Rural Education:
A Review of Provincial and Territorial Initiatives
2009

Manitoba Education,
Citizenship and Youth

Dr. Dawn C. Wallin
University of Manitoba

Research Assistance:
Heather Anderson
Christine Penner

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This document will also be available on the Manitoba Education, Citizenship and Youth website at http://www.edu.gov.mb.ca/k12/docs/reports/rural_ed/index.html and the Canadian Council on Learning website at http://www.ccl-cca.ca.

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Purpose of the Rural Education Review

Much of the international research on rural education focuses on the challenges that rural settings face that deter educational excellence: isolation from specialized services (Cheney & Demchak, 2001); limited accessibility to quality staff development and university services (Hodges, 2002); teacher shortages especially in key areas of math and science (Lemke & Harrison, 2002) with little hope in recruiting new teachers who wish to live in larger metropolitan areas (Ralph, 2002); decreasing enrolments which leads to a decrease in funding (Ralph, 2002), a declining pool of qualified administrative candidates (Waddle & Buchanan, 2002) often due to little administrative support and an overburdening of community expectations, and educational funding formulae that do not meet the challenges of service delivery in rural areas. Carlson (2002) stated that the closure of small schools has been the single most implemented educational "change reform" in rural areas. The limited Canadian research on rural education tends to concur with these findings (Canadian Council on Learning, 2006; Corbett, 2005, 2007; Dupuy, Mayer & Morissette, 2002; MacKinnon, 1998; Harris, 2002; Looker, 2001; Tremblay, 2001; Wallin, 2008; Wallin & Reimer, 2008). Some of these challenges arise from the social, economic, and political differences between urban and rural environments, but at the most fundamental of levels, they stem from the consequences of globalization on trade, labour relations, regulatory control, or governmental rules and guidelines (Howley, 1997; Lutz & Neis, in press).

Another line of research, however, discusses the benefits of rural schooling and illustrates how rural schools develop their capacity in ways that meet both systemic accountability demands and demands of local parents and communities (Corbett & Mulcahy, 2006; Gallagher, 2004; Gruenewald, 2003; Harris, 2006; Howley & Howley, 2006; Meier, 2002; Shelton, 2005; Theobald, 1997; Wallin, 2007; Wallin, 2008; Wallin & Reimer, 2008; Wotherspoon, 1998). Much of this research is localized and particularistic, because it is influenced by the needs of the local context in which it is undertaken. Unfortunately, this type of research makes it difficult to respond to common challenges facing rural areas across Canada, and/or influence policy at a national or provincial/territorial level.

In Manitoba, rural education has become a priority for Manitoba Education, Citizenship and Youth. In response to the work already being undertaken in the province in research (Wallin, 2008) and in local school divisions (MASS & MAST, 2006), in November, 2006, Manitoba Education, Citizenship and Youth organized a research forum on rural education under the auspices of the Manitoba Education Research Network (MERN). In January, 2007, an invitational meeting of educational policymakers and decision makers was held to begin visioning for rural provincial policy directions. At the annual Rural Forum event in April, MECY held an forum open to organizations both inside and outside of education with a view towards building networks and considering the needs of rural stakeholders. In the fall of 2008, MECY announced rural education as one of its priorities that address actions committed to supporting rural schools.

One of the ways this plan will be realized is through the fostering of research links between universities, school divisions and MECY. This project is one example of such a link. This report moves beyond the work that has already been done in Manitoba that outlines the challenges facing rural areas. In a proactive fashion, this report focuses on the plethora of initiatives schools have undertaken to support their rural schools and to address the challenges they face. In addition, the report offers a survey of initiatives that have been undertaken by Ministries of Education across Canada, with a specific focus on detailing those initiatives that either are directly targeted to rural schools, or have benefited them in the areas of *Teaching and Learning*, *Infrastructure*, *Educational Finance*, and *Inter-jurisdictional Collaboration*. In doing so, this report not only showcases the good work already being done in rural Manitoban schools with a view towards sharing opportunities rural schools might consider, but it also highlights some of the initiatives being undertaken at the ministry level that may provide avenues of exploration in the future. It is the intent that this review of rural education initiatives will help foster planning for rural education across the province that produces viable alternatives in practice and policy for rural education.

Acknowledgements

This study would not have been possible without the aid and commitment of a number of organizations, colleagues and rural educational stakeholders. The study was completed with financial support from the Canadian Council on Learning and Manitoba Education, Citizenship, and Youth. Ministerial contacts across Canada in Departments of Education, individual superintendents from rural areas, the Council of School Leaders, the Southeast Interlake Principals Association, and the principals who facilitated or passed on the invitation to participate are gratefully acknowledged. I wish to thank Mr. Jean-Vianney Auclair, Assistant Deputy Minister of Manitoba Education, Citizenship and Youth, for facilitating the work with ministries across Canada, and for his willingness to work with me through the challenges that inevitably occur in a study of this scope. The willingness to fund and support a study of this nature illustrates the value of the work being done in and for rural educational contexts, and acknowledges the potential of research on rural education in Canada, and in particular, in Manitoba.

I am particularly grateful to the two research assistants who helped with this project, Heather Anderson, and Christine Penner. Their energy and enthusiasm never failed, even when we realized that the scope of this project was much larger than any of us could have anticipated. Their professionalism in organizing the research process, contacting participants, and participating in the data analysis and writing of the results added another layer of analysis and integrity to the research process. I am humbled by their willingness to support and commit to this project, and to me.

Most importantly, my sincerest appreciation goes to all those who gave of themselves, their time and their ideas, by participating in the interview process. The diversity of responses, portfolios, responsibilities, and innovations reaffirms to me that rural education has a number of champions in our school system, and in the ministries of education across Canada. Your commitment to rural schooling is commendable, and it was a real joy to have the opportunity to meet and work with you.

I hope this report validates the work already being done within rural and remote schools in Manitoba, and within the provinces and territories across Canada, and offers some avenues of consideration for the future.

Sincerely,

Dr. Dawn C. Wallin
University of Manitoba

Executive Summary

The world of rural education is ever in flux; rural schools are innovative out of necessity because of their immediate reliance on local economies, demographics and social circumstances. However, in Canada, public education remains within the purview of provincial/territorial Ministries of Education, and in this respect, a symbiotic relationship exists between ministerial authorities and local jurisdictions. There always exists tension between provincial/territorial planning and priorities and the challenges in providing educational services at the local level based on contextual differences. However, as the findings of this study suggest, the tensions are negotiated and managed at the local level in ways that attempt to commit to provincial/territorial priorities while facilitating community interests. Because of the vast diversity across local contexts, and across provincial/territorial contexts, this study could not possibly capture all the innovations that either directly or indirectly affect rural schools. However, the respondents who participated in this study, whether they were local Manitoban principals and teachers, or provincial/territorial officials responsible for a number of different portfolios, have provided a wealth of information that suggests that commitment to the sustainability of rural schools remains. This Executive Summary briefly offers a collation of the ideas that are elaborated upon fully in the remainder of this report.

Based on the responses of the professionals involved in this study, a number of conclusions can be drawn about the innovations being undertaken in Manitoba schools:

(a) visions of schooling attempt to address formal educational goals within the local community context;
(b) organizing, managing, and staffing inclusive special education have become a priority for rural schools;
(c) school divisions have focused their energy and resources on providing relevant and instructional-based opportunities for local professional growth as opposed to external development due to time, distance, and cost factors;
(d) programming options have focused on literacy in the early years; social, at-risk and student engagement activities in the middle years; career development in the senior years; and skills training and PLAR in adult education;
(e) the use of ICT is growing, but is vastly uneven across the province;
(f) transportation costs continue to be an issue, to the extent that they have become instrumental in the decline of extra-curricular programs in schools;
(g) schools have become incredibly creative in how they use funds to build capacity in their schools and have appreciated the opportunities to access extra resources for innovative programs; however the increasing reliance on a competitive grant structure is becoming onerous, time-consuming and costly as more administrative time is necessary for writing, reporting upon, and managing the grants; and,
(h) collaboration within, between and across schools, communities, school divisions, external agencies, and institutions of higher education has become normative and is necessary to provide program opportunities, professional growth opportunities, information sharing, and access to services, personnel, and resources.

The provinces/territories that have been most innovative in the support of rural education have a number of factors in common. These ministries have:

(a) clearly articulated a strategic vision that focuses specifically on rural issues;
(b) supported with commitment and resources the extensive development of an ICT infrastructure capable of providing access, equity and choice for coursework, professional development, and service provision;
(c) focused on developing incentives and initiatives that will recruit, retain and develop teachers and administrators in rural communities;
(d) provincial/territorial funding structures deliberately designed to recognize differential economic, demographic and educational needs in rural areas;
(e) encouraged innovation to solve challenges faced by rural school divisions by resource provision, networking opportunities, and partnerships;
(f) promoted and protected flexibility for local options, programs and cultural innovations; and,

(g) developed partnerships across ministries, between ministries and local jurisdictions, and with post-secondary and work for service provision, career development, and recruitment and retention.

Rural schools have become more sophisticated and more adept at doing what they have always done best—they rely on the local expertise and the concept of community to work together with partners in order to find ways to innovate, to offer as many opportunities as they can for the students they serve, and to support the local people who work hard to make sure their children receive the best education they have to offer. Local rural schools in Manitoba have aligned their innovations and practices with the direction set by the province, partly as a consequence of the resources, directions and mandates of the ministry, but also because in doing so, they have found ways to support the economies, education and social environments of their local communities. Such a symbiotic relationship works best when it is based on mutually beneficial, equitable and authentic partnerships; strategic direction and planning at both the grass roots and provincial/territorial levels; the deliberate focus on creating flexible options that can work in multiple contexts; and pressure and support for growth in response to local and provincial/territorial need. There is no doubt that there remains much work to be done to facilitate quality education in Manitoba rural and remote schools. However, as evidenced in this study, there are three elements that will greatly support this work: (a) the energy and commitment to leading renewal and quality education already exists within the rural and remote schools in Manitoba; (b) Manitoba Education, Citizenship and Youth has established rural education a priority; and, (c) there exists a wealth of policy and practice innovations already undertaken in other jurisdictions in areas that face Manitoba schools, such as distance education, recruitment and retention, culturally sensitive programming, and career and vocational programming. Rather than having to begin anew, Manitoba can learn from these jurisdictions to create models of service that support the Manitoba context. In doing so, it will increase the access, quality and choices of rural and remote students, educators, and communities for educational services respectful of both provincial mandates and community need.

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Framework of the Study

This study utilizes a framework that is based on an amalgam of the past work on rural education conducted in the province of Manitoba in research (Wallin, 2008), policy (MECY, 2007) and practice (MASS & MAST, 2006). The interview protocol and analysis were created and conducted based on areas of concern relevant to the Manitoba context: (a) *Teaching and Learning*; (b) *Infrastructure*; (c) *Educational Finance*; and, (d) *Inter-Jurisdictional Collaboration*. Respondents were asked to comment upon initiatives or policies that were either directly targeted to, or benefited, rural schools as they related to the framework topics. The following table describes the nature of the topics found in each area.

Learning	Teaching
• Dealing with increasing diversity of student needs; • Individualization (content/strategies); • Opportunities for programming; • Developing learning cultures; • Access to resources for special needs students and student services such as mental health; • Dealing with social issues: transience, SES, family dynamics, cultural diversity, health; • Student service delivery options and flexibility; • Innovative planning processes; • Creating safe and welcoming schools	• Recruiting: General, specialty, student services; • Access to professional development (EAL, behavioral management, social issues) for professional and nonprofessional staff; • Reducing high workloads; • Accessing substitute pools for teachers, bus drivers, support personnel; • Multi-age, multi-grade classrooms; • Collective agreement benefits; • "Out of field" teaching assignments or non-certified professionals; and, • Opportunities for collaboration/teaming. • Communication
Infrastructure	**Educational Finance**
• Access to ICT: learning beyond school, access to high-speed internet, cross-divisional partnerships, course development/delivery and PD; • Facilities: renovations, capital projects, accommodating increasing and decreasing student enrolment, community partnerships for innovative and multiple-use facilities; and, • Transportation—bussing costs, route length, bus ride length.	• Innovative Use of Funds • Local means of accessing funds • Improving provincial/territorial educational finance
Inter-Jurisdictional Collaboration	
• Local freedom and flexibility to explore options, pursue partnerships and institute changes; • Mechanisms for reducing barriers between community agencies and government departments for resource sharing and collaboration between school divisions and other entities; • Access to research about effective policy and/or practice in other jurisdictions; • Developing monitoring and tracking processes to assess the effectiveness of new policy directions and/or program innovations; and, • Partnerships with post-secondary and work. • Partnerships with community groups, business, neighbouring school divisions; • School contributions to community life;	

Rural School Initiatives: What the Research Says

Limited research endeavors have been attempted in the rural areas of educational systems (Ortleib, Cheek, & Earl, 2008). Particularly in Canada, there seems to be a relative lack of research within rural educational contexts. This literature review examined documents that outline best practices for rural education in the categories of *Teaching and Learning*, *Infrastructure*, *Educational Finance*, and *Inter-Jurisdictional Collaboration*. It was not the intent of this literature review to outline in detail all the initiatives undertaken in rural areas; references within each framework category are included in Appendix A. The intent of this section is to outline the major thrust of initiatives within each of the study categories.

Teaching and Learning

Much research has been done in the area of *Teaching and Learning*. The category was subdivided into five subcategories: *professionalism, personnel issues, initiatives, program concerns*, and *planning and accountability.* Professionalism was a focus in the teaching and learning documents, closely linked with the use of technology. The goal is to create learner-centered classrooms where technology is embedded with teachers trained in appropriate pedagogies of technology use (Mitchem, Wells, & Wells, 2003). In terms of *personnel issues*, documents most often cited issues related to the recruitment and retention of teachers, as well as the multiple roles of educators in rural educational settings. To meet the needs of a diversity of learners in rural and remote communities, many *initiatives* have been implemented within schools. Technology is the basis of many of these initiatives. In addition, multi-age classrooms was a focus in the area of programming in rural educational contexts. Finally, in the area of *planning and accountability*, research in the USA indicates a high degree of accountability to reform standards. Accountability for learning in this context is measured by test scores (Ortlieb, Cheek, & Early, 2008).

Infrastructure

The *Infrastructure* category was subdivided into three subcategories: *technology, facilities*, and *transportation.* The major thrust of research in this category has been done in the area of technology. Technology has been a key factor in connecting rural and remote communities to the world at large. School initiated technology courses, and distance education courses were most often cited in the documents collected. Besides being able to help their schools overcome an inherent remoteness, rural educators see technology as a tool to improve the diversity of experience, develop leaders, provide national and global opportunities for students, and provide linkages and resources for the whole community (Hawkes, Halverson, & Brockmueller, 2002). Rural schools have viewed technology not as a panacea, but as an equalizer to the abundance of experiences, resources, and options urban students receive over their rural counterparts (Hawkes, Halverson, & Brockmueller, 2002; Mitchem, Wells, & Wells, 2003).

Educational Finance

In the category of *Educational Finance* there were three subcategories: *uses of finance, local access to funds*, and *educational finance*. All three of these subcategories appeared in research documents. Documents cite innovative use of school funds, grant-writing, and ideas for re-conceptualizing educational finance to help implement school and division initiatives.

Inter-Jurisdictional Collaboration

Inter-jurisdictional Collaboration was further subdivided into three subcategories: *school-community linkages, within-system collaboration* (school-based, school-to-school, school division), and *accessing networks* (inter-agency collaboration, higher ed collaboration, government collaboration, professional association collaboration, research collaboration). All three of these subcategories appeared with regularity in the documents collected. School-community linkages was a focus throughout the inter-jurisdictional documents. In rural areas, schools are the focal point in the community, and an important source of community solidarity (Barley & Beesley, 2007). Documents on within-system collaboration most often referred to the sharing of resources within schools, districts, and school divisions. Finally, accessing networks most often referred to partnerships with colleges and universities. Documents cited many initiatives undertaken by local colleges and universities in an attempt to improve student learning within local, rural contexts.

Canadian Ministries of Education: Provincial/Territorial Frameworks

Canada has 13 departments of education; one in each province and territory. In order to collect data for this literature review, provincial and territorial Department of Education websites were visited twice in order to survey sample documentation that spoke to one of four target themes: (1) *Teaching and Learning* experience; (2) *Infrastructure;* (3) *Education Finance;* and, (4) *Inter-Jurisdictional Collaboration.* Only documents readily available on the websites were accessed except for one province that sent the lead researcher print materials. Websites were surveyed looking for specific links to publications, documents, policies, document depots, annual reports, and reports. In many instances, web archives were accessed because print publications, such as PDFs, were not readily available online. These web archives typically served to highlight initiatives or programs occurring within provinces and territories. Based on this research, we do not suggest that provinces and territories are not planning strategies or initiatives related to the issues under study. But our search is suggestive of whether, or what, provincial/territorial strategies and/or initiatives have been drafted into documents readily accessible to the public.

The four research themes were subdivided to provide a framework from which the documents could then be organized. The *Learning Experience* theme was subdivided into the following subcategories: (a) student diversity; (b) program opportunities; (c) access to resources for special needs; (d) individualization; (e) learning cultures; (f) dealing with social issues; (f) delivery options; (g) innovative planning; (h) safe schools; (i) partnerships; (j) school contributions to community life; and, (k) communication between the stakeholders. The *Teaching Experience* theme was subdivided into the following subcategories: (a) recruiting; (b) professional development; (c) reducing high work loads; (d) sub pools, bus drivers, support personnel; (e) multi-grade/multi-age classrooms; (f) collective agreements; (g) teaching by non-certified teachers; and (h) collaboration and teams. The theme of *Educational Finance* included only one theme, that of budget/finance. The theme of *Infrastructure* was subdivided into the following subcategories: (a) access to ICT; (b) facilities; and, (c) transportation. The theme, *Inter-Jurisdictional Collaboration* was subdivided into the following subcategories: (a) local freedom; (b) reducing barriers; (c) access to research; (d) monitoring and tracking new policy; (e) interdepartmental communication; (f) collaboration between provincial and federal governments; and (g) partnerships with postsecondary or work. Although in many instances documents and web archives spoke to multiple themes and subcategories, they were sorted and allocated according to their primary theme and subcategory fits.

Volume of Documents Related to Study Framework: What is Accessible?

In total, 127 documents and web archives were collected from the 13 provincial and territorial websites. It must be noted that the Quebec site was searched only for documentation written in English, and therefore this province is not represented in the wealth of information it may have available in French. These documents have been collated and sorted into the categories of the framework used for this study, and are found in Appendix B. Table 1 offers a brief summary of the number of references per province/territory that relate to each theme. This does not indicate separate documents (127), but the number of times study parameters were referenced within these documents (196), since some of them might overlap within the framework categories. Every province and territory had some data to offer this study and literature review. Alberta Education's website offered the largest number of documents that readily pertained to the research parameters.

The theme most commonly addressed by provincial and territorial website documents was the *Learning Experience*. Fifty-seven percent of the website documents and web archives related to the *Learning Experience* theme. Eleven documents were collected from each of Alberta's and Saskatchewan's websites, representing the greatest number of documents related to one theme. Manitoba's website offered eight readily applicable documents for the *Learning Experience* theme.

It is apparent that for the framework category of *Teaching and Learning*, Provincial and territorial departments of education are more apt to promote initiatives and provide documents relating to the *Learning Experience*, and they are less likely to provide documents related to the *Teaching Experience*. In fact, Manitoba, Saskatchewan, Quebec and Yukon offered no readily available documentation related to the Teaching Experience theme. Likely this finding connects partly to a growing concern for public accountability for what and how students learn, given the growing diversity in schools. Public concerns about the teaching experience, except as it relates to student learning, are less likely to find themselves within the public purview. It may also concern the fact that many issues within *Teaching Experience* are noted within collective bargaining agreements, and therefore are less likely to be supported with additional documentation.

Table 1
References of Provincial/Territorial Documents to Framework Themes

Theme	BC	AB	SK	MB	ON	QC	NB	NL	NS	PE	NT	NU	YT	TOTAL
Learning	5	11	11	8	5	2	6	6	2	3	4	4	6	73
Teaching	1	5		1	2		2	2	4	1	2	1		21
Educational Finance	4	5	2	3	8	1	2	4	1	2	3	2	5	42
Infrastructure		7	2	3	1		2	4		1	1	2	2	25
Inter-Jurisdictional Collaboration	2	7	5	3	3	1	1	3	1	2	5	1	1	35
Total References to Framework Themes	12	35	20	16	19	4	13	19	8	9	15	10	14	**196**
Total Number of Documents Per Province or Territory	8	20	13	11	13	3	6	12	6	7	11	7	10	**127**

Learning Experience

The greatest number of documents referenced the *Learning Experience* theme. Only the subcategories of *learning cultures* and *safe schools* had fewer than ten documents. The majority of the other subcategories were referenced in at least 20 documents or more.

The subcategories within this theme that were referenced in the greatest number of documents included *program opportunities* (36), *dealing with social issues* (27) and *partnerships* (26). Every province and territory had documents that fit into the *program opportunities* subcategory, and nearly all of the documents of some provinces, such as Alberta and Prince Edward Island, fit into this subcategory. Program opportunities were most commonly mentioned in terms of increasing the results or learning outcomes of students in K-12 education. Literacy and numeracy initiatives were the most frequent type of program opportunities to arise in the documents, as well as increasing general school success frequently defined by better scores on assessments. Provinces and territories with literacy, numeracy, or general school improvement program opportunities included Alberta, British Columbia, New Brunswick, and Saskatchewan. Other common areas within *program opportunities* included opportunities for language acquisition or support, increased opportunities for skills acquisition and vocational education, and increased opportunities for students with special needs. Provinces and territories with program opportunities related to these profiles included Manitoba, Newfoundland, Prince Edward Island, Quebec and Saskatchewan.

Dealing with social issues was most commonly profiled as an early childhood development or intervention program meant to engender school readiness for all children. Alberta, British Columbia, Manitoba, Nunavut, Northwest Territories, and Saskatchewan all had documents related to some sort of early childhood development initiative as a way to deal with social issues. Additionally, this topic was also addressed in programs that aligned workforce needs with educational initiatives in

vocational education or career education as evidenced in documents such as Newfoundland's *All the skills to succeed: Report of Newfoundland and Labrador skills task force* or Nunavut's *Adult learning strategy*.

The subcategory of *partnerships* was most commonly characterized in cross-ministry initiatives as in partnerships between Social Services, Health and Education (as seen in the early childhood development initiatives), or as collaboration and consultation with stakeholders such as parents or community leaders on issues related to education. Other types of common partnerships are those involving apprenticeship and vocational education as evidenced in documents such as Manitoba's *Technical vocational initiative,* and partnering with postsecondary institutions as evidenced in the Northwest Territories' document *Getting in, staying in, getting out: A plan for postsecondary student success*. Finally, partnerships were often characterized as those initiatives that bring Aboriginal peoples and the Department of Education together to provide better education for Aboriginal peoples. Documents in support of this finding include Saskatchewan's web archive *First Nations and Metis education branch* and Northwest Territories' *Revitalizing, enhancing and promoting Aboriginal languages: Strategies for supporting Aboriginal languages*.

Twenty documents referenced the subcategory of *student diversity*. Many of these documents recognized student diversity as a challenge to be addressed in order to attain improvements in learning and assessments. The Yukon's web archive, *First Nations programs and partnerships* is one such example for increasing sensitivity of cultural diversity to address learning needs. Other documents that serve as examples of recognizing and making allowances for student diversity include Newfoundland's *Focusing on the students: ISSP and pathways commission* and Ontario's *Reach every student: Energizing Ontario education*.

The documents within the subcategory of *delivery options* spoke mainly to rural and remote education concerns. Primarily these documents address technology for distance and rural education enhancement and focus on various delivery modes such as homeschooling, videoconferencing, and correspondence. In terms of the subcategory *school contributions to community life,* documents relate to increasing the inclusion of Aboriginal ways in schools so as to strengthen the community, creating caring and safe schools, and creating career and vocation education programs to aid in maintaining a thriving community. Documents that focus on *communication between stakeholders* generally speak to the idea of ensuring First Nations and Aboriginal peoples have a say in what education for their commuities should look like. Further, this subcategory also speaks to including parents and the community in education decisions.

Teaching Experience

The *Teaching Experience* theme as defined in this study yielded the fewest number of documents overall, the fewest number of documents that fit into subcategories, and was absent from the websites of Quebec, Saskatchewan, and Yukon. Within the subcategories, the number of documents were particularly limited in two subcategories, those of (a) *sub pools, bus drivers, and support personnel*; and (b) *multi-age, multi-grade classrooms.* Only one document per category was accessed. Further, of the 20 documents that fit into the *Teaching Experience* theme, the subcategory of *professional development* was referenced in half of those documents, for a total of 10. Alberta and Nova Scotia's websites offered 10 of the 20 documents related to the *Teaching Experience* theme.

The two subcategories with the greatest number of documents were *professional development* and *recruiting*. The documents related to professional development focused on increasing teachers' knowledge about, and servicing in, specialized areas of classroom content, new programming, or in special education. Further, many of the professional development documents imply a financial need to support teacher professional development in order to better meet education initiatives and targets. Several provinces and territories, namely Alberta, British Columbia, and the Northwest Territories, had documents that specifically spoke to the needs and dilemmas of professional development in rural areas. Difficulties in recruiting and retaining teachers in rural and remote areas were mentioned in the documents of four jurisdictions, British Columbia, Northwest Territories, Newfoundland and Nova Scotia. Northwest Territories has created an entire strategy to aid in overcoming this dilemma as evidenced in its document, *Strategy for teacher education 2007-2015.* Newfoundland's *Education and our future: A road map to innovation and excellence* document and Nova Scotia's *Audit of teaching assignment: An integrated analysis of teacher education*

background and courses taught, also reference the difficulties of recruiting and retaining teachers in rural areas. To overcome this issue, two provinces, Alberta and Newfoundland, have recommended increasing the financial support of teachers as a way to not only recruit them, as in Alberta, but also to retain them by helping to find appropriate rural housing and aid with debt repayment.

Infrastructure

Twenty-five documents referenced the theme of *Infrastructure*, including *access to ICT* (11), *facilities* (8), and *transportation* (5). Five of the ICT documents were referenced on the Alberta Education website. Alberta has several initiatives related to increasing access to ICT. Further, Alberta seems fully aware of the power that access to ICT affords rural schools and teachers as evidenced through its documents, *Planting the seeds growth in rural education: A series of choices*, and *Videoconferencing research community of practice: Research report*. The *facilities* subcategory included documents that spoke primarily about upgrading and maintianing physical school properties. Two territories, Nunavut and Northwest Territories, had their capital standards documents available online which specifically addressed facilities issues.

Educational Finance

Forty-two documents on provincial/territorial websites referenced *Educational Finance*. The budget/finance documents and web archives range from full provincial or territorial annual budgets to Department of Education specific annual budgets. Other foci within the collected documents include program or initiative specific expenditures and estimates of expenditures. Every province and territory had some sort of budget document available online. The budget/finance documents collected help to illustrate the types of dollars being attached to initiatives and programs addressed in the other three research theme areas. For example, numerous provinces and territories spoke to the budgetary implications of initiatives related to early childhood development and literacy/numeracy. Another prominent area to be addressed through the finance/budget subcategory was that of funding technology and ICT. Provinces and territories with technology-related financial documents included Alberta, Newfoundland, Nunavut, and Prince Edward Island.

Jurisdiction

The jurisdiction theme had 35 documents that readily fit the research parameters. This theme was divided into seven subcategories, of which *connections to interdepartmental communication*, *reducing barriers*, and *partnerships with postsecondary and work* appeared most frequently in the documents. *Interdepartmental communication* seemed to be a focus throughout the jurisdiction documents especially when it came to the combination of health, social welfare, and education. Examples of interdepartmental communication included documents collected from nine of thirteen provinces and territories such as Manitoba's *Moving forward: Manitoba's priorities for the future* which speaks to Health, Social Services, and Education working together on initiatives to better the lives of all Manitobans; and Ontario's *Accessibility plan 2007-2008 Ministry of education* which connects various arms of the public sector to improve services for people with disabilities. Other commonly referenced topics related to *interdepartmental communication* were related to technology use and apprenticeship programming.

In terms of the subcategory on *reducing barriers*, attending to the needs of Aboriginal people through education was a common jurisdictional priority as evidenced by documents such as Northwest Territories' *Building on our success: Strategic plan 2005-2015*. Further, the idea of using technology to reduce barriers, such as increasing access to technology or using technology to overcome isolation issues, arose regularly. Finally, *partnerships with postsecondary and work* most often referred to apprenticeship type programs or raising awareness about careers in the trades. In some instances, like in Alberta, the ministry has focused on using technology to reduce barriers and increase the remote access to trades skills through the initiative called the mobile Career and Technology Studies (CTS) lab. This mobile CTS lab is context specific for addressing the needs of rural and remote communities.

Methodology

Data-Gathering Procedures

Given its focus on surveying initiatives and best practice currently in use in rural Manitoban schools and in Ministries of Education across Canada, this study was primarily descriptive and analytical in nature. It focuses on an analysis of policy initiatives and best practices specifically designed for, or that benefit, rural school environments. As such, the study consisted of: (a) an extensive literature review, and (b) semi-structured telephone or personal interviews with policy representatives of ministries of education, and principals of rural school environments and/or vice-principals or teachers designated by those principals who could provide information on specific initiatives. Participants were asked to describe policies and/or initiatives aligned with current research and work done in Manitoba (MASS/MAST, 2006; MECY, 2007; Wallin, 2008). Interviews took place at a time mutually agreed upon and convenient for the participants and researcher. Interviews lasted approximately one hour. Participants were mailed or emailed the interview protocol before the interview so that they could gather their thoughts. Some participants requested to respond to the questions in writing over email. Interviews were audio-taped and stored in a locked file cabinet accessible only by Dr. Wallin. Transcripts were sent to participants for verification, but it should be noted that neither ministry officials nor other participants were provided the opportunity to complete revisions of the final report. The data were analyzed using the software program Atlas-ti and a constant comparative method. All participants received a copy of the final report. A description of these best practices are provided as they relate to four primary areas of interest: (a) *Teaching and Learning*; (b) *Infrastructure*; (c) *Educational Finance*; and, (d) *Inter-Jurisdictional Collaboration*. Similarities and differences across school sites and ministries are noted. The research began in December, 2007 and was completed in November, 2008.

This study focuses on an analysis of policy initiatives and best practices specifically designed for, or that benefit, rural school environments.

Interview Protocols

The interview protocols for both principals and ministry personnel have been attached with this document as Appendix C.

Study Participants

To address the area of best practice in rural Manitoban schools, principals and a small number of teachers who were designated as key informants because of their work with particular initiatives were interviewed. The Council of School Leaders (COSL) which is the in-school administrative cadre found within the Manitoba Teachers Society (MTS) agreed to inform and invite rural school principals to become involved in the study by sending an invitation via email and placing it in its documentation for the annual conference to principals in Manitoba in February 2008. The invitation to be involved was distributed to principals attending the Southeast Interlake Principals' Association meeting held in December 2007 to which Dr. Wallin had been invited as a University of Manitoba guest. In addition, rural Manitoba superintendents were informed of the study through email with a request to forward the invitation to principals involved in rural education initiatives. In total, 31 participants were involved in this phase of the research, representing all the rural education regions in the province: (a) Southeast/Interlake; (b) Central; (c) Parkland/Westman; and, (d) Northern/Remote, 12 of the 38 school divisions, and 25 schools in a variety of grade configurations and enrolment sizes. Table 2 offers a breakdown of the number of participants from each region. Southeast/Interlake is most highly represented.

To address the second purpose of the study, that of the cross-Canadian survey of initiatives, ministry personnel from provincial/territorial Departments of Education across Canada were interviewed. Manitoba Education, Citizenship and Youth, as a sponsor of this project, used its networks with ministries across Canada to invite and create a list of ministry personnel in departments of education whose input into the study would be valuable. Once this contact list was created, Dr. Wallin contacted these people via telephone to determine their willingness to be interviewed. Table 2 offers a breakdown of the 19 participants interviewed from each province or territory. Although there is representation from the provinces and territories where there exist the

largest percentages of those living in rural areas, Central Canada (Ontario/Quebec) was not represented in this study, and only one Atlantic province (Nova Scotia), was represented. All three territories, and all the western provinces were represented in this research. Alberta and Saskatchewan were represented most strongly in participation overall.

Informed Consent and Confidentiality

Informed consent was obtained in writing before interviews occurred. Once interviewees indicated via telephone that they were willing to participate in the study, the consent form (which made them aware of the nature of the research, the parameters of the study, the nature of their own participation and confidentiality), was emailed (or mailed) to them depending on preference, and mailed or faxed back to the researcher.

Respondents were assured that all of their responses would remain anonymous and confidential, and that all personal identifiers would be stripped from the analysis and dissemination of the results of the study. In the case of ministry personnel, only the fact that they represent ministries of education for a particular province is indicated, and this level of reporting was made clear in the consent form. In addition, the fact that ministry personnel were asked to offer factual information regarding educational policies and financial formulae that are in fact public limits the level of potential risk involved to them personally. During interview data analysis, all responses were collated for the purposes of generalization by province or territory, and by the topics used to determine best practices in the literature review that is based on the current research and literature on rural education in Manitoba (MASS/MAST, 2006; MECY, 2007; Wallin, 2008). No comments that might suggest the identity of a person were used in the results. All results are reported and/or disseminated in a general format by province/territory and by the topics used to focus the literature review. All data were stored in a locked file cabinet at the University of Manitoba and were not made available to anyone except for two graduate student research assistants. The data will be destroyed upon completion of the study, December, 2008.

Table 2
Interview Participants

Manitoba Education Region	Number of Participants	Number of School Divisions	Number of Schools	Provincial / Territorial Ministries	Number of Participants
Southeast/Interlake	17 5 Teachers 1 Vice-Principal 11 Principals	5	11	British Columbia	3
Central	3	2	3	Alberta	4
Parkland/Westman	8 I Vice-Principal 7 Principals	4	8	Saskatchewan	4
Northern/Remote	3	1	3	Manitoba	2
				Nova Scotia	2
				Yukon	2
				Northwest Territories	1
				Nunavut	1
Total	**31**	**12**	**25**		**19**

Findings: Manitoba Rural Schools

Thirty-one participants contributed to the findings outlined in this section, representing all of the educational regions in Manitoba, 12 school divisions, and 25 schools with a variety of different grade configurations, numbers of teachers, and enrolment sizes. Tables 2-5 offer details related to the grade configurations, numbers of teachers working in the schools, and enrolments. This information was verified by examining the *Schools in Manitoba 2007/2008* report created by MECY.

Table 3

School Descriptions: Grade Configurations

K-4	K-5	K-6	K-8	K-9	K-12	5-9	7-12	9-12	10-12	Adult Ed
2	2	3	3	1	8	1	1	2	1	1

Table 4

School Descriptions: Numbers of Teachers

≤ 10	11-20	21-30	31-40	>40	Range	Mean	Median
5	8	8	3	1	4-76	21.75	20

Table 5

School Descriptions: Numbers of Schools Based on Enrolment Categories

≤ 50	51-100	101-200	201-300	301-400	401-500	501-600	>600	Range	Mean	Median
1	2	6	6	6	2	1	1	39-1257	294.8	213

In addition to the statistical school descriptions, participants were asked to offer any special characteristics of their school, without any elaboration on what this might entail. Eleven respondents spoke of growing diversity in their schools, in terms of cultural diversity (increasing immigration, linguistic diversity, and growing Aboriginal student populations), learning diversity (increasing numbers of funded students and students with various learning needs) and socio-economic status (from highly variable to a very high proportion of low SES and single-parent families). One respondent actually suggested that the school's special characteristic was that it had not been impacted by growing cultural diversity, as if this was no longer the norm in many rural schools. Two individuals mentioned that pupil transience was a growing issue, another two spoke of growing enrolments in their rural school, and one principal spoke of an increase of non-resident student enrolment as a consequence of access to particular programs. Five principals spoke of various programs that added to the breadth of their offerings, including French Immersion, Home Economics, Technical Education, full-time Kindergarten, International Student Programs, and strong extra-curricular offerings. Two respondents suggested that their organization as multi-age/multi-grade schools made them unique; and another principal

suggested that the fact that over 80% of the students who attended the school were transported by school buses from the rural municipality made the school unique across the school division.

In the interviews, participants were asked to provide information related to the creative or innovative ways their schools had addressed challenges in the areas of: (a) *Teaching and Learning*; (b) *Infrastructure*; (c) *Educational Finance*; and, (d) *Inter-Jurisdictional Collaboration*. The following sections provide the findings in these areas.

Teaching and Learning

In the category of teaching and learning, the comments focused primarily in four areas: (a) Personnel and Professionalism; (b) Programming; (c) Initiatives; and, (d) Planning and Accountability.

Personnel and Professionalism

This section will outline the initiatives rural school divisions and schools have undertaken in the area of personnel and professional growth.

Personnel. One of the areas mentioned by principals was the initiatives they have undertaken to access substitutes within their schools. In fact, one of the principals mentioned that there can be so much difficulty in accessing substitutes that teachers have had to forego taking time off for professional development, or even minor illness. Most schools develop a list of substitute teachers within the local area, though the method of accessing these substitutes varies from administration calling each substitute individually, to the use of a central substitute calling system. In order to address the substitute shortage that exists in some areas, schools attempt to access teacher candidates who may not yet be certified but have completed their university term. Others access retired teachers who remain within the area, though they are often in demand by many schools in the local area. Some schools have utilized the services of individuals who have university degrees but who are not certified teachers. One principal mentioned that the school division is offering to pay mileage to substitutes who travel significant distances as an incentive. The principal of the largest of these schools indicated that the school has the luxury of hiring a full-time substitute because there is always someone missing from the school, and if there is some surplus time, that person can be used to offer relief for teachers by covering classes or helping out with supervision. Three participants spoke of the fact that accessing substitutes was not difficult, because of the school's proximity to either Winnipeg or Brandon. One of these individuals mentioned that the school division has been actively recruiting substitute teachers, which has helped to increase this pool of professional service. Another principal suggested that accessing substitutes for partial days is more difficult than for full days. A third suggested the substitute pool was healthy because of proximity to an urban center and because local graduates who wish to teach in the area are always willing to substitute in the hopes of gaining a teaching position.

In the category of Teaching and Learning, comments focused primarily in four areas: (a) Personnel and Professionalism; (b) Programming; (c) Initiatives; and, (d) Planning and Accountability.

A second area of concern for principals was the use of educational assistants. Some schools have strategically hired educational assistants to help with the issues facing schools, such as growing English as Additional Language populations, working with Aboriginal families and communities, and working with particular special education students. One principal mentioned that he hired educational assistants who are a linguistic match to parents whose first language is not English, and part of this person's position is to help translate between the home and school. Another indicated that educational assistants are being asked to attend parent-teacher interviews to help translate, and are then given days in lieu for their time. One school schedules a half-time EAL teacher every other day for full days in order to meet with groups of students, to assess their reading levels and to group them in guided reading groups; on alternate days educational assistants are used to support the programming. The training of these educational assistants becomes a primary focus when they are working with this growing population of children. Some of the schools have designated educational assistants to support the work of specialists, such as speech language pathologists. Educational assistants have also been used to deliver individualized programming in either pull-out resource or speech programs. One principal suggested that

an educational assistant with some extra time in her schedule and a willingness to work with students has begun to provide, with support from a classroom teacher, enhanced learning opportunities on important issues for students using the arts, technology, and community service. Another indicated that educational assistants are running an after school program for Aboriginal students. One respondent mentioned that in order to support and induct educational assistants or those who substitute for them, he worked with the group to design a handbook that provides information relevant to their work. Amidst the discussion related to the many uses of educational assistants, it was clear that principals are rethinking the efficiency and preponderance of educational assistant positions within the philosophy of inclusive education. These principals have begun to use special education funding that has traditionally been designated for hiring educational assistants to finance additional resource teachers so that students have more access to appropriate programming from a professional.

A third aspect related to personnel and professionalism includes the recruitment and retainment of teachers. Many of the principals spoke of the fact that their pool of teachers often included those teachers who had grown up in the local area and returned home to work. In these communities, there was often little teacher turnover unless it was related to retirement. In some communities, most notably those closest to city centers or those that were service centers in their own areas, teacher recruitment for regular teaching positions was often not difficult. Term positions, part-time positions, and specialty positions were more difficult to fill, and in these cases, schools had to rely on retired teachers in the community or entice those already in the system with the appropriate skills to move into the specialty area. Due to the fact that there are often difficulties accessing certified professionals for specialty positions, teachers are often hired with the expectation that they will begin working towards certification. Oftentimes schools work to attract the teacher candidates who have completed their practicum in those schools, or they hire substitutes from the community for positions, which then has implications for the substitute pool. In order to retain teachers and develop internal capacity for specialty positions such as administration or resource, school divisions have initiated mentoring programs that focus on new teachers, administration and/or resource, supported professional development, instituted buddy systems for school-based support and collaboration, instituted staff recognition opportunities to demonstrate appreciation, strategically time-tabled courses for new teachers to minimize their preparation expectations, and in some cases minimized the expectation to do the “extras” such as extracurricular activities or committee work so that new teachers can focus on their curricular and academic expectations.

Overall, respondents lamented the lack of specialty services for special education and mental health, such as occupational therapists, physiotherapists, speech language pathologists and social workers. Most often, these schools could access services intermittently, if at all, and service was inadequate. One principal mentioned the notion of “poaching” between divisions in the desire to hire these professionals. Another mentioned working with local service agencies to access the services of these professionals, even if this was often difficult. Resource teachers were commonly found in schools, though many were uncertified, often worked part-time as resource and part-time as regular classroom teachers, and some were shared between schools.

In order to meet the needs of students and/or the local community context, a number of innovative positions have been created within these rural schools. The most common position mentioned by respondents includes the introduction of literacy leaders (or instructors), who often are responsible for coordinating literacy programs across grades or schools, instituting professional development and collaboration between teachers in the local area, and sharing resources that help support the literacy needs of diverse learners. Some of these literacy leaders are found at the divisional level, while others are part-time literacy leaders in

schools in conjunction with other duties such as regular classroom responsibilities, Reading Recovery, or student engagement. Most of these positions have been accessed through grant monies received from MECY that focus on literacy, class size and composition, multi-age/multi-grade, or middle years programming. More generally, participants mentioned the development of curriculum specialist positions, again housed either at the division or within schools, with job descriptions similar to that of literacy leaders but including various areas of curricular support. Others have used grant money to craft programs that reduce the workload of teachers by parceling out subjects to various teachers or adding part-time specialty positions (often related to literacy). Many of these positions were designed to reduce class size, to free up time for students to have reading intervention, to ensure students have access to enrichment or arts opportunities, or to build in time for internal teacher meetings by paying for substitutes. The position of early years support teacher was created in one school division as an innovative way to support early literacy and transition into the school system. This position is usually combined as a part-time position in conjunction with another teaching assignment or resource position, supported by the school board. Other positions included program coordinator/liaison positions to facilitate relationships between the school and Aboriginal students, families and communities, or to facilitate relationships between the school and parents who have cultural or linguistic differences; career counselor or career development worker (often in conjunction with regular teaching duties) who works on career counseling and/or work placements for students; behavior administrator for coordinating the programs and plans for students with behavioral issues; program support workers whose job it is to help apply for special education funding and design class review meetings; school technology coordinators; and, student support facilitator whose role is to advocate for students while working in conjunction with teachers. For those positions more traditionally found in schools, principals spoke of the ways they have made improvements by: scheduling specialty positions such as band with regular classroom duties in order to alleviate itinerant teaching and the scheduling issues this causes; hiring personnel with unique specialty combinations so that one person can provide service in two specialty areas (i.e. French and vocational training); hiring teachers willing to instruct using online methods such as webCT so that teachers have opportunity to teach other electives in school (i.e. Guitar, Spanish, French, Physics); and, attempts to hire staff who represent the diversity of the student body. In addition to divisional positions, principals also mentioned personnel who provide services to students such as Public Health nurses who work with families and consult with schools on health questions, guest speakers, and volunteer retired teachers who provide enrichment programming for students.

Professional growth. The focus on local professional growth was a priority for all the rural schools involved in this study. In fact, although external professional development was mentioned as a possibility, supported with some finances for staff (teachers and in some cases educational assistants), either as attendees or presenters, most of the commentary suggested that the time, distance and cost factors related to attending them were often higher than the support that could be given. Therefore local schools and school divisions have begun channeling their resources into opportunities for professional development and/or support positions (generally in some area of curricula), designed to maximize professional growth through collaborative opportunities. For example, the Northern school divisions have designed a summer institute for professional staff so that the travel distances and time away from home are not as great as they would be if staff were to attend the Clear Lake Summer Institute, or opportunities in either Brandon or Winnipeg. Some divisions have initiated the sharing of university coursework in areas of need (such as EAL training), or negotiated the design of Masters programs to be delivered at least partially onsite. Others have released staff to check out programs or resources available in other school divisions. Some have begun using online opportunities through webCT or other Internet platforms.

At the divisional level, professional development committees have been formed to plan for professional development opportunities that impact on local needs, divisional priorities, and new programs. Most divisions have a minimum of two to three division-wide professional development days, and some invite non-professional staff to attend. The most common innovation is the introduction of curriculum support specialists, who most often work at the division level, and whose purpose is to develop the curricular or program expertise of

professional staff. These curricular experts visit classrooms, model lessons, work with teachers individually in groups to problem solve and develop strategies, share resources, and design opportunities for teachers to visit other classrooms to observe and to collaborate. Divisions have also coordinated professional development by bringing together representatives from each school to attend locally planned and driven workshops to promote consistency in practice across the division related to division initiatives. These school teams then go back to their respective schools to share with their colleagues and implement ideas. Others have used interactive television to provide division based professional development across school sites. Finally, some divisions have initiated mentoring programs led by staff members for new teachers, and designed internship experiences for prospective administrators, resource teachers and counselors to develop the local capacity to fill these positions.

At the school level, professional development opportunities are accessed through the development of same grade, cross grade, multi-age, or multi-grade teaming opportunities, often organized according to early years or middle years. These teachers meet regularly to plan, set goals, and work on areas of common concern, such as literacy, Guided Reading, assessment, literacy with ICT, lesson or unit planning, or criteria-based learning. Others have designed action research projects, whereby teachers design lessons together, teach lessons, rework them, and re-teach them in other classrooms. These opportunities are created through the use of early dismissals, release time through the provision of substitutes, flexible time-tabling to coincide preparation times, and school-based professional development days. One respondent spoke of the design of voluntary study groups conducted in the evenings for teachers interested in developing their knowledge of the Kindergarten to Grade Three math curriculum. Six others spoke of the value of resource support documents they utilize for developing practice, including those found by literacy leaders or curricular support specialists; binders for new programs put together by teachers that have sections related to activities, data collection, teaching and learning strategies, parental engagement and necessary forms; books provided to teachers related to the continuum of literacy learning; MECY documents such as *Independent Together* that focuses on multi-age/multi-grade teaching strategies; and, the use of divisional online platforms such as First Class Mail on which is placed teacher-friendly activities organized by grade or subject level in Language Arts and Mathematics.

The topics found in the area of Programming include innovative programming initiatives to support student learning, differentiated instructional approaches, multi-age/multi-grade opportunities, flexible scheduling, and the need for communication.

Programming

The topics found within this area of the framework include innovative programming initiatives to support student learning, differentiated instructional approaches, multi-age/multi-grade opportunities, flexible scheduling options, and the need for communication.

Programs. Because education in Manitoba is most often divided into early years, middle years, senior years, and adult educational opportunities, the program innovations described by participants were organized along these lines. Without question, two types of program innovations were commonly described: literacy programming in early years, and technical/vocational or career initiatives in senior years. Few middle years-specific initiatives were brought up in discussion, unless they occurred in schools where middle years students were part of early or senior years schools. In these instances, middle years students often received the benefit of programs being designed initially for the other groups of students.

Five respondents spoke of the development of daycare/nursery/pre-school programs that ran either as a service to the community (including staff), or to young moms still in school. Respondents spoke of the benefits of these programs in terms of the development of parenting/child care programs for young mothers, as ways in which teachers were able to initiate early intervention possibilities through pre-Kindergarten assessments, as means of building relationships with new families and the school to ease the transition into Kindergarten (including one

program specifically designed for EAL parents that also connects them with community services), and as a way to keep families in the community by offering a place for their children with an educational focus from birth to graduation.

In terms of Kindergarten programming, one of the respondents spoke of the move to a full-time Kindergarten program in order to focus on literacy at a younger age and to offset the costs of Reading Recovery in schools. Another group of respondents spoke of a kindergarten intervention program called the KIDS program that adds an extra 12 full days to the regular Kindergarten program for small flexible groups of children to come for literacy intervention. The pilot school within the division kept data on the effect of this program on literacy rates in children, as well as the self esteem of the students who were able to access this support from the teacher. Because students were found to move in to Grade One with higher literacy rates, the Reading Recovery teacher could service more students because she could discontinue them sooner. This finding, combined with the fact that it was very expensive to sustain Reading Recovery in the very large school division with large travel distances, convinced the division to begin funding the program in almost all schools in the division.

Most of the early years initiatives relate to literacy or numeracy. A program called Strong Beginnings starts with a diagnostic assessment in the second week of September, where teachers get to meet students individually for an hour while the resource teacher, an educational assistant or other support person works with the remaining group on other planned material. During the one-on-one time, teachers collect information related to each child as a learner, based on an analysis of reading strategies, the creation of a running record, interest inventories, numeracy skills, problem-solving strategies, etcetera. After these appointments are complete, the teachers complete a classroom profile which helps drive their planning, teaching and grouping strategies for individual students and for the whole class. Another program called Great Readers, Outstanding Writers (GROW), sponsored by the MECY Class Size and Composition grant, at-risk monies and other grants, allows grades one to three teachers to reduce their class sizes by half each day for one period in order to provide focused instruction on reading and writing, followed by another period with the remaining half of the students. Those students who leave the room are instructed by another teacher who teachers an alternate subject, such as Science, Physical Education, or Music. This time has enabled teachers to get to know their students individually, minimized behavioral issues, and increased literacy rates in children. A third program is that of a “dual track” Reading Recovery/literacy intervention program for non-EAL and EAL students. In this program a Reading Recovery teacher uses half her time working in Reading Recovery, and the other half of her time is spent with flexible groups of five or six children from various classes. The same is used for EAL students (with the difference being that the Reading Recovery teacher does the assessments and groupings, but educational assistants deliver the programming due to the lack of time equivalent for the position), but with a focus on reading level and more intensive work on vocabulary development. In this case, there was a deliberate separation of the two groups because of the difference in vocabulary that was noted, as well as the need to ensure that students’ self-esteem is promoted and that they feel successful as they work with others in the groups. This has also helped to decrease behavioral issues, as students who feel successful in their academics and who work at the appropriate pace are less likely to misbehave. Other program initiatives included: the use of Reading Recovery; a targeted reading program whereby community volunteers read to students having difficulties reading in grades one to three; the introduction of literacy specialists to support early years literacy programming; the addition of an itinerant teacher who works with children on subjects such as drama or art while the classroom teacher keeps three or four students for reading interventions; the use of

buddy reading where younger students are paired with older students for reading appreciation; EAL "immersion" with non-EAL students in peer buddy systems along with one-on-one support from the teacher on vocabulary and basic concept; beginning-of-year assessments linked to Reading Recovery, Reading Intervention and Numeracy Intervention; the use of volunteer retired teachers to provide an enriched math program for students in grades three to five; and, the collection of leveled books related to curricular content placed in the school library, classrooms, with literacy specialists, and sent home to EAL students.

Many of the literacy initiatives conducted in early years schools are moving into middle years grades as expertise develops. One of the programs that spans both early and middle years students includes the development of an enhanced program delivered by an educational assistant with support from a teacher, whereby students have the opportunity to use technology, develop skills in the arts, create performances, and do community service projects. A program that deliberately focuses on students in middle years is entitled Expanding Horizons; this is an after school program for Aboriginal students that focuses on numeracy, literacy, and cultural sensitivity. Another program in its infancy stages is being accessed through a MECY grant, which focuses on enhancing student engagement in the middle years. The Seniors and Students Going the Extra Mile (SMILE) program bridges the gap between seniors in the community and at-risk youth in grades four through nine, accessed through a community-based grant. Students and seniors are paired together to learn from each other and to work together on community issues, to create performances, or to work on artistic projects. Middle years students have also been the recipients of the current thrust to support bringing community artists into the school, supported by grant monies by MECY, First Nations communities, or community sponsors, and often organized in partnership between schools within a division or between divisions. One of the participants spoke of an off-campus alternative school that focuses on serving the needs of middle years students in grades five to eight who have difficulty being successful in a regular program. Another person mentioned the use of community services such as the RCMP who support a drug awareness program for Grade 6 students.

The remaining programs mentioned by participants that included middle years students were generally also available to senior years students. This included access to Swimming, Band, Drama, Home Economics, or Industrial Arts programs which were often compulsory in middle years and optional in senior years. Many of these programs, though not all, necessitated the bussing of students into high schools that housed these specialized programs. One of the participants spoke of modular programming that was sometimes developed to support at-risk students who did not successfully complete course credits. Another initiative was the development of a Student Assistance Program that links teachers to a team that identifies students who are at risk of social or academic problems and initiates supports from Student Service personnel. This program was similar to one mentioned by a second respondent that focuses on a group of 30 at-risk youth between the ages of 12 and 17 across the division, with the addition that it utilizes an agreement made between interagency service providers such as the RCMP and CFS to collaborate with resources and to share information. A program mentioned by one respondent utilizes the services of a Student Support Facilitator who works under the supervision of a teacher, and whose role is to advocate for students. This person works with students in small group settings in conjunction with teachers to ensure students complete their coursework in a safe and inviting environment, aided by peer tutors. She also helps to deliver distance education courses to students who cannot be in the regular classroom, often because they are students with special needs who have not yet accessed cognitive assessments. A final program that supports at-risk students from both middle years and senior years is one called the Individual Self-Paced Learning Program (ISLP). This program is an attempt to support students who have had difficulty with Grade Nine curricular outcomes and who are missing credits. Rather than having these students complete the entire course over again, teachers work together to determine what curricular objectives still need to be completed, and students work at their own pace to complete those objectives in their first semester with help from support teachers, and then move into Grade 10 coursework second semester. Completion rates have increased, and drop-out rates have decreased. The school has also initiated an ISLP satellite program which allows students who are not meeting school expectations to work on modular programming offsite.

In terms of senior years education, the programs most often mentioned by participants included those related to career and/or technical/vocational education. Many of these programs utilize internship, job shadowing or work experience opportunities within the local community that lead to possibilities for senior apprenticeship credit and dual credit in community college programs such as those found at Red River College or University College of the North. Some school divisions have combined resources or have worked with businesses to share program opportunities such as Welding, Automotive Mechanics, Technology, Heavy-duty Mechanics, Building Construction, Cosmetology, Woodworking, Earth and Environmental Science, Visual Communication, Performance Arts, etcetera. In this way, individual sites can focus on developing expertise and expensive equipment in one technical/vocational area, and students can be provided with more program options. Other programs were those related to academic coursework, such as Applied Math 40S, Pre-Calculus 40S, and language programs such as French Immersion, Spanish, Basic French, and Ojibway. Many of these programs were offered using innovative delivery mechanisms, such as shared campuses to combine classes between sites, the use of interactive television between schools, the development of broadband communication in order to design videoconference opportunities between schools, adding 50% extra time in the timetable for these courses so that students could be successful and have more opportunities to access scholarships or university entrance, or the creation of program majors in clusters of courses that offer skills for particular work force areas. Two participants spoke of alternative or store-front schools that were designed to support students who were unable to achieve success in the regular school environment. Another spoke of the design of an Advisory System whereby every high school teacher oversees an advisory group of students from grades nine to 12 for two hours each week throughout their high school experience in order to foster student attachment, to create a positive school culture, to build relationships and to offer mentoring opportunities between youth. Included in the Advisory System is a Master Portfolio that includes a number of activities whereby students come to learn about themselves, their learning characteristics, their interests, and their learning goals as they investigate potential careers and focus on their future. Three respondents spoke of the growing interdisciplinary nature of program options. One of these respondents spoke of a Connections project conducted every other year where students in the entire high school complete a self-directed interdisciplinary research project that combines at least two different subject areas. Students are provided several afternoons to work on their projects, and advisors monitor the work inside and outside of the school. These projects are then presented in May and the public is invited to attend. Projects have included rebuilt cars, design of mini-bikes, bedroom suite furniture, redecorating projects, science and mathematics projects. A second participant spoke of a young engineers program that combines students from electrical, science and machine technology in order to enter competitions at the University of Manitoba and to create interdisciplinary projects. The third respondent spoke of an interdisciplinary project that combines English and Video Production classes as students work on a major movie project that culminates in a movie premiere. Finally, one participant mentioned the development of programs or positions such as Aboriginal consultant/social worker, a school liaison worker, or an Aboriginal Support Centre, designed for Aboriginal students to access support, to monitor their success in school, and to build relationships between the school and First Nations communities and parents.

Programming options have focused on literacy in the early years; social, at-risk and student engagement activities in the middle years; career development in the senior years; and skills training and PLAR in adult education.

There were some program options that were mentioned by participants that tended to span across K-12 schools. These were programs related to Arts programs, or Physical Education or sporting events that typically utilized community facilities such as the local curling or skating rink, community hall or theatre free of charge. The second included school character education programs such as the Virtues Program or the Four Pillars Program that are attempts to support safe and caring schools. The third was the focus on creating opportunities for

community-based programs offered by local service agencies such as the RCMP, Fire Hall, Social Work, Public Health, and Manitoba Theatre for Young People.

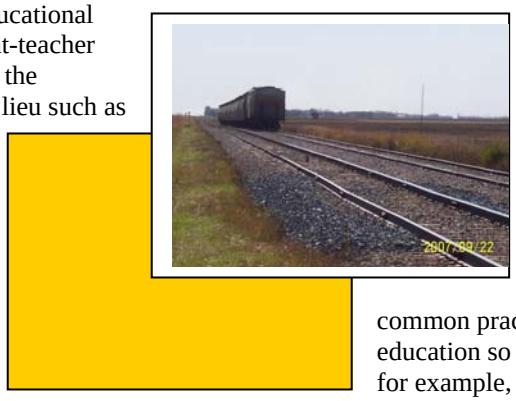
Three participants spoke of program options provided by adult education providers. The most common program opportunity was accessed by mature students to access their Grade 12 diploma. However, an innovation mentioned by a respondent was a program entitled "Earn and Learn" which allows adult education students to take their courses during the time of their regular work day placement. This program is especially useful for those students who need to work around family obligations or other work commitments. Often these positions become permanent after the student has completed his/her coursework. Another innovation is the increasing use of Prior Learning Assessment and Recognition (PLAR), which offers students the opportunity to advance in their coursework if they already have the necessary skills from prior learning experiences. A fourth programming opportunity provides community businesses with some of their skill training, and then makes that available to other businesses in the community. A final program mentioned by a participant focuses on computer courses. Even though most computer courses in the K-12 system are now defunct because children come in to the system with computer skills, many adult learners still require support in this area.

Differentiated instruction. The second topic in this area focuses on the comments made by participants that alluded to the various ways in which educators are attempting to differentiate instruction to meet the growing diversity of student needs. The focus on literacy has encouraged teachers to work together to learn more about reading and writing strategies. Participants acknowledged a growing number of activities they have developed as a consequence of their professional development, classroom visits, and curricular support from the division/school level. These include team teaching, the use of literature circles, Guided Reading, growing book resources, the use of portfolios for student work and conferencing, flexible grouping, small group instruction, literacy centers, word walls, classroom charts for sight word knowledge, ICT strategies, Trait Writing and Writing labs, homework bags of literacy games for parental reinforcement of school content, and user-friendly homework logs for parents. At the middle and senior years, participants were more apt to note instructional strategies related to ICT that were attempts to provide more flexibility or options for students. Such instructional strategies included the use of ITV, podcasting, e-learning platforms such as WebCT, Moodle, and Bridges, and teaching tablets with presentations. In addition, they spoke of portfolio work that often related to career development programs, modular coursework, school-community partnerships for work placement, and self-directed learning.

Multi-age/Multi-grade. Twelve participants spoke of multi-age/multi-grade situations in their schools. These participants spoke of how teachers have been investigating best practices for children so that these teaching situations could meet the needs of the learning diversity in the room. In most cases, the multi-age/multi-grade situation was comprised of two grades per classroom, but two participants spoke of situations where three to four grades were taught together. In the latter case, there was some concern over the workload issues for teachers and recruitment problems that developed as a consequence. However, most participants spoke of the benefits brought about in these situations, such as mentoring and social skill development, establishing routines and consistency, and peer learning. Besides designing these classrooms due to low enrolment, some schools have initiated multi-age/multi-grade situations to balance high numbers of students in particular grades with lower numbers in other grades. Other schools that have not needed to compose multi-age/multi-grade situations have done so because of a change in philosophy that supports the benefits of these classrooms, often in conjunction with project support from MECY. In the case of larger schools, the multi-age/multi-grade situation allows for a greater ability to focus on classroom composition for social/academic reasons, teacher needs, familial ties, more options for classroom placement for new students, and more efficient use of educational assistant time which can then be put towards teaching time. In addition to multi-age/multi-grade situations, three respondents spoke of their move towards looping, whereby a teacher will work the same group of students over the course of two years. These participants suggested that looping provides a very good opportunity for teachers to get to know students, to provide mentoring and guidance, and to provide consistency and support for students. Others spoke of cross-grade initiatives that

occurred irregularly for the purposes of project development, themed school-wide topics of interest such as Earth Day activities, literacy initiatives, or community building.

Flexible scheduling. While participants spoke of the innovations they have encouraged to increase program options for students, they inevitably mentioned the ways in which they have had to be flexible in how they scheduled their programs and/or time-tables to accommodate this growing diversity. As mentioned in the previous section, multi-age/multi-grade and looping strategies provide for some flexibility in classroom composition design. The use of flexible grouping within and across grades has provided more individualized instructional opportunities for teachers and students to work on targeted skill development. Three principals indicated that they use substitutes, or they themselves, sometimes cover classes for teachers in order to offset workload and to provide an opportunity for teachers to have an additional preparation period. One principal spoke of the use of educational assistants as translators in parent-teacher meetings for EAL parents, with the provision of banked days off in lieu such as classroom party days, or days before major holidays.



Some schools have accessed grants in order to reduce class sizes, to focus on literacy development, and to bring in substitutes so that teachers can meet together in grade group meetings, such as that found in the GROW project that was described above. Others have focused on increasing early childhood intervention, such as the KIDS program, in order to offset literacy difficulties later in school. Because this program is offered either in the mornings or the afternoons, parents and teachers have had to be flexible in busing arrangements, either for picking up their children at lunch, or bringing them to school. Because these schools operate within local communities where people tend to know each other quite well, in some cases, school representatives have actually gone to these students' homes to pick them up or drop them off when parents are unable to do so. In addition to needing flexibility in bussing arrangements, teacher scheduling has had to be flexible, since it is not always possible for the Kindergarten teacher to be the KIDS Program teacher. In some cases, teachers who have other regular classroom duties move into the KIDS Program and a contracted person (sometimes a substitute) takes over the other classroom. In another case, the resource teacher has helped to support the program.

It is clear that schools are focusing deliberately on classroom composition so that they can reduce teacher workload, use educational assistants more efficiently, and provide more effective learning environments for students. In addition, principals are timetabling preparation periods to coincide for grade level teachers to provide opportunities for collaboration, and are providing professional development opportunities during the day for such initiatives as visiting classrooms or meeting with curricula support specialists. At the middle and senior years level, many schools transport students for Technical/Vocational/Arts courses so that schools can centralize equipment and expertise. One participant spoke of the creation of a shared high school between communities in order to share teaching expertise and coursework. This added to transportation costs on the one hand, but provided face-to-face learning opportunities and programs for students. The use of combined classes with rotational course offerings remains a common practice in senior years education so that students can access, for example, Drama 30 and Drama 40, but they can be offered every other year or in different semesters to reduce scheduling problems and to address the lack of teacher time. Some schools have increased class sizes in some courses in order to be able to offer opportunities for advanced or specialty courses that have small enrollments, while paying attention to composition issues that arise as a result. The hiring of teachers with more than one specialty area (such as French and Industrial Arts, or principals with resource backgrounds), or being able to change teaching assignments from itinerant positions to school-based positions (half-time Band, half-time classroom), was viewed as a way to increase programming possibilities, even though it sometimes led to scheduling conflicts since one person could not be scheduled in two places at the same time. Some senior schools were able to design new teacher workloads in such a way as to minimize

the number of course preparations they had to do in any one semester. Many have moved to providing more flexibility through the incorporation of technology, such as podcasting, use of internet platforms such as WebCT, Moodle and Bridges, ITV for course sharing, as well as hiring teachers who are willing to teach online coursework so that other teachers are freed up to teach elective courses. Others have used modular programs that provide access to course credit or to facilitate the completion of Grade Nine course credits as students transition into high school. One principal mentioned adding extra time to particular courses such as pre-Calculus so that students have more time to successfully complete these difficult courses. A number of schools have increased the use of interdisciplinary projects or programs in order to offer scheduling alternatives, and one school in particular has embedded this kind of project every other year as a primary means of promoting student learning within the community. Alternative classrooms have been provided in order to provide student support, work space and flexibility for students who are working on modular coursework or self-directed learning initiatives, or who have time-tabling or attendance issues. A handful of schools are considering differential school scheduling options, such as the Balanced School Day that has already been initiated in some schools in the province, or the 4-day school week which could potentially support teacher professional development, time for meetings, and minimize substitute problems as teachers are expected to take personal days on the day they do not teach.

In the area of adult education, scheduling flexibility has always been one of the primary goals, as adults tend to have to balance their education around familial and work obligations. In this respect, there has traditionally been more opportunity for students to work on modular or self-directed learning projects that they can complete at least partially at home. In addition, the hours of operation of the center involved in this study are amenable to student work and family responsibilities; for two days per week, the center is open for 12 hours in addition to the regular hours of operation for the rest of the week. The educators in these centers often work in conjunction with employers to create opportunities for flexibility in the program. They have crafted the Earn and Learn program described above that allows for course credit, work experience and pay, and they work with individual students through phone calls and personal meetings outside of the center to ensure these students are successful in their studies. One of the concerns mentioned by this respondent related to new expectations from the funding agent to provide clusters of learning where students come in to a classroom setting for a required amount of time in order to complete programs more quickly and to promote higher completion rates. Unfortunately, this type of programming is much less flexible for adult learners, and reflects a public school model of schooling. This respondent was concerned that, under the guise of management and efficiency, the flexibility that was part of the impetus for the design of adult education centers will no longer exist and may prove to be a detriment to completion.

Communication. In order to facilitate the programming needs of schools, a number of communication initiatives are necessary. Some school divisions have initiated internal online communication systems such as the First Class Mail to coordinate divisional communications. Others use more common internet communication systems such as MSN. More traditional methods such as staff meetings, team meetings, grade level or cross grade level meetings, staff surveys, monthly newsletters, daily announcements, local newspaper submissions and coverage of school events, and website postings ensure regular communication between staff, students, parents and the larger community. One principal spoke of a staff advisory committee created with elected representatives from the teaching and non-professional staff who take responsibility for communicating with the staff and generating ideas. Another spoke of the decision to revolve school board meetings across the schools in the division to provide opportunities for stakeholders to attend. One principal spoke of the importance of having staff who can communicate orally with parents who do not speak English in order to build trust and to provide information related to the community services and program information available at the school. Perhaps the most innovative idea was that of a Program Advisory Forum designed to highlight a topic affecting the school, such as curricular or EAL issues. Stakeholders from the community are invited to engage in conversations around the topic. These forums utilize panels of parents, students, and educators who come together to discuss these topics in a round table format and end the day with action planning.

Initiatives

Aside from programming opportunities, schools engage in a number of initiatives that either facilitate or support student learning, build school-community relationships, develop school culture, or promote citizenship. Some of the more traditional initiatives include drama productions, Christmas concerts, celebration of Remembrance Day, participation in the Terry Fox Run, Spirit Weeks, Winter Carnival, Science Fair, the use of scholarships to reward learning, and a host of sports or extra-curricular clubs. Many initiatives were mentioned by participants that support learning, such as I Love to Read Month activities. One principal mentioned a book buying opportunity whereby two students from each grade surveyed their classmates, and were then sent to Winnipeg with their teachers to buy books for their classrooms. Other literacy initiatives included cross-grade groups whereby students came together to act out books or participate in group story writing, and the institution of a pre-school wellness day to offer information to parents and to provide teachers with the opportunity to work through some screening activities. One school initiated a Mini-Olympics, whereby students engaged in cultural learning activities based on different countries that culminated in a luncheon of ethnic foods. Another organized a mini-Trappers Festival which celebrated local history and diversity, and taught students traditional skills. A third organized a one day conference for youth that offered career and personal development activities. One principal mentioned a seniors' program whereby seniors were invited to come in to the school to work on curricular activities with students. Another principal mentioned the school's "transient traveling bunny" that moved from home to home to teach students responsible pet ownership because it could no longer remain in the school due to student allergies. In order to support student learning, many schools have instituted breakfast or lunch programs that include healthy options. They use the opportunity to promote nutrition, teach students food preparation skills, and invite parents to help serve or support the programs.

Some activities focused deliberately on character education in order to address bullying, discipline or safety issues. These initiatives included: the use of the Virtues Program; recess groups or Playground Peacekeepers to promote student attachment and group activities; the development of cross-grade houses or dens with organized activities and focused social learning; school patrols; and, Not in My School anti-bullying activities.

Attempts to build school culture were often whole-school projects. These included: the development of promotional items such as school logos, school songs, magnets, T-shirts, and jerseys; the use of school assemblies where all students are eventually recognized for their contributions to the school; school council activities; hall and bulletin board displays that promoted student work; and, student-led announcements that coincided with opportunities to speak with the principal. Finally, a plethora of citizenship activities were mentioned by respondents: senior suppers, community breakfasts, and community work placements; recycling programs and environmental care projects such as beach, dump or community clean-up and celebration of Earth Day; Koats for Kids; Christmas Cheer Food Drive; Operation Christmas Child; Team in Africa Project; Free the Children World Vision foster child sponsorship; Walk to Afghanistan; and, fundraising for the local animal shelter.

"Education has sometimes focused too much on the academics and not enough on the development of the person that we're trying to put into these communities."

Planning and Accountability

Three topics related to the area of planning and accountability were determined: vision, school planning, and data collection.

Vision. One respondent summed up the majority of comments made by respondents that offered a perspective on the visions for these rural schools when he suggested, "education has sometimes focused too much on the academics and not enough on the development of the person that we're trying to put into these communities." Such a comment is suggestive of the balancing act in which rural schools engage as they attempt to mediate between mandated formal education and the needs of the community. It also affirms the focus on character education and citizenship (global or local) repeatedly alluded to in the discourse on program options, the focus on literacy and career opportunities within the community and beyond, the need to respect diversity, and the promotion of humanitarian efforts.

School planning. Five respondents made direct references to school planning. One

of the principals spoke of the difficulty in school planning amidst growing diversity, constant change, and staff resistance. Two spoke to planning processes, which included the use of a "Heretic Supper" where members of the Parent Advisory Committee, staff, students and interested parents came together to "think outside the box." The second spoke of the institution of staff meetings and an interest survey as means of designing the school plan for the subsequent year. The remaining two respondents spoke of elements within their school plan, which included succession planning for administration and/or programs as staff retired, and the promotion of character and citizenship education.

Data collection. Respondents spoke of collecting data in order to improve in four areas: individualizing programming, program effectiveness, future planning, and satisfaction levels. Particularly related to literacy or numeracy initiatives, respondents often spoke of conducting assessments on students that would then drive individualized programming, teaching strategies, or grouping strategies. Such data related not only to quantifiable assessments and running records, but also to increases in self-esteem, confidence, and perceived sense of success. Often these data were used in conjunction with other types of program data, such as changes in program design, assessment strategies, behavior tracking, teacher anecdotes, action research, research reviews and stakeholder feedback to provide evidence of program effectiveness. Such data were sometimes used to drive local program change, or to convince school divisions to implement pilot projects across the division. The final type of data collection mentioned by respondents was the use of surveys that elicited satisfaction levels with programs in the school (graduate survey) or staff wellness. All of this data in combination were then used by both school divisions and local schools to increase local capacity, inform stakeholders of progress, align with ministry mandates and community needs, and plan for future change.

Infrastructure

In the area of infrastructure, the comments focused primarily in three areas: (a) Technology; (b) Facilities; and, (c) Transportation.

Technology

As indicated in previous sections, school divisions and schools are more than ever embedding technology into their programs and practice, though their ability to do so is drastically uneven across the province. The discussion on technology centered on the infrastructural issues related to technology, the accessing of particular technological tools, embedding ICT into teaching strategies, and technology programs. However, one respondent cautioned against the use of technology as a panacea for addressing concerns in rural schools, citing the loss of interpersonal connections, low completion rates for online programs, and the loss of humanity or mentoring when students access their learning from a screen rather than from a local role model.

The greatest disparity in technology existed in terms of technological infrastructure. Though computers were not the only technology mentioned, they certainly were the center of attention for respondents. Most schools had access to at least one computer lab, though they are trying to move towards the incorporation of computers in classrooms. Some schools have multiple labs; others have at least one computer in each class; one participant indicated the school has a mobile pod of computers situated in a classroom; and two respondents indicated that all teachers are furnished with a laptop. Some schools designated labs based on level of schooling (early, middle, senior), while others, most often large high schools, designated them by subject area (English, Mathematics, Business, etcetera). One respondent spoke of the use of the lab as an "Internet Café" open to students on a regular basis. The adult education center represented in this study had a Community Access Program computer for students to access.

Some school divisions have enlarged their band-width capacity and have created wide area networks in order to facilitate internet or teleconference possibilities. Others are creating fibre optic links and installing wireless capacity in their schools so that every teacher and student has access to the internet managed through the creation of student accounts. One respondent spoke of a cyclical technology plan along with the strategy of putting computers on terminal or central servers in order to extend the shelf life of computers. Other divisions have instituted interactive television (ITV), often in partnership with other school divisions, as a means of sharing coursework, providing professional development, or facilitating meetings. A number of divisions have accessed grants for developing online coursework to be shared across the

division or province. They tend to use online course platforms such as webCT, Moodle and Bridges to provide course options, and some have begun using teacher tablets or podcasts that can be downloaded onto laptops or ipods. Others have accessed Technological-Vocational Initiative grants to access upgrades for equipment demands for vocational programs.

As tools for supporting practice, respondents mentioned the incorporation of a First Class Mail service which facilitated cross-divisional communication. Others are using e-conference options offered online to facilitate meetings. Other technology tools mentioned were digital cameras for project work, and advanced sound systems for performance arts or sporting events. As a means of incorporating ICT into learning, some schools are using online portfolios for student work. Many divisions have created Learning with ICT committees or have hired technology consultants who work with teachers to develop their technology skills such as powerpoint, video projection and Photo Story 3, and then support teachers as they implement these tools into their teaching. A few teachers have begun interdisciplinary projects such as movie projects that combine, for example, English classes with Video Production classes in order to research, write, and produce a movie that is premiered publicly. One respondent spoke of new ICT or technology courses being offered in high school within the new high school framework. In this case, two teachers are team teaching the option for grades 10-12 students who can choose two half-course credit technology options from a list of eight and engage in some self-directed learning that is monitored by the teachers. The course culminates in an end product that is used by some audience, such as a website for the school library, 3D models of the school, or projects for the community.

Facilities

Most of the discussion around facilities centered on changes as a consequence of restructuring, the need for renovations and/or space, and the use of facilities by community groups as a community service. Three respondents spoke of the impact of restructuring on facilities. In one case, two buildings in one community were combined into one K-12 facility which had as a consequence the addition of a major building project. In this case, the amalgamation was viewed positively by the principal who suggested that the building project was completed in a timely way, added many useful rooms, and students transitioned without the difficulties some people associate with combining younger children with older ones in the same school. Two others spoke of a restructuring initiative which affected all schools in the division, shifting the number of grades per school and moving the population into buildings that were not designed for the grade level they now accommodated. These principals remained advocates for renovations in their buildings that would accommodate the students in the building. One principal in particular was conscious of the fact that the early years school was located in an area of town near a railway yard and a busy highway, which added extra danger for the young people attending the school.

Five respondents spoke of the fact that their buildings were full, and that space to accommodate the programs, learning needs, and logistics of the people within them was at a premium. In one K-12 school that is without a multi-purpose room or lunch room, students must eat in classrooms which requires more supervision. When divisional meetings occur in the school, classes must be moved to the canteen, stage, or physical education areas which can be highly disruptive to the learning environment. Because of the physical orientation of the building, the school has moved away from the focus on early, middle and senior years education, and is reconfiguring itself to reflect a K-6, 7-12 model. By doing this, younger children to have access to the playground, soccer field, and baseball diamond, and older children will have access to a green space, an outdoor classroom and picnic tables. Another K-8 school does not have access to an art room, cafeteria, gymnasium, staff room, lab or library. The school uses the community hall and rink for physical education. Three other respondents spoke of the being full to capacity due primarily to increases in EAL students. Because the overcrowding issue has come on relatively suddenly, these schools are likely to need huts to accommodate the overcrowding. In one school,

the room that had been designated as a "safe space" for EAL students now has to support EAL instruction, store math manipulatives, house a bathroom sometimes used for special needs students, and doubles as a sick room. In another K-12 school, the Grade 6 EAL population has to move in the afternoon to the empty Kindergarten room; but with the next year's growth in Kindergarten enrolment, this will no longer be an option. Other comments related to the need for renovations in a number of areas because of the age of buildings, such as heating fluctuations and poor windows, need for paint, or new carpets. Alternately, respondents spoke with pride of renovations that are or were occurring within buildings, such as: new computer labs; gymnasium renovations; student artwork and painting that built school pride; reorganization of library space; labs for Guided Reading; a major building project that provided for new common rooms, a music area, a multi-purpose room, a resource area, an office area and resource center; and a brand new building.

Many of the respondents spoke of the use made of school facilities by community groups. Examples included Tae Kwan Do, Drivers Education, 4H, Karate, use of the weight room, Babysitter courses, adult volleyball, ski groups, dance groups, arts festivals, walking programs, Tae Bo, quilt making, Christmas concerts, pre-school education, playgroups, senior help clinics, Public Health services, and immigrant settlement services. Respondents suggested that although this sometimes caused scheduling conflicts and/or hassle with building supervision and security, overall the use of the space by community members was viewed as a means of building trust and relationships with the community. In fact, one school division sold its empty facility to a local church group for $1 so that the building could remain in use and support community needs.

The adult education center in this study struggles with keeping its two campuses open as well as being able to keep itself open two nights per week with two half-time teachers. However, regardless of the difficulty, staff and community have fought for the maintenance of both sites as a way of maintaining services for two separate communities.

Transportation

Interestingly, only two respondents mentioned the length of bus rides, and this was to suggest that no students had to ride a bus for more than 45 minutes. Transportation innovations were most often made for accessing programs, though this varied by division. For example, one division defrayed the costs of transporting students to a swimming program at a pool located in the division, whereas another division did not pay for the costs to the nearest pool located outside the division; in this case, transportation costs were paid by parents. Three respondents spoke of transportation initiatives related to Band programs. One division paid for transporting students to a joint Band program operating between schools in order to keep the Band program viable. The sharing of a Band teacher between schools in another division led to the sharing of transportation and other expenses for travel and participation in Band Festival. A third division transported students from junior high feeder schools to attend a Grade 10 Symphonic Band program.

Transportation costs were high between two schools that shared a high school and operated as an inter-campus facility. However, it was felt that this delivery mechanism benefited students and local communities, because students were able to access full high school programs, and communities were able to maintain K-12 schools. The development of inter-school busing in another division occurred due to the restructuring of schools. This busing was available to all early years students, minimally for middle years students, and not at all for senior years students. Although this busing was not legally necessary, the division felt that for safety reasons and to offset an increasing number of parents who would cause safety problems by dropping children off at the relocated schools, the move to inter-school bussing would be practical. However, this service has had a few negative impacts: early years schools are now dismissing students 15 minutes early to get students ready for the buses, discipline issues on the busses have increased as they have become overcrowded, and fewer drivers are available in the community.

Perhaps the best example of divisional collaboration is the transportation of students who are part of the Red River Technical Vocational Initiative between Borderland School Divisions, Western School Division, Garden Valley School Division, Red River Valley School Division, and la Division scolaire franco-manitobaine. Technical/vocational programs are housed in various schools across these divisions and students can choose to attend the programs of choice. Students are transported to a central school, and then moved out to other vocational

campuses. The principals and school divisions work together to ensure the programs are financed and managed equitably.

There were few positive innovations related to transportation mentioned by respondents when it came to extra-curricular activities. Most respondents commented on the decreasing number of extra-curricular opportunities or field trips undertaken by schools because of the prohibitive costs and safety issues related to transportation, and/or the problems associated with asking the same parents to continually provide transportation to events. Some schools have defrayed costs by fundraising or charging transportation fees, and one respondent suggested that the student council volunteered to defray some of the costs for students. One respondent indicated that due to safety issues related to passenger vans, she could not get the division to provide permission for the use of them, even if the school was too small to need a full bus, and although staff members volunteered to get their license. Issues related to differential abilities to fundraise and/or socioeconomic differences between schools aggravate the ability to be consistent in approach across divisions. One principal mentioned that there are not enough drivers to transport students on extra-curricular field trips, and another suggested that even though the school funds field trips for students over and above allotments with the instructional budget, teachers must plan field trips that can occur only between the hours of 9:00 and 3:30, because all buses are needed at the end of the day to transport students home due to increasing enrolments. Northern school divisions have additional costs associated with transportation, since their travel almost always necessitates room and board. Distances tend to be very far, and students have been crammed in vans or in small cars which can be dangerous in winter conditions.

A final tension was alluded to by one respondent who spoke of transportation "poaching" across divisional lines. Another division sent buses into the divisional catchment area as an incentive for families to send their children to its schools, which extends above and beyond most divisions' policies related to schools of choice, and leads to the potential loss of students from local schools. In addition, this person felt that catchment areas were crafted on population demographics that no longer match reality, and that they, along with transportation policies, need to be more conducive for families who wish to attend particular rural schools but need transportation to be provided in order to do so.

In the area of educational finance, comments focused on local access to funds, innovative use of funds, and funding structures.

Educational Finance

In the area of Educational Finance, the comments focused primarily in three areas: (a) Innovative Use of Funds; (b) Local Access to Funds; and, (c) Educational Finance.

Innovative Use of Funds

Schools used the funds they receive in a number of innovative ways. For example, given the focus on literacy development, some of the monies from the Strong Beginnings program, as well as that from Scholastic Book purchases, went towards acquiring one book for every student in grades 1-4. Monies for the KIDS program went towards early intervention initiatives that would help offset future intervention costs. An example of this is the development of homework bags provided to pre-school children to get them ready for Kindergarten by focusing on fine motor activities and letter recognition. Money for literacy was also spent on a book-buying trip for students in order to replenish local classroom libraries. Another school accessed donated books from a former school librarian who writes childrens' book reviews. Some schools deliberately offer to pilot resources in order to receive lower book costs. Another school principal used a graduate survey to help advocate for more library resources. The grant monies accessed through class size and composition grants often served the purpose of helping schools to reduce class sizes, acquire literacy specialists to serve the needs of early years students, support the professional development of teachers, and hire substitutes so that teachers could meet in teams to work on literacy strategies.

In addition to literacy support, schools have used funds to support other programs. The Red River Valley Technical Vocational Initiative is a collaboration between principals and school divisions to offer more technical/vocational opportunities to students while allowing schools to specialize in very expensive programs. One principal convinced the board to put monies into creating a compound in the parking lot of the

junior high so that students from the junior and senior high school could do woodworking outside. Monies are being used to create course innovations such as a podcasting course in Accounting. In another division, teachers have been hired to teach webCT courses so that other teachers are freed up to teach electives. Many school boards are topping up the monies for special education programs in order to provide more services for special education students. One school funds approved field trips that cost more than what has been allotted through the instructional budget. Another division pays all fees for all programs in the school, including Band, Home Economics, and Industrial Arts.

Other funds are being diverted into innovative staffing ideas. For example, monies from class size and composition projects have been used to create literacy specialist positions. Monies accessed for multi-age/multi-grade projects, as well as for special education are helping to fund full-time resource people rather than educational assistants, as classroom composition and more efficient use of educational assistant time is facilitated. One division has begun paying mileage to substitutes who travel large distances to teach in the division.

Many funds have been used to acquire school resources. For example, schools have made deals with their school division to purchase equipment on the understanding that they will pay back the money over a number of years with interest. In one school, local people are making equipment for special education students to offset high costs and wait times. Another school became part of a Network of Innovative Schools and was able to access over $30,000 in grant monies for programs and technology. One of the principals in this study ensured the school was using central servers to extend the shelf life of computers. The use of international student funds has funded school improvement projects such as library upgrades, computer lab upgrades, new tables and a new curtain divider. Building updates such as painting are being undertaken by students who take more ownership of the buildings when they have a hand in maintaining and decorating them.

Corporate sponsorships are growing, and providing schools opportunities to access scholarships, equipment, conferences, school clothing, learning materials, staff and student appreciation rewards. Many communities allow the school to use its facilities for free, and often schools will reciprocate by doing community service projects or providing their facilities to community organizations. In one case, the local town council is funding the development of a multi-purpose room that will be used by the school and local residents for community events. Some businesses use school facilities for community events and then provide the school with free supplies or supplies sold at cost. The rent for the adult education facilities represented in this study is paid for by the respective towns in recognition of the service these centers provide to local residents. Many schools have accessed community organizations that help offset the burden of school fees or other costs such as clothing and food for students from low socio-economic families.

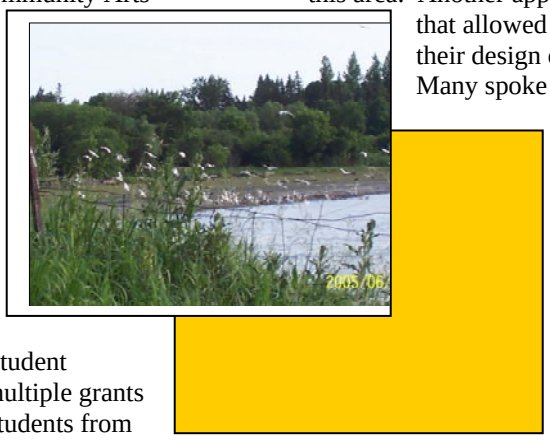
Local Access to Funds

Schools' local access to funds typically fell into two categories: fundraising initiatives, and grant opportunities.

Fundraising. When it comes to accessing local funds, schools tend to rely on donations from parents, local community organizations and school-based fundraisers. The most often cited donation group are Parent Advisory Councils. Other organizations include: Manitoba Metis Federation; Winter Carnival committee; Lions Club; local community clubs; Band Boosters; town council; local banks; individual parents; local businesses; Walmart; Friendship Centres; Breakfast for Learning; and, District Community Foundations. Fundraisers included the following: farming land as a fundraiser by a community group; a kickback of 7% of a $20 gift certificate purchased at a local greenhouse owned by a parent from the school; profits from community events such as school reunions, sponsored suppers, and pancake breakfasts; profits from selling articles such as chocolates, recipe books, community calendars, poinsettas, and sweatshirts; profits from raffles or draws for meat, trailers built by welding students, and TV/DVD's; and, profits from school fundraisers like lunch programs, pizza/hot dog sales, and drink machine sales. These funds were used in the following ways: to fund scholarships; to provide opportunities, equipment and uniforms for sporting events; to help offset costs for field trips for students in need; to provide for playground structures, campus beautification, and a new walking fitness track; to offset costs associated with lunch or breakfast programs; to provide for purchases such as sound systems, band instruments, bleachers, choir staging, new stage curtains,

learning carpets or smartboards; to offset field trip costs to Camp Arnes, Band trips, conferences, or competitions; to be donated to charities such as Team in Africa, Koats for Kids, Walk to Afghanistan or animal shelters; to create hampers for local families in need; to provide for visiting performers or guest speakers such as MADD; and, to purchase rewards and incentives for assemblies, student, staff or volunteer recognition.

Grant opportunities. Schools are now writing grant proposals in order to access additional funds. Most of the grants mentioned were those accessible through MECY, but others included federal grants, local community grants, foundation grants, and partnership grants. These included: Middle Years Experiential Learning grant; Education for Sustainable Development grant; Small Schools grant; Healthy Schools grant; Arts Smarts grant; Class Size and Composition grant; Multi-Age/Multi-Grade grant; French Second Language Revitalization Program; grants for French-Language Education; English as an Additional Language (EAL) Support grant; School and Community Arts Program; Early Numeracy Initiative grant; Community Schools grant; Developmental Assets grant; Aboriginal Academic Achievement grant; Early Childhood Development Initiative; Early Literacy Intervention Initiative (ELI); Technical Vocational Initiative grants; Building Aboriginal Student Success with Parents grant; multiple grants for Aboriginal and/or Metis students from Indian and Northern Affairs Canada, and local First Nations communities; community grants or local business partnership grants for purchasing equipment such as Smartboards, special education equipment or programs that connect seniors to at-risk students in the school; Network of Innovative Schools grant; Millenium Foundation grant; Manitoba School Improvement Program grants; and Sport Manitoba grants. Such grants supported the programs, personnel, and learning needs of many students. However, most of them required commitment to sustainability after external funding time was complete. In addition, most schools applied for many of these grants simultaneously, and the application process is long and arduous; unfortunately, rural schools do not have large numbers of staff who have the extra time to collaborate to write these proposals. The reporting requirement for these grants are also onerous. Although respondents were proud of what they had been able to achieve with their access to grants, many respondents were frustrated with what they considered to be "hoop jumping" when "we should be given the money to do our jobs and not have to worry about applying for extra money." Some spoke of the need to think about hiring full time grant writers because it was impossible to keep up with the opportunities that could be accessed along with the logistical commitments of writing and reporting on them.



Educational Finance

Respondents were asked to provide any suggestions they had related to educational finance that might improve the provision of services to rural areas. One of the responses credited the provincial government for its quick response to EAL issues in the province, and recommended keeping the financial support in this area. Another appreciated grant incentives that allowed schools to be creative in their design of innovative projects. Many spoke of the need to be vigilant in alleviating the tax burden to farmers and rural landowners, and they did not support the suggestion that the tax rebate to farmers should be removed. One respondent suggested that rural schools with facility space should begin leasing out their buildings to generate funds for school boards. Another suggested that schools needed to be able to carry over more than 6% of their budgets in order to plan more comprehensively for long-term initiatives, and that the current culture of "spend it or lose it" was not a good measure of accountable financing. Two respondents suggested that school divisions and the provincial government should more closely examine the number of substitute days used in Manitoba schools, as well as the reasons why they are needed. They suggested that school divisions should consider innovative scheduling ideas such as the 4-day school week to potentially offset some of logistical and financial difficulties associated with finding and paying for substitutes in rural areas. One respondent

suggested that Kindergarten students should be counted as one full-time-equivalent student, as their needs are no less than a high school student who is enrolled in only two courses but is counted as one full-time-equivalent.

Three respondents spoke of the need to recognize additional cost factors in rural (and particularly Northern) schools that have limited infrastructures for revenue creation. Examples might include more support for travel for educational programming or events, for paying visiting specialists' travel costs and/or for extra-curricular activities and curricular field trips. One principal spoke of high capital costs, and the need for the Public Schools Finance Board to respond to upgrade or renovate buildings. Another principal suggested that the province was not responding quickly enough to high growth divisions; therefore, local taxpayers were increasingly dependent on local revenue for service provision. In addition, the fact that current program implementation support for curricular initiatives such as Physical Education had to be offset by 75% from local school divisions added to the burden of high growth divisions that were trying to respond to system needs. One principal suggested that some support for the growing influx of high needs foster children living away from home needed to be provided for school divisions. Finally, a respondent suggested that, as in the case of ambulances, school buses should be purchased by the provincial government to offset purchasing costs in divisions where transportation costs are high.

"We're part of a community and the community is a part of what we are." (Principal)

Inter-Jurisdictional Collaboration

In the area of inter-jurisdictional collaboration, the comments focused primarily in three areas: (a) School and Community Collaboration; (b) School System Collaboration; and, (c) External Collaboration.

School and Community Collaboration

As one of the respondents in this study suggested, "we're part of the community and the community is a part of what we are." Two of the primary means of school-community collaboration occur in the areas of facility sharing, and fundraising for school equipment, programs, etcetera. However, because these were mentioned in the previous sections on infrastructure and finance, they will not be repeated here. A third means of collaboration includes the variety of community events sponsored or attended by both school and community members in order to build relationships: winter festivals, summer festivals, sporting events, welcome barbeques, Christmas concerts, band concerts, mini-Trappers festival, pancake breakfasts, Meet the Teacher events, musicals, Remembrance Day services, Secret Friends (whereby students write to someone in the community who writes back, and the process is anonymous until the end of the activity), Family Fitness challenge, Winter Fun Day, Penny Carnival, Summer Picnic, RCMP presence at school dances, and cultural awareness events. There are also numerous events that relate to curricular issues: education fairs, science fairs, career symposia with local businesses, guest speaker events by members of the community (artists, RCMP, Fire Hall, Social Work, Public Health), poster contests judged by seniors, and field trips to local businesses. A number of community service projects and/or humanitarian efforts were also mentioned: congregate meals for town residents, seniors suppers and/or spending time in seniors' centers, recycling projects, community clean-up, contributions to the local food bank, community volunteers, plastic bag clean-up at the dump, Koats for Kids, Christmas Cheer Food Drives, Operation Christmas Child, World Vision, and the Terry Fox Run.

Many schools sponsor and/or house in their facilities programs that service the community and build stronger relationships between community groups, parents, and the school: an Art mentorship program held in the evening by local artists; daycare/Nursery school programs such as Mother Goose, or Moms and Tots; community swimming pool; Babysitting courses; private music lessons; the Katimavik program; Public Health programs such as seniors health clinics; immigrant settlement office; and Sport Manitoba parent/child drop-in programs. Community members also support a variety of school programs and/or curricular initiatives. For example, the Seniors Going the Extra Mile (SMILE) program is one designed to pair students in grades 4-9 who have some social or academic challenges with seniors in the community who mentor and work with them on various projects such as drama. The KIDS program mentioned earlier builds partnerships with parents for early literacy instruction. While students are being assessed in early September, a

parent room is established in which school programs are highlighted, initiatives like learning carpets are explained, and programs are described. Parent meetings occur before and during the program for information on their child's progress and how they can support their child at home. They are provided with a Homework Bad to initiate that work. Parents are also involved in celebrating and evaluating the program at the end of the year. A third initiative included partnerships with businesses and local schools interested in the development of a program centered around the unique fossils and geography in the local area. Other ways that the community is involved in school programming and/or curricular issues include: community placements for technical/vocational programs, business plans judged by local business representatives, volunteering for extra help for students, targeted reading programs and Nutrition/lunch programs, involvement of community coaches for sports programs, working with school coordinators to support Aboriginal students or EAL families in the school and community, involvement in parent-teacher interviews or student-lead conferences (with translation opportunities for EAL parents), book donations, use of substitutes from the community, working with parents to access Mental Health services for children with special needs, parent consultations for receipt of adapted programs for their child, and the design of interdisciplinary learning projects (the research project Connections and a movie project described earlier) that entail students working with community expertise and showcased publicly. Other school-community connections include school planning initiatives like the Heretic Supper described earlier, local coverage of school events by the local newspaper, and the use of newsletters (some of which are translated from English) to inform parents/community members. One school is involved with a local community group that is trying to entice former students and residents to move back to the community. A second school division initiated a Program Advisory Forum which provided an opportunity for school and community representatives to discuss issues facing education and the community, such as English as an Additional Language, and curricular issues. Interestingly, two of the schools in this study have been recognized by the magazine, *Today's Parent* as one of the top 25 schools in Canada, after being nominated by parents who support the work that they do. Another school had the interesting experience of having a TV crew film a new student settling in to the school as part of a virtual TV program that follows families when they move to a new country. This kind of public acknowledgement is a wonderful way to build positive relationships between schools and the community.

In terms of Adult Education, the *Earn and Learn* program allows students to gain course credit while working. The center also engages in skill training for local businesses in the community. It is a member of the local Chamber of Commerce, connects with the Community Economic and Social Success group, presents to community groups, and partners with businesses to promote the programs it provides.

School System Collaboration

This section is organized into those initiatives that speak to school-based collaboration, and inter-divisional collaboration.

School-based collaboration. Most of the school-based collaboration activities have been listed before as they relate to programs, initiatives, and professional development. This includes the involvement of literacy support specialists or curriculum support teachers who work with teachers in the classroom to develop strategies such as literacy circles, novel studies, and continuums of learning, model lessons, and offer professional development. Other collaborative activities include team teaching opportunities; classroom visits; cross-grade activities or inter-disciplinary projects; working with resource personnel and educational assistants to support students with special needs; team meetings (some with support of substitutes during the day and others with preparation periods deliberately designed to facilitate this); regular meetings between resource teachers and educational assistants; local in-service days for teacher sharing and for presentations from colleagues; planned learning conversations; informal conversations; reporting back to others of external professional development opportunities; book studies; evening study groups; planning together for course scheduling; planning for projects such as class size and composition, multi-age/multi-grade, middle years, and literacy; planning events such as I Love to Read Month; focusing on school concerns such as school culture, behavioral issues, numeracy and literacy; aligning mentors for new staff; and the development of a Staff Advisory Committee to share staff concerns and facilitate communication between staff and

administration.

Inter-divisional collaboration. Inter-divisional collaboration occurred mostly as schools combined their capacity to offer joint programming such as Band programs, Vocational programs, and Swim programs. In one school division, each high school is developing a different program in order to share the information and program opportunities between schools. One respondent spoke of an inter-campus program whereby two schools share a high school and students are bussed between them in order to maintain the facilities in both communities. Many schools partner through technology to design and share courses across campuses. Other schools partner for various activities, such as sports programs, Science Fair, guest speakers, culture awareness activities, and high school transition activities. Finally, schools collaborate with each other around professional development. Positions such as literacy support specialist, curriculum support specialist, and literacy with ICT specialists are shared across schools to facilitate teacher professional growth in these areas. Other areas of professional development included: shared sessions, shared resources, classroom visits, and grade-level or subject-specific professional development opportunities.

External Collaboration

Many cross-divisional partnerships were evident. The first was the Red River Technical Vocational Initiative shared between Borderland School Division, Garden Valley School Division, Western School Division, Red River Valley School Division, and la Division scolaire franco-manitobaine. A second initiative was that between Kelsey School Division, Flin Flon School Division, Swan Valley School Division, and Mountain View School Division to offer French Language programs, law programs, and technical-vocational opportunities using ITV. Both of these technical-vocational cross-divisional partnerships, along with others in the province, partner with higher education authorities such as Red River College, and University College of the North to provide dual credit and practicum time towards apprenticeship. The Northern divisions also collaborate to provide a summer institute that offsets the costs that accrue for people who would otherwise have to take professional development opportunities in the south. Another collaborative initiative was that between one Manitoba school division and the Calgary School Division whereby educators from Manitoba went to visit schools in Calgary to learn about advisory programs that were than tailored to fit the Manitoba context. A regional initiative that is catching on across the province is called the Southeast Interlake Principals association, which is a consortia of all principals in this region who are organizing meetings and conferences together in order to share ideas and to build capacity.

In addition to cross-divisional partnerships, there were many partnerships growing between divisions and institutions of higher education. Most often cited were those initiatives that lead to dual credits or practicum time for apprenticeships for technical-vocational programs with institutions such as Red River College, University College of the North, or Assiniboine Community College. One school offers night courses through Continuing Education for students who need to access particular courses. Some schools invite institutions like Assiniboine Community College to their local career advisories to ensure that their students are aware of entrance requirements for various institutions; some send groups of students to various institutions for competitions or information.

Many school divisions participate in the teacher career fairs held by the University of Manitoba, the University of Winnipeg, and Brandon University to recruit teachers to their local schools. Many schools also mentor teacher candidates during their practicum placements as a means of enticing them to apply for local positions. Finally, a number of school divisions are advocating for, and receiving, certification or university courses such as English as an Additional Language, Resource, or Guidance taught on site or through technology. One participant mentioned the partnership between Garden Valley School Division, Western School Division, Borderland School Division and the University of Manitoba for the design of a Masters program offered partially onsite and partially at the university.

As was mentioned earlier, there existed many school-community relationships evident in these studies, which will not be repeated in this section. In addition to these relationships, collaboration with a number of groups external to local schools or school divisions existed. These included: relationships with the provincial Day Care Coordinator to develop programming in the school; a relationship with ministry personnel to support the role development of

literacy support worker; relationships with Manitoba Teachers Society to assist with school planning; and linkages with Manitoba Metis Federation and local First Nations authorities to support Metis or First Nations students and/or contribute to school programs or initiatives such as Artists in the School or sports equipment. However, the most-often cited external linkages were those related to inter-agency services such as Child and Family Services, regional health authorities, mental health, the RCMP, homeless shelters or safe houses, Public Health, Addictions Foundation Manitoba, and the Fire Hall. These connections were made primarily for student service support, but also for immunizations, senior health clinics, threat assessments, fire drills, drug and alcohol awareness programs, and building trust between community agencies, parents, and the school.

Findings: Canadian Ministries of Education

Nineteen participants representing Ministries of Education across Canada were interviewed for this study. This group of participants held a variety of positions within their respective ministries: director, associate director, chair, superintendent, senior policy advisor, assistant deputy minister, and research advisor. Their areas of expertise were also varied: curriculum, early childhood, K-12 schools, workforce planning, technology, French language services, childrens' services, policy, and rural education. Although there is representation from the provinces and territories where there exist the largest percentages of those living in rural areas, Central Canada (Ontario/Quebec) was not represented in this study, and only one Atlantic province (Nova Scotia), was represented. All three territories, and all the western provinces were represented in this research. Alberta and Saskatchewan were represented most strongly in participation overall.

Nineteen participants representing Ministries of Education across Canada were interviewed for this study who had portfolios in curriculum, early childhood, K-12 schools, workforce planning, technology, French language services, childrens' services, policy, and rural education.

Participants were asked to provide information related to the creative or innovative ways their schools had addressed challenges in the areas of: (a) *Teaching and Learning*; (b) *Infrastructure*; (c) *Educational Finance*; and, (d) *Inter-Jurisdictional Collaboration.* The following sections will provide the findings in each of these areas.

Teaching and Learning

In the area of teaching and learning, the comments focused primarily in four areas: (a) Planning and Accountability (b) Programming; (c) Personnel and Professionalism; and, (d) Initiatives.

Planning and Accountability

Seven ministries overtly discussed strategic planning initiatives that would affect rural schools and school divisions. These initiatives covered the areas of: rural development (Alberta); learning and technology (Alberta and British Columbia); workforce planning (Alberta); the institution of rural task force findings (British Columbia); a Continuing Learning Framework for provincial education (Saskatchewan); a career development strategy for youth (Saskatchewan); a reconceptualization of service models of delivery for special education (Saskatchewan); an action plan for rural education (Manitoba); and a focus on Aboriginal culture and language in early childhood through to grade 12 (Yukon, North West Territories and Nunavut).

In 2005, the Alberta provincial government unveiled *A Place to Grow*, which is a rural development strategy that incorporates four pillars for sustainable rural communities: (a) economic growth; (b) community capacity, quality of life and infrastructure; (c) health care; and, (d) learning and skill development. This initiative provides competitively accessed financial support for locally developed initiatives, plans and projects that align with the four pillars with a particular emphasis on providing a voice for rural youth, meeting the needs of seniors living in rural areas, increasing the participation of Aboriginal Albertans, and preserving Alberta's environment. As learning is one of the pillars of the rural development strategy, many educational initiatives have been funded across the province that support rural schools.

In 2004 Alberta Education developed a Distributed Learning Strategy which is an attempt to anchor strategies for technology development, distribution and use with visions of schooling for the future. The ministry is working with stakeholders to develop a strategic plan that clearly articulates the changing nature of the global world, and aligns the skills students will need in the future with educational strategies that use technology as a tool to support learners. The ministry has done environmental scans to find out what other provinces/territories are doing in the area of distributed learning, and has found out that much of this work is being done in rural areas, since local districts are often ahead of ministries in actual usage and local policy because of their immediate need. The ministry hopes to use the information it is collecting to provide equity, access, and standards around

distributed learning opportunities in the province. Their introduction of the SuperNet in the province to provide broadband access to all communities has created an infrastructure where technologies such as videoconferencing and other emerging technologies can be supported. Because research becomes an integral part of this process, the ministry has crafted a number of competitive calls for proposals that are supported financially for 3 years as pilots for technological projects, such as: videoconferencing; a project called the Emerge Wireless Learning Project whereby 2000 students from grades 4-10 are provided with a laptop in order to examine what the education system needs to learn about teaching and learning as it moves towards the day when students come to school with their own technology; and the Technology and High School Success project which attempts to increase high school completion rates (particular in rural, First Nations and Metis communities) by re-engaging learners through technology to personalize learning, and to provide students with independence and ownership of their learning.

In addition to technologies for teaching and learning, Alberta is also working on a project called the Provincial Approach to Student Information (PASI), which is part of a strategic initiative to allow for real time data flow of student information between school divisions and the ministry. Besides being tied to educational funding, such an initiative can reduce administrative costs of data input multiple times over in current systems. Rather than creating one student information system, however, the ministry is working with stakeholders to determine how it can create the technical system that would allow the systems to inter-operate to have a standardized approach, rather than a standardized system, of student information.

In the area of workforce planning, Alberta has recognized that with growth in population comes a growing need for teachers. Therefore, the ministry's workforce planning branch is working with an external workforce advisory committee comprised of representatives from the College of Alberta Superintendents Association, the Alberta School Boards Association, the Alberta Teachers Association, and all of the teacher preparation institutes in the province to develop a framework to respond to the anticipated growth. The group is focusing on issues related to recruitment, preparation, retention, engagement, and development of the teacher over the career cycle.

In 2001, British Columbia instituted a Rural Task Force that engaged with stakeholders across the province, culminating in a report in 2003 with 19 recommendations to support rural districts. In 2005 the ministry created a ministerial position entitled Superintendent of Rural Schools. This person is seconded to the ministry and charged with addressing the rural recommendations. A steering committee of rural educators was designed to support this initiative, and in 2007, the ministry decided that it should embed this work into a rural district. Therefore, the Superintendent of Rural Schools now works .3 time with the ministry, and the remaining time within the district embedding rural strategies to determine their success. As part of this vision, technology is being used to connect teachers across rural British Columbia and elsewhere. The ministry has provided the Elluminate platform to all schools in British Columbia so that all teachers have access to a professional online speaker series that extends an annual conference on rural education. These workshops are later edited and put on podcasts to be accessible to those using the platform. Web conferencing capabilities exist within the platform for meetings, professional development and course delivery that offer breakout rooms that include white boards for collaborative discussion, provide instant messaging services and/or voice audio, and access Smart boards and tablet PC's. For example, teachers have accessed professional development from scholars like Faye Brownlee on learning and intentions, or they can learn from the modules how to use technology like wikis and podcasts. In addition, Classroom Connects is an initiative that uses Elluminate to connect classrooms across the province so that students can benefit from innovative lessons on such topics as predators in science, Aboriginal authors in literature circles, and professional musicians.

Saskatchewan has developed a strategic vision called the Continuous Learning Framework which is based on four priorities:

higher literacy and achievement; equitable opportunities; smooth transitions; and, system accountability and governance. School divisions develop their plans within these priorities, and schools create a learning improvement plan whose implementation is the responsibility of the school community council in cooperation with the staff at the school. Biannually, ministry personnel meet with school divisions to discuss the plans, achievements related to the plans, and potential areas where they may seek to improve. One of the initiatives that has come out of this strategic planning is the launch of a career development strategy that is underpinned by two goals: that those who graduate are equipped with the essential career and skill management competencies that will assist them in achieving their potential on their personal pathways of learning; and, that the labour market will benefit from youth who are self-motivated and who are moving positively toward their personally determined future. A second initiative is that of school division restructuring from 119 to 28 school divisions, which was an attempt to provide equity of access and benefit to students, and impacted the renewal of the school operational grant along principles of transparency, equity and access to education. In rural and remote areas, technology is playing a large role in providing access to services and supports. A third initiative is an entire change in the philosophy of service delivery for special education from a medical model to a needs based intervention model. This change was incorporated due to the recognition that large disconnects existed between assessment and intervention, and the planning and outcomes for students with special needs. The philosophy supports a community intervention model of service delivery that facilitates improvements in learning rather than focusing only on individualizing programming that did not provide for systemic change. The ministry has collaborated with school divisions across the province to establish a service delivery improvement process around the areas of philosophy, staffing and intervention. A rubric was created to assess models of service delivery across the province. School divisions create SMART goals on areas in which they need support, and they partner with other divisions that have strengths in that area. The ministry believes there is now a more balanced approach between the use of individualized program plans and the need for systemic change. In addition, the ministry has provided school divisions with information they've never had in the area of student services around accountability, essential elements of service delivery and personal program plans, while focusing on a shift to access appropriate staffing complements to address appropriate programming and appropriate intervention, and moving away from a model based on paraprofessional support.

Manitoba has identified Rural Education as one of its key priority area. Accordingly, the province is presently developing an action plan for rural education. The plan stems from the current research and advocacy work that has been conducted in the province, and will focus on a variety of areas. This will include working with school divisions to find ways to enhance distance learning opportunities for students and offering more professional learning opportunities focusing on the alternate formats provided by using information and communication technologies. Greater use of videoconferencing capacities will also be explored. The province has recently been hiring more staff dedicated to assisting rural schools and school division staff in designing and implementing programming for students with special needs. In areas such as international education and technical and vocational education, the development of regional consortia will continue to be supported. With respect to funding, the province is continuing to adjust the allocation of provincial funding to recognize rural education programming needs and cost pressures related to declining enrolment. The Department has also instituted a number of research initiatives in rural areas across the province by collaborating with researchers at various institutions of higher education, and funding agencies such as the Canadian Council of Learning. As such, the ministry is able to develop initiatives around current research to address immediate needs facing schools and students.

From 2002 to 2004, a review of the Yukon's *Education Act* involved

extensive consultation with people in the Yukon to try to improve the education system. The Education Reform Project (ERP) worked within the context of self-governing First Nations to establish a structure and a culture of education that is open to all partners. Addressing the gap between First Nations and non-First Nations student outcomes was central to the mandate of the ERP. The team had several other goals as well: an education system that meets the needs of all Yukoners and ensures that students can participate successfully in work, post-secondary education, training and life-long learning; increased involvement by First Nations in schools and in the education decision-making process; and ways in which the federal government could provide additional funding for education in the Yukon. The ERP team identified four areas that would be essential to meet these goals within its final report: (a) workable and inclusive model of public school governance; (b) the decentralization of decision-making and the empowerment of school councils and communities; (c) a strategy to address Aboriginal language revitalization and retention; and (d) initiatives to address the social and community aspects of Yukoners' educational needs.

In the Northwest Territories, the Minister of Education, Culture and Employment is responsible for prenatal to grade 12 education. The emphasis of this strategic plan is on the provision of culturally sensitive and linguistically appropriate education for Aboriginal children served in local schools. In Nunavut, all government services have been underpinned by Inuit Qaujimajatuqangit (IQ), or eight guiding principles passed on from Inuit elders: respect, fostering good spirit, serving and providing for family and community, decision-making through consensus and discussion, development of skills through practice, working together for a common cause, being innovative and resourceful in seeking solutions, respect and care for land, animals and environment. The government of Nunavut is using IQ as the guiding principles for achieving four goals across all ministries: healthy communities, simplicity and unity, self-reliance, and continuing learning. This fourth goal offsets a continuing learning framework for programs and practices in local schools, which values lifelong learning from all levels and sources, equal opportunity and equal access, and land and language skills. To that end, the new *Education Act* of the territory has created a strongly decentralized education system, with power to determine the course of education largely in the hands of the District Education Authorities in local communities, and considerably less power granted to the Minister of Education. In fact, schools can choose programming based on a protocol of Multiple Options, whereby the funds schools receive can be used to provide local programming relevant to community need. Because all schools cannot offer all the different programming that is available, the community and District Education Authority decide for the community what programming meets its needs, and the school teaches towards that focus.

Programming

The topics found within this area of the framework include innovative programming initiatives to support student learning, differentiated instructional approaches, and multi-age/multi-grade opportunities.

Innovative programs. Innovation in programming tended to relate to distance learning opportunities, career development opportunities, curriculum development, and cultural awareness. As one respondent from British Columbia suggested, "rural will probably lead the charts on this because in urban they just don't see the value of this right at their fingertips."

In Nova Scotia, a joint committee between the teachers' union and the Department of Education was struck to examine issues of small schools and declining enrolments. In 2003 a committee was formed to create a central distance education service in Nova Scotia. The province added funding for specific numbers of seats for students from small high schools and ensured which courses would be offered several years in advance. This includes a growing number of advanced courses which often cannot be provided in small high schools, and core French classes. In April 2007, the province outlined a common platform for learning called the Nova Scotia Virtual School. This platform is a combination of Moodle for asynchronous coursework (similar to webCT or Blackboard), and Marratech for the synchronous coursework, which is similar to Elluminate in that it has a common white board, live chat features, text for private or public

When it comes to innovative programming, "rural will probably lead the charts on this because in urban they just don't see the value of this right at their fingertips." (British Columbia)

use, and excellent voice over dialup with small format web-based video more like MSN. Because the online coursework is interactive, but still tied to the regular school semester, the province also augments distance education through the Correspondence School Program in both English and French Immersion. In addition, the province has purchased a provincial license for an online periodical database in order to provide equity of access in all schools to support the curriculum and teacher professional development. This license extends to students and teachers from K-12 and can be accessed from school and home.

Nova Scotia has also instituted a Reading Recovery program for French as a second language. Five teacher leaders trained in reading recovery with Masters degrees work with immersion students across the province in Grade One to address reading issues for immersion students and to help them remain in the French program. The province also has entered into a partnership with the Office of Health Promotion to create a Healthy Eating program which provides funding for breakfast programs. It also has entered into collaboration with Energy Conservation to write science curriculum with a focus on energy conservation. The Council of Atlantic Ministers of Education and Training have an agreement like the Western Protocol for joint curriculum development with a regional focus. The province jointly supports with Industry Canada the program *Computers for Schools*, which helps to refurbish computers for classrooms and libraries distributed through school boards on a per capita basis. The Options and Opportunities program is a program designed to provide work experience for Nova Scotia students that articulates with Nova Scotia Community College for the provision of dual credit. Finally, locally initiative programs, such as Oceanography, are occasionally piloted in school divisions after approval from the province.

The comments from Alberta related to programs in distance education, career education and Aboriginal education. The Technology and High School Success program was previously described in the section on planning. The Alberta Distance Learning Strategy is an attempt to build equity of access and choice of programming to students across Alberta through various distance education technologies, such as video conferencing for programs such as Paleontology taught out of Drumheller, mobile Career Technology Service labs that move around jurisdictions to offer high-cost programs such as welding or computing, and online coursework that may be offered from any of the 20-30 jurisdictions in the province that have online courses openly available to students wherever they may live. In addition, Alberta has initiated a Learner Career Pathways program that focuses on transitions between learning and work through continuous learning and apprenticeship opportunities articulated with colleges. The province offers a Green Certificate which is a program whereby high school students take agricultural courses and receive their first level of an agriculture apprenticeship, which helps keep some rural students in schools and fosters the local agriculture industry. Finally, the First Nations, Metis and Inuit policy framework of 2002 has created a number of program opportunities for Aboriginal students, and has fostered the infusion of Aboriginal content into all areas of the curriculum.

The British Columbia innovations in distance education programming were described in the section on planning, and will not be reiterated here, except to suggest that there has been significant online course offerings created under what has been called the Rural Education Network. Much of this work can be found on the LearnNowBC website at <http://www.learnnowbc.ca/>.

The respondents in the Yukon spoke of distance education delivery systems, special education, and culturally responsive curricula and teaching. In the Yukon, the ministry provides for videoconference equipment in every community school with high speed internet. The territory provides the funding for technology, and local communities provide programming. A web-based program entitled, *First Voices* is an Aboriginal language program for language renewal that allows teachers to create language materials. All computers have been equipped with a keyboard responsive to Aboriginal language writing. Another “distance education” strategy that has been used for three

Differentiated instruction is being supported primarily by technological innovations.

schools that do not house grades 10-12 is the use of a residence in Whitehorse. Students are moved to Whitehorse and live in a residence heavily subsidized and supervised by the territory. All food and lodging is provided, as well as social support networking and a van to drive students to recreational centers and events. Because transition issues are still a concern leading to drop out, however, the territory has begun to consider ways of providing access to grades 10-12 within the local communities to foster higher completion rates.

Due to the lack of access to specialized service providers for students with special needs, the territory has moved away from requiring a formal assessment of students before they are allowed to access special education programs. This provides for earlier intervention and support prior to gaining access to a specialist. In addition, the territory has funded an after school tutoring program to assist students with homework primarily in the areas of Language Arts, Math and Science.

The greatest programming opportunities are focused on culturally sensitive curricula and programming. The development of experiential learning programs aligned with subjects like Science, Social and Geography allow students to complete core activities in school, and then move onto the land for 3-4 days to do related experiential learning activities such as canoeing, bison/caribou hunts, muskrat trapping, rabbit snaring, and winter/outdoor survival activities. There is also some examination of the Rural Experience Model (REM) in which students go on outdoor experiential trips for a week at a time, and are divided into groups who partake in four different activities to build outdoor survival skills while examining the Science and History of various areas. The territory also provides cultural funding to each school, with a base of $5000 and additional monies per capita. In meetings between school administration, staff, First Nations Directors and First Nations governments, the monies are used to design programs around cultural perspectives, which can include field trips, examination of cultural history in the area, provide for honoraria for elders to become part of the school, or buy culturally relevant materials. There also exists an Elders in the School program, for which First Nations governments generally cost share. Elders are provided with honorariums to present cultural histories to students through stories, artifacts, and hands on projects. There is also a move to design a Bilateral Bicultural Program which would entail the use of the local First Nations language in the school 30%-40% of the day, taught by a cultural linguist, with teachers teaching local culture. The curriculum is in the development phase in collaboration with Harbour C. School in Juno, Alaska and will be implemented in the fall of 2009.

In Saskatchewan, the ministry has examined the number of career development practitioners and instituted a program and curriculum for middle years Career Guidance. As of September 2008, students in grades 6-9 must be taught a minimum of 30 hours of Career Guidance, and every school division must have a career development team that will work with the school community council to strengthen career development in every school. In conjunction with this, Grade 9 students will complete a personal career portfolio which will extend into senior high.

Manitoba spoke of distance learning opportunities using traditional paper correspondence, as well as some decentralized online coursework typically designed by local jurisdictions that are shared with the department. An advisory team is being put into place to begin to examine how jurisdictions can begin to collaborate on the design and on the delivery of distance education programs that do not duplicate efforts.

Due to the importance placed on local community and culture in Nunavut, curricula are printed in up to four languages: English, French, Inuktitut, and Inuinnaqtun. A translation office in Iqaluit deals with this aspect of curricular development. Although Inuktitut is the working language of the government, on the west side of the territory, an alternate dialect, Inuinnaqtun, is supported in the attempt to revitalize this endangered dialect. Language and cultural learning are an integral part of school programming, and many schools focus on cultural programming as their model of choice. A grades 10-12 curriculum has been developed to address some of the social, mental and emotional issues that exist within many of these remote communities dealing with suicide, drug and alcohol abuse, teen pregnancy, abuse, parenting skills, etcetera. Because these issues are integral to the lifestyles of many students, the ministry has been successful in lobbying to have these credits contribute as entry credits for university coursework. The ministry has also attempted to address dropout rates and student

engagement through a focus on culturally relevant land-based, and/or technical vocational programs. Examples include community-based small engine repair, construction, and land survival courses. One school was noted for its Stay in School program based on the development of trade skills. At the end of the course many students have taken their trades entrance examinations and gone onto trades programs. Others complete workplace safety training before they move into work placements. In Rankin Inlet, the ministry is supporting a trades school that will be groundbreaking, as students will be able to complete their trades programs in Nunavut. An emphasis is placed on developing culturally sensitive, local resources.

Differentiated instruction. Given the program initiatives described above, it is not surprising that differentiated instruction is being supported primarily by technological innovations. Almost all the respondents spoke to various online courses available to students, offered by a variety of technological innovations such as video or web conferencing, web-based platforms such as Elluminate or Marratech, webCT, Moodle, or Blackboard, a variety of learning objects available online, and the provincial licensing of online periodicals. Alberta has spent over $12 million on video conference supports to ensure that each school jurisdiction has at least two videoconference sites, for a total of over 800 sites in the province which can bring in innovative guests, courses, and shared programming between schools. Students have access to multimedia learning objects and digital resources linked to programs of study, and can access courses of their choice from multiple jurisdictions. Mobile labs provide another opportunity for students to complete expensive computer and vocational courses using hands-on learning formats. British Columbia uses Elluminate to differentiate online instruction that includes lectures, digital learning objects, podcasts, wikis, breakout rooms for discussions using white boards, instant and text messaging capabilities, and the ability to link to Smartboards and tablet PC's. Webcam technology used in distributed learning labs allows the facilitation of online coursework as teachers from alternate sites can view students working on coursework from a multitude of sites and students can see each other and the teacher for instructional interaction. In some places, students get access to a laptop that they then take to a special lab room equipped with webcams to "attend" a course with a specific teacher at a specific time. This also opens opportunities for multi-age/multi-grade settings. The ministry, through LearnNowBC, offers free tutoring for grade 10-12 students from 6:00 to 10:00 pm. Online testing programs are available so that students can test their growth in learning. There exists a clearinghouse of online courses available in the province with a course finder option so that students can choose online courses from the place they wish. For example, one group of seven school districts came together to combine their resources, develop content, and share coursework using presenters from each district. Another consortium called the COOL consortium is a content development consortia of about 40 school districts that offers hundreds of free media objects online.

The Yukon provides online instruction through videoconferencing with classrooms in Whitehorse. This includes the web-based program *First Voices* which is an Aboriginal language program that allows teachers to create language materials.

In Saskatchewan, some school divisions have begun to use video conferencing for meetings and coursework, and the province has purchased a provincial site license for the Blackboard course management system, in addition to providing a three-day online institute for teachers to teach them how to use it. In addition, in 2000, Saskatchewan dedicated funding to Web-Based Learning Resource Development (WBLRD) in order to create online resources that matched the Saskatchewan curriculum designed by practicing teachers. These teachers were supported by the ministry to develop their skills to design the online resources which are subsequently posted freely online. Another distance learning opportunity mentioned by respondents in Saskatchewan was that of Interactive Television Instruction (ITI) that delivers secondary credits, postsecondary courses and credits, professional development and special events broadcasting through one-way video via satellite. The Saskatchewan Communications Network broadcasts to over

200 sites in the province, with access back to the studio via email, fax and/or telephone.

Nova Scotia houses a central distance education service called the Nova Scotia Virtual School that offers online coursework to students. The ministry also supports a provincial license for a periodical database that can be accessed by students and teachers from school or at home.

In addition to the online methods of differentiating instruction, respondents from three ministries (Nova Scotia, Yukon, Manitoba) spoke of the use of more traditional correspondence opportunities. In the Yukon, the home tutoring program sponsored by the ministry attempts to support students in their academics by using community members with degrees, or educational assistants as tutors in an after school program. All three territories are also creating materials and books that are culturally relevant. Respondents from Nova Scotia spoke of the media lending library available to teachers, which houses video, DVD's, etcetera for teachers. The ministry produces some video, and purchases the rights to curriculum based resources which it can then duplicate and lend to schools.

Multi-age/Multi-grade. Respondents from five provinces/territories spoke of multi-age/multi-grade programming. Nova Scotia is developing curriculum guides to specifically address multi-grade classrooms. Through its rural development action plan, Manitoba hopes to create a committee of teachers who will develop professional development packages to support the instructional work of those who work in multi-age/multi-grade classrooms. Respondents from British Columbia spoke of the "side-effect" of the distributed learning labs that were becoming multi-age/multi-grade/multi-discipline classrooms as students progressed in their individual learning. A respondent in the Northwest Territories suggested it would be difficult not to find a classroom that was single-graded in the territory, and therefore all instructional activities facilitated learning in multi-age/multi-graded situations, sometimes with three to four grades within the structure. The respondent from Nunavut spoke of movement away from the terminology of multi-age/multi-grade schooling to the learning continuum model presented by elders who suggest that there are five stages of development through which children pass, but that they pass through these stages at different times, so that every learner is unique. In the view of the ministry, the notion of learning continuum growth related to the elders' outlook is a more powerful way of conceptualizing these classrooms.

Most ministries focused on professional growth in order to recruit, support and retain quality teachers and administrators.

Personnel and Professional Growth

Most ministries focused on professional growth in order to recruit, support and retain quality teachers and administrators. It should be noted that although the use of technology initiatives were the most commonly mentioned methods of providing access and variety in professional development to teachers in rural areas, they will not be repeated in this section because of their detailed descriptions in previous sections.

Some of the ministries spoke of initiatives being undertaken to recruit professionals into particular areas. For example, Nova Scotia is addressing a shortage of French language teachers in a number of ways. Teachers, potential teachers, supply teachers and substitute teachers of French as a second language who would like to improve their French skills have the opportunity to take an online course with Acadia University free of charge at the beginner, intermediate or advanced level. Three blocks of these courses are offered each year, with the potential of supporting 100 teachers per year. In addition, the ministry is offering bursaries for students who would like to specialize in French first or second language teaching methods. The students' tuition fees are paid for the duration of the program and upon the completion of their degree they agree to accept a teaching position in French first or second language within the province for a period of two years. Finally, a Masters cohort in Resource in French second language has begun with St. Francis Xavier University. The ministry has helped to offset some of the costs of establishing and developing the program that has grown out of meetings between school jurisdictions, the university and the ministry. The program will be offered in different locations on weekends and in the summer to provide access across the province. Nova Scotia also offers an early hiring fair for Nova Scotia teacher training facilities in February, whereby school boards make a commitment to hire a certain number of new education graduates so

that they do not leave the province to accept employment elsewhere. Nova Scotia is also responding to a report issued by the Education Professional Development Committee to support school based, professional learning communities.

British Columbia brought together 35 new teachers with less than two years of experience (that has grown to an estimated 100 teachers for 2008), across rural school divisions to orient and support them in the challenges they face as new teachers in rural areas. The province has also recognized that leadership in rural communities looks different than it does in larger centers. For this reason, school/community leadership teams are being developed for the express purpose of working together to support schooling and the community. As a third initiative, one administrator and one lead teacher from secondary schools that have less than 200 students are going to be networked so that they can start collaboratively working on reforming secondary education in small rural schools.

Respondents from the Yukon spoke of the difficulty in attracting staff to the rural/remote areas, which are typically fly-in communities. Often these communities attract people from other provinces/territories who may want to finish their career on the attractive salary and pension plan that exists in the Yukon, or those who are already retired. The Yukon Northern Teacher Education Program offers a four-year teacher pre-service degree in Whitehorse open to both First Nations and non-First Nations students as an attempt to recruit and train teachers for/from local communities. In addition, the ministry provides bursaries and incentives for students to attend universities in the hopes that they return, though there are no stipulations made in that regard. The ministry provides an annual fall orientation for new teachers who are moving into traditional territories of the local First Nations. This training event provides new teachers with the opportunity to learn about the First Nation's culture and values, the languages, practices and food in that particular community. The initiative has been particularly helpful in establishing a relationship between the teacher and the community. In terms of succession planning for administration, the ministry is providing additional funds for relief time to be granted to staff members who know the community to work with the principal on assigned tasks as training for transitions when principals retire.

Saskatchewan has created a Teacher Recruitment and Retention Fund that provides some support for school divisions to use in recruitment for positions. It can be used to enhance the ability to recruit people in particular subject areas, or to provide support to teachers currently employed to access further education. Most of the funding affects Northern and rural school boards, and about 216 teachers benefit annually from the bursaries provided. Northern school divisions also use this funding for advertising positions. In addition to this initiative, there was a change made to the Teachers Superannuation and Disability Benefit Act that removed provisions that affected the number of days a retired teacher could teach without impacting pension. Another change has been a Step 15 in the provincial salary grid which encourages the retention of older teachers and has provided an increased salary class for school divisions. The ministry recognizes a fifth year of undergraduate study in an area of local or provincial need and has instituted additional qualifications certificates. In particularly hard to recruit areas of expertise, school divisions can reward teachers who broaden their teachable areas with reclassification and an increase in salary. In addition there is recognition for certain journeyman certificates and technical training for retaining vocational teachers. There has also been some partnerships between school divisions and local First Nations Education Authorities for shared professional development and curricula development. The shift in the special services delivery model to the balance between personal programming and systemic intervention is building capacity within divisions as they work collaboratively with each other and the ministry, and is reducing the reliance on paraprofessional models. Finally, the ministry has been involved for the past three years in a pilot project that provided teachers with the opportunity to take a 12 week online course from Harvard in its WIDE program that focuses on the concept of teaching for understanding, planning, goal creation, and ongoing assessment for, as and of learning to

support a deeper understanding of students. Over 200 teachers have taken the course over the past three years, and they have been paired up with coaches from Harvard. Approximately a dozen of those teachers have gone through the coach development course and some are coaching with WIDE. The other benefit is that there now exists a cadre of online teachers in Saskatchewan who have the capacity of being online professional development providers for the ministry.

Manitoba is considering increasing funding for the hiring of student service coordinators and clinicians in remote areas, as well as providing bursary programs to train clinicians from areas in which it is difficult to recruit. It is also planning on designing a committee of teachers who will create professional development packages for teachers who teach in multi-age/multi-grade settings. Finally, the ministry is planning on delivering more professional learning through the internet and videoconferencing. Currently, it is providing some programming for the Manitoba School of the Deaf via distance.

In many of the rural/remote fly-in communities in the Northwest Territories, the largest reason why 40% - 100% of teachers and administrators leave each year is due to a lack of housing. In many communities two or three teachers live together in inadequate, high-cost apartments or homes, and this situation creates untenable living and working conditions over time. All teachers in the Northwest Territories except those in Yellowknife are government employees. In the early 1990's, the government decided to offload its responsibility for providing teacherages onto local school jurisdictions, which could not cover the costs. The same issue exists for all public service employees, and this is the number one issue listed by teachers when they are surveyed or come together to discuss teaching challenges. Those communities that still retain some teacherages find that their teachers and administrators remain longer, build stronger relationships with the community, and therefore create a more effective teaching and learning experience. Fortunately, more Aboriginal students are going to college and university, and many of them return home to work and live; incentive programs have been designed to encourage this. A second initiative links to a collaborative initiative between Health and Education to provide videoconference equipment in all health centers that can be accessed by educators. The intent of this is not only to provide professional development to teachers, but also to link educators, health care providers, and children with special needs to specialists in the Northwest Territories via technology so that they may access regular service in a collaborative fashion.

Alberta's Workforce Planning Branch is reviewing provincial certification requirements that have been described by those who have received their training from outside the province as being too arduous and unnecessarily tedious. One of the outcomes of the workforce is to review those processes to find the means to qualify people who are qualified out of country/province without undue difficulty. Alberta also has the Alberta Regional Professional Development Consortium (ARPDC), which is a consortium that provides professional development support in five regional centers across the province. It is responsible for providing professional development in response to ministry and school system priorities. The consortia work collaboratively across the regions, pooling resource time and planning, and support requests from the field, particularly from rural jurisdictions, for professional development needs that cannot be met at the local level.

In Nunavut, the ministry makes a concerted effort to recruit personnel at the entry level who speak Inuktitut, as this is the formal language of government. However, since the hiring policy in the Government of Nunavut is to hire Inuit beneficiaries first, those speakers with a good education who do well in the entry positions are often moved up through the system quickly, particularly because there are over 900 positions open in government. This makes it somewhat difficult to maintain consistency at different levels. Although there exists a lack of special services for students in remote communities, schools do have program support teachers who are dedicated to producing and acquiring resources for teachers and students with special needs. One of the challenges Nunavut faces is a lack of certified substitutes. Often, non-certified substitutes are used to fill in for teachers who need time off or who resign part-way through the year, which can cause difficulties for consistency in programming for students. Non-certified personnel are also approved by the District Education Authorities to work in land-based, linguistic and cultural programming initiatives. Although there remains difficulty retaining young educated students once they have had a taste of the

attractions of "life in the south," Nunavut has been successful in targeting particular universities and teaching schools to attract teachers, as well as acquiring retired teachers from the south who often come north with the incentive for a larger pension. Relatively lucrative benefits in the collective agreements are another way teachers are attracted, though the respondent suggested that perhaps less monetary incentives and more incentives for travel or positions that move back and forth from remote centers to more southern centers might be more beneficial for attracting youth. Orientation packs and resources are provided to teachers, and there exist attempts to orient them into the community.

Initiatives

In addition to all the program and professional aspects occurring across Canada, many ministries are working on initiatives that either impact on, or are directly targeted towards, rural schools. The focus on technology is certainly one of those initiatives, but it will not be repeatedly described in this section.

Saskatchewan has a Community Schools Program that includes 98 schools. There exists a framework for implementation for rural areas that has been developed, as well as other supplemental support information. SchoolPLUS is an initiative that builds upon Community Schools where the vision is improved learning and wellbeing for all children and youth. It focuses on improvements in schools as well as their connections with external partners for human services. The Caring and Respectful School program promotes an array of strategies that schools can incorporate. The program focuses on school climate, strategies for promoting caring and respect in the curriculum, and increasing community engagement with the school. Finally, School Community Councils grew out of the restructuring movement whereby there was needed local representation, but also a more flexible framework than that provided by the structures currently in place (boards of trustees, local school advisory committees, home and school communities). In 2006, legislation was passed that stated that every school shall have its own School Community Council unless it is in the best interest of the community to band together with another school. This allows for communities with two schools to work with only one School Community Council, or schools in different communities who wish to work together, or the combining of a high school and feeder schools. The community can apply to the school division for such an arrangement, but the Minister of Education makes the decision.

In Manitoba, a number of school divisions have come together as regional consortia to design programs while pooling resources. One such consortium is the Red River Valley Technical Vocational Initiative that was described in the provincial section of this report. The ministry would like to expand this model in different areas.

The Alberta Initiative for School Improvement is an action research oriented endeavor established by the ministry and supported by the major stakeholders in the province. It has provided funding to school districts across the province so that schools can engage in action research projects to assist in the development of learning experiences for students. The Alberta Children and Youth Initiative is another strategy affecting rural schools. A specific example includes a large bullying initiative related to creating safe and caring schools across the province. Finally, the Class Size Initiative has had a large impact on the reported level of satisfaction by teachers, particularly in the K-3 area where the funding target is to ensure there are no more than 17 students in any K-3 class. Although the province remains at 19-1, it is much lower than what was the case even five years ago, which is increasing the efficacy of teachers and enabling them to work more closely with students. In the senior years, the target is to have at least four high school classes with ratios of 27-1. However, invariable class sizes have been on average lower than this due to specialty or advanced classes with low enrolments. In fact, the only way for many jurisdictions to achieve the 17-1 ratio in early years has been to increase class size at the high school level.

The Northwest Territories has initiated culture-based educational strategies at all levels, and focuses on the successes schools have had in terms of graduation rates, meeting student needs, dealing with students with special needs, and

community engagement, because the foundation of the school is based on the strengths and culture of the community. Many schools are also working on creating safe and caring schools by implementing effective behavior strategies that are open and welcoming to the community. Finally, more communities are able to offer some sort of preschool or early intervention programs to support families and young children in their development so that they are school ready when entering Kindergarten and Grade One. Some of the early childhood programs available include daycare, homecare, Head Start, or language nest programs that focus on the Aboriginal language of the community.

British Columbia's steering committee that grew out of the Rural Task Force is comprised of 19 people who represent the partner groups of trustees, teachers, principals, district staff and ministry members. They meet monthly and manage a $1.2 million annual budget to create initiatives that enhance the work going on in rural districts around the province, but do not interfere with the uniqueness of those districts. In addition to the technology initiatives mentioned previously, the committee also sponsors an annual conference for rural practitioners. These conversations are then carried on in discussions and workshop sessions via technology. Other initiatives sponsored by this group and mentioned previously are the new teacher development pilot for rural teachers in their first and second year of teaching, the Rural Education Network of online course offerings, the school/community leadership teams, and the network of administrators and lead teachers from secondary schools of less than 200 students who work together on reforming small rural secondary schools.

In Nunavut, culture-based educational strategies, linguistic revitalization and retention, and trades programming are the three primary areas of focus. The Multiple Options school protocol, the linguistic and cultural first language speaker specialists, and the trades school described earlier in Rankin Inlet are examples of these initiatives. Also described was a partnership with the RCMP to create a youth center run by a coordinator who is responsible to ensure that community groups coordinate their activities for youth for the sake of consistency in program and financial responsibility. The ministry supported the development of the youth center with $100,000 specifically for educational programming and back to school incentives.

Manitoba has drafted an action plan for rural education that incorporates a focus on staffing and professional development, student services and special education, support for regional consortia, funding, utilization of surplus space, and research. The government of Alberta has created opportunities for rural Alberta in its Rural Development Strategy, which includes education as a primary pillar and supports local sustainable initiatives financially. Finally, Nova Scotia has put an emphasis on ensuring students from small/rural schools have "reserved" seating for online coursework in the Nova Scotia Virtual High School.

Infrastructure

Three categories are developed in the section on infrastructure: (a) Technology; (b) Facilities; and, (c) Transportation.

Technology

Without repeating the information already presented in previous sections, the use of technology to provide access, choice and variety in learning for students, professional development opportunities for educators, connectivity between stakeholders and resource provision were the common rationales for infrastructural development in this area.

In Alberta, the Distributed Learning Strategy policy framework acts as a lever for strategic planning and policy making related to the rationales for and use of any and all technology to facilitate schooling. The Alberta SuperNet links 4700 government offices, schools, post secondary institutions, municipalities, Child and Family Services, public libraries and all other public sector facilities to high speed, broad band capacity networks. Alberta Education pays for the installation of SuperNet to all schools that in return pay the monthly connection fees. Alberta has also invested more than $12 million in a videoconference strategy to ensure a minimum of two sites per jurisdiction, for a total of over 800 videoconferencing sites in the province. Rural schools in particular utilized this funding to design full course delivery

The use of technology to provide access, choice and variety in learning for students, professional development opportunities for educators, connectivity between stakeholders and resource provision were the common rationales for infrastructural development in this area.

programming. However, now that schools are equipped with video conferencing capabilities, the government is examining emerging technologies for what they might provide in the future as part of its learning and technology strategy. The provincial government negotiates provincial licensing with Microsoft to ensure that all schools have the license for Microsoft Office, and it has created Education Standing Offers, whereby the province negotiates with manufacturers for best prices that are posted so that districts can deal with vendors for the education standing offer price. This takes off the pressure for rural districts to do the process of tendering and negotiating with limited bargaining power. The data collected demonstrate that the Education Standing Offer prices tend to save districts 10-15% on technology costs, and lowers local administrative costs of independent purchasing. The Provincial Approach to Student Information (PASI) strategy is an attempt to work closely with stakeholders to figure out ways to standardize the student data collection approach within the province by harmonizing local technical systems so that they can inter-operate, which will significantly reduce administrative input time and costs, and provide real-time accurate data reporting. Alberta is also investing into technology-based research projects such as the Emerge Wireless Learning Project and the Technology and High School Success Project described previously to enhance student engagement, increase completion rates, and determine how technology changes pedagogy and learning. Mobile CTS labs deliver high-cost computing and technology programs to students in districts around the province. The Alberta Distance Learning Center is a government supported online provider of online coursework that co-exists with 20-30 other online course providers within the province to ensure students have access and choice in online programming. As one respondent suggested, "the investment by our ministry in technology resources and technology supports has been significant, and appreciated by people at the school system level."

As part of the rural education strategy in British Columbia, the ministry supports a number of technological innovations, including the use of Elluminate to provide professional development for educators and curricular connections between classrooms. Technical support is provided for those presenters who contribute to the online series. The ministry has also begun to support a train-the-trainer model whereby districts send representatives to be trained to use the technology available to them, and are sent home with money to provide face to face training with teachers. There is an attempt to create an online community of educators with rural blogs, wikis, and newsletters to spur networking, alleviate isolation, and facilitate professional development. The Rural Education Network represents districts that work together to provide online course offerings for students. Through a model of shared instruction, districts share good courses and good instructors to offset individual costs and to provide access to courses for students across districts. A number of consortia of school districts such as the COOL consortium develop online content freely accessible to teachers and students. Distributed Learning Labs equipped with webcam technology and the Elluminate platform sponsored by the provincial government allow teachers to monitor students in multi-grade, multi-discipline settings as they work on coursework with a teacher via distance. Learnnowbc.com offers tutoring possibilities for students in the evening, digital learning resources, online testing opportunities, and online course finders for students who need support. All of these innovations have been spear-headed by the embedding of the province's Rural Education Strategy into a part-time superintendent position within a rural school district so that innovation can begin at the sites of practice.

In the Yukon, the territorial government has ensured that every community school has video conferencing capabilities and high speed internet. Students are linked to classrooms in Whitehorse to take online courses, including the Aboriginal Language program *First Voices*.

In the Northwest Territories, the ministries of health and education have combined resources to provide videoconferencing services for Telehealth and Telespeech. In this way, students are receiving regular speech and language services in collaboration with health and educational

partners that have not been accessible previously.

In Saskatchewan, every school, both First Nations and provincial, most regional colleges and over 2/3 of the regional libraries are on the wide area network called CommunityNet that makes video conferencing between sites possible. The ministry has paid for CommunityNet on behalf of all schools and provides internet access through that network. There are more internet-connected work-stations per student capita in rural areas than in urban areas. Videoconferencing opportunities are growing, particularly for use in meetings and some professional development opportunities. However, before this capacity was developed, Saskatchewan invested heavily into interactive television instruction (ITI) across a satellite network called the Saskatchewan Communications Network (SCN). Currently there exists over 200 receipt sites in the province which are used to deliver secondary credits, post-secondary courses and programs, professional development and special events. This network is one way out video but comes with access by telephone, fax or email back to the studio for two-way communication. Saskatchewan has invested in web based learning resource development (WBLRD) which was an initiative designed to create digital learning resources aligned with the Saskatchewan curriculum designed by practicing teachers. Teachers were provided with the support and training to develop these resources while working with students, after which they are posted online with free access. Because of the development of these resources, the Saskatchewan ministry decided to invest in a provincial license for the Blackboard course management system, and provides teachers with three day online instructional institutes to learn how to use this service in their own classroom. Finally, as an initiative to support the focus on career development in the province, the ministry has launched a Career Development website for parents and students.

In 1997, Nova Scotia developed a joint planning group called RoBoTS, or Regional Board of Technology Supervisors. This group makes recommendations about aspects of technology with a specific focus on small schools. Between 1998 and 2001, the Nova Scotia ministry spent $38 million on the ICT infrastructure of computers, accessories and software in schools. Over $1 million annually was committed for teacher professional development and technical support. Currently, the province spends over $2.5 million on technical support for schools. In conjunction with RoBoTS, the ministry tenders collectively so that over the course of the year schools can buy computers at a volume standing offer price. The ministry also provides computers with a base suite of software so that all schools will have a standard office suite software program, most commonly that of Microsoft Office. The ministry participates in the Federal program *Computers for Schools* that refurbishes computers for classrooms that are distributed on a per capita basis. The ministry tendered for high speed internet service with EdNET with the stipulation that service would be available from one carrier across the province and would be exactly the same rate in any school in the province; every school had what would pass for high speed at the time at the same rate as those in larger centers. This tender was broken up in 2008 so that vendors could respond by groups of schools, and the ministry now deals with three carriers instead of one at a significant cost saving. In 2007 the province announced a commitment that every rural community in Nova Scotia would have high speed broad band access by 2009 at least at DSL speeds, and the commitment is that high speed will be at least as fast as in the urban center. Also in 2007, Nova Scotia launched the Nova Scotia Virtual School whereby the province pays for a guaranteed number of seats for students in small schools to access online coursework, including a growing number of advanced courses that were often lacking in rural areas. The platforms used are Moodle for asynchronous delivery and Marratech for synchronous delivery that optimizes audio at all costs in situations where there potentially may be low band width and video might freeze. The ministry also provides a provincial license for an online periodical database accessible to educators and students at school and at home.

Facilities and Transportation

Very little mention was made of facilities or transportation by respondents. In terms of facilities, one Yukon respondent spoke of the lack of housing as an area that greatly impacted retention of teachers and administrators. Another spoke of the fact that the Yukon ministry supports schools of necessity that are in good repair. This person spoke of a $12 million school that just opened up in Carmacks for a student enrolment of 100. In the last five years, a number of other schools in the same situation have also opened. Manitoba

respondents spoke of the growing strategies to improve the joint use of facilities by community organizations in schools where declining enrolment is not utilizing facilities to their capacity. In addition, respondents spoke of the impact that a ministry moratorium on school closure may have on certain communities that had planned on consolidating facilities or closing them for resource reasons. A Nova Scotia respondent suggested that the province builds schools based on design requirements after considering the program needs for various grade levels. For example, most schools are no longer equipped with computer labs except at the high school level in order to encourage the embedding of ICT into classrooms as pedagogical tools. The respondent from Nunavut spoke of the impact of a new school for trades being constructed that would provide students with the opportunities to engage in trades programs in Nunavut. Alberta respondents spoke of the 18 new major school construction projects occurring in the province, the majority of which are in urban centers. Current government planning for school infrastructure includes public-private partnerships. There has also been significant investment into modular school technology; modules are mobile and can be moved easily across jurisdictions to offset enrolment issues. Formally portable units were not built for sustainability, and were eventually moved off to sites where they were abandoned. The current technology and standards indicate these units will last for up to 40 years; the school planning committee suggests they may be suitable for a school that might need to be modernized or might need additional space.

Only one Alberta respondent spoke about transportation. This person spoke of the $280 million transportation funding that is broken into rural, urban and metro costs divided using distance, sparsity and population factors. Bussing is contracted by all school districts, and some children ride up to 55-60 minutes one way to school, though the individual suggested that this has not been a huge barrier in comparison to the desire for rural parents to keep a rural school open.

Educational Finance

In the area of educational finance, the comments focused primarily in two areas: (a) Educational Finance; and, (b) Innovative use of Funds.

Educational Finance

This section will outline the funding structures of all provinces and territories in Canada. It should be noted that certain provinces and territories were more transparent in having this information readily available than others.

British Columbia. Public school funding in British Columbia is allocated using a student-based funding system plus supplementary grants. Over 80% of the funding is allocated on a per FTE basis, with additional recognition of a variety of special needs. Other supplemental grants are provided to Boards of Education to address the variable costs associated with declining enrolment, educator salaries, transportation, unique geographic factors (small community supplement, low enrolment factor, rural factor, climate factor, sparseness factor) and funding protection (which protects districts from year to year funding declines). Additional supplemental grants are provided through Special Needs Funding (Levels I to III), English as a Second Language (ESL) Funding, Aboriginal Education Funding, and Adult Funding. Capital funding is provided through a separate grant. It is estimated that the Ministry of Education will contribute 4.467 billion in operating grants for the 2008-2009 school year. Grants for the Provincial Learning Network and the provincially-administered portion of the Learning Resources grant are not directly allocated to boards, but are managed by the Ministry on their behalf. A holdback of $84.5 million is held in reserve to meet the requirements of additional enrolment that occurs throughout the year. The Minister of Education announces the overall provincial funding available for public schools on or before February 1, prior to the start of the school year. Estimates of each Board of Education's operating grant for the coming school year are announced on or before March 15 of the same year. School board operating grants are recalculated and finalized based on actual enrolments as reported

on September 30. These final grants are usually announced in the late fall.

Alberta. In 1994-1995, the provincial government of Alberta took away the educational taxing power of school boards and pooled education property taxes into the Alberta School Foundation Fund (ASFF) to be distributed on a per student basis. All other funding for the K-12 system comes from general revenues of the province. This was done to create more equity across the province for boards to impact programming and instructional opportunities, particularly in rural areas where the assessment base was much lower. About 31% of the K-12 funding comes from property taxes (roughly 1.6 billion out of a $6 billion budget). A new framework was implemented in 2004 to change the way funds were allocated in order to recognize demographic, geographic and economic environments in which boards operate. Previous targeted grants were pooled inside base instruction and differential cost funding was incorporated for English as a Second Language/Francisation and Support Services for Immigrant Students, Enrolment Growth and Decline, First Nations, Metis and Inuit Grant (FNMI), Disabilities funding, Northern Allowance, Relative Cost of Purchasing and Services Adjustment (recognizing varying costs of purchasing in different areas), Small Schools by Necessity (taking into account enrolment levels, distances between schools and enrolment capacity), Small Board Administration, Socio-Economic Status (based on StatsCanada data applied to incidence rates and then a per student funding rate to determine the proportion of a jurisdiction's population that might be disadvantaged), and Transportation (a weighted grant that takes into account population density and distance from school). Boards are allowed to pool their allocation and transfer it to areas of student need. In addition, there are some targeted grants that do not maintain flexible status: Student Health Initiative, the Alberta Initiative for School Improvement, Francophone Student health Services, Small Class Size Initiative Funding ($230 million annually), Children and Youth with Complex Needs and the SuperNet Service Funding for connection to SuperNet. Other provincial support funding includes that for institutional programs, regional educational consulting services, learning resources credit, and the regional professional development consortium. Boards are allowed to spend 4-6% of their revenue on administration on a sliding scale based on student population, so smaller boards can spend greater proportions. No board can budget for a deficit and if this occurs, it must submit a plan to the ministry for how it will eliminate the deficit. However, boards in Alberta are more apt to have surpluses. Because the ministry recognizes the need for boards to maintain surpluses for emergencies and for planning purposes, it works with boards to eliminate very high surpluses, but does not mandate a surplus limit.

Saskatchewan. Financing the public education system in Saskatchewan is a shared responsibility, mainly between the provincial government and school boards. The government provides funding from general revenues on an equalizing basis that is distributed through the operating grant formula. School boards have autonomy to deliver education services in their school divisions and to raise the remaining education funding requirements from the property tax base. The operating grant formula is a distribution mechanism to allocate a fixed amount of provincial funding, taking into account local need (school boards' expenditure requirements) and local fiscal capacity (school boards' capacity to collect education tax levies from the property tax base). The formula is based on recognized expenditures and revenues. Each year, changes in student enrolments, programs and taxable assessment can cause shifts in the allocation of grants. The major factors that impacted the 2008-09 school division grant

Four provinces (Saskatchewan, Manitoba, Quebec and Nova Scotia), and one territory (Northwest Territories) allocate educational funding through a combination of provincial/territorial revenue and locally determined taxation, and the Northwest Territories uses this model only partially for two District Education Authorities located in Yellowknife. The remaining provinces and territories have incorporated provincial/territorial funding based on annual budgets submitted by local authorities that are held accountable for the administration of the funds.

allocations include changes in enrolment (a decrease of 1.26% province-wide, though this is the lowest decline in seven years given Saskatchewan's current economic boom), changes in the total taxable assessment (which are up $700 million or 1.7% from the previous year), changes in provincial funding (operating grants are up $34.6 million for 2008-2009 for a total of $621.1 million), and changes in programs (examples include French Immersion or transportation routes). In 2004 the provincial government responded to the *Boughen Commission* report and committed to a three-phase initiative to renew K-12 education in Saskatchewan that included the following initiatives: (a) the restructuring of school division boundaries to create fewer, larger divisions with the capacity to deliver high quality programs and services to all students; (b) the development of a new system of school operating grants that is simpler, more equitable and more transparent; and, (c) commitment to a long-term solution to lowering education property tax. Changes to the Foundation Operating Grant (FOG) were made to reflect the changes in the K-12 system due to restructuring, with an emphasis on four principles: equity (working to common rates for all, while still recognizing justifiable, significant cost differences); transparency (ensuring that funding policies are written down, understood and consistently applied); simplicity (fewer categories and simpler formulas); and, accountability (ensuring that funding is creating the right incentives, and supports the achievement of high educational outcomes for our students). The operating grant consists of Basic Program Recognition; Transportation Recognition (rural and urban); Targeted Funding Support (Community Schools, Pre-Kindergarten and Diversity which covers supports for learners whose needs cannot be met through differentiated instruction, curricular adaptations or environmental considerations and is based on both a per-pupil recognition and vulnerability recognition which considers low-income status, lone-parent status, families of low education attainment and families whose first language is not English using Stats Canada data); Intensive Supports Recognition (Level I and Level II); Other Recognition (Technology Supported Learning Tuition Fees, Language Immersion, Schools of Necessity/Hutterian Schools, Geographic, Francophone Allowance, Northern Allowance, and Other Recognized Expenditures); and K-12 Initiatives that include particular educational programs, resource materials such as copyright, database licensing and CommunityNet, educational projects and initiatives such as an Adult Basic Education pilot program, the Recruitment and Retention Fund and a Contingency fund, and ministry obligations to the Saskatchewan Assessment Management Agency.

Manitoba. As in Saskatchewan, education finance is a shared responsibility between the provincial government and local school boards. The provincial government's share comes from general revenues and the Education Support Levy (ESL), a tax on commercial property. Property classified as residential or farmland is exempt from the ESL. School boards raise their portion through the Special Levy (SL) which is a tax on all assessed property (residential, farm and commercial). Manitoba provides tax rebate/credit programs through the Farmland School Tax Rebate (70%) and the Education Property Tax Credit program for homeowners and tenants (basic $600 with adjustments for low income and seniors).

The Funding of Schools Program (FSP) is the primary mechanism for distributing provincial government education funding to school divisions. The FSP comprises operating and capital support for public school divisions in Manitoba and is administered by the Schools' Finance Branch and the Public Schools Finance Board. The 2008/2009 public school funding announcement was $1,009.7 million, consisting of $906.2 million for operating support, $87.5 million for capital support and a new Tax Incentive Grant of $16.0 million. Government has committed to increasing the provincial contribution to the total cost of public education to 80% by 2011/2012. The Tax Incentive Grant was a new initiative in the 2008/2009 funding announcement to provide school divisions with sufficient funds through the funding formula and the Tax Incentive Grant (TIG) to support expenditure increases at their average rate of growth over the past four years, and to hold the line on taxes for local rate payers for 2008.

The FSP includes base support, categorical support and equalization support which is provided to recognize the varying ability of school divisions to meet the cost of unsupported program requirements through the property tax base of the school division. Along with these three support areas are a formula guarantee that provides school divisions with a minimum increase of 2% for formula grants, and capital support which includes debt servicing for

school construction, Technology Education Equipment Replacement, Technical Vocational Initiative Equipment Upgrade, minor capital projects and School Buildings Support. All grants within the FSP that are not student specific are calculated using eligible enrolment based on the previous year's enrolment on September 30th. Student specific grants (e.g. Transportation, Special Needs Level II/III) are based on the current year's enrolment reporting.

Base support includes Instructional Support, Sparsity Support, Curricular Materials, Information Technology, Library Services, Student Services, Counseling and Guidance, Professional Development (including Technical Vocational Initiative Professional Development), Physical Education and Occupancy grants. Categorical support is established for Transportation, Board and Room, Special Needs (includes Coordinator/Clinician and Level II/III support), Senior Years Technology Education, English as an Additional Language (includes Intensive Newcomer Support project funding), Aboriginal Academic Achievement (includes Building Student Success with Aboriginal Parents project funding), Heritage Language, French Language Programs/Instructions, Small Schools, Enrolment Change Support, Northern Allowance, Early Childhood Development Initiatives, Early Literacy Intervention, Early Numeracy, Experiential Learning and Education for Sustainable Development grants.

The formulas within the FSP are sensitive to a number of variables that affect student need and differences amongst divisions, such as socio-economic status, geography (in terms of remoteness, distance and sparsity), and local autonomy with respect to differences in the property assessment base. A number of measures that are sensitive to rural and northern school division circumstances are included in the FSP. The Sparsity grant is based on the enrolment and geographical size of a division. Each division's sparsity is also taken into account in the calculation of grants such as Transportation and Coordinator/Clinician support. The Small Schools grant recognizes the higher costs incurred by rural school divisions in operating small schools. The Northern Allowance recognizes the higher costs incurred by northern school divisions.

The FSP also includes provisions that specifically assist school divisions with declining enrolments. The first provision is the use of the prior year's enrolment to calculate current year grants based on eligible enrolment within the FSP. This essentially allows school divisions a year to adjust resource levels to enrolment declines, without losing funding in the year of the decline. A second provision is through Enrolment Change Support, which provides further opportunity for school divisions with declining enrolment to adjust, by providing school divisions with a declining enrolment grant based on a decline in enrolment in the previous school year.

In addition to the grants provided through the FSP, further support is also provided to school divisions such as Shared Services with funded independent schools, Special Needs programs (e.g. Autistic programs), Institutional Programs, Nursing Supports, New Schools, Red River Technical Vocational Area Coordinator, Southwest Vocational Coordinator, Community Schools, Healthy Schools, General Support Grant, Technical Vocational Initiative (Demonstration Projects), Class Size and the Rural and Northern Clinician Bursary.

The ministry also offers a number of competitive grants for targeted initiatives, such as Education for Sustainable Development for teachers which provides up to $2,000 for professional development, teacher release time, and teaching/learning resources for sustainability education, Innovation in Citizenship Education to acknowledge innovative classroom or school projects, Scientists in the Classroom to support teachers in their efforts to collaborate with scientists to engage with students, Manitoba Rocks! Garage Band Project for students. Manitoba Music Month Grants, School and Community Arts Program which is a joint initiative of MECY and Manitoba Culture, Heritage, Tourism and Sport to make arts programming more accessible to communities throughout Manitoba and the French Second Language Revitalization Program.

Nova Scotia. In 1954, the *Royal Commission on Public School Finance* (often called the Pottier Report because it was written by Justice V.W. Pottier), set the stage for educational finance in Nova Scotia by establishing a foundation program providing for educational services financed partly by the provincial government and partly by municipal taxes equalized across the province. In 1981, the *Report of the Commission on Public Education*

Finance, chaired by George Walker and known as the Walker Commission, significantly reduced the number of school boards in the province on the ground that the change would create an administrative situation in which sufficient students, funds, professional staff and specialist expertise would permit a wider and more enriched program. The number of school boards in the province is constantly being reviewed. In April 2002, the *Financial Measures Act* set out to ensure greater financial accountability of school boards. The introduction of the legislation in May 2008 involved amendments to 11 pieces of legislation, including the *Education Act*, that will index annual increases in municipal education costs to the Nova Scotia Consumer Price Index as opposed to the higher rate of assessment growth. Unfortunately, the only accessible data source for Nova Scotia finance encompassed the 2005-2006 school year. The total expenditures were $1.011 billion, which included costs for School Administration and Instruction, Special Education, Regional Board Management, Property Service, Student Transportation, School Generated Funds, and Other Expenditures. The province generated 75.4% of the revenues, municipal grants generated 17.7%, and the remaining revenue was generated by the federal government, board revenues, and school generated funds.

Yukon. In the Yukon, the territorial government provides for the financing of the education system out of funds appropriated by the Legislative Assembly. There exists a base allotment of funding based on FTE along with supplemental funding to offset contextual variables. Many of the initiatives outlined in previous sections, such as the after-school tutoring program, experiential education, Elders in the School program, and cultural funding have been added into the funding for Yukon education. For the fiscal year 2006-2007, actual operations and maintenance (O&M) expenditures for the Public Schools Branch totaled $75 million 022,000 or 67.1 per cent of the total O/M budget for the Department of Education. These expenditures were broken down into Administration (central office administrative costs within the Department of Education), Program Delivery (school-based personnel and activities), Program Support (those that support school based personnel and activities), Partnerships & Operations (those that support French language programs, as well as partnerships between various stakeholders in education), Special Programs (those that support school-based special education services), and First Nations Programs and Partnerships.

Northwest Territories. In the Northwest Territories, the Department of Education allots funds for Kindergarten to Grade 12 programs delivered by five Divisional Education Councils (DECs), two District Education Authorities (DEAs), and the Commission scolarie francophone de division. The two District Education Authorities, both located in Yellowknife, are the only education bodies that levy local property taxes. These two DEAs are expected to cover at least 25% of the costs of delivering elementary school programs. The Government collects taxes for the DECs and provides 100% of the funding needed for delivery of school programs.
Councils/authorities receive draft contribution schedules in the Spring, which they are encouraged to review and comment on. Also provided is a Payment Schedule, which shows the contribution amounts that will be paid over the school year. This schedule should enable councils/authorities to plan month-to-month expenses. Formulas determine most of the funding for Council/Authority operations are separated into seven categories: Administration and School Services (funding for staffing, travel, administration funding and the administration costs associated with the councils outside of Yellowknife); Territorial Schools (staffing for teachers, consultants, school counselors, secretaries, and custodians, as well as materials and supplies for the classrooms); Inclusive Schooling (support systems and services to enable all students to be included as full participating members in regular classrooms appropriate to their age and within their home communities); Aboriginal Languages and Cultural Programs (support the establishment and maintenance of Teaching and Learning Centers, translation and interpretation costs); Infrastructure (personnel infrastructure such as medical travel assistance, removal, dental, advertising for recruitment, Employee Family Assistance Program, and facility infrastructure for utilities and leases); Local Property Taxation (only the two Yellowknife District Education Authorities levy local property taxes. The GNWT acts as the assessment authority for Yellowknife, and uses the same approach to assessments across the Territories making assessments comparable); and Heritage Canada French Language Funding. In 2004/05, which is the latest report available on the governmental website, the total operations and maintenance

(O&M) contributions to jurisdictions, including Government of the NWT and local taxes, were an estimated $120.7 million. From 2000 to 2005, the Government of the Northwest Territories spent $35.8 million in capital expenditures, an average of over $7.1 million each year. During this 5-year period, 36% of the total expenditures were spent on schools in communities, 31% in regional centers and 32% in Yellowknife.

Nunavut. The *Nunavut Education Act* (2002) replaced the North West Territories (NWT) *Education Act* that it inherited upon its creation in April 1999. The *Nunavut Education Act (NEA)* sets out the fundamental regulatory framework for elementary, secondary, and tertiary education in Nunavut territory. Among other things, the NEA defines the duties and responsibilities of parents, teachers, principals, and directors of education and other stakeholders of the education enterprise. It also establishes the legal structure, financial accountability, and the administrative responsibilities of the District Education Authorities (DEA). District Education Authorities work together with government, assisted by a society composed of the district education authorities known as the Ilinniaqtulirinirmut Katujjiqatigiit. The ministry is responsible for ensuring that district education authorities are provided with the resources necessary to provide services, and district authorities are responsible for the administration of schools under their jurisdiction. Unfortunately, there was no financial statistics available from which to garner elements of the financial formula governing the operational grant structure.

Ontario. In Ontario, each year the ministry provides funds to school boards through a series of grants known as Grants for Student Needs (GSN). In March 2008, the ministry announced changes to the funding formula for 2008-09, as well as increased funding of $315 million for a total operating grant of $19.06 billion. The operating grant reflects a 2 percent increase in 2008–09 for salaries and benefits for teaching and non-teaching staff and additional labour-related enhancements beyond the 2 percent that will be available to boards which, by November 30, 2008, have ratified local collective agreements that are in keeping with the terms of the Provincial Discussion Tables (PDT) agreements. These enhancements are based on provincially-facilitated discussions that are being held between the trustee associations and representatives of teaching and non-teaching staff to set the stage for long-term labour agreements at the local level. Allocations for operating purposes include funding from the Pupil Foundation Grant; the School Foundation Grant; the special purpose grants and the School Operations Allocation of the Pupil Accommodation Grant. The special purpose grants include Primary Class Size Reduction Grant; Special Education Grant; Language Grant; First Nations, Metis and Inuit Education Supplement; Geographic Circumstances Grant; Learning Opportunities Grant; Safe Schools Supplement; Program Enhancement Grant; Continuing Education and Other Programs Grant; Cost Adjustment and Teacher Qualifications and Experience Grant; Early Learning Grant; Student Transportation Grant; Declining Enrolment Adjustment; School Board Administration and Governance Grant; and the Community Use of Schools Grant.

As part of the Government's ongoing reform of the funding formula, there have been several changes made to the structure of the operating grants in recent years. In 2005–06, an Early Learning Grant was eliminated because all boards now offer junior kindergarten programs. In 2006–07, the operating grants structure was realigned to create a School Foundation Grant. In 2007–08, two new operating grants were introduced: the Program Enhancement Grant, which supports programs and activities that contribute to a well-rounded education, such as arts, music, physical education, and outdoor education; and the First Nations, Métis, and Inuit Education Supplement, which is dedicated to improving achievement among Aboriginal students. In addition, the Supported Schools Allocation and the Rural and Small Communities Allocation were added to the Geographic Circumstances Grant to enhance the viability of schools in small communities. For 2008–09, a new operating grant, the Safe Schools Supplement, has been created. In addition, the Community Use of Schools Grant, which was previously part of the School Operations Allocation, has been restructured and enhanced and is now a separate grant.

In addition to the grants for operating are those grants for capital and other purposes. These monies provide grant allocation for school renewal and the principal and interest costs of

financing investment under the Good Places to Learn renewal initiative. They also support the long-term financing costs of the New Pupil Places and Other Capital Programs (which includes Best Start, Growth Schools, Primary Class Size Capital, Prohibitive to Repair, and Capital Transitional Adjustment for French-language school boards).

Quebec. In Quebec, education is overseen by the ministry of Education, Leisure and Sport, which, for the 2008-2009 year, budgeted $13.9 billion, of which $8.07 billion served the interests of preschool, primary, and secondary education. Public elementary and secondary education is provided by local school boards managed by school commissioners who are elected by residents in the school board's jurisdiction. Funding is provided through a combination of local tax revenue, provincial revenue and other sources. In the latest data available for 2003-2004 education indicators, local tax revenue provided 14% of the revenue for education, the provincial proportion was 77%, and other sources provided the remaining 9%. Unfortunately, there were no documents available to help demonstrate the elements of the financial formula utilized by the province for creating the operational grant.

New Brunswick. In New Brunswick, the Department of Education provides an annual operating budget to District Education Councils (DEC). After receipt of the DEC's operating budget, they must submit a budget expenditure plan that considers the approved education plan and school improvement plans to the Department of Education by July 1st. DEC's must operate within budget; however, an accumulated operating surplus, up to $100,000, can be retained and expended in the subsequent year. School districts cannot incur deficits in either the capital or operating budgets. In 2006-2007, the ministry spent $831 million on elementary and secondary education; however, a detailed funding formula analysis was not available.

Prince Edward Island. In Prince Edward Island, the minister is responsible for establishing a school board funding program. The School Board Staffing and Funding Program is the mechanism for providing financial grants to school boards. The aim of the School Board Staffing and Funding Program is to create equal access to basic educational services. In order to meet this aim, school boards are required to allocate staff and resources equitably among schools. School boards submit budget information, and the minister must meet annually with boards to discuss budget matters. School boards cannot budget for a deficit if that deficit would create an accumulated deficit. If a deficit is incurred, it will be a first call on the school board's grant for the subsequent year. Surpluses remain with the school board. If a regional school board desires to offer programs or services above and beyond those for which funding is provided by the Minister, it may seek supplementary funding in accordance with the terms of the *Real Property Tax Act.* However, before seeking supplementary funding, it must: (a) receive approval from the Minister; (b) publish relevant facts about the program or service to be offered and the tax to be levied in a newspaper having general circulation within the regional administrative unit; and (c) conduct a plebiscite on the matter whereby the majority of voters approve the tax, and if, within thirty days following the publication, less than five per cent or more of the eligible voters of the unit protest in writing to the school board against the implementation of the tax.

Funding grants are provided in two areas: salaries, wages, benefits and operations grants. The operations grants consist of those related to Administration, Maintenance—Physical Plant, Program Materials, Transportation, Capital Repairs and Equipment Replacement, Professional Development, and Other Funding. For the 2007-2008 year, the education budget was $247 million, 63% of which went to K-12 education. The education capital budget is $13.1 million, which includes $10.6 million for new school construction, $1 million for capital upgrades and $1.5 million for 21 new school buses. Progress to improve student achievement is supported with $3 million to implement the recommendations of the *Task Force on Student Achievement.* Some of these initiatives include early literacy coaches and resources, social studies curricular updates, new equipment for science and music, resources for Core French and French Immersion, development of a new International Baccalaureate program, school support for developing School Development Plans, transitions for special needs student for work or further study, improvement of school library collections, establishment of a welding program in one of the high schools, addition of teaching positions, Speech Language pathologists, improvement of services for students with special needs and classroom composition, and increased support for operating costs.

Newfoundland and Labrador. In Newfoundland and Labrador, the minister allocates and distributes funds voted by the Legislature to school boards who then administer the funds within their jurisdiction. Boards must submit an annual budget for approval. School boards in Newfoundland and Labrador spent $589 million on educational services in 2006-2007. Capital disbursements ran into $25 million. No information related to funding formula or specific grants for information was available.

Innovative use of Funds

The costs associated with the input of technological infrastructure to provide innovative opportunities for students and educators are relevant to this section, though they will not be reiterated as this has been such a large focus of ministry innovations. The decision of Nova Scotia to support the rural broad band initiative is one such example. The province also provides bursaries to students who would like to specialize in French second language or French first language education. Tuition fees are paid for the duration of a Bachelor of Education degree on condition that the teacher accept a teaching position for a period of two years as a means of recruiting and retaining these specialty teachers. Nova Scotia has also engaged in a Masters program for French Resource teachers in which the ministry played an integral role in financing the meetings between stakeholders to develop the program which will be offered in different locations throughout the province to facilitate rural professional growth opportunities and capacity building.

The government of Alberta dedicated $100 million towards Alberta's Rural Development Fund. The board stands alone from the ministry and distributes the money around designated priorities to projects that have the potential to be sustainable over time and increase the capacity of rural Alberta. Alberta has used innovative strategies such as provincial licensing and tendering to offset procurement and administrative costs for equipment. It has also invested into research projects with technology (such as the purchase of laptops for students), in order to facilitate provincial thrusts of student engagement, increasing graduation rates, and strategically planning for technological literacy. The Alberta Regional Professional Development Consortia described previously is an attempt to address provincial and local school jurisdictional professional development needs on a regional basis. Over the course of this study, a major deal between the Alberta government and the Alberta Teachers Association was struck whereby the government agreed to take over the teachers' share of an underfunded liability over and above their regular pension contributions if the teachers could convince their local associations, and government could convince school boards, to sign a five year collective agreement with teachers. The government promised to pay the teachers' salary increases that equate to the average weekly earning index each year, that would pay for that raise in its annual funding increases to school boards. In return, if teachers signed a five year contract, the government would take over their share of the unfunded liability. This deal managed to increase certainty in budgetary and program planning for the next five years, and allows school boards and teacher groups to work together rather than engage in contract negotiations. Alberta has also created nine provincial partnerships to serve children with special needs. These partnerships include a school board, a regional health authority, Child and Family Services, plus other relevant stakeholders. The partnership is allocated funds based on the students served from each of the jurisdictions associated with the partnership and provides services to students in the schools wherever they need them.

The British Columbia government is focusing on funding the recommendations that came out of its Rural Education Task Force by embedding innovations within local school divisions. The online technological innovations, rural networks and teacher mentoring opportunities, and train the trainer workshops are all evidence of the innovative use of funds to support rural schools.

The Yukon has used funding to design after school tutoring programs for students using local community personnel to help students, and has set aside $375,000 for rural schools to initiative experiential learning programs. There also exists cultural funding of a base of $5000 with additional monies on a per capita basis accessed by each school in order to plan with the school administrators, the First Nations Education Director and the First Nations Government for cultural program initiatives. There exists an Elder in the School program, whereby the ministry usually contributes half of the

Inter-Jurisdictional Collaboration occurs primarily through ministry-school division partnerships, cross-ministry partnerships, and partnerships with post-secondary institutions.

funding offset by the local First Nations government to provide honorariums to elders. The ministry offers funds for a Food for Learning program in order to offset food costs in some schools. It also provides room, board, and travel costs for students who have to travel in to Whitehouse to access senior high. In fact, due to transition and lower completion rates, the ministry is considering offering high school courses in these small communities to increase student success. In order to recruit new teachers, the ministry offers bursaries to those interested in higher education in the hopes that they will come back home to live and work. In order to retain teachers and administrators, the ministry offers reduced housing rates and some housing although the housing situation remains one of the primary reasons for teacher turnover. There is also an attempt to provide incentives such as relief time to teachers with leadership potential to work with administrators as a means of succession management.

Saskatchewan has created a Teacher Recruitment and Retention Fund to provide some support for school divisions in their recruitment procedures, particularly in specialty areas. The fund may also be used to support teachers currently employed to access further education. Some divisions provide bursaries to teachers who are pursuing coursework in areas of need, and others use it for advertising purposes. Given the focus on career development in the province, the ministry has set aside $300,000 towards projects that develop the six elements of its strategic plan so that it can use them as models for provincial implementation. Among the projects that were funded are business and education partnerships in rural areas.

Manitoba is considering increasing funding for the hiring of student service personnel and clinicians in remote areas, as well as providing bursaries to train clinicians in areas where recruitment is difficult. Nunavut has created the flexible protocol called Multiple Options whereby funds designated for education can be targeted for programs that meet community needs.

Inter-Jurisdictional Collaboration

In the area of inter-jurisdictional collaboration, the comments focused primarily on ministry-school division partnerships, cross-ministry partnerships, and partnerships with post-secondary institutions.

Nova Scotia created a partnership with a professor at Acadia University to offer French language online coursework free of charge for educators who wished to improve their language skills. It also partners to offer a French Professional Certificate for educators wishing to upgrade language proficiency through summer courses. The ministry worked with St. Francis Xavier University to design a Masters cohort program in Resource for French Second Language educators offered in regional sites across the province provided by school districts. It has organized an early hiring fair in conjunction with teacher training institutions and worked with school boards to make a commitment to hire an agreed-upon number of education graduates to facilitate local hiring, recruitment and retention. The ministry has also created an *Options and Opportunities* program which is an articulation agreement with Nova Scotia Community College to provide high school students with dual credits and apprenticeship time for technical vocational programs. The ministry maintains a seat on the RoBoTS technology joint planning group. It has also partnered with the ministry of Health on a number of initiatives, such as developing a healthy eating program for breakfast funding, and increasing physical activity by providing funding for community based animators or facilitators who blend community and school needs to broaden access to school facilities, and to increase the access to meet physical education requirements without building infrastructure. Education has also partnered with Energy Conservation in order to design science curriculum that has an energy conservation agenda. This ministry has worked with the federal government to incorporate the *Computers for Schools* refurbishing program, and participates in the Council of Ministers of Education and Training to facilitate the joint development of curriculum based on regional priorities. Finally, all the directors of the Public School Branch meet monthly with the directors of school boards to talk about programs, initiatives and issues.

As part of its technology strategy, Alberta regularly meets with stakeholders to aid in the creation of the strategic plan for access, choice and implementation of technology strategies across the province. One

of its offshoots has been to use videoconference technology in collaboration with teacher pre-service institutions to provide supervision of teacher candidates in rural schools. The introduction of the SuperNet was a huge partnership between private and public agencies to provide broadband capacity throughout the province. As part of its use of online learning, Alberta has a memorandum of understanding with the Canadian Space Agency to provide science classes with students. Alberta also has created a Green Certificate which is an articulation agreement that allows high school students to take agricultural courses and receive their first level of an agriculture apprenticeship. The ministry has also worked with Alberta Health, Alberta Child Services, school boards, and other partners to create nine partnerships that are allocated funds based on students served in jurisdictions associated with the partnership. The representatives of that partnership then provide services to students with special needs in those schools. Alberta has moved into a private/public partnership model for facility development, including the latest capital building project of 18 new schools, as well as the manufacturing of mobile modular school units. Finally, the most relevant partnership for this project is the cross-ministerial partnership called the *Alberta Advantage*, which is the Alberta government's rural development strategy focusing on building capacity and sustainability in rural communities.

Many of the partnerships in British Columbia come as a consequence of the ministry's decision to embed its Rural Education Strategy into the work of a pilot school division. The technology strategy that has developed as a consequence of this facilitates collaboration in professional development, classroom connections, training sessions for school district representatives on emerging technologies, networking and professional development to cohorts of new teachers working in rural schools, local school division consortia development of online course development and shared instruction, and tutorial services to students online in the evenings.

The Yukon Department of Education works with the Yukon Northern Teachers Education Program in order to recruit and retain local teachers for schools. It also provides bursaries to students as they move into postsecondary education as an incentive to complete programs and to come home to live and work. The Yukon College System provides adult training, and there exist articulation agreements for high school students to access dual credits and apprenticeship credit for technical vocational programs. The Connect Yukon project was a partnership between health, education, business and communications for technological infrastructure that has increased the capacity, equity and access to education for all schools. The ministry is currently working with Harbour C. School in Juno, Alaska to devise curricula and programming for a Bilateral Bicultural Program whereby the local First Nations language will be incorporated into the school 30% to 40% of the day, taught by a cultural linguist. Finally, the ministry maintains a good work relationship with the Yukon First Nations Chiefs Committee on Education that provides political direction and advice, recommendations about education, and helps to exchange information.

In Saskatchewan, the ministry's decision to establish the Teacher Recruitment and Retention fund allows for bursaries to be provided to teachers who are pursuing coursework. The province has developed the Human Services Integration Force, which is made up of Assistant and Associate Deputy ministers from Justice, Education, Health, Social Services, First Nations and Metis Relations, Parks, Tourism and Culture, and Corrections, Public Safety and Policing. This group meets to share interdepartmental planning, and has been linked to nine regional inter-sectoral committees, connected to communities. These regional committees have a mandate to plan and develop programs at the regional level, and to bring together resources and personnel to achieve shared goals and outcomes. SchoolPlus has fostered an interagency approach to education in the province that includes all the human service providers such as Justice, Health, Social Services, and Education. The School Industry/Education Council was created to bring together schools, businesses, industry, post-secondary institutions, trades, and community based organizations around career development. The change in philosophy for special education that focuses on both individualized programming as well as systems change has created strong partnerships between the ministry and local school divisions as they work together to build

capacity to serve the needs of children. Education has partnered with Health on developing the health curriculum, dealing with child obesity, nutrition, and public health services. It has shared online courses with Alberta, such as a German/Ukrainian language exchange, and is in the process of signing an agreement that speaks more broadly about sharing provincial resources in this area. Finally, Saskatchewan participates in the Western and Northern Canadian Protocol joint curricula agreements.

Manitoba has consulted an Advisory Team of partner stakeholder groups around issues of distance education. The province has also created a number of research partnerships with researchers in universities on projects that align with its strategic agenda which allows it to collect data and conduct research on areas of need in ways that are fiscally responsible. Manitoba also has a history of conducting provincial consultations on major initiatives with relevant stakeholder groups.

The Advisory Committee on Joint Use of School and Community Facilities (ACJUSC) has been created to consider ways of maximizing the joint use of community and school facilities for the benefit of all members of the community with a focus on children, youth. With respect to education finance, the province has been working with the Advisory Committee on Funding of Schools Program. This advisory committee reports to the Department on matters pertaining to the functioning of the provincial funding formula.

To help children reach their potential, Healthy Child Manitoba works with families to support their children within strong communities.

Led by the Healthy Child Committee of Cabinet, Healthy Child Manitoba (HCM) bridges departments and governments and, together with the community, works to improve the well-being of Manitoba's children and youth. HCM focuses on child-centered public policy through the integration of financial and community-based family supports.

The Public Schools Finance Board (PSFB) conducts a general review of school space and utilization annually. As a consequence of rural and northern enrolment decline, available school building space in many school divisions is often in excess of school requirements. The PSFB, in collaboration with the department of Family Services and Housing is in discussions with school divisions regarding strategies that could be used to increase the “non-school” use of surplus school space. This includes the addition of child-care spaces.

The partnership spoken of by participants from the Northwest Territories was that between Education and Health for the use of videoconference TeleHealth/TeleSpeech services for students with special needs. In Nunavut, cross-ministry partnerships have developed around trades and vocational training as the territory recognizes the growth that is anticipated to occur in this area in the next 20 years. In addition, once a year the Northern Arctic College holds an inter-agency meeting in consultation with the community on the kind of programs it can supply to the community.

Discussion

Manitoba Rural Schools

Teaching and Learning

In the category of *teaching and learning*, the comments made by respondents focused primarily on personnel and professional issues, programming, special initiatives, and planning and accountability. In the area of personnel, respondent comments focused on ways of accessing substitutes, and appropriate use of and support for educational assistants. There exists a growing movement towards using special education funding that has traditionally been designated for hiring educational assistants to finance additional resource teachers so that students have more access to appropriate programming from a qualified professional. Overall, respondents lamented the lack of specialty services for special education and many focused on initiatives they have undertaken to recruit and retain teachers and/or specialists.

A number of innovative positions have been created to meet the needs of students and/or the community context, including the introduction of literacy leaders in elementary schools, curriculum specialists, program coordinators/liaisons to facilitate relationships between the school and Aboriginal or EAL families, career counselors or career development workers in the middle years or senior level, and behavioral specialists.

The focus on local professional growth was a priority for all the rural schools involved in this study. In fact, although external professional development was mentioned as a possibility, supported with some finances for staff, most of the commentary suggested that the time, distance and cost factors related to attending them were often higher than the support that could be given. Therefore local schools and school divisions have begun channeling their resources into opportunities for professional development and/or support positions designed to maximize professional growth through collaborative opportunities. The most common innovation mentioned was the introduction of curriculum support specialists, who most often work at the division level, and whose purpose is to develop the curricular or program expertise of professional staff.

Most of the early years initiatives relate to literacy or numeracy. However, many of the literacy initiatives in early years schools are moving into middle years grades as expertise develops. At the middle years level, the most common initiatives included those related to student engagement, social issues such as drug and alcohol awareness, and/or at-risk programming. In terms of senior years education, the programs most often mentioned by participants included those related to career and/or technical/vocational education. There were some program options that were mentioned by participants that spanned across the K-12 schools. These were programs related to the Arts, Physical Education or sporting events, character education and/or safe schools programs, and local programs offered by community agencies. At the level of adult education, programs were designed that related to accessing grade 12 equivalency, work training that provided opportunities to gain credit while receiving wages, the increasing use of Prior Learning Assessment and Recognition, skill training for local business, and computer skills training. Aside from programming opportunities, schools have engaged in a number of initiatives that either facilitate student learning, build school-community relationships, develop school culture, promote citizenship, or address bullying, discipline or safety issues.

When it comes to differentiating instruction, the growing use of team teaching and literacy strategies were most often mentioned at the early years level, At the middle and senior years, participants were more apt to note instructional strategies related to ICT that were attempts to provide more flexibility or options for students.

Manitoba rural schools are increasingly adopting the use of multi-age/multi-grade classrooms, looping strategies, or cross-grade initiatives either as a consequence of declining enrolments or as a philosophy for addressing the growing diversity in classrooms. Most participants spoke of the benefits brought about in these situations, such as mentoring and social skill development, establishing routines and consistency, and peer learning.

While participants spoke of the innovations they have encouraged to increase program options for students, they inevitably have had to be flexible in how they scheduled their programs and/or time-tables to accommodate this growing diversity. A number of innovations in the K-12 system were mentioned as a means to provide programming

and delivery options: flexible grouping strategies within or across grades; administrative support for decreasing workload or for providing professional development opportunities; the use of educational assistants as translators; accessing grants to "buy" support or program opportunities; the deliberate focus on class size and composition to facilitate learning needs; shared programming between schools; rotational course offerings; reduced preparation responsibilities for new teachers; the growing use of technology and modular programming; interdisciplinary projects; alternative classrooms for self-directed learning; and, differential school schedules. In adult education, flexibility has been achieved through the use of modular or self-directed learning projects; flexible hours of operation; and coursework planned in conjunction with employers. However, one of the concerns mentioned was that new expectations under the guise of management and efficiency may in fact minimize the flexibility that was part of the original design of adult education centers and may be a detriment to the adult learners who need that flexibility.

In terms of planning and accountability, respondents promoted a vision of schooling that recognized the importance of a formal education that did not compromise community values. Moving that vision into school planning includes the need to focus on diversity, constant change, and the inclusion of staff and community members in the planning process so as to focus both on school needs (such as succession planning), as well as on student and community needs (such as the promotion of academics, character and citizenship education). Collecting data on individualized programming needs, program effectiveness, future planning needs, and satisfaction levels was mentioned as being key to the planning process to increase local capacity, inform stakeholders of progress, align with ministry and community needs, and plan for future change.

Infrastructure

In Manitoba, school divisions and schools are more than ever embedding technology into their programs and practice, though their ability to do so is drastically uneven across the province. The discussion on technology centered on the infrastructural issues related to technology, the accessing of particular technological tools, embedding ICT into teaching strategies, and technology programs.

Most of the discussion around facilities centered on the consequences of restructuring, the need for renovations and/or space, and the use of facilities by community groups. Some of the schools in this study were dealing with increasing enrolments as a consequence of growing Aboriginal or EAL populations, and therefore space to accommodate the programs, learning needs, and logistics of the people within them was at a premium. Other schools are considering ways of sharing or leasing available space with community agencies or programs. The adult education center in this study struggles with keeping its two campuses open as well as being able to keep itself open two nights per week given the staff equivalent. However, staff and community have fought for the maintenance of both sites as a way of maintaining services for two separate communities.

Transportation innovations were most often made for accessing programs, though this varied by division. As schools and/or divisions begin to collaborate on programming initiatives, busing becomes a high priority. Extra-curricular opportunities in rural schools are decreasing as a consequence of transportation costs, safety issues, and/or the problems associated with asking the same parents to continually provide transportation to events. Some schools have defrayed costs by fundraising or charging transportation fees. However, issues related to differential abilities to fundraise and/or socioeconomic differences between schools aggravate the ability to be consistent in approach. While some schools may be able to finance bus costs, increasing enrolments necessitate that all buses be on duty, which limits the venues to which students can travel over the course of the school day. On the other hand, Northern school divisions have additional costs associated with transportation, since their travel almost always necessitates room and board.

Educational Finance

Schools' local access to funds typically fell into the categories of fundraising initiatives, or grant opportunities. When it comes to accessing local funds, schools tend to rely on donations from parents and local community organizations and school-based fundraisers. In addition, schools are now writing grant proposals almost constantly. Most of the grants mentioned were those accessible through MECY, but others included federal grants, local community grants, foundation grants, and partnership grants. Such grants support the programs, personnel, and learning needs of many students. However, most

of them require commitment to sustainability after external funding once the grant is complete. Although they appreciated the additional funding provided by the grants, many participants spoke of the logistical and onerous commitments of writing and reporting on them, as this added to the workload and administrative costs of already overburdened rural personnel.

Schools have used the funds they receive in a variety of ways. Respondents suggested that they have used resources to: design programs; access resources; provide opportunities for children to engage directly with their learning; reduce class sizes; create new positions; support professional development; create course innovations through the use of technology; purchase equipment and/or technology; provide more services for students with special needs; offer extra-curricular opportunities; defer costs for travel; create scholarships; alleviate school fees; and, defer facility costs by entering into reciprocal agreements with the community for services.

Respondents were asked to provide any suggestions they had related to educational finance that might improve the provision of services to rural areas. Comments acknowledged the immediacy of response made to EAL issues by the ministry, and offered appreciation for grant incentives. However, participants continue to worry over the tax burden for rural residents; finding ways to lease facility space to community agencies; the need to carry over surplus for emergency and long-term planning; the need to focus on the growing number of substitute days covered by school divisions and the reasons for this growth; consideration of alternate scheduling; the need to increase funding for differential cost factors in rural and Northern schools; the need for capital projects sponsored by the PSFB; the need for more support for mandated curricular changes; the need to increase support for the growing influx of high needs foster children living away from home; and, the need for more support for divisions where transportation costs are high.

Inter-Jurisdictional Collaboration

In the area of inter-jurisdictional collaboration, comments focused primarily in three areas: school and community collaboration; school system collaboration; and, external collaboration. School-community collaboration occurs in the areas of facility sharing; fundraising; community events that build relationships or relate to curricular issues; community service projects and/or humanitarian efforts; the sponsorship and/or housing of programs in the school that service the community; and, community support of school programs and/or curricular initiatives.

Most school-based collaboration activities related to program development, organization of initiatives, and professional development opportunities. Inter-divisional collaboration occurred mostly as schools combined their capacity to offer joint programming, extra-curricular activities, or professional development opportunities.

Many cross-divisional partnerships are developing across the province related to technical vocational initiatives, often in conjunction with post-secondary institutions that provide dual credit and practicum time towards apprenticeship. Others have been created to provide opportunities for professional development, or to share ideas for programs in order to build capacity. Some of the partnerships that are growing between divisions and institutions of higher education benefit students directly: articulation agreements for dual credit, night classes for credit, career advising or entrance requirement information, or learning opportunities with the chance to visit postsecondary campuses. Others benefit school divisions by creating opportunities for recruiting, retaining and developing professionals: participating in career fairs, mentoring teacher candidates during the practicum, and gaining access to coursework or programs such as EAL, Resource, Guidance, or Educational Administration.

There also exist a number of partnerships with groups external to the local school or school division, which include those with ministry personnel, Manitoba Teachers Society, Manitoba Metis Federation and local First Nations authorities, local artists, and inter-agency services such as Child and Family Services, regional health authorities, mental health, the RCMP, homeless shelters or safe houses, Public Health, Addictions Foundation Manitoba, and Fire Halls.

Canadian Ministries of Education

Teaching and Learning

In terms of *Teaching and Learning*, Alberta and British Columbia are the leaders when it comes to planning strategically for rural education. These two provinces have deliberately emphasized rural education strategies in policy and practice, and have funded personnel and initiatives at the ministry level designed to build capacity, access and sustainable rural communities. Manitoba has just recently outlined an action plan for rural education as it has become a priority at the ministry level. Other provinces and territories have initiated strategic plans that are cognizant of, and reflect, rural issues, but do so within a general provincial/territorial thrust. These priorities include learning and technology (Alberta, British Columbia and Nova Scotia); career development (Saskatchewan and Manitoba), a reconceptualization of services for students with special needs (Saskatchewan and Yukon), and Aboriginal culture and language retention (Northwest Territories, Yukon, and Nunavut). Nunavut remains unique in its focus on decentralization, community consultation and concensus, working in the spirit of Inuit Qaujimajatuqangit.

In the area of programming, innovations can be categorized into distance learning opportunities, career development opportunities, curriculum development initiatives and programs intended to build cultural awareness. The creation of distance learning opportunities was the most-often cited programming innovation. Examples include: the Nova Scotia Virtual School, *Computers for Schools* and provincial online periodical license; the Alberta Distance Learning Strategy, mobile CTS labs, along with research/grant initiatives that attempt to study how technology affects pedagogy, student retention and completion rates; British Columbia's LearnNowBC, the Rural Education Network and COOL Consortium; the use of videoconferencing in the Yukon and the online Aboriginal language program *First Voices;* and the development of an Advisory Team in Manitoba to examine distance learning. Those that focus on career development include the development of trades programs and/or articulation agreements with postsecondary institutions for dual credits and apprenticeship credit for technical vocational programs (Nova Scotia, Alberta, Saskatchewan, Manitoba, Yukon and Nunavut). The third set of innovations around curriculum development include such ideas as French Reading Recovery (Nova Scotia and Manitoba), local course options (Nova Scotia, Manitoba, Alberta), after-school tutoring programs (Yukon), middle years Career Guidance (Saskatchewan), multi-lingual and/or bicultural curricula development (Nunavut and Yukon), and curricula designed to address social, emotional and mental health issues (Nunavut). The fourth set of program initiatives are those that create program opportunities for Aboriginal students, including the First Nations, Metis and Inuit policy framework (Alberta), experiential learning opportunities (Yukon, Northwest Territories, Nunavut), Elders in the School programs (Yukon), and a Bilateral Bicultural Program (Yukon).

Differentiated instruction is being supported primarily by technological innovations. Almost all the respondents spoke to various online courses available to students, offered by a variety of technological innovations such as video or web conferencing, web-based platforms such as Elluminate or Marratech, webCT, Moodle, or Blackboard, a variety of learning objects available online, the provincial licensing of online periodicals, and interactive television. Alberta and British Columbia are the most active in this regard, though Saskatchewan, Nova Scotia and the Yukon all spoke of regular use of distance technologies to facilitate learning.

Other methods of differentiating instruction included correspondence opportunities (Nova Scotia, Yukon, Manitoba), tutoring opportunities (Yukon and British Columbia), media lending libraries (Nova Scotia) and multi-age/multi-grade programming (Nova Scotia and curricula development, Manitoba and committee development, British Columbia due to distributed learning labs, Northwest Territories as a reality of practice, and the Nunavut focus on a continuum of learning based on Inuit traditional knowledge).

Most ministries focused on professional growth in order to recruit, support and retain quality teachers and administrators. Some of the more innovative initiatives include the Alberta Regional Professional Development Consortium; early hiring fairs with guaranteed hiring (Nova Scotia); cohort networking of new teachers in rural communities (British Columbia); bursaries for post-secondary study (Yukon, Saskatchewan, Manitoba and Northwest Territories); lucrative benefits in the collective agreements (Nunavut); an annual fall orientation for new teachers

(Yukon); and partnerships between school divisions and local First Nations Education Authorities for shared professional development and curricula development (Saskatchewan).

In addition to all the program and professional aspects occurring across Canada, many ministries are working on initiatives that either impact on, or are directly targeted towards, rural schools. The focus on technology is certainly one of those initiatives, but others related to each of the provinces include the Community Schools Program, SchoolPLUS and Community Schools (Saskatchewan); caring and safe schools initiatives (Saskatchewan, Alberta, Northwest Territories); partnerships for designing programs and pooling resources (Manitoba and Nunavut); school improvement initiatives (Alberta); class size and composition initiatives (Alberta, Manitoba); culture-based and language renewal educational strategies (Yukon, Northwest Territories, Nunavut); the Multiple Options school protocol (Nunavut); early childhood programs (Northwest Territories); initiatives sponsored by British Columbia's steering committee that grew out of the Rural Task Force; the Alberta Rural Development Strategy; and, "reserved" seating for students from small schools for online coursework in the Nova Scotia Virtual High School.

Infrastructure

The use of technology to provide access, choice and variety in learning for students, professional development opportunities for educators, connectivity between stakeholders and resource provision were the common rationales for infrastructural development in this area. Alberta, British Columbia and Nova Scotia were the most strategic in the development of technological infrastructure. The Alberta Distributed Learning Strategy which incorporates the SuperNet, the incorporation of emerging technologies, the Alberta Distance Learning Center, mobile CTS labs, and pilot projects that will determine how technology impacts pedagogy, student engagement and retention are primary examples of Alberta's strength in this area.

The British Columbia ministry supports a number of technological innovations through LearnNowBC, the use of Elluminate to provide professional development for educators and curricular connections between classrooms, training workshops for technology use, the development of an online community of educators with rural blogs, wikis, and newsletters, the Rural Education Network, shared online instruction, online course/content development consortia, and Distributed Learning Labs. All of these innovations are part of the province's Rural Education Strategy that embeds initiatives into a pilot school district so that innovation can begin at the sites of practice.

In Nova Scotia, the creation of the joint planning group called RoBoTS lead to the extensive incorporation of ICT infrastructure. The Nova Scotia Virtual School, the provincial rural broadband project, and computer refurbishing program all speak to commitment in this area.

Other provinces have developed their capacity to offer courses, educational services and professional development via videoconferencing (Yukon, Saskatchewan, Northwest Territories). Saskatchewan also uses interactive television instruction (ITI) across a satellite network called the Saskatchewan Communications Network (SCN) to deliver secondary credits, post-secondary courses and programs, professional development and special events. Many provinces have invested in online course design (Alberta, British Columbia, Saskatchewan, Nova Scotia), as well as course management systems (Alberta, British Columbia, Saskatchewan, Nova Scotia). The respondents from two provinces (Alberta and Nova Scotia) suggested their respective provinces have instituted mechanisms for provincial tendering for equipment to help offset administrative and equipment costs.

Very little mention was made of facilities or transportation by respondents. Those that mentioned facilities spoke of building projects and/or modular technology (Yukon, Nunavut, and Alberta), housing shortages (Yukon and Northwest Territories), the promotion of joint use facilities (Manitoba) and design preferences based on program needs (Nova Scotia). Only one Alberta respondent spoke about transportation costs, bussing contracts, and long bus rides that are tolerated due to the desire of rural parents to keep their local schools open.

Educational Finance

Three provinces (Saskatchewan, Manitoba, and Quebec), and one territory (Northwest Territories) fund education through a combination of provincial/territorial revenue and locally determined taxation, and the Northwest Territories uses this model only partially for two District Education Authorities located in

Yellowknife. The remaining provinces and territories have incorporated provincial/territorial funding based on annual budgets submitted by local authorities that are held accountable for the administration of the funds. Most utilize a combination of base funding based on student enrolment, along with categorical funding grants to offset differential needs. The funding formulae are in constant flux as provinces/territories and ministries attempt to align funding structures with changing demographics, economics, and programming needs. Some of the categorical structures in existence that impact directly on rural areas include those categories for declining enrolments, sparsity factors, transportation, rural factors, climate factors, Aboriginal education, northern allowances, relative cost of purchasing and services adjustments, small schools by necessity, socio-economic status, Hutterian Schools, heritage language instruction, small schools, experiential learning, and community use of schools. In addition to the operational grant structure, many provinces and territories offer targeted grants that provide incentives to school boards to offer programs in particular areas of focus, such as class size and composition, technology, technical vocational programming, language instruction, early childhood programming, etcetera.

Provinces/territories have used their funds in innovative ways to support rural schools either directly or indirectly. The costs associated with the input of extensive technological infrastructure and broadband capability has been supported extensively in British Columbia, Alberta, Saskatchewan, Nova Scotia, and Yukon, using significant private/public partnerships. The use of bursaries and/or tuition payments as a means of recruiting, retaining and developing teachers is also used by many provinces and territories. British Columbia and the Yukon have designed initiatives to work on succession planning for administration in rural/remote schools. The Nova Scotia ministry contributed to the development of a Masters program for French Resource teachers offered in various sites across the province in order to develop capacity in this area. Provincial licensing and tendering (Alberta, British Columbia, Saskatchewan and Nova Scotia) help to provide resources, access and professional opportunities for teachers and students while limiting administrative costs. Manitoba and Alberta have initiated research projects to facilitate data collection and understanding in areas of ministerial concern. Innovative partnerships for addressing students with special needs have developed in Alberta, Saskatchewan and the Northwest Territories. All of the provinces and territories represented in this study are supporting career education, particularly in the areas of technical vocational initiatives. Experiential, land-based cultural and linguistic programming is a primary thrust of the Northwest Territories, the Yukon and Nunavut to foster cultural and linguistic revitalization. Other unique funding innovations include the Alberta Advantage for sustainable rural communities, the Alberta Regional Professional Development Consortium, and the Rural Education Task Force strategy of embedding innovations within local school divisions.

Inter-Jurisdictional Collaboration

Comments focused primarily on ministry-school division partnerships, cross-ministry partnerships, and partnerships with post-secondary institutions. Often these partnerships are developed to promote professional growth, recruitment or retention of teachers (all); career advancement opportunities for students primarily in terms of technical vocational initiatives (all); technological infrastructure or facilities development (British Columbia, Alberta, Saskatchewan, Nova Scotia, Yukon); curricular initiatives or programs (all); research initiatives (Alberta, Manitoba); provision of services such as special education (Alberta, Saskatchewan, Yukon, Northwest Territories); or to facilitate information sharing and networking between educational stakeholders (all).

Conclusion

Based on the responses of the professionals involved in this study, a number of conclusions can be drawn about the innovations being undertaken in Manitoba schools: (a) visions of schooling attempt to address formal educational goals within the local community context; (b) organizing, managing, and staffing inclusive special education has become a priority for rural schools; (c) school divisions have focused their energy and resources on providing relevant and instructional-based opportunities for local professional growth as opposed to external development due to time, distance, and cost factors; (d) programming options have focused on literacy in the early years; social, at-risk and student engagement activities in the middle years; career development in the senior years; and skills training and PLAR in adult education; (e) the use of ICT is growing, but is vastly uneven across the province; (f) transportation costs continue to be an issue, to the extent that they have become instrumental in the decline of extra-curricular programs in schools; (g) schools have become incredibly creative in how they use funds to build capacity in their schools; however the increasing reliance on a competitive grant structure is becoming onerous, time-consuming and costly as more administrative time is necessary for writing, reporting upon, and managing the grants; and, (h) collaboration within, between and across schools, communities, school divisions, external agencies, and institutions of higher education has become normative and is necessary to provide program opportunities, professional growth opportunities, information sharing, and access to services, personnel, and resources.

A number of innovative positions have been created in rural schools in order to foster curricular or pedagogical expertise, to build relationships between schools and Aboriginal and/or EAL families, and to foster career education. Differentiation in instructional strategies, age/grade configurations, and scheduling has become a way of life for those who work in rural schools as they try to find innovative ways to offer program options within the limitations of staffing equivalents. School initiatives often attempt to entwine academic, social and community-building activities to foster citizenship and to create learning opportunities relevant to the lives of students and the community. Across the province, facility usage vacillates between the need to more effectively use extra space due to declining enrolments or finding room to accommodate growing numbers of EAL and/or Aboriginal students. Funding concerns exist related to the local tax burden, facility usage and capital projects, differential cost factors in rural areas, transportation costs, and the need to support growing numbers of vulnerable children.

At the ministry level, advancements in the use of technology are most evident in Alberta, British Columbia, Saskatchewan and Nova Scotia. Cultural innovations, and linguistic revitalization efforts are most prevalent in the Yukon, Northwest Territories, and Nunavut. All of the provinces and territories represented in this study had a strong focus on career education, with an emphasis on technical vocational education. Clearly, those provinces and territories that have been most innovative in their development of rural education have in common a number of factors. These provinces/territories have: (a) clearly articulated a strategic vision that focuses specifically on rural issues; (b) supported with commitment and resources. the extensive development of an ICT infrastructure capable of providing access, equity and choice for coursework, professional development, and service provision; (c) focused on developing incentives and initiatives that will recruit, retain and develop teachers and administrators in rural communities; (d) provincial/territorial funding structures deliberately designed to recognize differential economic, demographic and educational needs in rural areas; (e) encouraged innovation to solve challenges faced by rural school divisions by resource provision, networking opportunities, or partnerships; (f) promoted and protected flexibility for local options, programs and cultural innovations; and, (g) developed partnerships across ministries, between ministries and local jurisdictions, and with post-secondary and work for service provision, career development, and recruitment and retention.

The professionals in the rural schools involved in this study must be applauded for the incredible insight, energy, resources and time they have put in to the innovations they have shared. What is most evident in these innovations is that rural schools have become more sophisticated and more adept at doing what they have always done best—they rely on the local expertise and the concept of community to work together with partners in order to find ways to innovate, to offer as many opportunities as

they can for the students they serve, and to support the local people who work so hard to make sure their children receive the best education they have to offer.

And yet, rural/remote education thrives in many of the provinces/territories involved in this study because the ministries in question have attended to local needs, have aligned ministry initiatives with supports for embedding them in rural schools, and have deliberately and strategically cultivated opportunities and partnerships for reconceptualizing practices in ways that allow for flexibility and resource pooling. The findings of this study suggest that local rural schools in Manitoba are starting to align their innovations and practices with the directions of the province, partly as a consequence of the resources, directions and mandates of the ministry, but also because in doing so, they have found ways to support the economies, education and social environments of their local communities. Often it is in these environments where educational innovations are first conceptualized and tested because of the necessity to manage resources and programs differently in order to survive. But they are often vulnerable to changes in demographic, economic and social circumstance, and therefore cannot exist in isolation from the provincial/territorial authorities that have jurisdiction over the provision of educational services. Such a symbiotic relationship works best when it is based on mutually beneficial, equitable and authentic partnerships; strategic direction and planning at both the grass roots and provincial/territorial levels; the deliberate focus on creating flexible options that can work in multiple contexts; and pressure and support for growth in response to local and provincial/territorial need. There is no doubt that there remains much work to be done to facilitate quality education in Manitoba rural and remote schools. However, as evidenced in this study, there are three elements that will greatly support this work: (a) the energy and commitment to leading renewal and quality education already exists within the rural and remote schools in Manitoba; (b) Manitoba Education, Citizenship and Youth has established rural education as a strategic priority and has now unveiled strategic directions in this regard; and, (c) there exists a wealth of policy and practice innovations already undertaken in other jurisdictions in areas that face Manitoba schools, such as distance education, recruitment and retention, culturally sensitive programming, and career and vocational programming. Rather than having to begin anew, Manitoba can learn from these jurisdictions to create models of service that support the Manitoba context. In doing so, it will increase the access, quality and choices of rural and remote students, educators, and communities for educational services respectful of both provincial mandates and community need.

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Appendix A
Rural Schools Research Organized by Study Framework Themes

TEACHING AND LEARNING	Professionalism	Personnel	Initiatives	Programming	Planning and Accountability
Annetta, L. & Minogue, J. (2004, Dec). The effect teaching experience has on perceived effectiveness of interactive television as a distance education model for elementary school science teacher's professional development: Another digital divide? *Journal of Science Education and Technology, 13*(4), 485-494.	*				
Baker, J.D., Rieg, S.A. & Clendaniel, T. (2006, Winter). An investigation of an after school Math tutoring program: University tutors + elementary students = a successful partnership. *Education, 127*(2), 287-293.				*	
Bargerhuff, M.E., Dunne, J.D. & Renick, P.R. (2007, Winter). Giving teachers a chance: Taking special education teacher preparation programs to rural communities. *Rural Special Education Quarterly, 26*(1), 3-12.				*	
Barley, Z. & Beesley, A. (2007). Rural school success: What can we learn? *Journal of Research in Rural Education, 22*(1).	*	*		*	*
Bo-yuen Ngai, P. (2006). Grassroots suggestions for linking native-language learning, Native American studies, and mainstream education in reservation schools with mixed Indian and white student populations. *Language, Culture & Curriculum, 19*(2), 220-236.				*	
Bo-yuen Ngai, P. (2007) Bilingual education in rural schools with native and non-native students: Indigenous-language programme elements for an inclusive model. *International Journal of Bilingual Education and Bilingualism, 10*(6), 723-751.				*	

TEACHING AND LEARNING	Professionalism	Personnel	Initiatives	Programming	Planning and Accountability
Butera, G. & Dunn, M.W. (2005, Spring). The case for cases in preparing special educators for rural schools. *Rural Special Education Quarterly, 24*(2), 22-27.	*				
D'Amico, J.J. & Nelson, V. (2000, Winter). How on earth did you hear about us? A study of exemplary rural school practices in the Upper Midwest. *Journal of Research in Rural Education, 16*(3).			*	*	
Dappen, L. & Isernhagen, J.C. (2002, Winter). TeamMates: A model to support mentoring in rural schools. *Journal of Research in Rural Education, 17*(3).			*		
Diehl, H.L. (2005, Sept). Snapshots of our journey to thoughtful literacy. *Reading Teacher, 59*(1), 56-69.			*		
English, L., Dickinson, G., McBride, J., Milligan, J. & Nichols, J. (2004, Fall). Throw out the lifeboat: Staying afloat in the age of efficiency and effectiveness. *Education, 125*(1), 104-110.	*				
Forbush, D.E. & Morgan, R.L. (2004, Spring). Instructional team training: Delivering live, internet courses to teachers and paraprofessionals in Utah, Idaho and Pennsylvania. *Rural Special Education Quarterly, 23*(2), 9-17.	*	*			
Goddard, J.T. & Habermann, S.R. (2001, Fall). Accessing the knowledge base of retired teachers: Experiences in establishing a formal mentoring program in a rural school division. *Journal of Research in Rural Education, 17*(2).		*	*		
Hardre, P.L. & Sullivan, D.W. (2008, Nov). Teacher perceptions and individual differences: How they influence rural teachers' motivating strategies. *Teaching and Teacher Education, 24*(8), 2059-2075.					*

TEACHING AND LEARNING	Professionalism	Personnel	Initiatives	Programming	Planning and Accountability
Kenny, J., Seen, A. & Purser, J. (2008, Sept). Supporting and resourcing secondary Science teachers in rural and regional school. *Teaching Science-The Journal of the Australian Science Teachers Association, 54*(3), 19-24.	*		*		
Keramidas, C.G., Ludlow, B.L., Collins, B.C. & Baird, C.M. (2007, Winter). Saving your sanity when teaching in an online environment: Lessons learned. *Rural Special Education Quarterly, 26*(1), 28-39.	*				
Koch, S.P. (2007, Fall). Training rural special educators online to teach social skills. *Rural Special Education Quarterly, 26*(4), 16-20.	*				
Kollie, E. (2007, Oct). Examining the characteristics of rural school districts. *School Planning and Management, 46*(10), 54-58.		*			
Kushman, W.K. & Barnhardt, R. (2001, Spring). Reforming education from the inside-out: A study of community engagement and educational reform in rural Alaska. *Journal of Research in Rural Education, 17*(1).			*		
Lee, M.M. (2007, May). 'Making it relevant': A rural teacher's integration of an international studies program. *Intercultural Education, 18*(2), 147-159.				*	
Lynch, R., Steen, D., Pritchard, T., Buzzell, P., Manley, J. & Pintauro, S. (2007, April). Development of a web-based, multimedia computer application for teaching food safety to middle school children. *FASEB Journal, 21*(5), 212-216.				*	
Lyons, T. (2008, Sept). More equal than others? Meeting the professional development needs of rural primary and secondary science teachers. *Teaching Science-The Journal of the Australian Science Teachers Association, 54*(3), 27-31.	*				

TEACHING AND LEARNING	Professionalism	Personnel	Initiatives	Programming	Planning and Accountability
Matson, E., DeLoach, S. & Pauly, R. (2004, Jul-Dec). Building interest in Math and Science for rural and underserved elementary school children using robots. *Journal of STEM Education Innovations and Research, 5*(3/4), 35-46.				*	
Mitchem, K., Wells, D. & Wells, J. (2003, Fall). Using evaluation to ensure quality professional development in rural schools. *Journal of Research in Rural Education, 18*(2).	*				
Monk, D.H. (2007, Spring). Recruiting and retaining high-quality teachers in rural areas. *Future of Children, 17*(1), 155-174.		*			
Mulryan-Kyne, C. (2005). The grouping practices of teachers in small two-teacher primary schools in the Republic of Ireland. *Journal of Research in Rural Education, 20*(17).				*	*
Ortlieb, E.T., Cheek Jr., & Earl, H. (2008, Sept). How geographic location plays a role within instruction: Venturing into both rural and urban elementary schools. *Educational Research Quarterly, 32*(1), 48-64.				*	
Panizzon, D. & McLennan, G. (2003, Winter). Mission possible: A day of Science, fun and collaboration. *Investigating: Australian Primary & Junior Science Journal, 19*(2), 9-14.			*		
Peck, S.M. & Virkler, A.J. (2006, May). Reading in the shadows: Extending skills through shadow-puppet theatre. *Reading Teacher, 59*(8), 173-191.			*		
Peterson, P.J. & Montfort, L. (2004, Fall). Creating culturally dynamic materials for rural culturally and linguistically diverse exceptional students. *Rural Special Education Quarterly, 23*(4), 25-29.				*	
Quitadamo, I.J. & Campanella, R. (2005, Apr/May). Cougars, curriculum, community. *Science Teacher, 72*(4), 28-31.				*	

TEACHING AND LEARNING	Professionalism	Personnel	Initiatives	Programming	Planning and Accountability
Scarpa, S. (2005, April). Virginia offers cash to keep teachers. *District Administration, 41*(4), 22.		*			
Schafft, K.A., Alter, T.R. & Bridger, J.C. (2006). Bringing the community along: A case study of a school district's information technology rural development initiative. Journal of Research in Rural Education 21(8).		*	*		
Shand, P. & Spring, J. (2007, Spring). Teaching Canadian music in a rural setting. *Music Educator, 48*(3), 19-20.			*	*	
Simpson, E.S., Yocom, D.J. & Blum, H.T. (2005, Spring). The Wyoming Collaborative Mentorship Academy: A field-based program for certifying fully qualified special education teachers in a rural state. *Rural Special Education Quarterly, 24*(2), 11-17.	*				
Skelton, S. (2004, July). Thriving in rural Alaska. *English Journal, 93*(6), 76-81.				*	
Starr, K. & White, S. (2008). The small rural school principalship: Key challenges and cross-school responses. *Journal of Research in Rural Education, 23*(5).		*		*	
Swidler, A.S. (2000, Spring). Notes on a country school tradition: Recitation as an individual strategy. *Journal of Research in Rural Education, 16*(1).				*	
Swidler, A.S. (2005). Conversation and control: Emergent progressive pedagogy. *Journal of Research in Rural Education, 20*(4).				*	*
Tytler, R., Symington, D., Kirkwood, V. & Malcolm, C. (2008, Sept). Engaging			*		

TEACHING AND LEARNING	Professionalism	Personnel	Initiatives	Programming	Planning and Accountability
students in authentic science through school-community links: Learning from the rural experience. *Teaching Science-The Journal of the Australian Science Teachers Association, 54*(4), 13-18.					
Wenger, K.J. & Dinsmore, J. (2005). Preparing rural preservice teachers for diversity. *Journal of Research in Rural Education, 20*(10).					*
Wischnowski, M.W., salmon, S.J. & Eaton, K. (2004, Summer). Evaluating co-teaching as a means for successful inclusion of students with disabilities in a rural district. *Rural Special Education Quarterly, 23*(3), 3-14.					*
Yarbrough, R. & Gilman, D.A. (2006, Oct). From five days to four. *Educational Leadership, 64*(2), 80-85.					*
Zahn, G. & Buchanan, M. (2002, Fall). Supporting teachers of children with autism using distance education and video portfolios. *Rural Special Education Quarterly, 21*(4), 21-25.	*				

INFRASTRUCTURE	Technology	Transportation
Annetta, L. & Minogue, J. (2004, Dec). The effect teaching experience has on perceived effectiveness of interactive television as a distance education model for elementary school science teacher's professional development: Another digital divide? *Journal of Science Education and Technology, 13*(4), 485-494.	*	
Bargerhuff, M.E., Dunne, J.D. & Renick, P.R. (2007, Winter). Giving teachers a chance: Taking special education teacher preparation programs to rural communities. *Rural Special Education Quarterly, 26*(1), 3-12.	*	
D'Amico, J.J. & Nelson, V. (2000, Winter). How on earth did you hear about us? A study of exemplary rural school practices in the Upper Midwest. *Journal of Research in Rural Education, 16*(3).	*	
Forbush, D.E. & Morgan, R.L. (2004, Spring). Instructional team training: Delivering live, internet courses to teachers and paraprofessionals in Utah, Idaho and Pennsylvania. *Rural Special Education Quarterly, 23*(2), 9-17.	*	
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Hawkes, M., Halverson, P. & Brockmueller, B. (2002, Winter). Technology facilitation in the rural school: An analysis of options. *Journal of Research in Rural Education, 17*(3).	*	
Howley, C.B., Holwley, A.A. & Shamblen, S. (2001, Spring). Riding the school bus: A comparison of the rural and suburban experience in five states. *Journal of Research in Rural Education, 17*(1).		*
Jameson, J.M. & McDonnell, J. (2007, Spring). Going the distance to train teachers for students with severe disabilities: The University of Utah Distance Teacher Education Program. *Rural Special Education Quarterly, 26*(2), 26-32.	*	
Keramidas, C.G., Ludlow, B.L., Collins, B.C. & Baird, C.M. (2007, Winter). Saving your sanity when teaching in an online environment: Lessons learned. *Rural Special Education Quarterly, 26*(1), 28-39.	*	
Koch, S.P. (2007, Fall). Training rural special educators online to teach social skills. *Rural Special Education Quarterly, 26*(4), 16-20.	*	
Knezek, G. & Christensen, R. (2007). Effect of technology-based programs on first-and second-grade reading achievement. *Computers in the Schools, 24*(3/4), 23-41.	*	
Lee, M.M. (2007, May). 'Making it relevant': A rural teacher's integration of an international studies program. *Intercultural Education, 18*(2), 147-159.	*	
Lynch, R., Steen, D., Pritchard, T., Buzzell, P., Manley, J. & Pintauro, S. (2007, April). Development of a web-based, multimedia computer application for teaching food safety to middle school children. *FASEB Journal, 21*(5), 212-216.	*	
Matson, E., DeLoach, S. & Pauly, R. (2004, Jul-Dec). Building interest in Math and Science for rural and underserved elementary school children using robots. *Journal of STEM Education Innovations and Research, 5*(3/4), 35-46.	*	
Mitchem, K., Wells, D. & Wells, J. (2003, Fall). Using evaluation to ensure quality professional development in rural schools. *Journal of Research in Rural Education, 18*(2).	*	

INFRASTRUCTURE	Technology	Transportation
Schafft, K.A., Alter, T.R. & Bridger, J.C. (2006). Bringing the community along: A case study of a school district's information technology rural development initiative. Journal of Research in Rural Education 21(8).	*	
Skelton, S. (2004, July). Thriving in rural Alaska. *English Journal, 93*(6), 76-81.	*	
Slavin, P. & Gentner, J. (2006, Jan/Feb). Long way home. *Teacher Magazine, 17*(4), 32-37.		*
Starr, K. & White, S. (2008). The small rural school principalship: Key challenges and cross-school responses. *Journal of Research in Rural Education, 23*(5).		*
Stevens, K. (2008, April). Collaborative professional education for e-teaching in networked schools. *Proceedings of World Academy of Science: Engineering and Technology, 28,* 425-429.	*	
Venkataram, P., Rajavelsamy, R., Chaudhari, S., Ramamohan, T.R. & Ramakrishna, H. (2003, Dec). A wireless Rural Education and Learning System based on disk oriented MPEG streaming multimedia. *International Journal of Distance Education Technologies,1*(4), 20-38.	*	

EDUCATIONAL FINANCE	Uses of Finances	Local Access to Funds	Educational Finance
Barley, Z. & Beesley, A. (2007). Rural school success: What can we learn? *Journal of Research in Rural Education, 22*(1).	*		
Benseman, J. (2006). Moving towards lifelong learning in rural New Zealand: A study of two towns. *Journal of Research in Rural Education, 21*(4).		*	*
D'Amico, J.J. & Nelson, V. (2000, Winter). How on earth did you hear about us? A study of exemplary rural school practices in the Upper Midwest. *Journal of Research in Rural Education, 16*(3).		*	*
Dappen, L. & Isernhagen, J.C. (2002, Winter). TeamMates: A model to support mentoring in rural schools. *Journal of Research in Rural Education, 17*(3).			*
Forbush, D.E. & Morgan, R.L. (2004, Spring). Instructional team training: Delivering live, internet courses to teachers and paraprofessionals in Utah, Idaho and Pennsylvania. *Rural Special Education Quarterly, 23*(2), 9-17.			*
Goddard, J.T. & Habermann, S.R. (2001, Fall). Accessing the knowledge base of retired teachers: Experiences in establishing a formal mentoring program in a rural school division. *Journal of Research in Rural Education, 17*(2).	*		
Hoff, D.J. (2007) Usually contentious Title 1 Formula is no NCLB barrier. *Education Week, 27*(1), 18-19.			*
Jennings, N.E. (2000, Winter). Standards and local curriculum: A zero-sum game? *Journal of Research in Rural Education, 16*(3).		*	
Kinnucan, H.W., Yuqing, Z. & Brehmer, G. (2006, Dec). State aid and student performance: A supply-demand analysis. *Education Economics, 14*(4), 487-509.			*
Klein, A. (2007). Supplemental Bill includes hurricane aid for schools. *Education Week, 26*(5), 23.			*
Kollie, E. (2007, Oct). Examining the characteristics of rural school districts. *School Planning and Management, 46*(10), 54-58.			*
Kushman, W.K. & Barnhardt, R. (2001, Spring). Reforming education from the inside-out: A study of community engagement and educational reform in rural Alaska. *Journal of Research in Rural Education, 17*(1).		*	
Mitchem, K., Wells, D. & Wells, J. (2003, Fall). Using evaluation to ensure quality professional development in rural schools. *Journal of Research in Rural Education, 18*(2).		*	
Schafft, K.A., Alter, T.R. & Bridger, J.C. (2006). Bringing the community along: A case study of a school district's information technology rural development initiative. Journal of Research in Rural Education 21(8).		*	
Starr, K. & White, S. (2008). The small rural school principalship: Key challenges and cross-school responses. *Journal of Research in Rural Education, 23*(5).	*		
Tytler, R., Symington, D., Kirkwood, V. & Malcolm, C. (2008, Sept). Engaging students in authentic science through school-community links: Learning from the rural experience. *Teaching Science-The Journal of the Australian Science Teachers Association, 54*(4), 13-18.		*	

INTER-JURISDICTIONAL COLLABORATION	School-Community	System-Based	External Collaboration
Agbo, S.A. (2007). Addressing school-community relations in a cross-cultural context: A collaborative action to bridge the gap between First Nations and the school. *Journal of Research in Rural Education, 22*(8).	*		
Baker, J.D., Rieg, S.A. & Clendaniel, T. (2006, Winter). An investigation of an after school Math tutoring program: University tutors + elementary students = a successful partnership. *Education, 127*(2), 287-293.			*
Bargerhuff, M.E., Dunne, J.D. & Renick, P.R. (2007, Winter). Giving teachers a chance: Taking special education teacher preparation programs to rural communities. *Rural Special Education Quarterly, 26*(1), 3-12.			*
Barley, Z. & Beesley, A. (2007). Rural school success: What can we learn? *Journal of Research in Rural Education, 22*(1).	*		
Benseman, J. (2006). Moving towards lifelong learning in rural New Zealand: A study of two towns. *Journal of Research in Rural Education, 21*(4).	*		
D'Amico, J.J. & Nelson, V. (2000, Winter). How on earth did you hear about us? A study of exemplary rural school practices in the Upper Midwest. *Journal of Research in Rural Education, 16*(3).	*		
Dappen, L. & Isernhagen, J.C. (2002, Winter). TeamMates: A model to support mentoring in rural schools. *Journal of Research in Rural Education, 17*(3).	*		
English, L., Dickinson, G., McBride, J., Milligan, J. & Nichols, J. (2004, Fall). Throw out the lifeboat: Staying afloat in the age of efficiency and effectiveness. *Education, 125*(1), 104-110.			*
Forbush, D.E. & Morgan, R.L. (2004, Spring). Instructional team training: Delivering live, internet courses to teachers and paraprofessionals in Utah, Idaho and Pennsylvania. *Rural Special Education Quarterly, 23*(2), 9-17.			*
Holloway, D.L. (2002, Winter). Using research to ensure quality teaching in rural schools. *Journal of Research in Rural Education, 17*(3).			*
Isbell, D. (2005, Nov). Music education in rural areas: A few keys to success. *Music Educators Journal, 92*(2), 30-34.	*		
Jameson, J.M. & McDonnell, J. (2007, Spring). Going the distance to train teachers for students with severe disabilities: The University of Utah Distance Teacher Education Program. *Rural Special Education Quarterly, 26*(2), 26-32.			*
Jennings, N.E. (2000, Winter). Standards and local curriculum: A zero-sum game? *Journal of Research in Rural Education, 16*(3).			*
Kenny, J., Seen, A. & Purser, J. (2008, Sept). Supporting and resourcing secondary Science teachers in rural and regional school. *Teaching Science-The Journal of the Australian Science Teachers Association, 54*(3), 19-24.			*
Keramidas, C.G., Ludlow, B.L., Collins, B.C. & Baird, C.M. (2007, Winter). Saving your sanity when teaching in an online environment: Lessons learned. *Rural Special Education Quarterly, 26*(1), 28-39.			*

INTER-JURISDICTIONAL COLLABORATION	School-Based	Within-System	External Collaboration
Kushman, W.K. & Barnhardt, R. (2001, Spring). Reforming education from the inside-out: A study of community engagement and educational reform in rural Alaska. *Journal of Research in Rural Education, 17*(1).	*		
Lee, M.M. (2007, May). 'Making it relevant': A rural teacher's integration of an international studies program. *Intercultural Education, 18*(2), 147-159.			*
Matson, E., DeLoach, S. & Pauly, R. (2004, Jul-Dec). Building interest in Math and Science for rural and underserved elementary school children using robots. *Journal of STEM Education Innovations and Research, 5*(3/4), 35-46.			*
Mitchem, K., Wells, D. & Wells, J. (2003, Fall). Using evaluation to ensure quality professional development in rural schools. *Journal of Research in Rural Education, 18*(2).			*
Panizzon, D. & McLennan, G. (2003, Winter). Mission possible: A day of Science, fun and collaboration. *Investigating: Australian Primary & Junior Science Journal, 19*(2), 9-14.			*
Schafft, K.A., Alter, T.R. & Bridger, J.C. (2006). Bringing the community along: A case study of a school district's information technology rural development initiative. Journal of Research in Rural Education 21(8).	*		
Simpson, E.S., Yocom, D.J. & Blum, H.T. (2005, Spring). The Wyoming Collaborative Mentorship Academy: A field-based program for certifying fully qualified special education teachers in a rural state. *Rural Special Education Quarterly, 24*(2), 11-17.			*
Starr, K. & White, S. (2008). The small rural school principalship: Key challenges and cross-school responses. *Journal of Research in Rural Education, 23*(5).	*	*	
Tytler, R., Symington, D., Kirkwood, V. & Malcolm, C. (2008, Sept). Engaging students in authentic science through school-community links: Learning from the rural experience. *Teaching Science-The Journal of the Australian Science Teachers Association, 54*(4), 13-18.	*		*
Wenger, K.J. & Dinsmore, J. (2005). Preparing rural preservice teachers for diversity. *Journal of Research in Rural Education, 20*(10).	*		*
Zahn, G. & Buchanan, M. (2002, Fall). Supporting teachers of children with autism using distance education and video portfolios. *Rural Special Education Quarterly, 21*(4), 21-25.			*

Appendix B
Canadian Ministry Documents Organized by Study Themes

Ministry of Education Website URLs

All of the documents and web archives referenced in the following appendix can be accessed through the department of education websites listed below.

Alberta (AB)
http://education.alberta.ca/

British Columbia (BC)
http://www.gov.bc.ca/bced/

Manitoba (MB)
http://www.edu.gov.mb.ca/

New Brunswick (NB)
http://www.gnb.ca/0000/

Newfoundland and Labrador (NL)
http://www.ed.gov.nl.ca/edu/

Nova Scotia (NS)
http://www.ednet.ns.ca/

Nunavut (NU)
http://www.gov.nu.ca/education/eng/

Northwest Territories (NT)
http://www.ece.gov.nt.ca/

Ontario (ON)
http://www.edu.gov.on.ca/

Prince Edward Island (PE)
http://www.gov.pe.ca/education/

Quebec (QC)
http://www.mels.gouv.qc.ca/gr-pub/m_englis.htm

Saskatchewan (SK)
http://www.education.gov.sk.ca/

Yukon (YT)
http://www.education.gov.yk.ca/

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**student diversity**	**program opportunities**	**access to resources for special needs**	**individualization**	**learning cultures**	**dealing with social issues**
AB Cycle 1 AISI project summaries and results	*	*		*		
AB Cycle 2 AISI project summaries and results	*	*		*	*	
AB Cycle 3 AISI project summaries and results	*	*		*		
AB Programs of study Aboriginal languages	*	*				
AB Government of Alberta - Alberta children and youth initiative (ACYI)						*
AB Supernet backgrounder Kindergarten to grade 12 (K-12)		*		*		
AB Education annual report 2006 - 2007	*	*	*	*		
AB Facts on funding support to ACOL		*				
AB Funding for special education needs	*		*	*		
AB Planting the seeds growth in rural education: A series of choices		*	*			
AB Videoconferencing in Alberta		*				
BC Budget and fiscal plan 2008/09 - 2010/11	*					*
BC Balanced budget 2008: Goals, objectives, strategies and performance measures		*	*			
BC Policy document Strongstart BC early learning centre						*
BC Ministry of education task force on rural education						*
MB Manitoba education, citizenship and youth annual report 2006 - 2007	*		*	*	*	*
MB Distance Learning A Course Guide for Independent Study		*		*		

MB Distance Learning Teacher Mediated Option (TMO)		*		*		
MB Distance Learning A Policy Handbook for Schools/Divisions/Districts		*		*		
MB Supporting Manitoba's children and families			*			*

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**student diversity**	**program opportunities**	**access to resources for special needs**	**individualization**	**learning cultures**	**dealing with social issues**
MB French second language revitalization program Manitoba education		*			*	
MB Technical vocational initiative		*		*		
NB 2006-2007 annual report education	*	*		*	*	
NB Becoming the best: An update on public education initiatives		*	*		*	
NB Dropout statistics September 30, 2006 - September 30, 2007						*
NB Connecting care and challenge: Tapping our human potential	*		*			*
NL All the skills to succeed: Report of Newfoundland and Labrador skills task force		*				
NL Focusing on students: ISSP and pathways commission	*	*		*		*
NL Minister outlines improvements underway to services for students with special needs			*			
NL Student support information 2007 - 2008	*		*			
NS Response to the Minister's review of services to students with special needs			*			
NS Minister's review of services for students with special needs	*		*			
NU Adult learning strategy						*
NU Capital standards and criteria						*
NU Early childhood development update report 2003/2004						*
NU Bill 21 education act		*			*	

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**student diversity**	**program opportunities**	**access to resources for special needs**	**individualization**	**learning cultures**	**dealing with social issues**
NT Developmental directive for career development across the lifespan		*	*			*
NT Framework for action early childhood development		*		*		*
NT Getting in, staying in, getting out: A plan for postsecondary student success		*		*		*
NT Getting in, staying in, getting out: A plan for postsecondary student success		*		*		*
NT Revitalizing, enhancing and promoting Aboriginal languages: Strategies for supporting Aboriginal languages				*		*
ON Accessibility plan 2007-2008 Ministry of education		*		*		*
ON More ways to succeed in high school			*			
ON Reach every student: Energizing Ontario education		*				
ON Special equipment funding guidelines: Special equipment amount (SEA) and special incidence portion (SIP)	*	*				
ON Special education transformation: The report of the co-chairs with the recommendations of the working table on special education			*			
PE Department of education annual report 2005-2006			*			
PE Annual activity report 2000-2001: Official languages in education and special investment measure special investment report 2001		*	*			

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**student diversity**	**program opportunities**	**access to resources for special needs**	**individualization**	**learning cultures**	**dealing with social issues**
PE Education and early childhood development accelerated apprenticeships	*	*				
QC Adapting our schools to the needs of all students: Plan of action for special education	*		*			
QC ADHD working together to provide better support for young people	*	*	*			
SK 2006-2007 annual report			*	*		
SK Building communities of hope		*				
SK First Nations & Metis education	*					*
SK Caring and respectful schools: Bullying prevention: A model policy	*					*
SK Saskatchewan learning: Pre-K-12 continuous improvement framework guide	*	*				
SK E learning satellite network		*				*
SK Processes and partnerships: Rural community school implementation guide						*
SK School plus at a glance		*				
SK Provincial budget performance plan KidsFirst strategy						*
YT Funding for correspondence courses			*			*
YT First Nations programs and partnerships		*				*
YT Safe and caring schools policy		*				*
YT Airfare/ travel allowance						*
YT Technology assisted learning			*			

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**delivery options**	**innovative planning**	**safe schools**	**partnerships**	**school contributing to community life**	**communication between the stakeholders**
AB Cycle 3 AISI project summaries and results		*				
AB Programs of study Aboriginal languages		*		*	*	
AB Government of Alberta - Alberta children and youth initiative (ACYI)			*		*	
AB Supernet backgrounder Kindergarten to grade 12 (K-12)	*			*		
AB Education annual report 2006 - 2007		*	*			
AB Planting the seeds growth in rural education: A series of choices	*	*		*	*	
AB Videoconferencing in Alberta	*	*		*		
BC Policy document Strongstart BC early learning centre				*	*	*
BC Ministry of education task force on rural education	*				*	
BC Facing our fears: Accepting responsibility of the safe schools task force			*			
MB Supporting Manitoba's children and families					*	

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**delivery options**	**innovative planning**	**safe schools**	**partnerships**	**school contributing to community life**	**communication between the stakeholders**
MB Moving forward: Manitoba's priorities for the future				*		*
MB Technical vocational initiative		*		*		
NB 2006-2007 annual report education		*		*	*	*
NB A benchmark report on the targets of when kids come first - 2007			*		*	*
NB Becoming the best: An update on public education initiatives	*	*		*		
NB Connecting care and challenge: Tapping our human potential			*			
NL All the skills to succeed: Report of Newfoundland and Labrador skills task force	*			*		*
NL Focusing on students: ISSP and pathways commission		*		*	*	*
NL Government delivers on its vision for excellence in the K - 12 school system			*	*	*	
NL Supporting learning: Report on the ministerial panel on educational delivery in the classroom	*					
NS Minister's review of services for students with special needs						*
NU Adult learning strategy				*	*	*

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**delivery options**	**innovative planning**	**safe schools**	**partnerships**	**school contributing to community life**	**communication between the stakeholders**
NU Capital standards and criteria			*			
NU Early childhood development update report 2003/2004				*	*	
NU Bill 21 education act					*	*
NT Building on our success: Strategic plan 2005-2015					*	
NT Developmental directive for career development across the lifespan				*		
NT Framework for action early childhood development				*	*	*
NT Getting in, staying in, getting out: A plan for postsecondary student success		*		*		
NT Revitalizing, enhancing and promoting Aboriginal languages: Strategies for supporting Aboriginal languages		*				
ON More ways to succeed in high school				*		
ON Reach every student: Energizing Ontario education			*			*
ON Special education transformation: The report of the co-chairs with the recommendations of the working table on special education		*				
PEI Education and early childhood development accelerated apprenticeships				*		
SK 2006-2007 annual report	*					
SK First Nations & Metis education				*		

THEME: LEARNING EXPERIENCE						
DOCUMENT or WEB ARCHIVE TITLE	**delivery options**	**innovative planning**	**safe schools**	**partnerships**	**school contributing to community life**	**communication between the stakeholders**
SK Caring and respectful schools: Bullying prevention: A model policy			*		*	
SK Saskatchewan learning: Pre-K-12 continuous improvement framework guide						*
SK E learning satellite network	*					
SK Early childhood development progress report 2005/06				*		
SK Processes and partnerships: Rural community school implementation guide				*	*	*
SK Youth career discovery				*		
SK School plus at a glance				*	*	*
SK Provincial budget performance plan KidsFirst strategy				*	*	
YT Funding for correspondence courses		*				
YT First Nations programs and partnerships					*	
YT Safe and caring schools policy				*		
YT Student living allowance	*	*				
YT Airfare/ travel allowance		*				
YT Technology assisted learning		*				

THEME: TEACHING EXPERIENCE					
DOCUMENT or WEB ARCHIVE TITLE	recruiting	professional development	reduce high workloads	sub pools, bus drivers, support personnel	multi age multi grade
AB Class size initiative	*		*		
AB Planting the seeds growth in rural education: A series of choices		*			
AB Videoconferencing research report		*			
BC Ministry of education task force on rural education		*			
MB Independent Together Supporting the Multilevel Learning Community					*
NB A benchmark report on the targets when kids come first		*			
NB Connecting care and challenge: Tapping our human potential		*			
NL Education and our Future: A roadmap to innovation and excellence	*	*			
NL Supporting learning: Report on the ministerial panel on educational delivery in the classroom		*			
NS Audit of teaching assignments: An integrated analysis of teacher education background and courses taught October 2007	*				
NS Nova Scotia public education teacher supply and demand: 2007 update report	*			*	
NT Towards excellence: A report on postsecondary education in the Northwest Territories					*
NT Strategy for teacher education 2007-2015	*	*			
ON Reach every student: Energizing Ontario education		*			
ON Special education transformation: The report of the co-chairs with the recommendations of the working table on special education		*			
PE Staffing and funding program review: Proposed instructional staffing model			*		

THEME: TEACHING EXPERIENCE			
DOCUMENT or WEB ARCHIVE TITLE	**collective agreements**	**teaching by non-certified teachers**	**collaboration/teams**
AB Integrated results analysis	*		
AB Planting the seeds growth in rural education: A series of choices			*
AB Students get a stellar education: Video conferencing		*	*
NS Agreement between the minister of education of the province of Nova Scotia and the Nova Scotia teachers union 2005-2008	*		
NS Department of Education business plan-2007-08			*
NU Collective agreement between the Nunavut employees union and the minister responsible for public service act	*		
NT Towards excellence: A report on postsecondary education in the Northwest Territories		*	

THEME: INFRASTRUCTURE NEEDS			
DOCUMENT OR WEB ARCHIVE TITLE	**access to ICT**	**facilities**	**transportation**
AB Financial information		*	
AB Funding manual for school authorities 2008-2009		*	*
AB Innovative classrooms: About innovative classroom technology	*		
AB Planting the seeds growth in rural education: A series of choices	*		
AB Supernet backgrounder Kindergarten to grade 12 (K-12)	*		
AB Videoconferencing in Alberta	*		
AB Videoconferencing research report	*		
MB The Signal			*
NB 2006-2007 annual report: Education		*	*
NB A benchmark report on the targets when kids come first	*		
NL Government delivers on its vision for excellence in the K - 12 school system		*	
NL Supporting learning: Report of the Ministerial panel on educational delivery in the classroom	*		
NL Department of education: School bus transportation policies			*
NL Department of education: Strategic plan April, 2008- March 2011		*	
NU Report of the Nunavut broadband task force	*		
NU Capital standards and criteria		*	
NT Capital standards and criteria department of education government of Nunavut		*	
ON Reach every student: Energizing Ontario education		*	
PE Communication and information technology in the public school system: Strategic plan	*		
SK 2006-2007 annual report	*		
SK CommunityNet programs and services	*		
YT Education act: Student transport regulations			*

YT Technology assisted learning	*		

THEME: EDUCATIONAL FINANCE	
DOCUMENT OR WEB ARCHIVE TITLE	**budget/finance**
AB Financial information	*
AB Funding manual for school authorities 2008-2009	*
AB Integrated results analysis	*
AB Supernet backgrounder Kindergarten to grade 12 (K-12)	*
AB Budget 2008 highlights	*
BC Budget and fiscal plan 2008/09-2010/11	*
BC Province of British Columbia strategic plan 2008/09-2010/11	*
BC Budget 2008: Ministry of education budget 2008/09-2010/11	*
BC Service plan 2008/09-2010/11 ministry of education resource summary	*
MB Manitoba citizenship, education and youth: Annual report 2006-2007	*
MB Supporting Manitoba's children and families	*
MB Manitoba budget '08: Opportunity and stability: Moving forward on Manitobans' priorities	*
NB 2006-2007 annual report: Education	*
NB A benchmark report on the targets when kids come first	*
NL Financial information 2006-2007	*
NL Government delivers on its vision for excellence in the K - 12 school system	*
NL Supporting learning: Report of the Ministerial panel on educational delivery in the classroom	*
NL Department of education: Strategic plan April, 2008- March 2011	*
NS Department of education business plan 2007-08	*
NU Capital standards and criteria	*

NU Nunavut's early childhood development expenditures and programs	*

THEME: EDUCATIONAL FINANCE	
DOCUMENT OR WEB ARCHIVE TITLE	**budget/finance**
NT Capital standards and criteria department of education government of Nunavut	*
NT 2003-2004 School funding framework	*
NT 2002-2003 School funding framework	*
ON 2008 Ontario budget backgrounder: Strengthening Ontario's economy by investing in education	*
ON Ontario's budget 2008: Chapter 1 section A: A stronger Ontario: Building skills and creating jobs	*
ON Ontario's budget 2008: Chapter 1 section A: A smarter Ontario: Excellence in publicly funded education	*
ON Ministry of finance: Publicly accounts of Ontario 2006-2007: Ministry statements and schedules	*
ON Reach every student: Better results for Ontario's students	*
ON Legislative grants 2003-2004: Rural education strategy	*
ON Reach every student: Energizing Ontario education	*
ON Special equipment funding guidelines: Special equipment amount (SEA) and special incidence portion (SIP)	*
PE Department of education annual report 2005-2006	*
PE Backgrounder: Education budget 2007-2008	*
QC Budget annuel de fonctionnement 2008-2009 des cegeps	*
SK 2008-09 provincial budget summary	*
SK 2006-2007 annual report	*
YT 2008 - 2009 budget address	*
YT Financial information 2008-2009	*
YT Education: Vote 03 department of education	*
YT Funding for correspondence courses	*
YT First Nations programs and partnerships	*

THEME: INTER-JURISDICTIONAL COLLABORATION					
DOCUMENT or WEB ARCHIVE TITLE	**local freedom**	**reducing barriers**	**access to research**	**monitor and track new policy**	**interdepartmental communication**
AB Government of Alberta - Alberta children and youth initiative (ACYI)					*
AB Education annual report 2006-2007	*				
AB Facts on funding support to ACOL		*			*
AB Innovative classrooms					*
AB Planting the seeds growth in rural education: A series of choices					*
AB Supernet backgrounder Kindergarten to grade 12 (K-12)		*			
AB Technology in schools: Video conferencing		*			
BC 2007-2008 District accountability contracts					*
BC Balanced budget 2008: Goals, objectives, strategies and measures				*	
MB Supporting Manitoba's children and families		*		*	*
MB French second language revitalization program Manitoba education	*	*			
MB Moving forward: Priorities for future		*			*
NB A benchmark report on the targets when kids come first				*	
NL Provincial apprenticeship and certification board activity plan		*			
NS Department of education business plan 2007-08					*
NU Adult learning strategy		*			*
NT Building on our success: Strategic plan 2005-2015		*		*	
NT Career development across the lifespan					*
NT Framework for action: Early childhood development			*		

THEME: INTER-JURISDICTIONAL COLLABORATION					
DOCUMENT or WEB ARCHIVE TITLE	**local freedom**	**reducing barriers**	**access to research**	**monitor and track new policy**	**interdepartmental communication**
NT Towards excellence: A report on postsecondary education in the Northwest Territories			*		
NT Youth in transition study					*
ON Accessibility plan 2007-2008 Ministry of education		*		*	*
ON Published results-based plan 2007-08: Ministry of training, colleges and universities		*			
PE Findings of the professional development review committee				*	
QC Strategic plan 2000-2003				*	
SK 2006- 2007 annual report				*	
SK Saskatchewan learning: Pre-K-12 continuous improvement framework guide					*
SK Provincial budget performance plan KidsFirst strategy					*
SK School plus at a glance					*
YT 2008-2009 budget address		*			*

THEME: INTER-JURISDICTIONAL COLLABORATION		
DOCUMENT or WEB ARCHIVE TITLE	**collaboration between provincial and federal governments**	**partnerships with postsecondary/ work**
AB Government of Alberta - Alberta children and youth initiative (ACYI)	*	
AB Facts on funding support to ACOL	*	
AB Planting the seeds growth in rural education: A series of choices	*	
AB Supernet backgrounder Kindergarten to grade 12 (K-12)	*	
MB Supporting Manitoba's children and families	*	
MB Moving forward: Priorities for future	*	
NL All the skills to succeed: Report of Newfoundland and Labrador skills task force	*	*
NL Provincial apprenticeship and certification board activity plan		*
NL Department of education: Strategic plan April, 2008- March 2011		*
NS Department of education business plan 2007-08	*	*
NU Adult learning strategy		*
NT Career development across the lifespan		*
NT Youth in transition study	*	
ON Published results-based plan 2007-08: Ministry of training, colleges and universities		*
ON More ways to succeed in high school		*
PE Education and early childhood development accelerated apprenticeships		*
SK E learning satellite network		*
SK Provincial budget performance plan KidsFirst strategy	*	

Appendix C
Interview Protocols

(School Principals)

This interview protocol has summarized the current discussions and research on rural education that has occurred in Manitoba over the past three years. Please feel free to elaborate on any of the points of discussion, and to offer any other ideas that may not be addressed in this summary.

1. In what ways has your school developed creative and innovative opportunities for enhancing the **learning experience** of students? You may consider the following topics in your response:
   - Dealing with increasing diversity of student needs;
   - Individualization (content/strategies);
   - Opportunities for programming;
   - Developing learning cultures;
   - Access to resources for special needs students and student services such as mental health;
   - Dealing with social issues: transience, SES, family dynamics, cultural diversity, health;
   - Student service delivery options and flexibility;
   - Innovative planning processes;
   - Creating safe and welcoming schools;
   - Partnerships with community groups, business, neighbouring school divisions;
   - School contributions to community life; and,
   - Communication between stakeholders

2. In what ways has your school developed creative and innovative opportunities to enhance and address challenges of the **teaching experience**? You may consider the following topics in your response:
   - Recruiting: General, specialty, student services;
   - Access to professional development (EAL, behavioral management, social issues) for professional and nonprofessional staff;
   - Reducing high workloads;
   - Accessing substitute pools for teachers, bus drivers, support personnel;
   - Multi-age, multi-grade classrooms;
   - Collective agreement benefits;
   - “Out of field” teaching assignments or non-certified professionals; and,
   - Opportunities for collaboration/teaming.

3. In what ways has your rural school developed innovative and/or creative ways to address **infrastructural needs?** You may consider the following topics in your response:
   - Access to ICT: learning beyond school, access to high-speed internet, cross-divisional partnerships, course development/delivery and PD;
   - Facilities: renovations, capital projects, accommodating increasing and decreasing student enrolment, community partnerships for innovative and multiple-use facilities; and,
   - Transportation—bussing costs, route length, bus ride length.

4. a. What are some of the creative ways that your school has managed to finance its educational priorities and activities outside of the annual provincial educational **financial** structure?
   b. What suggestions would you have to improve the way in which education is currently financed so as to address some of the issues facing rural schools?

5. In what ways has your rural school created opportunities for developing inter-agency and/or inter-**jurisdictional** capacity? You may choose to consider the following:
   - Local freedom and flexibility to explore options, pursue partnerships and institute changes;
   - Mechanisms for reducing barriers between community agencies and government departments for resource sharing and collaboration between school divisions and other entities;
   - Access to research about effective policy and/or practice in other jurisdictions;
   - Developing monitoring and tracking processes to assess the effectiveness of new policy directions and/or program innovations; and,
   - Partnerships with post-secondary and work.

Thank you for being willing to share with others the good work that is being done in rural schools across Manitoba!

Interview Protocol
(Ministry Personnel)

This interview protocol has summarized the current discussions and research on rural education that has occurred in Manitoba over the past three years. Please feel free to elaborate on any of the points of discussion, and to offer any other ideas that may not be addressed in this summary.

1. In what ways has the ministry in which you work developed creative and innovative opportunities for enhancing the **learning experience** of students that may be beneficial for rural schools? You may consider the following topics in your response:
   - Dealing with increasing diversity of student needs;
   - Individualization (content/strategies);
   - Opportunities for programming;
   - Developing learning cultures;
   - Access to resources for special needs students and student services such as mental health;
   - Dealing with social issues: transience, SES, family dynamics, cultural diversity, health;
   - Student service delivery options and flexibility;
   - Innovative planning processes;
   - Creating safe and welcoming schools;
   - Partnerships with community groups, business, neighbouring school divisions;
   - School contributions to community life; and,
   - Communication between stakeholders

2. In what ways has the ministry in which you work developed creative and innovative opportunities to enhance and address challenges of the **teaching experience** that may be beneficial for rural schools? You may consider the following topics in your response:
   - Recruiting: General, specialty, student services;
   - Access to professional development (EAL, behavioral management, social issues) for professional and nonprofessional staff;
   - Reducing high workloads;
   - Accessing substitute pools for teachers, bus drivers, support personnel;
   - Multi-age, multi-grade classrooms;
   - Collective agreement benefits;
   - “Out of field” teaching assignments or non-certified professionals; and,
   - Opportunities for collaboration/teaming.

3. In what ways has the ministry in which you work developed innovative and/or creative ways to address **infrastructural needs?** You may consider the following topics in your response:
   - Access to ICT: learning beyond school, access to high-speed internet, cross-divisional partnerships, course development/delivery and PD;
   - Facilities: renovations, capital projects, accommodating increasing and decreasing student enrolment, community partnerships for innovative and multiple-use facilities; and,
   - Transportation—bussing costs, route length, bus ride length.

4. What are the current means of financing education in your province/territory? Please address the following factors:
   - Taxation structure
   - Funding Formula (base, additional factors, and additional supports from ministries)
   - "Extra opportunities" for funding outside of local/provincial/territorial coffers
   - Spending capacity (including surplus)
   - Provincial/territorial mandates/priorities and level of support for them

5. In what ways has the ministry in which you work created opportunities for developing inter-agency and/or inter-**jurisdictional** capacity? You may choose to consider the following:
   - Local freedom and flexibility to explore options, pursue partnerships and institute changes;
   - Mechanisms for reducing barriers between community agencies and government departments for resource sharing and collaboration between school divisions and other entities;
   - Access to research about effective policy and/or practice in other jurisdictions;
   - Developing monitoring and tracking processes to assess the effectiveness of new policy directions and/or program innovations;
   - Inter-departmental communication and policy coordination at the provincial/territorial level;
   - Collaboration between provincial/territorial/federal/First Nations gov'ts); and,
   - Partnerships with post-secondary and work

Thank you for your cooperation.

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Manitoba