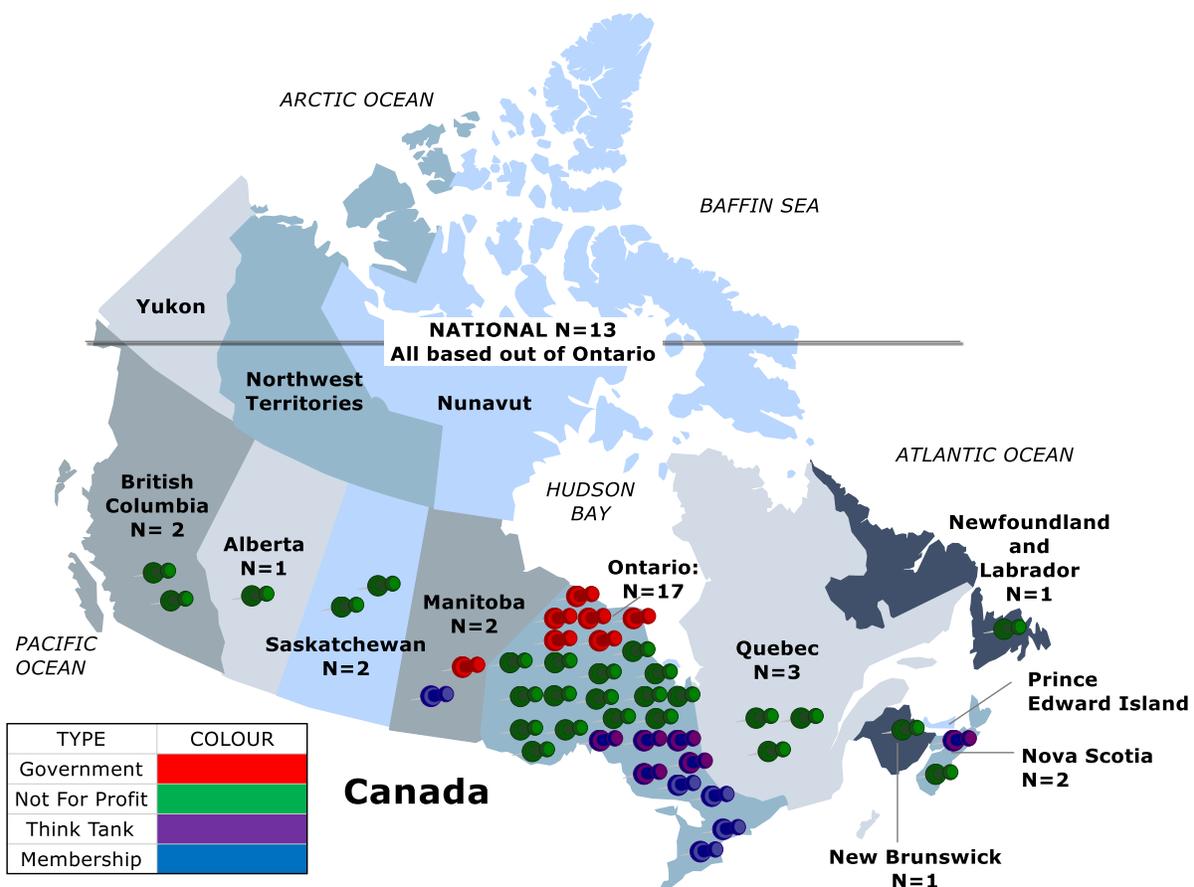


Knowledge Mobilization in Education

A cross-case analysis of 44 research brokering organizations across Canada



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Funded by



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada



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BACKGROUND AND PROBLEM

An emerging field of inquiry has arisen in order to address the oft-cited gaps between research, policy and practice called knowledge mobilization (KMb) in education and knowledge translation in the health sector (names vary across sectors and countries). For the purposes of this study, KMb includes efforts to increase the use of *research evidence* in policy and practice in education. KMb occurs through iterative, social processes involving interaction among two or more different groups or contexts (researchers, policymakers, practitioners, third party agencies, community members) in order to improve the broader education system. This study uses the term ‘research brokering organization’ (RBO) to describe third party, intermediary organizations whose active role between research producers and users is a catalyst for research use in education.

The rationale for the use of evidence in public sectors is clear – using research should lead to higher quality decision-making, more informed policies, more effective practices and, as a result, improved outcomes. Historically, the use of research in many social policy areas has led to dramatic improvements such as citrus fruits used to prevent scurvy, the importance of hand washing in medical care to prevent infection, the influence of clean drinking water on public health, the ability of disabled children to benefit from public education, to name just a few of the numerous instances.

Although there is now widespread recognition of the importance of evidence-based policy and practice, there is still little empirical research that can guide governments, policymakers and practitioners as to what KMb processes and initiatives will yield the best outcomes. Five interrelated problems identified in the literature set the stage for this study:

- the oft-cited gap between research, policy and practice that acts as the impetus for KM as a field of inquiry;
- the lack of systematic approaches to KMb *within* and *across* organizations, systems, sectors, disciplines and countries;
- the lack of empirical evidence on research use and processes surrounding KMb;
- where studies do exist, modest levels of research use are reported in policy and practice;
- the underexplored role of intermediaries in KMb, despite the growing recognition of their importance to research use processes.

Education has been slower to adopt evidence use policies and practices in comparison with other public services such as health and criminal justice; as a result, these issues are especially salient.

SIGNIFICANCE

Much of the research that does exist on KMb focuses on research producing contexts (such as universities) and research using contexts (such as hospitals and schools) with very few studies addressing the intermediary organizations that often facilitate research use processes. Intermediaries are important because practitioners rarely come into contact with primary

research directly from academic journals or lengthy research reports. Instead, educators engage with research indirectly through colleagues, professional development, the media, and often through various third party organizations. Educational intermediaries have also been increasing in the past twenty years; in the US alone, think tanks have quadrupled from less than 70 to over 300 since the 1970s. Because of the growing recognition of the prominence of intermediaries, research agencies (e.g. William T. Grant Foundation) and prominent scholars in the field are highlighting the importance of intermediaries' roles in Kmb and emphasizing the need for empirical work on third parties in the Kmb process. This study explores the nature and impact of the work of RBOs in research mediation in education and also looks for evidence on the results of these efforts.

RESEARCH QUESTIONS

What is the nature of the work of Canadian intermediaries (RBOs) in knowledge mobilization in education?

1. What **types** of intermediary RBOs exist in education across Canada?
2. What are the **organizational features** of intermediary RBOs?
3. What **knowledge mobilization processes** are intermediary RBOs involved in, and what **dissemination mechanisms** do they use?

CONCEPTUAL FRAMEWORK

The conceptual framework (Figure 1) builds on Levin's (2004) model of research impact, showing research use as interaction between (1) research producing contexts (2) research using contexts and (3) intermediary RBOs, all influenced by the social context that Kmb is embedded within.

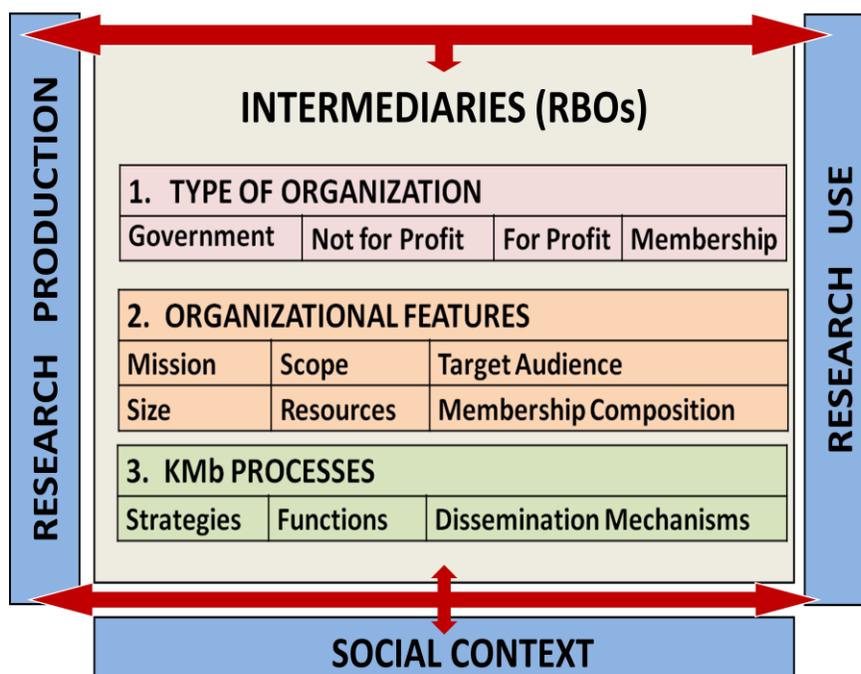


Figure 1. Conceptual framework: Research mediation.

Subsidiary research questions correspond to the three dimensions of the conceptual framework; each dimension is further disaggregated into variables arising from the research utilization literature across sectors.

Contribution to the Advancement of Knowledge

This study aligns with the Social Sciences and Humanities Research Council's (SSHRC) strategic priority to better understand and increase research use in the social sciences in Canada and was funded by SSHRC. This research will extend our knowledge about: what RBOs exist in education in Canada; what roles intermediaries play in getting research evidence used in policy and practice; and what KM strategies intermediaries utilize to accomplish their mandate. Other sectors and countries can also use the tools and methodology from this study to map the intermediary activity in various contexts.

METHODOLOGY

This study used a multicase research design to collect empirical data on educational organizations whose major focus and activity is connecting research producers and users to improve knowledge mobilization.

Sample Selection

This study aimed to identify all educational RBOs across Canada. Three sampling strategies were utilized to ensure systematic sample selection and consider a majority of Canadian educational organizations:

- 1) A directory of key contacts in Canadian education called the Ki-Es-Ki handbook, produced by the Canadian Education Association, containing over 4,000 individuals and organizations involved in the education sector across Canada.
- 2) Systematic searching of major internet search engines (e.g. Yahoo, Google) using combinations and permutations of key terms¹. Search strings and results were recorded.
- 3) Organizations identified through the Research Supporting Practice in Education (RSPE) program (www.oise.utoronto.ca/rspe), a team known internationally for their KM work.

Three sampling strategies resulted in 541 potential organizations across Canada.

Inclusion Criteria

RBOs were selected based on two inclusion criteria:

1. *Target Audiences*: they connected research producers **and** research users.
2. *Mission Statements*²: organizations' mission statements, goals and/or strategic plans were explicitly related to KM in some way and to increasing connections between research, policy and practice (although these aims were articulated using different terminology).

¹ Example of search string: (education*) AND (organization) AND (research) AND (use)

² Mission statements were used because it was a common unit of analysis among diverse types of organizations

Of the 541 potential organizations: 24 were excluded because they did not have websites listed in the Ki-Es-Ki, 67 were excluded because they were French³. The 450 remaining organizations were considered: 388 met neither inclusion criteria; 18 met criteria 1 only; and 44 met both inclusion criteria so were included in the study (Appendix A).

Data Collection

Throughout the literature, sectors are struggling to find tools to measure research use, its impact and KMb efforts. The RSPE team has created an evaluative tool to assess knowledge mobilization efforts of organizations across sectors through systematic website analysis⁴. This tool (Appendix B) is a matrix which measures organizational KMb activities in terms of KMb strategies (products, events and networks) and KMb indicators as they relate to strategies (different types, ease of use, accessibility, focus of audience and so on).

This matrix provides a systematic way to compare diverse organizations across uniform elements arising from the research utilization literature. While this tool uses organizational websites as a data source, it is important to note that the matrix is not evaluating the websites themselves for layout or online presence; rather, it is using the data on websites as a proxy of KMb activity in the real world. Much of the data on websites, while being housed in virtual space, actually provides a record of activities, events and networks occurring face-to-face in the real world. The interrater reliability testing of the tool was completed for 20% of the RBO sample (3 raters per organization for 9 organizations); the average intraclass correlation coefficient across these RBOs was 0.8 (a satisfactory value of reliability is usually considered to be 0.7).

Data Analysis

Statistical analysis was conducted using SPSS and Excel. Data analysis included: descriptive statistics (overall mean scores, percent scores, standard deviation); interrater reliability of KMb matrix using intraclass correlation coefficient; reliability testing was conducted using Cronbach's α ; non-parametric statistical tests were conducted because the data from the website metric are ordinal and not normally distributed; independent- samples Kruskal-Wallis tests were conducted to evaluate differences among different types of organizations – where the test was significant, pairwise comparisons were conducted to evaluate similarities and differences among organizations.

FINDINGS

Typology of RBOs

A typology of RBOs was constructed from the literature in conjunction with the empirical sampling for the study (Figure 2). There are four broad categories of Canadian RBOs: Governmental RBOs (N=7), Not-for-profit RBOs (N=31), For profit RBOs (N=0) and Membership RBOs (N=6) (for further elaboration on types, see Appendix C).

³ The principal investigator is not bilingual so could not analyze French organizations

⁴ The principal investigator was involved in the creation and development of this tool

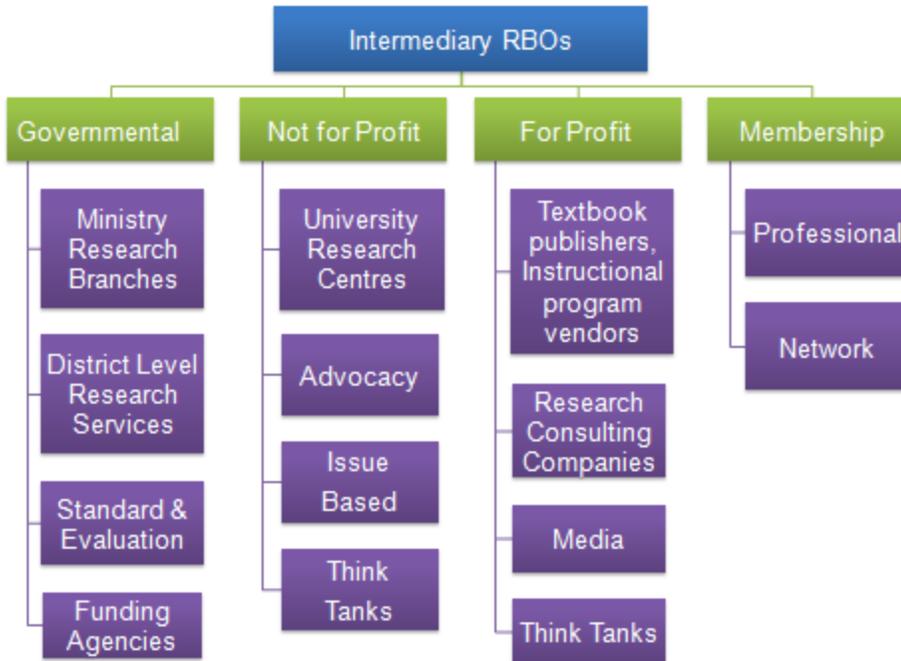


Figure 2. Typology of intermediary research brokering organizations.

44 RBOs were identified across Canada from 9 provinces (AB, BC, MB, NB, NL, NS, ON, QC, SK) with the highest concentration of organizations being from Ontario (Figure 3).

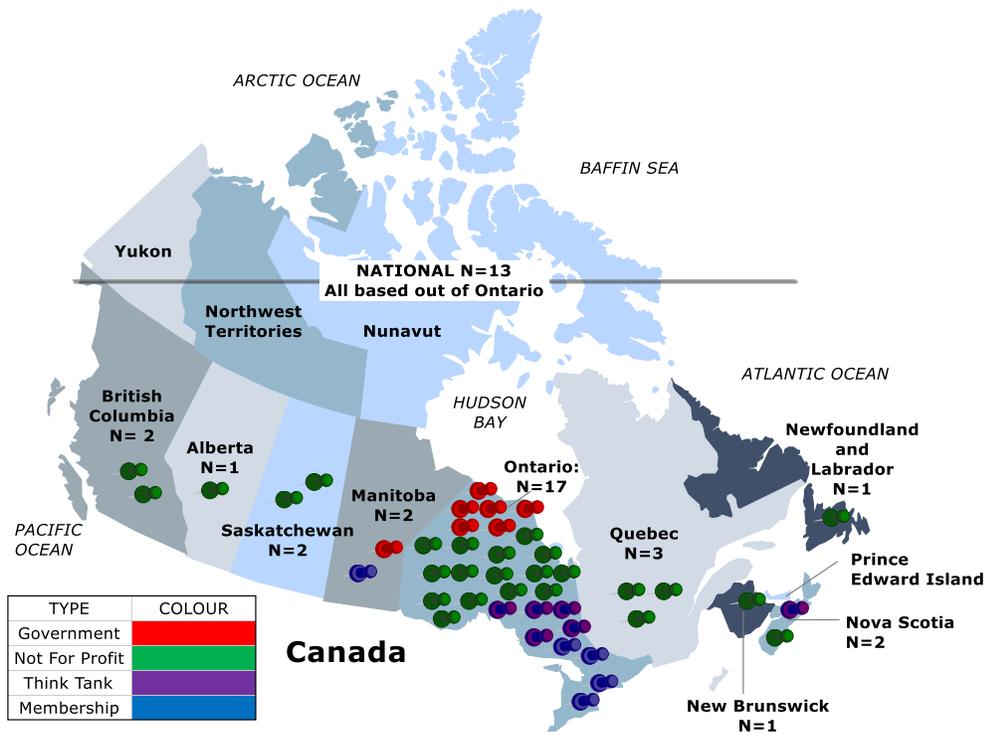


Figure 3. Distribution of provincial and national RBOs differentiated by type.

Many of the RBOs that currently exist have risen in the last decade: 43% (N=19) of the sample has been founded since 2000.

Comparing KMb efforts of RBOs, faculties of education, school districts and ministries

The KMb matrix tool was used to evaluate the KMb efforts of the 44 organizations included in the sample (Appendix D). Most RBOs score moderately on the KMb matrix (M=56%). The RSPE team has used this tool to analyze KMb efforts of different kinds of organizations including faculties of education (N=21), school districts (N=14), and ministries of education (N=26), so there were scores from a range of organizations as a baseline for comparison. When comparing KMb efforts of different organizations in the sector, RBOs and faculties of education are moderately engaged in KMb efforts with some being extensively involved. School districts and ministries of education have lower levels of KMb efforts (Figure 4).

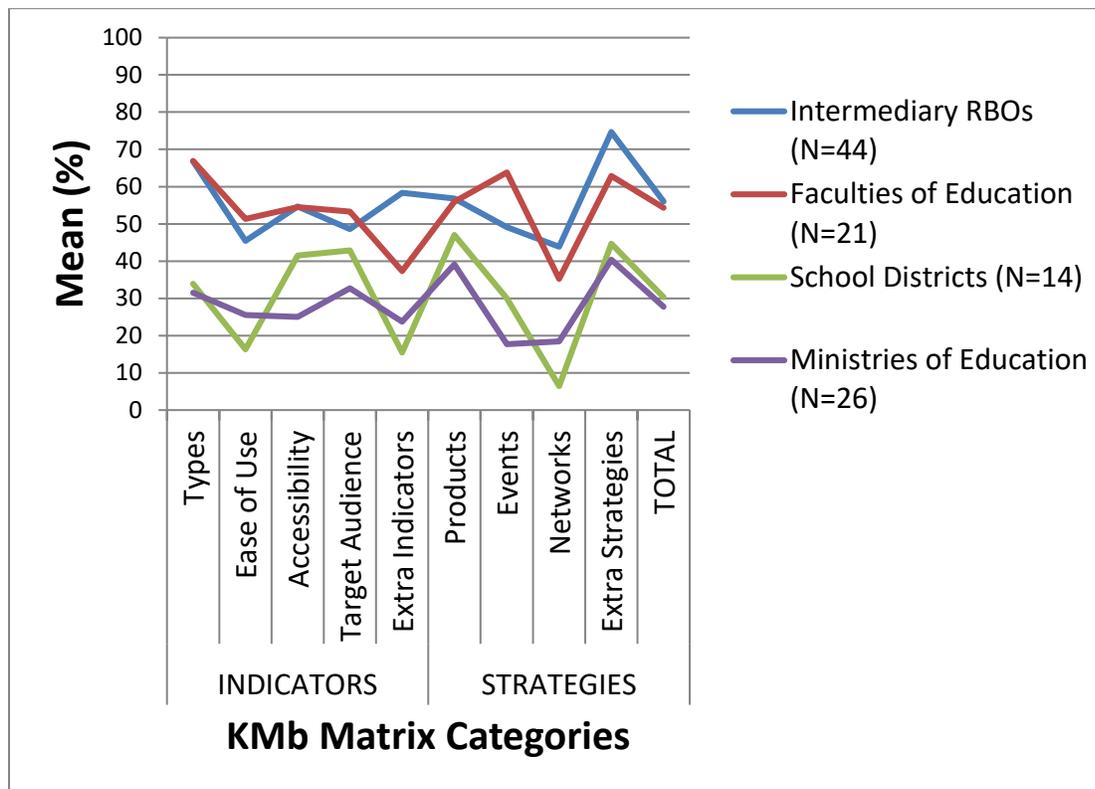


Figure 4. Comparing KMb efforts of RBOs, faculties of education, school districts, and ministries of education.

RBOs and faculties of education perform similarly; school districts and ministries perform similarly; and there are significant differences between these two groups with RBOs and faculties of education having stronger KMb efforts. Predominantly, the top performing organizations in terms of KMb efforts are RBOs (Figure 5).

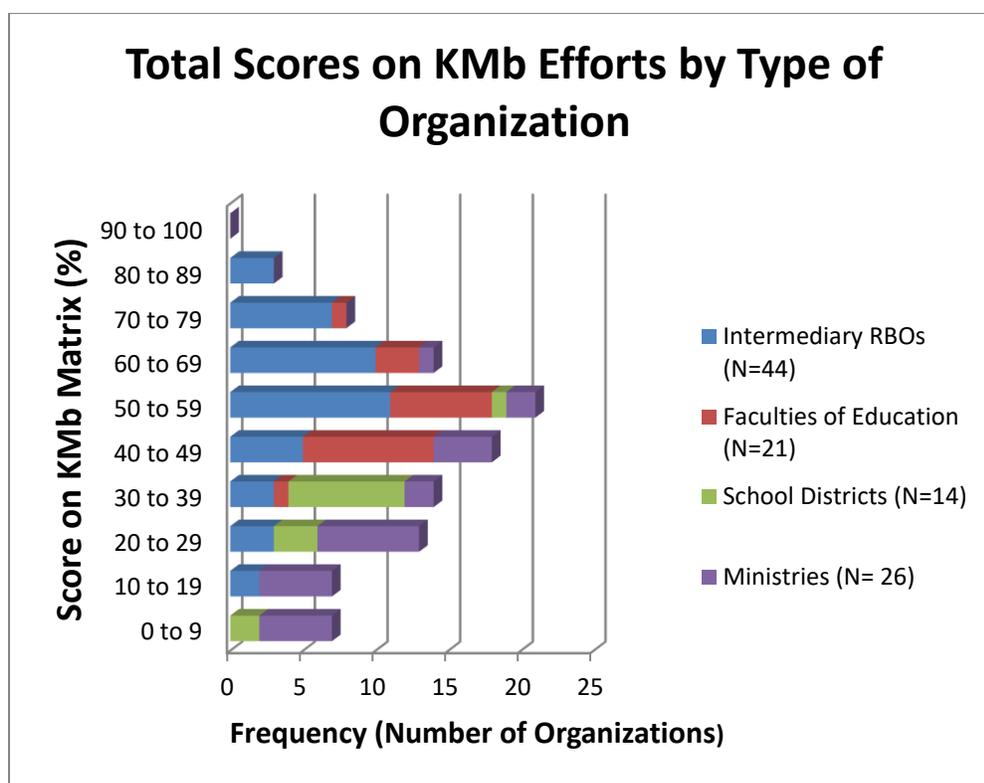


Figure 5. Histogram of KMb efforts by type of organization.

Organizational Features of RBOs

Canadian RBOs were compared in relation to mission, target audience, membership composition, scope, size and resources. RBOs' target audiences included researchers, practitioners, policymakers, community members (such as parents), and students. RBOs connected a range of institutions: schools, districts, ministries, faculties of education and other educational organizations. The scope of Canadian RBOs varied from local (N=2) to provincial (N=29) to national (N=13). Some of the provincial RBOs defined their scope in relation to a particular audience (P4E has a parent focus) or in relation to a specific topic such as mental health (The Centre). RBOs allocate money and staff to strengthening connections between research and practice. However, there is wide variation in the number of resources RBOs have. Most Canadian KMIs are small (59%) with less than 10 full time employees (FTE) (Table 1).

Table 1

Size of Canadian Intermediary RBOs

RBO Size (FTE)	N	Min	Max	Mean	Mode
Small (1-10 FTE)	26	1	10	5	3
Medium (11-19 FTE)	5	11	14	12	11
Large (20+ FTE)	13	20	77	41	30

The range of operating expenditures⁵ of RBOs is large with the smallest annual budget for a RBO being \$150,000 and largest being \$20, 583, 4905 (Table 2).

⁵ Only 18 of the 44 RBOs would release financial data.

Table 2

Operating Expenditures of RBOs for the 2009-2010 fiscal year

RBO Size	n (N)	Operating Expenditures 2009-2010* (\$)		
		Min	Max	Mean
Small (1-10 FTE)	8 (26)	150,000	2,044,892	758,712
Medium (11-19 FTE)	1 (5)			75,901,640
Large (20+ FTE)	9 (13)	2,137,898	20,583,490	7,569,696

* Operating expenditures are based on the 2009-2010, due to the fact that data collection occurred before 2010-2011 fiscal reports were ready.

Of the 18 RBOs that released their financial data, some (N=8) were also revenue generating. The relationship between organizational features and Kmb efforts was explored. RBOs vary widely in levels of Kmb activity as well as amounts of dedicated resources. There were no significant differences among RBOs based on size; however, some of the top RBOs were small and operating on very small budgets but had dedicated staff (Table 3).

Table 3

Top Scoring RBOs on Kmb Efforts and organizational features

Rank	Organization	Type*	Size (FTE)	Operating Expenditures	Score on Kmb Matrix (%)
1		NfP university	Small (3)	\$250 000	
	1.2.1 RI	research centre			81
	1.2.4 Fraser	NfP, think tank	Large (60)	\$12,808,690	81
	1.4.2 CEA	Memb, network	Small (9)	\$2,044,892	81
2	1.2.4 AIMS	NfP, think tank	Small (5)	\$872 234	78
3	1.2.0 CCL	NfP, general	Large (77)	\$20,583,490	76
	1.2.3 The Centre	NfP, issue-based	Large (25)	\$5,685,000	76
4	1.2.0 TLP	NfP, general	Large (74)	\$5,293,039	75
	1.2.1 HC	NfP university research centre	Med (11)	---	75
5	1.2.0 CCBR	NfP, general	Med (12)	---	74
6	1.1.2 E-BEST	Gov, district level	Small (6.5)	---	72
7		NfP, university	Small (9)	---	
	1.2.1 CEECD	research centre			69
	1.2.2 P4E	NfP, advocacy	Small (9)	\$537,806	69
	1.2.3 LEARN	NfP, issue-based	Large (33)	\$3,000,000	69
8		NfP, university	Large (50)	\$7,200,200	
	1.2.1 HELP	research centre			67
9	1.1.3 CSC	Gov, standards	Large (20)	\$3,849,254	65

*See Appendix C for thorough description of each type of organization (NfP = not-for-profit RBOs, Memb = membership RBOs, Gov = governmental RBOs)

Therefore, dedicated resources do not necessarily imply stronger Kmb efforts.

KMb Processes and Dissemination Mechanisms

Cumulatively, RBOs are making a significant contribution to KMb efforts through a multitude of different activities. A typology of brokering strategies being utilized by Canadian RBOs was constructed along broad areas: research product strategies, capacity building and support strategies, event strategies, network strategies, media strategies as well as some activity that was not research based (such as promotional materials, and strategic plans for organizational development) (Figure 6).

RESEARCH PRODUCTS	CAPACITY BUILDING	NON RESEARCH	EVENTS	NETWORK	MEDIA
<ul style="list-style-type: none"> • Reports, Exec Summaries • Summaries • Lit Reviews • Systematic • Conceptual • Reference Lists • Policy Briefs • Fact Sheets • Success Stories • Multimedia 	<ul style="list-style-type: none"> • Glossaries • Research FAQs • Toolkits • Online Tutorials • Research Support Services 	<ul style="list-style-type: none"> • Strategic Plan • Editorials • Promotional Materials • Advocacy • Annual Report 	<ul style="list-style-type: none"> • Panel/ Talk • Conference • Annual Meetings • Workshop • Awards Ceremonies 	<ul style="list-style-type: none"> • E-Bulletins • Network Push • Directories of Contacts • Social Media • Online Forum 	<ul style="list-style-type: none"> • Press Release • Newspaper • Radio • TV • Blog

Figure 6. Brokering strategies used by Canadian RBOs.

This typology was used to compare RBOs that scored highest, mid-range, and lowest on KMb efforts according to scores from the KMb matrix tool (Figure 7). CEA is a not-for-profit membership RBO, CCL is a governmental RBO, SAEE and SQE are think tanks and LDAO is a not-for-profit issue based RBO.

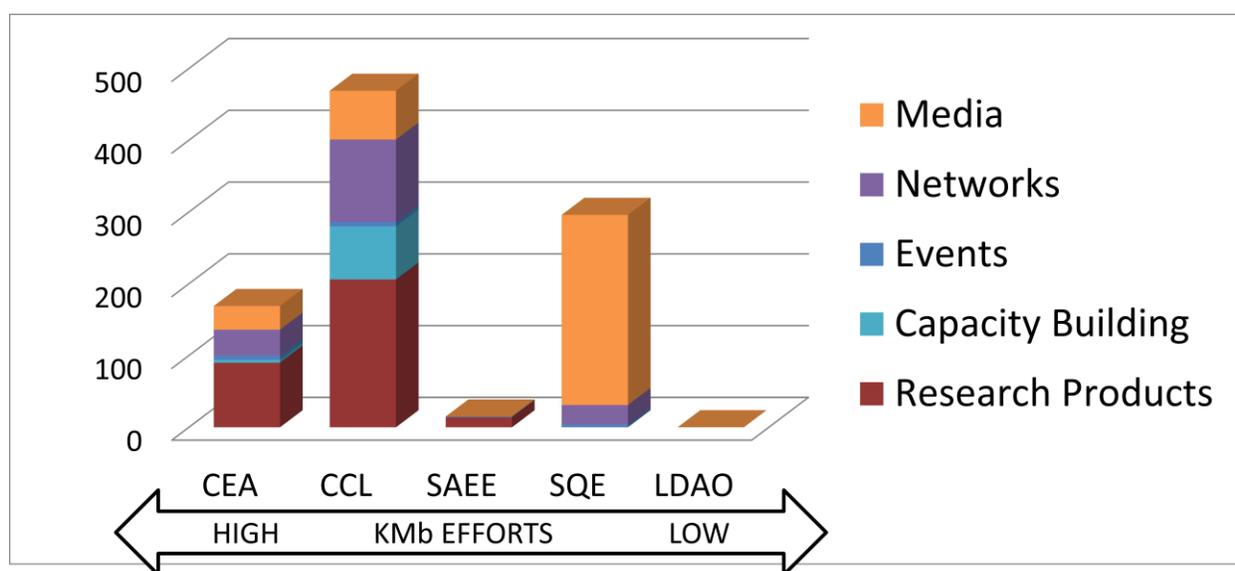


Figure 7. Comparing KMb efforts of high, mid and low performing RBOs.

RBOs vary widely in levels and kinds of KMB activities. Capacity building is rarely focused on (CCL is an exception). Think tanks (SQE) use extensive media strategies in comparison with other RBOs.

Further analysis of strategies revealed 8 major brokering functions of Canadian RBOs: linkage and partnerships, awareness, accessibility, engagement, capacity building, implementation support, organizational development and policy influence (Figure 8).



Figure 8. Brokering functions of Canadian RBOs.

Canadian RBOs use various dissemination mechanisms: face-to-face interaction, media outlets, online technological platforms and social media, and other intermediary organizations. Exploration of online dissemination strategies revealed that most RBOs do not use many online strategies beyond their websites, with 36% using 1-2 and 32% using none at all (Figure 9).

Social Media

36 % of the sample (N=16) used social media of some kind. A look at the top two additional strategies, Facebook and Twitter usage, revealed wide variation in the size of network audiences (followers) and also of intensity and frequency of use. RBO Facebook networks range from 17-4577 people; however, most RBOs that used Facebook (75%) had networks smaller than 225. Twitter networks ranged from 11 to 2172 followers: 40% had networks of less than 50 people; 47% had networks between 50-300 people; and, with 13% having more than 800 people. The

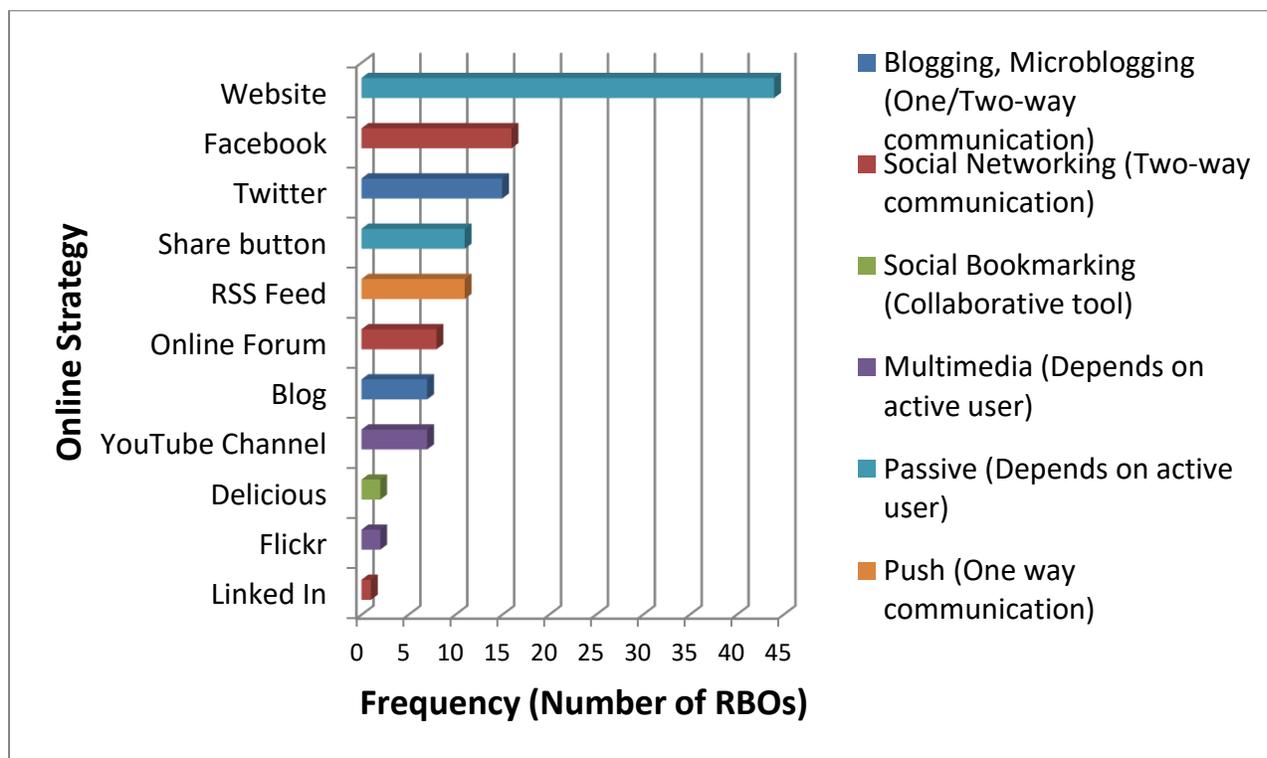


Figure 9. RBOs' use of online strategies for KMb.

intensity of the use of social media (in terms of frequency of posts) was also wide ranging across RBOs (tweets per month ranged from 0 to 149), but overall modest (67% less than 20 per month, 20% between 30-50 per month, 13% nearing or exceeding 100 per month).

Five categories emerged in terms of the content of RBO posts using social media: Opinion, Promotion, Information, Update and Research-based posts. The nature of the posts for a few RBOs was analyzed: approximately 20% of Facebook and Twitter RBO posts are research based, with 39% being opinion posts, 34% of posts being to provide information about events and 7% being updates. Overall, regardless of the type of online strategy, RBOs engage in modest levels of social media and Web 2.0 activities with many doing none at all. A few RBOs, however, have more extensive use of social media strategies.

Implications

This study contributes empirical data about intermediaries' roles in research use in education in Canada and provides more clarity and direction for third party work in education in the future.

More work is needed to determine what strategies and functions are most effective with different audiences in various contexts; however, this study was an important first step to identify the range of activities and functions that can now provide the necessary scaffolding for development of impact measures.

For other countries and sectors

The KMb matrix tool as well as the methodology from this study could be used to map the intermediary activities in other contexts (such as mapping RBOs in other countries or in the health sector). More research is needed in virtually all areas of KMb, especially in relation to research brokering roles played by intermediaries. More replication is needed in order to build an accumulative and comparable body of empirical evidence on KMb. Also, the few tools that do exist to measure KMb efforts (such as those utilized in this study) need to be widely applied and incrementally improved through further empirical investigation.

For researchers

Researchers should consider seeking out and cultivating relationships with RBOs in their discipline and content area. Researchers should incorporate KMb plans into their grant applications, and these plans should utilize RBOs as research dissemination bridges into policy and practice worlds. The networks that intermediaries already have might prove to be powerful channels to increase the spread, if not the impact, of important bodies of empirical knowledge. Also, using already established networks of RBOs is a better use of researchers' time than building these networks themselves. RBOs also have many tools that might assist researchers in the dissemination of their work including templates for plain language research summaries, policy brief templates, and so on.

For practitioners and policymakers

Practitioners and policymakers could benefit from seeking out and forging relationships with RBOs. These organizations focus on packaging research with users in mind; hence, they have many tools for practitioners and policymakers to better integrate research use into their daily work. Similarly, many of these organizations have support structures and consultation hotlines for users, so practitioners or policymakers can request research summaries on topics that are relevant to an issue they are trying to address.

For intermediaries

Recommendations to intermediaries include collecting data on which strategies are most effective with various target audiences. Also, intermediaries should seek to be evidence-based, not in the content they produce but in how they go about their work. Are the strategies being implemented proven to be effective? Collaboration among intermediaries might provide a powerful avenue to aggregate various efforts, such as creating a common database of research summaries and policy briefs or a common database of capacity building tools. These types of communal efforts are already occurring in the health sector, and the education sector would advance itself by using and building on these models.

For funders

Funders are increasingly requiring researchers to include KMb plans in grant applications. Rather than expecting researchers to coordinate KMb efforts, funders should advise and train researchers how to create KMb plans that utilize RBOs. These organizations are already

embedded in the system and connect diverse stakeholder groups, so using them is more productive than having researchers attempt to create new networks from scratch when instead they could be leveraging activity that already exists within the sector.

Much can be learned from Canadian RBOs that are extensively involved in KMb efforts across the education sector. There are many committed professionals engaging in exciting efforts to connect diverse stakeholders and use research to improve our public services.

Appendix A: Organizational Acronyms and websites

Type	Organization	Acronym	Website	Province
1.1.0	Council of Ministers of Education of Canada	CMEC	http://www.cmec.ca/Pages/splash.aspx	National
1.1.0	Manitoba Education Research Network	MERN	http://www.mern.ca/index.asp	MB
1.1.1	Ontario Research Strategy and Evaluation	ERESB	http://www.edu.gov.on.ca/eng/research/strategy.html	ON
1.1.2	Evidence-Based Education Services Team	E-BEST	http://www.hwdsb.on.ca/e-best	ON
1.1.3	Curriculum Services Canada	CSC	www.curriculum.org	National
1.1.3	Education Quality and Accountability Office	EQAO	www.eqao.com	ON
1.1.4	Social Sciences and Humanities Research Council	SSHRC	www.sshrc.ca	National
1.2.0	Centre for Community Based Research	CCBR	http://www.communitybasedresearch.ca	ON
1.2.0	Canadian Council for Learning	CCL	www.ccl-cca.ca	National
1.2.0	Galileo Network for Leadership in Learning	Galileo	www.galileo.org	AL
1.2.0	Society for the Advancement of Excellence in Education	SAEE	www.saeec.ca	ON
1.2.0	Society for Quality Education	SQE	www.societyforqualityeducation.org	ON
1.2.0	The Learning Partnership	TLP	www.thelearningpartnership.ca	ON
1.2.1	Center of Excellence for Early Childhood Development	CEECD	http://www.excellence-earlychildhood.ca	QC
1.2.1	The childcare resource and research unit	CRRU	http://www.childcarecanada.org	ON
1.2.1	Harris Centre	HC	http://www.mun.ca/harriscentre	NFLD
1.2.1	Human Early Learning Partnership	HELP	http://www.earlylearning.ubc.ca	BC
1.2.1	Research Impact	RI	http://www.researchimpact.ca	ON
1.2.1	Research Supporting Practice in Education	RSPE	www.oise.utoronto.ca/rspe	ON
1.2.1	Strategic Knowledge Cluster on Early Childhood Development	SKE-ECD	http://www.skc-eed.ca/home.html	QC
1.2.2	People for Education	P4E	http://www.peopleforeducation.com	ON
1.2.3	Early Years Education Ontario Network	EYEON	http://eyeonkids.ca/	ON
1.2.3	The Hanen Centre	HANEN	www.hanen.org	ON
1.2.3	Literacy Coalition of New Brunswick	LCNB	http://www.nb.literacy.ca/about.htm	NB

1.2.3	Learning Disabilities Association of Canada	LDAC	http://www.ldac-acta.ca/	National
1.2.3	Learning Disabilities Association of Nova Scotia	LDANS	http://www.ldans.ca/	NS
1.2.3	Learning Disabilities Association of Ontario	LDAO	http://www.ldao.ca	ON
1.2.3	Learning Disabilities Association of Saskatchewan	LDAS	http://www.ldas.org	SK
1.2.3	Leading English Education and Resource Network	LEARN	www.learnquebec.ca	QC
1.2.3	Literacy BC	LiteracyBC	www.literacybc.ca	BC
1.2.3	Provincial Centre of Excellence for Child and Youth Mental Health	the Centre	www.excellenceforchildand youth.ca	ON
1.2.3	The Promoting Relationships and Eliminating Violence Network	PREVNet	http://prevnet.ca	National
1.2.3	Saskatchewan Literacy Network	SK Literacy	www.sk.literacy.ca	SK
1.2.4	Atlantic Institute for Market Studies	AIMS	http://www.aims.ca/en/home/default.aspx	NS
1.2.4	Canadian Centre for Policy Alternatives	CCPA	www.policyalternatives.ca	National
1.2.4	CD Howe Institute	CD Howe	http://www.cdhowe.org	National
1.2.4	Canadian Policy Research Networks	CPRN	http://www.cprn.org	National
1.2.4	The Fraser	Fraser	www.fraserinstitute.org	National
1.4.1	Council of Directors of Education	CODE	http://www.ontariodirectors.ca/	ON
1.4.2	Association of Educational Researchers of Ontario	AERO	http://www.aero-ontario.org	ON
1.4.2	Canadian Centre for Knowledge Mobilization	CCKM	www.cckm.ca	National
1.4.2	Canadian Education Association	CEA	www.cea-ace.ca	ON
1.4.2	Manitoba Council for Leadership Development in Education	MCLE	http://www.mcle.ca/index.php	MB
1.4.2	The Ontario Research and Innovation Optical Network	ORION	http://www.orion.on.ca/	ON

Appendix B: Matrix to Evaluate KMb Practices of Organizations Using Website Analysis

Strategies Indicators	Products	Events		Networks	Overall features	Total
Different types	1 point (1-2 types) 2 points (3-4 types) 3 points (5-6 types)	2 points (1-2 types) 4points (3-4 types) 6 points (5-6 types)		2 points (1 type) 4points (2 types) 6points (3 types)	1 point (1 strategy); 2 points (2 strategies); 3 points (2 strategies with a good balance); 4 points (three strategies); 5 points (three strategies with a good balance)	/20
Ease of use	1 point (means provided to make comment on the main page) ;2 points (means provided to make comments on specific products)	2 point (occasional follow-ups) 4 points (regular follow-ups)	2 point (events archived)	2points (archived network communication)	1 point (1 searching tool) 2 points (2 searching tools) 3 points (3 searching tools) 4 points (4 searching tools)	/14
Accessibility	1 point (small portion) 2 points (large portion) 3 points (all)	2 point (conditions attached); 4points (part of events with conditions attached) 6 points (no conditions attached)		2point (once every three month or less) 4 points (more frequently)	1 point (low readability) 2 points (average readability) 3points (high readability)	/16
Focus of audience	1 point (part of products) 2 points (part of products with clear application information) 3 points (all products) 4 points (all products with clear application information)	2 points (brief introduction)		2 points (general introduction about who is involved in the network) 4 points (clear introduction about purpose, who is involved and the contributions)		/10
Extra indicators				Collaborative nature of the network 2points (some indication) 4 points (strong indication)	Explicit KMb statement on the site 2 points (general statement); 4 points (clear statement without overall plan); 6 points (strong statement loosely connected to org overall plan); 8 points (strong directly connected to org plan)	/12
Total points	/ 12	/20		/20	/20	/72

Appendix C: Typology of Canadian intermediary RBOs in education

CATEGORIES (location; funding)	DISAGGREGATED TYPES & CANADIAN EXAMPLES
1.1.0 Governmental Intermediary RBO (System Actor; internal; funded by government)	<p>1.1.1 Provincial ministry research branches that deal explicitly with research use and evidence-based policies and strategies. (ERESB)</p> <p>1.1.2 District level research services teams that exist outside schools but are embedded within school districts to provide support for evidence-based initiatives. (E-Best)</p> <p>1.1.3 Evaluation, standards organizations that have an explicit KMb role in public schools. (EQAO)</p> <p>1.1.4 Funding Agencies are agencies that provide funding for research thereby supporting research infrastructure and policy. They sometimes have grants which require linkage and exchange between producers and users. (SSHRC)</p>
1.2.0 Not-for-profit Intermediary RBO (non system actor; external; funded by a variety of sources such as fundraising and donation or funding from various organizations)	<p>1.2.1 University research centers and programs that focus on connecting research to practice and policy communities; if they are simply researchers collecting data for studies in the public school system, they are not included. (RSPE; Harris Center; Research Impact)</p> <p>1.2.2 Advocacy Organizations are defined by Andrews and Edwards (2004) as organizations that “make public interest claims either promoting or resisting social change that, if implemented, would conflict with the social, cultural, political, or economic interests or values of other constituencies and groups” (p. 481). (People for Education)</p> <p>1.2.3 Issue Based Organizations mobilize research around a particular issue (for example literacy or learning disabilities). (LDAO, the Centre)</p> <p>1.2.4 Think tanks are defined by Rich (2004) as “non-profit public policy research organizations either independent or associated with a college or university” (p.13). (AIMS, Fraser Institute)</p>
1.3.0 For-profit Intermediary RBO (non system actors; external; private funding from business sector)	<p>1.3.1 Textbook publishers, instructional program vendors especially where these organizations create tools and resources for KM (Thompson Corporation)</p> <p>1.3.2 Research consulting companies: Consulting companies where the focus and professional development with teachers or researchers revolves around KM. (KMbWorks)</p> <p>1.3.3 Media Organizations: Professional media and mass media where sustained coverage deals explicitly with research use in education. (TVO)</p>
1.4.0 Membership Intermediary RBO (System/non-system actors; internal/external; funding from members)	<p>1.4.1 Professional Organizations: Unions and other professional associations in education where there is a focus on research use. (CODE, OSSTF)</p> <p>1.4.2 Network Organizations are organizations who are non-partisan and are primarily involved in maintaining networks across various stakeholders. (CEA, CCL)</p>

Appendix D: Website Analysis Scores on Kmb Efforts Rated from Highest to Lowest Scores

Organization	Kmb INDICATORS					Kmb STRATEGIES				TOTAL	%
	Types	Ease of Use	Accessibility	Target Audience	Collaborative; Mission	Products	Events	Networks	Balance; Search; Readability; Mission		
1.2.1 RI	17	10	15	6	10	8	16	16	18	58	81
1.2.4 Fraser	20	10	12	8	8	11	14	16	17	58	81
1.4.2 CEA	18	12	11	7	10	8	12	18	20	58	81
1.2.4 AIMS	16	14	13	5	8	9	16	14	17	56	78
1.2.0 CCL	19	6	15	7	8	9	16	12	18	55	76
1.2.3 The Centre	16	8	14	9	8	9	14	12	20	55	76
1.2.0 TLP	17	12	9	8	8	9	12	18	15	54	75
1.2.1 HC	18	8	14	6	8	6	18	14	16	54	75
1.2.0 CCBR	20	8	7	10	8	10	14	10	19	53	74
1.1.2 E-BEST	17	11	8	6	10	10	12	14	16	52	72
1.2.1 CEECD	16	9	13	6	6	9	10	14	17	50	69
1.2.2 P4E	15	7	10	8	10	10	6	20	14	50	69
1.2.3 LEARN	20	5	7	8	10	10	12	10	18	50	69
1.2.1 HELP	17	8	7	8	8	7	14	10	17	48	67
1.1.3 CSC	20	7	7	5	8	6	16	8	17	47	65
1.1.3 EQAO	11	10	11	6	8	12	12	4	18	46	64
1.1.1 ERESB	15	7	7	8	8	8	10	10	17	45	63
1.2.3 LiteracyBC	13	10	10	4	8	8	12	6	19	45	63
1.2.4 CPRN	13	7	13	7	4	8	10	12	14	44	61
1.2.4 CD Howe	14	9	9	7	4	6	12	12	13	43	60
1.2.0 Galileo	13	8	5	8	8	10	8	8	16	42	58
1.2.3 PREVNet	11	7	8	8	8	7	12	6	17	42	58
1.2.3 LDAO	15	4	11	5	6	6	10	12	13	41	57

Organization	KMb INDICATORS					KMb STRATEGIES				TOTAL	%
	Types	Ease of Use	Accessibility	Target Audience	Collaborative; Mission	Products	Events	Networks	Balance; Search; Readability; Mission		
1.2.0 SAE	15	9	6	2	8	6	14	6	14	40	56
1.2.3 SK Literacy	13	3	13	2	8	6	10	8	15	39	54
1.2.1 CRRU	11	4	12	3	8	7	8	6	17	38	53
1.2.1 RSPE	11	7	8	4	8	7	6	8	17	38	53
1.2.3 EYEON	10	6	14	2	6	5	10	8	15	38	53
1.4.2 CCKM	15	4	8	2	8	6	8	10	13	37	51
1.4.2 ORION	13	5	4	7	8	5	6	14	12	37	51
1.2.1 SKE-EDU	11	6	9	8	2	8	12	6	10	36	50
1.1.0 CMEC	13	5	7	3	6	7	6	6	15	34	47
1.1.0 MERN	10	6	10	0	8	5	12	2	15	34	47
1.2.4 CCPA	12	4	9	2	6	5	6	6	16	33	46
1.1.4 SSRHC	10	7	6	0	8	6	6	4	15	31	43
1.2.3 LDANS	9	3	8	5	6	5	10	4	12	31	43
1.4.2 MCLE	9	1	8	2	8	4	8	2	14	28	39
1.2.3 HANEN	9	2	4	8	4	6	6	4	11	27	38
1.2.3 LCNB	10	2	5	1	8	6	2	2	16	26	36
1.4.2 AERO	9	1	2	0	8	1	2	2	15	20	28
1.2.3 LDAC	9	2	1	2	4	1	2	4	11	18	25
1.4.1 CODE	10	1	3	0	2	4	2	2	8	16	22
1.2.3 LDAS	6	1	7	0	0	0	8	2	4	14	19
1.2.4 SQE	2	4	5	1	2	4	0	4	6	14	19
Overall Mean	13.36	6.36	8.75	4.86	7.00	6.82	9.82	8.77	14.93	40.34	56.02
Overall SD	4.05	3.28	3.54	2.99	2.34	2.59	4.35	4.98	3.41	12.35	17.22
Overall %	66.82	45.45	54.69	48.64	58.33	56.82	49.09	43.86	74.66	56.03	