Knowledge mobilization in education in Canada and the role of universities

Paper prepared for the 2011 conference of the International Alliance of Leading Educational Institutions
Jie Qi and Ben Levin, OISE
November, 2010

Introduction

The paper is organized around different dimensions related to research mobilization in Canada. Major features of Canada as a country are described first to serve as a background to the paper. The next section introduces the role of government, including current research funding agencies in Canada and issues of research quality indicators and research capacity building. Next, the paper focuses on the strategies and mechanisms currently used by universities to share their research. We close the paper with a discussion about the key debates and considerations around the state and future of education research mobilization and identify some unresolved issues that might help guide future research. We recognize that there are other areas that could be included in this paper, as research mobilization is a new and growing area of study which could cover a wide range of disciplines, people and contexts. Rather than being all-inclusive, we direct our attention mainly to the field of education and the role of universities.

Overview of Canada

Canada is the world’s second largest country in area. Canada has ten provinces and three territories. English and French are two official languages at the federal level. Canada is one of the world’s wealthiest countries. The social and political realities of Canada comprise a large, geographically and demographically diverse country with an
advanced industrial and service economy. The term “cultural mosaic” is commonly used to describe the multicultural nature of Canadian society. Canada has one of the highest immigration rates in the world (more than 1% per year). Nearly 20% of Canadians were born outside the country (a proportion that is increasing steadily) and these immigrants come from all parts of the world (www12.statcan.ca/census-recensement/2006/as-sa/97-557/p2-ang.cfm). People who come from different origins and cultural groups are able to retain their religions, customs as well as language.

Canada also has a high achieving education system, consistently among the highest ranking countries on international assessments such as PISA or PIRLS. Mandatory school age for young people is from 5-7 to 16-18 years old depending on the province. The adult literacy rate is 99%, although Canada does not score as highly on assessments of adult literacy as it does for school-age skills (The Conference Board of Canada, http://www.conferenceboard.ca/hcp/details/education.aspx).

Canada has a federal political system. Power is divided between the federal government and provincial or territorial governments. Canada’s provinces range in size from Ontario, with 13 million people, to Prince Edward Island, with about 200,000 people; the territories have even smaller populations. Four provinces (Ontario, Quebec, British Columbia and Alberta) account for 30 million of Canada’s 34 million people. In many fields of social policy, jurisdiction is shared between the provincial and federal governments but education is a responsibility of provinces. For schools, virtually all the responsibility rests with the provincial governments. In post-secondary education and training, the federal government has played a more significant role, particularly in regard to research (about which more later).

Although provinces and territories are responsible for education, and the coordinating mechanisms nationally are fairly weak, in general the differences in school systems or higher education systems across provinces are not large. The greatest divergence often occurs in Quebec, where the province’s history and French-language nature has led to some quite different education policies, such as one year less of secondary education.
Schools in Canada are organized into districts which are governed by locally-elected school boards. Although school boards are regulated by provincial legislation, they also provide schools with a political base in their local community, but one which is not part of municipal government. Canada now has fewer than 500 districts following a further wave of consolidation in the last 20 years. Districts range from very large – 250,000 students in Toronto – to very small, with quite a few rural and remote districts having only a few schools and fewer than 1000 students. The variability in districts presents some additional challenges to the effective use of research knowledge, as discussed later.

The Canadian university sector in education

Canada has approximately 70 universities (though the AUCC has 95 member institutions, a number of these are constituent colleges within larger universities). The sector is very diverse in terms of size, origins, and programs. In Canada universities are all primarily funded by provincial governments, with a significant contribution from student tuition fees. Universities are independent organizations with their own governing bodies, and collegial systems of academic decision-making. Freedom of expression for university faculty members is a deeply held value in Canada.

Across Canada there are more than 50 programs or faculties of education (http://resource.educationcanada.com/foe.html) offering initial teacher education, graduate programs in education, or both. Education is one of the largest fields of study in Canada, especially at the graduate level, since teachers are one of the largest groups in the Canadian labor force. In total there are perhaps something like 1500 faculty members in faculties of education or education programs across the country. Some faculty in other disciplines, such as economics or psychology, also study education though this number appears to be quite small. So in total the number of active researchers in education in Canadian universities is modest – though still larger than most other disciplines. Our team’s current study of those holding significant grants for education research suggests that there are perhaps 3–400 active researchers (defined as
those who have held external research grants) in education faculties across the country, and those cover all areas of education, so the number of researchers in any one sub-field is almost always quite small. Moreover, Canada’s very large geographic area means that researchers are separated by considerable distances. Bringing together a national seminar or network involves people spending many hours on airplanes. Still another complication is that the Quebec research community, which is about 25% of the Canadian total, operates primarily in French and often has stronger links with other francophone researchers around the world than with English-Canada.

Canadian faculties of education use the academic ranks of assistant, associate and full professors and do award tenure after 5 or 6 years of successful service. Tenure and promotion for the most part still use traditional measures of academic activity – notably publication in refereed journals. Universities are struggling with how to recognize research dissemination work and how to account for the growing importance of electronic communications outside the traditional publications, since clearly the latter can often have far more impact than the former.

**Major research funding agencies and organizations in education**

The research mobilization endeavor is not just a dialogue on research, but also requires an institutional system and national and local infrastructure. Therefore, it is necessary to look at a larger national context to gain a better idea about how the research activities are facilitated in the country. In this section, we will sketch a general picture about research funding agencies and relevant organizations with a focus on the education sector.

In the past decade, governments in many countries including Canada have begun to emphasize how knowledge production and dissemination are crucial to the country’s future. Research funding is certainly on critical part of the research mobilization enterprise. As Arzberger and his colleagues (2004) put it

The use of research data cannot be maximized if access, management, and preservation costs (including cost of documentation and metadata creation) are an
afterthought or are insufficiently or inconsistently funded in research projects (p.1777).

Around $30 billion per year, or about 1.88% of Canada’s GDP, is allocated to research and innovation (http://www40.statcan.ca/l01/cst01/scte01a-eng.htm). In 2007 more than 40% of this spending came from the business sector, governments provided about 25%, and universities about 15%. However, overall research and development policy is outside the scope of this paper.

Total research in universities is estimated at about $10 billion, or about a third of total R&D (http://www.aucc.ca/policy/quick-facts_e.html). Externally-funded university research is around 50-60 percent of the whole university-based research activities. All sectors in Canada increased their investments for research in universities in the past 15 years, especially the federal government. Canada ranks the first among G7 countries for private sector investment for university research (http://www.aucc.ca/policy/quick-facts_e.html).

Most university research funding in Canada for social sciences comes from the federal government, with provincial research funding much smaller and private sector funding in this area very small (Johnes, 1994). The total amount of funding for education research in Canada is unknown.

Federal research funding is allocated primarily through three research funding agencies. These operate as agencies of the federal government. They have their own governing councils but their CEOs are regarded as senior public servants, they report through a federal minister, and they are subject to federal government rules in areas such as human resources and finance. The three councils are:

- **Natural Science and Engineering Research Council (NSERC)** with a research funding budget around $1 billion in 2010 (http://www.nserc-crsng.gc.ca/_doc/FactsFigures-TableauxDetailles/QuickFactsonFunding)

- **Social Sciences and Humanities Research Council (SSHRC)** with a 2010 budget of $ 335 million (http://www.sshrc-crsh.gc.ca/about-au_sujet/facts-faits/budget-eng.aspx)

- **Canadian Institutes for Health Research (CIHR)** with annual research budget around $ 900 million (http://www.cihr-irsc.gc.ca/e/22953.html).
These budget figures are not all for direct research costs, however; they also include costs of various programs such as indirect research costs and graduate student support.

The Social Sciences and Humanities Research Council of Canada (SSHRC) is the most important single source of funds for university-based research in the area of social sciences and the humanities, including education, in Canada. SSHRC supports several different programs for funding research and also provides funds to graduate students. SSHRC’s program architecture is going to change significantly in 2011; this paper discusses primarily the current program structure, in place now for a considerable period of time.

The large single share of SSHRC research funding, some $136 million annually, is awarded competitively to interest-driven research based on peer reviews. Most of these grants are for three years and provide funding for graduate students, direct research costs and, occasionally, release time for researchers. Each application is reviewed by external referees and all the applications in a given field are then collectively rated by a panel of researchers chosen by SSHRC. A typical three year grant in education would be in the area of $100,000 to $150,000.

In addition, SSHRC has funded several other kinds of research grants, and will continue to do so in future though the program names and criteria are changing. SSHRC has funded a small number of much larger grants to teams of researchers working in priority areas. For example, from 2000 to 2005 SSHRC operated the “Initiative on the New Economy” which provided funds for studies related to the changing Canadian economy. SSHRC has also funded ‘Community-University Research Alliances’ (CURA), which have sought to build bridges between university researchers and community organizations. These grants, typically for five years, have supported a number of education initiatives such as the new project launched in 2009 to examine how northern Ontario communities and First Nations (aboriginal people) work in partnership to foster economic growth. This project, funded for some $1 million over the next six years, involves various stakeholders including the City of Kenora, Grand Council Treaty #3, the University of Manitoba and the University of
Winnipeg. Another recent CURA project at the University of Waterloo focuses on supports for community mental health in a diverse community. Yet another looks at building relationships in Montreal between a new hospital and its local community.

In March 2010, SSHRC announced four Major Collaborative Research Initiatives (MCRI). As examples, the University of Ottawa will study how religion influences the legal, political and social environment with an aim of promoting quality and public policy. York University is leading two MCRI projects, one on suburban growth and the other on long-term residential care for seniors. McGill University initiated a project looking into the emerging superpowers of the Indian Ocean areas including China and India. Each of these four initiatives will receive around $2.5 million in the next seven years.

Still, SSHRC funding for education has fallen well short of the demand. Each year a significant number of applications are rated as deserving of funding by the reviewers and panels but are not funded due to lack of budget. So SSHRC is only able to support a relatively small number of university researchers in education (Hanson, 1994). In fact, the success rate for applications in education has been falling; in 2008-2009, SSHRC provided more than $4 million in grants in the area of education, and only about 25% of applications in that area were funded (http://www.sshrc-crsh.gc.ca/results-resultats/stats-statistiques/postdocs_2008.xls).

Only a few provincial governments, notably Quebec, have any significant funds for education research on an open competition basis, though most provinces fund research on a contract basis at least to some degree. Still, our team’s analysis of websites of Canadian provincial ministries of education showed that in most cases research had little or no prominence (Qi & Levin, 2010). Canada also has relatively few philanthropic foundations or other third-party organizations that fund research, particularly in comparison to the United States, and those which do exist are generally small. This is largely a result of the lack of federal government involvement in education, so that national organizations and think tanks are also few in number and fairly weak. For example, national organizations of school boards, teachers and administrators are all much weaker in Canada than are their provincial counterparts.
The Canadian Education Association is one of the very few pan-Canadian organizations in education with a national scope and an interest in research but it is small and does not have very much funding. The Canadian Council on Learning, set up in 2004 to promote research and knowledge exchange in education, was terminated five years later, leaving a significant gap. Even in national education data Canada is quite weak, leading to weak participation in many international projects and a lack of comparable national data about education, providing further constraints to research.

In the 1990s, the federal government took several steps to improve university-based R&D. It created the National Centres of Excellence (NCE) Program that created national research networks in high priority areas (http://nce.nserc.ca/Index_eng.asp). Most of the NCEs are in the sciences and the two that have been funded with some connection to education – one on information technology and one on language and literacy – were both terminated after their initial five years of funding.

In 2000, the federal government also launched the Canada Research Chairs program and established the Canadian Foundation for Innovation (CFI) as well as providing funding directly to universities to offset some of the overhead costs of research (AUCC, 2003). The Canada Research Chair Program and the CFI between them have provided funds to support salaries and other costs for 2000 Research Chair positions at universities across the country. The goal was to allow universities to attract and retain top researchers. However the vast majority of the chairs, as with the overall funding for research, have been allocated to science, medicine, engineering and related areas and there are probably fewer than 20 across the country in education (Tuuzelmann& Mbula, 2003, pp.41-42).

The Canadian research granting councils, including SSHRC, have for the last 15 or 20 years also supported the creation of national research networks, linking researchers across the country and from different disciplines doing related work. A number of networks of this kind were created in education, but often the funding expired after a few years and the momentum was lost. Still, the connections did help create more lasting links across the Canadian research community.
Creating public support for research funding and ensuring accountability for the money spent remains a considerable issue, especially in the social sciences and humanities. In a general climate of public skepticism about public spending, research programs are also under pressure to demonstrate value for money, leading to increased reporting and other accountability requirements. This can be a particular pressure in education. Whereas in the sciences most lay people do not understand the titles or content of much academic research, in the social sciences it can be easy for anti-taxation groups to score political points by issuing press releases suggesting that funded research projects are esoteric or silly or both, a process sometimes helped by project titles that are heavy on academic jargon.

**Research mobilization in education**

The focus on greater sharing, use, dissemination, transfer, exchange or mobilization (all these terms are used in the literature) is not new (e.g. Weiss, 1979) but has certainly been a field of growing interest in the last ten years or so (Cooper, Levin & Campbell, 2009; Levin, 2010). However it has been increasingly recognized by professionals, practitioners as well as policy-makers, that better transfer and use of new information and knowledge from research in education are key to achieving high quality teaching and learning in schools (Weel, et al, 2004). As a result, “evidence-based decision making” and “evidence-based practice” quickly gained their popularity in many fields.

In education, the trend of promoting applied and practice-based research by governments and other organizations also reflects growing interest in how to utilize research knowledge effectively (Furlong & Oancea, 2005). Ideally, the development of research dissemination efforts should go hand in hand with the research on dissemination, as the former need to be guided by the latter (Kerner, et al., 2005).

There has been much discussion concerning effective approaches to sharing research in the field of education (Pfeffer & Sutton, 2000, 2006; Levin, 2004) Various empirical studies have been conducted on effective sharing of educational research (Levin, 2008). A range of barriers to and facilitators of research use have been
identified, such as the accessibility of material in academic journals to non-academic audiences; lack of encouragement or support given to researchers around dissemination to practitioners; and absence of time and support to help practitioner access research.

Canadian researchers have contributed significantly to the understanding of KM related issues. Cooper and Levin (2010) reviewed some of the important Canadian studies. Mitton et al (2007) found that more than half of the authors engaged in the issue related to KM are in Canadian. Landry et al (1998) studied the research dissemination efforts of Canadian university-based researchers in the social sciences. Surveys were collected from 55 Canadian universities. 50% of the researchers in social sciences stated that they disseminate their research findings quite often while 35% reported they are rarely or never concerned about research dissemination. However one would expect that in the decade since then these numbers might have shifted given the emphasis on knowledge mobilization. Landry et al (2001) hold that degree of research use vary in different disciplines and emphasized that ‘knowledge utilization, depends much more heavily on factors related to the behavior of the researchers and users’ context than on the attributes of the research products’ (Landry et al, 2001, p. 347).

The Research Supporting Practice in Education (RSPE) team led by professor Levin at OISE (www.oise.utoronto.ca/rspe) is undertaking a series of studies and activities around KM activities across different aspects of education. Our team uses an organizing framework for research mobilization with a focus on education research, as exemplified in Figure 1 (drawn from Levin, 2010).

Figure 1 – Conceptual framework
This framework provides an overall approach to the mobilization of research knowledge that can be assessed at the organizational or system level over a period of time. It draws attention to the key roles of knowledge production, use and mediation while recognizing that these roles can overlap particular organizations or individuals.

Our team’s work has drawn heavily from the broader research on knowledge mobilization, including work by Lavis and colleagues, and Landry and colleagues cited earlier (a fuller discussion can be found in Levin, 2010). Our empirical work has investigated research use in secondary schools across Canada (Levin et al., 2009), patterns of online research use (Edelstein et al., 2010), and KM strategies in educational organizations based on their institutional websites (Qi & Levin, 2010). Our work on universities is reported more fully below.

We find, as do those working other fields (Nutley et al., 2007) that the evidence for knowledge mobilization practices is still quite limited, and that current practices are not always consistent with the evidence that does exist. In education, many key institutions such as government education departments do relatively little in this field,
while schools and school systems generally lack the capacity to find, share and use relevant research knowledge (Levin, 2010). Universities provide a particularly interesting and important instance.

The role of universities in knowledge mobilization

Universities are very important knowledge creation institutions and remain at the centre of the knowledge production system in most societies.

Newson (1994) asserted that,

…universities will be key agents for producing the promised benefits of a society which is rooted in the application of theoretical knowledge to all areas of social life and social organization (p.142).

Universities are in the position between the communities of practice they serve and the federal and provincial governments which largely fund them (Godin & Gingras, 2000). In many cases, including education, they are the largest single source of research, and other relevant institutions are often linked to universities at least to some degree.

As Furlong & Oancea (2005), point out, traditional indicators of research quality, such as trustworthiness, contribution to knowledge, ethical propriety and careful reporting, while still relevant, are no longer sufficient. In an applied field such as education, a particular emphasis needs to be put on the potential contribution research can make to practice; in other words, how well a research project responds to the need of policy and practice. A significant literature has now grown up in this area (e.g. Levin, in press; Nutley et al., 2007; Cooper, Levin & Campbell, 2009; Nutley, Walter & Davies, 2007) and many interesting ideas are being proposed and attempted, though health continues to be the leading field for this work. However in our view the overall research effort in Canadian universities has not yet been altered significantly to support greater knowledge mobilization.

Education researchers in Canada do make many efforts to share their findings. Although we currently have no reliable data, anecdotal evidence is clear that many researchers do write in professional publications, build partnerships with schools and other professional organizations, conduct workshops for educators, and use new
dissemination mechanisms such as websites and videos. However these efforts depend on individuals and are not matched by institutional supports and commitments at either the faculty or university level.

SSHRC grants are the single most important support for research in education in Canada, but they do not currently provide very much information on KM activities. SSHRC requires researchers to include in all proposals an indication of plans to for dissemination of their results and, at the end of their grant, to submit productivity reports that address the significance of their research results and the efforts made to share their research with professionals and the public. However, which activities should be counted as research dissemination efforts is not entirely clear. So far these reports are used for administrative purposes and there is currently no public analysis of the content related to research dissemination activities so no consistent and objective data concerning the impact of research supported by SSHRC (Hanson, 1994). Our team is currently conducting a survey of SSHRC grant holders in education to learn more about their KM practices.

Other evidence for our contention that university KM efforts are still modest at best comes from several studies done by the KM research team at OISE. We first undertook to analyze the KM practices of a range of Canadian and international organizations using information from the organization’s websites (Qi & Levin, 2010). Our current sample of about 100 organizations includes provincial ministries of education as well as faculties of education, school districts, various professional organizations, and comparison organizations in fields such as health. We developed inductively a rating system to evaluate the extent and quality of KM activities as evidenced on each institution’s website.

A second study has assessed the knowledge mobilization strategies of 5 schools of education in Canada and 8 at research-intensive universities in other countries (Sá et al., 2010). The study focuses on institutional efforts to encourage and support the dissemination of research knowledge to a broader range of potential users, as opposed to individual initiatives. We used information from institutional websites and also interviewed deans or other senior leaders in each institution around their knowledge
mobilization policies and practices.

Faculties of education have taken a variety of steps to encourage and support knowledge transfer. These strategies can be summarized in the following categories: using traditional knowledge dissemination channels (particularly academic publications and conferences); establishing connections between researchers and potential users; providing institutional supports and incentives. However, our results in both studies show that most institutions are not well equipped to share existing research information quickly or effectively and usually encounter substantial difficulties when trying to do so (Sá et al. 2010). Although the internet is now a primary vehicle for knowledge sharing, including research knowledge, most universities have not exploited these possibilities in organized ways.

In the analysis of websites, although faculties of education had among the highest ratings in this study compared to other kinds of organizations with about 50 points on average, their scores were still far from the potential maximum of 72 points, meaning that quite a few important features of a comprehensive KM strategy were not in use, at least based on what could be found on their websites. In particular, university KM strategies as identified through their websites focused largely on making available various products such as reports, or providing short releases or audio or video commentaries by or about particular studies. We found much less use of active approaches such as the building of interpersonal networks between researchers and potential users, even though new information technologies make such approaches much easier to use. The sharing strategies tend to be non-comprehensive; it is often hard to find out what research is being done at a given institution. Website materials often provide results of individual studies, seemingly in an effort to promote the status or prestige of the institution, rather than defining issues of interest to practice and bringing cumulative institutional knowledge to bear on these. In very few cases could a practitioner easily find research in a form useful to policy or practice on a faculty of education website.

In the fuller study of university KM practices we found significant variation across institutions. Most of the deans with whom we spoke did recognize KM as an
important function, but they also reported few practices at the institutional level to support this work. In general, tenure and promotion policies do not recognize KM work, though this appears to be changing slowly and there is still heavy weighting in the academic world towards academic rather than professional or lay publications. So to a considerable extent, involvement in KM work continues to depend on the interest of individual faculty members. Notably, there is no equivalent in education almost anywhere to the well organized supports and processes that most universities have in place to support technology and knowledge transfer in the sciences or engineering or medicine (Sá et al., 2010).

A few institutions were more advanced in their KM work, especially where the external policy environment or funders put pressure on and provided supports for greater efforts around knowledge sharing. However this work continues, in most faculties of education, to have a relatively low priority compared to more traditional functions of teaching and research. Additionally, the opportunity to use graduate students as vehicles for knowledge mobilization is rarely exploited in any organized way.

Of course the performance of Canadian universities is affected by many external factors, such as the availability of funding for research and for knowledge mobilization. Canadian national scholarly organizations are weak because the country is so large yet so sparsely populated. Moreover, living next to the United States, Canadian researchers are deeply influenced by the much larger US academic world as our public policy is often influenced by US public policy even though our countries are very different. As an example, more Canadian education researchers typically attend the annual meeting of the American Educational Research Association than attend the Canadian equivalent, the Canadian Society for the Study of Education. Equally, it is harder for Canadian education journals, whether academic or professional, to survive because of small numbers and large distances, just as it is harder to build research networks across the country. Given the lack of infrastructure to support knowledge mobilization at national, regional and local levels, the current level of performance is not surprising.
The province of Ontario has just launched an interesting effort in this regard. Called the “Knowledge Network for Applied Education Research”. This initiative funded by the Ministry of Education and led by two universities, is an attempt to strengthen research-practice connections in Ontario by bringing researchers and practitioners together to share knowledge, develop shared priorities, and develop research partnerships.

**Future possibilities**

Obviously the effective sharing of research knowledge with the profession and the public presents challenges for universities. As awareness of the importance of KM grows, more and more university researchers are interested in promoting the use of their research results. The institutional processes to recognize and support these researchers are slowly being improved. Encouraging and rewarding research dissemination efforts are crucial for this work, as young researchers may otherwise penalized by the tenure and promotion standards in universities. Also, universities need to build up intra-university communication channels to make sure that faculty members and graduate students are aware of the research sharing opportunities available. Universities could also provide better platforms for networking among university researchers and practitioners who work on enhancing the impact of their research results. To overcome these challenges, universities need to have a strong leadership not only from individual departments or faculties but from the university as a whole. This capacity building cannot be only at one level, it needs to embrace different levels such research leaders and information management (Weel, et al, 2004).

At the organizational level, universities need better institutional information systems. A starting point would be the expectation that external audiences would have good access to the research being done and its implications for practice. A second important step would be to improve supports for building networks between researchers and practitioners for conducting research collaboratively and for sharing results and implications, since we do have evidence that interpersonal connections are
much more powerful than is the simple dissemination of information.

The research dissemination system should have the following features:

- Provide support for different usages of research knowledge including creation; dissemination as well as retrieval of existing research evidence;
- Reflect the a wide range of research users and their working context;
- Embrace both social and instrumental dimensions of research knowledge;
- Make full use of conventional and new media power to build research infrastructure;
- Set up relatively consistent standards which enable us to fit different aspects of research mobilization together not only within institutions but across institutions.

As Hemsley-Brown and Sharp (2004) summarized, …research findings should be more accessible; the reward structures should be reframed; alternative publishing venues should be developed to target users; and academic jargon should be reduced. Authors of opinion papers frequently argue that teachers and policy-makers do learn from research but research utilization works best in settings of collaboration and mutual support (p.12).

Graduate students in Canada represent another important and untapped resource to improve knowledge mobilization, since they are mainly practitioners who are now also being initiated into the world of research. In general, graduate education programs in Canada do not pay enough attention to building bridges between the students practice experiences and their graduate study. If graduate students could connect their research to the real issues of practice, or support partnerships between researchers and school systems, they could play important roles as research mediators and more value would be gained from graduate research projects instead of just letting the thesis sit on the library’s shelf after months and months of hard work.

Canada faces the challenge of improving its infrastructure for research impact in education while lacking a national system and national supports for doing so. Health organizations have been investing a great deal of time and money in transferring research knowledge to inform policy-making and practices in health. Detmer (2003) proposed the idea of a national health information infrastructure (NHII) through which the quality of research knowledge and relevant data can be improved and used
to inform decisions at different levels. NHII is defined as “an information and
communications infrastructure exists to connect users-to each other, to information,
and to analytical tools-and to enable management and generation of knowledge”
(p.10). Canada has built some of this in health through the Canadian Institutes for
Health Research (one of which is entirely focused on research mobilization) and
through organizations such as the Canadian Institute for Health Information (CIHI).
However the provinces and territories in Canada are generally resistant to federal
government initiatives of any kind in education yet are also generally unwilling to
create their own pan-Canadian systems, so the prospects for anything similar in
education are not good. The Canadian Council on Learning, created with federal
government funds in 2004, was terminated in 2009 largely due to opposition from
provinces. It is possible that SSHRC, as the major granting organization, could further
strengthen efforts around knowledge mobilization but it is also struggling with
multiple demands, including pressure from the researchers it funds to be less directive
both in setting priorities and in pushing for research application. Still, initiatives such
as the CURAs have had a significant positive impact.

Of course, we need to recognize that there are diverse views about research
knowledge itself, and complicated issues regarding research methods plus varying
disciplinary perspectives make this job very difficult. The idea of research
mobilization challenges the traditional distinction between “pure theoretical research”
and other types of research. To emphasize the actual take-up of research knowledge in
the world of practice is not to say that the continued contribution to pure theoretical
knowledge is less important. Knowledge that contributes to theory can also contribute
to changed practice and is, indeed, essential to that end in the longer-term (Furlong &
Oancea, 2005).

Future research

The study of knowledge mobilization is also at an early stage. More research is
needed on almost every aspect of the elements in Figure 1 above. For example, we do
not know nearly enough about the roles of principals, district consultants,
superintendents, and classroom teachers in research knowledge use. Teacher research (or action research) is another potential means to build research use capacity, although the degree to which this strategy can operate at a large scale remains uncertain. In other words, much detailed descriptive work is needed in order to understand how various research users acquire information, innovate and produce new information in the research mobilization process. User preferences in terms of research format, type of language, and search patterns may differ and these differences can have a large influence on the ultimate degree of research use.

Our journey to understand and improve the mobilization of research in education is a challenging undertaking, as the concept of ‘research use’ itself is embedded with considerable complexities (Nutley et al., 2007). Fortunately, there is a growing interest worldwide (Cooper & Levin, 2010). Canadian researchers and policy-makers are more engaged in the maximizing the uptake of research outcomes. We can expect, with confidence, that improved knowledge mobilization will benefit education and other fields of the society.

References


