures are parental education and parental occupation. These both connect

to the presumption that the economic status of the parents influences the educational and future occupational outcomes of the child (Willms, 1999). A proxy measure for family income used in the United Kingdom is the percentage of students eligible for an FSM, because eligibility is based on family income and whether the family is receiving government assistance (Gorard, 2012; Hobbes & Vignoles, 2010). While the local school authorities do not collect information about individual income, the percentage of students eligible for an FSM in a school is readily available from school administrations at no cost, which makes it an attractive measure for researchers. Similarly, one of the most-cited measures of SES in quantitative studies in the United States is the percentage of students who qualify for FRL lunches, which is determined by federal government funding allocations and based on household income (Harwell, 2018; Kurki, Boyle, & Adaljem, 2005). There is an assumption that eligibility for FRL can be used to measure income and, subsequently, SES because:

> Students are eligible for a reduced price lunch if their household income is less than 185% of the federal poverty guidelines and for a free lunch if their household income is less than 130% of the poverty guidelines. (Harwell & LeBeau, 2010, p. 122)

All of these single-indicator measures connect back to the premise that SES is meaningfully represented only as a function of family income, parent occupation, or parental education.

There are both benefits and problems with using a single measure to represent SES. A single measure is easy to collect, especially for large data sets, and can be accessed for very little cost (Harwell & LeBeau, 2010). The information can also be collected unobtrusively as it is often available publically, which avoids the problems associated with asking students about the SES of their families (Merola, 2005). When SES is being measured to serve as a control variable, only using one value simplifies calculations and avoids the problems associated with missing data. However, some reports criticize using family income as a crude proxy variable for SES because although income is related to family educational culture, it cannot account for other interactions or influences in the family or community (Cabrera, Karl, Rodriguez, & Chavez, 2018; Leithwood et al., 2004; Roebuck, 2017). By only using one variable, studies can overestimate SES effects. When studies adjust for family background but only use one measure, this leads to what Peter Hill and Kenneth Rowe (1996) call under specification, in that not all relevant aspects of family background are included and "the impact of unreliability in intake measures invariably leads to over-estimates of the proportion of variance at the student level" (p. 10). Another issue when only using one measure is the possibility of an imperfect binary. Some studies will set up a dichotomous measure as a proxy for income, for example, students who qualify for an FSM and those who do not. However, not all students who qualify for an FSM are in the lowest-income households, which results in an imperfect proxy bias (Hobbes & Vignoles, 2010) and an "unreliable approximation of SES, since the true value of the underlying concept is continuous" (van Ewijk & Sleegers, 2010, p. 138). There can also be issues when an FRL is used as an aggregate at the school level as "enrollment rates provide an imprecise measure of school-level economic advantage" (Domina, Brummet, Pharris-Ciurej, Porter, Penner, Penner, & Sanabria, 2017, p. 2).

The literature reviewed shows that there are both benefits and problems associated with using a single measure of SES that researchers must consider. As well, when conducting research outside of the U.S. or the U.K., there are no equivalent measures to use as proxies for family income.

Multiple measures

Another approach in educational research is to conceptualize SES as a combination of factors. These studies often use a traditional measure of SES (income, parental occupation, or parental education) coupled with measures of family resources, educational culture, or neighbourhood influences. The American Psychological Association Task Force (APA, 2007) report states that SES must be considered in context with other constructs and an "intersectional approach considers these constructs as multiple, interlocking dimensions of social relations" (p. 8). There are examples of studies that consider multiple measures of SES. Doris Entwisle and Nan Astone (1994) recommend that researchers use family income, the mother's education level, and information about the family structure (e.g., the number of birth parents, step-parents, or grandparents in the home). In a study of the impact of school organizational culture on student achievement, a sociocultural capital index was used based on both parent's highest education levels and the number of books in a student's home (Dumay, 2009). Research studies have also looked at family background and characteristics to help explain the variance in student achievement. In a Canadian study, Xin Ma and Don Klinger (2000) estimated a variable called SES using student reports of "education related possessions at home and their participation in social and cultural activities, rather than parental income or occupation" (p. 44). The same study measured the number of parents in the home (two or one) and created a variable called Parental Involvement by asking students how much a parent helped with homework and talked about the importance of school. In a study of secondary students results on a literacy test in Ontario, the level of mean family income in the neighbourhood of the school was measured in conjunction with access to a computer and literary resources at home (Klinger, Rogers, Anderson, Poth, & Calman, 2006). A link between a family's access to resources and a student's academic achievement is seen when SES is measured with multiple variables. Using an intersection of factors also provides researchers with the ability to conceptualize SES in a broader sense. However, some difficulties when working with several intersecting measurements are collecting accurate data and being able to determine which variables have had a significant influence. As well, as seen in the examples, the conceptualization of SES is not consistent.

A further extension of this research approach is to use composite measures, where several factors are accounted for, but the analysis only uses a single value derived from the measures. One composite measure is called the Social Risk Index (SRI). Human Resources Development Canada (HRDC, 2003) developed it as a way to profile the SES and potential risk factors in communities, such as low income, high mobility, or high unemployment rates. It includes nine variables available from Canadian census data: average household income, unemployment rate, proportion of adults without a high school diploma, proportion of homeowners, mobility, speak-

ing an official language, proportion of recent immigrants, lone-parent families, and reliance on government transfer payments. The composite scores results in a number from zero to nine, with higher scores indicating an increased level of social risk. A composite accounts for a variety of factors influencing SES at a neighbourhood level, yet still provides a single value for use in calculations.

As with other methodological approaches, there are problems with composites. The APA (2007) task force cautions against their use:

> one should be careful about creating a composite measure. It is generally more informative to assess the different dimensions of SES and understand how each contributes to an outcome under study rather than merge the measures. (p. 11)

Many composite measures use data gathered from a country's census. There can be an issue with this reliance on census data:

> The main drawback of census-based poverty measures is the fact that full census data are collected and published only every 10 years. Although neighborhoods do not change overnight, significant changes do take place over the course of 10 years, and the student composition of schools is likely to change even faster. (Kurki et al., 2005, p. 7)

Even in Canada, where census data is collected every five years, there is a possibility that neighbourhoods may changes over that time. Composite measures can provide a representation of SES that involves many factors, but whether they are applicable or available in a specific context needs to be taken into account.

Levels of measurement

A consideration for researchers is whether the data will be collected from individual students, aggregated at the school level, or taken from the neighbourhood around the school. The most comprehensive and accurate picture of SES comes from questioning an individual or family members about their lives. However, very few large-scale quantitative studies can afford the time and cost associated with collecting accurate data from individuals. Often, university-based researchers are not allowed access to students. In the case of younger children, they cannot accurately answer income, occupation, or parental education-level questions, so their parents must be contacted to provide accurate information (Kurki et al., 2005; Viadero, 2006). There are also issues of privacy around SES, such that the Programme for International Student Assessment and other international studies do not allow students to be questioned about income (May, 2002). Individual non-response to questions about SES results in missing data and undermines the study (Hauser, 1994). The next level of aggregation is to calculate values to represent the whole school. Several meta-analyses have found a strong correlation between SES and student achievement when aggregated at the school level (Hattie, 2009; Sirin, 2005; White, 1982). Karl White (1982) found that the correlation between SES and academic achievement was stronger when aggregated to the school level, rather than at an individual student level. Similarly, Sirin (2005) determined that:

> of all the factors examined in the meta-analytic literature, family SES at the student level is one of the strongest correlates of academic performance. At the school level, the correlations were even stronger. (p. 438)

Fortunately, in Canada, school-level achievement and economic data is often available publically through the provincial or territorial education ministry. The next level of aggregation is to use SES values that represent the neighbourhood surrounding the school. An argument is that neighbourhood data is a better alternative because "the immediate geographic area where a person lives fundamentally moulds that individual's life chances: his or her educational, social and financial future" (Kurki et al., 2005, p. 3). Psychological research has shown that the perception of social rank within the neighbourhood also has an impact on student well-being (Roebuck, 2017). The belief that neighbourhood SES is important for student success is seen at work at the Ontario Ministry of Education (OMOE). Information on the percentage of school children from low-income households who are recent immigrants, whose parents have less than a high school diploma, and who come from single-parent families, determines an amount of additional funding to school districts (OMOE, 2010). The ministry uses data from the Statistics Canada census for each dissemination area (DA) linked to postal codes in the province. The OMOE uses student home address postal codes to determine what percentage of each school's population is in each DA, then weights the census data to provide a more accurate picture of each school's neighbourhood demographics. Philip Nagy, Ross Traub, and Shawn Moore (1999) refer to this as the enrollment method, where:

> the demography of a school is indexed in terms of the demography of those parts of the catchment area and beyond that are represented by the students attending the school … which requires the postal codes of the students attending the school. (p. 37)

This comparative study found that the enrollment method for measuring SES correlates more strongly with student achievement (Nagy, et al., 1999). The Government of British Columbia uses Statistics Canada data for six indicators and analyzes it by district to determine social economic indicators (BCStats, 2013). However, this level of analysis is too time consuming for individual researchers and not all Canadian provinces track the same data, so there is not a consistent country-wide measure or aggregate level for researchers. However, if a provincial government makes these measures publically available, then they can be reliable and useful for educational research.

Criteria for use of SES measures

As mentioned previously, a researcher must carefully consider the scope and purpose of his or her study when deciding on the most appropriate measure of SES and the level of aggregation to use for the data. Some factors that influence research design and the way that SES is measured are the type of information that is publically and freely available and the scope and timelines of the study (Harwell, 2018; Harwell & LeBeau, 2010; Merola, 2005). It is important to include a measure of SES in quanti-

tative study design, but how do researchers determine an appropriate measure? Robert Hauser (1994) outlines three important characteristics of an SES variable: it must be easy to measure, be measurable for every child involved in the study, and must not vary over the short term. Stacey Merola (2005) explained some of the difficulties with accumulating SES data if parents could not be interviewed and the "need to balance the very real concerns of cost and obtrusiveness with the need to collect valid data" (p. 3). The American Psychological Association (APA, 2007) report on the use of SES in research is clear that researchers must base their choice of SES measure on a specific theory so that it truly relates to the outcome being studied. Based on the work of the APA and several other research studies, Harwell and LeBeau (2010) outline an approach for researchers to follow. Researchers should begin with "a clear conceptualization of SES and select one or more variables that capture the relevant circumstances of a student's SES consistent with that conceptualization and the purpose of the study" (p. 126). The conceptualization of SES needs to be part of the design phase in research.

Researchers must strike a balance when finding useable measures of SES for analysis that are accessible at a reasonable cost and valid and reliable for the researcher's conceptualization. There are measures that require little work on the researchers' part, such as the percentage of students qualifying for an FRL or FSM. These values are already calculated by the school or district and they are collected each year. However, there is criticism that an FRL is not valid or reliable because the information is based on self-reporting and it is a crude measure of income (Domina et al., 2017; Harwell, 2018; Harwell & LeBeau, 2010; Viadero, 2006). There are also questions about the validity of any study that only uses one measure of SES (APA, 2007; Cabrera et al., 2018; Hill & Rowe, 1996) that is tied to family income. There are more factors that influence student achievement than just income level.

Researchers may conceptualize socio-economic measures as combined variables and composite measures. Examples of this type include both income and educational resources in the home or parental education. A study found that a proxy for income worked better when combined with other measures of SES (Cabrera et al., 2018). These measures, both economic and social, may be available from schools or can be calculated with publically available information. Again, researchers need to think carefully about the conceptualization of SES, preferably in the early stages of planning and before data collection begins.

Purpose

Based on the literature review, the hypothesis of this article is that the calculation of intersecting variables better serves to answer research questions than any individual or composite measure and that SES should be measured at the school and neighbourhood level. Socio-economic status should be conceptualized and measured as the result of both economic and social influences (APA, 2007; Cabrera et al., 2018; Dumay, 2009; Entwisle & Astone, 1994; Leithwood, Patten & Jantzi, 2010; Klinger et al., 2006). As well, Lisa Nicholson, Sandy Slater, Jamie Chriqui, and Frank Chaloupka (2014) recommend "that multiple components should be measured and used separately in the models" (p. 57). In the Canadian context, data for the areas

surrounding schools is publically available and a study is able to measure several factors with a reasonable level of cost of access and calculation. By aggregating data at the school or neighbourhood level, the issue of individual non-response is eliminated and a researcher is better able to measure neighbourhood effects (Nagy et al., 1999). The next step in continuing this research is to test measures of SES using data from multiple district school boards in Ontario and compare several approaches to analysis to see which better explains the variance within student achievement results in mathematics and literacy.

Methods

The survey data used for this analysis was collected in the spring of 2009 as part of a larger project on educational leadership (Leithwood, Patten & Jantzi, 2010). For this study, the achievement and SES measures collected were reanalyzed. Hierarchical linear modelling (HLM) was used to test how different measures of SES explained the variance in mathematics and literacy scores in elementary schools. The first level of analysis used mathematics and literacy scores for the school as the outcome variable and measures of SES were the predictors. The second level of analysis accounted for different types of school district, whether public, Catholic, or French. The analysis was completed using HLM 7 from Scientific Software International and procedures outlined by Stephen Raudenbush and Anthony Bryk (2002).

There were responses from 219 elementary schools across 34 district school boards in Ontario. However, due to missing data only 199 schools are included in the analysis. In Ontario there is province-wide testing of literacy and mathematics in Grades 3, 6, 9, and 10. The outcome variable measuring student achievement is the percentage of students at the school who achieved or exceeded the provincial standard on the standards-based assessment. The value used in this analysis is the average of the success rate in math or literacy testing for all participating students at the school. The measures of SES included the effect of family background measured using both school- and neighbourhood-level variables. A composite variable that was tested included three measures of the SES of families in the community around the school: the income of households expressed as a percentage of the highest income in the sample, the percentage of two-parent families in the community, and the percentage of adults in the area who attained some post-secondary education. Each of these three measures was also tested as an independent predictor of achievement. A measure of the education culture and resources within the home were two predictors that represented the percentage of students at each school who reported that they had adult support for homework and a computer available for their use in the home. The data on support in the home was collected through surveys given to each student who wrote the provincial test and was aggregated and reported publically for each school by the testing agency.

Results

The data for each school was entered into SPSS Statistics 24 and the descriptive statistics are presented in Table 1.

Table 1. Descriptive statistics

Variable	Mean	Standard deviation	Minimum	Maximum
Math achievement	65.53	14.06	25	98.5
Literacy achievement	66.55	12.45	22.25	97.5
SES composite	58.92	7.21	43.35	91
Family composite	38.62	4.89	15.25	51.50
Income level	34.67	8.58	17.14	100
Two parents	84.21	5.32	66	96
Higher education	57.88	13.24	26	93
Adult help	15.61	4.43	2	30.5
Computer at home	61.62	9.7	12	88.5

To test the hypothesis that using an intersection of factors would better explain the variance in math and literacy test scores, the outcome variable represented the percentage of students who wrote the test and scored at or above the provincial standard for their grade. Prior to the analysis, the composite variables created were tested for internal reliability. The internal consistency of both variables was checked using the value of Cronbach's alpha (α). For the SES composite the value was $\alpha = 0.802$, which is considered strong. However, for the Family composite the value was $\alpha = 0.542$, which is weak. Therefore, only the SES composite was used in the analysis. The two Family predictors were retained but were used as separate variables.

The first analysis used the achievement data for the province-wide mathematics test as it had a larger standard deviation and more variance within the school scores. The use of multilevel regression accounts for the nested nature of the data. The assumption is that if schools are part of the same district school board, they will follow similar policies and procedures and any variance within the district could be due to socio-economic factors. For all of the models the residual effects, μ_{0j}, were assumed to be normally distributed with mean 0 and variance τ_{00}. The analysis was run with restricted maximum likelihood because of the sample size. An analysis of the unconditional model was run in order to determine the mean value of all scores and how much variance occurred within schools in the same district school board and how much variance occurred between district school boards.

$$\text{Level 1 Model:} \quad \text{MathAchievement}_{ij} = \beta_{0j} + r_{ij} \qquad r_{ij} \overset{iid}{\sim} N(0, \sigma 2)$$

$$\text{Level 2 Model:} \quad \beta_{0j} = \gamma_{00} + \mu_{0j} \qquad \mu_{0j} \overset{iid}{\sim} N(0, \tau_{00})$$

For the unconditional model, the overall grand mean score for Math Achievement$_{ij}$ was 65.5 ($t = 44.5$, $p < 0.001$), which represents that, on average, 65 percent of students in Grades 3 and 6 in the sample are achieving the provincial standard in math.

The main objective of running the unconditional model was to determine if there was variance either within schools in the same district or between schools in different districts. The variance within schools was $\sigma^2 = 171.8$ and the variance be-

tween school districts was $\tau_{00} = 27.7$. The interclass correlation (ICC), which represents the proportion of variance between districts, is 14 percent, so the difference within schools in the same district accounts for 86 percent of the variance.

The next step of the analysis added predictor variables to represent the socio-economic factors in the neighbourhood and show the relationship to student achievement in order to explain some of the variance. Two different models were run to determine whether SES explains more of the variance when analyzed as a composite measure or as separate predictors. Model 2 was run with just the composite SES and Model 3 was run with the three separate economic predictors representing the neighbourhood surrounding each school (level of income, two-parent families, and levels of higher education). All of the variables were grand-mean centred following the procedures in Raudenbush and Bryk (2002). Any variables that were too small, with coefficients less than 0.10, and not statistically significant, with a *p* value greater than 0.10, were dropped. After the first run of Model 3, the variable of Income Level was dropped as it was not statistically significant.

Table 2. Comparison of two models using a composite measure versus separate predictors

	Model 2	Model 3
Math achievement —grand mean β_0	65.5	65.5
Variance within school districts σ^2	142.6	142.2
Variance between school districts τ_{00}	31.7	31.7
Relationship of predictors to student achievement	SES $\gamma_{10} = 0.83$ $t = 6.08$, $p < 0.001$	Two parents $\gamma_{10} = 0.69$ $t = 3.54$, $p < 0.001$ Higher education $\gamma_{20} = 0.30$ $t = 3.60$, $p < 0.001$

As can be seen in Table 2, the composite and separate predictors explain the same amount of variance in the reduced model. By accounting for socio-economic factors, 17 percent of the variance within districts is explained. However, the model with two factors provides more details to the researcher. As well, the APA (2007) guidelines recommend including more dimensions of SES in order to understand how each contributes to student achievement. Therefore, Model 3 was retained for the analysis.

The next step in the model was to add two predictors to represent the social factors in the family, whether a parent was available to help with homework and if a computer was available in the home. During the analysis, the predictor for adult help with homework was not statistically significant and was dropped. Model 4, the final model, with three predictors of SES is presented in Table 3. Adding the three predictors for different aspects of SES explained 30 percent of the variance in mathematics achievement within school boards. Overall, the results show that, on average, 65 percent of students meet the provincial standard in mathematics.

Table 3. Relationship between student achievement and socio-economic predictors

Model 4 Results	
Math achievement—grand mean β_0	65.5
Variance within school districts σ^2	120.9
Variance between school districts τ_{00}	35.33
Relationship of predictors to student achievement	
Computer in the home	$\gamma_{10} = 0.57$ $t = 5.57, p < 0.001$
Two parents	$\gamma_{20} = 0.60$ $t = 3.30, p = 0.001$
Higher education	$\gamma_{30} = 0.18$ $t = 2.32, p = 0.022$

The three predictors of SES all have a positive relationship with math achievement. The higher the percentage of students that have a computer available in the home, the higher the overall scores ($\gamma_{10} = 0.57$). There is a similar positive relationship when the neighbourhood around the school has a higher percentage of two-parent families ($\gamma_{20} = 0.60$). The effect of having more adults in the neighbourhood with education beyond the high-school level is smaller, but still positive ($\gamma_{30} = 0.18$). All of these predictors show that in this data set, SES does account for and explain some of the variance in mathematics achievement within (30%) and between (27%) district school boards.

The same procedure was used to analyze the data using the success rate of students on the province-wide literacy test of reading and writing. The results were very similar. The use of the same three predictors explained 29 percent of the variance within schools in the same district. All three predictors had a positive relationship with literacy achievement: computer in the home $\gamma_{10} = 0.46$, two-parent family $\gamma_{20} = 0.33$, level of higher education $\gamma_{30} = 0.23$. This finding extends the use of the conceptual model of SES as a combination of economic status, family composition, and resources available in the home.

Discussions and recommendations

The purpose of this study was to recommend and test a conceptual model for SES and variables to measure it that are available to researchers in Canada and still applicable in other countries. The analysis for this sample showed that there was not a statistical benefit to using a composite variable in comparison to the use of separate variables. The recommendation is that multiple predictors of SES should be used in educational research. There are too many problems both conceptually and statistically with only using one single measure of SES. Socio-economic status should be conceptualized and measured as the result of both economic and social influences (APA, 2007; Cabrera et al., 2018; Dumay, 2009; Entwisle & Astone, 1994; Klinger et al., 2006; Leithwood, Patten & Jantzi, 2010). Conceptually, including a measure of status by education or income is imperative. Adding additional variables to measure family composition, such as two-parent versus single-parent households, and

resources, such as books or computers in the home, gives researchers a better understanding of the many facets of SES and how it can impact student achievement. Based on the literature reviewed and the measures tested, a combination of predictors in this study explained approximately 30 percent of the variance within districts. A further recommendation is that quantitative researchers use data based on what is publically available in their province, state, or country. Using data collected through a government agency saves time, effort, and cost for individual researchers. Working with data that is aggregated to the school and neighbourhood level results in less missing data and accounts for neighbourhood effects. As well, the work done by Statistics Canada and other government agencies is reliable, timely, and the measures are explained clearly.

Limitations and future research

A limitation of this study is that the data collected were based on only one time period. Changes in SES can be difficult to track over time, but it would be interesting in future research to try and determine if changes in achievement scores reflected changes in neighbourhood demographics. As well, all of the data was collected from public sources and was aggregated at the school and neighbourhood level. For this reason it is inappropriate to make assumptions about individual student achievement. The socio-economic predictors used did not account for all of the variance, but as stated previously, SES is only used to ensure that the testing and inferences about other factors being investigated is accurate.

Conclusion

The study was a response to the need for Canadian educational researchers to have a valid way to conceptualize and measure SES. The recommendations provided and tested outline a consistent approach to quantitative analysis that includes predictors for SES. Researchers should conceptualize SES as a combination of factors and use measures that include economic factors, family composition, and educational resources. There will always be issues with the use of statistical proxies and trying to quantify all of the factors that impact student achievement. Researchers in all jurisdictions can benefit from reflecting on their own practices in how they conceptualize and measure SES when making their own conclusions in quantitative research.

References

American Psychological Association: Task Force on Socioeconomic Status. (2007). *Report of the APA Task Force on Socioeconomic Status*. Washington, DC: American Psychological Association.

BCStats. (2013). *British Columbia regional socio-economic indicators – methodology*. Victoria, BC: Province of British Columbia. Retrieved July 4, 2018, https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/socio-economic-profiles-indices/methodology-background.

Buchmann, C. (2002). Measuring family background in international studies of education: Conceptual issues and methodological challenges. In A. Porter & A. Gamoran (Eds.), *Methodological Advances in Cross-National Surveys of Educational Achievement* (pp. 150–197). Washington, DC: National Academy of Sciences.

Cabrera, J.C., Karl, S.R., Rodriguez, M.C., & Chavez, C. (2018). Investigating socioeconomic status proxies: Is one proxy enough? Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Caro, D., McDonald, J.T., & Willms, D. (2009). Socio-economic status and academic achievement trajectories from childhood to adolescence. *Canadian Journal of Education, 32*(3), 558–590.

Coleman, J.S. (1966). *Equality of educational opportunity*. Washington, DC: US Department of Health, Education, and Welfare.

Domina, T., Brummet, Q., Pharris-Ciurej, N., Porter, S., Penner, A., Penner, E., & Sanabria, T. (2017). *Capturing more than poverty: School free and reduced-price lunch data and household income*. Washington, DC: Center for Administrative Records Research and Application.

Dumay, X. (2009). Origins and consequences of schools' organizational culture for student achievement. *Educational Administration Quarterly, 45*(4), 523–555.

Entwisle, D.R., & Astone, N.M. (1994). Guidelines for measuring youth's race/ethnicity and socioeconomic status. *Child Development*, *65*(6), 1521–1540.

Fan, W., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13*(1), 1–22.

Fan, W., & Williams, C.M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology*, *30*(1), 53–74.

Gorard, S. (2012). Who is eligible for free school meals? Characterising free school meals as a measure of disadvantage in England. *British Educational Research Journal*, *38*(6), 1003–1017.

Harwell, M. (2018). *Don't expect too much: The limited usefulness of common SES measures and a prescription for change*. Boulder, CO: National Education Policy Center. Retrieved July 4, 2018, from https://nepc.colorado.edu/publication/SES.

Harwell, M., & LeBeau, B. (2010). Student eligibility for a free lunch as an SES measure in education research. *Educational Researcher, 39*(2), 120–131.

Hattie, J. (2009). *Visible learning: A synthesis of meta-analyses relating to achievement.* London, UK & New York, NY: Routledge.

Hauser, R.M. (1994). Measuring socioeconomic status in studies of child development. *Child Development*, *65*(6), 1541–1545.

Hill, P.W., & Rowe, K.J. (1996). Multilevel modelling in school effectiveness research. *School Effectiveness and School Improvement*, *7*(1), 1–34.

Hobbs, G., & Vignoles, A. (2010). Is children's free school meal "eligibility" a good proxy for family income? *British Educational Research Journal*, *36*(4), 673–690.

Human Resources and Skills Development Canada. (2003). *Understanding the early years.* Gatineau, QC: Human Resources and Skills Development Canada.

Klinger, D.A., Rogers, W.T., Anderson, J.O., Poth, C., & Calman, R. (2006). Contextual and school factors associated with achievement on a high-stakes examination. *Canadian Journal of Education, 29*(3), 771–797.

Kurki, A., Boyle, A., & Aladjem, D.K. (2005). *Beyond free lunch: Alternative poverty measures in educational research and program evaluation.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Kyriakides, L., & Creemers, B.P. (2008) Using a multidimensional approach to measure the impact of classroom-level factors upon student achievement: A study testing the validity of the dynamic model. *School Effectiveness and School Improvement*, *19*(2), 183–205.

Leithwood, K., Louis, K.S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning: Review of Research*. Toronto, ON: OISE/UT.

Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a Conception of How School Leadership Influences Student Learning. *Educational Administration Quarterly*, *46*(5), 671–706.

Ma, X., & Klinger, D.A. (2000). Hierarchical linear modelling of student and school effects on academic achievement. *Canadian Journal of Education*, *25*(1), 41–55.

May, H. (2002). *Development and evaluation of an internationally comparable scale of student socioeconomic status using survey data from TIMSS* [unpublished doctoral dissertation]. Philadelphia, PA: University of Pennsylvania (AAT 3073031).

Merola, S.S. (2005). *The problem of measuring SES on educational assessments.* Paper presented at the American Sociological Association, Philadelphia, PA.

Nagy, P., Traub, R., & Moore, S. (1999). A comparison of methods for portraying school demography using census data. *Alberta Journal of Educational Research*, *45*(1), 35–51.

Nicholson, L., Slater, S., Chriqui, J., & Chaloupka, F. (2014). Validating adolescent socioeconomic status: Comparing school free or reduced price lunch with community measures. *Spatial Demography*, *2*(1), 55–65.

Ontario Ministry of Education. (2010). *Technical paper, 2010–2011*. Toronto, ON: Ontario Ministry of Education. Retrieved March 18, 2011, from http://www.edu.gov.on.ca/fre/policyfunding/funding.html.

Peaker, G. (1971). *The Plowden children four years later*. London, UK: National Foundation for Educational Research in England and Wales.

Raudenbush, S., & Bryk, A. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). London, UK: Sage.

Roebuck, E. (2017). Class and the classroom: The role of individual- and school-level socioeconomic factors in predicting academic outcomes. *Psychology Honors Projects*, *41*. Retrieved July 4, 2018, from http://digitalcommons.macalester.edu/psychology_honors/41.

Sirin, S. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research, 75*(3), 417–453.

van Ewijk, R., & Sleegers, S. (2010). The effect of peer socioeconomic status on student achievement: A meta-analysis. *Educational Research Review, 5*(2010), 134–150.

Viadero, D. (2006). Scholars test out new yardsticks of school poverty. *Education Week*, *26*(11), 1, 15.

White, K.R. (1982). The relation between socioeconomic status and academic achievement. *Psychological Bulletin, 91*(3), 461–481.

Willms, J.D. (1999). *Inequalities in literacy skills among youth in Canada and the United States.* Ottawa, ON: Ministry of Industry.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(4)
2019

Using the Evidence-Based Adequacy Model across Educational Contexts: Calibrating for Technical, Policy, and Leadership Influences

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Abstract This article reports on a rigorous approach developed for calibrating the Evidence-Based Adequacy Model to suit the Ontario K–12 public education context, and the actual calibrations made. The four-step calibration methodology draws from expert consultations and a review of the academic literature. Specific attention is given to the technical revisions and, importantly, the significant influence of policy (values) and leaders' decision-making on the calibration process. It also presents emerging implications for leaders and researchers who are considering calibrating the EBAM for use in their educational context. Calibrating the instrument was a necessary step before use in a jurisdiction outside of the United States, where the model was developed, and our team has been the first to outline a methodology and bring Canadian evidence to the discussion.

Keywords Adequacy; Resources; Education; Calibration; Leadership; Policy; Decision-making

Introduction

The field of education has entered an exciting era, as researchers and policymakers "know more now than ever about effective resource use and can do a better job of taking advantage of that knowledge" (Adams, 2010, p. 24). To help the sector take

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advantage, scholars have been developing approaches to contextualize this knowledge, because what is known about the social world is often borrowed and does not necessarily "hold up across settings [and] over time" (Adam, 2010, p. 24; see also Fazekas, 2012). In the academic area of education finance, the review process for contextualizing this knowledge—which often takes the form of funding frameworks or models—can be quite formal; therefore, this article refers to this process as *calibration*. A great example of scholars calibrating knowledge on the effective use of resources for application across educational contexts is the Evidence-Based Adequacy Model (EBAM), a robust tool grounded in research evidence that was developed in the United States to generate adequate estimates of school resource levels (Odden & Piccus, 2014). The model has been widely applied in the United States, due to the efforts of researchers working in partnership with "policymakers … education leaders and practitioners [to] review, modify, and tailor [the model's] core recommendations to the context of each state's situation" (Odden, Picus, & Goertz, 2010, p. 631). However, no team of scholars or policymakers has attempted to employ the EBAM outside of the United States—opening a space for researchers to develop a new calibration process that would allow stakeholders in other educational contexts to benefit from this knowledge. This article reports on the rigorous calibration process that was developed, as well as the calibrations made to the EBAM—specifically, the model's recommendations for adequately resourcing schools—for use in the context of K–12 public education in Ontario, Canada.

This Canadian province, similar to so many other Organisation for Economic Co-operation and Development (OECD, 2017) educational jurisdictions, has stakeholders engaged in a long-standing debate over what constitutes adequate K–12 school resourcing (Keenan, 2017; Mackenzie, 2009; Office of the Auditor General of Ontario, 2017; People for Education, 2018; Queiser, 2017). This debate, now at a stalemate, has different sides presenting competing and/or conflicting evidence claims (i.e., performance indicators and professional expertise vs. local knowledge), resulting in status-quo resource allocation and use that helps perpetuate student achievement gaps. In addition, provincial education leaders are not systematically using research as a type of evidence to inform how they allocate and use resources, nor is research being used to inform public deliberations on the topic (Faubert, 2018, in press). For these reasons, the province could benefit from a research-based tool on school finance adequacy, such as the EBAM. Before Ontario can make use of the EBAM, however, researchers, policymakers, and education leaders will need to work together to examine and calibrate the instrument for application in their jurisdiction (Adams, 2010; Fazekas, 2012; Odden, Picus, & Goetz, 2010).

This article's intended contributions to the field of education finance and leadership/administration include: a) outlining a process for researchers, policymakers, and education leaders outside of the United States who are interested in calibrating the EBAM and potentially related models for use in their jurisdictions; b) highlighting both the technical revisions and the powerful influence of policy and leadership in calibrating the EBAM; and c) bringing Canadian evidence to the academic discussion on school finance adequacy and education policy funding, as most of the related research has been conducted in the United States.

This article describes the EBAM and briefly explains how this model came to be. Then it provides a brief overview of the Ontario K–12 education policy context and how it fits in the international conversation on school resource adequacy. It then outlines the framework and calibration process used here, and offers a detailed review of the calibrations made. This is followed by additional considerations connected to the factors shaping the calibration process, which are framed as implications for leaders and researchers working in non-American jurisdictions who are considering calibrating the EBAM or a similar evidence-based model. The article concludes with a brief summary.

What is the EBAM? How did it come to be? Why is it important?

There are four approaches to estimating adequate resource levels in schools: a) the input or professional judgement approach, b) the successful district approach, c) the cost function approach, and d) the evidence-based approach (Odden & Picus, 2014). It is beyond the scope of this article to describe each, but suffice to say, each approach is grounded in specific evidence types, with the EBAM and its recommendations grounded (primarily) in research evidence.

Lawrence Odden and Allen Picus developed the EBAM in response to the long-standing debate about the adequacy and equity of school finance in the United States (Adams, 2010; Malen, Dayhoff, Egan, & Croninger, 2017; Odden & Picus, 2014). More specifically, the EBAM can be used to estimate the level of resources "required to deliver a comprehensive and high-quality instructional program within a school" (Odden & Picus, 2014, p. 76). Although the model can also be used to generate resource estimates for district offices, this article focuses only on the school-level recommendations. The model works by applying the EBAM recommendations "tailored to the exact enrolment and demographic data for each school" (Odden & Picus, 2014, p. 118). Because each school has specific needs, the model's recommendations include guidance on how to adjust resource supports proportionately to reflect a school's enrolment level, as well as other characteristics that research has suggested require higher levels of support. For example, schools having a higher percentage of students with disabilities, students who speak English as a second language, and students in the community who live in low-income households (Odden & Picus, 2014; Odden, Picus, & Goetz, 2010).

When compared with the other approaches, the EBAM stands out for three important reasons. First, scholars are increasingly regarding evidence-based models as superior when compared to the professional judgement approach—currently the most widely used—because resource estimates generated using this approach often read like "a wish list" (Costrell, Hanushek, & Loeb, 2008, p. 118) and are subject to political bias (Rebell, 2007).

Second, the model's developers reviewed the latest research evidence and best practices in the United States context. Given that the vast majority of empirical research connected to the effective use of resources in education is conducted in the United States, the EBAM is the most comprehensive model of its type, globally speaking. A literature review confirmed that no other English speaking country has, at this time, the evidence base required to develop a "home-grown" model, again meet-

ing the same standard of evidence as the EBAM. This adds to the value—and necessity—of developing a process for calibrating, and later validating, this model for use in other jurisdictions.

The final reason concerns the opportunity to advance the equity agenda through school finance research. Education finance scholars often consider horizontal equity (i.e., treat all students the same) and vertical equity (i.e., treat students differently because some may need more supports than others to achieve educational aims [Odden & Picus, 2014; Young, Levin, & Wallin, 2014]). Odden and Picus (2014) have argued that "one major difference between equity and adequacy is that equity implies something about a relative difference, while adequacy implies something about an absolute level. [That is,] adequacy requires some link between inputs and outputs … some level of spending that should be sufficient to produce some level of student achievement" (pp. 65–66). Without disagreeing with this notional distinction, the position of Betty Malen, Justin Dayhoff, Laura Egan, and Robert Croninger (2017), usefully advances the argument that a "more fulsome definition of equity … [in school finance can be achieved if scholars] incorporate horizontal equity, vertical equity and adequacy" (p. 637).

The school resource debate in Ontario, Canada—and internationally

Ontario is the most populous province in Canada, with a total population of 14,374,084, as of April 1, 2018, and comprising approximately 38.7 percent of Canada's total population (Ontario Ministry of Finance, 2018). For constitutional reasons, authority over K-12 education in Canada resides at the provincial level (CMEC, 2018). In the case of Ontario, the province's Ministry of Education defines K–12 education policy, including funding and curriculum, while 72 school districts manage the implementation of policy and oversee the delivery of education in 4,877 schools populated by 113,672 teachers and 7,352 school administrators and two million students,[1] or approximately 94 percent[2] of the province's K–12 population.

Regarding funding and policy, Ontario's K–12 public school districts receive the vast majority of their revenues through two mechanisms: a funding formula and the lesser known Education Programs—Other (EPO) (Rodrigues, 2018a). The province's funding formula is data-driven but not systematically informed by empirical research, while EPO is used to pilot specific government initiatives based on policy priorities (Faubert, 2018, in press). Between these two mechnanisms, all K–12 public education in the province is, effectively, 100 percent publicly funded. Resource decision-making in Ontario is largely the responsbility of leaders at the provincial (state) and district levels of educational governance. In June of 2018, the citizens of Ontario elected the leader of the province's Progressive Conservative party as their new premier with a majority government, ousting the Liberal government that had been in office and directing education policy since 2003. The Conservative leader has promised to review education policies through the lens of a more traditional or 'back to basics' approach to education (Jones & Casey, 2018; Newhouse, 2018), denoting a shift in the values from the previous government's inclusive focus (e.g., attention to Indigenous issues). Given that "the use and impacts of school funding formulas greatly depend on the characteristics of the policy environment they are embedded

in" (Fazekas, 2012, p. 12), this shift in values and policy changes will likely affect the funding formula and the revenues that school districts receive in the future. In 2018–2019, Ontario's public school boards will receive approximately $24.5 billion for the provision of education and $246.9 million for EPO (Rodrigues, 2018).

A 2018 survey of Ontarians found that the majority of them have "confidence" in K–12 public schools and educational policy (Hart & Kempf, 2018). Despite this confidence and the multibillion-dollar annual public investment, sector stakeholders—including nongovernmental organizations, policy think tanks, the news media, and the Ontario Auditor General—have criticized the formula used to allocate funding because it provides inadequate levels of resources, which contributes to known gaps in student achievement outcomes and well-being (Keenen, 2017; Mackenzie, 2009; Office of the Auditor General of Ontario, 2017; Queiser, 2017). Moreover, stakeholders have argued that education leaders are inadequately committed to strategically using resources to close these longstanding gaps in student academic achievement—for example, for students who speak English as a second language or have special education needs (Ontario Ministry of Education, 2012)—which further contributes to education inequities (Keenan, 2017; Office of the Auditor General of Ontario, 2017). The combined outcome of this situation is that too many students are transitioning into adulthood without the knowledge and skills required to fully participate in the economy and society—a threat to the future prosperity of the student, province, and country. A model such as the EBAM could help Ontario by generating an alternative set of research-informed estimates of adequate school resource levels to shape the public debate and help leaders rethink their allocation and use of resources to close achievement gaps more effectively.

These debates over school resource adequacy are not unique to Ontario or the United States. When governments set standards for education, they effectively set an adequacy mandate and the resources they provide are, presumably, by some measure "adequate" to deliver education that enables students to meet those specific aims (Odden & Picus, 2014). Whenever goals are set for education, this invariably sets the stage for academic, policy, and public debate about what constitutes adequate levels of school funding to achieve them; these debates are also taking place in the rest of Canada (Carr-Stewart, Marshall, & Steeves, 2011; Henley & Young, 2008; Levin, 2008; Mwere, 2010) and internationally, including in the United Kingdom, Australia, and Norway (Atkinson, Lamont, Gulliver, White, & Kinder, 2005; Fazekas, 2012)—sometimes within the context of adequacy, sometimes not.

How are governments allocating funds to achieve their adequacy mandate? Many governments in OECD countries—and, increasingly, developing countries—use formulas to allocate resources to schools and school districts (Atkinson et al., 2005; Fazekas, 2012). Certainly no funding formula is perfect (Levin, 2008), but more can always be done to improve the methods used for resourcing education. For example, funding formulas (and other allocation mechanisms) typically draw from many data sources, but they are not necessarily informed by empirical research evidence. In a review of how their member countries resource education, the OECD (2017) concluded that research could play a greater role in improving resource allocation methods and the overall planning of education resources. To their credit, education finance

scholars and policymakers have been focusing their efforts over the past decade on developing and interrogating funding models to better incorporate research and deliver on this adequacy mandate (OECD, 2017). The OECD regards research on resource adequacy in the United States as a promising line of study (Fazekas, 2012), adding greater weight to the model's potential global utility and the imperative to develop a calibration process.

Framework and sources informing the calibration process

The framework centres on six concepts: *policy*, *decision-making*, *adequacy*, *school finance adequacy*, *resources*, and *calibration*. Policy is the "authoritative allocation of values" (Lingard, 2013, p. 114, 128) that "mobilises the distribution of capitals … of various kinds across the education system" (p. 118), while decision-making is defined as an ongoing process (Lingard, 2013) of leaders exercising control. Odden and Picus (2014) drew on William Clune's (1994) articulation of adequacy "as being adequate for some purpose, typically student achievement" (p. 377), to describe school finance adequacy as "providing a level of resources to schools that will enable … all, or almost all students … to meet their state's performance standards in the longer term" (Odden, Picus, & Goetz, 2010, p. 630). For the purposes of this article, resources refers to funding and personnel (Ontario Ministry of Education, 2014). Calibration refers to a formal process of review and revision to the EBAM's recommendations to suit the education policy context of an educational jurisdiction; this articulation differs from how the model's developer have used this term, which is to calibrate a jurisdiction's current funding model relative to the EBAM recommendations (Odden & Picus, 2015; Odden, Picus, & Goetz, 2006, 2014). The study's six concepts, similar to the EBAM itself, are grounded in structural-functionalist sociological assumptions that acknowlege the authority of the government to define student performance standards for an education system (Guthrie, Springer, Rolle, & Houck, 2007).

In developing a process for rigorously calibrating the EBAM for use in Ontario, the model's developers were consulted and the academic literature was reviewed. The remainder of this section summarizes the insights gained from both the experts and the literature.

Expert opinion

We contacted the model's developers, Dr. Arthur Odden and Dr. Lawrence Picus, regarding their perspective on the model's external validity. They noted that although the model is grounded in United States-based research, they did not "think it outlandish applying the model to Canada, and Ontario" (Dr. Allan Odden, Personal Communication, August 17, 2015). They were not aware of a researcher applying the model outside of the United States and offered no specific case to draw methodological precedence. Their recommendation for developing a calibration methodology was to use the latest iteration of the model (Odden & Picus, 2014) and to review each element of the model with Ontario education funding experts to see which adaptations were necessary to accommodate the provincial context.

Scholarly literature

We first searched for literature specific to adapting the EBAM in the American context, and then expanded to other evidence-based frameworks applied in different social contexts. This review uncovered a number of sources published by the model's developers and other scholars who have applied the EBAM across the United States (Odden & Picus, 2015; Odden, Picus, & Goetz, 2006; 2014; Picus & Oden, 2009; Picus, Odden, Goetz, & Aportela, 2012). Given that the model is grounded in American research, no discussion of validity concerns for applying the recommendations across states were uncovered, although other considerations did emerge. For example, Michael Rebell (2007) conducted a review of adequacy studies and concluded that "the choice of an outcome standard dramatically affects the ultimate recommendation [of a model and] … the expenditure level needed to close the adequacy gap" (p. 1326). Odden, Picus, and Goetz (2010) seemed to acknowledge this point, noting that the degree to which a jurisdiction will observe gains in student performance—the result of providing adequate levels of school resources—will depend on the specific education goals set by government. In addition, they acknowledged that the model itself will be applied differently across educational jurisdiction to suit contextual differences, and recommended setting up review panels that can provide professional guidance on the application of the model's recommendations (Picus & Odden, 2009). Regarding review panels, Rebell (2007) acknowledged the value of the "client" voice, but cautioned against clients who sometimes want to change the model's methodology partway through its application because of cost concerns. Concerning expenditure data, Odden, Picus, & Goetz (2010) recommend using either a national average salary or state average salary for teachers and other personnel.

A wider literature review uncovered several additional factors that could influence the ways an evidence-based model is adapted to social contexts, including differences in cultures and values at both national and local levels, fiscal and political contexts, knowledge or information gaps, and leadership. Specifically, culture-based differences at the national level can make "efforts to inject the same resource allocation mechanisms to different national systems … questionable" (Liefner, Schätzl, & Schöder, 2004, p. 36). It is similarly well documented in the literature that evidence-based frameworks can conflict with local cultural norms and values (Anderson-Smith, Foxworth Adimu, & Phillips Martinez, 2016), limiting their take-up and effectiveness. Fiscally, all societies have limited resources and must work within the constraints therein (OECD, 2017); politically, education stakeholders often present leaders with demands for more resources, not less (Levin, 2008). Both the fiscal and political factors are connected, given that the reality of scarce resources necessarily leads to competition among stakeholders for "their" share (Malen et al., 2017), and political leaders are called upon to make decisions that can reconcile these constraints. Unfortunately, leaders often have incomplete knowledge, evidence, or information available to help inform their application of evidence-based models in their specific social context and instead rely on their own assumptions to help fill the gaps (Malen et al., 2017). This situation can be problematic if leaders, in the face of insufficient information, aim at "the bottom threshold" (Malen et al., 2017, p. 633) to avoid difficult discussions or

spending beyond the budget envelope, effectively maintaining the status quo. These combined factors stress the point that leaders' decision-making is a significant factor that can either enhance or minimize a model's chance of being implemented in a manner that upholds its intended aims (Malen et al., 2017).

A method for calibrating the EBAM for use in non-American contexts

After the consultation and literature review, a four-step method was developed. Methodological details for each stage of the calibration process are outlined below.

Review the empirical literature

First, a review was conducted of the empirical literature (in comparator English speaking countries, excluding the United States) to determine if the recommendations related to each component of the model applied beyond the United States and were relevant to the Ontario K–12 education context. The literature review was limited to research conducted in Canada, the United Kingdom, Australia, and New Zealand, and to research using randomized controlled trials, meta-analyses, or other statistical procedures¾the same standard for evidence used to develop the model's "strongest programmatic recommendations" (Odden, Picus, & Goetz, 2010, p. 630).[3] Excluding research conducted in the United States meant that very little literature employed these research designs and methodologies. Of the most relevant articles—published in Australia (nine), New Zealand (two), and Ireland (one)—none offered specific information to challenge the recommendations of the model.

Interview Ontario K–12 funding experts

The second step involved conducting interviews with five Ontario K–12 funding model experts/leaders—four business superintendents from school boards of varying sizes (small, medium, large, and very large, based on enrolment)—and one system leader to introduce varied perspectives from the board and provincial levels of governance when assessing the applicability of the model's recommendations.

Compare notions of "student performance standards"

In the EBAM, governments must provide adequate resource levels to support and enable "high performance standards" (Odden & Picus, 2014). The EBAM's of high performance standards was compared (Odden & Picus, 2014) with Ontario's, drawing primarily from the Ontario Ministry of Education's (2018a) strategic vision document, *Achieving Excellence: A Renewed Vision for Education in Ontario*.

Review the model, element by element, with a district research partner review panel

The final step involved reviewing the model with a panel composed of members from the pilot school board and research team. At the calibration stage of the study, the panel included the school board's business superintendent and senior data expert, both of whom worked with the research team to provide input into the calibration of the model; the panel will be expanded to include the director of education, other superintendents, and trustees as the project moves from calibration to full application

of the model. Specifically, the business superintendent was asked to provide guidance on calibrating the EBAM recommendations and the data analyst asked to check if the key assumptions of the model also apply in Ontario.

The Ontario-calibrated EBAM

This section reports on the calibrations the team made to the EBAM's elements to suit the Ontario K–12 public education policy context. The calibrations are organized below into three categories of revisions: technical, policy (values), and leaders' decision-making.

Technical calibrations

Ontario-specific variables for student demographic and school community characteristics

The model requires specific student demographic and school enrolment data and, thankfully, the pilot school board regularly reports on a wide range of variables. To determine the number of students with special learning needs, the student demographic variable *students with special needs (excluding gifted)* was used; for English Language Learners (ELL), the variable *arrived in Canada in the last five years* was used, because this is the baseline the Ontario government uses for providing funding support for ELL. As an indicator for struggling students due to poverty in the school community, the EBAM developers used a percentage of students who are eligible for free and reduced-priced lunch, a variable comparable at the national level in the United States but not in Canada (Odden & Picus, 2014). A number of variables were available to serve as an indicator for struggling students due to poverty (e.g., the percentage of *families receiving social assistance* and *lone-parent families* in the school community), but here the percentage of families in the community with *family income below low-income measure* was used, as this variable will provide the most conservative estimate of students living in low-income households.

Expenditure data

The review panel recommended using the expenditure data that the school board reports back to the Ministry each year for accountability purposes, because these expenditure data account for all district revenue sources. Given that salaries for school personnel differ across school districts, the panel also advised the use of board-specific expenditure averages (e.g., the average cost of elementary teacher and secondary teachers' salaries and benefits) when generating expenditure estimates. The school board will provide both of these data sets because they are not publicly available at the level of detail required to generate the estimates.

Calibrating for policy (values)

Adapting elements (recommendations) to suit context

Most of the model's elements fit with the Ontario education policy context, with only a small number of exceptions. For example, Ontario does not provide funding for school nurses, so this element needed to be removed. Also, Ontario's K–12 public school system does not provide preschool services—these are instead delivered

through a combination of social services—so the recommendation specific to preschool was removed. The resource recommendation for substitute teachers was revised because the advisory panel believed the model's recommendation to "add an additional five percent of teachers for the sum of all teacher positions" (Odden & Picus, 2014, p. 104) would fall far short of the actual substitute resources needed, opting instead to use the actual personnel and costs incurred by the school board. In addition, the panel opted to keep the 1:15 staff-to-student ratio for summer school, but use actual numbers for students who enroll in summer school instead of the model's estimate, which is the number of students "struggling to meet academic requirements[:] 50 percent of all adjusted free and reduced-price lunch students in all grades K-12" (Odden & Picus, 2014, p. 96). The review panel believed that using actual summer school enrolment numbers would generate more accurate estimates. Drawing from the interviews, board superintendents also wanted to add elements to the model, such as adding additional resources for newly arrived refugees and students who identify as Indigenous, both of which are policy priorities in the Ontario context (although this could change with the new government). These revisions to the model, however, fell outside of the scope of the calibration exercise, constituting an expansion exercise, but they may be incorporated into future iterations of the Ontario EBAM—something more fully attended to in the discussion section. Based on the professional judgement of the advisory panel, however, add a school-level element was added for expenditure on materials such as photocopier paper, office materials, other supplies (i.e., actual costs incurred by the school board).

Comparing the EBAM's notion of "student performance standards" with Ontario's Odden and Picus (2014b) reviewed "state standards based reform, the Common Core Standards, and court mandates for school finance adequacy" and concluded that they are "focused on a similar goal" (p. 64) of effectively "educating students to or above the state's proficiency standards … [in the] reading, math and science curriculum[s] … that in most states are geared to college and career-ready standards" (p. 76). In Ontario, the mission of the education system is to help "develop the knowledge, skills and characteristics [of students] that will lead them to become personally successful, economically productive and actively engaged citizens" (Ontario Ministry of Education, 2018a, p. XX), which implies preparing students for careers and postsecondary education after graduation. To achieve this mission, the Ontario government has also set student performance standards in literacy and numeracy—equivalent to a "B" grade—and improving high school graduation rates (Ontario Ministry of Education, 2018a). Comparing the benchmarks revealed that both had a focus on ensuring that all students succeed academically in the areas of literacy and numeracy, measured through annual assessment, and improved graduation rates and access to postsecondary education.

Interrogating the model's assumptions (grounded in research) and ideological approaches

Drawing from school board-specific data, the data expert confirmed that the key assumptions of the model—for example, that students who have special education needs, live in poverty, are ELL, or are both ELL and living in poverty are at a higher

risk of lower academic achievement outcomes than students who are not—also holds for students enrolled in the school board. This "check" did not result in any calibrations to the model but did lend support to the external validity of its assumptions (i.e., its applicability in the Canadian context and, possibly, international ones) despite social differences.

Goals for education are necessarily grounded in an ideological approach to education, or more than one approach. Both the EBAM and Ontario have a set of goals for education that focus on individual students as economically productive citizens and support targeting individual student needs, especially additional supports for the academic success of students who are considered to be at risk. These goals reflect an approach to education that is grounded in values consistent with the liberal tradition of political philosophical thought: the goals respond to overall and individual student needs as well the market and society as a whole (Gutek, 2013). The EBAM, grounded in the US context, has arguably adopted a more neoliberal focus with its priority emphasis on career readiness, while Ontario's approach is more reform-liberal oriented, with its emphasis on well-being and citizenship in addition to employment (Gutek, 2013).

Calibrating for leaders' decision-making

Leaders' values when making calibrations

The business superintendent from the pilot board expressed a concern about the model's American origins: because the model was grounded in research and developed by scholars in the American context, the superintendent felt this could limit support from internal and external education stakeholders for both the calibration and use of the model. Another superintended echoed this sentiment and cautioned that the model may be associated with perceived "US education aims and values" that are not connected to the EBAM itself:

> If these are the goals and I get my funding based on this because this is what the evidence says, then I should be able to perform well on these goals. If I don't perform well, what happens? Do you penalize me as a school board, because obviously here at [school district] we've done something wrong with our funding, or we've put our resources in the wrong place?

This quotation reflects a common concern of Canadian scholars and practitioners about this work: if the EBAM is applied, then will failing to meet state-set goals result in sanctions to schools and school boards, as was the case with the *No Child Left Behind Act* of 2001 in the United States (Deming & Figlio, 2016). These concerns are grounded in the view that using the EBAM in Ontario will move the school system away from "Canadian education aims and values"[4] toward what are perceived to be American education aims and values. This leadership consideration did not result in specific revisions to the model, but instead led to a rich discussion between members of the review panel on the aims and values embedded in the model, the aims and values of the Ontario K–12 public education system, if and how the EBAM could help advance these aims and uphold these values, and the importance of leaders keeping these considerations in the foreground when making calibrations.

Discussion and implications

The academic literature pointed to technical-, policy- (values-), and leadership-based decision-making as three broad categories of factors that can greatly impact the calibration process; these same factors were also significant in calibrating the EBAM to the Ontario context. This section discusses some additional considerations connected to each of these categories, and frames these considerations as implications for leaders and researchers who are considering calibrating the EBAM, or a similar evidence-based model, for use in their jurisdiction.

Technical

Data quality

The model's estimates are only as good as the data inputs. In the pilot board, experts noted that the ELL information is sometimes unreliable. Districts are not always 100 percent certain of the real population/demographic makeup of schools, and census information does not provide specifications for each school/district neighbourhood and it can be somewhat dated (Faubert, 2018, in press). Despite these data shortcomings, members of the review panel concluded that the available data could be used to generate quality estimates. Similarly, other jurisdictions considering the EBAM should explore whether their jurisdiction collects data at a level of quality that is appropriate for generating estimates for resource levels and the associated costs.

Defining and measuring adequacy

Odden, Picus, and Goetz (2010) noted that "some analysts are uncomfortable with the term adequacy itself [and] question whether estimating the costs of adequacy can be done with current knowledge and technologies" (pp. 629–630). Experts in Ontario raised a similar concern: what constitutes adequate or inadequate will vary between educational contexts—or even within the same jurisdiction—at different points in time. This makes it difficult to claim that a certain level of inputs (e.g., resources) will lead to specific performance standards, not to mention the less-tangible outputs, such as quality education or improved well-being. The ways in which outcomes are measured in education, such as achievement in literacy/numeracy or high school graduation rates, are regularly contested on technical (methodological) and political (ideological) grounds, and measuring adequacy is no exception. These challenges and frequent contestations are not good reasons to avoid measuring outcomes; however, they do underscore the importance of clearly articulating and making public how measures are defined. This team has formally defined adequacy, and its approach to measuring adequacy, and the purpose and value for Ontario, are open to debate and recommend that other jurisdictions be open to the same.

Validating and updating the model

For leaders and researchers, it will still be important to assess the tool post-calibration to validate that the recommendations will work in the applied context. In the next phase of the study, the team plans to investigate whether there is a relationship between the estimated resource gaps and province-wide student achievement data to demonstrate the validity of the model's resource recommendations and estimates. In

addition, the model's developers recommend ongoing monitoring and updates to the EBAM (Odden & Picus, 2014). They specifically recommend recalibrating funding systems every five years (Odden & Picus, 2015). Updating the EBAM's elements with the latest research within the same amount of time seems reasonable, and accordingly this team plans to follow this timeline.

Policy (values)

Policy/regulatory restrictions for the allocation existing funds

System- and district-level education leaders were clear that the Ministry's allocation and school boards' local resource decision-making are both highly constrained by the political and regulatory promises that take precedence. These commitments consume between 85–95 percent of the revenue that boards receive, with the remaining 5–15 percent flexible for allocation and use according to the district's discretion (Faubert, 2018, in press). Such regulatory restrictions are not unique to Ontario, as Odden, Picus, and Goetz (2010) noted that "the flexibility a district retains in distributing staff and funds to school sites [is] a state policy issue" (p. 638). The fact that existing regulations exist in Ontario does not diminish the value of EBAM estimates because they present an alternative set of numbers to inform resource deliberations: policymakers, education leaders, and researchers around the world may also find the EBAM useful for this purpose.

Policy aims not reflected in the EBAM

Ontario leaders wanted to add elements to better reflect the province's policy mandate, including additional resource supports for the integration of student refugees and for students who identify as Indigenous. Adding new elements to the model would require a robust review of the research evidence that meets the same standard of evidence used by the model's developers and is specific to resourcing the learning needs of these student groups, followed by a strong case for the inclusion of these elements in the EBAM framework. The model's developers did just that for each element of the existing framework in their published literature, so the scope of work to add these elements is outside the calibration process. The EBAM is not a fixed model, however, which means Ontario, and other jurisdictions, could consider adding such elements to the model if there is sufficient research evidence that meets the standards set by the model's developers (Odden & Picus, 2014).

Realizing school resource adequacy depends on a stable strategic vision or policy for education

In democratic countries where elections take place every three to five years, there is the possibility of significant policy shifts concurrent with government turnover; this is important, given that the model's timeline for changing achievement outcomes is four to six years. In the Ontario case, the newly elected government will release new strategic vision and policy documents, guided by different values, which may set a different direction for the province—potentially impacting the calibration and to validate the model's recommendations and future analyses. The research team plans to reassess student performance standards as they are articulated in the new strategic

policy documents, but it is anticipated that the core goals of high achievement in literacy and numeracy, improved graduation rates, and job readiness will remain the same in light of the new government's "back-to-basics" vision for education. In short, governments that can frequently change set educational goals in democratic countries, which means that leaders and researchers need pay attention to significant changes in policy goals and how these changes could impact the calibration and, ultimately, the application of the EBAM and its resource estimates.

The types of evidence that inform policy are politically (ideologically) contingent

Not all political parties are equally receptive to models grounded in research-based evidence. For example, in the case of Ontario, it is unclear if this new government will preserve the previous government's commitment to "develop and implement policies, programs, and practices that are evidence-based, research-informed, and connected to provincial education goals" (Ontario Ministry of Education, 2018c),[5] which will potentially impact political interest in the uptake of the EBAM in the province; this is also true for stakeholders at the local level. For example, one business superintendent expressed an interest in bringing more research evidence to board-level discussions around budgets, but was uncertain how receptive the public would be to research evidence guiding resource decision-making, alluding to Tina Anderson-Smith, Tanisa Foxworth Adimu, and Amanda Phillips Martinez's (2016) comments about such evidence conflicting with local norms and values. Before introducing the EBAM, scholars and leaders should consider how open their political leaders and local education stakeholders are to recommendations grounded in research evidence, which could inform resource decision-making.

An approach to education that is consistent with the tenets of liberal political

The model has the greatest chance of being successfully implemented by leaders and received positively by education stakeholders in jurisdictions where the vision for and aims of education align with the liberal tradition of political philosophical thought. Canada's education values, broadly speaking, reflect these values, as Canada education ministers have agreed that schools should aim to achieve the goals set by their government and help individuals attain their own growth opportunities and aspirations (CMEC, 2008, 2017). Ontario's goals are strongly connected to academic outcomes with a focus on postsecondary education and career readiness, as are the EBAM's. However, this review found that Ontario's policies also place explicit emphasis on well-being. Even though the EBAM does include supports for well-being (e.g., guidance counsellors), recent research conducted in Ontario found that as the school system shifts programs and services for well-being from a reactive to a preventative focus, it requires additional supports in the form of personnel and funding (Pollock, Faubert, Hauseman, & Baker, 2017). This means that the EBAM's estimate could fall short of achieving Ontario's "preventative" goal for student well-being. However, our team does not see this as a shortcoming of EBAM, nor evidence that the model's aims are incompatible with Ontario education values. Rather, our team believes this opens a future line of inquiry to further tailor the model to the Ontario context, along with additional supports for refugees and students who identify as Indigenous.

It is beyond the scope of this article to comment on the ideological traditions and orientations of education systems in other countries, but leaders are advised to consider their system's ideological tradition and orientation because implementing the EBAM recommendations in a jurisdiction with strongly conflicting values could result in calibrations (e.g., removal of supports) that detract from the aims of the model, which could limit its effectiveness and increase stakeholder resistance.

Leadership

How the model can support leaders' work and system aims

As noted earlier, when the research team looked to members of the review panel to provide input into the calibration process, they were confronted with having to make recommendations at the calibration stage that will impact the model's effectiveness and future application. Our team believes that Ontario leaders made recommendations that suited the policy (values) context and upheld the aims of the model. Presenting a clear case for how the model can support leaders' work and system goals was essential for them to make decisions that upheld the overall aims of the model—in other words, to provide all students with the opportunity to succeed during the calibration process. Four arguments were most likely attain buy-in from Ontario leaders: a) the EBAM offers one rigorous measure of adequacy to compare resource allocations with achievement outcomes at the district and school levels (Odden, Picus, & Goetz, 2010); b) it provides education leaders with direction for adequate staffing levels based on research evidence where currently no direction exists—notably the paraprofessionals who support at-risk students and board-level administration (Faubert, 2018, in press); c) it helps leaders use resources more effectively by recommending new ways of allocating and using resources to close gaps in student achievement; which d) ultimately supports Ontario's future workforce and society by developing students as highly skilled workers and citizens in civic society.

Attaining the EBAM's school finance adequacy is no panacea

Education finance researchers have noted that some school districts spend more than what is recommended by the EBAM, and yet do not show the anticipated gains in student achievement. This finding is unsurprising, given that education finance scholars concluded long ago that although resource levels matter, leaders must also pay attention to how resources are used if school systems hope to benefit from them and achieve equity aims (Grubb & Allen, 2011; Odden & Picus, 2011; Odden, Piccus, & Goetz, 2010). Moreover, even if the EBAM is calibrated (and applied) following rigorous standards, there can always be a case made for resource inadequacy: some stakeholders may reject decision-making grounded in research evidence, others may simply want more resources (Levin, 2008). In other words, resourcing schools at adequate levels does not address the equally important consideration of how resources are used to achieve equity in terms of student outcomes, nor is the model the singular antidote to the longstanding debate on adequate school resourcing.

Calibrating the message is as important as calibrating the model

Policymakers, education leaders, and researchers who are considering the EBAM for

use in their jurisdiction should consider whether stakeholders in their own system will have concerns similar to those raised by Ontario leaders. Calibrating the EBAM "pitch" (i.e., how the model will help to advance educational aims and uphold values) is as important as calibrating the model itself. Ingo Liefner, Ludwig Schätzl, and Thomas Schöder (2004) noted that poor efforts to raise awareness among stakeholders can lead to political resistance and indicated that providing accurate information to stakeholders can combat the outright rejection of the model.

Conclusion

This article reports on the rigorous approach the team developed for calibrating the EBAM to suit the Ontario K–12 public education context, as well as the actual calibrations made. A four-step method for calibration that draws from consultations with experts and academic sources is outlined. This article brings specific detail to the technical calibrations and the significant influence of policy (values) and leaders' decision-making on the process. It also discusses the emerging implications for leaders and researchers who are considering calibrating the EBAM for use in educational contexts outside of the United States.

Currently, research evidence is not being used systematically to inform leaders' allocation and use of resources or public deliberations on adequate school resourcing in Ontario (Faubert, 2018, in press), or in many other OECD educational jurisdictions (OECD, 2017), resulting in status-quo resourcing that perpetuates student achievement gaps. Although no funding model is perfect (Levin, 2008) and the EBAM has its limitations, the model can provide much-needed research-based insight to inform both. Calibrating the instrument is the first step, and this article outlines the first methodology for calibrating the EBAM for use outside the United States, and bringing Canadian evidence to the discussion.

Notes

1. 2016–2017 academic year (Ontario Ministry of Education, 2018b)
2. 2014–2015 academic year (Van Pelt & Macleod, 2017)
3. The model's developers also used research on best practices, peer-reviewed articles on schools that have demonstrated significant improvements, and recommendations from professional associations (Odden & Picus, 2014; Odden, Picus, & Goetz, 2010). These sources were omitted from the review for two reasons. First, they would have made the scope of this review unmanageable, given the range of countries, literatures, topics, and possible methodologies. Second, these evidence sources do not support the model's strongest recommendations.
4. The Ontario government does not have a history of cutting education funding to school/districts for not meeting student performance standards; however, some non-governmental organizations in Ontario do publicly report on school-level performance.
5. Under the previous government, this commitment had not been fully extended to discussions around funding allocations or the use of resources by leaders at the system or district levels of governance (Faubert, 2018, in press).

References

Adams, J.E., Jr. (2010). Smart money and America's schools. In J.E. Adams Jr. (Ed.), *Smart money: Using educational resources to accomplish ambitious learning goals* (pp. 1–26). Cambridge, MA: Harvard Education Press.

Anderson-Smith, T., Foxworth Adimu, T., & Phillips Martinez, A. (2016). Selecting, adapting and implementing evidence-based interventions in rural settings: An analysis of 70 community examples. *Journal of Health Care for the Poor and Underserved*, *27*(4), 181–193.

Atkinson, M., Lamont, E., Gulliver C., White, R., & Kinder, K. (2005). *School funding: A review of existing models in European and OECD countries*. Slough, UK: National Foundation for Educational Research. Retrieved December 2, 2018, from https://www.nfer.ac.uk/publications/ESF01/ESF01.pdf.

Faubert, B. (In press). Transparent resource management: Implications for leadership and democracy in education. *International Journal of Educational Management*.

Carr-Stewart, S., Marshall, J., & Steeves, L. (2011). Inequity of education financial resources: A case study of First Nations school funding compared to provincial school funding in Saskatchewan. *McGill Journal of Education, 46*(3), 363–377.

Clune, W. (1994). The shift from equity to adequacy in school finance. *Educational Policy, 8*(4), 376–394.

Costrell, R., Hanushek, E., & Loeb, S. (2008). What do cost functions tell us about the cost of an adequate education? *Peabody Journal of Education, 83*(2), 198–223.

Council of Ministers of Education, Canada. (2008). *Learn Canada 2020: Joint declaration provincial and territorial ministers of education*. Retrieved December 2, 2018, from http://www.cmec.ca/Publications/Lists/Publications/Attachments/187/CMEC-2020-DECLARATION.en.pdf.

Council of Ministers of Education, Canada. (2017). *What does CMEC do? CMEC's current priorities.* Retrieved December 2, 2018, from https://www.cmec.ca/11/About_Us.html.

Council of Ministers of Education, Canada. (2018). *Responsibility for education*. Retrieved December 2, 2018, from https://www.cmec.ca/299/Education-in-Canada-An-Overview/index.html.

Deming, D., & Figlio, D. (2016). Accountability in US education: Applying lessons from K–12 perspective to higher education. *The Journal of Economic Perspectives, 30*(3), 33–55.

Fazekas, M. (2012). *School funding formulas: Review of main characteristics and impacts* (OECD Education Working Paper No. 74). Paris, FR: OECD Publishing.

Grubb, N., & Allen, R. (2011). Rethinking school funding, resources, incentives and outcomes. *Journal of Educational Change*, *12*(1), 121–130.

Gutek, G.L. (2013). *Philosophical, ideological, and theoretical perspectives on education* (2nd ed.). Boston, MA: Pearson.

Guthrie, J., Springer, M., Rolle, R.A., & Houck, E. (2007). *Modern education finance and policy.* Boston, MA: Peabody College Education Leadership Series, Allyn and Bacon.

Hart, D., & Kempf, A. (2018). *Public attitudes toward education in Ontario 2018: The 20th OISE Survey of Educational Issues, 40 years of the OISE Surveys*. Toronto, ON: University of Toronto, Ontario Institute for Studies in Education. Retrieved December 2, 2018, from https://www.oise.utoronto.ca/oise/News/2018/2018_OISE_Survey_of_Educational_Issues.html.

Henley, D., & Young, J. (2008). School boards and education finance in Manitoba: The politics of equity, access and local autonomy. *Canadian Journal of Educational Administration and Policy*, *72*, 1–25.

Jones, A., & Casey, L. (2018, May 8). Doug Ford vows to replace sex-ed, math curricula, tie university funds to free speech if elected. *Global News*. Retrieved December 2, 2018, from https://globalnews.ca/news/4194296/ontario-election-doug-ford-education-promises/.

Keenan, E. (2017, January 16). TDSB should be ashamed of how it balances budget—School board defends practice of diverting money that it's given specifically to serve the needs of disadvantaged students. *The Toronto Star*. Retrieved December 2, 2018, from https://www.thestar.com/news/gta/2017/01/16/tdsb-should-be-ashamed-of-how-it-balances-budget-keenan.html.

Levin, B. (2008). Fix the flawed funding formula! *The Phi Delta Kappan, 89*(9), 697–698.

Liefner, I., Schätzl, L., & Schöder, T. (2004). Reforms in German higher education: Implementing and adapting Anglo-American organizational and management structures at German universities. *Higher Education Policy, 17*(1), 23–38.

Lingard, B. (2013). The impact of research on education policy in an era of evidence-based policy. *Critical Studies in Education, 54*(2), 113–131.

Mackenzie, H. (2009). *No time for complacency: Education funding reality check*. Ontario, ON: Canadian Centre for Policy Alternatives. Retrieved December 2, 2018, from https://www.policyalternatives.ca/sites/default/files/uploads/publications/reports/docs/Education%20Funding%20Formula%20Review_0.pdf.

Malen, B., Dayhoff, J., Egan, L., & Croninger, R.G. (2017). The challenges of advancing fiscal equity in a resource-constrained context. *Educational Policy, 31*(5), 615–642.

Mwere, B. (2010). *Equity and adequacy in the financing of public education in Canada: Issues and concerns*. Ottawa, ON: Library and Archives of Canada.

Newhouse, D. (2018, July 17). Why is Doug Ford silent on Indigenous—especially education—issues? *Globe and Mail*. Retrieved December 2, 2018, from https://www.theglobeandmail.com/opinion/article-why-is-doug-ford-silent-on-indigenous-especially-education-issues/.

Odden, A., & Picus, L. (2014). *School finance: A policy perspective* (5th ed.). New York, NY: McGraw Hill.

Odden, A., & Picus, L.O. (2015). *2015 Wyoming recalibration report*. Picus Odden & Associates. Retrieved December 2, 2018, from http://picusodden.com/2015-wyoming-recalibration-report/.

Odden, A., Picus, L.O., & Goetz, M. (2006). *Recalibrating the Arkansas school funding structure*. Picus Odden & Associates. Retrieved December 2, 2018, from http://picusodden.com/state-studies/.

Odden, A.R., Picus, L.O., & Goetz, M.E. (2010). A 50-state strategy to achieve school finance adequacy. *Educational Policy*, *24*(4), 628–654. Retrieved December 2, 2018, from https://doi.org/10.1177/0895904809335107.

Odden, A., Picus, L.O., & Goetz, M. (2014). *Recalibrating North Dakota's per student number for the school foundation program*. Picus Odden & Associates. Retrieved December 2, 2018, from http://picusodden.com/wp-content/uploads/2014/06/ND-Picus-Odden-Associates-Recalibration-Report-June-4-20141.pdf.

Office of the Auditor General of Ontario. (2017). School boards' management of financial and human resources (Chapter 3, Section 3.12). Retrieved December 2, 2018, from http://www.auditor.on.ca/en/content/annualreports/arreports/en17/v1_312en17.pdf.

Ontario Ministry of Education. (2012). *Closing the achievement gap: Advice from expert Ontario Principals*. Retrieved December 2, 2018, from http://www.edu.gov.on.ca/eng/policyfunding/leadership/pdfs/ClosingTheGap.pdf

Ontario Ministry of Education. (2014). *Exploring five core leadership capacities—Aligning resources with priorities: Focusing on what matters most* (Ideas into Action, Bulletin No. 6). Retrieved December 2, 2018, from http://www.edu.gov.on.ca/eng/policyfunding/leadership/IdeasIntoActionBulletin6.pdf.

Ontario Ministry of Education. (2017). *Ontario's education equity action plan*. Retrieved December 2, 2018, from http://www.edu.gov.on.ca/eng/about/education_equity_plan_en.pdf.

Ontario Ministry of Education. (2018a). *About the Ministry—Achieving excellence: A renewed vision for education in Ontario*. Retrieved December 2, 2018, from http://edu.gov.on.ca/eng/about/renewedVision.pdf.

Ontario Ministry of Education. (2018b). *Education facts, 2016-2017 (preliminary)*. Retrieved December 2, 2018, from http://www.edu.gov.on.ca/eng/educationFacts.html.

Ontario Ministry of Education. (2018c). *Research in education*. Retrieved December 2, 2018, from http://www.edu.gov.on.ca/eng/research/.

Ontario Ministry of Finance. (2018). *Demographic quarterly: Highlights of first quarter 2018*. Retrieved December 2, 2018, from https://www.fin.gov.on.ca/en/economy/demographics/quarterly/dhiq1.html.

Organisation for Economic Cooperation and Development. (2017). *The funding of school education: Connecting resources and learning*. Retrieved December 2, 2018, from http://www.oecd.org/publications/the-funding-of-school-education-9789264276147-en.htm.

People for Education. (2018). *2018 Annual report on schools: The new basics*. Retrieved December 2, 2018, from https://peopleforeducation.ca/.

Picus, L., & Odden, A. (2009). *Review and analysis of Ohio's evidence-based model*. Picus Odden & Associates. Retrieved December 2, 2018, from http://picusodden.com/wp-content/uploads/2013/09/Ohio-EB-Report-Final.pdf.

Picus, L.O., Odden, A., Goetz, M., & Aportela, A. (2012). *Estimating the cost of an adequate education for Texas school districts using the evidence-based approach*. North Hollywood, CA: Lawrence O. Picus and Associates.

Pollock, K., Faubert, B., Hauseman, C., & Bakker, P. (2017). *Ontario's suspension and expulsion program evaluation: Final report*. Toronto, ON: Ontario Ministry of Education.

Queiser, S. (2017). *Missing opportunities: How budget policies continue to leave behind low-income students*. Toronto, ON: Social Planning Toronto. Retrieved December 2, 2018, from https://d3n8a8pro7vhmx.cloudfront.net/socialplanningtoronto/pages/542/attachments/original/1484226232/LOG_report-final-web.pdf?1484226232.

Rebell, M. (2007). Professional Rigor, public engagement and judicial review: A proposal for enhancing the validity of education adequacy studies. *Teachers College Record*, *109*(6), 1303–1373.

Rodrigues, B. (2018). *Update: Education funding for 2018–19* [Memorandum 2018 B14] and *2018-19 School Year Education Programs – Other (EPO Funding)* [Memorandum 2018 B07]. Retrieved December 2, 2018, from http://www.edu.gov.on.ca/eng/policyfunding/funding.html.

Van Pelt, D., & Macleod, A. (2017). *Increasing share of students attending independent schools in Ontario*. Retrieved December 2, 2018, from https://www.fraserinstitute.org/article/increasing-share-of-students-attending-independent-schools-in-ontario.

Young, J., Levin, B., & Wallin, D. (2014). Resources for Education. In *Understanding Canadian schools: An introduction to educational administration* (5th ed.). Retrieved December 2, 2018, from http://homepage.usask.ca/~dcw130/chapterfive5.html.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(5)
2019

Coaching as a Knowledge Mobilization Strategy: Coaches' Centrality in a Provincial Research Brokering Network

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Abstract Ontario's Child and Youth Mental Health (CYMH) program is a provincially sponsored initiative that aims to build school district capacity for developing research-informed school mental health policies. This article reports findings from a mixed-methods study that employs social network theory and analysis tools to explore the centrality of CYMH coaches within this research brokering network. Overall, CYMH coaches are central within these social networks, although the patterns of interaction differ from the program's original design, with some coaches being more central than others. While formal CYMH professional development events appear to be the most direct approach to connecting research, policy, and practice, informal social networks provide the support necessary to make sense of research-based materials for use in local policymaking.

Keywords Knowledge mobilization; Educational policy; Social network analysis; Research use

Joelle Rodway (2019). Coaching as a Knowledge Mobilization Strategy: Coaches' Centrality in a Provincial Research Brokering Network. *International Journal of Education Policy & Leadership 14*(5). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/864. doi: 10.22230/ijepl.2019v14n5a864

Introduction

Publicly funded institutions and social systems have experienced an increasing pressure to use research-based knowledge[1] to inform policy and decision-making activities (Cooper, Levin, & Campbell, 2009; Davies, Nutley, & Smith, 2000). While the scholarly conversation around the role of academic research in public policy is not new (see Weiss, 1979), the current accountability era has reinvigorated international interest in the connections between education research, policy, and practice. Many terms have come to represent the process of connecting research and practice—in Canada, it is most commonly known as "knowledge mobilization" (KMb) (Cooper, 2012). Effective KMb is an important government priority in Ontario where the Ministry of Education funds several initiatives serving to connect research, policy, and practice in keeping with its provincial research strategy (Government of Ontario, n.d.).

The focus on KMb to ensure research-informed policy and practice in Ontario's education system is concomitant with an emphasis on student health and well-being (Government of Ontario, 2014). This emphasis is a recent addition to the provincial vision, responding to Canadian child and adolescent mental health research indicating that most children do not receive adequate treatment and services despite mental health issues being the greatest health challenge that they face after infancy (Waddell, McEwan, Shepherd, Offord, & Hua, 2005). There is limited capacity in school districts to effectively deliver the services necessary to address students' needs (School-Based Mental Health and Substance Abuse Consortium, 2013) and little research on the capacity and readiness of educators to deliver evidence-based and research-informed student mental health programming (Santor, Short, & Ferguson, 2009).

This article reports on a study that investigated KMb in the context of research-informed school mental health (SMH) policy. It details a study that took a social network approach to understanding how patterns of interaction within a provincial implementation support program facilitated and/or constrained the ways in which central office leaders were able to find, share, understand, and use research knowledge for use in SMH policymaking in their school districts. The article begins with an overview of the role of knowledge brokers as important KMb agents and focuses on recent social network studies that investigated connecting research and practice in education. The findings are presented, highlighting the utility of a social network perspective in exploring the centrality of brokers in KMb contexts. It concludes with a discussion of these findings and the implications for both researchers and policymakers moving forward.

Knowledge brokering: Connecting research, policy, and practice

Knowledge brokering is increasingly understood as an important function of KMb (Meyer, 2010; Ward, House, & Hamer, 2009), yet it remains understudied across the social sector (Nutley, Walter, & Davies, 2007). The core motivation of knowledge brokers (KBs) is making research-based knowledge accessible and usable beyond the research community itself (Ward et al., 2009). Current definitions and descriptions of knowledge brokering work share the notion that brokers span the research-practice gap through a wide variety of activities (Davies & Nutley, 2008), and the

field is advancing as researchers investigate the deliberate attempts of KBs in developing capacity for research use within systems and organizations (e.g., Conklin, Lusk, Harris, & Stolee, 2013; Cooper, 2014; Dobbins, Robeson, Ciliska, Hanna, Cameron, O'Mara, DeCorby, & Mercer, 2009). In their systematic review, Catherine Bornbaum, Kathy Kornas, Leslea Peirson, & Laura C. Rosella (2015) describe KBs as individuals who,

> work collaboratively with stakeholders to facilitate the transfer and exchange of relevant information. They represent the human component of [KMb] strategies as they work to facilitate interaction; develop mutual understanding of stakeholders' goals and contexts; identify emerging areas of concern warranting attention; expedite the identification, evaluation, and translation of evidence into practice and/or policy; and facilitate the management of relevant knowledge. (p. 2)

Local context informs the work of KBs (Meyer, 2010) and conceptualizations of knowledge brokering are evolving. Amanda Cooper (2014) describes eight distinct brokering functions: linkage and partnerships; awareness; accessibility; policy influence; engagement; organizational development; implementation support; and capacity building. Vicky Ward, Allan House, and Susan Hamer (2009) similarly describe knowledge brokering work as knowledge management, including finding, translating, and disseminating relevant research findings to those whose work might benefit (i.e., practitioners and policymakers); connecting research users with the researchers themselves through linkage and exchange activities; and capacity-building among both researchers and research users to be able to engage in knowledge brokering work independently over time. All these tasks and functions are multidimensional and complex, making knowledge brokering work not only challenging to carry out but also difficult for empirical study.

Knowledge mobilization, more broadly, is predicated on connectedness; knowledge brokering is inherently relational work as it is rooted in the premise of connection. Connecting research-based knowledge with policy and practice renders these contexts interdependent. Jonathan Lomas (2007) characterizes effective KBs as excellent facilitators, mediators, and negotiators, who are credible, possess strong communication skills, understand the culture of both research production and research use, and most importantly, are trustworthy. The effectiveness of KBs lies not in their individual attributes but rather in the quality of relationships they are able to nurture across related contexts. Knowledge brokering is a social process (Ward et al., 2012), where relationships serve an important function in connecting research, policy, and practice (Barwick, Boydell, Basnett, O'Hara, Ferguson, & Haines 2006). Relationship building is among one of the most important factors in influencing research use (Oliver, Innvar, Lorenc, Woodman, & Thomas, 2014), and facilitating interaction is the most fundamental component of knowledge brokering work (Van Kammen, Sevigny, & Sewankambo, 2006).

Given the emphasis on connectedness and relationships in knowledge brokering work, networks have been identified as an important mechanism through which to facilitate connections and interaction (Cooper & Levin, 2010; Dobbins et al., 2009). While there is a general paucity of literature around the effectiveness of brokerage

activities (Bornbaum et al., 2015), networks are emerging as an important brokering tool because of the ability of relationships to facilitate learning processes (Conklin et al., 2013).

However, in much of the existing literature, the understanding of networks is limited, with the term most often referring to a group of people coming together to use research around a shared interest. While this is a necessary network antecedent, from a sociological point of view, the actual network emerges through the examination of the patterns of interaction among members within it (see Rodway, 2015a), and understanding how those relational patterns mediate desired outcomes. To do this, however, it is necessary to expand research knowledge beyond conventional skills sets and focus on methods that enable a closer examination of these social spaces.

A social network approach to studying knowledge brokering

A social network perspective enables researchers and practitioners to get beneath the surface of the network (Rodway, 2018), highlighting unique tools and methods that overcome some of the challenges of conventional research approaches in studying relational spaces. Interest in social network theory and analysis as an approach for empirical study is growing (Borgatti & Foster, 2003), although to date it has been applied in only a handful of education studies that investigate research use in practice settings. Cynthia Coburn (2010) used social network methods, for example, to examine the sources of research knowledge used in school district decision-making around instructional matters. Her study highlighted the importance of external organizations that act as intermediaries that build awareness of, provide access to, and help make sense of relevant research-based knowledge for use within the district. Alan Daly, Kara Finnigan, Stuart Jordan, Nienke Moolenaar, and Jing Che (2013) also conducted research on evidence use employing a social network perspective to consider how research evidence was diffused and used within and between low-performing schools in an urban school district. Their work highlighted the inequity of information systems in the school district by demonstrating how the most underperforming schools were peripherally situated within district information networks with lower levels of information brokerage activity on behalf of their area superintendent. These studies, as well as other research that takes a social network approach to understanding schools and school systems (e.g., Moolenaar, 2012; Spillane, Shirrell, & Sweet, 2017), emphasize the value in understanding how social structures affect outcomes.

A core tenant of network theory asserts that some individuals are more structurally important than others within a social network (Scott, 2017). Depending on the context of study, there are many different concepts that identify important network actors; prominence is one such concept and the focus of this article. Prominent people in a network are more visible to others (Wasserman & Faust, 1994), and they occupy positions of advantage within the social context (Borgatti, Everett, & Johnson, 2013). Because of their position within the social network, they enjoy privileges that others do not—easier access to resources, for example. It is easier to determine what is happening within a network when it is possible to identify prominent figures and examine the conditions that contribute to their centrality (Prell, 2012).

Centrality is a core concept used to identify key figures within a network. There are many different types of centrality that emphasize the differing ways people can be central in a network (see Borgatti et al., 2013). *Degree centrality* is a simple measure that identifies the most "popular" individuals in a network by calculating the number of ties (or interactions) they possess with others in the network (Carolan, 2014). Degree centrality can be further understood in relation to the direction of a tie: *outdegree* relates to resource-seeking behaviour (i.e., reaching out to someone), illustrating the expansiveness of one's network, whereas *indegree* relates to the provision of resources (i.e., giving someone something), identifying the sources of resources in a social network (Borgatti et al., 2013).

In Coburn's (2010) study, for example, indegree measures identified external intermediaries as important sources of research-based knowledge as they were most often sought out for this kind of information (i.e., external intermediaries received more ties). Similarly, outdegree measures demonstrated that the social networks of the most underperforming schools in the school district were restricted in size because of the low levels of resource-seeking behaviour (people from these schools were not actively seeking out research evidence). Degree centrality offers descriptive information about the patterns of interaction, providing important information about the identities of structurally important actors within a social network. In research brokering networks (see Rodway, 2015a), degree centrality permits the identification of who has the most access to and/or the most control over the resources available within it. Research use is predicated on who has access to it and who provides that access. Individuals with high indegree centrality influence what research knowledge is mobilized within a network and those with high outdegree centrality are those people most likely to have access to it.

Degree centrality scores can also be used to divide a network into two groups: the core and the periphery. The core of a network is comprised of the people who are most active within a network (and often are highly connected to each other), whereas the periphery is populated by the least active people (Borgatti et al., 2013). This is important because the core of a network is the central point of resource exchange, meaning that some network members, by virtue of their activity levels (and not necessarily formal role), may possess more control or influence over the flow of resources within a network.

There are many social network tools that can be used to investigate centrality (see Rodway, 2015b); degree centrality is but one approach to understand what is really a family of concepts that address the complex roles of prominent actors in social networks (Borgatti et al., 2013). In keeping with earlier investigations into research use employing a social network perspective, this analysis uses degree centrality to identify who is brokering research-based knowledge across Ontario's Child and Youth Mental Health Program (CYMH).

Context: Ontario's Child and Youth Mental Health Program

The CYMH is a provincially funded initiative that brings together school-based mental health professionals called Mental Health Leaders (MHLs), with program coaches (psychologists, social workers, and former senior school system administrators) who

work together to develop the capacity to use research-based knowledge in their local policy and programming. Child and Youth Mental Health members come together in person from across the province at scheduled times throughout the year to engage in professional development sessions that focus on research-informed and evidence-based practices related to a variety of topics relevant to child and youth mental health. During the pilot years of the program—the time frame encompassed in this study—each MHL was assigned to an individual coach who served as a point of contact throughout the year. This study focused on the ways relationships between MHLs and coaches, outside of formally organized, whole group professional development sessions, supported mobilizing research-based knowledge in the development of school district mental health policies.

Methods

A descriptive case study (Yin, 2014) of the CYMH program was conducted, employing a sequential explanatory mixed-methods design (Cresswell & Plano Clark, 2011) to investigate the ways in which members' informal interactions with each other (i.e., interactions outside of formal meetings) enabled and/or restricted their abilities to find, understand, and share research-based knowledge in their local policy development work. Phase one consisted of a social network survey to collect the necessary data to map the CYMH network. The purpose of the survey was to establish professional profiles for each participant in terms of their experience with using research-based knowledge as well as describing the informal patterns of interaction among the participants outside of formal professional learning activities. The survey provides important demographic data as well as important insights about the relational patterns within the context of the program. These findings informed phase two of the study, which consisted of interviews with key informants to further probe and understand the network patterns and their influence on KMb activities.

Phase 1: Social network survey

A position-based approach was used to specify the network boundary (Marin & Wellman, 2011), inviting only those MHLs from school districts that had already established their SMH strategy under the guidance of the CYMH program. The first two cohorts of MHLs

Table 1. Participants' demographic data

	Mental health leads (N = 31)		Coaches (N = 5)	
Variable	Count	(%)	Count	(%)
Sex				
Male	2	(6)	2	(40)
Female	29	(94)	3	(60)
Degree				
Bachelor	3	(10)	1	(20)
Master	20	(65)	1	(20)
Doctorate	8	(26)	3	(60)
Work experience education setting	M = 12.4 (SD = 8.3)		M = 21.4 (SD = 12.4)	
Total CYMH	M = 20.8 (SD = 7.8)		M = 25 (SD = 11.8)	

were invited to complete the survey (cohort 1: $n = 15$; cohort 2: $n = 16$). In addition, coaches with at least one year of experience with the program were invited to participate ($n = 6$), for a total of 37 network actors. The survey response rate was 97 percent ($N = 36/37$). Table 1 provides a description of the study participants.

The survey was comprised of two sections: a) professional attributes, and b) social networks, which queried individuals' relationships with their CYMH colleagues. These questions were modelled on survey questions previously used and validated in other social network studies (e.g., Cross & Parker, 2004; Daly & Finnigan, 2010). The roster method was used in collecting these data to reduce measurement error (Carolan, 2014; Wasserman & Faust, 1994). Respondents were prompted to consider their relationship with each CYMH member. They were asked how frequently they sought out advice, what types of information (i.e., research, data, or general information) they accessed from their colleagues, and how influential these interactions were on their practice (see Rodway, 2015b, for the full survey). The focus of this article is on the social network data (see Rodway, 2015b, for descriptions of professional profiles).

Each type of relational data collected was treated as its own separate social network within the CYMH program, yielding multiple data sets. To increase the reliability of the advice and influence data, only the strongest ties were included; that is, the ties included in this data set included advice interactions that took place on at least a monthly basis and only influence ties that were rated as at least "very influential." For the information network, respondents were asked to identify which type of information they received through the interactions: data, research, or general information. This article focuses solely on the research-based information ties (see Rodway, 2015b for details on data and general information ties).

Degree centrality was used to focus on the visibility or popularity of the coaches within these networks. Using social network software called UCINet (Borgatti, Everett, & Freeman, 2002), two degree centrality scores were calculated: 1) outdegree centrality, which measures *resource-seeking* behaviour (e.g., who was looking for information or advice), and 2) indegree centrality, which considers who is *providing resources* within the network (e.g., who was providing information or advice). Outdegree and indegree centrality scores were generated for each person and descriptive statistics were generated for both. Data were disaggregated according to cohort and role (MHLs and coaches), enabling comparisons between groups in their levels of activity within the networks. To elaborate upon degree centrality measures, core-periphery analyses were also conducted for each relational dimension.

Phase 2: Key informant interviews

The data collected through these semi-structured interviews were used to elaborate the ways in which the patterns of interaction within CYMH facilitated/constrained KMb activities. They helped contextualize and triangulate the quantitative network analyses, providing insights into why certain network features exist and what implications there may be for connecting research, policy, and practice.

Two groups participated in semi-structured interviews based on the survey data analyses. All coaches were invited to participate because of their prominence across

each of the networks. The MHLs were invited to participate based on their individual centrality scores within the research network. Two MHLs with the highest and lowest outdegree and indegree centrality scores in the research knowledge network were invited to participate (i.e., two MHLs for each of the four categories: high/low indegree and high/low outdegree). Because many people possessed the same scores, participants with low centrality scores were chosen at random. The achieved sample included six MHLs; individuals with low outdegree scores were non-responsive. Interviews (N = 11) ranged from 30–75 minutes long; most were conducted by telephone given the wide geographic region represented in the sample.

Interview protocols were tailored to the participants' program role. The coaches were asked about their role in the CYMH program, what types of research knowledge they thought were the most pertinent to their work, and how they brokered research knowledge within the network. They were also asked questions about their perceptions of the communication patterns within the program as well as the nature of their relationships with the people they interact with the most and the least frequently. The MHLs were asked about their advice- and information-seeking behaviour and the conditions under which they sought out additional resources from their CYMH colleagues outside of their formal meetings. Interviews concluded with a question about the influence their interactions within the CYMH program had on their ability to develop evidence-informed SMH policies. All interviews were fully transcribed.

A summary table, which included sections for comments about the quantity and quality of interactions, the influence of the program on KMb activities, and the development of district SMH policies, was created for each interview and sent to the respondent for review. The summary tables were analyzed using the constant comparative method (Glaser & Strauss, 1967). Comparisons were made at three levels: 1) within a single interview; 2) between interviews within the same group (e.g., coaches, high outdegree MHLs); and 3) between interviews from different groups (Boeije, 2002). A thematic approach to coding (Saldaña, 2013) was used to identify emerging themes, developing a thick description of the network activity.

Findings

Coaches are central figures across CYMH's advice, research knowledge, and influence networks

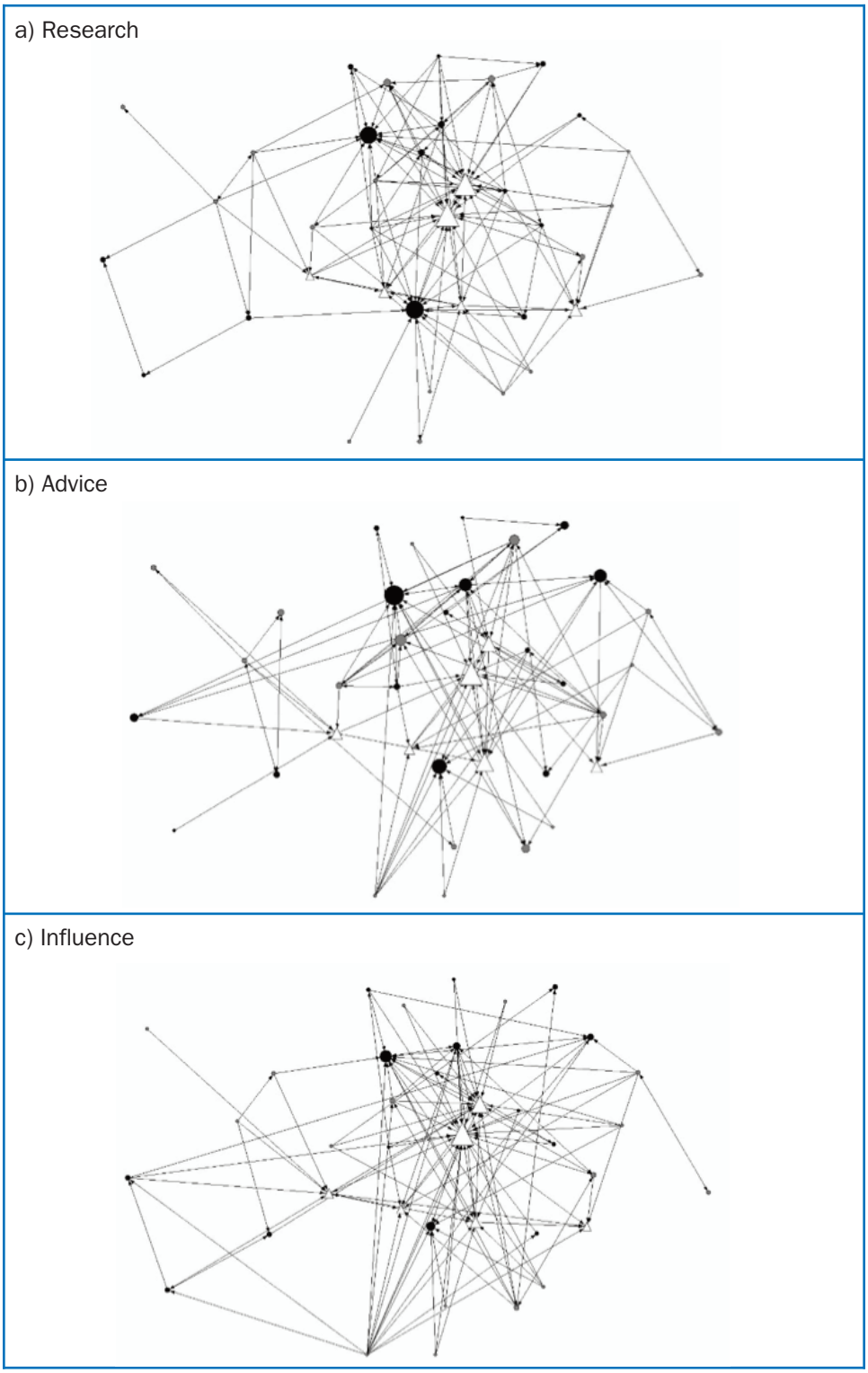
Indegree centrality scores suggest that the CYMH coaches are central figures in all networks. Table 2 provides the descriptive statistics for the distribution of indegree scores, disaggregated by role (coaches versus MHLs) and cohort. Figure 1 provides illustrations of each of these networks.

Table 2. Descriptive statistics for the distribution of normalized indegree centrality scores

Network	M_{Coach}	SD_{Coach}	M_{MHL}	SD_{MHL}
Research	30.6	19.2	6.7	9.0
Advice	20.5	8.9	6.2	6.6
Influence	35.0	21.4	4.4	6.7

The *t*-tests, conducted using statistical procedures in UCINet (see Borgatti et al., 2013, for a description of permutation-based *t*-tests using social network data), showed statistically significant mean differences between the coaches and MHLs within the research-based knowledge network ($t = .24$, $p < .001$), advice network ($t = .133$, $p < .001$), and influence network ($t = .276$, $p < .001$). In other words, it is

Figure 1. Maps of the Child Youth Mental Health program's research, advice, and influence networks



Note: The size of the node corresponds with indegree centrality scores; the bigger the node, the more often that person was identified as a source of research/advice/influence. White triangles = program coaches, black circles = cohort 1 MHLs, and grey circles = cohort 2 MHLs

not by chance that the coaches are sought out more often than MHLs for resources within the context of the CYMH program.

Core-periphery analyses were executed for each network to elaborate upon which coaches were part of each network's core (i.e., the most active people within each network). All five participating coaches were core members in the research and influence networks, and three coaches were also core network members in the advice network. Consistent with the program design, coaches were interacting with MHLs outside of formal professional development settings, providing ongoing support to MHLs throughout school district policymaking processes. These results suggested that the program was achieving its goal in that coaches are active in supporting MHLs outside of formal settings. However, these analyses also indicate that fewer than half of the MHLs interact informally—they are sitting on the periphery of the network. Thus, although the coaches are central figures within the network, core network membership suggests that more than half of the MHLs are neither accessing coaches' knowledge and expertise nor that of their MHL colleagues outside of those formal CYMH program meetings. This potentially limits the impact of the CYMH program on SMH policy work in these districts. It also places the coaches and the other MHLs in a position where they greatly influence the flow of resources across the CYMH networks.

During the interviews, the role of the coaches was the most commonly reported factor contributing to the frequency of interaction within the research-based knowledge and advice networks, validating the findings of the quantitative network analyses. Interviewees universally spoke about the coaches' role in facilitating interactions among colleagues within the program. One MHL stated, "all of the coaches have great expertise. So, there's a steady stream of valuable information that comes from them," also acknowledging their coach's "terrific system skills." Other MHLs spoke of turning to coaches when there are "questions related to challenges [with the work]" or when there is "something more in depth [to discuss]." The director of the CYMH initiative, who also served as a coach in the first year and continued to be informally available to all MHLs, was highlighted by many MHLs as being central to the program. Her prestige within the group was explained by one MHL as being related to the fact that "she was so instrumental in its [CYMH] development and she's the public face of it in so many ways. … [She] is brilliant. She's the whole package. She's smart, she knows about systems, she's articulate, she's visionary, she's evidence-based. She's got it; she's the whole package." There was a lot of respect among MHLs for the experience and expertise that the coaches bring to the program.

Coaches often spoke of their perceived responsibility to connect MHLs with each other as part of their duties in addressing individual school district needs. For example, one coach said, "They [MHLs] often ask me for examples of something and I will refer them to one of the other cohorts. … Just because I have a little bit of knowledge about what each of them is doing and they may not have the same knowledge." Other coaches echoed this point, speaking about the importance of building a trusting relationship between a coach and MHL, saying that "once you have that, the people you are working with will reach out to you a lot more, even just for conversations."

Another coach suggested that personality differences may play a prohibitive role in facilitating relationships, which could help explain why some members remain

on the periphery of the network. She suggested that "style differences may play a role in why some people connect more with their coaches than others." Coaches viewed their role not only to be about connecting with MHLs one-on-one, but also to facilitate connections between MHLs as a group, so that they have access to the knowledge and experiences of their peers.

In keeping with the program's design, coaches are making connections with their school district colleagues beyond the formal CYMH meetings. The MHLs interviewed for the study identified coaches as central figures in their personal professional networks relating to this work. From this point of view, the program is achieving its goal. However, the social network analyses indicate that about half of MHLs from each cohort sit on the periphery of these informal networks. This is an important insight for the CYMH leadership team, given that the current social structure greatly limits MHLs' ability to access the knowledge and expertise of their coaches and colleagues once they have returned to their daily work in their local contexts.

Coaches play a key role in connecting research, policy, and practice

Both coaches and MHLs viewed the inclusion of coaching as a strategy for developing research-informed SMH policies as a central piece of the CYMH program. The coaches spoke about two levels of responsibility within the program, speaking of their work in relation to two groups: among themselves as program coaches, and their individual coaching work with district MHLs.

Coaches most frequently referred to their responsibility to each other within the context of their collaborative preparatory work (i.e., preparing the resources and materials used during the formal professional learning and development sessions). One coach described the CYMH program team as "a collective multidisciplinary group … who have a responsibility [to each other] to share our perspectives and share our lenses and shape how we do the work because we come from different backgrounds." The coaches acknowledged the varied professional experiences and knowledge that each individual brought to the program. They also identified a collective responsibility to the entire program, using their unique experiences in the fields of educational administration, psychology, and social work to develop an evidence-based and research-informed CYMH program, while also building district-level capacity for research-informed SMH policy.

Most coaches articulated the belief of incorporating evidence-based knowledge into the routines of school districts, fuelling their sense of responsibility to the MHLs. The time for individual coaching (outside formal meetings) was a time when "[coaches] are reinforcing those messages that are coming out of the mental health leadership meetings," said one coach. Another coach discussed the importance of building coherence across the group, "As coaches, if we ask what structures you have put into place so that your system is very clear about the language you are using, the purpose of your work, and the function of their group, we should all be getting the same answers."

There was, however, at least one coach who felt that building capacity for research use in school district policymaking was not explicitly part of her role: "We [the program] have presented a rubric in terms of criteria for what constitutes good

evidence-based usage. We've given them some examples of programs that are evidence-informed, if not evidence-based. But I don't explicitly do that [build capacity] … in my role as a coach." There is some variation in the degree to which coaches took responsibility for explicit capacity building for using research knowledge.

Two-thirds of the MHLs interviewed (n = 4) acknowledged the important role that coaches played in connecting research and practice. One MHL clearly stated, "I would say in terms of finding and using research knowledge, it would be predominantly my coaches that sort of steer that, more so than my mental health [colleagues]." She believed this to be the case because "They're leaders in the field of school mental health. …They're cutting edge … they're presenting at international conferences." Other MHLs spoke about the importance of having coaches to turn to when they are "questioning evidence or [having trouble] believing the applicability of something." Generally, MHLs shared similar perceptions as the coaches: coaches are an important resource available to help facilitate incorporating research knowledge in their individual district SMH policies.

Coaches also constrain knowledge mobilization activities

Both groups also identified coaches as a constraint on KMb activities. Some coaches expressed that their personal approach to coaching and the evolution of the CYMH coaching model within the broader context may have been impeding their success in building capacity for research use. For example, one coach queried whether or not she was engaging in enough activity with her assigned group of MHLs: "I guess one question I have is, why aren't they calling more often? And is that because I haven't reached out enough, not reminded them enough, not sending them my phone number and email every week?" This coach reflected at length about whether or not her personal style in terms of approaching her coaching work was a mitigating factor in connecting MHLs with the knowledge and skills necessary to develop research-informed SMH policy. She was aware of the infrequency of interaction with her group of MHLs, indicating that even her own expectations were not met in terms of frequency of interaction.

The program director acknowledged the challenges with the coaching strategy: "The coaching model is a tricky one because we are just building it," she said. Recognizing the successes and challenges during the pilot years of the program (the period covered during this study), she attributed the shift toward a one-on-one model from the earlier group approach as being a difficult but important evolution: "It's an evolving thing … [the coaching model has] lacked a standardization across the coaches, and the Mental Health Leaders have been quite direct with me about what their needs are, when they are being met, and when they are not." The evolving nature of the coaches' role within the program helps understand why—when they were generally central figures across the networks—coaches' involvement in the informal network varied greatly when considered individually.

The MHLs also described how interactions with coaches functioned as a KMb constraint. Although they are formally assigned to specific coaches, one MHL stated, "There are some coaches that they [MHLs] would talk about [issues] in front of anyway, but there are some that you don't know why they are coaches." Not all coaches are perceived

as equal within this group; some coaches' skills, knowledge, and experience are considered more valuable than others—a finding reflected in the social network structure.

There exists a common group of individuals who are far less connected than others across the CYMH networks. One MHL suggested that "there is some work to be done around what is the role of the coach, and can we use different coaches for different reasons"—an insight that may help explain why the informal patterns of interaction do not follow the formal assignment of coaches to MHLs, as well as why some people (coaches and MHLs) are more frequently sought out than others. The value and underlying goal of helping school districts design and implement research-informed SMH policy and programming was uncontested; rather, the coaching model (in terms of how coaching groups were organized) that was brought into question and identified was, in some ways, a barrier to knowledge exchange.

Discussion

The CYMH program functioned as an intermediary organization, brokering research-based knowledge between mental health research and school district contexts. The program design was specific, focused, and informed by research. In other studies of intermediary organization's work with school districts (e.g., Coburn, 2010; Honig, 2004), brokers often begin their work within an established workplace with its own cultural norms and practices (i.e., pre-existing social capital), which may affect research use in district decision-making and policymaking. In this context, with a few exceptions, participants were new to each other; there was very little established social capital within the group at the onset of their work together. This added a layer of complexity to building a professional community that would engage complicated problems of practice and complex knowledge exchange—situations where high levels of trust and credibility are critical to knowledge exchange processes (Daly, 2010). In addition to the work necessary to build capacity for evidence-based and research-informed practice, CYMH's leadership also had to attend to social capital development, rendering the task even more difficult.

The CYMH program was unique in its interdisciplinary design, where experts from the fields of child and youth mental health and educational administration were brought together rather than remaining in the typically siloed landscape that often characterizes social services. With coaches and MHLs coming to the program with their own experience and expertise from across diverse fields, the interdisciplinary nature of CYMH invited a host of challenges—adapting what works well in the health sector to an education context. The lack of common language and different approaches to problem-solving potentially impedes capacity development in some school districts where the prevailing culture precludes research evidence use. However, there is great opportunity within this KMb model to bridge the gap between research and practice by integrating knowledge and expertise from across domains, functioning in tandem rather than separately, as is often the case.

While the CYMH program envisioned a specific coaching model, the patterns of interaction revealed that the reality of the program did not match the design. Individual MHLs were assigned to specific coaches who theoretically served as their point of contact outside of formal meetings. Had informal activity patterns adhered to this design,

the network maps would have shown groups of MHLs clustering around their individual coaches, but that was not so. Collectively, the coaches were central figures in the research knowledge and advice networks, yet there was considerable variability in their levels of informal activity: two coaches were consistently sought out more often than other program coaches across multiple relational dimensions. Hence, the patterns of informal interaction within this professional community were not divided up into individual coaching groups, as one might expect given the original design.

The nuanced insights provided in the interviews—making clear the value of conducting a mixed-methods study in social network research—helps understand why the patterns of informal interaction differed from the program design. A key function of the program is to help build MHLs' capacity to use research in district policymaking. Thus, the people perceived to be the most knowledgeable were those coaches who had extensive experience in child and youth mental health within schools and school districts; all coaches were not considered equal. A combination of field-based knowledge and experience in both child and youth mental health and educational administration characterized some coaches' expertise as more credible or authoritative than coaches who possessed knowledge and expertise in only one domain. This accounted for the more central positions of some coaches within the networks. Those with the most relevant knowledge and expertise were seen as the key facilitators of connecting research and practice.

While CYMH coaches were key figures in helping MHLs make sense of related research and offering advice, MHLs implied that it was the formal meetings and evidence-based tools of the program more broadly that connected research and practice. When MHLs discussed connecting with research knowledge, they most often referenced the program's materials and resources, which were provided to them during the formal meetings, as the predominant source of resource knowledge. In effect, it is the artefacts created and distributed by the coaching team that are mobilizing research knowledge most effectively, offering further evidence and findings that products and events are important KMb mechanisms (Cooper & Levin, 2010; Nutley et al., 2007). The informal interactions within this network provide more sense-making opportunities in relation to these KMb tools, rather than directly connecting research and practice.

Conclusion

The CYMH participants are not connecting often with each other outside of formal events, potentially compromising the long-term sustainability of the program beyond its formal mandate. However, given the study's focus on the two pilot years of the program, lower levels of activity might be expected as the program gains traction while it takes time to build social capital within a community. This study emphasizes how social structures within research brokering networks such as CYMH affect how they carry out their work in relation to KMb activities. In this case, the primary role of the informal network is to provide a context within which members make sense of the research-informed tools and materials designed to help them develop their own research-informed SMH policies. Sense-making processes are highly individual and personal, often requiring strong, trusting relationships, which take time to develop.

Policymakers and program designers would do well to pay attention to these social spaces and incorporate social capital strategies—that is, deliberate and focused approaches to building the types of relationships necessary to meet intended goals—into their program design and implementation planning. Policymakers and decision-makers at both government and district levels need to understand that it is the *quantity and quality of interactions* within these networks that both facilitate and constrain desired outcomes. These findings reiterate the necessity of providing the collaborative spaces in which face-to-face interactions develop the foundational levels of social capital (e.g., a culture of trust and reciprocity) required to engage in joint work, regardless of its nature. A social network perspective can generate important formative feedback that identifies weak areas and/or under-utilized resources within a network, enabling governments and system leaders to reallocate resources in order to strengthen network activity and the conditions that support network growth. Developing and sustaining research brokering networks such as CYMH is a resource-intensive activity requiring deliberate action to ensure sustainability: a social network perspective can positively inform this work.

From a practice point of view, a social network perspective can help people become aware of their social environments, providing a critical feedback loop. In the case of CYMH, the program's leadership can use these insights to understand the ways in which their school district participants are interacting with their coaches and CYMH colleagues outside the formal boundaries of the program. For example, the leadership team will need to decide whether or not these low levels of informal interaction are, in fact, problematic. If so, they can make decisions that will encourage greater connectivity outside of professional learning events. If not, they can focus their energy on developing the formal elements of the program. Similar decisions can be made about whether or not the existing core-periphery structures and other network characteristics (see Rodway, 2015b) are troublesome.

When designing and implementing research brokering networks, it is essential to build awareness of and access to the expertise within the network that will enable members to make use of research-based knowledge in their daily professional practice. Paying attention to who is included in the network and establishing structures and processes that enable the group's ability to connect is crucial. Networks cannot be taken for granted—they do not always function in positive ways. Some patterns of interaction can, in fact, inhibit the realization of intended goals, or at the very least pose significant barriers that make achieving the desired ends difficult. Social spaces are complex and messy, but they have real and sometimes serious implications for the design and implementation of educational change strategies, such as research brokering networks. There is a growing body of literature on both social capital and social network theory that could fruitfully guide these processes as well as illuminate the invisible work of networks as important tools for knowledge mobilization.

Note

1. In this study, "research-based knowledge includes research findings, evidence, and also theoretical and empirical insights" (Davies & Nutley, 2008, p. 2).

References

Barwick, M., Boydell, K., Basnett, D., O'Hara, B., Ferguson, H.B., & Haines, R. (2006). Knowledge translation for practice change in children's mental health. *CIHR Institute of Health Services and Policy Research, Evidence in action: acting on evidence: A casebook of health services and policy research knowledge translation stories*, 13–18.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity*, *36*(4), 391–409. doi: 10.1023/A:1020909529486

Borgatti, S.P., & Foster, P. (2003). The network paradigm in organizational research: A review and typology. *Journal of Management*, *29*(6), 991–1013. doi: 10.1016/S0149-2063(03)00087-4

Borgatti, S.P., Everett, M.G., & Freeman, L.C. (2002). UCINet for Windows: Software for social network analysis. Harvard, MA: Analytic Technologies.

Borgatti, S.P., Everett, M.G., & Johnson, J.C. (2013). *Analyzing social networks*. Thousand Oaks, CA: SAGE Publications.

Bornbaum, C.C., Kornas, K., Peirson, L., & Rosella, L.C. (2015). Exploring the function and effectiveness of knowledge brokers as facilitators of knowledge translation in health-related settings: A systematic review and thematic analysis. *Implementation Science*, *10*(162), n.p. doi: 10.1186/s13012-015-0351-9

Carolan, B. (2014). *Social network analysis and education.* Thousand Oaks, CA: SAGE Publications.

Coburn, C.E. (2010). The partnership for district change: Challenges of evidence use in a major urban district. In C.E. Coburn & M.K. Stein (Eds.), *Research and practice in education: Building alliances, bridging the divide* (pp. 167–182). Plymouth, UK: Rowman & Littlefield Publishers, Inc.

Conklin, J., Lusk, E., Harris, M., & Stolee, P. (2013). Knowledge brokers in a knowledge network: The case of Seniors Health Research Transfer Network knowledge brokers. *Implementation Science, 8*(7), n.p. doi: 10.1186/1748-5908-8-7

Cooper, A. (2012). *Knowledge mobilization intermediaries in education: A cross-case analysis of 44 Canadian organizations* [Doctoral dissertation]. Retrieved from ProQuest Dissertations and Theses Database, (UMI No. NR97561).

Cooper, A. (2014). Knowledge mobilisation in education across Canada: A cross-case analysis of 44 research brokering organisations. *Evidence & Policy: A Journal of Research, Debate and Practice*, *10*(1), 29–59. doi: 10.1332/174426413X662806

Cooper, A., & Levin, B. (2010). Some Canadian contributions to understanding knowledge mobilisation. *Evidence & Policy: A Journal of Research, Debate and Practice*, *6*(3), 351–369. doi: 10.1332/174426410X524839

Cooper, A., Levin, B., & Campbell, C. (2009). The growing (but still limited) importance of evidence in education policy and practice. *Journal of Educational Change*, *10*(2–3), 159–171. doi: 10.1007/s10833-009-9107-0

Cresswell, J.W. & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research* (2nd edition). Thousand Oaks, CA: SAGE Publishing.

Cross, R., & Parker, A. (2004). *The hidden power of social networks: Understanding what really gets done in organizations.* Cambridge, MA: Harvard Business School Press.

Daly, A.J. (2010). *Social network theory and educational change*. Cambridge, MA: Harvard Education Press.

Daly, A.J., & Finnigan, K.S. (2010). A bridge between worlds: Understanding network structure to understand change strategy. *Journal of Educational Change*, *11*(2), 111–138. doi: 10.1007/s10833-009-9102-5

Daly, A.J., Finnigan, K.S., Jordan, S., Moolenaar, N.M., & Che, J. (2013). Misalignment and perverse incentives: Examining the politics of district leaders as brokers in the use of research evidence. *Educational Policy*, *28*(2), 145–174. doi: 10.1177/0895904813513149

Davies, H.T.O., & Nutley, S.M. (2008). *Learning more about how research-based knowledge gets used: Guidance in the development of new empirical research.* New York, NY: William T. Grant Foundation.

Davies, H.T.O., Nutley, S.M., & Smith, P.C. (Eds.). (2000). *What works? Evidence-based policy and practice in public services.* Bristol, UK: Policy Press.

Dobbins, M., Robeson, P., Ciliska, D., Hanna, S., Cameron, R., O'Mara, L., DeCorby, K., & Mercer, S. (2009). A description of a knowledge broker role implemented as part of a randomized controlled trial evaluating three knowledge translation strategies. *Implementation science*, *4*(23), n.p. doi: 10.1186/1748-5908-4-23

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory.* Chicago, IL: Aldine Publishing Co.

Government of Ontario. (n. d.). *Ontario Ministry of Education research and evaluation strategy.* Retrieved September 10, 2014, from www.edu.gov.on.ca/eng/research/research.pdf.

Government of Ontario. (2014). *Achieving excellence: A renewed vision for education in Ontario*. Toronto, ON: Queen's Printer.

Honig, M.I. (2004). The new middle management: Intermediary organizations in education policy implementation. *Educational Evaluation and Policy Analysis*, *26*(1), 65–87. doi: 10.3102/01623737026001065

Lomas, J. (2007). The in-between world of knowledge-brokering. *BMJ*, 334, 129–132.

Marin, A., & Wellman, B. (2011). Social network analysis: An introduction. In J. Scott & P.J. Carrington (Eds.), *SAGE handbook of social network analysis* (pp. 11–25). Thousand Oaks, CA: SAGE Publications.

Meyer, M. (2010). The rise of the knowledge broker. *Science Communication*, *32*(1), 118–127.

Moolenaar, N.M. (2012). A social network perspective on teacher collaboration in schools: Theory, methodology, and applications. *American Journal of Education*, *119*(1), 7–39.

Nutley, S.M., Walter, I., & Davies, H.T.O. (2007). *Using evidence: How research can inform public services.* Bristol, U.K.: The Policy Press.

Oliver, K., Innvar, S., Lorenc, T., Woodman, J., & Thomas, J. (2014). A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC Health Services Research*, *14*(2), n.p.

Prell, C. (2012). *Social network analysis: History, theory, methodology.* Thousand Oaks, CA: SAGE Publications.

Rodway, J. (2015a). Connecting the dots: Understanding the flow of research knowledge within a research brokering network. *Education Policy Analysis Archives*, *23*(123), 1–24.

Rodway, J. (2015b). *Mobilizing research knowledge through social networks* [Unpublished doctoral dissertation]. Toronto, ON: University of Toronto. Retrieved November 30, 2018, from http://hdl.handle.net/1807/71321.

Rodway, J. (2018). Getting beneath the surface: Examining the social side of professional learning networks (pp. 172–193). In C. Brown & C.L. Poortman (Eds.), *Networks for learning: Effective collaboration for teacher, school, and system improvement.* New York, NY: Routledge.

Saldana, J. (2015). *The coding manual for qualitative researchers.* Thousand Oaks, CA: SAGE Publishers.

Santor, D.A., Short, K., & Ferguson, B. (2009). *Taking mental health to school: A policy-oriented paper on school-based mental health for Ontario*. Ottawa, ON: Provincial Centre of Excellence for Child and Youth Mental Health at CHEO.

School-Based Mental Health and Substance Abuse Consortium. (2013). *School-based mental health in Canada: A final report*. A report commissioned by the Mental Health Commission of Canada. Ottawa, ON: Mental Health Commission of Canada.

Scott, J. (2017). *Social network analysis: A handbook* (4th edition). Thousand Oaks, CA: SAGE Publications.

Spillane, J.P., Shirrell, M., & Sweet, T.M. (2017). The elephant in the schoolhouse: The role of propinquity in school staff interactions about teaching. *Sociology of Education*, *90*(2), 149–171. doi: 10.1177/0038040717696151

Van Kammen, J., de Sevigny, D., & Sewankambo, N. (2006). Using knowledge brokering to promote evidence-based policy-making: The need for support structures. *Bulletin of the World Health Organization*, *84*(8), 608–612.

Waddell, C., McEwan, K., Shepherd, C.A., Offord, D.R., & Hua, J.M. (2005). A public health strategy to improve the mental health of Canadian children. *The Canadian Journal of Psychiatry*, *50*(4), 226–233. doi: 10.1177/070674370505000406

Ward, V., House, A., & Hamer, S. (2009). Knowledge brokering: The missing link in the evidence to action chain? *Evidence & Policy, 5*(3), 267–279. doi: 10.1332/174426409X463811

Ward, V., Smith, S., House, A., & Hamer, S. (2012). Exploring knowledge exchange: A useful framework for practice and policy. *Social Science & Medicine*, *74*(3), 297–304. doi: 10.1016/j.socscimed.2011.09.021

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications.* New York, NY: Cambridge University Press.

Weiss, C. (1979). The many meanings of research utilization. *Public Administration Review, 39*(5), 426–431.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: SAGE Publications.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(6)
2019

Addressing Wicked Educational Problems through Inter-Sectoral Policy Development: Lessons from Manitoba's Healthy Child Initiative

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Abstract In 2000, the Government of Manitoba initiated an inter-sectoral policy strategy referred to as Healthy Child Manitoba. This article reports on a research project that studied the success and challenges of this horizontal policy strategy. The research suggests that while this policy approach—which places education within the broader context of a *healthy child*—warrants attention, the day-to-day operationalization of the policy strategy remains difficult. Using a horizontal approach to improve educational outcomes by breaking down the *silo effect* of traditional government departments appears to be important, but working effectively across sectors requires overcoming a number of barriers, including the need for the horizontal approach to co-exist within a well-delineated vertical governmental machinery.

Keywords Wicked problems; Policy networks; Horizontal policymaking

Introduction

Governmental administrations throughout the world are undertaking diverse initiatives to address the increasing level of uncertainty, volatility, and unpredictability that currently characterize the policymaking process. Public institutions are now called upon to consider problems and challenges that have, according to many observers, scholars, and political scientists, a higher level of interrelatedness and com-

Jean-Vianney Auclair (2019). Addressing Wicked Educational Problems through Inter-Sectoral Policy Development: Lessons from Manitoba's Healthy Child Initiative. *International Journal of Education Policy & Leadership 14*(6). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/859 doi: 10.22230/ijepl.2019v14n6a859

plexity (Bourgon, 2011). Consistent with this perspective, Donald Savoie (2003) states that "policy issues no longer respect boundaries" (p. 214), suggesting that it is increasingly difficult to consider problems in isolation from one another.

Moreover, as governmental policy initiatives are becoming increasingly intertwined with activities conducted by multiple external influential actors, governments are becoming more dependent on these actors to achieve their mandates (Klijn, 2008). Predominantly government-centric views of policymaking are becoming a tradition of the past. The development of networking capacities to facilitate the building of relationships across policy actors is consequently becoming critically important in a policy environment where trust, negotiation skills, flexibility, collegiality, and the ability to give and take represent increasingly important habits of mind for any policy actors. This applies to all sectors of policy activities within and without government, but most certainly in the health and education sectors.

"Wicked problems" are difficult to clearly define, have many interdependencies, are often multi-causal and socially complex, and hardly ever sit conveniently within the responsibility of any one organization (Australian Public Service Commission, 2007; Rittel & Webber, 1973). For these reasons, they require a coordinated response by a number of governmental and non-governmental actors, through more horizontal collaborative processes. There is indeed a growing need for public institutions to respond to increasingly horizontal and multifaceted problems, which often also have conflicting values (Kickert, Klijn, & Koppenjan, 1997; Sørensen & Torfing, 2008). Erik-Hans Klijn (2008) suggests that the "trend towards various forms of horizontal governance will ultimately transform nations into network societies in which interdependence and horizontal relations are paramount" (p. 506). Jocelyne Bourgon (2011) supports this notion and suggests that achieving public results through policymaking can progressively be done through the participation of multiple actors. Accordingly, she suggests that in government, hierarchy and networks are called upon to coexist. This type of approach cannot, however, take place without challenges.

These notions are relevant and applicable to Canadian provincial educational policies committed to pursuing complex equity goals and the ideal of "success for every student" (Manitoba Education and Advanced Learning, 2015). The success of children in schools is affected by multiple external social factors, agencies, and institutions, which also have an influence on the development of the child. In this context, Karen Seashore Louis, Kenneth Leithwood, Kyla Wahlstrom, and Stephen Anderson (2010) suggest that all the activities conducted in schools, representing all school variables, only account for 12 to 20 percent of the variation in student achievement across schools. The holistic development and growth of children, therefore, depends on a variety of variables and on the coordinated actions and intervention of multiples actors, including parents, families, communities, and schools, as well as private and public institutions.

Education and Healthy Child Manitoba

In the year 2000, the Government of Manitoba implemented a horizontal policy strategy referred to as Healthy Child Manitoba. This horizontal and cross-depart-

mental strategy drew education into a policy network environment focused on the holistic development of children from preconception to age 18, particularly the well-being of vulnerable children, including those living in poverty (Healthy Child Manitoba, 2012). The strategy was designed to have an influence on the development of children and to also affect their success in schools while addressing several factors located inside and outside of schools. Its main purpose is to improve the well-being of all children.

While Healthy Child was not a policy strategy specifically designed to address the problem of inequity in society, it was argued that from a macro-level perspective, poverty and ensuring learning success to all students represent two interrelated fundamentally wicked problems, which the horizontal and collaborative strategy was intended to address. It is important to note that Healthy Child was not an anti-poverty strategy or, *per se*, an education-specific policy. Rather, it was an approach designed to break the barriers typically existing between sectors and departments to best coordinate the provision of support toward the healthy development of children.

This article reports on the findings of a research study that analyzed the Healthy Child Manitoba policy strategy from an educational perspective, using it as a case study to examine the perceived benefits and challenges of horizontal policymaking involving the education sector. The central question examined in this study was: how has the Healthy Child Manitoba policy strategy evolved over time as an intersectoral policy strategy, and what were the benefits and challenges perceived by key policy actors as it relates to the field of education?

More specifically, the study addresses the following three sub-questions:

1. What were the origins of the Healthy Child Manitoba policy strategy, how has this policy approach evolved over time, and how has it related to the field of education?
2. Who were the public and non-public policy actors involved in the Healthy Child Manitoba policy strategy, what role did they play, and how did they interact with one another?
3. How was the Healthy Child Manitoba policy strategy being perceived and understood by educational policy actors in terms of challenges and benefits?

The article first presents a brief description of the Healthy Child Manitoba policy network, followed by a description of the main findings of the research that primarily highlight the perceived benefits and pitfalls of the horizontal policy approach in relation to the third sub-question. The article concludes with an examination of the implications of this research for the field of Canadian educational administration.

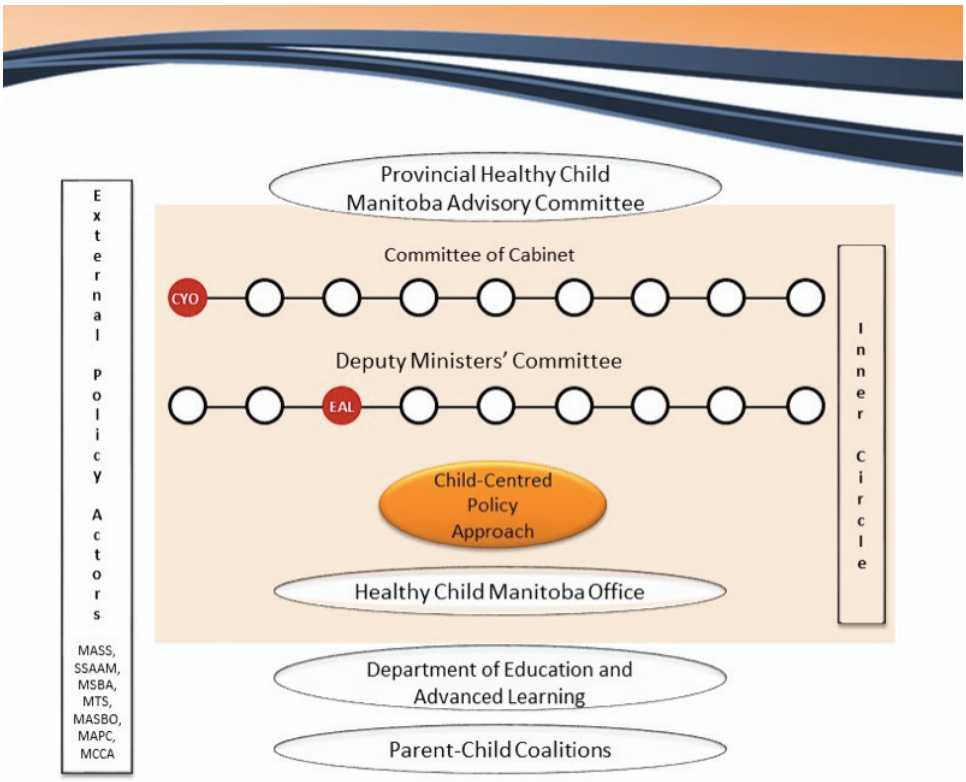
Description of the Healthy Child Manitoba policy network

In the context of this research, the policy strategy, through the actions of a number of governmental and non-governmental policy actors, was considered as taking place in a network environment, i.e., a policy network. Accordingly, the respective roles of public and non-public policy actors, as well as their interactions with one another, were examined through a theoretical framework focusing on the notion of *policy net-*

work (Börzel, 1998). This concept was used as a lens to examine how the policymaking process takes place within the complex and multilayered policy environment.

The following figure provides a visual representation of the organization of the Healthy Child policy network as it was structured in 2015 and identifies the main policy actors considered for the purpose of this research.

Figure 1. The Healthy Child Manitoba network



Notes: CYO: Department of Children and Youth Opportunities; EAL: Department of Education and Advanced Learning; MASS: Manitoba Association of School Superintendents; SSAAM: Student Services Administrators Association of Manitoba; MSBA: Manitoba School Boards Association; MTS: Manitoba Teachers' Society; MASBO: Manitoba Association of School Business Officials; MAPC: Manitoba Association of Parent Councils; MCCA: Manitoba Child Care Association

A Committee of Cabinet led the policy strategy. The first row of nine circles (see Figure 1) represents the groups of nine ministers involved in this committee and illustrates the cross-departmental nature of the strategy. The Children and Youth Opportunities (CYO) circle highlights the position of the minister responsible for chairing the committee and accountable for the policy initiative. The second row of circles represents the Committee of Deputy Ministers. The Education and Advanced Learning (EAL) circle highlights the position of the deputy minister responsible for chairing this committee. The Healthy Child Manitoba Office (HCMO), located under the Committee of Deputy Ministers, was primarily responsible for supporting the work of the two committees. The EAL departmental bureaucrats were located underneath the HCMO. For the purpose of this visual representation, only the staff from this department were considered given the educational focus of the study. The parent-child coalitions[1] were located at the bottom of the diagram. The Provincial Healthy Child Manitoba Advisory Committee was located at the top of the diagram to illustrate how, in principle, this advisory body was responsible for guiding and

influencing the policy strategy. The influence of the external policy actors was illustrated with the rectangle located on the left side of the diagram and primarily representing the educations stakeholders consulted for the purpose of the study. The main locus of the cross-sectoral strategy was represented with the oval located at the centre of the diagram. The shaded area highlights the structures of the network considered as the network *inner circle*, as noted on the right side of the diagram.

The use of the expression "policy network *inner circle*" emerged from this study and was used to describe one central dimension of the Healthy Child Manitoba policy network. The inner circle refers to the group of internal elected and non-elected policy actors who benefitted from a privileged influential role in the policymaking process. It included the committees of ministers and deputy ministers, the staff from the HCMO, as well as the chair of the advisory committee. The most influential external policy actors within the education sector were considered to be MASS, MSBA, MCCA, and SSAAM, based on the insights shared by the interview participants.

Methodology

The data collection conducted for this qualitative research was based on a documentation analysis for content and context, as well as on 24 semi-structured interviews conducted in the fall of 2015. The interviews were conducted with two ministers and non-elected public policy actors, including one deputy minister, as well as with non-public policy actors. The informants were primarily selected because of their relatively direct involvement with the Healthy Child policy strategy and because of the role they played within the education system in both the context of government and the context of the field of education. All organizations and key policy actors included in Figure 1 participated in the interview process. When considering the notion of "inner circle," eight out of the 24 participants interviewed were deemed to be members of this group. Several sets of questionnaires were developed to better take into account the relatively unique context of each individual informant. Many elements, however, were common in all questionnaires. The questionnaires included a number of open-ended questions that covered a variety of topics related to the perceived challenges and successes of the policy strategy. For example, all participants were asked: "If there is anything you could change regarding the Healthy Child Manitoba approach, what would it be?"

All interviews were transcribed. The draft interview transcripts were submitted to each interviewee for review and approval. The final approved transcripts were read and analyzed several times. NVivo™ software was used to organize and analyze the data collected and to identify key nodes for coding purposes. The nodes selected only took into account the information collected through the interview process. Additional data came from the documentation review conducted parallel to the interviews. The coding process began with the identification of the major themes that became apparent following multiple readings of the transcripts, which led to the identification of more than 50 nodes. Following multiple coding steps, it became evident that some nodes were redundant and overlapping. A final list of 39 nodes was used for analysis purposes.

The findings

The main findings related to the perceptions of the policy actors interviewed for this study were organized around five broad statements referred to as *constats*. The French word was chosen to capture the idea of a significant finding drawn from the predominant perceptions of the participants. In some instances they convey a fairly strong consensus; in other cases they reflect divergent views and perceptions.

Constat 1: The policy strategy was valued and perceived as beneficial by the members of the policy network

The interdepartmental nature of the policy strategy was widely considered as its most innovative dimension. Having a broad policy strategy with an influential and high-profile Committee of Cabinet was seen as being forward-looking and as having the potential to develop more effective policy solutions. According to the informants, the mere existence of this committee clearly signalled the governmental political commitment to the implementation of the strategy. The Committee of Cabinet table was seen as creating a focused and open forum where issues could be discussed and examined in a coordinated fashion. The same observation applied to the Committee of Deputy Ministers and the staff from the HCMO, who were directly engaged in collaborative work. The two high-level central structures of the policy strategy were viewed as being well-suited for establishing connections across sectors and allowing for greater convergence in the setting of priorities and synergies.

Many saw the unique legislated status attributed to the strategy, *The Healthy Child Manitoba Act* (later referred to as *The Act*), as a strength as it conferred a high level of legitimacy, in turn creating an element of stability. More specifically, the legislative framework was seen as an important tool to clarify roles, responsibilities, and accountability.

In general, Healthy Child Manitoba was perceived as being well-positioned to respond to emerging issues and for providing relevant opportunities to outsiders—those located outside of the inner circle—to effectively and strategically influence policy decision-making beyond the mandate conventionally attributed to the Department of Education and Advanced Learning (later referred to as the Department of Education).

The Healthy Child Manitoba policy strategy was considered as promoting the long-term value of prevention and the critical importance and benefits of early interventions. Accordingly, this long- term way of thinking was seen as a positive shift in the government modus operandi, which often tends to be too centred on opportunistic and short-term political gains. It prioritized "upstream" policy activities that focus on the prevention of problems.

The fact that the policy approach was solidly anchored on the use of research evidence, evaluation, and measurable outcomes was perceived by many as a very sound model and as an area of strength. Because of its research expertise as well as research partnerships, namely with the Manitoba Centre for Health Policy, the HCMO was seen as being well-positioned to support the work conducted locally by school divisions and to help support the development of a working culture that valued evidence-based decision-making.

The parent-child coalitions were by design loosely defined, with limited accountability constraints, to promote local decision-making. These organizations were seen as having the benefit of letting local communities determine their own priorities and orientation. Some perceived the coalitions as inviting and welcoming, especially members of the community who were not attending on behalf of a formal organization and who, at times, felt intimidated or left out of these types of community organizations.

Constat 2: The interactions taking place in the policy network have led to the establishment of a closer relationship between the early childhood education sector and the formal Kindergarten to Grade 12 education system

The Healthy Child strategy, especially through the work of the HCMO, was perceived as a governmental advocate for children, especially from a preschool perspective. As the initial focus of Healthy Child concentrated mostly on early childhood development, it was without surprise that several respondents linked the mandate of Healthy Child primarily to the narrower perspective of early childhood development as opposed to the actual mandate, which extended from the prenatal stage to youth.

All respondents recognized the role played by Healthy Child in the early learning sector. Several described how the policy strategy had been successful at raising the profile of early childhood development and how, through an effective research dissemination process, the network created meaningful synergies across sectors and successfully brought early learning onto the policy agenda. Through a well-orchestrated process, Healthy Child brought to the forefront the science and the research supporting early intervention, early prevention, and early childhood development and more broadly highlighted the critical importance of the early years in the life trajectory. It was suggested that through these initiatives, childcare services were finally being publicly recognized as an important public service, not only for the families but also for the benefit of the larger society.

Perhaps more importantly, there was agreement among respondents that Healthy Child played a significant leadership role in bringing the early childhood education sector and the formal Kindergarten to Grade 12 (K–12) education system closer together. It was reported that early childhood education was initially treated with a great deal of caution by the members of the K–12 education system. For example, many school administrators initially felt threatened by the idea of linking the early years to the school system, often for practical reasons. Simply considering the sharing of school spaces to accommodate an early learning centre was indeed initially perceived as a threat. Today, it is largely considered a benefit. Raising the awareness of key stakeholders around the need to build strong relationships at the local level between childcare workers, primary school teachers, school principals, and childcare centre directors was seen as a required condition to enhance learning outcomes for all children.

Through the collaboration of all these sectors, within a network environment including the involvement of Healthy Child Manitoba and the Department of Education, progress was made over time. As a result of this cross-sectoral collaboration, the importance of early childhood education is

now more widely accepted, and there appeared to be an emerging consensus in the education community of the importance of early interventions taking place prior to school entry.

Constat 3: The members of the network had divergent and at times opposing views on the community engagement dimensions of the policy strategy

While *The Act* defines fairly specifically the notion of a community partner as a "community organization or other body that delivers a government-funded program or service for children or their families" (Manitoba, 2007, p. 1), the interpretations shared by the informants varied significantly from the perspective of the insiders and the outsiders. There were indeed diverging views expressed regarding the level of influence community partners could exercise. On the one hand, the members of the inner circle maintained that community engagement was central to the long-term vision of the policy strategy. On the other hand, several policy actors located outside of the inner circle indicated that they had a limited understanding, awareness, and appreciation of the policy's community engagement aspiration.

Right from its inception, the policy strategy was intended to have a collaborative and consultative focus. Informants from the inner circle suggested strongly that the origin of the strategy itself was informed by an open, bottom-up process. For example, it was suggested that the foundational orientation set to guide the work of Children and Youth Secretariat—the precursor organization of the HCMO established by the previous Progressive Conservative government—was the outcome of a broad-base consultative process that involved a variety of stakeholders located both inside and outside of the government.

When considering the parent-child coalition model, there was evidence that the approach was initially influenced and guided by some of the programs and initiatives developed locally by a small number of school divisions. These grassroots initiatives later benefitted from support provided by Healthy Child in an era where early childhood education was not yet considered a priority. Accordingly, the horizontal policy strategy was seen, especially by those from the inner circle, as acting as a bridge between the community and the government and, therefore, as providing opportunities for a bottom-up policy influence. This perceived closer relationship with the community created, by design, a flatter, more horizontal, and less hierarchical way of doing business.

From the perspective of respondents from the HCMO, ensuring a strong presence in the field and working beyond the internal partner departments to reach out to external partner and community organizations became fundamental elements of the strategy. Other interviewees went further with the notion of community and emphasized the importance of reaching individual families, as well as other members of the network, to collectively address the needs of children. In that sense, Healthy Child helped create synergies across sectors, not only within government but also at the community level. This more holistic approach, supported by the policy strategy, also highlighted how both members of the community and the government had a role to play, and that in some cases, the local community was seen as better positioned to identify specific policy solutions.

In contrast, a number of external policy actors had difficulties commenting on the community partnership aspect of the strategy and providing any concrete examples to illustrate how it favoured and encouraged the participation of external stakeholders. In other words, they were unsure as to how the term "community" was to be interpreted and how this relationship with external stakeholders was to take place in concrete terms. For these reasons, some participants were wondering to what extent the government was genuinely interested in providing meaningful opportunities for input from the community. Accordingly, the policy approach was considered by many as being primarily government-centric, with limited references and connections to the engagement of external community partners or stakeholders. Policy actors located outside of the inner circle noted that there was a strong direction imposed from and controlled by the government, and that stakeholders and educational partners were simply expected to buy-in. As a result, the HCMO was perceived more as a top-down agency responsible for providing policy direction to partner departments as well as to local organizations.

One of the mechanisms available to Healthy Child for seeking community input and engagement is the provincial advisory committee. Here as well, the value of the committee was qualified with diverging opinions. For members of the inner circle, the committee represented an effective pathway to allowing external stakeholders to influence the broad policy directions and supporting the sharing of information on best practices. For other informants, the committee was perceived as being too large and as being predominantly used to favour the unidirectional distribution of information, as opposed to encouraging constructive and influential dialogues.

Constat 4: The policy network faced a number of operational challenges often related to the horizontal/vertical relationship

Creating collaborative and effective working relationships with multiple policy partners is a difficult task. Contrary to what one might think, it cannot be assumed that the horizontal collaboration and conversations taking place at the highest levels of the hierarchy automatically percolate down to all the different levels in all the individual partner departments. Participants reported that the need to replicate the horizontal collaboration and communication taking place at the top to the various outer-circle internal stakeholders, particularly within the Department of Education, represented one of the most significant challenges to this policy strategy. While some informants attempted to minimize the implication of this problem, for others it was an issue that required more concerted attention. Participants perceived the horizontal nature of the policy structure as clearly delineated at the level of the two committees—ministers and deputy-ministers—as well as through the support and guidance provided by the HCMO. However, the cross-sectoral structures were not considered as well-defined in the lower levels of government, where follow-up actions and implementation were expected to occur. As a result, the horizontal collaboration was seen as largely left by default to the discretion of those located in lower levels of the hierarchy and conducted on an ad-hoc basis as opposed to being intentionally coordinated.

As a consequence of the perceived disconnect and lack of alignment between the horizontal and vertical dimensions at play, the staff in the Department of

Education was, at times, required to address a number of competing and sometimes conflicting priorities. Each individual partner department involved with Healthy Child had its own departmental plan to implement and series of results to achieve under the leadership of one deputy minister and one minister. There was, however, a perception that, in some cases, unforeseen directions received from the HCMO could force a department to reassess its operational plan and priorities to accommodate a new mandate set from the top.

Consultation is an issue often examined in light of the relationship between internal and external policy actors or stakeholders. When considering a horizontal and cross-sectoral strategy such as Healthy Child, having sufficient internal consultation to expand the cross-sectoral buy-in and engagement represented an important issue. Some respondents suggested that interdepartmental dialogues that build a shared understanding of the central issues were not adequately facilitated and should have been structured to build a collective sense of ownership.

Even with the best intentions, policy communication channels cannot always be transparent, linear, inclusive, and sequential simply because of the complexity of the issues being considered and the rapidity with which these issues often need to be acted on in government. On that note, the level of communication with external stakeholders was also perceived as problematic in this study. For some participants, this issue focused largely on the lack of involvement of departmental staff in the coordination of the work being conducted by the HCMO. Some informants suggested, for example, that the office should play a better dispatching and coordinating role to avoid missteps and misunderstandings.

Because of the horizontal and collaborative nature of the policy strategy, some external actors indicated that it was not always easy to determine who was leading. Was it the chair of the Committee of Cabinet, the chair of the Committee of Deputy Ministers, or the chief executive officer of the HCMO? This perceived lack of clarity around leadership had the potential to create a certain level of confusion both inside and outside of government, particularly with respect to matters of responsibility and accountability. As one participant commented, even if *The Act* identified the chair of the Committee of Cabinet as being responsible for the Healthy Child legislated status, if everybody was involved, was anybody fundamentally responsible? In other words, was there a risk of diffusion of responsibility?

The notion of leadership was also considered from a project management perspective. The internal public policy actors located outside of the HCMO raised a number of concerns related to the operationalization of the internal policymaking process. The first was related to a perceived confusion or lack of clarity around who is responsible for playing the lead role on the projects undertaken. Often, by design, projects initiated under the Healthy Child strategy were inter-sectoral in nature and, therefore, required the participation of multiple actors. The need to identify a project lead often related to the selection of departmental content experts. While one could assume that a project undertaken under the Healthy Child's umbrella would normally be led by a staff member from the HCMO, this did not always appear to be the case.

Constat 5: Healthy Child and the Department of Education interacted in a shared but undefined policy space

Some program activities implemented under the Healthy Child policy initiative directly targeted schools, while others were designed to intervene on factors located outside of the formal K–12 education system. This included diverse activities related to preschool learning and parental support programs such as the parent-child coalitions. The recognition that many factors influencing children's learning were located outside the realm of schools provided a compelling rational for participating in this inter-sectoral policy initiative, but also raised important questions about the nature of that participation. Should, for example, the work of Healthy Child predominantly be targeting activities surrounding the school system through, for example, community programming, after-school programming, or parent-support initiatives? Or should it be directly attempting to influence the activities taking place in schools? Most participants in this study indicated that they believed that there was sufficient policy space to allow both sectors, Healthy Child and the Department of Education, to intervene collaboratively within the school system when it was relevant to do so. Based on this perspective, it made sense to have both sectors develop programs and policies collaboratively to be implemented in schools through the Department of Education and to have Healthy Child also intervening on factors located outside of the school system.

The role of the HCMO required attention when considering the notion of policy intersection. This role, described by one interviewee as the "critical inside engine" of the policy strategy, evolved over time. There was, however, a variety of perspectives around the role and function the office has played in the past and should be playing in the future when working collaboratively with partner departments, namely the Department of Education. This raised a number of questions regarding how collaboration should take place, who should be leading the initiative, and where the ownership of the program being developed should be located. There was a longstanding ambivalence related to the ownership and program delivery function of the HCMO. Initially, Healthy Child was primarily conceptualized as a governmental agency that would, in collaboration with others, incubate new policy solutions as opposed to its own programs. Early on, the HCMO did not invest a lot of time or resources in the management of programs. The ownership of programs has indeed been an area of struggle and tension that was linked directly to the fundamental mission and role of the horizontal policy strategy.

Some have suggested that Healthy Child, in collaboration with its partners, should have mainly focused its attention and resources on the testing of new and innovative ideas to be incubated during a finite and predefined period of time. When proven effective, these incubated programs would be devolved by partner departments, which would then become responsible for the long-term implementation and management of the program in question. From that point on, Healthy Child would play a role in assisting with the implementation in a collaborative manner and would bring back to the two high-level committees any issues arising from the implementation being conducted.

The inner-circle policy actors often made the point that while the notion of incubating ideas was initially part of the vision of the policy strategy of this

organization, this focus evolved over time and was perhaps neglected as the organization became more involved in the implementation and management of programs. For some policy actors located outside of the HCMO, the role of the agency was perceived as having evolved more toward a program delivery function than an incubator function.

Beyond the idea of program ownership and incubation, some respondents emphasized more specifically the coordinating role the HCMO played to achieve better policy alignment and reduce the potential duplication of efforts. This role was described as focusing on the creation of connections across the partner departments by breaking the barriers that typically exist in the government. Based on this perspective, Healthy Child should act primarily as a facilitator, an enabler, and would operate from what was referred to as "the balcony" to orchestrate the interactions taking place in the network, facilitate opportunities for deeper collaboration, and a more effective articulation across systems.

Others thought that the role of the secretariat should be located somewhere in the middle and suggested that the HCMO should play the hybrid role of being a convener, an incubator, as well as a program developer and holder. Depending on context and priorities, the emphasis on one of these three orientations could be more predominant. But each offers a quite distinct approach to the implementation of inter-sectoral collaboration and policy development.

Discussion

The Healthy Child case study examined the extent to which horizontal policy approaches are particularly well-suited to address multifaceted and complex policy problems also known in the literature as "wicked problems": policy problems that never fully get resolved. Creating the best conditions to provide equitable opportunities for all children to achieve the best possible learning outcomes falls under this category. This wicked social challenge far surpasses the role and capacity of the formal education system. The need to create well-articulated synergies across sectors in support of student learning appears fundamental to the effective pursuit of this goal, but these synergies are also difficult to achieve.

Do horizontal policy approaches make a difference in complex policy problems? If one assumes that Healthy Child Manitoba is in fact dealing with a wicked problem or even, perhaps, with multiple complex and multifaceted problems, one should not be surprised to learn that the policy strategy may not yet have achieved the outcomes it was initially intended to deliver. It is well known that horizontal policy approaches are difficult to implement and that there is no easy solution or perfect model that can apply to all kinds of issues and circumstances (Savoie, 2008). For this reason, as suggested by Guy Peters (1998), "the administrative Holy Grail of coordination and horizontality is one of the perennial quests for practitioners of government" (p. 1).

While Healthy Child was initially perceived as a unique and innovative policy approach in Canada, especially given its legislated status, the relevance of the strategy is now being questioned by some (Bostrom, 2010). Some were suggesting that Healthy Child has become a "do everything" type of organization and that it now

needs to rethink its focus. Others suggested that the policy strategy has achieved some successes in some pocket areas, but that the success is not as widely distributed as it could be.

The findings of this study suggested that the *policy strategy* was perceived as playing a positive role in improving and extending the effectiveness of the more conventional development and implementation of educational policies designed to benefit children's learning and well-being. This effect was primarily attributed to the main function of the strategy, which targeted a number of factors located both upstream and often outside of the formal education system. Healthy Child attempted to achieve this goal through its primary focus on early interventions and prevention. In addition, with its focus on evidence-based policymaking and evaluation capacity and, Healthy Child brought to the forefront other tools, processes, and practices that could have been used more extensively to determine the real potential of the policy decisions being considered prior to their implementation, and, as a follow-up to a rigorous implementation process, their effectiveness and impact. There were, however, reasons to believe that the strategy's capacity to address complex policy problems was not leveraged to its full potential due to a number of difficulties associated with the complexity of implementing effective collaborative approaches across sectors within the policy network.

The findings of this research suggest that juxtaposing the aspiration of a horizontal policy strategy with the need to operate vertically in an environment with a well-established hierarchical structure and compartmentalized way of doing business represents one of the most significant challenges facing a jurisdiction interested in implementing a seamless cross-sectoral policy approach. Any misalignment of the vertical and horizontal dimensions of the governmental machinery will produce communication disconnects and a lack of buy-in at all levels of the hierarchy. This resulted in policy actors feeling left-out, disengaged, and misinformed, negatively impacting the efforts made to work more collaboratively in a network environment favouring a horizontal way of doing business.

In any large bureaucracy, silos can be considered a necessary evil, but they are not necessarily conducive to innovation and change, especially when considered in the context of a highly complex policy environment. Accordingly, they can be considered operationally effective when promoting the status-quo. Silos favour the fragmentation and compartmentalization of responsibilities over collaboration and communication. Indeed, the *silo effect* largely takes place when sectors do not adequately collaborate. If the goal is to be innovative and create change, establishing a culture of collaboration becomes a sine qua non condition of success when wanting to create a concrete and measurable collaborative advantage (Huxham & Vangen, 2005) to effectively address problems and challenges having a high level of complexity.

Horizontal policy approaches such as Healthy Child are designed to break this *silo effect*. One of the risks inherent in a strategy favouring cross-sectoral collaboration is creating duplicative efforts, too many ineffective levels of collaboration and inefficient internal processes are often linked to a lack of communication that do not yield positive advantages or gains. Any additional layers implemented to facilitate horizontal collaboration can create inefficiencies and may not be optimizing the resources

available. Moreover, when moving away from silos, fragmentation, and specialization, as the number of individuals involved in the network increases, there is often a higher risk of confusion and the diffusion of responsibilities and issues regarding communication. Finding the right balance between specialization and collaboration, as articulated in this article, relates perhaps more to an art than a science.

When considering these challenges from a pragmatic and concrete perspective, it is suggested that in a best-case scenario both processes, specialization and collaboration, need to take place in the form of a well-orchestrated dance. There are times when collaboration is required and there are times when specialization is more adequate and efficient. It is through the right combination of these two dimensions that the best results can be achieved.

Healthy Child benefited from being examined in light of two distinct but interdependent perspectives. The first one related more specifically to *how* internal policy actors interacted with one another when attempting to build a more horizontal and collaborative environment. The second one related predominantly to *how* the government interacted with external stakeholders and engaged with them to leverage the influence they could have on the policymaking process and through the sharing of the policy space. This is with the intent of sharing the decision-making process but, perhaps more importantly, the identification of collaboratively defined solutions leading to the production of what Bourgon (2011) would call *public value*.

The issue of poverty represents one of the most predominant barriers impacting children's access to equitable educational opportunities—an issue that cannot be addressed effectively, in isolation, by the education system. The Healthy Child policy network continues to be strategically well-positioned to orchestrate and mobilize the required synergies to respond to a number of complex needs and pressures. This creates an exciting opportunity to determine how it needs to move forward, to redefine itself, and to reaffirm its mandate in order to act as a catalyst for the creation of an ambitious endeavour of collaborative and collective imagination.

Note

1. The parent-child coalitions represent the community-based organizations responsible for addressing a number of local priorities in a cross-sectoral manner. The 26 existing coalitions are funded annually by Healthy Child Manitoba and have a relatively loosely defined mandate with limited accountability measures. They consequently have a considerably high level of autonomy in determining local priorities and how areas of need are addressed.

References

Australian Public Service Commission. (2007). *Tackling wicked problems: A public policy perspective*. Canberra, AU: Australian Government. Retrieved May 2016, from https://www.apsc.gov.au/tackling-wicked-problems-public-policy-perspective.

Börzel, T.A. (1998). Organizing Babylon: On the different conceptions of policy networks. *Public Administration, 76*(2), 253–273.

Bostrom, H. (2010). "Closing the Gap" in Manitoba. In P.G. Thomas & C. Brown (Eds.), *Manitoba politics and government: Issues, institutions, traditions* (pp. 358–371). Winnipeg, MB: University of Manitoba Press.

Bourgon, J. (2011). *A new synthesis of public administration: Serving in the 21st Century.* Kingston, ON: School of Policy Studies, McGill-Queen's University Press.

Brown, K., & Keast, R. (2003). Citizen-government engagement: Community connection through network arrangement. *Asian Journal of Public Administration, 25*(1), 107–131.

Healthy Child Manitoba. (2012). *Healthy Child Manitoba: 2012 report on Manitoba's children and youth.* Winnipeg, MB: Healthy Child Manitoba. Retrieved December 2017 from http://www.gov.mb.ca/healthychild/publications/hcm_2012report.pdf.

Huxham, C., & Vangen, S. (2005). Managing to collaborate: The theory and practice of collaborative advantage. New York, NY: Routledge.

Kickert, W.J., Klijn, E.H., & Koppenjan, J.F.M. (1997). Introduction: A management perspective on policy networks. In W.J. Kickert, E.H. Klijn, & J.F.M. Koppenjan (Eds.), Managing complex networks: strategies for the public sector (pp. 1–13). Thousand Oaks, CA: Sage.

Klijn, E.H. (2008). Governance and governance networks in Europe. *Public Management Review, 10*(4), 505–525.

Manitoba. The Healthy Child Manitoba Act, C.C.S.M. c. H37 (2007). Retrieved December 2017 from http://web2.gov.mb.ca/laws/statutes/ccsm/_pdf.php?cap=h37

Manitoba Education and Advanced Learning. (2015). Annual report 2014–2015. Retrieved December 2017 from http://www.edu.gov.mb.ca/ar_edu_1415/report.pdf.

Peters, G. (1998). Managing horizontal government: The politics of coordination [research paper No. 21]. Retrieved December 2017 from http://publications.gc.ca/collections/Collection/SC94-61-21-1998E.pdf.

Rittel, H.W.J., & Webber, M.M. (1973). Dilemmas in a general theory of planning. *Policy Science, 4,* 155–169.

Savoie, D.J. (2008). *Horizontal management of official languages: Report submitted to the Office of the Commissioner of Official Languages*. Ottawa, ON: Office of the Commissioner of Official Languages.

Seashore Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). *Investigating the links to improve student learning: final report of research findings.* Minneapolis, MN: University of Minnesota. Retrieved December 2017 from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf.

Sørensen, E., & Torfing, J. (2008). Introduction. In E. Sørensen & J. Torfing (Eds.), *Theories of democratic network governance* (pp. 169–182). London, UK: Palgrave Macmillan.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(7)
2019

Beyond Rhetoric: How Context Influences Education Policy Advocates' Success

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Abstract This article discusses findings from a study of a 22-year campaign to change special education assessment policy in Ontario by the advocacy organization People for Education (P4E) and explains how dominant discourses enabled the government to leave the issue unresolved. Based on a rhetorical analysis of 58 documents, the article identifies strategies used by P4E to persuade Ontario's government and citizens to view students' uneven access to educational assessments as a problem. Further, since this problem differently impacts children by class and geographical location, it perpetuates inequities. Despite using strategies deemed effective in other change efforts, arguments mobilized by P4E have not been persuasive in a neoliberal context that champions responsibilized individualism, meritocracy, human capital development, and reduced funding of public services.

Keywords Education policy; Neoliberalism; Advocacy; Special education policy

Sue Winton & Lauren Jervis (2019). Beyond Rhetoric: How Context Influences Education Policy Advocates' Success. *International Journal of Education Policy & Leadership 14*(7). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/852 doi: 10.22230/ijepl.2019v14n7a852

On March 26, 2018, the then-premier of Ontario, Canada, announced the government would spend $300 million over three years to eliminate waiting lists for special education assessments and improve services for children with special needs (Ontario, Office of the Premier, 2018). Should the impetus for this announcement be attributed to the efforts of advocates who, for decades, pointed to these lists as evidence of a problem with access to assessments in the province's public schools? Should this announcement even be seen as a success for these advocates, given that the government made the announcement only shortly before an election that it was widely expected to—and did—lose (Powers, 2018), leaving no time to actually act on the promise? Policy influence is difficult to establish since it is indirect, complex, and diffuse (Dumas & Anderson, 2014; Weaver-Hightower, 2008), but researchers, activists, and theorists are nevertheless interested in understanding how individuals and groups can impact policy. Many researchers investigate and highlight strategies advocates used in successful campaigns, but they are largely silent on why campaigns are unsuccessful—even when advocates employ those same strategies.

This article discusses findings from a study of a 22-year campaign by Ontario advocacy organization People for Education (P4E) to change special education assessment policy in the province and explains how the discourses dominant in Ontario enabled the government to leave the issue unresolved for so long. It begins by reviewing what is known about how groups influence education policy, pointing out that limited attention has been given to how policy context impacts advocates' success. Next, it describes the historical and contemporary contexts of special education in Ontario, including the assessment and identification process for students with exceptionalities requiring extra support in schools. It then explains the theoretical perspective that grounded the study and describes the methodological approach. It goes on to present findings from a rhetorical analysis of P4E's efforts to influence special education assessment policy in Ontario since 1996. It shows that P4E defines students' uneven access to educational assessments as a policy problem because it means some children are delayed in receiving the supports they need to be successful in school. Furthermore, since this problem differently impacts children by class and geographical location, it perpetuates inequities in a public education system ostensibly committed to equity for all. The article highlights strategies used by P4E to persuade Ontario's government and citizens to adopt this definition of the policy problem and to address it, and it points out that other groups have used the same strategies in successful policy change efforts. It then shows how dominant neoliberal discourses of individualized responsibility, meritocracy, human capital development, and reduced public spending impeded P4E's ability to persuade the government and the public. The political context that finally led to the former premier's announcement in March 2018 is also examined.

What do we know about educational advocacy?

The number of groups vying to influence education policy has increased over the past decades, but understanding of their activities and impact remains limited. A review (Winton, 2017) of recent research on education policy advocacy finds that much of this work examines how new types of policy actors (including think tanks,

philanthropists, and businesses), transnational organizations, and networks influence policy and the ways they have successfully promoted privatization policies in education at the state, national, and international levels (e.g., Anderson & Donchik, 2016; Feuerstein, 2015). The literature on resistance to these policies is much smaller, although the number of studies is growing (e.g., Bocking, 2015; Cortez, 2013; Scott, 2011; Winton & Milani, 2017). Research on advocacy in special education is also limited (Burke & Goldman, 2016), with researchers often focusing on how parents advocate for supports for their own children (e.g., DeRoche, 2015; Trainor, 2010; Zaretsky, 2004). They have shown that parents with financial resources are able to secure special education services and resources for their children that other parents cannot (DeRoche, 2015; Ong-Dean, Daly, & Park, 2011). The national contexts of the majority of studies in all these bodies of research are the United States, England, and Australia; much less is known about education policy advocacy in other countries, including Canada.

Furthermore, with the important exception of work by critical disability scholars who show how enduring racism, classism, and ableism thwart efforts for the inclusion of children with disabilities in mainstream classrooms (e.g., Ferri & Connor, 2005), most studies of policy advocacy highlight strategies used by advocates in successful campaigns. These strategies include conducting original research (Christens & Dolans, 2011; Magrath, 2015; McLaughlin, Scott, Dechenese, Hopkins, & Newman, 2009; Oakes, Renee, Rogers, & Lipton, 2008; Winton & Evans, 2016); consulting others' research (McDonald, 2013; Winton & Evans, 2016); engaging traditional and social media (McDonald, 2013; Ramey, 2013); and lobbying decision-makers (Opfer, Young, & Fusarelli, 2008). Some researchers demonstrate how successful advocates draw on their social networks and social capital to secure policy changes (e.g., Green, 2017; Grossman, 2012), while others examine how groups frame issues strategically (e.g., Feuerstein, 2015; Itkonen, 2009).

Collectively, these studies imply that unsuccessful campaigns may be attributed to advocates' failure to use or possess these strategies, networks, or capital, but the lack of knowledge about unsuccessful policy change efforts makes it difficult to know if these attributions are fitting. Further, while some researchers describe how a policy's context impacted successful change efforts (e.g., Nygreen, 2017; Ramey, 2013), its influence on advocates' unsuccessful campaigns is rarely discussed. Instead, researchers imply that advocates alone are responsible for campaigns' outcomes. The case discussed in this article is one of three campaigns that were explored in a larger study of P4E's policy advocacy over a 22-year period. People for Education used almost identical strategies in its efforts to change provincial school fees (Winton & Milani, 2017), fundraising practices (Winton, 2018), and special education assessment policies, yet the outcomes of the campaigns varied, suggesting that factors besides the strategies advocates use impact the success of their advocacy.

Historical and legal contexts of special education in Ontario

The *Education Amendment Act, 1980* guaranteed that students in Ontario with special needs would be entitled to receive the necessary supports and services for success in the province's public schools. Before 1980, access to special education was uneven

across the province. Some school boards offered classes for students with certain disabilities, notably classes for "slow learners," but opportunities varied widely by location, need, and grade level (Clandfield, 2014, p.133; Gidney, 2002). Until this time school boards were legally permitted to exclude students they deemed unlikely to benefit from education in elementary schools (Gidney, 2002). The demand for education for all students began to intensify in the 1960s and 1970s, and as some boards responded by expanding their offerings, they faced substantial financial costs, and many children waited for access to services (approximately 15,000 children were on waiting lists in 1978; Gidney, 2002).

In 2014–2015, more than 178,500 students in Ontario were eligible for special education support services (Ontario Ministry of Education [OME], 2017). Ontario Regulation 181/98 details the process for identifying students legally entitled to access these supports. This process involves the establishment of identification, placement, and review committees (IPRCs) to formally identify a student as having one or more exceptionalities and to recommend the placement of the student. Cam Cobb (2016) explains that "identification is a powerful gatekeeper in the province" (p. 53). In making its determinations, an IPRC considers educational assessments and other materials deemed necessary, including "a health assessment of the pupil by a qualified medical practitioner" (Ontario Regulation 181/98, s. 15 (2)) and/or "a psychological assessment of the pupil" (Ontario Regulation 181/98, s. 15 (3)). Students may encounter long waiting lists for receiving publicly funded assessments that would enable them to be formally identified as having an exceptionality by an IPRC (Cobb, 2016; Rushowy, 2011). While schools and boards may provide extra supports and services to students who have not been formally identified by an IPRC, there is confusion about when and if they are required to do so, and many students remain on waiting lists to access services.

Theoretical framework

This study is grounded in critical policy analysis (CPA). Scholars of CPA aim to understand how policies challenge and/or maintain the status quo (Diem, Young, Welton, Cumings Mansfield, & Lee, 2014). The study conceptualizes policy as a cycle that includes three contexts: the contexts of influence, text production, and practices (Bowe, Ball, & Gold, 1992). Government decisions and texts (and their absence) are important in policy cycles' contexts of influence and text production, but practices in schools and communities as well as the activities and texts of non-state actors are also significant. So, too, are discourses. A discourse is "a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities" (Hajer, 1997, p. 45). Discourses operate at the broad cultural level and at the micro level of everyday interaction (Fischer, 2003). Cultural discourses "organize [policy] actors' understandings of reality without them necessarily being aware of it" (p. 74). They organize social action and regularize thinking (Fischer, 2003). At the micro level, different discourses produce different ways of understanding a policy issue and responses to it. Actors attempt to change policy through argumentation (Fischer & Gottweis, 2012), using discourses as both

"tactic and theory" (Fulcher, 1999, p. 9). That is, they mobilize discourses that reflect their theories of how the social world works using a range of rhetorical strategies in their efforts to change policy meanings, and ultimately, practices.

Policy actors use numerous rhetorical strategies to persuade others to understand and respond to a social practice in a particular way. Persuasion, a central aspect of policy processes, has received limited attention in education and other fields of policy research (Edwards & Nicoll, 2004; Gottweis, 2012). Rhetoric is multidimensional and includes the following elements: the rhetorical situation (including exigence and audience), persuasive discourses, and the five rhetorical canons (invention, disposition, style, memory, and delivery; Leach, 2000). The canon of invention includes arguments that appeal to the audience's reason (logos), confidence in the speaker (ethos), and deeply held values and emotions (pathos; Selzer, 2004). This study examines P4E's efforts to persuade Ontario's government and its citizens to address the issue of untimely and uneven access to assessment and how the policy's context may have influenced the persuasiveness of the group's arguments.

Methodology

People for Education (2018) describes itself as "a unique organization in Canada: independent, non-partisan, and fueled by a belief in the power and promise of public education" (para. 1). The group was founded in 1996 by parents concerned about controversial education cuts and other policy changes taking place in Ontario. From a small grassroots organization, P4E has grown into a well-known advocacy group that regularly tracks and reports on the impact of government policies as experienced by people in schools across the province. It advocates for changes to multiple policy issues, thereby offering the opportunity to compare campaigns where rhetorical strategies were similar but outcomes were different.

It is difficult to determine policy influence (Dumas & Anderson, 2014; Weaver-Hightower, 2008), but by a number of indicators, P4E is an influential policy actor in Ontario. The group's influence is suggested by: references to and praise for P4E's work by elected officials (including Ontario's premier) and journalists (Gordon, 2017); frequent invitations to offer expert opinions by news journalists; teacher unions' and researchers' references to its survey findings; diverse partnerships with university researchers and organizations; the participation of school, district, government, and not-for-profit organization leaders and politicians (including Ontario's Minister of Education) at its annual conference; and the group's membership on government advisory groups.

Rhetorical analysis is the method used in this study, which aims to identify how P4E attempted to persuade Ontario's government and citizens to view and respond to the issue of access to assessments in a particular way and explore how influences beyond Ontario's special education policy cycle may have influenced P4E's persuasiveness. Rhetorical analysis involves establishing how a problem is defined, how the audience is constructed, and how elements from the rhetorical canons of invention, disposition, style, memory, and delivery are engaged (Leach, 2000; Winton, 2013). Further, it requires that the rhetorical strategies identified at the micro level be considered in relation to broader cultural discourses.

Data for the rhetorical analysis included 58 documents published between 1996 and 2018. The documents include texts authored by P4E or a P4E member (33), transcripts from debates in the Ontario Legislature (4), and texts including explicit references to P4E's research and/or quotes from P4E members published by teacher unions (8), the Ontario Human Rights Commission (1), and various media sources (12). Each document was read multiple times and phrases of text that included appeals to logos, pathos, and ethos or reflected the other canons of rhetoric were highlighted. With the aid of qualitative software, the phrases were given codes named for the kind of appeal or canon. The data was also considered and highlighted according to how it defined the problem (exigence) and constructed its audiences. After the coding process was completed, consideration was given to how P4E's rhetorical strategies both challenged and reflected dominant cultural discourses in Ontario and discourses and practices within the province's special education policy cycle. These discourses and practices were identified through a review of academic literature and media reports, the authors' knowledge of the Ontario context and prior research, and with input from scholars at academic conferences.

Findings

A rhetorical analysis of P4E's advocacy

People for Education has defined students' delayed access to educational assessments as a policy problem because it means some children do not receive special education supports when they need them. Further, since this problem impacts students differently based on their family income and/or where they live, it creates inequities within Ontario's public education system. This understanding of the policy problem underlies P4E's 2012 recommendation that the Ontario government "develop an equitable and needs-based process for determining who gets psycho-educational assessments" (P4E, 2012, p. 5). This call to action, one among many, demonstrates that one of P4E's key audiences is the Ontario government. By speaking directly to policymakers, such as when the group called on the government to "provide a one-time grant to eliminate existing special education waiting lists" (P4E, 2002, p. 3), P4E constructs the government as responsible for improving access to assessments and able to do so.

A second important audience for P4E's persuasive efforts is the broader public. This audience is evident in part through the content of the group's annual reports. These reports not only present findings from the group's surveys on policy effects, they also explain how various processes work, such as the IPRC process. This is knowledge that government officials would presumably already possess. Evidence that Ontario's citizens make up a key audience is also found in the means through which the group disseminates its arguments: on its website, in email newsletters to over 15,000 subscribers, and through the media.

To appeal to its audiences' sense of reason, or logos, P4E cites evidence from its annual survey of schools to demonstrate the problem of uneven and delayed access to educational assessments. For example, in its 2000 *Elementary Tracking Report* (People for Education, 2000), the group quoted a principal who said: "Our school is in desperate need to have children assessed and placed in proper programs to help them" (p. 18). Another principal, quoted in P4E's 2015 report, explains that "Getting students

assessed is our major bottleneck to providing special education services" (P4E, 2015, p. 17). The group also presents numerical evidence that the problem exists—and is worsening. In 2002, for example, P4E (2002) reported that 39,400 elementary students were on wait lists for services related to special education and of these students, 65 percent were waiting for assessments—a 12 percent increase since 2000–2001.

People for Education has argued that a contributing factor to students' uneven ability to be assessed is the existence of caps on the number of children that can be assessed each year in some school boards and the variation between boards' policies related to caps. Again, it presented evidence from its surveys to support this claim. In 2013, for example, P4E (2013) reported:

> Some students may not even make it onto waiting lists: 47% of elementary and 41% of secondary principals across Ontario report that there is a restriction on the number of students they can put forward for assessment. And just as special education services vary across the province, so do restrictions on waiting lists: 74% of elementary schools in eastern Ontario, and 68% of those in central Ontario reported caps, while only 28% of schools in the GTA [Greater Toronto Area] did. (p. 2)

Another reason students' access to assessments is uneven, P4E has argued, is due to differences in boards' access to psychologists. In 2002 the group presented its finding that 46 percent of secondary schools in Toronto have regular access to psychologists, whereas no schools in the northern part of the province do. In 2012 P4E similarly presented evidence that elementary schools' access to a psychologist varies by region.

Finally, P4E argues that students' access is uneven because parents who can pay for their children to receive private assessments can have their needs considered by IPRCs sooner than students whose parents cannot. In 2011, the group combined data from its survey and government data to demonstrate this point, stating: "The average number of children on special education waiting lists in high poverty schools (10) is more than double the average number of children (4) per low poverty school" (P4E, 2011, p. 22). In 2014 P4E drew on its survey data to show that the likelihood of parents using private assessments is greater in the richest 25 percent of schools compared to the poorest 25 percent of schools in the province (P4E, 2014). People for Education's use of evidence gathered through research, in this case to persuade its audiences that the problem of untimely and uneven access to assessments exists, is a common rhetorical appeal to logos, and many studies of successful policy change campaigns identify advocates' use of research evidence as an effective advocacy strategy (e.g., Best, 1987; Christens & Dolans, 2011; Magrath, 2015; McLaughlin, et al., 2009; Oakes et al., 2008; Winton & Evans, 2016). Why was this strategy ineffective for P4E for so long?

In addition to appealing to reason, P4E attempts to persuade its audiences by appealing to values they are assumed to hold (pathos) and share with P4E. Specifically, P4E appeals to audience members' commitment to equity and the belief that Ontario's public education system must offer equal opportunity to all students. In 1996, for example, a P4E member said she was told her child would have to wait months to be assessed unless she could pay for a private assessment. She told a news

journalist, "That's okay for us because we can afford it, but what about other families? We have to maintain a public system equal to all" (Crawford, 1996, p. F5). The group restated this appeal in its 2001 annual report:

> Parents who can afford it … pay privately for music lessons, tutors, and assessments for Special Education. But if we are to preserve the most important tenet of public education — that every child deserves an equal chance to succeed — growing inequities in the system must be addressed immediately. (P4E, 2001, p. 3)

In 2002, P4E described this situation as a "two-tiered system" (P4E, 2002, p. 9), and in 2011, in an introduction to its findings of the relationship between family income and accessing timely assessments and special education supports, the group warns that the results "fly in the face of the fundamental premise of public education—that it should provide all students with an equitable chance for success" (P4E, 2011, p. 3).

In addition, P4E uses metaphors to construct the access to special education assessments problem as a crisis. In its 2002 *Special Education and the Funding Formula*, for example, the group employs the language of the hospital emergency room or a battlefield when it writes:

> Special education is degenerating into an *emergency service* [emphasis added] offered only to the most needy students. … The Funding Formula has created *a triage system of special education* [emphasis added] in which only the most needy are served. (P4E, 2002, p. 1)

Eleven years later a heading in the *Report on Special Education* reads: "Special Education Triage" and the report goes on to explain that "The majority of comments from principals [on the 2013 survey] focused on operating in *triage* mode with special education resources" (P4E, 2013, p. 3). The use of the crisis metaphor is familiar in education policy debates (e.g., McIntush, 2000; Washington, Torres, Gholson, & Martin, 2012). It is used to evoke fear, suggests immediate action must be taken, and can be very powerful (Washington et al., 2012). In this case, however, mobilizing this metaphor did not have the anticipated effect.

Beyond appeals to logos and pathos, P4E must also convince its audiences of its credibility. The group's appeals to ethos have changed over time. When P4E first formed, its members drew on their positions as parents with firsthand knowledge of the effects of policy decisions in their children's schools. After the group started conducting its annual surveys of schools, as discussed above, P4E began referencing evidence of the problem gathered through its research. Its findings were, and often still are, the only source of this data, making it difficult to contest. The group will sometimes highlight congruency between its findings and arguments and those of other researchers, which also enhances its credibility. In addition, as mentioned, many of P4E's research reports conclude with direct calls to actions, which constructs P4E as positioned to advise government officials.

People for Education also uses the voices of principals and parents to establish its credibility and the credibility of its findings. In its 2016 report, for example, the words of a school principal follow a discussion of the numbers of children on waiting lists and parents paying for private assessments so their children can avoid waiting:

> [We] need MORE psycho-educational assessments. In more affluent schools, where parents are working and have coverage, they make up for the lack of assessments by having parents pay privately, which frees up assessments for the children who are left. When you work in a less affluent school there are often more students who need the assessment, fewer parents who can afford to go privately, and there are not nearly enough assessments to go around. (P4E, 2016, p. 3)

Including the voices of people who experience the phenomena discussed by P4E firsthand helps establish that P4E's findings accurately reflect what happens in schools.

These appeals to ethos, similar to P4E's appeals to logos and pathos, are not unique. Nor are the metaphors and strategies the group uses to mobilize its rhetoric. All the rhetorical strategies identified here have been identified by other researchers as contributing to advocates' success in other cases. This article now turns to a discussion about aspects of the context of this policy change campaign to explain why P4E's advocacy efforts remained unsuccessful for so long.

Impacts of context on P4E's success

The persuasiveness of an argument is influenced by the broader context in which it is mobilized (Fischer, 2003). This section examines dominant discourses in Ontario and aspects of the province's special education assessment policy to help explain why P4E was unable to persuade its audiences that this policy needed to change.

The creation and enactment of all policy in Ontario over the past few decades, including special education assessment policy, has taken place in a context dominated by neoliberal rationality (Clandfield, 2014; Sattler, 2012). Neoliberal rationality asserts that the economic, political, and social spheres are best organized according to market principles and views governments' role as facilitating market attitudes, conditions, and behaviour while limiting public spending (Brown, 2006; Connell, 2010; Larner, 2000). The primary task of schools, according to neoliberal logic, is to prepare young people to successfully compete in local and global marketplaces (i.e., to develop human capital). Further, neoliberal rationality sees individuals as responsible for their well-being and the well-being of their family and encourages people to view others' failure to meet this responsibility as "morally repugnant" (Olmedo & Wilkins, 2016, p. 5; see also Larner, 2000). A number of these ideas challenge the importance of the problem of uneven access to special education assessments as constructed by P4E and help explain why the group's arguments were not persuasive enough for the government to address the problem or for citizens to demand it to.

First, meeting the needs of children through special education is expensive. Ontario's government earmarked $2.86 billion for the 2017–2018 school year alone (Alphonso & Giovannetti, 2018). Thus, within a discursive context that advocates less public spending, P4E's calls for more money for special education may appear unreasonable given how much is already allocated to it. Further, under neoliberal rationality, public schools' key purpose is to produce human capital (Connell, 2013).

From this perspective, children viewed as unlikely to contribute productively to the economy may not be viewed as a good investment, and this raises questions about whether spending money on special education is a good use of limited public funds. While provincial data is not available, figures from the Toronto District School Board (TDSB, 2013) show that children identified with exceptionalities (excluding being gifted) are less likely to graduate from high school or attend postsecondary institutions than those without identified exceptionalities (excluding being gifted). Gillian Parekh, Isabel Killoran, and Cameron Crawford (2011) also found that students in special education programs, apart from the gifted program, in the TDSB had lower rates of access to "socially valued educational opportunities" (p. 275) such as French immersion. They conclude that "[n]eoliberalism could be the economic rationale for a meritocratic system that determines which demographics are streamed into basic education tracks and away from more marketable education opportunities" (p. 275), thereby perpetuating discrimination and further marginalizing students in special education programs. However, in their efforts to facilitate market competition and to justify its unequal outcomes, governments must also create *the perception* of equal opportunity for success (Naidoo, 2016). Funding special education to some extent thus creates the appearance that the Ontario government is meeting this requirement while portraying itself as committed to equity.

Further, P4E's argument that allowing parents to pay for private assessments is problematic because not everyone can afford to do so conflicts with the neoliberal discourse of meritocracy that constructs successful (i.e., affluent) people as deserving of their success and entitled to the rewards it brings. In the case of waiting lists for assessment, this meritocratic discourse suggests that parents who can afford to pay for private assessments have earned both the ability and right to do so. In addition, paying for private assessments enables parents to enact neoliberal expectations of good parenting, which construct parents as responsible for their children's well-being and success. Accordingly, parents are expected to do whatever they can to provide their children with what they need to be successful. And practically speaking, by allowing private assessments, school boards face fewer demands for assessment and save money since fewer students overall will be assessed at the boards' expense. This may be desirable, since many boards spend more money on special education than the dedicated funding they receive for it (Rushowy & Ferguson, 2015). Finally, even though waits might be years-long for some children, once they *are* assessed parents can be expected to focus their energy on meeting their child's needs rather than how long the assessments took. That is, the problem of waiting for assessments is a one-time issue for parents in most cases.

So far, P4E's advocacy campaign regarding special education assessment wait times has been treated as largely unsuccessful. Some might cite the government's aforementioned announcement in March of 2018 as evidence that the advocacy was, in fact, successful. It is true that in finally pledging to eliminate the wait lists, Ontario's government was addressing the concerns raised by P4E. Then Premier Kathleen Wynne's framing of the new special education funding as an effort to "give *every child* [emphasis added] the support they need to succeed to achieve in school" (Ontario, Office of the Premier, 2018) gestures to a conception of the public educa-

tion system as a place that should privilege equity, which aligns with P4E's arguments. That being said, the political context likely played a key role in the timing of the Liberal government's funding commitment. Its promise to increase investment in special education shortly before a provincial election fit with the Liberal Party's campaign strategy. Its election platform (which also contained the promise to eliminate wait lists for assessments) was titled *The Ontario Liberal Plan for Care and Opportunity* (Ontario Liberal Party, 2018), and a promise to improve special education aligned with both the emphasis on caring for Ontarians and on increasing opportunities for achievement and prosperity. Furthermore, the promise fit in with a theme of strengthening or enhancing public services, in contrast to the Progressive Conservatives' focus on reducing the cost of government—something that the Liberals warned would entail cutting services (Ontario Liberal Party, 2018).

More importantly, though, it would not be accurate to consider the March 2018 funding announcement a substantive success for those advocating for an improvement in special education assessment wait times. The announcement was made so shortly before the election that the Liberal government did not have time to implement the promised improvements. With the subsequent change in government, there is no guarantee that the promise will be acted upon. Ultimately, if Kathleen Wynne's government had wanted to prioritize addressing assessment waiting lists, this announcement would have been made much earlier than the eleventh hour.

Conclusions

While it might be tempting for researchers to recommend particular rhetorical strategies or for advocates to replicate strategies utilized by other actors in successful policy change efforts, this study's findings show that advocates' success depends on much more than the persuasive strategies employed. These findings also contribute a Canadian example and new knowledge to a growing body of literature that examines how context in general, and a context in which neoliberal discourses are dominant in particular, impacts education policy advocacy. Despite using rhetorical strategies deemed effective in other change efforts, arguments mobilized by P4E in its attempts to change special education assessment policy in Ontario were not persuasive in a neoliberal context that championed responsibilized individualism, meritocracy, human capital development, and the reduced funding of public services. The argument that allowing parents to pay for private assessments so their children bypass waiting lists is problematic, for example, may not resonate with parents who can afford to do so and who are operating in a context that emphasizes their responsibility for their children's success.

These findings do not, however, lead to the conclusion that policy advocacy efforts by public groups are futile in the context of neoliberal rationality. Rather, they highlight the need for policy actors to construct their arguments in ways that resonate with broader cultural discourses. While connecting arguments to dominant discourses runs the risk of upholding them, these findings also show that when dominant cultural discourses interact with individual policy cycles, the effects of advocacy efforts are unpredictable. People for Education used the same strategies in its efforts to change assessment wait times as it used in other policy change efforts during the

same time period in Ontario, yet the results differed in each case (Winton, 2018; Winton & Milani, 2017). That is, P4E constructed school fundraising and the practice of collecting school fees for basic and enhanced materials as problematic because they create and perpetuate inequities between and within school communities. The group used the same rhetorical strategies to persuade the Ontario government and its citizens in these cases as it did in the special education assessment case, but P4E's policy meaning only became dominant in the case of charging school fees for basic learning materials (Winton & Milani, 2017). Discouragingly, the findings show that a highly credible group's construction of a policy problem as a problem because it creates and perpetuates inequities in schools and society, along with decades of supporting evidence from affected individuals, is not sufficiently persuasive for the government to enact—or for the public to demand—changes to official policies and practices in Ontario's public schools.

References

Alphonso, C., & Giovannetti, J. (2018, March 26). Ontario Liberals promise $300-million to support special education. *Globe and Mail*. Retrieved December 1, 2018, from https://www.theglobeandmail.com/canada/article-ontario-liberals-promise-300-million-to-support-special-education/.

Anderson, G.L., & Donchik, L.M. (2016). Privatizing schooling and policy making. *Education policy*, *30*(2), 322–364.

Best, J. (1987). Rhetoric in claims-making: Constructing the missing children problem. *Social Problems*, *34*(2), 101–121.

Bocking, P. (2015). Why do governments adopt neoliberal education policies? Critical theory on policy movement in the context of contemporary reform in Mexico. *Alternate Routes: A Journal of Critical Social Research*, *26(1)*, 74–100.

Bowe, R., Ball, S.J., & Gold, A. (1992). *Reforming education and changing schools: Case studies in policy sociology.* London, UK: Routledge.

Brown, W. (2006). American nightmare: Neoliberalism, neoconservatism, and de-democratization. *Political Theory, 34*(6), 690–714.

Burke, M.M., & Goldman, S.E. (2016). Documenting the experiences of special education advocates. *The Journal of Special Education*, *5*(1), 3–13.

Christens, B.D., & Dolan, T. (2011). Interweaving youth development, community development, and social change through youth organizing. *Youth & Society*, *43*(2), 528–548.

Clandfield, D. (2014). Special education and streaming. In *Restacking the deck: Streaming by race, class and gender in Ontario schools.* (Vol. 2, pp. 113–184). Ottawa, ON, Canada: Canadian Centre for Policy Alternatives.

Cobb, C. (2016). You can lose what you never had. *International Journal of Inclusive Education, 20*(1), 52–66.

Connell, R. (2010). Understanding neoliberalism. In S. Braedley & M. Luxton (Eds.), Neoliberalism and everyday life (pp. 22–36). Montréal, QC: McGill-Queen's University Press.

Connell, R. (2013). The neoliberal cascade and education: An essay on the market agenda and its consequences. *Critical Studies in Education, 54*(2), 99–112.

Cortez, G.A. (2013). Occupy public education: A community's struggle for educational resources in the era of privatization. *Equity & Excellence in Education*, *46*(1), 7–19.

Crawford, T. (1996, April 21). Middle class standing up to be counted. *Toronto Star*, p. F1.

Davies, S. (1999). From moral duty to cultural rights: A case study of political framing in education. *Sociology of Education*, *72*(1), 1–21.

DeRoche, C. (2015). Labels in education: The role of parents and parental cultural capital in acquiring diagnoses and educational accommodations. *Canadian Journal of Education*, *38*(4), 1–24.

Diem, S., Young, M.D., Welton, A.D., Cumings Mansfield, K., & Lee, P. (2014). The intellectual landscape of critical policy analysis. *International Journal of Qualitative Studies in Education, 27*(9) 1068–1090.

Edwards, R., & Nicoll, K. (2004). Expertise, competence and reflection in the rhetoric of professional development. *British Educational Research Journal, 32*(1), 115–131.

Ferri, B.A., & Connor, D.J. (2005). Tools of exclusion: Race, disability, and (re) segregated education. *Teachers College Record*, *107*(3), 453–474.

Feuerstein, A. (2015). Parental trigger laws and the power of framing in educational politics. *Education Policy Analysis Archives*, *23*(79), 1–34.

Fischer, F. (2003). *Reframing public policy: Discursive politics and deliberative practices*. Oxford, UK: Oxford University Press.

Fischer, F., & Gottweis, H. (2012). Introduction: The argumentative turn revisited. *The argumentative turn revisited: Public policy as communicative practice* (pp. 1–30). Durham, NC: Duke University Press.

Fulcher, G. (1999). *Disabling policies? A comparative approach to education policy and disability* (2nd ed.). Sheffield, UK: Philip Armstrong Publications.

Gallagher-Mackay, K., & Kidder, A. (2014). *Special education: A People for Education report*. Toronto, ON: People for Education.

Gidney, R.D. (1999). *From Hope to Harris: The reshaping of Ontario's schools*. Toronto, ON: University of Toronto Press.

Gordon, A. (2017, September 2). Annie Kidder and People for Education have made a mark on Ontario schools, but have they become part of the system? *The Toronto Star*. Retrieved July 10, 2018, from https://www.thestar.com.

Gottweis, H. (2012). Political rhetoric and stem cell policy in the United States: Embodiments, scenographies, and emotions. In F. Fischer & H. Gottweis (Eds.), *The argumentative turn revisited: Public policy as communicative practice* (pp. 211–235). Durham, NC: Duke University Press.

Green, T. (2017). 'We felt they took the heart out of the community': Examining a community-based response to urban school closure. *Education Policy Analysis Archives*, *25* (21), 1–30.

Grossmann, M. (2012). Interest group influence on US policy change: An assessment based on policy history. *Interest Groups & Advocacy*, *1*(2), 171–192.

Hajer, M.A. (1997). *The politics of environmental discourse: Ecological modernization and the policy process*. Oxford, UK: Clarendon Press.

Itkonen, T. (2009). Stories of hope and decline: Interest group effectiveness in national special education policy. *Education policy*, *23*(1), 43–65.

Larner, W. (2000). Neo-liberalism: Policy, ideology, governmentality. *Studies in Political Economy, 63*, 5–25.

Leach, J. (2000). Rhetorical analysis. In M.W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image and sound* (pp. 207–226). Thousand Oaks, CA: Sage.

Magrath, B. (2015). Information politics, transnational advocacy, and education for all. *Comparative Education Review*, *59*(4), 666–692.

McDonald, L. (2013). In their own words: U.S. think tank 'experts' and the framing of education policy debates. *Journal for Critical Education Policy Studies*, *11*(3), 1–28.

McIntush, H.G. (2000). Defining education: The rhetorical enactment of ideology in *A Nation at Risk*. *Rhetoric & Public Affairs*, *3*(3), 419–443.

McLaughlin, M.W., Scott, W.R., Deschenes, S., Hopkins, D., & Newman, A. (2009). *Between movement and establishment: Organizations advocating for youth*. Stanford, CA: Stanford University Press.

Naidoo, R. (2016, March 21). *The FreshEd Podcast* [podcast]. Retrieved December 3, 2018, from https://soundcloud.com/freshed-podcast/freshed-20-rajani-naidoo.

Nygreen, K. (2017). Negotiating tensions: Grassroots organizing, school reform, and the paradox of neoliberal democracy. *Anthropology & Education Quarterly*, *48*(1), 42–60.

Oakes, J., Renée, M., Rogers, J., & Lipton, M. (2008). Research and community organizing as tools for democratizing education policymaking. In C. Sugrue (Ed.), *The future of educational change: International perspectives* (pp. 136–154). New York, NY: Routledge.

Olmedo, A., & Wilkins, A. (2016). Governing through parents: A genealogical enquiry of education policy and the construction of neoliberal subjectivities in England. *Discourse: Studies in the Cultural Politics of Education*, *38*(4), 1–17.

Ong-Dean, C., Daly, A. J., & Park, V. (2011). Privileged advocates: disability and education policy in the USA. *Policy Futures in Education, 9*(3), 392. https://doi.org/10.2304/pfie.2011.9.3.392

Ontario Liberal Party. (2018). *The Ontario Liberal plan for care and opportunity*. Retrieved December 3, 2018, from https://platform.ontarioliberal.ca/full-platform-text/.

Ontario, Office of the Premier. (2018, March 26). *Driving student success with more supportive classrooms* [press release]. Retrieved December 3, 2018, from https://news.ontario.ca/opo/en/2018/03/driving-student-success-with-more-supportive-classrooms.html.

Ontario Regulation 181/98 Identification and placement of exceptional pupils. (2005). *Ontario e-Laws.* Retrieved December 1, 2018, from https://www.ontario.ca/laws/regulation/980181.

Opfer, V.D., Young, T.V., & Fusarelli, L.D. (2008). Politics of interest: Interest groups and advocacy coalitions in American education. In B.S. Cooper, J.G. Cibulka, & L.D. Fusarelli (Eds.), *Handbook of education politics and policy* (pp. 196–216). New York, NY: Routledge.

Parekh, G., Killoran, I., & Crawford, C. (2011). The Toronto connection: Poverty, perceived ability, and access to education equity. *Canadian Journal of Education, 34*(3), 249–279.

People for Education. (2000). *The tracking report 2000: The effects of funding and policy changes in Ontario's elementary schools.* Toronto, ON: People for Education.

People for Education. (2001). *The 2001 tracking report: The effects of funding and policy changes in Ontario's elementary schools*. Toronto, ON: People for Education.

People for Education. (2002). *Special education and the funding formula*. Toronto, ON: People for Education.

People for Education. (2011). *Annual report on Ontario's publicly funded schools 2011*. Toronto, ON: People for Education.

People for Education. (2012). *Special education*. Toronto, ON: People for Education.

People for Education. (2013). *Special education*. Toronto, ON: People for Education.

People for Education. (2014) *Public education: Our best Investment* (Annual report on Ontario's publicly funded schools 2014). Toronto: People for Education.

People for Education. (2015). *Ontario's schools: The gap between policy and reality (Annual report on Ontario's publicly funded schools 2015*). Toronto, ON: People for Education.

People for Education. (2016). *The geography of opportunity: What's needed for broader student success (Annual report on Ontario's publicly funded schools)*. Toronto, ON: People for Education.

People for Education. (2018). *Public education. Public good*. Retrieved December 3, 2018, from https://peopleforeducation.ca/about/

Powers, L. (2018, June 7). 'We have taken back Ontario': Doug Ford leads PCs to majority government. *CBC News*. Retrieved December 3, 2018, from http://www.cbc.ca/news/canada/toronto/we-have-taken-back-ontario-doug-ford-leads-pcs-to-majority-government-1.4696736.

Ramey, J.B. (2013). For the public good: Urban youth advocacy and the fight for public education. *Children and Youth Services Review*, *35*(8), 1260–1267.

Rushowy, K. (2011, June 1). Special-ed wait times troubling. *Toronto Star*, p. GT1.

Rushowy, K., & Ferguson, R. (2015, March 12). Special ed cuts to hit most Ontario boards. *Toronto Star.* Retrieved 23 April, 2017, from https://www.thestar.com.

Sattler, P. (2012). Education governance reform in Ontario: Neoliberalism in context. *Canadian Journal of Educational Administration and Policy, 128,* 1–28.

Selzer, J. (2004). Rhetorical analysis: Understanding how texts persuade readers. In C. Bazerman & P. Prior (Eds.), *What writing does and how it does it: An introduction to analyzing texts and textual practices* (pp. 279–307). Mahwah, NJ: Routledge.

Scott, J.T. (2011). Market-driven education reform and the racial politics of advocacy. *Peabody Journal of Education*, *86*(5), 580–599.

Toronto District School Board. (2013). *Special education fact sheet #4*. Retrieved April 13, 2017, from http://www.tdsb.on.ca/Portals/research/docs/reports/Gr9CohortFactSheet4SpecialEducation13May13.pdf.

Trainor, A. A. (2010). Diverse approaches to parent advocacy during special education home-school interactions: Identification and use of cultural and social capital. *Remedial and Special Education, 31*(1), 34–47. https://doi.org/10.1177/0741932508324401

Wang, Y. (2017). The social networks and paradoxes of the opt-out movement amid the Common Core State Standards implementation: The case of New York. *Education Policy Analysis Archives*, *25*(34), 1–27.

Washington, D., Torres, Z., Gholson, M., & Martin, D.B. (2012). Crisis as a discursive frame in mathematics education research and reform. In S. Mukhopadhyay & W-E. Roth (Eds.), *Alternative forms of knowing (in) Mathematics* (pp. 53–69). Rotterdam, NL: Sense Publishers.

Weaver-Hightower, M. B. (2008). An ecology metaphor for educational policy analysis: A call to complexity. *Educational Researcher, 37*(3), 153–167. https://doi.org/10.3102/0013189X08318050

Winton, S. (2013). Rhetorical analysis in critical policy research. International Journal of Qualitative Studies in Education, 26(2), 158–177. https://doi.org/10.1080/09518398.2012.666288

Winton, S. (2017). *What do we know about advocacy groups and educational policy? A review of the English-language literature*. Paper presented at the World Educational Research Association Focal Meeting and Hong Kong Educational Research Association International Conference 2017, Hong Kong, China. November 30–December 2, 2017.

Winton, S. (2018). Challenging fundraising, challenging inequity: Contextual constraints on advocacy groups' policy influence. *Critical Studies in Education*, *59*(1), 54–73.

Winton, S., & Evans, M.P. (2016). Consulting, mediating, conducting, and supporting: How community-based organizations engage with research to influence policy. *Leadership and Policy in Schools*, *15*(1), 4–25.

Winton, S., & Milani, M. (2017). Policy advocacy, inequity, and school fees and fundraising in Ontario, Canada. *Education Policy Analysis Archives*, *25*(40), 1–33. http://dx.doi.org/10.14507/epaa.25.2679

Zaretsky, L. (2004). Advocacy and administration: from conflict to collaboration. *Journal of Educational Administration*, *42*(2), 270–286.

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(8)
2019

Good Governance and Canadian Universities: Fiduciary Duties of University Governing Boards and Their Implications for Shared Collegial Governance

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Abstract Using a legal framework, doctrinal analysis, critical legal analysis, and fundamental legal research and drawing upon legislation, case law, judicial, and scholarly commentary, this article defines the fiduciary duties of Canadian university governing boards given the unique features of the university as a legal entity. The legal analysis considers the Canadian university as a corporation, distinguishing it from other types of corporations, identifying the charitable, not-for-profit, public/private dimensions of universities in Canada, and significantly, considering the judicially recognized "community of scholars" and collegial features of universities. The article argues that all of these features shape the fiduciary duties of governing boards and have implications for shared collegial governance in Canadian universities.

Keywords Universities; Board governance; Fiduciary duties

Introduction

The Canadian university is a complicated legal entity that is fashioned by old and new statutes, case law, history, custom, and usage. Yet there is very little research documenting its unique legal nature and analyzing the resulting fiduciary responsibilities of the board of governors that flow from this status within a shared gover-

Theresa Gemma Shanahan (2019). Good Governance and Canadian Universities: Fiduciary Duties of University Governing Boards and Their Implications for Shared Collegial Governance. *International Journal of Education Policy & Leadership 14*(8). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/861 doi: 10.22230/ijepl.2019v14n8a861

nance context. Recent events in several universities across Canada provide evidence of confusion and misunderstandings about the fiduciary duties of the board of governors. In the absence of a full understanding of the university as a socio-legal-historical entity, with medieval roots and a unique role in society (Fallis 2007; Harris, 1976; Kerr, 2001), university leadership have mistakenly reached for legal principles governing modern, private business corporations to understand the scope and nature of their obligations. This approach fails to account for the institutional context of the university, and the legally recognized collegial, charitable, and not-for-profit dimensions of the university, which complicate our understanding of governing board fiduciary duties. Consequently, in a number of instances, Canadian university boards have imperilled the fiduciary duties they owe to the university and to the public, triggering non-confidence motions from within universities and external governance reviews from outside the university (see Canadian Association of University Teachers, 2015; CBC News, 2015; Curran, 2011; Goudge, 2015; Johnson, 2016; Murray, 2016; University of Concordia News, 2011; Winders, 2015).

This article presents data from a research project that examines governance issues in Canadian universities. It focuses on the fiduciary duties owed by Canadian (publicly funded) university governing boards. Publicly funded, secular universities dominate the university sector in Canadian higher education in terms of numbers of institutions, enrollment, funding, regulation, and policymaking. Unlike other jurisdictions, only a small number of private, mostly faith-based, universities exist in Canada. For this reason, this article's analysis will focus on publicly funded Canadian universities. Using a legal framework this article identifies distinguishing legal features of the Canadian publicly funded university and establishes the university as a unique legal entity. A central objective of this research is to identify the fiduciary duties of governing boards within this unique legal context, employing doctrinal and critical legal analysis and drawing upon relevant statutes, case law, judicial, and scholarly commentary. The article defines the legal concept of fiduciary duty in a university context and examines who boards of governors owe fiduciary duties to, what they owe fiduciary duties for, and in what form and to what standard of conduct. Finally, this article offers an analysis of some implications for shared collegial governance in Canadian universities.

Methods

This article employs doctrinal research, fundamental legal research, and critical legal analysis. Doctrinal methodology focuses on case law, statutes, and other legal sources of law in order to identify and explicate what the law is on a particular issue and to establish the legal principles that can be discerned from the legal sources. It has been described as lying "at the basis of the common law and is the core legal research method" (Hutchinson & Duncan, 2012, p. 85). The doctrinal method traces legal precedent and legislative interpretation through case law offering "a critical conceptual analysis of all relevant legislation and case law to reveal a statement of the law relevant to the matter under investigation" (Hutchinson, 2014, p. 584). It necessarily involves:

> an understanding of the rules of precedent between the court jurisdictions, the rules of statutory interpretation, the tacit discipline

> knowledge such as the difference between civil and criminal jurisdictions, and various tests of liability, along with the acknowledged reasoning methods borrowed from philosophy and logic , such as induction and deduction. (Hutchinson, 2015, p. 131)

When purely applied, the doctrinal approach can be insular, in that it looks at the law within itself, and not within a broader context. It identifies what the law is at a given time. It does not consider what the law could or should be, nor does it critique the law. However, doctrinal research is a necessary starting point for any legal analysis, especially when the law in a particular area is uncertain, evolving, or complicated, as is the case with the fiduciary duties of university governing boards.

To counter the limitations of doctrinal research, this article moves beyond doctrinal analysis and includes critical legal analysis (Minow, 2013) to determine the implications of the body of legal principles on governance within the university, and where and how the legal principles apply in a university setting. This involves exposing "unstated assumptions, patterns or results, internally inconsistent structures or other tensions within a body of law or legal practices or institutions" and highlighting "the tensions, contradictions or paradoxes behind the surface of law or legal practices" (Minow, 2013, p. 68). This approach combines the scholarship from higher education on the university with legal doctrine to deepen the understanding of the complexity of university governance. In this respect, this approach includes non-doctrinal dimensions and is cross-disciplinary. This methodological approach, therefore, includes "fundamental research" (Arthurs, 1983, p. 68), understanding the law as a social, historical, philosophical, and political phenomenon.

In this project, establishing the doctrinal law involved researching and analyzing the constituting statutes of public universities across Canada and the provincial legislation governing the higher education systems. Relevant non-education, provincial, and federal statutes were also considered, such as the Canadian Constitution Act, (1982) and the Canadian Charter of Rights and Freedoms, (Part I, Constitution Act, 1982), as well as relevant corporate and not-for-profit legislation. To this was added case law (that is, judge-made law) on university governance, corporate governance, charity governance, university autonomy, and the fiduciary duties of university/corporate/charity governing boards. To round out the data sources and analysis, various reviews of governance at universities across Canada were considered. Major commissions, reports, and task forces on university governance by government, non-governmental organizations, and constituents within the higher education sector were also analyzed where they addressed or established legal interpretations or precedents in law on university governance.

The legal status of Canadian universities

Canadian publicly funded universities are constituted as independent, autonomous, not-for-profit corporate entities by either a primary piece of provincial or federal legislation, royal charter, or royal proclamation. In this respect universities are unlike private business corporations, which are typically created in Canada through the filing of articles of incorporation by an individual or an organization where there is minimal ministerial discretion to refuse incorporation if the statutory requirements

are met.[1] By stark contrast, Canadian provincial governments control and regulate the establishment of publicly funded universities fairly closely through parliamentary legislatures. This means that in order to establish a university that will receive public funding, a parliamentary bill has to be prepared, debated, and passed in the legislature, with all its checks and balances. Public funds are set aside in a provincial governments' budget to support the operating costs of the university. In this regard, universities are treated, in their creation, regulation, and at law, as special purpose corporations with explicit public, teaching, research, and service missions.

Unlike private business corporations, public universities have no shareholders, no owners, and no share capital. They are, instead, constituency-based. Akin to not-for-profit corporate organizations, they have a board of governors (instead of a board of directors), and are made up of a membership base who elect/appoint its board. This arrangement offers representation on the board for the internal membership, and it offers oversight with external members. It also signifies that the board is accountable to and owes duties to the membership/constituent base. In a not-for-profit organization these arrangements are usually spelled out in the constituting statute of the organization (Bourgeois, 2002a, 2002b; Carter & Prendergast, 2011).

Notwithstanding these legal features, it is important to note that Canadian universities have a dual governance structure and multiple governing boards (both an academic senate and a financial board). Governance arrangements within universities vary by province and by institution—typically one must look at the constituting legislation of the specific university, and the provincial legislation governing the higher education system in which the university is located, to determine the exact governance structures, the constituents of the university, and the governing boards and their roles, responsibilities, and the scope of their respective authority. However, the dominant model of university governance across Canada is bicameralism, where academic policy and educational matters are the authority of a senior decision-making, senate-type body (made up of a majority of internal members and faculty) that runs parallel to a board of governors (made up of a majority of members external to the university) responsible for the management of finances and administrative functions (Jones, Shanahan, & Goyan, 2004).[2] Both of these governing boards in the university include elected representatives from the collegium, internal to the constituents of the university (i.e., faculty, staff, and students).

Once established by government, however, Canadian universities enjoy high institutional autonomy, and university senates and governing boards have considerable independence from government in their management of day-to-day internal and academic affairs. Government and the courts are loath to intervene in internal matters and disputes within the university (Davis, 2015a; Shanahan, 2015a). This principle of autonomy and non-intervention, while not enshrined in statute, is widely recognized in case law by the highest courts in Canada (*Harelkin v. University of Regina*, 1979; *Harrison v. University of British Columbia*, 1991; *Kulchyski v. Trent University*, 2001; *McKinney v. University of Guelph et al.*, 1990). Yet there is a tension between the university's independence and the quasi-judicial nature of its boards (senate and governing board) on the one hand, and its concomitant responsibilities to its immediate members (students, staff, and faculty) as well as its service to the public on the

other hand. The Supreme Court of Canada has captured the complicated autonomous, yet public service and trust-like nature of the university thusly:

> While a university, incorporated by a statute and subsidized by public funds, may in sense be regarded as a public service entrusted with the responsibility of ensuring the higher education of a large number of citizens, as was held in "Polten", its immediate and direct responsibility extends primarily to its present members and, in practice, its governing bodies function as domestic tribunals when they act in a quasi-judicial capacity. The Act countenances the domestic autonomy of the university by making provision for the solution of conflicts within the university. (*Harelkin v. University of Regina*, 1979, p. 594)

The legal autonomy of universities is a double-edge sword. It shrouds (but does not completely protect) university board and senate internal decision-making from external review, making internal and external accountability processes even more critical. University boards have the power to make policies and codes that govern their own conduct and decision-making. They also have the power to act as quasi-judicial tribunals reviewing their own decisions on university academic and non-academic matters. But with this public grant of autonomy and self-governance, come enormous responsibility and a profusion of duties. In all of their decision-making and conduct, university boards are held to the highest legal standards. They cannot act with impunity. Their decisions and conduct can be ultimately reviewed by courts and government by way of: judicial reviews of board/senate decisions; government reviews; law suits for negligence or mismanagement; malfeasance in a public office; or breach of contract among other legal avenues (*Freeman-Maloy v. Marsden*, 2006; Fridman, 1973).

At the same time, over the years Canadian universities have become captured by developing case law and statutory frameworks, beyond their own constituting legal documents, which they are compelled to follow and which impact the duties and obligations of governing boards. Legally, Canadian publicly funded universities are considered at common law to be charities, and they are typically registered as charities with the federal government. Beyond favourable income tax implications, the charitable status of the publicly funded university in Canada heightens and extends the duties of governing board members, especially around dealings with the charitable property of the university (Davis, 2015a).

With the passage of the Canadian Charter of Rights and Freedoms in 1982, case law has evolved in Canada around the public-private nature of the university in the context of the applicability of the Charter to universities. In the United Kingdom and the United States, publicly funded universities have long been considered as quasi-public institutions (Farrington & Palfreyman, 2006). Since the Supreme Court of Canada found the Charter of Rights and Freedoms only applies to government action or the action of government agents (*RWSDU v. Dolphin Delivery Ltd.*, 1986), many assumed it did not apply to the Canadian university with its legally autonomous status. However, Canadian case law over the last three decades has altered this understanding, and has established that, in certain instances when carrying out government policies, programs, or missions, universities *may* be considered by the

courts as agents of the government, and in these instances, the Charter of Rights and Freedoms will apply to their actions (*Eldridge v. British Columbia [Attorney General]*, 1997; *Pridgen v. University of Calgary,* 2012; Shanahan, 2015a). This public-private legal status of the university impacts on the nature and extent of the duties university governing boards owe to the university's constituents (i.e., students, staff, and faculty) in any given situation.

If the university governing board is found at law to be acting in a governmental capacity in a particular instance, its actions may attract Charter scrutiny, and the governing board must uphold the rights and freedoms afforded to individuals under the Charter in its conduct and decision-making. In other circumstances, the actions and relationships of Canadian universities are considered at law as private in nature and governed by contract or tort law. For instance, *Eldridge v. British Columbia [Attorney General]*, 1997, sets out the test for whether the Charter should apply to a private entity. In this case, the Supreme Court confirmed that if a private entity is acting under a statutorily granted authority, its actions will be subject to Charter scrutiny, and it will be deemed to be included in the definition of "government." An autonomous entity will attract Charter scrutiny in the "implementation of a statutory scheme or government program" (para 44). Since provincial governments have exclusive authority over public education under the Constitution, which they delegate to universities through provincial legislation, the argument can be made that the Charter captures universities in their delivery of public education. Hence, the Charter has been found to apply to university student disciplinary proceedings (*Pridgen v. University of Calgary,* 2012). However, by contrast, the Supreme Court has found that human resources policymaking is an internal management activity and a private matter between the university and the employee. Therefore, mandatory retirement policies within collective agreements of universities did not infringe on the Charter rights of universities employees (*McKinney v. University of Guelph et al.*, 1990).[3] Nevertheless, there is considerable uncertainty as the multifaceted relationship between the university and its constituents is determined on a case-by-case basis and governed by multiple areas of law. This creates confusion for university boards. Davis observes, Canadian universities "exist uncertainly on the line between a public and private institution" (2015a, p. 61).

In addition to being considered special purpose, not-for-profit, quasi-public, charity, and a corporation, the Canadian university is also recognized by the Supreme Court of Canada as a collegium or "community of scholars." The Supreme Court of Canada has stated, "The Act incorporates a university and does not alter the traditional nature of such an institution as a community of scholars and students enjoying substantial internal autonomy…" (*Harelkin v. University of Regina*, 1979, p. 594). This is judicial recognition, at the highest level, of the university collegium in Canada and its import cannot be understated. Significantly the Supreme Court clearly notes that the university's legal status as a corporation does not supplant its collegial nature. Its corporate structure does not have paramountcy over its collegial structure. Its corporate structure exists alongside its collegial structure and processes. In fact, historically in Canada and the United States, the university's collegial structure predates its corporate structure (Fallis, 2007; Kerr, 2001). The tradition of collegial decision-

making in the university distinguishes its governance arrangements from the boards of directors of modern, private business corporations in Canada (see University of Western Ontario, 1996).

As collegiums, university-constituting statutes in Canada create university governing bodies (boards and senates) designed for democratic constituency representation rather than corporate strategic management. Historically, the trend in Canada has been toward increasing the democratization of university boards. This is evidenced in the Duff–Berdahl Report (1966) recommendations, which have led to changes over the last few decades in Canadian universities and their governing statutes around the composition of governing boards and senates to include elected representatives from various constituents within the university. This particular feature of Canadian universities can be problematic, as government higher education policy in Canada has increasingly required universities to strategically manage resources and to strategically plan for the future.[4]

Each of these features of the Canadian publicly funded university (i.e., special purpose, not-for-profit, quasi-public, charitable, corporation, and constituency-based collegium), which are recognized at common law and/or in statutory law, influences the shape and machinations of the university as an institution. Universities are subject to federal and provincial statutory and case law, corporate law, not-for-profit law, the law of charities and trusts, contract law, tort law, as well as being subject to the equitable prerogative jurisdiction of the courts as a charity or trust. All of this is grafted onto the traditional "community of scholars," with its historical customs, traditions, core principles, and practices recognized by case law (*Harelkin v. University of Regina*, 1979, p. 594). These features shape the nature and scope of the fiduciary duties of university governing boards. Where and how fiduciary duties apply, to whom they are owed, for what, and to what standard of care—and what all of this looks like in a university setting is unique and legally complicated, crossing multiple areas of law. The second half of this article will untangle some of these considerations in applying the law of fiduciary duty to university governing boards in Canada.

Fiduciary duty defined

> Fiduciary duty is a doctrine originating in trust. It requires that one party, the fiduciary, act with absolute loyalty toward another party, the beneficiary or cestui que trust, in managing the latter's affairs. (*Alberta v. Elder Advocates of Alberta Society*, 2011 SCC 24. P.274, para 22)

A fiduciary relationship is a legal relationship of trust between two people (or between a person and a group/class of people) called the fiduciary and the principal/beneficiary. The fiduciary is a type of trustee and acts for the benefit of another who is the principal/beneficiary (Shanahan, 2017). It is one of the highest duties created in law. For the purposes of this analysis it is worth emphasizing that the fiduciary duties emerge from a relationship between two people (*Alberta v. Elder Advocates of Alberta Society,* 2011*)*. In Canada it has been long established by the Supreme Court that in a corporate setting the board of directors owes a fiduciary duty to the corporation (*Canadian Aero Service Ltd v. O'Malley*, 1974). By extension,

the board of governors of a university, as fiduciaries, owes a fiduciary duty to the university as a corporation and owes a fiduciary duty as trustees to the university as a charitable organization.

General fiduciary duty

Fiduciary responsibilities can be set out in the constituting statute of a university or other legislation governing the sector, and it can also be imposed by the common law. At common law the general requirements for the imposition of a fiduciary duty on a relationship is set out by the Supreme Court of Canada in *Alberta v. Elder Advocates of Alberta Society*, 2011. The hallmark principles include an express or implied undertaking of loyalty by the fiduciary to act in the beneficiary's best interests. The relationship involves the unilateral exercise of power or discretion by the fiduciary that affects the beneficiary's legal or practical interests where the beneficiary may be vulnerable to the person holding the discretion or power. The law of fiduciary duties protects against the abuse of power in certain types of relationships or circumstances (*Alberta v. Elder Advocates of Alberta Society*, 2011).

There are two aspects to the fiduciary duty: a duty of loyalty and a duty of care. Some legal commentaries on fiduciary duties add on the duty of obedience that flows from these two duties of loyalty and care. In the university setting the statutory and common law duty of care owed by governors and officers of the university has been summed up by the Association of Governing Boards of Universities and Colleges (2014) in the following way:

> The **duty of care** generally requires officers and governing board members to carry out their responsibilities in good-faith and using that degree of diligence, care and skill which ordinarily prudent person would reasonably exercise under similar circumstances in like positions. Accordingly, a board member must act in a manner that he or she reasonably believes to be in the best interests of the institution.
>
> The **duty of loyalty** means that the board member must not act in their own individual interests, or the interests of another person or organization, but rather must act in the interests of the university and its' not-for-profit or charitable purposes. They must act reasonably and in good faith and not out of expedience, avarice or self-interest.
>
> A third fiduciary duty, which is arguably an element of the duties of care and loyalty, is the **duty of obedience.** This is the duty of board members to ensure that the college or university is operating in furtherance of its stated purposes (as set forth in its governing documents) and is operating in compliance with the law. (pp. 2)[5]

Board members have a duty to act in good faith toward members of the university and a duty to consult member constituents of the university and they also have a duty of disclosure (although it is less clear to whom and for what).[6] The duty of care involves being informed, showing up for meetings, voting, and apprising oneself of the policies and operation of the organization. If one draws on the scholarship of the private business corporation to understand this ideal, Dr. Roger Barker (2016)

contends that at minimum, "This incorporates the expectation that a director will maintain an awareness of the company's activities and financial position, monitor its policies and actions, and investigate developments where appropriate. Ignorance of corporate affairs or failing to act in adverse circumstances is not acceptable" (p. 253). Barker's comments suggest that external board members sitting on university governing boards must learn about the university as a unique institution, its history, customs, and practices. Therefore, importing erroneous principles from the private corporate business world or elsewhere would be unacceptable.

The English courts have always considered loyalty to the company as a fundamental duty of corporate directors, and this has been understood in terms of directors not acting "for any collateral purpose" (Re *Smith and Fawcett Ltd,* [1942, p. 306] as cited in Barker, p. 252). The duty of loyalty of board members in a university setting includes avoiding or declaring personal conflicts of interests with the university's interests, representing the organization in a positive manner, and observing confidentiality. The duty of confidentiality is not a gag order on board members on all board discussions and deliberations. Meetings of Canadian university boards are generally open, and notice of meetings is supposed to be given to the constituent members of the organization and the public. *In camera* meetings are held only if the matter at hand involves personal confidential information or sensitive material relating to the university.[7]

The duty of obedience flows from the duty of care and loyalty and involves making sure the university is operating according to its purposes as reflected in its constituting legislation and governing documents as well as operating both legally and ethically within the law and any other applicable internal and external rules (Association of Governing Boards of Universities and Colleges, 2015). It is not a duty of obedience of the board member to the board per se, nor is it a solidarity clause with other board members, as potentially a board member may find themselves in a situation where they must disobey the board if the university or board is breaking the law or if the board is acting against the university's best interest. Moreover, a director on a governing board is obliged to ensure their board colleagues are following the law relevant to the corporation. However, loyalty has been interpreted to mean that directors/boards of governors must comply with legislation as well as the corporation's governing documents (i.e., charter, constituting legislation, by-laws, etc.), which may include following governing board policies around conduct (Carter & Prendergast, 2011).

Taken together the duty of loyalty and obedience mean university governors must carry out their duties according to the law, being loyal or true to the mission and purposes of the university, independently and without self-interest, putting the interests of member constituents as a whole above their own or the interests of the executives of the corporation. The governing board members must execute their responsibilities associated with the administration and management of the university property/assets (pecuniary and non-pecuniary, such as reputational assets, goodwill, and also standing in the community) all the while protecting the interests of the principals.

Fiduciary duty of a trustee

Complicating an already confusing landscape, in certain instances university boards

of governors may be found to be acting as trustees; that is, in a guardianship role over the assets of a charity. The trustee has the highest duty of care for a fiduciary created by law. In these instances, acting as a trustee, director/board of a charitable corporation have additional duties, including ensuring the charitable purposes of the corporation are carried out and acting gratuitously for the charity. Furthermore, they have duties to the beneficiary of the charity/trust that, in the Canadian university setting may be considered to be the public and the constituent members of the university that is the "community of scholars" (*Harelkin v. University of Regina*, 1979) that makes up the university. This standard includes acting with the care and the diligence of the prudent person protecting the charity's property from risk or loss and excessive administrative expense. The protection of charitable trusts is reflected in the inherent equitable jurisdiction of the courts to intervene in the governance of charities in order to monitor and regulate charities where funds or property have been mismanaged (Carter & Prendergast, 2011; *Ontario Society for the Prevention of Cruelty to animals v. Toronto Humane Society,* 2010).

Fiduciary duties of a not-for-profit board

Generally, the board of directors of a not-for-profit is accountable to the members of the organization for managing and supervising the activities and affairs of the corporation. Under federal not-for-profit legislation, not-for-profit directors are not automatically considered trustees at law for any property of the corporation, unless the not-for-profit is also a charity and a trust has been explicitly created, as in the case of universities (*Canada Not-for-profit Corporations Act* (NFP) Act, 2009, s.32). University boards of governors are also captured by not-for-profit legal principles, which are expanding in Canada. Boards of membership-based, not-for-profit corporations, such as universities, have duties to constituent members, that, in certain instances, may be defined as fiduciary duties, in addition to myriad duties and obligations captured by contract and employment law (Burke-Robertson, 2002; Carter & Prendergast, 2011; *Ontario Public Guardian and Trustees v. AIDS Society for Children [Ontario]*, 2001; *Pathak v. Hindu Sabha,* 2004). In membership-based non-profit corporations, such as universities, there are persons entitled to elect or appoint the board of governors/directors. These elector members are typically those persons for whose benefit the corporation operates. In a university this is the collegium (that is the staff, students, and faculty), which elects senate representatives on the board of governors. It also includes the public who, through the government, appoint members of the board from the larger community (Jones & Skolnik, 1997).

Recent not-for-profit legislation in some provinces and at the federal level focuses on enhancing not-for-profit member rights and remedies, making them akin to shareholders rights in a for-profit corporation. The new not-for-profit legislation has clear implications for the duties and decision-making of university boards. This suggests that, going forward in Canada, not-for-profit boards may need to consider in their decision-making stakeholder member interests to a greater degree than before. Moreover, external members of Canadian university boards are volunteers, who carry out the university mission and operations according to the university constitution

and by-laws. This feature shapes the dynamics of governing a university as a not-for-profit corporation, making it different from governing boards of a for-profit entity (Amundson, 2002).

The fiduciary standard of care

Identifying the appropriate standard of care for university governors (that is, the level at which they must execute their fiduciary duties) is challenging because the law governing them is a mix of the law on charities, law on trusts, the law of not-for-profits organizations, and the law of corporations (Bourgeois, 2004; Carter & Prendergast, 2011; Cullity, 2002). In addition, in a university landscape, these areas of law can be layered with contract and labour law, as well as principles of natural justice. Moreover, the university as an organization is judicially recognized as a collegium/community of scholars and a public service type of organization akin to a foundation. Each of these areas has different legislation and case law governing it, with different standards of care.

The typical standard of care for directors of not-for-profit corporation under federal not-for-profit legislation is the objective standard of the "reasonably prudent person" (*Canada Not-for-Profit Corporations Act,* SC 2009, c 23, s.148). That is to say that directors and officers are required to exercise at least the level of care, diligence, and skill that a reasonably prudent person would exercise in their decision-making in similar circumstances. In Canada some constituting university statutes set out the specific duties of the board and the standard of these duties. University governing boards may also rely on the standards of conduct spelled out in ancillary regulations, by-laws, or policies created by the university officers or the governing board itself. If the university statute is silent on the standard of care or the university is exempt from the provincial not-for-profit legislation, then the common law standard applies. The common law standard for boards is a higher, more subjective standard than the statutory standard, and it requires that a director's actions be at the standard of the reasonable prudent person with the same expertise, skill, and knowledge. This means if a board member is a financial executive with extensive board experience, the board member will be held to that standard in decision-making, not to the standard of the ordinary person.

The 1928 American case of *Meinhard and Salmon* (164 N.E. 545 [N.Y.1928]) sets out in absolute language and high moral tone the uncompromising fiduciary standard of care, defined by Judge Cardozo as "the duty of finest loyalty" and "stricter than the morals of the marketplace":

> Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior. As to this, there has developed a tradition that is unbending and inveterate. Uncompromising rigidity has been the attitude of the courts of equity when petitioned to undermine the rule of individual loyalty by the "disintegrating erosion" of particular exceptions. Only thus has the level of conduct for fiduciaries been kept at a level higher than that trodden by the crowd. … A loyalty that is undivided and unselfish. The rule of undivided loyalty is relentless and supreme.

Scholarship suggests that, in theory, the fiduciary duty attempts to offer clarity to the problem of complexity and multiple, conflicting interests in relationships. However, it is less clear what this standard actually means, or looks like, in terms of real-life practice (Anderson, 1978; Minow, 2016; Thompson, 2008). One legal scholar suggests "The punctilio phrasing provides a standard rather than a rule, a clear statement as to tone and direction, but little in the way of specific guidance for resolving hard questions" (Thompson, 2008, p. 21).

Finally, the lofty ideals of Cardoza's statement of the fiduciary standard are practically limited and watered down by the "business judgement rule," which makes it very difficult to find directors liable for a breach of fiduciary duty if they have followed the usual procedures in their business in making a decision. Courts are less likely to second guess, even if their decisions and judgement are wrong and cause injury (Minow, 2016). In effect the business judgement rule lowers liability and the standard of care in that directors/boards of governors will not be held liable for mistakes made after an honest and good faith evaluation of a decision if adequate scrutiny of issues is done before making decisions. While the business judgement rule may or may not be available to boards of governors of Canadian universities as charities, given the higher fiduciary duty required of trustees of charities, it does provide the principle of diligent scrutiny of decisions as a standard for directors and boards of governors (Carter & Prendergast, 2011).

Analysis: Key issues in governance

To whom is the fiduciary duty of care owed in the university context

It is well established that governing board members of universities in Canada are considered fiduciaries at law. However, it is less clear to whom the duty is owed in a university context. Generally, in not-for-profits and charitable corporations, such as universities, the boards of governors owe fiduciary duties to the "corporation"; trustee fiduciary duties to the named beneficiary of the trust (the public and any donors) when dealing with charitable property; and trustee duties to the members/constituents of the charitable not-for-profit organization. Contemporary legal commentary and case law on private business corporations suggests that the fiduciary duty of a governing board is owed holistically to "the corporation," not the shareholders and not separately to each individual members or stakeholder groups (Carter & Prendergast, 2011; *London Humane Society (Re),* 2010 ONSC 5775, [2010] OJ No 4827 (Ont Sup Ct J) at para. 19). However, it is not clear if and how this line of scholarship and case precedents applies to a university context given its hybrid features as a charitable, not-for-profit, corporate collegium.

What is the corporation? Who is the corporation?

At law the corporation is a legal construct. It is considered a person—an independent legal entity that can hold property, be sued, and holds the same rights and obligations of a person in law. The corporation is separate and distinct from shareholders and other constituents within the corporate organization (including the board). This legal fiction allows the activities of a corporation to be captured by regulation in the same way a person is captured by laws. It also allows the fiduciary duty that exists between

two people to exist between the board and the corporation. In a corporate context, directors of governing boards are the "fiduciary" and the corporation (as a legal "person") is the "principal" to whom the duty is owed (Welling, 1991). As a legal person the corporation is a separate and distinct entity, the interests of which may, or may not, align with the membership of the organization.

This legal understanding complicates the relationship between the corporation as an organization and the shareholder/constituents of the corporation, especially in the university context. The view of the university as a singular corporate "person" runs counter to the historical structure and nature of the university as a collegial, self-governing community of scholars—two core ideals of the Western university. Furthermore, the legal construct of the corporation as a singular homogeneous legal person presents particular difficulties in understanding the fiduciary duties of governing boards within the contemporary context of the university as a "multiversity," with a complex, diverse environment where there are, by the very nature of the university, many competing interests (Fallis, 2007; Kerr, 2001). Owing a fiduciary duty to all of the constituents at once presents problems in defining the duty of loyalty. Minow tells us "Accountability to everyone is accountability to no one, and it is impossible to apply the fiduciary standard without a clear understanding of who the beneficiary is" (2016, p. 245). And this may be part of the challenge in applying the law in this area to universities—a legal construct has been grafted onto the structures of the university and it does not quite fit.

Who is the corporation? Who is the university? While commentary is clear that the governing board owes a fiduciary duty to the corporation, is less clear from statute and case law if the university and the corporation are one and the same thing. The constituting statutes of the universities in Canada are inconsistent and offer various answers to these questions. For example, under the statute constituting Western University (*An Act respecting The University of Western Ontario*, Bill Pr14, 1982, as revised by Bill Pr37, chapter Pr26, S.O., 1988 at section 1 and 8.), the "university" is defined vaguely and the corporate body is, perplexingly, defined as the governing board and not the university.

> s.1 (m) "University" means The University of Western Ontario, but does not include any college affiliated with the University.
>
> s.8. The Board of Governors of the University is hereby continued as a body corporate by the name "The Board of Governors, The University of Western Ontario."

If, indeed, the board of governors at Western University is the corporate body, under corporate law principles board members would owe a fiduciary duty to themselves, and they would be both fiduciary and beneficiary/principal at one and the same time. This conception defies the principles of trust and fiduciary law and, frankly, makes no sense legally.[8] By contrast in Alberta, the *Post Secondary Learning Act* (*Post-Secondary Learning Act*, SA 2003, c P-19.5 s 11(2) and s 16(2)) tells us that both the governing board and the senate of universities are each individual corporate bodies. This means there are two corporate entities within Alberta's universities, and neither are the university as an organization. Whereas in British Columbia, the *University*

Act R.S.B.C. 1996, c. 468 (Consolidation 2017) s.3(4) clearly states that each university is a distinct corporation.

University statutes and case law complicate and confuse the discussion of who owes whom a fiduciary duty within the university setting. It is clear that the legal principles of corporate law, charitable trusts, and fiduciary duties do not map onto the governance of the university very well. This raises the question of whether it is possible to apply the fiduciary standard without a clear understanding of who is the beneficiary and who is the corporation, who is the university and who is the charity.

What does the "best interests" of the organization mean? And who gets to decide?

It is difficult to determine what are "the best interests" of the university. Some define "best interests" in terms of financial sustainability, for others it is about academic quality and rigour, for others it is about productivity, efficiency, accountability, and transparency, and others again it is about upholding democratic principles. All of these ideas emerge in the university landscape and are consistent with the various missions and objectives of the university embedded in constituting statutes, yet each of them may be defined differently depending on the location within the university.

This case law suggests that in determining "best interests," one group's interests cannot supersede another group's interests, and that the governing board must make balanced decisions protecting the interest of the whole entity itself. However, the institution's interests in the university setting are by its very nature heterogeneous. The university in form and structure is fragmented into faculties and departments; it has flat collegial self-governance structures and hierarchical, managerial, bureaucratic, and administrative structures. Academic work is both horizontally and vertically fragmented, which challenges governance and leadership (Jones, 2013). Clark Kerr (2001) in his book *The Uses of the University* describes the modern university as a "multiversity" (p. 1–7). George Fallis (2007) takes this metaphor and describes contemporary universities as sprawling conglomerates providing liberal undergraduate, graduate, and professional education that is responsible for society's research enterprise. Fallis (2007) argues that contemporary Canadian universities have multiple missions, including teaching and research, but also that contemporary universities are fundamentally institutions of democracy and part of their mission and role in society is their contribution to democratic life.[9] The fiduciary obligation expressed in corporate case law requires that the board of governors protects the best interests of the university as a holistic organization. This notion negates everything we know about the modern university, its evolution over the last century and the nature of academic life, scholarship, and activities. Just as the notion of the corporation as a person is a legal fiction, the notion of the university as a homogenous entity is an analytic fantasy. In such a diverse environment there is no singular interest and it is difficult to determine who speaks for whom, which challenges the application of the fiduciary standard to governing board decisions.

The role of university governing boards: Guardianship or representative constituency?

In Canada the university governing board typically appoints the president, manages,

and is accountable for the financial aspects of the university.[10] It is made up of ex-officio members (the chancellor and the president and vice chancellor of the university), internal members, external members, and honourary members. Typically governing board membership includes students elected from the student body; representatives of the senate elected by the university senate; members of the non-academic university staff; representatives appointed or elected by alumnae; and members broadly reflective of the community at large appointed by the government or the governing board itself, as set out in board by-laws or regulations (Jones & Skolnik, 1997). Whereas the largest group on the governing board is the external public constituents appointed by the board or government, by contrast the academic governing body (senate) is made up of a majority of internal faculty members. Nevertheless, the governing boards of publicly funded Canadian universities do contain representatives from a large number of internal constituents, including faculty and student constituencies.[11] Glen Jones and Michael Skolnik noted in their 1997 study that it "is clear that Canadian universities have placed a high value on attempting to ensure that both internal and external interests are taken into consideration" (p. 293) in their decision-making. They also note that this high representation of internal members on university governing boards is "the factor that most differentiates Canadian boards from their American counterparts" (p. 293). Recent scholarship suggests that, historically, American universities followed the Scottish model, where a lay board is responsible for college governance, whereas Canadian universities followed the English model and gave faculty the majority of the governance responsibility in the form of a strong senate and faculty representation on boards (Galick-Moazen, 2012).

The constituting statutes of Canadian universities explicitly design the governance of the university boards for representation of the university's members. Therefore, some of the internal members sitting on the governing board come to the position with an automatic dual loyalty, as they are elected to the governing board precisely to represent the interests of their constituent group within the university. In this respect it has been argued that the university governance and decision-making functions in the manner of a parliament, a representative democracy, and follows the parliamentary rules of order (CAUTb, 2018). This democratic structure is consistent with the core role and mission of the publicly funded university in Canadian society as a democratizing institution (Fallis, 2007).

The membership of governing boards is significant to the discussion of fiduciary duties as there is a potential for conflicts of interest when members are from multiple constituencies—and this potential for conflicts may be greater in a Canadian university context than in an American university context given the larger proportion of internal board members. It is also significant because American legal commentary on the fiduciary duties of university governing boards should perhaps be referred to with caution in the Canadian university context because the actual composition of Canadian university boards and American university boards are different.

At the same time Canadian universities place a high value on collegial, democratic decision-making, and this principle of governance is recognized by the case law. It is this feature of governance that distinguishes the Canadian university governing boards

from private sector corporate boards and from many America university boards. From this perspective, constituency representation is crucial and most desirable. Herein lays the source of considerable tension in Canadian university governance: What is the role of the board of governors in a Canadian university? Is it the role of a guardian of a trust or is it the role of constituency representation? Or is it, can it be, both?

The guardianship view of the board of governors emphasizes the university as a public trust and draws on charity law. This view is closer to the American view of a university board of governors as trustees, and indeed the American scholarship refers to university board members explicitly as trustees (Engel & Achola, 1983; Floyd, 1995; Kaplin & Lee, 1995; Kerr & Gade, 1989). While this view emphasizes the highest fiduciary duty of the governors toward the university, it is less collegial and may occur at the expense of institutional autonomy and self-governance. It emphasizes the university's charitable nature, which allows for greater intervention by the courts into university governance in cases of mismanagement and allows for greater remedies for aggrieved constituent members. Courts will exercise their prerogative jurisdiction over a charity if the board of governors is acting in a way that may jeopardize the charity's assets (whether they are property, resources, or reputational assets). The trustee view also places high demands on board reporting and accountability for public funds. This governance arrangement usually has external, lay, public constituents as the dominant and majority group on the board of governors, as evident in America.

By contrast the constituency representation view places a high value on balance between internal and external representation and interests. This perspective is closer to the Canadian governance arrangements, which have high numbers of internal members elected to their boards (Jones & Skolnik, 1997). This approach emphasizes collegial decision-making and faculty input into governance. It values and defends the autonomy of the university, eschewing external interference from the government or courts as a self-governing professional body. This view is also reflected in the Canadian Supreme Court case law on the nature of the university (see *Harelkin v. University of Regina*, 1979) and is also evident in the university constituting statutes themselves, which require that governing board membership include elected representation internal to the university.[12] This principle of organizational democracy is also consistent with the Canadian trend on the laws of not-for profits, as seen in the changes to the federal *NFP Act,* 2009, which increases not-for-profit members' access to information and enhances their rights, their legal remedies against errant boards, and provides for a greater role for members in the governance of their corporation. However, representative boards have the potential for more conflicts. Members of Canadian university boards come to the board with divided loyalties: to constituents that elected them, as well as to the corporate person of the university.

Tension between the guardianship view and the constituency representation view of university governance has existed for decades in Canada. Both views are reflected in the case law, statutes, and commentary on university governance. Regardless, the question of whether the board should function representatively and responsively to university constituencies impacts on the shape of governing board fiduciary duties. The contradictions between these competing views are reflected in statements of fiduciary duties in higher education, especially around issues of the

duty of loyalty. For example, a recent governance review at Western University seems to advocate both a guardianship and representative view of governance, going so far as to suggest that board members must check their identity at the door once they become members of the board:

> It would be contrary to this fiduciary responsibility to have "representatives" of particular constituencies voting at the direction of their organizations. Regardless of how someone gets to the Board table, or who put them there, once a person becomes a Board member, his or her loyalty must lie with the best, long term interests of the university… (Report of the Governance Review Task Force UWO, 2015, p. 4)

This same report goes on to contradict itself:

> The Act determines the membership of the Board and provides for members to be elected from faculty, staff and student constituencies and those internal members of the board bring the views and concerns of their constituents to the table. (Report of the Governance Review Task Force UWO, 2015, p. 4)

A recent report from the Canadian Association of University Teachers (2018b) captures the essence of the contradiction in a university setting:

> In the case of the academy, such appointments are not made to persons who happen to be academic staff, but made because they are academic staff. To subsequently obstruct or interfere with a representational member consulting or canvassing the academic staff community they are to represent cannot be acting in the best interests of an institution as it is contrary to the university governance model itself. Recognizing representation, but denying representational rights, undercuts collegial governance and the representational framework on which it is based. (p. 5)

Conclusions: Implications for shared governance—"Fraught with history and traditions" [13]

Mapping the corporate legal framework onto the university is fraught with tensions, difficulties, and disconnects. Although the nomenclature may be the same, the university in form or function is not a typical corporation. It is, legally, a unique, hybrid organizational type. This may explain the confusion and contradictions evident in the field of higher education around the fiduciary duties of governing boards. Indeed legal scholars have observed that,

> The reasons that the letter of the law is not necessarily followed in the academy can be attributed to the unique historical rights and traditions inherent to a community of scholars. (Davis, 2015b, p. 200)

> For various reasons entrenched in the history of academia, the expectations of faculty and the practice of universities do not follow the prescriptions of the law. (Davis, 2015b, p. 211)

Moreover, philosophically there are at least two different views that are active in Canadian board governance. From a charitable corporation perspective, conflicts of interests are undesirable and must be avoided. Whereas from a "community of scholars" collegial perspective, conflicts of interest are inevitable and a desirable part of the culture, history, and tradition of academic life, essential in the creation and testing of knowledge, protected by the principles of academic freedom, and a fundamental feature of the university. Legal commentators have also observed that in addition to the general conflict of values and priorities between universities and corporations, there is a difference in the way universities operate in policies, procedures, and practices that are incongruent to business practices with the for-profit sector. Conduct and obligations that are common in, and reasonable for, an industry setting would be untenable in an academic setting. For example, practices around confidentiality and non-disclosure play out very differently in the two settings and this can influence what governing boards believe is appropriate for decision-making (Lowe & Lennon, 2015). The area of confidentiality and non-disclosure is particularly relevant here, as the trend in Canada among governing boards is to include such obligations in their codes of conduct. Jeffrey Lowe and Christopher Lennon (2015) highlight the different cultural environments:

> Unlike a business corporation, which often has obligations of confidentiality built directly into the employment agreements of its personnel, postsecondary institutions typically encourage at least a subset of their personnel-namely faculty, graduate students and other researchers … to share ideas and publish findings. Moreover the category of personnel likely to come into access confidential information in an academic community are much more diverse than in a commercial operation … The culture and practice of postsecondary institutions is simply not one where commitments of confidentiality are easily implemented. (p. 216)

In summary, the legal framework for university governance in Canada is extremely complex and layered. The nature of the university as an organization and its legal status are determined by myriad old and new statutes and case law, as well as medieval and modern forms and protocols mixed together. Its governance and legal status encompasses the law of corporations and the law of charities and trusts. To this must be added historical academic customs and the institutional practices of the collegium (whether or not enshrined in statute, but recognized in case law), together with current policies and by-laws within individual universities as well as across the higher education community, which have become the established conduct (usages) of the university. This can result in "paradoxes [that] can make university governance a difficult proposition" (Davis, 2015b, pp. 57–58) and inconsistencies in the application of the law. In fact, a number of legal scholars have commented on the unique nature of the university as a legal organization making the application of the black letter law in several legal areas (governance, intellectual property, spin-off companies, and confidentiality agreements, to name a few) uncertain and more honoured in the breach than in the observance (Shanahan, Nilson, & Broshko, 2015).

The law on fiduciary duties has implications for shared collegial governance and decision-making in universities. The law on fiduciary duties provides a legal standard, but not a clear statement or rule that can be easily applied in all decisions. It offers little guidance for resolving hard questions. Moreover, the publicly funded, charitable, collegial multiversity in Canada is a unique entity and context with a public mission, purpose, and stakeholders. This influences the nature of the fiduciary duties of governing boards and to whom they are owed. This is by no means a dilution of the standard but a more complicated standard. Furthermore, the autonomy of university governance and decision-making is exercised within a larger political context and within broader societal structures and values. In Canada, the Charter of Rights and Freedoms has changed the legal landscape of the university and impacted university decision-making and board governance. The Charter has increased our awareness of individual rights and freedoms. There is an increased expectation for the protection of these rights within society, including within the university (Dickinson, 1988; Hannah & Stack, 2015). The case law on the applicability of the Charter to universities has altered our understanding of the nature of university autonomy. It layers our understanding of the relationship between universities, governing boards, and their constituents. Inevitably, this influences the shape of governing board fiduciary duties.

Board members need to be aware of and appreciate the complexity of this working environment. In their decision-making they would do well to consult broadly and diligently scrutinize all issues and concerns brought forth from the various constituents making up the university. Transparency in board decision-making is also crucial. Internal and external accountability structures and mechanisms must be put in place and followed. Assiduous attention to due process and fairness goes a long way to establishing good faith in decision-making. In this context, the roles of faculty in Canadian universities, in faculty associations, and on senate within the dual governance structure of the university, are critical to the proper functioning of the university governance model in ensuring that board fiduciary duties are met. Both avenues into governance provide a check and balance on the board of governors within a particularly insulated decision-making environment, where the courts and government have allowed Canadian universities high institutional autonomy, shielding boards' decisions and conduct from review and oversight. Ultimately engaging the shared collegial governance structure of the university will enable boards to better navigate the complicated leadership space and will strengthen decision-making.

Notes

1. In fact the new federal Not-for-profit Act (2009) provides for incorporation as of right, whereby the approval of the minister is not required, and allows for electronic filing. Approval of the incorporation is automatic if the statutory requirements are met. Corporate by-laws are not included in incorporation package and are not reviewed by Corporations Canada staff.
2. The nomenclature varies across Canadian universities as to the name of the senior academic decision-making body and the senior financial/administrative body. Typically, they are called the senate and the governing board, respectively, but not exclusively. This can cause confusion in the literature and in the field. Also, some universities are organized in a unicameral structure (e.g., University of Toronto) while others have opted for a tri-cameral structure (e.g., Queens University). Regardless, one can see in each of

the unicameral, bi-cameral, or tri-cameral structures in Canadian universities the presence of a senior academic and a senior financial and/or administrative decision-making body. For the purpose of clarity within this article, these bodies are referred to as the "senate" and the "governing board."

3. The case law varies based on the facts in each case. For example, booking space for non-academic extracurricular activities at the university has been found to be non-governmental activity (*Lobo v. Carlton University,* 2012). Likewise, standards and grading are within university discretion and are non-governmental (*Jaffer v. York University,* 2010; *King v. Ryerson University,* 2015; *Lam v. University of Western Ontario,* 2015). There is extensive case law that sets out the educational relationship between universities and students as governed by an implied private contract to educate, provide appropriate instruction, and offer the educational services needed to obtain the credential that may include providing housing, co-op placements, parking, library services, and computer facilities in exchange for student fees. (See Hannah & Stack, 2015, for an extensive review). Patrick Gilligan-Hackett and Pamela Murray (2015) review the case law governing university-faculty relationships, observing that the law of contract provides the primary foundation for the employment relationship between faculty and the university. Nevertheless all of this is qualified by Charter case law and the determinations of whether, and when, a university is acting as a governmental actor.
4. In the province of British Columbia, for example, the provincial government has introduced mandate letters for universities that match the university's planned targeted programs and priorities with budget allocations for the coming fiscal year. Similarly, in Ontario, the provincial government has Strategic Mandate Agreements with each university that requires it to provide the government with strategic planning information on priorities and targets with funding attached. See Shanahan (2015b) for a discussion of strategic federal funding programs and Shanahan (2015c) and Shanahan (2015d) for a discussion of the range of provincial regulatory mechanisms around funding, quality, and accountability employing strategic planning requirements.
5. Note that this is an American association. Nevertheless the Canadian equivalent, Canadian University Boards Association (CUBA), directs it member universities to the American website for this information, and many Canadian university governing boards are members of this American organization and so are perhaps guided by this statement and other comments on the site. While this statement about fiduciary duties is consistent with the Canadian case law on fiduciary duties generally, the organization's additional commentary on what this statement means in practice for governing boards' conduct is not consistent with Canadian case law on the collegium and representativeness of governance arrangements in Canadian universities. That is to say, their explication of duties reflects the American landscape, which has a different mix of private and public universities. This is one of the limitations of policy borrowing from other jurisdictions, especially around law and governance.
6. One important theme that does come up in the case law and in contemporary business law commentary and practice is that disclosure to shareholders, beneficiaries, and membership is part of one's fiduciary duty. "Disclosure and the substance of fiduciary duty have long been intertwined in American corporate and securities law" (Thompson, 2008, p. 23). That is to say that a fiduciary must disclose risks, opportunities, and conflicts to the beneficiary's interests. In other words, disclosure can be part of the duty of loyalty. This is relevant to the university context.
7. For example see University of Toronto's Act (1971), which sets out openness of governance meetings:

   > Section 2(18) The meetings, except meetings of committee of the whole, of the Governing Council shall be open to the public, prior notice of the meetings shall be given to the members and to the public in such a manner as the Governing Council by by-law shall determine, and no person shall be excluded therefrom except for improper conduct, but where intimate financial or personal matters of any person may be disclosed at a meeting the part of the meeting concerning such per-

son shall be held in camera unless such person requests that such part of the meeting be open to the public. 1971, c. 56, s. 2(16–218).

8. Western University's Act is not the only university statute that conflates the board with the corporation. See also *University of Toronto Act* s. 2(1), which calls the University of Toronto's governing council a "corporation." And also under the University of Ottawa Act (*The University of Ottawa Act,* S.O. 1965, C.137), the board of governors are named as the body corporate.
9. For an exhaustive review of models of universities in scholarship that have emerged over Western-European history see Raymond P. Kybartas' (1996) Ideas of the University: Towards a Classification System Based on Ideal Types. Using a historical-philosophical lens and a Weberian "ideal type" method, Kybartas classifies six university models that he argues represents the range of potential university types including: the liberal university; the research university; the economic university; the social university; the transformational university; and the radical university. These are not mutually exclusive types and can be combined in various models. Clark Kerr (2001) and George Fallis (2007), both economists, academics, and former university administrators, present a new conceptualization of the contemporary Anglo-American multiversity that emerged in the second half of the twentieth century, as sprawling, diverse, complex conglomerates that incorporate elements of these ideal types. Although they concede that the central task of the contemporary Anglo-American university continues to be undergraduate education, they argue the contemporary university has many tasks and roles in a post-industrial society, which this article argues complicates the responsibilities of leadership.
10. This typically reads in statutes as "management and control of the University and of its property, revenues, expenditures, business and affairs are vested in the Board, and the Board has all powers necessary or convenient to perform its duties and achieve the objects and purposes of the University" (*York University Act,* 1965, s.10).
11. Jones and Skolnik's 1997 study on Canadian governing boards reported a third of the members of governing boards who participated in their study were from internal constituencies. Faculty and students made up than a quarter of members on average. Fewer than a quarter are appointed by government.
12. For one example see s.19 of *British Columbia's University Act R.S.B.C.* 1996, c. 468 (Consolidation last updated by the Office of the University Counsel on 28 June 2017).
13. See Davis, 2015a, p. 66.

References

Alberta v. Elder Advocates of Alberta Society. (2011). *SCC 24, [2011] 2 S.C.R.*

Amundson, W. (2002). Corporations & directors what, who, why & how. In P. Broder (Ed.), *Primer for directors of not-for-profit corporation* (pp. 1–13). Ottawa, ON: Industry Canada.

An Act respecting the University of Western Ontario. (1988). *Bill Pr14, 1982* (as revised by Bill Pr37, chapter Pr26, S.O.). London, ON: University of Western Ontario.

Anderson, A.G. (1978). Conflict of interest: Efficiency, fairness, and corporate structure. *U.C.L.A. Law Review*, 4(25), 738–796.

Association of Governing Boards of Universities and Colleges. (2014). *Governance brief on fiduciary duties.* Retrieved on February 8, 2018, from https://www.agb.org/briefs/fiduciary-duties.

Arthurs, H. (1983). *Law and learning report to the Social Sciences and the Humanities Research Council of Canada.* Ottawa, ON: SSHRCC Consultative Group on Research and Education in Law.

Barker, R. (2016). *The duties and liabilities of directors-getting the balance right.* In R. Leblanc (Ed.), *The handbook of board governance* (pp. 249–269). Somerset, NJ: Wiley and Sons, Inc.

Bourgeois, D. (2002a). *The law of charitable and not-for-profit organization.* Markham, ON: Butterworths.

Bourgeois, D. (2002b). *Charities and not-for-profit administration and governance handbook* (2nd edition). Markham, ON: LexisNexis Canada.

Bourgeois, D. (2004, April 14). *Board governance—when does it become director's negligence?* Paper delivered at the Canadian Bar Association/Ontario Bar Association 2nd National

Symposium on Charity Law. Retrieved May 25, 2018 from http://www.carters.ca/pub/article/charity/2004/djb0414.pdf.

Burke-Robertson, J. (2002). Duties of directors. In P. Broder (Ed.), *Primer for directors of not-for-profits corporations*. Ottawa, ON: Industry Canada.

Canada Not-for-Profit Corporations Act, SC 2009, c 23. Ottawa, ON: Government of Canada.

Canadian Aero Service Ltd v. O'Malley. (1974). *SCR 592, [1973] SCJ No.97 (SCC)*. Ottawa, ON: Supreme Court of Canada.

Canadian Association of University Teachers. (2015, December 14). *CAUT supports Carleton U prof's refusal to sign away his academic freedom*. Retrieved February 8, 2018, from https://www.caut.ca/latest/2015/12/caut-supports-carleton-u-prof%E2%80%99s-refusal-sign-away-his-academic-freedom.

Canadian Association of University Teachers. (2018a). *CAUT report on board of governors structures at thirty-one Canadian universities*. Ottawa, ON: CAUT.

Canadian Association of University Teachers. (2018b). *CAUT legal advisory- A corporation and a community: Fiduciary duties of university board members*. Ottawa, ON: CAUT.

Canadian Charter of Rights and Freedoms. (1982). *Part 1 of the Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c 11*. Ottawa, ON: Government of Canada.

Carter, T., & Prendergast, R. (2011.) *Duties and liabilities of directors and officers of charities and non-profit organizations: Emerging issues in directors and officers liability.* Toronto, ON: The Law Society of Upper Canada. Retrieved January 30, 2017, from http://www.carters.ca/pub/article/charity/2011/tsc0329.pdf.

CBC News. (2015). *Amit Chakma, Western University president, to give back half of $924K salary. President received nearly double his salary in 2014 in lieu of taking an administrative leave*. Retrieved February 8, 2018, from http://www.cbc.ca/news/canada/windsor/amit-chakma-western-university-president-to-give-back-half-of-924k-salary-1.3018799.

Creppin v. University of Ottawa. (2015). *ONSC 4449.*

Cullity, M. (2002). The charitable corporation: A "bastard" legal form revisited. *The Philanthropist*, *17*(1), 17. Retrieved February 22, 2018, from https://thephilanthropist.ca/2002/01/the-charitable-corporation-a-bastard-legal-form-revisited/.

Curran, P. (2011). Concordia faculty call on Lowy to suspend Ad Hoc BoG governance committee. *Montreal Gazette*. Retrieved February 8, 2018, from http://montrealgazette.com/news/local-news/concordia-faculty-call-on-lowy-to-suspend-ad-hoc-bog-governance-committee.

Davis, B. (2015a). Governance and administration of postsecondary Institutions. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The Handbook of Canadian Higher Education Law* (pp. 58–79). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Davis, B. (2015 b). Complex ventures: University research, intellectual property, and academic freedom. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 193–211). Montreal, QC, & Kingston, ON: McGill-Queens University Press.

Dickinson, G.M. (1988). *Academic autonomy and legal prescription: An investigation of the intrusion of law into decision-making within universities* [PhD dissertation]. Toronto, ON: University of Toronto.

Duff, J., & Berdahl, R.O. (1966). *University government in Canada.* Ottawa, ON: Association of Universities and Colleges of Canada and the Canadian Association of University Teachers.

Eldridge v. British Columbia (Attorney General). (1997). *3 S.C.R., 624.*

Engel, R.E., & Achola, P.P.W. (1983). Boards of trustees and academic decision making: A review of literature and research. *Review of Educational Research, 53*(1), 55–74.

Fallis, G. (2007). *Multiversities, ideas and democracy*. Toronto, ON: University of Toronto Press.

Farrington, D.J., & Palfreyman, D. (2006). *The law of higher education.* Oxford, UK: Oxford University Press.

Floyd, C.E. (1995). Governing boards and trustees. *Review of Higher Education, 19*(2), 93–110.

Freeman-Maloy v. Marsden. (2006). *CanLII 9693 (ON CA)*. Retrieved on June 27, 2018, from http://canlii.ca/t/1mxnf.

Fridman, G.H.L. (1973). Judicial intervention into university affairs. *Chitty's Law Journal,* 6(21), 181–188.

Galick-Moazen, M. (2012). *The role of faculty in institutional decision making* [PhD dissertation]. Knoxville, TN: University of Tennessee. Retrieved February 20, 2018, from http://trace.tennessee.edu/utk_graddiss/1526.

Gilligan-Hackett, P., & Murray P. (2015). Faculty employment at Canadian postsecondary institutions. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 167–193). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Goudge, The Honourable Stephen. (2015). *REPORT: Review of presidential compensation practices at the University of Western Ontario*. Retrieved April 17, 2018, from https://www.uwo.ca/univsec/pdf/Western_University_Compensation_Report.pdf.

Hannah, D., & Stack D. (2015). Students. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 125–167). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Harelkin v. University of Regina. (1979). *2 S.C.R. 561*.

Harris, R. (1976). *A history of higher education in Canada*. Toronto, ON: University of Toronto Press.

Harrison v. University of British Columbia. (1991). *1W.W.R.681 (S.C.C.)*.

Hutchinson, T., & Duncan, N. (2012). Defining and describing what we do: Doctrinal legal research. *Deakin Law Review*, *17*(1), 83–119. Retrieved October 24, 2018, from https://doi.org/10.21153/dlr2012vol17no1art70.

Hutchinson, T. (2015). The doctrinal method: Incorporating interdisciplinary methods in reforming the law. *Erasmus Law Review*, (3), 130–138. doi:10.5553/ELR.000055

Hutchinson, T. (2014). Valé Bunny Watson? Law librarians, law libraries and legal research in the post-internet era. *Law Library Journal*, *106*(4), 579–592.

Jones, G., Shanahan, T., & Goyan, P. (2004). The academic senate and university governance in Canada. *The Canadian Journal of Higher Education*, *XXXIV*(2), 35–68.

Jones G., & Skolnik, M. (1997). Governing boards in Canadian universities. *Review of Higher Education*, *20*(3), 277–295.

Kaplin, W., & Lee, B. (1995). *The law of higher education.* San Francisco, CA: Jossey-Bass Publishers.

Kerr, C. (2001). *The uses of the university* (5th edition). Cambridge, MA: Harvard University Press.

Kerr, C., & Gade, Marian L. (1989). *The guardians: Boards of trustees of American colleges and universities.* Washington, DC: Association of Governing Boards of Universities and Colleges.

King v. Ryerson University. (2015). *ONCA 648 (CanLII)*.

Kulchyski v. Trent University. (2001). *CanLII 11691 (ON CA)*.

Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.

Kybartas, R.P. (1996). *Ideas of the university: Towards a classification system based on ideal types* [PhD dissertation]. Toronto, ON: University of Toronto.

Jaffer v. York University. (2010). *ONCA 654 (CanLII)*.

Johnson, L. (March 29, 2016). UBC faculty association votes 'no confidence' in board of governors. *CBC News*. Retrieved February 8, 2018, from http://www.cbc.ca/news/canada/british-columbia/ubc-faculty-no-confidence-board-governors-1.3510995.

Jones, G. (2013). The horizontal and vertical fragmentation of academic work and the challenge for academic governance and leadership. *Asia Pacific Education Review*, *14*(1), 75–83

Lam v. University of Western Ontario. (2015). *ONSC 1642 (CanLII)*.

Lobo v. Carleton University. (2012). *ONCA 498*.

London Humane Society (Re). (2010). *ONSC 5775, [2010] OJ No 4827 (Ont Sup Ct J)*.

Lowe, J., & Lennon, C. (2015). Beyond research. In T. Shanahan, M. Nilson, & L. Broshko (Eds), *The handbook of Canadian higher education law* (pp. 213–231). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Meinhard and Salmon. (1928). *164 N.E. 545*.

Meinhard v. Salmon. (1928). *249 N.Y. 458, 463-4, 164 N.E. 545*.

McKinney v. University of Guelph et al. (1990). *3 S.C.R. 229*.

Minow, M. (2013). Archetypal legal scholarship: A field guide. *Journal of Legal Education*, *63*(1) 65–69.

Minow, N. (2016). The rise and (precipitous, vertiginous, disastrous) fall of the fiduciary standard. In R. LeBlanc (Ed.), *The handbook of board governance: A comprehensive guide for public, private and not-for-profit board members* (pp. 239–249). Somerset, NJ: Wiley & Sons.

Murray, The Honourable John C. (2016). *Collegial governance at Nipissing University: Shared challenges and responsibilities*. A report of the Special Governance Commission. Retrieved February 2, 2018, from http://www.nipissingu.ca/about-us/governance/Documents/Collegial-Governance-at-Nipissing-University.pdf.

Ontario Ministry of Education and Training. (1993). *Broadhurst report–university accountability: A strengthened framework.* Toronto, ON: Task Force on University Accountability.

Ontario Public Guardian and Trustees v. AIDS Society for Children (Ontario). (2010). *OJ No. 2170, [2001] OTC 432 (Ont Sup Ct.J).*

Ontario Society for the Prevention of Cruelty to animals v. Toronto Humane Society. (2010). *ONSC 608, [2010] OJ No. 279 (Ont Sup Ct.J.).*

Pathak v. Hindu Sabha. (2004). *OJ No. 1981, [2004] OTC 406 (Ont Sup Ct J).*

Post-Secondary Learning Act. (2003). *SA 2003, c P-19.5.*

Pridgen v. University of Calgary. (2012). *ABQB 139 Can LII.*

Re Smith and Fawcett Ltd. (1942). *1All ER 542, [1942] Ch. 304* at p. 306.

RWSDU v. Dolphin Delivery Ltd. (1986). *2 SCR 573.*

Shanahan, T. (2015a). The legislative framework of postsecondary education in Canada. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 3–17). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Shanahan, T. (2015b). The role of the federal government. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 17–37). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Shanahan, T. (2015c). The role of the provincial government. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 37–57). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Shanahan, T. (2015d). Provincial regulation of postsecondary education. In T. Shanahan, M. Nilson, & L. Broshko (Eds.), *The handbook of Canadian higher education law* (pp. 301–337). Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Shanahan, T. (2017). Educators' negligence and liability. In D. Young (Ed), *Education law in Canada: A guide for teachers and administrators* (pp. 151–187). Toronto, ON: Irwin Law.

Shanahan,T., Nilson, M., & Broshko, L. (Eds.). (2015). *The handbook of Canadian higher education law.* Montréal, QC, & Kingston, ON: McGill-Queens University Press.

Thompson, R. (2008). The story of Meinhard v. Salmon and Fiduciary Duty's Punctilio. *Vanderbilt University Law School Public Law and Legal Theory Working Paper Number* 08-44. Retrieved February 13, 2018, from http://ssrn.com/abstract=1285705.

University of Concordia News. (March 18, 2011). *Members of external governance review committee named*. Retrieved June 25, 2018, from http://www.concordia.ca/cunews/main/stories/2011/03/18/concordia-university-names-members-of-external-governance-review-committee.html.

The Constitution Act. (1982). *Schedule B to the Canada Act 1982 (UK), 1982, c.11.* Retrieved Feb 20, 2018, from https://www.canlii.org/en/ca/laws/stat/schedule-b-to-the-canada-act-1982-uk-1982-c-11/latest/schedule-b-to-the-canada-act-1982-uk-1982-c-11.html

The University of Ottawa Act. (1965). *S.O. 1965, C.137.*

The University of Toronto Act. (1971). *As amended by 1978, Chapter 88 December 15, 1978.* Amended [Subsection 2(4) repealed] June 4, 2015.

University Act. (1996). *R.S.B.C. 1996, c. 468* (Consolidation last updated by the Office of the University Counsel on 28 June 2017).

University of Western Ontario. (1996). *Final report: Review of the UWO Act, report and recommendations of the joint board/senate committee to review the UWO Act.* Retrieved June 27, 2018, from https://www.uwo.ca/univsec/about/final_report/final_report_review.html.

Welling, B. (1991). *Corporate law in Canada: The governing principles*. Toronto, ON: Butterworths.

Wilson, M. (Chair). (2015). *Report of the Governance Review Task Force*. London, UK: UWO. Retrieved January 27, 2017, from https://www.uwo.ca/univsec/pdf/Report_of_the_Governance_Review_Task_Force.pdf.

Winders, J. (April, 2015). Senate votes down non-confidence motions. *Western News*. Retrieved February 8, 2018, from http://news.westernu.ca/2015/04/senate-votes-non-confidence-motions/.

York University Act. (1965). *York University Act, s.10.*

International Journal of
Education Policy & Leadership

IJEPL
Volume 14(9)
2019

School Districts' Contributions to Students' Math and Language Achievement

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Abstract Conducted in British Columbia, this mixed-methods study tested the effects of nine district characteristics on student achievement, explored conditions that mediate the effects of such characteristics, and contributed to understandings about the role school-level leaders play in district efforts to improve achievement. Semi-structured interview data from 37 school administrators provided qualitative data. Quantitative data were provided by the responses of 998 school and district leaders' in 21 districts to two surveys. Student achievement data were district-level results of elementary and secondary student provincial math and language test scores. All nine district characteristics contributed significantly to student achievement. Three conditions served as especially powerful mediators of such district effects. The same conditions, as well as others, acted as significant mediators of school-level leader effects on achievement. This is among the few large-scale mixed-methods studies identifying characteristics of districts explaining variation in student achievement.

Keywords School districts effects; School Leadership: District Improvement Processes

Victoria Handford & Kenneth Leithwood (2019). School Districts' Contributions to Students' Math and Language Achievement. *International Journal of Education Policy & Leadership 14*(9). URL: http://journals.sfu.ca/ijepl/index.php/ijepl/article/view/863 doi: 10.22230/ijepl.2019v14n9a863

Introduction

This mixed-method study is part of a larger long-term project aimed at better understanding how school districts contribute to the success of their students. After Andrea Rorrer, Linda Skryla, and James Scheurich (2008), a school district is defned as "an organized collective constituted by the [superintendent]; the [elected board of trustees]; the central office-level administration; and principals, who collectively serve as critical links between the district and the school for developing and implementing solutions to identified problems" (p. 311).

Supported by the British Columbia School Superintendents' Association, this study builds on the methods and results of research recently completed in Alberta (Bedard & Mombourquette, 2015; Brandon, Hanna, Morrow, Rhyason, & Schmold, 2013) and Ontario (Leithwood & Azah, 2016; Leithwood & McCullough, 2016). Testing the efficacy of nine district Characteristics identified in some of this previous work, as well as deepening understandings about the profile of each district Characteristic in its most effective state, were among the primary objectives for the study. Results of this mixed-methods study help answer four broad questions. The qualitative portion of the study asked:

1. How do school leaders understand the contribution made by their district's characteristics to the success of their work in schools?

The quantitative portion of the study addressed three questions:

2. What characteristics of districts, under the control of districts themselves, explain significant amounts of variation in student learning?
3. How do such characteristics interact with conditions found in schools, classrooms, and families to achieve their effects on student learning?
4. What role do school-level leaders play in district efforts to improve student learning?

Framework

Leithwood developed the framework of this study, which is a replication of work completed in Ontario. The framework consists of nine characteristics of high-performing districts with both direct and indirect effects on students' math and language achievement. School leadership and four categories of conditions (13 specific Conditions in total) with significant direct effects on student achievement mediate the indirect effects of the nine district characteristics on student achievement.

District characteristics

Nine district characteristics serving as independent variables for this study are briefly summarized in this section (see Figure 1). Further information about each variable can be found in an extensive review of original empirical evidence about what districts do to close achievement gaps among their students (Leithwood, 2010), as well as more recent related publications, including Tina Trujillo (2014), Karen Louis

(2015), Kenneth Leithwood (2013), and Kenneth Leithwood and Catherine McCullough (2016; 2015).

Figure 1. District characteristics

District characteristics	Specific features
1. Broadly shared mission, vision and goals founded on ambitious images of the educated person	Ensure that a transparent visioning/direction-setting process is carried out Consult extensively about district directions as part of the process Spend sufficient time to ensure that the mission, vision and goals (directions) of the system are widely known, understood and shared by all members of their organizations Articulate, demonstrate and model the system's goals, priorities, and values to staffs when visiting schools Embed district directions in improvement plans, principal meetings and other leader-initiated interactions
2. Coherent instructional guidance	Adopt a service orientation toward schools Align curricular goals, assessment instruments, instructional practices and teaching resources Insist on ambitious goals for teaching and learning Advocate for attention to the best available evidence to inform instructional improvement decisions Expect schools to focus on needs of individual as well as groups of students Encourage staff to be innovative within the boundaries created by the district's instructional guidance system
3. Deliberate and consistent use of multiple sources of evidence to inform decisions	Use data from all available sources to assist decision making in the central office Insist on the use of the best available research and other systematically collected evidence to inform decisions wherever possible Encourage collaboration in the interpretation and uses of data Build system's capacity and disposition for using systematically collected data to inform decision-making Provide training for principals and staff on the use of data and research literature to sustain decision-making Model evidence-informed decision-making to school staffs Ground interactions with, and advice to, trustees in sound evidence
4. Learning-oriented organizational improvement processes	Require improvement processes to be evidence-informed Set a manageable number of precise targets for district school improvement Include school-level leaders in decisions about district-wide improvement decisions Create structures and norms within the district to encourage regular, reciprocal and extended deliberations about improvement progress within and across schools, as well as across the system as a whole. Develop and implement district and school improvement plans interactively and collaboratively with school leaders; Create structures to facilitate regular monitoring and refining of improvement processes Acknowledge Provincial goals and priorities in district and school improvement initiatives Allow for school-level variation in school improvement efforts

Figure 1. (continued)

District characteristics	Specific features
5. Professional development for all members	Provide extensive PD opportunities for both teachers and school-level leaders, most of it through some form of learning community or on-the-job context Use internal system networks as central mechanism for the professional development of school-level leaders Align the content of professional development with the capacities needed for district and school improvement Require individual staff growth plans to be aligned with district and school improvement priorities Hold staff accountable for applying new capacities by monitoring the implementation of school improvement plans
6. Alignment of budgets, personnel policies/ procedures and uses of time with district mission, vision and goals	Align the allocation of resources with district and school improvement goals Align personnel policies and procedures with the district's improvement goals Align organizational structures with the district's improvement goals Provide principals with considerable autonomy in the hiring of teaching staff Expect and assist schools to allocate instructional resources equitably
7. A comprehensive approach to professional leadership development	Use the best available evidence about successful leadership as a key source of criteria used for recruiting, selecting, developing and appraising school and district leaders Match the capacities of leaders with the needs of schools Provide prospective and existing leaders with extended opportunities to further develop their leadership capacities Develop realistic plans for leadership succession Promote co-ordinated forms of leadership distribution in schools
8. A policy-oriented district of trustees	Encourage trustees to focus on district policy and the achievement of the district's goals and priorities (policy governance model of trustee practice) Encourage participation of the elected district in setting broad goals for its use in fulfilling its policy-setting and policy-monitoring responsibilities Regularly report to the district progress in achieving these broad goals
9. Productive working relationships with staff and stakeholders	
Internal district and school staffs	Develop communication systems and processes throughout the district to keep all members informed Develop open, accessible and collaborative relationships with principals Encourage reciprocal forms of communication with and among schools Promote high levels of interaction among all school leaders, driven by a shared sense of responsibility for system improvement

Figure 1. (continued)

Internal district and school staffs (continued)	Create structures to facilitate reciprocal forms of communication, resulting in deeply interconnected networks of school and system leaders working together on achieving the system's directions Buffer schools from external distractions to the district's and schools' priorities and goals
Local community groups	Routinely consult with community groups on decisions affecting the community Encourage staff to participate directly in community groups Demonstrate the importance the district attaches to its community connections
Parents	Hold schools accountable for developing productive working relationships with parents Influence the work of schools toward fostering improved educational cultures in the home environments of their students
Ministry of Education	Develop/maintain high levels of engagement with provincial department/ministry of education Engagement with department/ministry is frequently proactive rather than only responsive Make flexible, adaptive use of provincial initiatives and frameworks, ensuring that they contribute to, rather than detract from, accomplishing system goals and priorities.

Creating a *broadly-shared mission, vision and goals for students* entails a district engaging all key stakeholders in building a shared sense of direction for the district, a process that includes many elements of strategic planning (e.g., Berson, Da'as, & Walman, 2015) and aimed at identifying ambitious outcomes for students. When a district focuses its curriculum standards and frameworks, instructional practices (Joyce & Weil, 2008), and professional development emphases and assessment tools on that vision, it is providing *Coherent instructional guidance. Deliberate and consistent use of multiple sources of evidence to inform decisions* include districts' uses of systematic evidence from multiple sources to monitor progress, revise strategies, and encourage data-based decision throughout the organization (Datnow, Park, & Wohlstetter, 2007; Honig & Venkeswaran, 2012).

Two of the district characteristics are explicitly about the individual and collective learning of staff. *Learning-oriented organizational improvement processes* create structures and norms within districts to encourage regular, reciprocal, evidence-based deliberations about improvement progress within and across schools, as well as across the system as a whole. *Professional development for all members* is extensive, aligned with district visions, guided by individual learning plans, and are often job-embedded. Such learning often takes place in collaborative peer structures such as networks (Leithwood, 2018), while more formal approaches are sustained over time, anchored to practice, use active learning strategies, and are coherent with other learning activities (Sun, Penual, & Frank, 2013; Garet, Porter, Desimone, Birman, & Suk Yoon, 2001). This vision-oriented learning is extended and reinforced by the *Alignment of budgets, personnel policies/procedures, and uses of time with district mission, vision, and goals.*

Professional leadership development across high-performing districts (those at least moderate to large in size) is guided by comprehensive policies and programs for re-

cruiting, pre-appointment professional development (PD), selection, appointment, post-appointment learning opportunities, evaluation (Davis, Darling-Hammond, LaPoint, & Meyerson, 2005), and succession planning. The best available evidence about successful leadership shapes these policies and programs. In particular, recruitment, selection, and appointment policies include strong provisions protecting against gender and racial biases. District governance is provided by a *Policy-oriented board of trustees* (Land, 2002), which forges strong internal bonds as a first priority, without neglecting the development of relationships with relevant external agencies and individuals (Saatcioglu, Moore, Sargut, & Bajaj, 2011). *Productive working relationships* are developed within the senior district leadership team, between school and district staffs, as well as with external stakeholders, including the local community and the government.

Mediating variables

A mediating variable is a variable that helps to explain the relationship(s) between a dependent variable and an independent variable. The mediating variables in this study were School Leadership and four categories of conditions (encompassing 13 conditions in total) labelled Rational, Emotional, Organizational, and Family conditions.

School leadership

A conception of effective school leadership developed by the *British Columbia Principals' and Vice-Principals' Association* was adopted for the study. This conception includes four leadership "domains"—Stewardship, Instructional Leadership, Relational Leadership, and Organizational Leadership—along with nine related standards of practice, each of which also specifies leadership practices associated with each standard. For example, the Stewardship domain includes two standards including *Values, Vision, and Mission* and *Ethical Decision-Making*. Practices associated with the *Values, Vision, and Mission* standard include contributing to staff's sense of overall purpose; helping clarify the reasons for implementing school improvement initiatives; providing useful assistance to staff in setting short-term goals for teaching and learning; and demonstrating high expectations for teachers' work with students. A complete description of BCPVPA's account of school leadership can be found at the BCPVPA website. The primary mediator is School Leadership.

Four categories of mediating conditions

As well as School Leadership, four categories of conditions served as mediators in this study. Substantial evidence suggests that these conditions have significant direct effects on student learning and can be influenced by leadership.

Detailed descriptions of these conditions, including their effects on student achievement, can be found in Kenneth Leithwood, Sarah Patten, and Doris Jantzi (2010); (see also Leithwood, Sun, & Schumacker [2018]; Leithwood, Sun, & Pollock [2017]). A very brief account of these mediating conditions is provided in this section of the article, including examples of evidence supporting their significant effects on students.

The Rational category of conditions reflects the knowledge and skills of school staff members about curriculum, teaching, and learning—the technical core of schooling—

along with features of the school culture which directly support the technical core. Four individual conditions are in this category, including Classroom Instruction (Hattie, 2009; Marzano, Pickering, & Pollock, 2001), Teachers' Use of Instructional Time (Tornroos, 2005; Wang, 1998), Academic Press (Cooper, 2018; Hoy, Hannum, & Tschannen-Moran, 1998), and Disciplinary Climate (Ma & Crocker, 2007; Willms & Ma, 2004).

A second category, Emotional conditions, includes those feelings, dispositions, or affective states of staff members (both individual and collective) shaping the nature of their work, including Collective Teacher Efficacy (Bandura, 1993; Tschannen-Moran & Barr, 2004), Teacher Trust in Others (Forsyth, Barnes, & Adams, 2006; Goddard, Tschannen-Moran, & Hoy, 2001), and Teacher Commitment (Hulpia, Devos, & Keer, 2009).

A third set of Organizational conditions includes features of schools that structure the relationships and interactions among organizational members. Among the most relevant of these conditions are Safe and Orderly Environments (Bucher & Manning, 2010), Collaborative Cultures and Structures (Camburn & Won Han, 2017; Lomos, Hofman, & Bosker, 2011), as well as the Organization of Planning and Instructional Time (DuFour & Fullan, 2013; Sun, Przybylski, & Johnson, 2016).

The fourth and final category, Family conditions, encompasses three variables which, taken together, represent the educational cultures in the home that contribute most to students' success at school. Fostering development of the knowledge and dispositions families need to productively work with schools in the interests of their children's success include these conditions: Parent Expectations for Children's Success at School (Jeynes, 2005), Forms of Communication among Parents and Children in the Home (Epstein, Sanders, Simon, Salinas, Jansorn, & Van Voorhis, 2002; Jeynes, 2005), and Parents Social and Intellectual Capital about Schooling (Davies & Rizk, 2018; Ferlazzo, 2011). Only the aggregate result of these three Family conditions was examined in this study.

Methods

This was a mixed-methods study, including the collection and analysis of survey and student outcome data. Mixed-methods research combines features of both quantitative and qualitative methods, helping to overcome the limitations of each method and adding a depth and breadth of understanding (Johnson, Onwueghuzie, & Tuner, 2007) to what is possible with the use of only quantitative or qualitative methods.

Measures

Qualitative interviews

The interview protocol used in this study consisted of a brief overview of the study and the purpose for the interview followed by 10 sets of questions. The first question was a broad and largely open-ended question about what respondents' districts had done in the past year that was most and least helpful for respondents and their staffs. Each of the remaining nine sets of questions was about the status, in the respondent's district, of one of the nine District Characteristics included in the study framework, along with perceptions of how each of these Characteristics influenced (positively or negatively) the improvement efforts in respondents' schools.

Quantitative surveys

Two surveys were used to collect data from school and district leaders. The 95-item *Leading and Teaching in Schools Survey*, completed only by school-level leaders, provided data about School Leadership and the other 12 mediating conditions. While largely based on an instrument used in studies recently carried out in both Ontario[1] and Texas,[2] the scale measuring School Leadership was replaced by a new scale reflecting the BC Principals' and Vice-Principals' Association's leadership framework. The 94-item *BC District Survey* collected data from both school and district leaders about the status of the nine district characteristics. This survey was adapted from an instrument used in an earlier study (Leithwood, 2010; Leithwood & Azah, 2016).

Provincial test data were used as measures of student achievement in both math and language. Results of the Foundation Skills Assessment represented student achievement in Mathematics and Language for Grades four and seven.[3] Secondary student achievement was estimated using results from Grades 10 and 12 English tests and Grade 10 Math tests (both Foundations and Pre-calculus, as well as Apprenticeship and Workplace. Two estimates of achievement were used for all cases: the latest available one-year provincial assessment, as well as a change-over-five-year score.

Sample

Quantitative

The unit of analysis for the qualitative portion of the study was the district. British Columbia's publicly funded school system includes 60 districts, of which 21 provided sufficient numbers of responses to be included in the study, a 35 percent response rate. Across the 21 participating districts, 610 school administrators responded to the *Leading and Teaching in Schools Survey* (an average of 29 respondents for each district), while 388 district and school administrators responded to the *BC District Survey* (an average of 18 respondents for each district).

To qualify for inclusion in the quantitative portion of the study, the number of responses to each of the two surveys from a district had to closely approach the number required to be statistically representative at the .05 level of probability. This number varied from one district to another, reflecting differences in the population of potential respondents in each district. Close approximations to the ideal size were accepted to retain as much data as possible, but responses from nine districts agreeing to be part of the study failed to meet our criterion.

The first survey was administered in the fall of 2016, the second in the winter of 2017. Data collection often occurred during a regularly scheduled meeting of district and school administrators. Attendees were divided into two groups. One group, including only principals and vice principals, responded online to the *Leading and Teaching in Schools Survey*. The second group, including both district and school-level administrators, responded online to the *BC District Survey.* Each survey required about 15 minutes to complete.

Data analysis

Qualitative interviews

Digital voice recordings were made of the 37 hour-long individual interviews. These

recordings were transcribed and then summarized in tabular form, including a precis of response to each of the interview questions. Axial or thematic coding was then conducted with interview responses about each district characteristic to identify key ideas about the status of district practices and their value for the work of school leaders. These data were then summarized in the results section of this article as responses to question 10, "How do school leaders understand the work of their districts and its helpfulness to them?"

Quantitative surveys

Because the district was the unit of analysis, the sample size for the study (21) was too small to permit the use of some of the more powerful statistical tests of relationships, such as Structural Equations Modeling**.** Scale reliabilities, means, and standard deviations of scales and individual survey items were calculated. Correlations (Pearson r) were used to assess the strength of direct linear relationships among variables (e.g., the relationship between district Characteristics and student achievement). In this article, Pearson correlations are treated as Effect Sizes, and their importance is judged using common rules of thumb proposed by Jacob Cohen (1988) and John Hattie (2009): less than 0.1 = no effect, 0.1 to 0.3 = small effect, 0.3 to 0.5 = intermediate effect, and larger than 0.5 = large effect. Both variability and (indirectly) sample size can influence the size of correlations, and these factors influence the interpretation of results in this study.

The strength of causal claims based on correlational evidence depends, in large part, on the quality of underlying theory and/or previous evidence. The nine district characteristics were derived from extensive literature reviews and each characteristic reflects one or more social science theories (not described in this article). A 2010 Ontario study (Leithwood and Azah, 2017), replicated and extended by the current study, provided evidence of the total effects of these characteristics on student achievement. Each of the 13 mediating conditions has been the subject of varied and quite extensive research demonstrating its effects on several different types of student outcomes. While correlations are relatively weak methods for testing causal claims, the theory and evidence on which the framework guiding this study was based is relatively robust. Causal language is used to report correlational results in subsequent sections of this article.

A relatively new method, the calculation of "Power Indices" (Sun & Leithwood, 2016) was used to estimate indirect relationships, such as the relationship between district characteristics and student outcomes, mediated by conditions. This method entails the combination of correlations among three sets of variables, illustrated in the report of results below. For this study, Power Indices were used instead of regression mediation analysis (MacKinnon, Fairchild, & Fritz, 2007), in part because they require little statistical background to interpret, and in part because the limited evidence available to this point suggests that they produce essentially the same results (data from the parallel Ontario study was analyzed using both power indices and mediation regression analysis with few differences in results). The significance of Power Indices was interpreted using the same standards applied to Effect Size statistics, as outlined above.

The calculation of Power Indices responds to a wicked practical problem (Sun & Leithwood, 2016) faced by leaders attempting to determine the most productive focus for their own improvement efforts. While there is a considerable body of evidence about the effects on students of a wide range of mediating variables—see, for example, John Hattie's (2009) synthesis of this evidence—there is very little evidence about how likely it is that leaders' efforts will actually improve the status of these variables. For example, a compelling body of evidence indicates that Teachers' Trust in Others has important effects on student achievement, but what evidence there is suggests that at least the typical practices of school leaders have little influence on it (e.g., Sun & Leithwood, 2017).

Qualitative results

The district characteristics

Interviews were limited to questions about the status of each of the nine district Characteristics in respondents' districts. This report of results is further limited to descriptions of the status of those Characteristics when principals and vice-principals perceived them to be helpful to their school improvement work**.** Because most interviewees claimed little knowledge about the work of trustees in their districts, the subject of one of the Characteristics, only eight Characteristics are actually described in this section. While this restriction of the sample to principals and vice principals only is clearly a limitation on what can be deduced about the nine district characteristics in their most productive form, school leaders' perspectives are undeniably critical.

Conventional forms of reporting interview data require significant direct quotations to illustrate main ideas. These conventions, however, pose a significant challenge to the acceptable length of a journal article about the results of a mixed-methods study. This is addressed here by limiting commentary to a synthesis of interview results, absent quoted material.

Broadly shared mission, vision, and goals for students

Evidence from the interviews indicated that highly participative approaches to building a district vision, alongside the alignment of school goals and processes to district goals and a substantial amount of staff buy-in to the vision, had a significant influence on the nature and direction of improvement efforts in schools.

Coherent instructional guidance

Central office efforts to provide coherent instructional guidance were generally viewed as useful by school leaders when there was some choice available about which of those efforts in which to participate. In most districts, interviewees indicated positive effects on instruction when there was access to professional development linked to the improvement of instruction. Also useful to school leaders were district-established processes for improving instruction that encouraged innovative teaching practices based on research. Productive forms of instructional guidance also included the provision of financial support for schools from their district.

Deliberate and consistent uses of multiple sources of evidence to inform decisions

Districts were helpful to schools, interviewees indicated, when they had data warehouses and when they provided assistance to schools in accessing and interpreting data about their own schools. Districts were also helpful when they included one or more staff members with evidence-related expertise who could provide guidance to schools about the interpretation and use of data. District-developed assessment teams able to work with schools were viewed as important resources. But district size figured prominently in the extent of access to such expertise. Most of that expertise resided in large districts and, according to interviewees, small districts were forced to leave schools on their own to figure out how to use available evidence.

Learning-oriented organizational improvement processes

The most sophisticated approach to organizational improvement was described by interviewees from one district that required school improvement plans to take the form of a "theory of action." At least conceptually, a theory of action consists of a series of "if-then" propositions (e.g., if our Grade 4 teachers have opportunities to view model lessons of especially effective math instruction, then they will begin to improve their own instruction in math; if our Grade 4 teachers improve their instruction in math, then our math results on the Foundation Skills Assessment will increase. A school improvement plan designed as a theory of action would include a large number of such propositions so that each component of the improvement strategy is linked to the end goal (some positive impact on students), however indirectly. Each proposition needs to be justified with evidence or, if evidence is lacking, at least logic or theory. Such an approach demands a high level of discipline in the creation of a plan and bringing such discipline to a plan requires considerable learning in order to justify the plan's propositions.

Also relatively sophisticated, were approaches to improvement by districts that began with the development of a district strategic plan followed by an expectation that schools would align their own improvement goals with district goals included in that plan.

Professional development for all members

In comparison with much of the research evidence about effective PD, some districts were "doing it right." Where this was true, PD was relatively plentiful, sufficiently comprehensive to allow for differences in PD needs among teachers and administrators, and carefully aligned to the capacities that staffs would need to move the district and school improvement agenda forward.

A substantial proportion of this PD was "job embedded," allowing opportunities for participants to develop the knowledge and skills needed to successfully implement new practices in their own school and classroom contexts. At the school level, professional development was aimed more at general capacity building. When PD was primarily directed by the district, it was usually aligned with district and school improvement priorities. Professional education consultants were used in one district to support both administrators and teachers in their professional learning.

Interviewees said that because the same educators had been used in this district over a three-year period this ensured continuity. Such district support systems brought some alignment and common direction to professional development efforts, which was very helpful when administrators and staff were all working together.

Budgets, structures, personnel policies and procedures, and uses of time are aligned with the district's mission, vision, and goals

Most interviewees believed their school and district budgets were significantly aligned; several pointed, for example, to the long history of declining district budgets that resulted in serious shortfalls in facilities and maintenance in order to continue providing the resources needed in classrooms for students. Most interviewees also spoke about the alignment of personnel resources with district (if not school) priorities for contributing to student success. Districts that hired teachers were considered to be doing a very good job at selecting effective teachers. Staff required to support key priorities for district improvement were hired. Alignment of the budget to the school improvement plan and the alignment of school activities to the district plan showed the importance of district-wide and school-wide continuity. The majority of the interviewees noted that if alignment was clear, then everybody was "on the same page," and it sent a clear message about the importance of an initiative or an activity.

Overall, respondents believed that Alignment made a big difference to work in schools and that the elements of the organization that are misaligned really stand in the way of effective education—improvement efforts "grind" to a halt.

Comprehensive approaches to leadership development

This characteristic is about how districts engage in leadership recruitment, selection, initial preparation, and both the professional development and performance appraisal of incumbent leaders. Effective ways of encouraging people to consider assuming formal school leadership positions were both indirect and direct. Interviewees pointed to the importance of being encouraged (often multiple times) by others (e.g., principals and superintendents) to consider the move from teacher to administrator, and the informal observations or conversations that helped them to better understand the nature of the job. Direct encouragement to consider formal leadership roles included being asked to be part of a school or district committee for the experience and being "tapped on the shoulder," a process with considerable influence, according to the available research.

While selection and hiring processes were reported as very uneven, interviewees valued processes that included significant data collection about applicants and processes that were well known to applicants, including the qualities needed to be successful. Also valued were opportunities for both internal and external candidates to apply and some process, such as an interview, to assess the abilities and dispositions of candidates. These processes worked best when implemented by a selection committee that included representatives from multiple professional and support roles in the district.

Once placed in a principal or vice-principal position, especially valuable support was attributed to mentoring experiences, close working relationships with a district supervisor, a variety of formal professional development programs mostly available through provincial associations, and participation in a network of colleagues willing to provide advice and support on an "as needed" basis.

Relationships

According to most of the interviewees, the current status of relationships among their district office leaders was quite good. Good, productive, or ideal relationships among senior district leaders were characterized as collaborative, with a collective focus on the districts' vision and goals or "moral purpose." Such relationships were a consequence of high levels of trust, transparency in decision-making, considerable respect for one another, and a sense of being part of a team. When district leaders had good relationships, school-level leaders heard the same messages from all members of the district team.

Most interviewees were quite positive about the quality of the relationships they had with their district colleagues. High-quality relationships with district colleagues, according to the interviewees, meant a collaborative (rather than top-down) approach to decision-making, the ease of access to district leaders for consultation, and a respectful disposition on the part of senior leaders toward the concerns, perspectives, and preferences of school-level leaders. Relationships were also judged to be of high quality when district leaders provided ample support for the work of school-level leaders and when school-level leaders were clear about who to communicate with in the district office about challenges they encountered.

Interviewees were asked about the advice and support they received from their district colleagues about school/parent relationships. Some interviewees described such advice and support as weak to non-existent. Others described receiving specific advice, with most focusing on building positive relationships with parents and the community and involving them in decision-making.

Quantitative results

Descriptive statistics

Results of the BC District Survey

All scales in the survey measuring the current status of the nine district Characteristics, except the Relationships scale, exceeded the commonly agreed on acceptable standard for reliability of .70 (Nunnery & Bernstein, 1994) by a significant margin. The Relationships scale was an aggregate of sub-scales measuring, separately, relationships among district leaders, between district and school staffs, relationships with parents, and relationships with community groups. The low reliability of this aggregate scale likely means that these different sets of relationships are not well aligned (some can be weak while others are strong).

Each of the nine district characteristics received mean ratings above the midpoint on the four-point response scale. Highest ratings were awarded to *Mission, vision, and goals* (m = 3.12) and the *Extent of district alignment* (m = 3.00). The lowest rated was *Uses of evidence* (m = 2.48). Standard deviations for all characteristics were relatively

small, indicating considerable uniformity in ratings among respondents. An exploratory factor analysis (details not reported) conducted on this instrument found that all items loaded on nine factors, and almost all items conceptually associated with each district characteristic loaded as expected.

Results of the Leading and Teaching in Schools Survey

This survey measured School Leadership and 12 other mediating conditions. All scales in this survey exceeded accepted standards of reliability. School Leadership and the other mediating conditions received mean ratings well above the midpoint on the five-point response scale. The results of an exploratory factor analysis (details not tabled) conducted on items in this survey closely reflected the conception of variables on which the instrument was developed for half of the these variables. The distribution of items measuring the remaining variables was not readily interpretable. Given the relatively high reliabilities of all 13 scales, subsequent analyses retained the original conception of item assignment.

Effects of mediating conditions on student achievement

At the elementary school level, three of the mediating conditions had intermediate to large effects on achievement, including Uses of Instructional Time (r = .37 with Grade 7 Math), Organization of Planning and Instructional Time (r = .47 and r = .60 with Language and Math, respectively), and Collaborative Cultures and Structures (r = .45 with math achievement).

At the secondary level, six of the mediating conditions had intermediate to large effects on achievement. Of the six, only Disciplinary Climate had significant effects (r = .62) on Grades 10 and 12 English, and only Organization of Planning and Instructional Time had significant effects on Foundations and Pre-Calculus Math (r = .43). Grade 10 Math (Workplace and Apprenticeship), however, was influenced by four mediating conditions, including Classroom Instruction (r = .51), Teacher Commitment (r = .58), Safe and Orderly Environments (r = .38), and Family Path Conditions in aggregate (r = .42).

Effects of district characteristics

This section of results reports the effects of the nine district characteristics on mediating conditions (including School Leadership), as well as their total effects on student achievement, using the Pearson r Effect Size statistic. This section also describes, using Power Indices, the indirect effects of the nine district characteristics on student achievement.

Effects on mediating conditions including School Leadership

Eight of the nine district characteristics had at least intermediate effects on the aggregate measure of mediating Conditions (not *Professional development*): *Mission, vision, and goals* (r = .44); *Coherent instructional programs* (r = .52); *Uses of evidence* (r = .51); *Professional leadership development* (r = .43); *Alignment* (r = .44); *Elected leadership* (r = .24); *Learning-oriented improvement processes* (r = .40); and Relationships (r = .34). Influencing the largest number of individual mediating conditions were *Mission, vision,*

and goals (five Conditions), *Coherent instructional guidance* and *Uses of evidence* (four each), followed closely by *Professional leadership development* and *Alignment* (two each).

Six district characteristics had meaningful though small effects on School Leadership (aggregate), including *Coherent instructional guidance* (r = .25), *Uses of evidence* (r = .32), *Professional development* (r = .24), *Professional leadership development* (r = .29), *Alignment* (r = .23), and *Relationships* (r = .29).

Total effects on student achievement

All nine district characteristics had meaningful effects on one or more measures of elementary student achievement used in the study. A few of these effects were weak, according to the standard used, but most were intermediate in strength. Because secondary school achievement scores were much less influenced by the District Characteristics only the elementary school results are summarized. In sum:

5. *Mission, vision, and goals* had weak effects on the one-year measure of Grade 4 language (r = .26), as well as the five-year change measure of Grades 4 and 7 math (r = .28 and .23).
6. *Coherent instructional guidance* had intermediate effects on the one-year measure of Grade 4 language (r = .31), as well as the five-year change scores in Grade 4 math (r = .29) and the one-year score in Grade 7 math (r = .41).
7. *Uses of evidence* had intermediate effects on one-year Grade 4 language achievement (r = .32), Grade 4 five-year change measures in math (r = .45), and one-year measures of Grade 7 math (r = .33).
8. *Professional development* had intermediate effects on Grade 4 one-year language scores (r = .31), as well as Grade 7 one-year math scores (r = .47).
9. *Professional leadership development* had intermediate effects on Grade 4 one-year language scores (r = .30) and Grade 7 one-year math scores (r = .40).
10. *Alignment* had intermediate effects on Grade 4 one-year language scores (r = .30) and one-year Grade 7 math scores (r = .37). This characteristic also had weak but meaningful effects on the five-year change score in Grade 4 math (r = .20).
11. *Elected leadership* had an intermediate effect on the one-year measure of Grade 7 math (r = .40).
12. *Learning-Oriented improvement processes* also had an intermediate effect on the one-year measure of Grade 7 math (r = .29).
13. *Relationships* had intermediate effects on Grade 4 one-year language scores (r = .23) and Grade 7 one-year math scores (r =.48).

Indirect effects on achievement

Power Indices were calculated to estimate indirect effects on the achievement of the nine district characteristics through each of the 13 Conditions. None of the Power Indices achieved the .20 minimum standard used to designate meaningful effect sizes. These results are different from those reported in the parallel Ontario district

study. Evidence from that study identified seven conditions through which districts influenced math achievement, including three teacher emotions (Teacher Trust, Collective Teacher Efficacy, and Teacher Commitment), as well as Safe and Orderly Environments, Collaborative Cultures, Academic Emphasis, and Classroom Instruction. However, with just one exception, the most recent Ontario results were based on Power Indices with effect sizes ranging narrowly from the minimum meaningful effect size of .20 to just .33; only the path from district characteristics to math achievement through Collective Teacher Efficacy exceeded Power Indices in the .30 range. Differences in the sample sizes of the two studies may be part of the explanation for contrasting results.

School leadership effects

This section reports the effects of School Leadership on the other mediating conditions, as well as the total and indirect effects of such leadership on student achievement. The same analytic techniques as those reported in the previous section were used to determine these effects.

Effects on other mediating conditions

This analysis of School Leadership effects examined separately, School Leadership treated in aggregate, as well as each of the four dimensions of School Leadership separately. The aggregate measure of School Leadership had intermediate to large effects on seven mediating conditions: Academic Emphasis (r = .63), Safe and Orderly Environments (r = .58), Collaborative Cultures and Structures (r = .49), Classroom Instruction (r = .70), Uses of Instructional Time (r = .56), Teacher Commitment (r = .43), and Conditions on the Family Path (r = .58). Among the four dimensions of School Leadership, Instructional Leadership had intermediate to large effects on seven Conditions, Relational on six Conditions, and Organizational Leadership on seven Conditions. Moral Leadership had intermediate-sized effects on Safe and Orderly Environments (r = .34), Academic Emphasis (r = .29), Classroom Instruction (r = .33), Uses of Instructional Time (r = 25), and Family Conditions (r = .44). School Leadership, in sum, had small to intermediate effects on the majority of the 13 mediating Conditions. These effects were a function of all four leadership dimensions.

Total effects on student achievement

Results evident from the one-year measures of achievement indicated that School Leadership (aggregate) had moderate-sized effects on Grade 4 Math (r = .37), Grade 4 Language (r = .37), Grade 7 Math (r = .32) as well as Grade 10 Math: Workplace and Apprenticeship (r = .40); these are generally smaller than the effect sizes reported in the parallel Ontario study, most of which were intermediate in size.

Of the four elementary-level one-year scores, Relational Leadership had meaningful effects on all, while both Moral and Instructional Leadership had intermediate effects on two of the four. Instructional Leadership also had a modest effect on the Grade 4 change-over-five-year math score. Organizational Leadership had weak but meaningful effects on one-year Grade 4 language (r = .21) and Grade 7 math (r = .26) scores, as well as a modest effect on the five-year change score in Grade 4 language (r = .26).

Indirect effects on student achievement

Power Indices were used to estimate the indirect effects of School Leadership on student outcomes. Using the aggregate measure of School Leadership, Power Indices identified six mediating conditions that met or exceeded the minimum meaningful effect size of .20.

14. Through Academic Emphasis, School Leadership indirectly influenced Grade 4 Language achievement (Power Indices range from .20 to .32).
15. Through the Organization of Time for Planning and Instruction, School Leadership had an influence on Grade 4 Math achievement (.20).
16. Through Safe and Orderly Environments, School Leadership had an influence on achievement in Grade 4 Math and Grade 10 Math (Workplace and Apprenticeship) (.20 to .29).
17. Through Collaborative Cultures and Structures, as well as Conditions on the Family Path (aggregate), School Leadership had a weak to moderate influence on Math achievement at both Grades 4 and 10 Workplace and Apprenticeship) (.21 to .36).
18. Through both Classroom Instruction and Teacher Commitment, School Leadership had an influence on Grade 10 Math – Workplace and Apprenticeship.

Results of the parallel Ontario study, using three achievement scores, identified most of the same paths, except for Uses of Instructional Time.

Discussion and conclusion

This study aimed to address four questions about districts and their contributions to student achievement. The first question, "How do school leaders understand the contribution made by their districts' characteristics to the success of their work in schools?" was explored through interviews with school leaders. Interview results generally reflect evidence from previous research about the status of each Characteristic in its most helpful or productive form. Nonetheless, future research aimed at deepening understanding of the nine Characteristics in their most powerful form would overcome the limitation of this interview sample of school-level leaders only. Such research would include the voices of district administrators, as well as teachers and possibly community members.

Underlying the interview evidence from school leaders about the nine district characteristics is an implicit conception of the basic building blocks of effective district organizations as, for example, participative decision-making, collaboration, teamwork, staff empowerment, shared vision, transparency, communication, and the importance of leaders at all levels engaging in "systems thinking" (Shaked & Schechter, 2016). These building blocks reflect Lee Bolman and Terrence Deal's (2017) conception of organizations as "families," as well as Gareth Morgan's (1986) metaphors of organizations as "brains" and "culture." The practical implication of this evidence for district leaders, especially if it is confirmed by additional research,

is to exploit (in the best sense) and further develop the professional expertise of staff, designing into one's district the fundamental properties of a learning organization (Watkins & Marsick, 1993).

A second question addressed by the study was about the effects on students of the nine district characteristics, associated, in previous research, with high-performing districts. All nine characteristics had meaningful total effects on at least some measures of student achievement. These results confirm the findings of the two previous studies partly replicated by this one. One practical implication of this set of results is the potential value to district leaders of using the nine district characteristics as a framework for their improvement efforts. This recommendation reflects the requirements for research use by central office staff identified by Meredith Honig, Nitya Venkateswaran, and Patricia McNeil (2018). For many districts, this would count as the sort of central office transformation—also identified by Honig and her colleagues (2010)—requiring considerable capacity development among central office leaders.

Future multi-case study research about the challenges encountered, and the outcomes realized, by districts choosing to follow this recommendation would significantly deepen understandings of the real work required of leaders using evidence-informed strategies for district-wide improvement. One case study carried out in the same provincial context as this study (Turner & Gordon, 2018), offers an especially robust example of what can be learned from such research.

A third question was about School Leadership effects. There were meaningful total effects of School Leadership on several measures of elementary, but not secondary, student achievement, as well as small to intermediate effects on the majority of the mediating conditions. All four dimensions of School Leadership (curriculum, instructional, moral, and relational) contributed to these effects. The indirect effects of School Leadership on student achievement were mediated by five conditions, largely paralleling the most recent Ontario study but with weaker effects.

One reason for weaker effects might be the differences in the frameworks on which the British Columbia and Ontario measures of School Leadership were based, along with the measures themselves. However, previous evidence about effective School Leadership practices has been dominated by evidence from elementary schools. This focus on elementary school leadership is more or less, and unavoidably, reflected in the approach to leadership measured by this study. The lack of effect of such leadership on secondary students' achievement demonstrated in this study recommends that future research award much greater priority to the comparison of effective leadership practices in elementary and secondary schools (e.g., Sammons, Day, Gu, & Ko, 2011).

Finally, this article addresses the generalizability of the results about nine district Characteristics. Results of this British Columbia study largely mirror the results of the two previous studies carried out in Ontario. In addition, research in Alberta has resulted in a "Framework for School System Success" (Bedard & Mambourquette, 2015; Brandon et al, 2013) reflecting many of the nine Characteristics although they are not fully organized and labelled in the same way. As a whole, then, the case for generalizability to districts in other Canadian provincial contexts is fairly strong. The

generalizability of these results to American districts also seems promising, since the nine district Characteristics characteristics were initially identified through a review of research (Leithwood, 2010), most of which was carried out in American districts.

Notes

1. This work was part of the Leading Student Achievement: Networks for Learning project annual evaluations.
2. See Leithwood, Sun, and Schumacker, 2018.
3. Foundation Skills Assessment results were used for the study in the face of controversies in the province, at the time, about the validity and reliability of these results. The authors do not adopt a position in the controversies. But possible challenges to the reliability and validity of Foundation Skills Assessment data could be viewed as one limitation of the study.

Website

British Columbia Principals' and Vice Principals' Association, https://bcpvpa.bc.ca/

References

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117–148.

Bedard, G., & Mombourquette, C. (2015). Conceptualizing Alberta district leadership practices: A cross-case analysis. *Leadership and Policy in Schools, 14*, 233–255.

Berson, R., Da'as, R., & Waldman, D. (2015). How do leaders and their teams bring about organizational learning and outcomes. *Personnel Psychology*, *68*(1), 79–108.

Bolman, L.G., & Deal, T. (2017). *Reframing organizations: Artistry, choice and leadership*. New York, NY: Wiley.

Brandon, J., Hanna, P., Morrow, R., Rhyason, K., & Schmold, S. (2013). *The Alberta framework for school system success*. Edmonton, AB: The College of Alberta School Superintendents.

Bucher, K., & Manning, M. (2010). Creating safe schools. *The Clearing House: A Journal of Educational Strategies*, *70*(1), 55–60.

Camburn, E., & Won Han, S. (2017). Teachers' professional learning experiences and their engagement in reflective practice: A replication study. *School Effectiveness and School Improvement, 28*(4), 527–554.

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155–159.

Cooper, K. (2018). Using affective data in urban high schools: Can we equalize the graduation rate? *International Journal of Leadership in Education*, *21*(1), 104–121.

Datnow, A., Park, V., &Wohlstetter, P. (2007). *Achieving with data: How high performing school systems use data to improve instruction for elementary students*. Los Angeles, CA: Center on Educational Governance, Rossier School of Education, University of Southern California.

Davis, S., Darling-Hammond, L., LaPoint, M., & Meyerson, D. (2005). *The school leadership study: Developing successful leaders.* Stanford, CA: The Stanford Educational Leadership Institute (commissioned by the Wallace Foundation)

Davies, S., & Rizk, J. (2018). The three generations of cultural capital research: A narrative review. *Review of Educational Research*, *88*(3), 331–365.

DuFour, R., & Fullan, M. (2013). *Cultures built to last*. Bloomington, IN: Solution Tree.

Epstein, J., Sanders, M., Simon, B., Salinas, K., Jansorn, N., & Van Voorhis, F. (2002). *School, Family and community partnerships: Your handbook for action* (2nd edition). Thousand Oaks, CA: Corwin Press.

Ferlazzo, L. (2011). Involvement or engagement. *Schools, Families, Communities*, *68*(8), 10–14.

Forsyth, P., Barnes, L., & Adams, C. (2006). Trust-effectiveness patterns in schools. *Journal of Educational Administration, 44*(2), 122–141.

Garet, M., Porter, A., Desimone, L., Birman, B., & Suk Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915–945.

Goddard, R., Tschannen-Moran, M., & Hoy, W. (2001). A multi-level examination of the distribution and effects of teacher trust in students and parents in urban elementary schools. *The Elementary School Journal*, *102*(1), 3–17.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York, NY: Routledge.

Honig, M.I., Copland, M., Rainey, L., Lorton, J., & Newton, M. (2010). *Central office transformation for district-wide teaching and learning improvement*. Seattle, WA: Center for Teaching and Policy, University of Washington.

Honig, M.I., & Venkateswaran, N. (2012). School–central office relationships in evidence use: Understanding evidence use as a systems problem. *American Journal of Education*, *118*(2), 199–222.

Honig, M.I., Venkatestawaran, N., & McNeil, P. (2018). Research use as learning: The case of fundamental change in school district central offices. *American Educational Research Journal, 54*(5), 938–971.

Hoy, W.K., Hannum, J., & Tschannen-Moran, M. (1998). Organizational climate and student achievement: A parsimonious and longitudinal view. *Journal of School Leadership, 8*(4), 336–359.

Hulpia, H., Devos, G., & Van Keer, H. (2009). The influence of distributed leadership on teachers' organizational commitment: A multilevel approach, *Journal of Educational Research*, *103*(1), 40–52.

Jeynes, W. (2005). A meta-analysis of the relation of parent involvement to urban elementary school student academic achievement. *Urban Education*, *40*(3), 237–269.

Johnson, R., Onwueghuzie, A., & Tuner, L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112–133.

Joyce, B., Weil, M., & Calhoun, E. (2009). *Models of teaching* (8th ed.). Boston, MA: Pearson Education, Inc.

Land, D. (2002). Local school boards under review: Their role and effectiveness in relation to students' academic achievement. *Review of Educational Research*, *72*(2), 229–278.

Lee, M., Louis, K., &Anderson, S. (2012). Local education authorities and student learning: The effects of policies and practices. *School Effectiveness and School Improvement*, *23*(2), 133–158.

Leithwood, K. (2018). Characteristics of effective leadership networks: A replication and extension. *School Leadership and Management.* doi: 10. 1080/13632434,2018, 1470503

Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective at closing the achievement gap. *Leadership and Policy in Schools, 9*(3), 245–291.

Leithwood, K., Sun, J., & Schumacker, R. (2018, April 13–17). *How school leadership influences student learning: A test of The Four Paths model*. Paper presented at the annual meeting of AERA, New York, NY.

Leithwood, K., Sun, J., & Pollock, K. (Eds.). (2017). *How school leadership influences student learning: The Four Paths.* Dordrecht, NL: Springer Publishers.

Leithwood, K., & Azah, V. (2016). Characteristics of high performing school districts, *Leadership and Policy in Schools, 16*(1), 27–53.

Leithwood, K., & McCullough, C. (2016). Leading high-performing school districts. *Education Canada* (March), 24–29.

Leithwood, K., & McCullough, C. (2015). De-mystifying effective district leadership. *Register Report*, Fall, 28-31.

Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how leadership influences student learning. *Educational Administration Quarterly*, *46*(5), 671–706.

Lomos, C., Hofman, R., & Bosker, R. (2011). Professional communities and student achievement — a meta-analysis. *School Effectiveness and School Improvement*, *22*(2), 121–148.

Louis, K. (2015). Linking leadership to student learning: State, district and local effects. *Nordic Journal of Studies in Education, 1*(3), 3–17.

Ma, X., & Crocker, R. (2007). Provincial effects on reading achievement. *The Alberta Journal of Educational Research, 53*(1), 87–109.

MacKinnon, D.P., Fairchild, A.J., & Fritz, M.S. (2007). Mediation analysis. *Annual Review of Psychology, 58,* 593–614. doi:10.1146/annurev.psych.58.110405.085542

Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Morgan, G. (1986). *Images of organization*. London, UK: Sage Publications.

Nunnery, J., & Bernstein, I. (1994). *Psychometric theory*. New York, NY: McGraw-Hill.

Rorrer, A., Skrla, L., & Scheurich, J. (2008). Districts as institutional actors in educational reform. *Educational Administration Quarterly*, *44*(3), 307–358.

Saatcioglu, A., Moore, S., Sargut, G., & Bajaj, A. (2011). The role of school board social capital in district governance: Effects on financial and academic outcomes. *Leadership and Policy in Schools, 10*(1), 1–42.

Sammons, P., Day, C., Gu, Q., & Ko, J. (2011). Exploring the impact of school leadership on pupil outcomes: Results from a study of academically improved and effective schools in England. *International Journal of Educational Management, 25*(1), 83–101.

Shaked, H., & Schechter, C. (2017). *Systems thinking for school leaders: Holistic leadership for excellence in schools*. Dordrecht, NL: Springer Press.

Sun, M., Penual, W., Frank, K., Gallagher, H., & Youngs, P. (2013). Shaping professional development to promote diffusion of instructional expertise among teachers. *Educational Evaluation and Policy Analysis*, *35*(3), 344–369.

Sun, J.P., Przybylski, R.M, & Johnson, B. (2016). A review of research on teachers' use of student data: From the perspective of school leadership. *Educational Assessment, Evaluation and Accountability, 28*(1), 5–33. doi: 10.1007/s11092- 016-9238-9

Tornroos, J. (2005). Mathematics textbooks, opportunity to learn and student achievement. *Studies in Educational Evaluation, 31(4)*, 315–327.

Trujillo, T. (2013). The reincarnation of the effective schools research: rethinking the literature on district effectiveness, *Journal of Educational Administration*, *51*(4), 426–452.

Turner, D., & Gordon, N. (2017). *Case study of a school district visioning process and the subsequent implementation: Leading to deep and powerful school and district transformation.* Paper presented to the International Congress on School Effectiveness and Improvement, Singapore.

Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationships of collective teacher efficacy and student achievement. *Leadership and Policy in Schools*, *(3)*3, 189–209.

Wang, J. (1998). Opportunity to learn: The impacts and policy implications. *Educational Evaluation and Policy Analysis, 20*(3), 137–156.

Watkins, K., & Marsick, V. (1993). *Sculpting the learning organization*. San Francisco, CA: Jossey Bass.

Willms, J.D., & Ma, X. (2004). School disciplinary climate: Characteristics and effects on eighth grade achievement. *Alberta Journal of Educational Research, 50*(2), 1–27.


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