How Educational Leaders Conceptualise the Usefulness of Academic Research to Support their Decision-Making

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Abstract

Given the pace of their work, school administrators often find it difficult to sift through the massive volume of primary academic research produced each year to find specific pieces that might be useful to inform their practice. In response to this issue, the author developed and implemented a strategy to filter research for local relevance and distribute that research to preKindergarten-Grade 12 administrators in a mid-sized Canadian school district. This paper provides a brief description of the strategy and reports a portion of the results from a study examining the efficacy of the strategy. Since the strategy surfaced research specifically connected to local problems of practice, it was anticipated that participants would (i) see value in research, at least if it was explicitly connected to local issues, and (ii) actually consult research to inform their work. Findings included a general acknowledgement from participants that academic research has the potential to support leaders' practice. However, many noted barriers such as time, access, syntax, and relevance that made it challenging to translate research findings into actual practice. Respondents' suggestions to make academic research more useful for them are discussed.

Keywords: research use, educational decision-making, evidence-informed practice, school-based leadership, educational administration, knowledge mobilisation

Around the turn of the century, there was a confluence of unflattering commentary about educational researchers and the work they do. For example, Elliott (2001), in his call for wholesale change in the educational research paradigm, argued that research should be redirected towards the systematic development of a body of knowledge that is capable of informing the practical in-service judgments of teachers. Similarly, Slavin, in his 2002 Dewitt Wallace-Reader's Digest Distinguished Lecture, proclaimed that education was on "the brink of a scientific revolution that has the potential to profoundly transform policy, practice, and [the nature of] research [itself]" (p. 15). This revolution, he argued, would usher in profound improvements across the entire spectrum of the educational enterprise because research would be of "genuinely ... high quality and ... appropriate to inform the decisions that educators and policy-makers face" (p. 18)—implying, of course, that this was not the case at the time. About a decade later, Cooper and Levin concluded that, while there had been some progress with respect to a stronger connection between research and policy and/or practice, "the empirical evidence needed [to build researchers' credibility to practitioners] simply does not exist or is not in a format that practitioners can find or apply" (2013, p. 2).

At the same time, and, perhaps, for much longer, educators were also criticized for their reluctance to allow research to influence their practice. Often referenced in the literature as a *research-practice gap*, Cooper and Levin noted that, in the education milieu, "research is rarely the determining factor either of policy or of professional practice" (2013, p. 4).

There are many reasons for this gap. Many educators do not have ready access to the primary re-

search that might help them improve their work: "Teachers can do more or less of that they already do, but they cannot start doing something they do not know" (David & Cuban, 2010, p. 183). The time to read and translate research into meaningful information that they can use as well as the availability of resources required to implement whatever the research advocates is often insufficient or non-existent (David & Cuban, 2010). Additionally, policy makers and researchers have expected educators to implement wave after wave of educational reform initiatives claiming to be research-based, but have largely not yielded the promised improvements "has led many educators to trust their own instincts/experiences over those of others [including researchers]" (Malin, Brown, & Saultz, 2019, p. 2).

Educator training and ongoing inservice learning also contributes to the research-practice gap: "Teachers are not trained to discern sound from unsound research designs, nor to develop effective instructional interventions based on the content of the research" (Hempenstall, 2014, p. 115). Similarly, many educators believe that the problems of practice they face in administrative offices and classrooms are too complex for research to be helpful (Malin, Brown, & Saultz, 2019).

Educational systems themselves contribute, at least in part, to the width and persistence of the research-practice gap. Drawing on broad range of literature, Malin and colleagues observed that "substantial socio-cultural divides exist between those inhabiting contexts traditionally categorized as 'research production' and 'research use'" (2019, p. 2).

Regardless of the reasons for the research-practice gap, "teaching has suffered, both as a profession in search of increased community respect and as a force for improving a nation's social capital, because of its failure to adopt the results of empirical research as the major determinant of its practice" (Hempenstall, 2014, p. 113). Furthermore, there are increasing pressures to change. In fact, it seems as if the present educational zeitgeist appears to hold that "any practice *not* based upon scientific knowledge is inferior and should ultimately be banned" (Biesta, 2007, p. 3, emphasis in the original).

There is also a concomitant call cautioning researchers, policy makers, and practitioners alike that the present wide-spread focus on trying to identify "what works" puts in jeopardy important theoretical research and, at the same time, reinforces a positivistic view of educational practice – stifling practitioners' creativity and advancing a narrow definition of success. Biesta (2007) noted:

On the research side, evidence-based education seems to favour a technocratic model in which it is assumed that the only relevant research questions are questions about the effectiveness of educational means and techniques, forgetting, among other things, that what counts as "effective" crucially depends on judgements about what is educationally desirable. On the practice side, evidence-based education seems to limit severely the opportunities for educational practitioners to make such judgements in a way that is sensitive to and relevant for their own contextualized settings. (p. 5)

While there is disagreement about the extent to which research ought to influence practice, few argue that educational research is unimportant or not worthwhile. Instead, there is increasing agreement that practitioners and policymakers ought to take a more nuanced perspective about the intersection between research and practice in which research should *inform* practice rather than "direct" or "drive" it. However, finding the time to track down academic literature carrying the precise information relevant to the problems of practice they face—let alone read and apply it to their situations—can be daunting at best for K-12 administrators, even if they are predisposed to consult research to inform their practice. Thus, "the research base needs to be converted into a form that is accessible to, and useable by, [educators]" (Hempenstall, 2014, p. 115).

There is no shortage of strategies designed to narrow the research-practice gap in education. Ostensibly, they help educators and policymakers select courses of action that are worthy of their attention by presenting the scientific evidence behind their claims of effectiveness.

A plethora of organizations and institutes (e.g., What Works Clearinghouse, New Zealand Council for Educational Research, Danish Clearinghouse for Educational Research, Coalition for Evidence-Based Policy, Best Evidence Encyclopedia, Promising Practices Network, etc.) evaluate research and translate findings about instructional strategies, programs, and interventions into practitioner-friendly language.

Research-practice partnerships such as the University of Chicago Consortium for Chicago School Research, the Strategic Education Research Network, and the Carnegie Foundation's Networked Improvements Communities also try to narrow the gaps by drawing practitioners and researchers together into "long-term collaborations … organized to investigate problems of practice and solutions for im-

proving schools and school districts" (Coburn & Penuel, 2016, p. 48). This strategy assumes that "if educators were more research engaged ... teaching and learning improvements would [naturally] follow" (Malin & Keshaorao Paralkar, 2017, p. 1).

Educational knowledge brokers spearhead a third strategy to address the research-practice gap. These individuals and organizations "intermediate between communities primarily engaged in research production and those primarily engaged in practice" (Malin & Keshaorao Paralkar, 2017, p. 1), usually through an active subscription to brokerage services. Some of these services (e.g., PEN Weekly News-Blast, ASCD SmartBrief, EduWonk, The Education Gadfly) are free to subscribers, while others (e.g., *The Marshall Memo*) are fee-based. The most relevant to the present research is *The Marshall Memo* (MM). The MM is fee-based (\$50 annually) and provides subscribers with "a brief weekly summary of the best [actionable, school-based] articles" (https://www.marshallmemo.com/why.php). According to MM's website (2019), the MM does three things:

- 1. SELECTS the most helpful, practical articles from a variety of sources.
- 2. SUMMARIZES the essence of each article in clear, readable prose and presents it in weekly publication[s] that can be read in 20 minutes.
- 3. ORGANIZES all articles (more than 6,500 so far) in an online database that is searchable by topic, author, publication, and level. [emphases in the original]

In light of the uneasy relationship between academic research and educational practice, researchers are left with an important problem of the practice of our own. That is, if teachers and administrators are skeptical about and/or have trouble interpreting research as a guide to practice, how can (or should) we reach the tipping point where educators actively seek out and critically examine academic research associated with their own problems of practice and allow research findings to inform their work?

Purpose

This article reports a portion of the findings from a study of an eight-year long project called *Cultivating Knowledge Through Professional Reading* (CKPRS). The purpose of the CKPRS project was three-fold. These included:

- 1. To provide preK-12 administrators with easy access to peer-reviewed academic research aligned with and translated for local problems of practice.
- 2. To promote academic research as a foundation for professional inquiry specific to their own problems of practice and/or to inform discussions that were taking place in the district at the time.
- 3. To encourage evidence-informed practice broadly and make it more likely that they would incorporate research into their practical decision-making calculi.

A study of the extent to which CKPRS achieved all three of its objectives was conducted at the conclusion of the project. The present article focuses on participants' views regarding the following three research questions:

- 1. To what extent do educational leaders in a particular preK-12 setting believe that academic research ought to inform practice?
- 2. What does it mean to these participants to *use* research?
- 3. What factors either hinder or advance these participants' use of academic research?

Background

The CKPRS project was the subject of an authored book at the five-year mark of its eight-year run (Tunison, 2016). The book provides extensive descriptions of: (a) the setting in which the CKPRS took place, (b) my positionality within the project, (c) the literature informing the project and its component parts, and (d) all CKPRS issues published to that point. The purpose of this section, therefore, is merely to provide a brief overview of these aspects of the study to put it in context.

Setting

The CKPRS project and subsequent research associated with it took place in Prairieland School District (PSD), a medium-sized Canadian urban public school district. At the time of the study, PSD served about

25,000 students annually across 43 elementary schools (preKindergarten to Grade 8), two faith-focused semi-autonomous associate schools, one autonomous First Nations partner school, and 10 high schools (Grades 9-12).

The PSD was in the midst of unprecedented growth fueled by several community- and policy-level shifts taking place all at once. Favourable provincial and federal immigration policies attracted a major influx of students from families of newcomers to Canada. Rural depopulation—particularly of Indigenous families—as well as a cohort of students with special needs that was growing in both absolute numbers and complexity of need, also contributed considerably to the increasingly diverse district population. Second, like many cities, there was a significant income-living condition gulf from one neighbourhood to the next. Third, the provincial government centralized control of educational funding—removing school boards' autonomy to raise funds for local priorities and/or to backfill public funding shortfalls. At the same time, national studies concluded that children's pre-literacy skills, as they entered school, were statistically significantly below Canadian norms and local testing supported this conclusion. Further, achievement levels for Indigenous students was substantially below that of the other students in the district.

Considering the pace of change in the district and the urgent need to respond, local administrators and teachers were searching for research-supported responses with a high likelihood of turning the tide longitudinally and, at the same time, provide "quick wins" in the short term. It was against this backdrop that I launched the CKPRS.

Researcher Positionality

The CKPRS project ran from 2009-2010 to 2017-2018 inclusive. For several years prior to 2009 and during the entire span of the CKPRS project, I was a member of PSD's leadership team with responsibilities for collecting, analyzing, and reporting about a wide range of organizational metrics (e.g., student achievement and engagement, employee and community perceptions, etc.) to support school- and district-level policy and practice.

My job description required me to keep current with relevant trends that may influence and/or support strategic planning and implementation of those plans. School-based and district-level administrators, as well as elected members of the school board, approached me on a regular basis with questions like "what does the literature say about ...?" Sometimes they just wanted to discuss the various potential options for practice, and, other times, they asked for a formal review of the literature. I took this as evidence that there was an appetite for research and undertook the CKPRS project, in part, to feed that appetite.

At the same time, I served as an adjunct professor of educational administration and as a research ethicist at the local university. My research interests include evidence-based practice and strategic planning, organizational effectiveness and improvement, change theory, and classroom assessment practices. As a research ethicist, my colleagues in the behavioural research ethics office and I regularly reviewed researchers' knowledge translation plans and offered suggestions about enhancing the likelihood of effective uptake of findings amongst research participants.

Consequently, I had an appreciation for and experience with the problems of practice common to local district leaders, access to relevant research that could inform these problems of practice, and broad appreciation for the importance of and processes for effective research knowledge translation. This combination of experience and background enhanced my credibility as a researcher and research mobilizer among district leaders and opened the door to implement the CKPRS project.

Underlying Literature

While developing and implementing the CKPRS project, I considered a broad range of literature from several disciplines including medicine, business, and, of course, education. It is beyond the scope of this paper to summarize the breadth and depth of the underlying literature for the entire project. Instead, I supply a brief summary of the literature explicitly pertaining to the subject of this paper.

What is research?

Research is the process of observing something and trying to figure out how or why it is the way it is.

Stated another way, "The search for knowledge about ourselves and the world around us is a fundamental human endeavour. Research is a natural extension of this desire to understand" (CIHR, NSERC, & SSHRC, 2014, p. 5).

In many respects, the best teachers are adept researchers. The most effective teachers follow a constant action research cycle of reflection about instructional practice, observation of the effect instruction has on students' learning, and exploration of alternative instructional practices to address whatever was learned about students' needs. Yet, even though they are experienced researchers, educators tend not to see themselves as such and do not usually consider their reflective practices as research (e.g., Bertrand & Marsh, 2015; Coburn & Talbert, 2006; Cooper & Levin, 2013; Mehrani, 2014).

What does it mean to use research?

In the last several years, interest in the relationship amongst data, research, assessment and improved social and educational outcomes has expanded exponentially in government and school district policies leading to increased interest among researchers. Despite millions of dollars spent on research, billions of hours preparing dissemination materials, thousands of professional development activities, and a seemingly endless stream of "innovation" in schools, decades of school reform efforts have produced little, if any, improvement (David & Cuban, 2010; Hamann & Reeves, 2012; Mitchell, Ream, Ryan, & Espinoza, 2012). Yet, according to federal and local legislation in many parts of the world including North America, states, districts, schools, and teachers are required to implement "research-based" interventions to achieve "adequate yearly progress" on state-administered standardized tests.

Sudsawad (2007) offered a simple heuristic for understanding the process of research use. He suggested that there are three main types of research use including (i) instrumental use, (ii) conceptual use, and (iii) symbolic use.

- *Instrumental use* of research takes place when leaders' decisions about policy or practice are influenced directly or explicitly by research findings. This use is the "type most emphasized in policies that encourage use of research evidence [but] is relatively uncommon" in education (Penuel, Briggs, Davidson, Herlihy, Sherer, Hill, Farrell, & Allen, 2017, p. 2). Nevertheless, when research is used instrumentally in education, it often takes the form of research syntheses published in the guise of "toolkits," "handbooks," "resource manuals," and other such titles that promise practitioners "research-based practices *that work*."
- *Conceptual* use results when research might make people more aware of the issues and potential responses but not necessarily affect practice. *Conceptual use* of research takes place most often at conventions and other meeting venues where teachers and other education practitioners go for professional development. Speakers at these events are usually research synthesizers, rather than primary researchers. These speakers are nearly always selected because their topic aligns with local issues, and their message raises mildly controversial questions designed to inspire people to think differently about the problem and seek new solutions. These presentations rarely translate into concrete or long-standing change (Borko, 2004; Broad & Evans, 2006; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007) but attendees are sometimes inspired about the topic and might be more open to new potential solutions later on.
- Symbolic use of research looks a bit like reverse engineering in which people look for and/or cite research to support whatever choice they have already made. In educational circles, the most common *symbolic use* of research takes place when someone attends a conference and was inspired by a presenter or when they consult a book they picked up along the way; other times they are faced with making decisions that may be unpopular or controversial (almost always these decisions are fraught with decision choices that will make almost no one happy). When research is used merely to support a political or operational position, it is also being used *symbolically*.

One of the teachers' most common critiques of administrators' use of research is that it appears to them that administrators are symbolic research users (Tunison, 2016). While there is some truth to this assertion, the reasons for this lie in administrators' limited access to research and unsophisticated inter-

pretations of findings rather than a deliberate intent to mislead (e.g., Hempenstall, 2014; Penuel et al., 2017). Furthermore, research appears to influence folks' ideas and beliefs before policy and practice are affected by it; this influence is especially common among novice research users (Levin, Cooper, Arjomand, & Thompson, 2011). Nevertheless, given the growing intensification of complexity and pace of educational change and the need to have means of responding to emergent issues as they arise, educators support instrumental research users because they do not have time to synthesize research into digestible bites for themselves. Unfortunately, this tendency further separates them from primary research diminishing their understanding of the research process and atrophying their capacity to make sense of research on their own.

Cultivating Knowledge Through Professional Reading Series

During the summer prior to launching CKPRS, I curated an electronic library of about 250 peer-reviewed research papers covering issues emerging from the collegial consultations mentioned above, as well as topics relevant to district strategic priorities and leadership practice. Then, in the fall of 2009, I began preparing and distributing weekly research briefs to central office and in-school administrators. Over time, other district leadership groups, such as instructional consultants, speech language pathologists, and school psychologists, were added to the CKPRS distribution list.

Over the project's eight-year run, about 400 CKPRS issues—highlighting more than 600 pieces of research—were distributed weekly during the 10 months of each school year. I used three broad criteria for article selection: *First*, I used peer-review as a proxy for quality and prioritized higher-ranked journals as sources of literature for distribution (e.g., Educational Researcher, American Educational Research Journal, Review of Educational Research, International Journal of Education, etc.). *Next*, I searched for articles addressing prominent issues in the district at the time (e.g., Indigenous educational strategic planning processes, etc.). I also focused on Canadian-based research when available, especially if conducted in settings similar to PSD. *Finally*, I regularly surfaced research with provocative epistemological stances and/or counterintuitive findings to challenge perspectives, spark debate, and widen the discussion about possible organizational responses. Each CKPRS issue consisted of:

- an executive summary of 1-2 academic research articles;
- · observations about how the research connects to key priorities and initiatives in the district;
- how the research could be used with colleagues;
- possible implications for decision-making and practice; and
- links to both the article itself and other related research housed in the research library, should recipients wish to read further.

While I was unaware of it at the time, the CKPRS project was similar in many ways to commercial and professional organization subscription-based offerings (e.g., The Marshall Memo, EdCan, CAPJournal, etc.). Nevertheless, CKPRS had some unique features. The CKPRS referred explicitly to district problems of practice and was embedded directly within local priorities, as well as emerging challenges and opportunities. Furthermore, rather than rely on a subscription model, all members of PSD administrator email distribution lists were included by default. On one hand, these characteristics may have been barriers to robust engagement with research for some. If they perceived research not to be of value to inform their work, the weekly emails may have been an irritant. On the other hand, for those who rarely accessed research but were open to do so, the weekly emails surfaced at least some research for them to consider. In any case, however, I consistently stated that the CKPRS is an invitation to engage in collegial discussion of and reflection about research—NOT an expectation.

Research Design

The following section provides a brief overview of the methods used for this study. Specifically, the participant pool characteristics and the data collection and analysis methods are described below.

Participants

While the CKPRS had an audience of approximately 350 over its eight-year run, the distribution list

in any given year consisted of about 125-150 district leaders. As mentioned earlier, Prairieland School District encompassed 53 schools at the time of the study. All schools had a principal and a vice-principal (three very large schools had two vice-principals). Central office leadership included eight senior administrators (called superintendents), ten central office principals (called coordinators), five central office vice-principals (called instructional consultants), and 15 paraprofessionals (i.e., speech-language pathologists and educational psychologists). Therefore, 147 leaders were members of district email distribution lists used to recruit participants. As 15 were new to their leadership roles and had not been part of the CKPRS project, there were 132 eligible participants. Of those eligible, 33 individuals completed the survey (response rate of 25%).

Who participated in this study? The survey asked respondents two demographic questions: (a) the number of years they were included in the CKPRS project and (b) the leadership role they had at the time of study.

Just over half of the respondents (18) indicated that they had been part of the CKPRS for all eight years; whereas, seven respondents had been part of CKPRS for 5-6 years and eight respondents had been involved for four or fewer years. The number of participants in each role included:

- Superintendents: 4
- Principals: 13 (all elementary)
- Vice-principals: 9 (8 elementary and one secondary)
- Coordinators: 3
- Instructional consultants: 2
- Paraprofessionals: 2

Respondents were not asked directly to indicate their level of education. However, due to the district's long-standing practice of funding educational leaves in support of leaders' graduate studies, all central office administrators (superintendents, coordinators, instructional consultants, and paraprofessionals) and the vast majority of principals held Masters degrees; whereas, vice-principals were either working on or had already completed their Masters degrees. Consequently, all participants had at least some experience interacting with research literature as graduate students.

While the district did not subscribe either to research databases or individual journals, administrators had access to research in a variety of ways. These included:

- Virtually all administrators completed their graduate studies at the local university and, as alumni, they retained access to university libraries, albeit on-site only.
- The union representing principals, vice-principals, coordinators, consultants, and most paraprofessionals had a robust research library with subscriptions to educational research databases—along with experienced reference librarians—to which they had access.
- All administrators had small annual professional allowances to support them in joining professional organizations, many of which also provide access to research.
- The proliferation of open-access journals also provided administrators with access to a wide range of research literature.

Data Collection and Analysis

Both the university and the school district reviewed and approved this research on ethical grounds. Data were collected via a 22-item online survey consisting of 16 defined-response items (using a 4-point Likert-type scale) and six open-ended questions. The survey was distributed to eligible participants by the school district via its internal email distribution system.

Broadly, the survey was designed to investigate the pattern of participants' interaction with the *PRS* issues and evaluate the extent to which they found them useful to inform their practice. For example:

- the frequency with which they read either the executive summaries or the full articles;
- the frequency with which they used the research cited in the CKPRS issues in their practice; and
- the frequency with which they shared the research with colleagues and what that process looked like.

Of interest to the present article, participants were also asked about their thoughts regarding the value of academic research in general and what role, if any, they thought it should have in everyday prac-

tice in schools. Three items were included in the survey to investigate these perspectives. One item—a defined response question using a 4-point Likert-type scale from strongly agree to strongly disagree—invited respondents to indicate the strength of their agreement with the statement cited below.

In general, academic research is an important source of information to support decision making in the regular everyday work of pK-12 leaders.

Participants also responded to the two open-ended questions (OEQs) quoted below:

- What does it mean to you to *use* research? How often do you use research in the way you describe? What makes it more or less likely that you will do that?
- What factors (both positive and negative) affect the extent to which academic research is useful to support everyday work? What could researchers do to make their research more useful for practitioners "in the field"?

Textual responses to the OEQs were analyzed using structural coding procedures. Saldaña (2016) suggested that structural coding is appropriate for studies that employ "standardized ... data-gathering protocols [with multiple participants] ... [in] exploratory investigations to gather topic lists or indexes of major categories or themes" (p. 297). When using this technique, the researcher reads the data several times to "categorize the data corpus into segments by similarities, differences, and relationships by using conceptual phrases" (Onwuegbuzie, Frels, & Hwang, 2016, p. 135). In this case, given that each OEQ included several sub-questions, each response was segmented into phrases related to each sub-question. Then, the phrases related to each sub-question were combined and reread to create a new set of thematic codes. Results are reported according to these codes, including the frequency with which the content associated with each code occurred.

Findings

Defined Response: The Value of Academic Research for pK-12 Leadership Practice

Naturally, the extent to which educational leaders see academic research as a viable source of information to inform practice will affect the frequency with which they consult academic research and allow their decisions to be informed by such research. As mentioned above, one of the objectives for the CK-PRS project initiative was to enhance the profile of primary academic research and present it in a way that would be compelling for educational leaders to read and, ultimately, to inform their practice.

Of the 33 individuals who completed the survey, 30 offered responses to this survey item. All but two of these respondents expressed some level of agreement. Fifteen respondents strongly agreed that academic research is useful to inform decision-making, another 13 agreed with the statement, and two strongly disagreed.

Given the objectives of the CKPRS project, the fact that the preponderance of respondents' opinions was at least somewhat positive was encouraging. Since CKPRS participants' perceptions about the value of research were not gathered at the start of the project, it cannot necessarily be credited directly for this positive result. However, the result does show that CKPRS took place in a fertile environment that had the potential for significant uptake of research to inform practice.

How Do Educational Leaders Conceptualize Using Research?

One of the two open-ended items was designed specifically to put flesh on the skeleton frame of the defined response item reported above. It was framed in three parts: (i) What does it mean to you to *use* research? (ii) How often do you use research in the way you describe? (iii) What makes it more or less likely that you will do that? The results from this survey item are presented below in three sections aligning with the three sub-sections. Note: direct quotations were edited to protect individuals' identities and are attributed to respondents using codes R1 through R33.

What does it mean to you to *use* research? While academic research was not universally valued by respondents, most acknowledged that research—perhaps reframed from original texts as briefs or executive summaries rather than primary sources—has some usefulness to inform practice. Comments addressing the usefulness of academic research to inform leadership practice tended to be generic. For example, R13 stated, "I [think it is] very important to base our practices on research." R30 argued, "It is

vitally important to use research at all times and to reference it." R12 opined, "Schools should be leaders in society so [it is] important to be out in front." The differences amongst participants' perspectives about the extent to which the investment in time and energy to find, read, and use research was worthwhile appeared to lie in their beliefs about the *purpose* of reading research.

Several suggested that research is valuable as an enhancement of their leadership practice to ensure that their work with teachers, students, and parents is well-informed. In the words of one respondent, "I often refer to peer-reviewed research to help drive my decisions. I think it is important [for me as a leader] to stay abreast of current trends and topics" (R3).

Many argued that their leadership practice was more efficient when they read research regularly and use what they learn as a guide to practice. Among those with this view, the most common perspective was that research acted like a filter that helped them adjudicate possible actions and avoid wasting time implementing ones that were unlikely to be successful. For example, R25 remarked, "[I use research] to filter out things that don't work. We don't have time to waste on strategies and practices that are not grounded in research." R30 said, "Research helps me to make informed decisions. [Triangulating] with varied insights from different researchers helps to ensure that we are doing the best for our students." Still, another argued,

I read current journals as part of ongoing knowledge development; seek out research on pressing topics related to school needs; inform leadership practices that support student learning; and facilitate teachers using research to develop and inform pedagogical decision-making. (R4)

A few respondents affirmed the importance of academic research but advocated for leaders to apply a nuanced interpretation of research findings in light of the particular setting in which they work. Generally, they tended to caution that leaders ought to ensure that the research they consult and reference in professional conversations is relevant and appropriate for that setting. The following two comments are illustrative of this sentiment.

Research is a great starting point. [However] rarely is someone else's situation exactly like ours ... [for example] study populations [may be] similar to ours but rarely if ever the same. Because of this, research is important, but when implemented at the school level, the practice must be implemented, keeping our actual reality in mind. (R24)

Using research means looking for academic, peer-edited literature that has been 'vetted in the field' to frame my understanding of important educational topics (e.g. improving literacy in schools, improving outcomes for minority students, most effective math interventions, trauma-informed education, etc.). (R20)

Even those who saw academic research as having limited usefulness acknowledged that research may have some value but ought not to be a major influence on leaders' practice. According to these respondents, most academic researchers are either out of touch with the realities of today's schools or their research interests follow paths that are irrelevant in actual practice. The quotations below are illustrative of these perspectives.

Research is often esoteric and disconnected from lived realities that it is an ontological or epistemological debate with little direct application ... because a pragmatic lens is rare in academic writing and the language is dense, I find I can't give out academic articles on their own ... [instead] I give out plain language summaries that make explicit connections to our work. (R31)

We sometimes look at research and best practice ... [but] I strongly believe people doing research are so far from the realities of today's classroom that their theories are not useful [for us]. (R28)

Several comments revealed a nuanced perspective of what it means to use research as an educational leader. R31's description, quoted below, of what it means to use research in school-based leaders' work exhibits a balanced and complex perspective, arguably one about which researchers and educational organisations advocating broader use of research to inform practice would be pleased.

Using research means three things to me. First, checking to see if there is a credible mix of

qualitative and quantitative evidence supporting a particular action. Second, using research means thinking about the application of the distinctions in the researcher's thinking so you understand the implications. Finally, using research means comparing it to my professional knowledge to see if it realistically makes sense, including critiquing the research.

Broadly, the differences amongst participants' perspectives about the extent to which the investment in time and energy to find, read, and use research was worthwhile appeared to lie in their beliefs about the *purpose* of reading research. Findings from this question provide some evidence that the CKPRS project was having the intended outcomes. As mentioned previously, the weekly research review issues always included two components: (i) an executive summary of the research chosen for distribution that week and (ii) an explanation of the ways in which the research connected to work ongoing in the district at the time. Often, the issues also included suggestions about how the research presented that week could support decision-making or inform professional discussions. For the most part, participants were able to provide rationales for the use of research to inform educational leaders' practice in general. They were also able to describe ways in which research could be used to inform their work—in fact, some described how they, as leaders, presently used research in their work.

How often do you use research in the way you describe? Eleven respondents offered comments regarding the frequency of their use of research. Among those who did, most simply said that they used research frequently or all the time without further details. R11's comment is illustrative of this tendency: "[I use research] all the time. [Our] district leadership framework is grounded in research—[so, when I work within the] framework [I am] using research."

Other respondents indicated that the frequency of research use was cyclical and depended upon the time of year, with more frequent use over school vacations and at the start of the school year and occasional use during the school year when relevant or when time permits.

I use research a lot in the beginning of the year, [for example] when I am mapping out the learning for my building and developing our strategic plan. [I also do so] before I am asked to present [about] something. I go through spurts where I am reading a lot of research for a week or two...then not again for maybe 2 months. (R20)

Finally, while acknowledging that research holds some potential usefulness in schools, a few respondents said that they generally do not consult research.

I rarely consult research or have the need to, although I agree that it does hold importance some of the time depending on what school you are in and the needs of that school. (R17)

For the most part, it seems, respondents' perspectives suggest that they equate "using research" with reading it. In other words, CKPRS issues may have encouraged participants to read research more regularly and to become more aware of the issues associated with the problems of practice they faced. But it appeared that the likelihood that that research (or other research that participants accessed on their own) actively influenced leadership practice, at least for those who responded, was not terribly high.

What makes it more or less likely that you will use research in the way you describe? Eleven respondents' comments alluded to the factors that influence the likelihood that they would use research. As one might expect, nearly everyone identified time as the most common factor cited influencing the frequency of their research use.

Several respondents mentioned that, aside from time, the issue under consideration influences the likelihood that they will access research to inform their work. For some of these leaders, research becomes more important when they have a tentative familiarity with the issue. For example: "[I ask myself], am I spreading the right information? Or, if I am telling people to do this in a certain way, does the research point me in that direction?" (R20).

Others' use of research is influenced by the level of accountability or profile of the work they are doing. R18's comments are illustrative of this thread of thought: "I am more likely to seek out research when I am responsible to share the information in a professional way (e.g., if I am expected to lead an in-service, I look for research to support me in that, to inform my presentation)" (R29).

Many, though, mentioned that they were more likely to use research to support their work because the CKPRS made research both more easily available and more relevant to their work. R30, for example, said that "[e]nsuring that [research] is easily accessible and themes [have been] established to [make it possible] to look it up quickly," as has been done with CKPRS, has enhanced the likelihood that administrators will use research. Similarly, R25 noted, "it is incredibly difficult to find time to dig into research so it is greatly appreciated to have it sent [to us] directly." A third mentioned, "having the most current research at our fingertips [as is the case with CKPRS] is so very helpful in the busy days of our administrative positions" (R18).

Clearly, there was an appetite for having access to research among participants and many appear to seek out and use research on their own as well. The CKPRS strategy for increasing research use seems to have successfully enhanced the likelihood that at least some educational leaders would use research to support their work and that of others.

Usefulness of Research in the Field

In a way, the results from the second constructed response item could be seen as a set of practitioners' recommendations to enhance the ways in which researchers engage practitioners in both the process of research and the dissemination of findings. This survey item had two parts: (i) What factors (both positive and negative) affect the extent to which academic research is useful to support the everyday work of leaders? and (ii) What could academic researchers do to make their research more impactful among practitioners in the field?

Twenty-nine of the 33 respondents offered perspectives and suggestions in response to this question. As is often the case with constructed response survey items with more than one part, respondents tended to focus their answers on the aspect of the question that spoke to them most prominently. While respondents were asked to identify both positive and negative factors affecting the usefulness of research for regular leadership practice, they tended to offer observations about the negative factors, or barriers, affecting their use of research and framed them as advice to researchers. Consequently, rather than artificially separating the comments into pieces that address the two sub-questions, results are reported below according to broad themes emerging from the comments. The themes are presented as respondents' advice to researchers.

Use clearer and more accessible vocabulary and syntax. Nearly every respondent saw both the vocabulary and syntax typically used to report primary research as a barrier to greater practitioner use of research. Responses related to this theme focused on the nature of the prose typically used to report primary research in academic journals. Most respondents on this path advocated for simpler, less dense prose that could be read more easily. A common perspective was that the difficult prose obfuscated the main points in the research, resulting in having potentially helpful findings getting lost in the text. Others said that the complex and less-familiar vocabulary often employed by academics affected their ability to read as widely as they would like because the articles took a long time to read and work into their busy schedules. The comments quoted below are illustrative of opinions associated with this theme.

With the amount of time we have to research, which doesn't seem like much at times, the readability and length of the research is very important. (R6)

When the wording is not relatable, or there is too much jargon, I am less likely to read the research. I think conclusions need to be strong and well supported but more [prominently] pointed out throughout the research. I think that would help people that are not as experienced with research articles to look at the articles deeper and more thoughtfully. (R29)

This finding presents an interesting conundrum for researchers and practitioners alike. On one hand, if practitioners see the dissemination format used by researchers (e.g., syntax, vocabulary, outlets, etc.) as a major barrier to engaging with primary research, they are left to access research filtered through knowledge translators' eyes (e.g., trade journals, leadership toolkits, practitioner conferences, etc.) —accepting translation bias and nuance truncation as necessary evils—or not at all. On the other hand, many compelling research questions require specialized vocabulary, complex theoretical frameworks, and/or sophisticated statistical computations that are not easily translatable to simple knowledge bites—relegating to the sidelines of practitioner consciousness findings and theories that could have a profoundly positive impact on practice and outcomes.

Write shorter reports, prepare descriptive practical executive summaries, and publish in accessible venues. A widely-held perspective was that academic research articles tend to be lengthy and daunting for practitioners. Several wondered if research could be presented more often in the form of research briefs that draw out a few of the most compelling findings and some of the relevant literature

and include hyperlinks to the full article should someone wish to read the entire study report.

One thing that makes it difficult to access research is the time required in an otherwise busy job. I access research, however I have heard colleagues complain about difficulty navigating research; I believe that an executive summary is a good way to make these studies less daunting and to make the language more understandable. (R13)

Share the "quick facts" in infographic form or in point form with [hyperlinks to the] full information [that we can look up if we are interested]. (R25)

Several respondents also pointed out that a great deal of research is published in restricted-access databases making it difficult or, in some cases, impossible for them to read. As suggested in the comments below, perhaps there are more accessible venues for research dissemination than are some academic journals.

Accessibility [is a problem], as we don't have a lot of time to search and we don't have the financial resources to purchase articles and books without knowing if they are good or not. If researchers could publish their work [in more accessible venues it] would be beneficial. (R30)

Language, relevance, and accessibility. We should all be required to set aside time to work through contemporary research in our fields [but] to be honest, Twitter is my best source [for professional information]. [It would be best if researchers shared] a few words that let me know it is relevant to my field and [provided] a link to the deeper analysis [that I can check out if I am interested]. (R23)

Taken together, respondents' comments with respect to this theme are encouraging in the sense that they convey a clear willingness to engage with research to inform their practice. They also suggest that they are finding ways to access research that is meaningful to them – even if it is only through the 280 characters permissible by Twitter. Administrators participating in this research also provided thoughtful and reasonable suggestions for research dissemination that could be employed as part of a comprehensive strategy for wider practitioner engagement.

Discussion and Implications

Participants in the study frequently described research use as a process of encountering ideas, reflecting upon them (when they have time), and then using them on occasion to inform their practice. Some participants also expressed an interest in using research to "stay abreast of current trends and topics" in order to guide planning and professional learning. Sudsawad's (2007) heuristic of research use highlighted the gap between theory and practice in this study. School- and district-level leaders' perspectives consistently identified the purpose of using research as either instrumental or conceptual and engaged with research as a way to stay current or to avoid expending time and resources on things that "don't" or might not "work" in their settings. With few exceptions, they saw research as potentially valuable as a guide to practice but struggled with the media typically used to convey research.

The CKPRS project had two broad objectives. *First*, to facilitate conceptual use of research amongst the administrators in Prairieland School District. Given that the broad topics addressed in the eight volumes of the CKPRS series were explicitly embedded in local problems of practice, recipients were aware—conceptually and practically—of most of the topics themselves. However, they may not have had the time, access, or interest to consult the bodies of literature informing those topics, thought about them deeply, or considered alternative ontological and epistemological stances about the topics prior to receiving the weekly CKPRS issues. Thus, the CKPRS created the conditions for increased conceptual use of research, at least for those who read it.

Participants tended to claim that research was important to them as a means of enhancing their instructional or leadership toolkits. In other words, they saw themselves primarily as instrumental users of research. However, only a few participants described the acts of understanding research and using it to support their practice as independent acts. Furthermore, given that few of them offered specific examples of doing so, they likely aspired to use research instrumentally rather than actually doing so. Rather, their descriptions of how they actually interact with research suggest that many tended toward symbolic use; they consulted research when they needed information to support decisions, rather than to help them understand the problems or to give them ideas about possible responses before making them. The difference(s) among their stated knowledge goals (conceptual understanding), intended use (instrumental use), and practical use (symbolic support of decisions/practice) are significant because it remained a mostly unidentified fissure between participant theory use and their practice.

Participants' critiques of the research and dissemination enterprise indicated they would prefer if research were presented in a way that would allow them to use it more easily. This perspective is, perhaps, to be expected. School- and district-based administrators are tremendously busy and, considering the hectic pace of situations requiring their attention, it is no wonder that many participants in this study identified time as a significant barrier to greater use of research in its multiple forms. By extension, in pointing to the syntactical and conceptual challenges associated with consuming primary research firsthand, they may not have the time to engage deeply in the intellectual challenge required to decode and interpret research for themselves, despite having had experience doing so during their graduate studies and espousing that research is an important source of information to inform their work. Alternatively, this finding also suggests that they may be unwilling to take on the intellectual challenge preferring to defer it to others to translate it into the partially digested bites common in practitioner journals and the plethora of publications promising solutions that work, steps to success, and toolkits for leaders. This tendency to allow someone else to "own" the intellectual calisthenics necessary to seek out and interpret research privileges others' (e.g., translators, publishers, etc.) perspectives. This approach also risks falling into the technocratic trap identified by Biesta (2007): abdicating crucial practical decisions to someone who does not understand their unique contexts and marginalizing their own creativity to develop solutions. Conceptual knowledge, too many steps removed from how a teacher, administrator, or central office member would use research in practice, may be condemned to remain theory divorced from practice.

The CKPRS was a strategy to model the process of filtering and unpacking research through the lens of the local context, and, of course, my own lenses as well. In short, I intended to make it easier for administrators to access research and to demonstrate ways in which it might be used to help them in their work. I understood the district context and deliberately made explicit my epistemological and ontological stances both through the CKPRS issues themselves and through personal relationships with my colleagues. Ironically, however, I may have inadvertently reinforced some aspects of Biesta's concern. Certainly, I made the decisions—albeit with others' input at times—about the literature to surface and privileged my own interpretations of both the implications and applicability of the research at the local level. Nevertheless, I did this from an *insider's* point of view. I modeled ways in which they could interact with research, offered some suggestions about how the findings and/or underlying literature could help them in their practice, actively invited debate about the research, and encouraged them to consult the CKPRS research library for themselves.

Conceptual use of research, the type that was most frequently reported in this study, is often criticized because it rarely translates into concrete change in practice, especially over time (Borko, 2004; Broad & Evans, 2006; Darling-Hammond et al., 2009; Garet et al., 2001; Yoon et al., 2007). It seems likely that reading for conceptual use through an undeveloped understanding of the strengths and limitations of research would typically result in little meaningful change in practice, even when leaders say that they intend to use the research to shape or inform their practice. In reality, even if the goal for seeking out research remains predominantly conceptual in nature, potential users of research appear to prefer materials that invite instrumental understandings.

Reflections

A study such as this raises several questions: Whose responsibility is it to bridge the research-practice gap? How can, or should, researchers contribute to a bridge over the gap? What can, or should, practitioners do in service of building this bridge? Do we even need a bridge? Given that the present article forwards findings from the analysis of a limited number of online survey questions answered by about a quarter of the target population in a specific location, the conclusions and recommendations extrapolated from the data may not be transferable to other settings. They are, however, indicators of the extent to which a simple intervention such as the CKPRS was successful in undergirding such a bridge for the setting in which it took place.

In 2011, Levin and his colleagues asked, "Can simple interventions increase research use in ... schools?" Reflecting on the findings from this study, I conclude that it is possible but, perhaps, in a limited way. The CKPRS was a simple attempt to bridge the research-practice gap in a particular K-12 district. Administrators received a weekly review of research selected, translated, and distributed by an insider who had first-hand knowledge of their problems of practice. These briefs encouraged them to engage with the research profiled in the CKPRS as well as to consult additional primary research either connected to the week's topic or another topic of interest via a curated library housed on the district's administrator portal. Despite the fact that most PSD administrators were convocants from graduate-level education and claimed to value research as a critical informant to support their practice, respondents' descriptions of the extent to which they engaged with research as a support for their work, was more at the conceptual level than as instrumental support. They reported reading research transformed into digestible morsels by knowledge cultivators (including me) rather than interpreting research for themselves.

While acknowledging Biesta's concerns, I still advocate for increased instrumental use of research amongst K-12 education leaders, albeit not uncritically. Educational leaders need to be able to read and interpret research for themselves. While there is a wide band of essential theoretical and conceptual research that may not be intended, or even appropriate, for educators on the ground to use instrumentally, educational researchers produce an enormous pool of knowledge that could support improved conceptual use by drawing educators' attention to critical issues and instrumental use by presenting evidence of the effect interventions.

References

- Bertrand, M., & Marsh, J. (2015). Teachers' sensemaking of data and implications for equity. *American Educational Research Journal*, 52(5), 861-893.
- Biesta, G. (2007). Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, *57*(1), 1-22.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational researcher*, *33*(8), 3-15.
- Broad, K., & Evans, M. (2006). A review of literature on professional development content and delivery modes for experienced teachers. University of Toronto, Ontario Institute for Studies in Education.
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (2014). *Tri-Council policy statement: Ethical conduct for research involving humans*. Ottawa, ON.
- Coburn, C., & Penuel, W. (2016). Research-practice partnerships in education: Outcomes, dynamics, and open questions. *Educational Researcher*, 45(1), 48-54.
- Coburn, C. & Talbert (2006). Conceptions of evidence use in school districts: Mapping the terrain. *American Journal of Education*, 112. 469-495
- Cooper, A., & Levin, B. (2013). Research use by leaders in Canadian school districts. *International Journal of Education Policy & Leadership*, 8(7), 1-15.
- Darling-Hammond, L., Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). Professional learning in the learning profession: A status report on teacher development in the United States and abroad. National Staff Development Council.
- David, J., & Cuban, L. (2010). *Cutting through the hype: The essential guide to school reform*. Cambridge, MA: Harvard Education Press.
- Elliott, J. (2001). Restructuring educational research for the Third Way. In M. Fielding (Ed.) *Taking education really seriously: Four years of hard labour*. London, UK: Routledge Farmer.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.

- Hamann, E., & Reeves, J. (2012). Accessing high-quality instructional strategies. In T. Timar
 & J. Maxell-Jolly (Eds.). Narrowing the achievement gap: Perspectives and strategies for challenging times. pp. 95-110. Cambridge, MA: Harvard University Press.
- Hempenstall, K. (2014). What works? Evidence-based practice in education in complex. *Australian Journal of Learning Difficulties*, 19(2), 113-127.
- Levin, B., Cooper, A., Arjomand, S., & Thompson, K. (2011). Can simple interventions increase research use in secondary schools? *Canadian Journal of Educational Administration and Policy*, 126, 1-29.
- Malin, J., Brown, C., & Saultz, A. (2019). What we want, why we want it: K-12 educators' evidence use to support their grant proposals. *International Journal of Education Policy & Leadership*, 15(3), 1-18.
- Malin, J., & Keshaorao Paralkar, V. (2017). Educational knowledge brokerage and mobilization: The Marshall Memo case. International Journal of Education Policy & Leadership, 12(7), 1-20.
- Marshall Memo LLC. (2019). *The Marshall Memo: A weekly round-up of important ideas and research in education*. Retrieved from https://www.marshallmemo.com/
- Mehrani, M. (2014). Bridging the gap between research and practice: Voice of mediators. *Journal* of Pan-Pacific Association of Applied Linguistics, 18(2), 21-38.
- Mitchell, D., Ream, R., Ryan, S., & Espinoza, J. (2012). Organizational strategies for addressing the educational achievement gap. In T. Timar & J. Maxell-Jolly (Eds.). Narrowing the achievement gap: Perspectives and strategies for challenging times. pp. 111-139. Cambridge, MA: Harvard University Press.
- Onwuegbuzie, A., Frels, R., & Hwang, E. (2016). Mapping Saldaña's coding methods on to the literature review process. *Journal of Educational Issues*, *2*(1), 130-150.
- Penuel, W., Briggs, D., Davidson, K., Herlihy, C., Sherer, D., Hill, H., Farrell, C., & Allen, A. (2017). How school and district leaders access, perceive, and use research. *AERA Open*, 3(2), 1-17.
- Saldaña, J. (2016). The coding manual for qualitative researchers. Thousand Oaks, CA: SAGE.
- Slavin, R. (2002). Evidence-based education policies: Transforming educational practice and research – 2002 Dewitt Wallace-Reader's Digest Distinguished Lecture transcript. *Educational Researcher*, 31(7), 15-21.
- Sudsawad, P. (2007). Knowledge translation: Introduction to models, strategies, and measures. Austin, TX: Southwest Educational Development Laboratory, National Center for the Dissemination of Disability Research.
- Tunison, S. (2016). *Cultivating knowledge: Promoting research to enrich everyday practice*. Rotterdam, The Netherlands: Sense Publishers
- Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the evidence on how teacher professional development affects student achievement. Issues & answers. REL 2007-No. 033. *Regional Educational Laboratory Southwest (NJI)*.