North East Understanding the Early Years



Community Mapping Study of Children in Northeast Saskatchewan

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Disclaimer

The views expressed in this report are the authors and do not necessarily reflect the opinions of Human Resources and Social Development Canada (HRSDC) or the Federal Government. All computations presented here were prepared by the authors.

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The changing nature of community programs and services adds complexity and some limitations to reporting on the characteristics of a community. The resources collected and studies for this report are not intended to be an exhaustive list, but rather to represent an important next step in understanding the assets and challenges of Northeast Saskatchewan. Issues concerning the quality and effectiveness of programs listed and offered are beyond the scope of this study. North East UEY and SPHERU have done their best in updating the current inventory of community program offerings. However, any omissions or errors due to incomplete data are not intentional.

Photos of children are used with parent permission and courtesy of the 0-3 Years Early Childhood Task Force and North East Understanding the Early Years.

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Brenda Ives, Community Coordinator for North East Understanding the Early Years

Thunda Ames

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Executive Summary

Community mapping is a way to illustrate the links between families, communities and children's development, to bring about positive changes. This study was commissioned to first discover how ready our children are to begin kindergarten. Through interviews and evaluation we discovered much strength within our community, enabling families to provide healthy environments for their children. We also discovered several challenges which may prevent our children getting the optimal environments they need. Even though much work is yet to be accomplished, this study also brings to light how we have merged our strengths and our challenges to form a platform from which we can discuss, enhance and ultimately provide the necessary tools and resources to provide the best possible environment for our children to grow and thrive.

The aim of this study is to build on an already established knowledge base of factors that promote children's school readiness and to learn what factors in local communities promote or hinder children's readiness to learn. Through identification of a community's strengths and challenges, this study aims to provide a catalyst to mobilize communities and inspire action. Ultimately, it is our hope that this Community Mapping Report will inspire community action plans that will result in improved wellbeing of children.

"Readiness to learn" is understood to be a broad and holistic concept measured by looking at physical, social, emotional, linguistic and cognitive skill development in children. In 2006, kindergarten teachers in Northeast Saskatchewan evaluated each of their students using the Early Development Instrument. This Community Mapping Report provides information about children, their families and communities, and illustrates the relationship between the environment in which children live and play and their outcomes.

For the purposes of this study, the region under consideration is the northeast region of Saskatchewan as defined by the boundaries of the Northeast Regional Intersectoral Committee, which follows closely the boundaries of the Kelsey Trail Health Region (KTHR). The northeast region is a large region with a varied geography. As a *community of communities*, the northeast includes a diverse population of Cree and Saulteaux First Nations communities, Métis, French, and Hutterite communities marked by small rural communities and larger urban centres. According to the 2001 Census, the three First Nations communities had populations between 300 and 900; ten small rural community populations numbered under 500; five urban community populations ranged from 500 to 4000 people; and two small urban centres between 4000 and 6000 people. Each of these communities were considered throughout this study and offered a population base of children between the ages of 0 and 6 years numbering 3160, 404 of which were measured in this study.

It is commonly accepted that healthy children emerge from healthy families and healthy families are promoted and supported through healthy communities. Community resources contribute to positive child outcomes, and understanding the distribution of resources can aid in identifying any gaps that may exist, which may provide barriers in attaining the optimal "readiness to learn" level. The northeast regional community strengths include education resources, health resources, and recreation resources. A number of high quality programs and services are distributed throughout the region. However, the majority of programs and services are clustered in the small urban villages and towns. Since much of the population is distributed throughout the region, lack of public transportation and diminished mobility may provide a barrier to many families and children wishing to participate in these programs. A significant amount of educational

programming and resources exists within the northeast region and is considered to be one of the most significant strengths of this community. Delivering home-based services to children with developmental delays through the North East Early Childhood Intervention Program (NEECIP), the Northeast has been able to overcome the geographical barriers that may result in some families' reduced ability to access their programs. Many educational programs are brought directly to the families within their own communities. Also considered a significant strength is the access to and provision of health resources within the northeast region. Support to the health of children and families in the entire Northeast is provided by the Kelsey Trail Health Region. The number and quality of healthcare related programs are community strengths, contributing to the wellbeing of children and their families. The availability and ease of access to recreational opportunities also serve in strengthening this community. The northeast region boasts an abundance of natural environments enhanced by volunteer-enabled programming and village recreation departments within each of the six study areas. These opportunities, along with those mentioned above, enable the northeast to provide vibrant and healthy communities that encourage the health and wellbeing of children.

This study presents the school readiness outcomes for children in North East UEY and compares each outcome with a Canadian average. Children in North East UEY as a whole lag behind their Canadian peers in Language and cognitive development and in Communication skills and general knowledge, two skill areas that are foundational to success in school. While kindergarten children in North East UEY generally lag behind their Canadian peers in Language and cognitive development and Communications skills and general knowledge, this is of particular concern for children in Red Earth and Shoal Lake. One in two children in these two communities is not ready for school in the Language and cognitive development and the Communication skills and general knowledge domains. This indicates that there is much more room to improve in these two. The North study area presents a picture that is possibly more complex than meets the eye. Generally, children in the North study area lag behind their Canadian peers in almost all school readiness domains. However, it is possible that the results observed for the North study area are influenced by the relatively dominant large town, Nipawin, than that of the surrounding rural areas. Results for the city of Melfort show that children there lag behind their Canadian peers in Social competence and Emotional maturity. Children in the East, West, and Central study areas do as well as if not better than their Canadian peers in almost all school readiness outcomes. The possible exception is in Language and cognitive development. Through analysis of these outcomes, it remains clear that much work is yet to be accomplished in order to close the gap in scores between these children and Canadian averages.

It is often said that "it takes a village to raise a child." However, it may also be true that it takes a "child to raise a village." The children in Northeast Saskatchewan have, through this study, raised the call for their parents, neighbours, teachers, and communities to help them set out on their start in life. The need for families and communities to participate in and ensure the best possible future for their children should not go unnoticed. While our study has considered children's early development from a teachers' perspective and the factors within the community that may affect these outcomes, the next step is to understand what can be done to help children increase their readiness to learn at school based upon this information. Through the process of working closely with Northeast communities, it is hoped that a strength based formation of networks within these communities will lead to better outcomes for our children.



Introduction

Communities where children live and play, and the socio-economic conditions and character of these communities, directly affect their development.

1. Introduction

The early years of a child's life, from conception to age six, is a fundamentally important period that lays the foundation for development, forms and shapes skills acquisition, and has a profound impact on a person's life course. The communities where children live and play, and more specifically, the socioeconomic conditions and characteristics of these communities, directly affect children's development (Willms, 2002; Shonkoff & Phillips, 2000). Access to programs, libraries, schools, hospitals, health care facilities, and childcare spaces all have an impact on a child's development and a parent's ability to provide adequate care and stimulating learning environments for their children. As well, community environments also affect children's ability and readiness to learn once they reach school (Shonkoff & Phillips, 2000).



This Community Mapping Report provides insight into children's development from birth to age six in Northeast Saskatchewan. Through maps and charts, it provides a visual representation of the communities and of the findings from a study conducted in the community, and suggests some actions to be taken in the future. The report is organized into six chapters:

- 1. *Introduction* introduces the study, briefly describing it, who has participated, and its goals and objectives;
- 2. The Northeast Saskatchewan Region has a description of the North East Understanding the Early Years community assets and strengths;
- 3. Community Strengths in North East UEY focuses on the strengths in the community;
- 4. Community Challenges in North East UEY describes some of the challenges the community faces;
- 5. School "Readiness" Outcomes in North East UEY describes a key component of the research, children's school readiness outcomes; and
- 6. Conclusions and Topics for Community Discussion has a description of the key findings, what these all mean, and gives some limited direction as to the next steps. In the style of true community development, we have not been prescriptive in stating next steps, but rather offered some suggestions, "food for thought," for the community to consider.

1.1 What is Understanding the Early Years about?

Understanding the Early Years (UEY) is a national research initiative that was created to address the role that communities play in the lives of children and their caregivers. The federal ministry of Human Resources and Social Development Canada has funded UEY projects in communities across Canada since 1999.

UEY is concerned about the developmental outcomes of children and their determinants, from birth to age six, and measures children's school readiness when they reach kindergarten. This research project also examines whether and how community factors influence school readiness. This information helps communities monitor children's progress to kindergarten and make decisions about what policies and programs they should consider implementing and strengthening in local communities. The longer term aim of the study is the development of community action plans which capitalize on existing community strengths and address gaps in order to enhance the wellbeing of children. In this way, the study also helps increase community capacity to conduct and use research knowledge.

Specifically, the project has the following objectives:

- To build knowledge about child development and parent and community factors (resources, supports, services) that support healthy child development and learning;
- To mobilize communities to take action based on local research evidence, to improve the developmental outcomes, wellbeing and competence of the communities' children;
- To develop and implement a framework for monitoring the community action plans in working toward sustainability of healthy development of children.

1.2 Who is involved?

The North East Understanding the Early Years¹ study is a three year research project (2005-2008) funded by Human Resources and Social Development Canada's Understanding the Early Years (UEY) initiative. The Northeast Regional Intersectoral Committee is the sponsoring body, with Kelsey Trail Health Region (KTHR) acting as the financially accountable partner. The Northeast Regional Intersectoral Committee (Northeast RIC) is a coalition of human service agencies and organizations (government and non-government) that have been working together over the past ten years, to enhance the wellbeing of young children, youth and families in

"Why are the children doing well? I think it is because of family involvement, participation in diverse activities, learning from older brothers and sisters and a strong parental commitment to helping children succeed" (Community Member)

Northeast Saskatchewan. The Healthy Children research team from the Saskatchewan Population Health and Evaluation Research Unit (SPHERU) at the University of Saskatchewan has partnered with North East UEY to develop this Community Mapping Report along with handouts and presentations for community dissemination.

¹ "North East Understanding the Early Years" is the term that will be used in this report to refer to the research study. This term is distinct from "Northeast Saskatchewan" which refers to a geographical area with defined boundaries, and is generally the site for the North East UEY Study. "Northeast Regional Intersectoral Committee" is an authorized body comprised of senior representatives from human services agencies with jurisdiction over coordinating human services in the Northeast Saskatchewan. "North East School Division" is the public school division that participated in the study.



The Northeast RIC appointed the North East UEY management committee, who hired a Community Coordinator. The Management Committee oversees the project and the Community Coordinator carries out project activities including data collection, completion of research reports, and communicating local results.

1.3 What does UEY measure?

This research initiative measures children's "readiness to learn" at kindergarten. Readiness to learn, in the study context, is understood to be a

broad and holistic concept, which is measured by looking at physical, social, emotional and language and cognitive skill development in children (Janus & Duku, 2007; Janus & Offord, 2007). In 2006, kindergarten teachers in Northeast Saskatchewan evaluated each of their students using the Early Development Instrument, the tool that measured children's readiness to learn in this study.

The study also measures the factors in communities that influence readiness to learn. North East UEY conducted a community survey of all programs and services for children aged 0-6 and their caregivers. We then analyzed this information, along with readiness to learn outcomes, and used ArcView mapping software to create community maps showing our findings. This Community Mapping Report provides information about children, their families, and their communities, and illustrates the relationship between the communities in which children live and play and their readiness to learn at kindergarten.

The social and economic characteristics of the communities included in this report were from 2001 Canada Census data. These census data were provided at the aggregated level of communities (ie, "study areas") as defined by the North East UEY study.

At a national level, Understanding the Early Years provides not only an overview of children in Canada as a whole, and their progression over time, but also gives an indication of children's development and school readiness by local neighbourhoods, communities, and provinces. This way, the information collected can help educators, program planners and policy-makers make decisions based on local information.

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² The term, "readiness to learn," although widely used, is a contested term. Some have commented that the term is too vague, that children are in fact born with a readiness to learn, and in its common use that it ignores the interplay between children and schools in that just as children need to be ready for school, schools also need to be ready to receive all children (Andrews & Slate, 2001; Emig, 2000; Pianta, 2002). In this report, 'readiness to learn' is used specifically to refer to the multidimensional concept measured by the Early Development Instrument. We also use the alternate and our preferred term, "school readiness," interchangeably throughout the report.

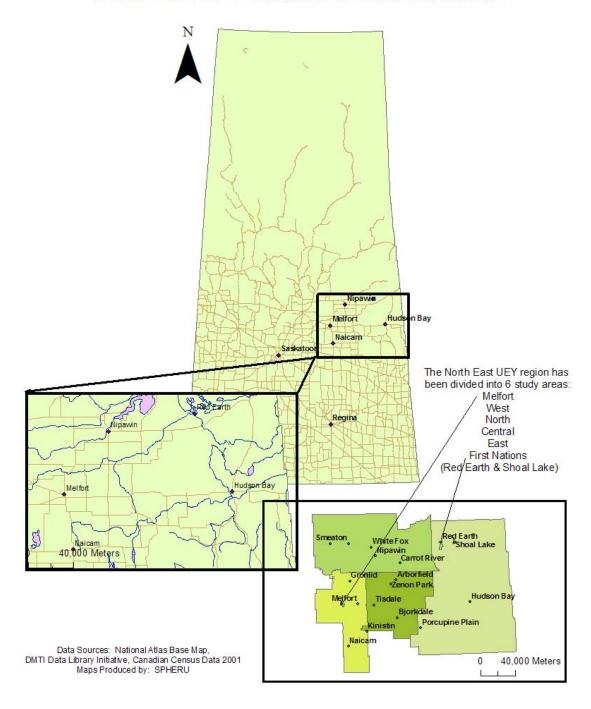


The North East Saskatchewan Region

The Northeast is a large region with a varied geography of cultivated farmland, rolling pasture and lightly forested areas.

1-1 North East UEY Location in Saskatchewan

North East UEY Location in Saskatchewan



2. The Northeast Saskatchewan Region

The Northeast is a large region with a varied geography of cultivated farmland, rolling pasture and lightly forested areas. The region reaches the Manitoba border in the east, includes the Saskatchewan River to the north and extends to the west to Melfort and fifty kilometres south of that city. Physically, the northeast region covers approximately 40,000 square kilometres. Melfort, Nipawin, and Tisdale are considered the major trading centres in the central part of the region. Hudson Bay is the major trading centre on the eastern edge. Red Earth First Nation, Shoal Lake Cree Nation, and Kinistin Saulteaux Nation are three First Nations reserves in the northeast (Cumberland Regional College, 2007; Kelsey Trail Health Region, 2006). (Please refer to Map 1 on page 14.)



The economy of the region is resource based and primarily agricultural, including grain farming, cattle and hog production, growing of specialty crops such as lentils and peas, and other specialty farming such as bison, elk, organic produce, and honey. A canola oil processing plant in Nipawin is a value-added feature of agricultural production. Agroforestry has expanded as farmers are seeking to find ways to use timber on their properties. Technology to create ethanol from biomass has been developed in Nipawin. Forestry operations

are present in the north and east of the region. One of the world's largest diamond fields extends across the northeast. Activity in diamond exploration and diamond mining has provided recent employment opportunities for the northeast. Oil and gas exploration is becoming more prominent. Industry in the northeast includes manufacturing of steel above ground fuel storage tanks in Tisdale and the production of agricultural implements west of Melfort (Industry and Economy of Nipawin, 2008; Town of Tisdale, 2008; Official Website of Kinistin Saulteaux Nation, 2008).

There are some notable population trends in the region. Overall, the population in the Northeast is older than the population of Saskatchewan, with an average age of 40, compared to the province's estimated average age of 36. The 40-54 year old age group represents the single largest part of the over-forty population, at 40% (Kelsey Trail Health Region, 2006). However, the fastest growing population is Aboriginal youth, and demographers expect this trend to continue. Fifty percent of the First Nations communities are under 20, compared to 26% for the non-aboriginal population (Northeast RNA, 2006, Cumberland Regional College). Aboriginal youth education levels and participation in the labour market, while improving, is increasing at a lower rate than that of the non-aboriginal population. This is a key area of interest for further development, as their skills are vital to the future prosperity of the region due to the anticipated labour market shortages and

demands (Cumberland Regional College, 2007). Cumberland Regional College serves higher education and lifelong learning needs in the region, with campuses in Hudson Bay, Nipawin, Melfort and Tisdale; they also offer some classes in community locations including First Nations in the region. They offer credit programs in association with the Saskatchewan Institute of Applied Sciences and Technology (Cumberland Regional College, 2007).

In January 2006, the Hudson Bay, Nipawin, Tisdale and Melfort School Divisions were amalgamated into the North East School Division, which provides education for children from prekindergarten to grade twelve. North East School Division is made up of 28 schools serving approximately 6,000 students. Challenges facing the division include declining enrolments, closure of small schools, increasing numbers of teachers who are retiring, changing family structures and transportation of students (Northeast RNA, 2006, Cumberland Regional College). First Nations communities provide band-controlled education programs for their children. In the community of Red Earth First Nation, 555 children attend nursery school to grade twelve classes at two First Nation operated schools. At Shoal Lake Cree



Nation, 230 children attend kindergarten to grade twelve at Wacihk School. Kinistin Saulteaux Nation provides education for approximately 75 children enrolled in nursery to grade nine classes. As a result of an education agreement entered in 2006 by Kinistin Saulteaux Nation and North East School Division, children in the Kinistin Saulteaux Nation continue their grade ten to twelve education at Tisdale Middle and Secondary School.

2.1 North East UEY's Study Population

For the purposes of this study, the region under consideration is the northeast region of Saskatchewan as defined by the boundaries of the Northeast Regional Intersectoral Committee. This region is in the North East School Division boundaries. The boundaries also follow closely the boundaries of the Kelsey Trail Health Region, which serves the study region.

The northeast region of Saskatchewan is a *community of communities*. It is made up of a culturally diverse population of Cree and Saulteaux First Nations communities, Métis, French, and Hutterite communities, small rural communities, and small urban communities.

The North East Understanding the Early Years study involved three First Nations communities with populations between 300 and 900, ten small rural communities with a population under 500,

five rural urban communities of 500 to 4000 people, and two small urban centres of 4000 to 6000 people. Physically, the northeast region covers approximately 40,000 square kilometres with a population of about 38,000. Based upon the 2001 Census, the population of children aged 0-6 years equals 3160 children. School readiness outcomes were measured in a kindergarten population of 404 students.

Participating School Boards

The following schools under the administration of the **North East School Division** participated:

- Arborfield School, Arborfield
- Bjorkdale School, Bjorkdale
- Broadway School, Melfort
- Brunswick School, Melfort
- Carrot River Elementary School, Carrot River
- Central Park Elementary School, Nipawin
- Gronlid Central School, Gronlid
- Maude Burke Elementary, Melfort
- Naicam School, Naicam
- Porcupine Plain Elementary
- Reynolds Central School, Melfort
- Smeaton School, Smeaton
- Star City School, Star City
- Stewart Hawke Elementary, Hudson Bay
- Sylvania School, Sylvania
- Tisdale Elementary School, Tisdale
- White Fox School, White Fox
- William Mason School, Choiceland
- Zenon Park School, École Zenon Park, Zenon Park



The following three **First Nations Schools**, each managed by its own Education Council and respective First Nations community, also participated:

- Nipwakawigamig Kinistin Education Centre, Kinistin Saulteaux Nation
- Ki-Waytinok School, Red Earth First Nation
- Wacihk Education Complex, Shoal Lake Cree Nation.

For the purpose of study, the northeast region has been divided into six study areas or "neighbourhoods." These six study areas are the focus for detailed analysis and study. The process of designating study areas within a predominantly rural area with low density of settlement involved first consulting the North East Understanding the Early Years management committee, followed by consulting representatives from Kinistin Saulteaux Nation, Red Earth First Nation and Shoal Lake Cree Nation. In defining study areas a number of criteria were given due consideration. First, to protect the privacy of individuals, it was necessary that a sufficient number of kindergarten children, defined as no fewer than 35 students, reside in each study area. As well, the boundaries of each study area needed to coincide with boundaries for census units or dissemination areas (DAs). Although each study area could not represent a true neighbourhood as commonly understood in an urban community, the boundaries were logically defined within each region. Using criteria of natural trading areas, historical school division boundaries and community characteristics, as well as geographic proximity, six study areas were delineated.

The six designated study areas were:

- The city of Melfort
- West representing the rural area surrounding Melfort
- Central representing Tisdale and the rural area surrounding Tisdale, including Kinistin Saulteaux Nation
- First Nations representing the Cree First Nations communities of Red Earth and Shoal Lake Reserves
- East representing the towns of Hudson Bay and Porcupine Plain and the surrounding rural area
- North representing Nipawin, Carrot River, White Fox, Choiceland and Smeaton and rural surrounding area.

³ Although "neighbourhoods" is used increasingly in research, planning and policy making, an authoritative or commonly accepted definition is difficult to find (Muhajarine, Vu, & Labonte, 2006). In some population centres, usually urban, there are commonly accepted understanding of how neighbourhoods are defined and what a neighbourhood constitutes. In this report we have attempted to use this term very sparingly, chiefly because we believe that the term is not relevant to the study setting. Instead, we use the term, "study areas," to refer to specific areas within the North East UEY with defined boundaries, and have been agreed to by the key stakeholders as sub-areas of interest for analysis and study

The table below shows the communities, schools and population represented in each of the six study areas.

Table 2-1 Communities, Schools and Population in North East UEY Study

	Melfort	West	Central	First Nations	North	East
Communities	Melfort	Naicam Gronlid Star City	Tisdale Bjorkdale Arborfield Sylvania Zenon Park Kinistin Saulteaux Nation	Red Earth Shoal Lake	Nipawin Carrot River White Fox Smeaton Choiceland	Hudson Bay Porcupine Plain
Schools	Broadway Maude Burke Brunswick	Reynolds Gronlid Naicam Star City	Tisdale Bjorkdale Arborfield Sylvania Zenon Park Nipwakawigamig	Ki- Waytinok Wacihk	Central Park Carrot River White Fox Smeaton Choiceland	Stewart Hawke Porcupine Plain
Total population of study area	5,355	6,465	7,840	1,270	10,765	5,170

The table that follows shows the total population of 0-6 year old children by each study area, the percentage of the population that the total of 0-6 year olds represents, and the number of kindergarten children who took part in the study.

Table 2-2 Distribution of children 0-6 years in North East UEY Study Areas and sample size

Study Area	0-6 year-old Population	0-6 year-olds as a percentage of total Population	Number of Kindergarten Children Surveyed EDI
Melfort	535	10%	72
West	555	8%	54
Central	550	7%	68
First Nations (Red Earth & Shoal Lake	290	23%	58
North	825	8%	100
East	405	8%	51

The largest *percentage* of children aged 0-6 years reside in the First Nations communities of Red Earth and Shoal Lake: 290 children in the 0-6 age range or 23% of the total population. However, the largest *total* number of children 0-6 years reside in the North study area: 825 children aged 0-6 years, which is 8% of the total population.

There are many factors that influence healthy child development – poverty, employment or lack of employment, education...

(Community Member)



Community Strengths in North East UEY

Communities in North East UEY have much to offer young children and their families...

3. Community Strengths in North East UEY



Families are key influences on the development of children. Parents have the major role in supporting the wellbeing of children who spend their formative years with their families. In turn, families are often shaped by the communities in which they live. Whether based on geography, ethnicity or interests (e.g., religious groups, parent groups), communities provide a foundation for family lives that can have a profound effect on the wellbeing of children. Healthy children emerge most often from healthy families and healthy families in turn are encouraged and promoted by healthy communities (Government of Canada, 2007).

3.1 Programs and Resources

Communities in North East UEY have much to offer young children and their families in terms of programs and services to enhance learning and healthy development of children. North East UEY

collected an inventory of community programs and services. This study looked at the distribution of community resources and examined the associations between resources and school readiness outcomes of children. A practical directory of these programs entitled *Early Years and Family Services Guide* has been published and is available online⁴ Gathering this knowledge helped to identify a number of community strengths which may contribute to positive developmental outcomes for children. To simplify classification a list of over 600 program resources entries were grouped into three general categories:

- Education Resources
- Health Resources
- Recreation Resources

Community resources contribute to positive child outcomes

"Our playground program is successful and well-attended because it is facilitated by friendly people in a safe environment. We have lots of opportunities for play, good snacks and best of all it is free. We just love to have fun."

(Recreation Board Member)

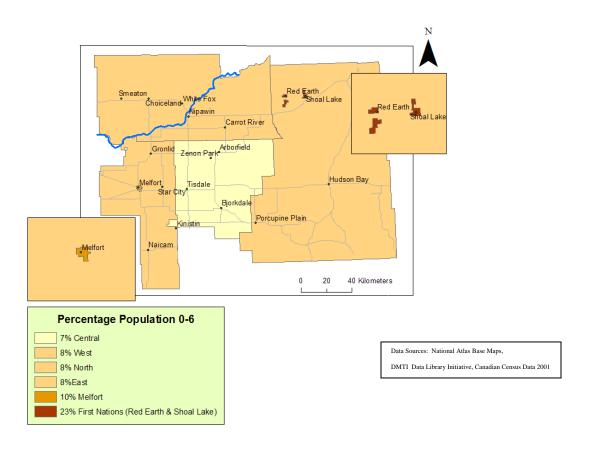
⁴ This guide is available online at http://earlyyears.nesd.ca, or by calling 306-752-6474.

and understanding the distribution of resources at the same time offers opportunities to address any gaps. Identifying problems and gaps is necessary to develop an accurate perception of the community and its children. However, from a community development perspective, creating solutions to bridge gaps begins by capitalizing on the strengths of the community (Kretzmann & McKnight, 1993). A number of high quality programs and services are distributed over the region; the maps in this report provide visual representation of the distribution of these programs within the six study areas. The majority of programs and services are clustered in the small urban villages and towns, which are the centres of trade and employment for families. While the number of programs and services available in our region appears to be a strength, the geographic distances to the urban centres within the northeast region and the lack of public transportation may be a barrier to participation in the programs.

"In my opinion, quality day care or preschool, early intervention and early learning experiences have a most positive influence on healthy child development."

(Day Care Director)

Map 3-1 Percentages of 0-6 Population in the North East UEY Study Areas



Map 3.1 (page 23) shows the percentages of 0-6 year-old children in the North East UEY study areas. This colour-coded map clearly shows the variation of the 0-6 year-old children residing in North East UEY study areas. As the colour deepens, the percentage of children 0-6 years of age increases. The Central study area has the lowest percentage of 0-6 year-old children (7%); the communities of Red Earth and Shoal Lake have the highest (23%). The largest number of children in the same age group resides in the North study area (825 children). Given this distribution of children, one would expect that many services and programs directed for the 0-6 year-old segment would need to be located in the North study area (where there is the largest number of children) and in Red Earth and Shoal Lake communities (where there is the largest percentage of young children).

3.2 Education Resources

Considering the relatively small population of the region, a significant number of education programs and resources exist throughout the northeast. In this category of community assets over 150 programs were available to support early learning (as listed in the Early Years and Family Services Guide). Education programs and resources depicted in the maps include: licensed childcare, preschools, pre-kindergartens, and kindergartens. Also included are literacy programs such as storytelling, playgroups, and programming specifically targeted to children at-risk. The structure of education resources includes informal community based playschools or parent run groups and formal learning opportunities funded or monitored provincially and federally, such as licensed childcare centres, pre-kindergartens, First Nations nursery school, kindergarten, and Aboriginal Head Start. Within the North East UEY Region both the formal and informal resources are assets.

In Maps 3.2 and 3.3, on pages 26 and 28 respectively, another layer of information is presented with the 0-6 year-old population percentages. They show the number of education programs that are available throughout the study areas, denoted by a circle. The size of circle represents the number of programs related to education located in a given site. The smaller the circle, the fewer the programs available; the larger the circle the more programs available. Maps 3.2 and 3.3 show the number of education programs and resources, and Map 3.3 presents the same information, adding in the distribution of public libraries.

Although this Community Mapping Study included all types of educational programs listed above, programs with secure funding, systematic monitoring of program quality, programming guidelines, training requirements for staff, and facilities standards would offer a higher quality of education for children. For example, research indicates that children attending licensed childcare centres where there is a high adult to child ratio, small group sizes, childcare providers with post-secondary education, well-defined spaces, and well-planned programs have better developmental outcomes (Report

"Good childcare should be a learning opportunity for children. Quality childcare in a positive environment with age appropriate activities, games and crafts, and good nutrition influences healthy child development. Social interaction with adults and other children is also important for children to learn."

(Child Care Provider)

on the State of Early Childhood Learning in Canada, 2007). Licensed childcare generally is of higher quality, since it is regulated, than is unlicensed, unregulated care. Because Aboriginal Head Start, pre-kindergarten and kindergarten programs receive government funding and are monitored, these programs are more likely to be of higher quality than some of the more informal community-based preschools or playschools.

Map 3.2 (page 26) tells us that Melfort, Tisdale, and Hudson Bay have the greatest number of educational resources. Nipawin has fewer programs, even though its population of children is larger than Tisdale and Hudson Bay. In the communities of Red Earth and Shoal Lake, where there is a higher concentration of young children, the number of education programs is lower. We would

expect more accessible programming related to education in these communities, not less.

"Communities need to offer good activities for children and parents."

(Community Member)

The northeast has addressed access to educational services through the North East Early Childhood Intervention Program (NEECIP). This program delivers home-based services to families in northeast Saskatchewan to maximize the learning potential of all children.

Services to families with preschool aged children with developmental delays or at risk for delayed development include home visits, educational toy and resource lending, consultations for family services planning, and assistance in transitions as children enter school. The NEECIP service area extends to all families and children in need in the northeast. The program has been funded provincially for twenty-six years. Beginning in 1989, services have been provided to children and families in First Nations communities. On this stable, sustained foundation, NEECIP staff have initiated or facilitated a number of programs to provide opportunities for children and their families, such as family literacy programs, parent and child play groups, centre based programs, and a preschool.

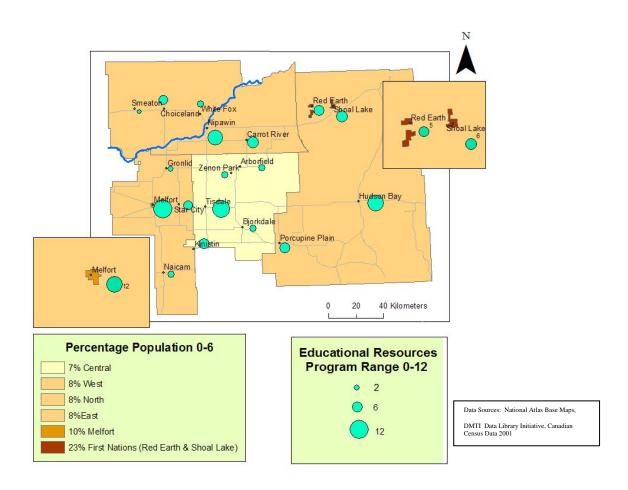
Schools are key institutions within communities who could creatively use their resources to facilitate a seamless delivery of educational opportunities for children. Within the North East School Division, schools in Melfort, Nipawin and Hudson Bay have been designated as Community

Schools by the provincial Ministry of Education. Each community school receives funding for a pre-kindergarten program targeted to vulnerable three and four year olds, and funding to offer other community-based programs for preschool children and their families such as playgroups, kids' kitchens, and family literacy programs. These activities are coordinated within a school by a dedicated community school coordinator. In First Nations communities, early learning programs



are funded federally. Aboriginal Head Start, nursery school, and kindergarten are available for all three, four and five year-old children. Licensed childcare centres also operate in First Nations communities. Nursery School is located in the elementary schools at Kinistin, Red Earth, and Shoal Lake. Further, in Arborfield, Star City, Gronlid, White Fox, Choiceland, Bjorkdale and Hudson Bay principals have invited community preschools to use classroom space within their elementary schools. Children enrolled in pre-kindergarten, nursery school and preschools located physically within elementary schools have access to the resources of the school such as the playground equipment, gymnasiums, library, and kindergarten classroom, and children become familiar with the formal school setting.

Map 3-2 Education Programs & Resources



Map 3.3 (page 28) combines the same information presented in Map 3.2 and adds the distribution of libraries in communities in North East UEY region. The public libraries in the northeast are all part of the Wapiti Regional Library system, which has 55 branches in North Central Saskatchewan between Chitek Lake and the Manitoba border. Library cards are free, and the Regional Library holds 440,000 items that can be borrowed from any branch. Many of the branches offer children's programming, such as preschool story hours for toddlers and young children, Read and Play Book Boxes, and summer reading programs. Several public libraries are located in five study areas. The First Nations communities of Red Earth, Shoal Lake and Kinistin do not have public libraries. Each library varies in size of holdings, hours of operation and number and types of programs offered. Melfort, Hudson Bay, Nipawin, and Tisdale branches of the Wapiti Regional Library are open an average of 55 hours and 6 days per week. Arborfield, Naicam, Star City, Bjorkdale and White Fox are open 3-5 days for a total of 13-21 hours per week. Carrot River, Choiceland, Gronlid and Smeaton are open 2 days or 8 hours each week.

Shoal Lake has developed creative ways to meet the needs for literacy resources. For example, Wacihk School in Shoal Lake has developed a number of literacy programs to close the gap created by the lack of public library resources. Community members in Shoal Lake may borrow items from the school library from 9am-4pm, Monday to Friday, throughout the school year. They also operate a family reading program twice a month, and a weekly reading program for five and six year olds. All three First Nations communities are served through NEECIP, which, in addition to providing services for children with developmental delays, offers family literacy programming.

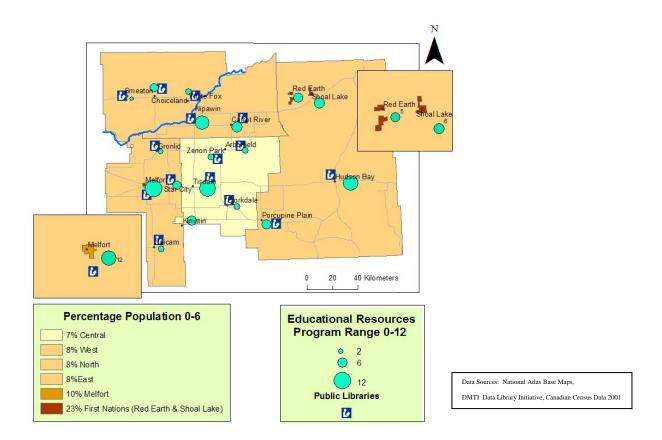
Having our own school...has strengthened our community. The school is a central point for families and children."

(Community Member)

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⁵ Twenty-six theme based kits with books, toys and learning materials for children in three age groups – babies, toddlers and preschoolers, have been distributed, funded by North East UEY.

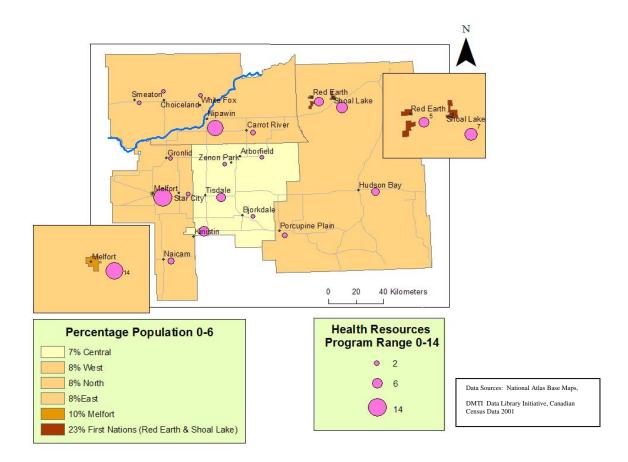
Map 3-3 Education Resources & Public Libraries



3.3 Health Resources

Access to resources to support the health of children and families contributes to healthy development of children. Health care services for all people in Northeast Saskatchewan are provided by Kelsey Trail Health Region. The First Nations communities of Red Earth, Shoal Lake, and Kinistin access clinical services such as doctors and hospitals. In addition the First Nations offer their own Community Health Services and programs funded by the federal government and administered though First Nations government. An inventory of health resources and programs gathered in 2005-2006 lists hospitals, child health clinics, primary health care clinics, mental health and addictions services and public health services as well as nutrition and family health programs as community assets. Map 3.4 (page 29) indicates the number and location of health resources including hospitals, clinics, counselling and birth, prenatal and family support services available to children and families in each of the six study areas throughout North East UEY. The map points out that Melfort and Nipawin have the greatest number of health related resources, which is commensurate with their relative population base.

Map 3-4 Health Resources



First Nations provide a range of community health programs utilizing a team approach to address issues affecting children and their families, including prevention programs such as the Canada Prenatal Nutrition Program, prevention of Fetal Alcohol Spectrum Disorder, the Good Food Box, breastfeeding initiatives, maternal home visitors, immunization services, dental health programs, and parenting and safety programs. On-reserve educational opportunities include licensed childcare, Aboriginal Head Start programs for three year olds, preschools for four year olds, and kindergarten for five-year olds. These education and health programs are administered by band governments who hire both aboriginal and non-aboriginal staff.

In addition to providing services the health care professionals, band health organizations and Kelsey Trail Health Region lead in developing and maintaining collaborative partnerships to provide programs and services to young children and their families. Funding and support from Kelsey Trail Health Region, North East School Division, the provincial government, and federal government have all contributed to sustaining these programs over the long term to ensure the learning and health needs of young children are met. It is important to recognize that many of these programs are comprehensive, often encompassing both education and health elements.

"Professional and local community teamwork is the key to achieving important goals in health care..."

(Community Health Staff Member)

Since health resources are free and universal, some financial barriers to access have been removed. Child health clinics, primary health care clinics, and doctor's clinics are available in all six study areas, reducing the travel distances for families to access health services and resources. The number, quality and

accessibility of health resources throughout Northeast Saskatchewan indicates that these assets are a community strength contributing to the wellbeing of children and their families. For example, a number of community-based clinical services are available at Red Earth, Shoal Lake, and Kinistin First Nations. In particular, in the North East UEY region, Kelsey Trail Health Region operates:

- Five hospitals
- Six Primary Health Care sites with advanced clinical nurses and primary health care teams facilitating treatment and prevention
- Child Health Clinics in eleven communities
- Mental Health counselling services in four communities
- Family physicians and surgeons in six communities
- One KidsFirst Targeted site
- One KidsFirst Regional Community Developer

KidsFirst Nipawin is an example of an important community health program targeted to vulnerable families with young children. KidsFirst is a provincial early childhood intervention program that helps families in vulnerable circumstances acquire the skills and resources to become the best parents that they can be and to have the healthiest children possible. The program enhances knowledge, provides support, and builds family strengths through home visitation, mental health and addictions services, early learning and childcare services, and referrals to other services as necessary. KidsFirst Nipawin has received provincial funding since 2002 (Government of Saskatchewan, 2006). Since 2002, over 167 families have benefited from the support of this program. In addition to serving the needs of targeted families, KidsFirst Nipawin has gained the

respect and trust of the community. The KidsFirst program manager and other staff have been willing to share their resources and expertise, and continue to partner with a number of organizations to better serve the needs of the targeted population and all children in Nipawin. KidsFirst Nipawin collaborates with, among others, the Nipawin Interagency Committee, Nipawin Integrated

"As far as strengths go, I know the Chief and Headmen give full support of the Head Start program. The school and health clinic share resources and provide good supports. If I had a wish for the kids they would have a big enough building, a good playground and lots of books."

(Community Member)

Services Committee, Nipawin Parks and Recreation, Central Park Elementary School and North East School Division, Nipawin Cooperative Daycare, and North East Early Childhood Intervention Program.



The KidsFirst Community Developer is a valuable regional health resource. Since 2002 the provincial government has funded the salary for KidsFirst community developers across the province. The Regional KidsFirst vision is that "all children enjoy a good start in life and are nurtured and supported by caring families and communities." In communities, supports and services are provided through partnerships between families, communities, service organizations, and governments. In the northeast the KidsFirst community developer is dedicated to initiating, assisting and supporting a number of community organizations and programs such as KidSport, Books for Babies, and participating in the North East Parenting Education Association and community interagency committees. The KidsFirst community developer is supervised by Kelsey Trail Health Region's Mental Health and Addiction Services department. Kelsey Trail Health Region with the KidsFirst Community Developer have influenced the development of the Parent Mentoring Program, population health programs, accessible nutritious foods, the Food for All Coalition and primary health care. The KidsFirst Community Developer cooperates and collaborates with professionals and managers in Public Health and Mental Health and Addictions. The KidsFirst Community Developer chairs the 0-3 Years Early Childhood Taskforce, and with the help of the Northeast Regional Intersectoral Committee, provides leadership for early childhood development activities in the region.

As a response to a presentation by Dr. Louis Rossetti about the importance of attachment in the early years, the 0-3 Years Early Childhood Taskforce was established. This coalition of early childhood professionals meets every six weeks. Their activities guide community action benefiting children in the early years of their development. Some examples of initiatives include facilitating Teacher Talk training to childcare workers and teachers, support of Books for Babies in communities, Family Fun Photo contest, the Early Years Partnership website, and Captive Audience poster campaigns.

Eastern Region II Métis Nation is a full service delivery agency whose mandate focuses on the Métis population; however, they operate on an open door policy to assist any individual in need. Services are provided throughout the northeast as needed or requested. Eastern Region II partners in a number of community-based and early childhood projects throughout the northeast, such as parenting classes, individual and group counselling, collective kitchens, mediation, addiction services and referrals to treatment, and assistance with justice issues, training, employment and education. Eastern Region II facilitates the federally-funded Canadian Prenatal Nutrition Program, and the Canadian Action Plan for Children.

"Group programs do really help the child, especially for the shy ones. When you live on a farm, you need to do
a lot of driving to take your children to any group programs."

(Community Member)

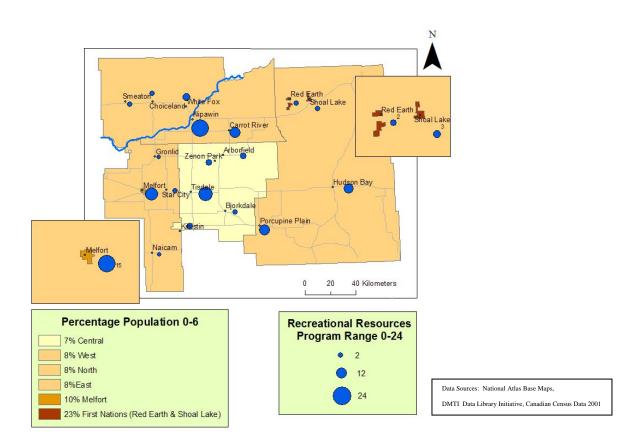


3.4 Recreation Resources

Vibrant communities need to provide recreational opportunities for families and children of all ages. The availability of recreation facilities and programs encourages positive physical, social, emotional, and cognitive development of children. In Northeast Saskatchewan there is an abundance of natural environments for exploration such as forests, farms, lakes, and rivers. The numerous Regional Parks and Greenwater Provincial Park are frequented often by many families during the summer months. There are playgrounds in all communities with playground equipment for children maintained and supported by volunteer groups and town or village recreation departments.

Map 3.5 (page 33) shows the number of recreational programs and facilities available in North East UEY. Recreation resources and programs that have been counted here include sports or music programming, such as dance, soccer, hockey, softball, gymnastics, and skating. Playgrounds, spray parks and indoor recreation facilities are also part of this tally. Not included in the recreational resources calculation are faith-based activities and regional or provincial parks and museums.

Map 3-5 Recreational Programs and Facilities



The communities with the greatest number of recreation programs and resources are Nipawin, Tisdale and Melfort, in that order. Hudson Bay and Porcupine Plain offer relatively high numbers of

programming for the size of their populations. The number of recreational resources available in the communities of Red Earth and Shoal Lake is relatively low, which is inconsistent given the high percentage of young children in this study area.

"My children have benefited from living close to their grandparents.

They have been a big help by providing love, support and emergency childcare. I rely on my family to help me raise my children."

(Community Member)

In the First Nations, cultural events are important social and recreational activities. Understanding one's cultural identity, which includes language, is an important value in the community. Although the people of Kinistin Saulteaux Nation speak English as a first language, participation in traditional and cultural activities including feasts, round and powwow dances, and traditional rite of passage ceremonies are valued activities. Hunting, fishing and berry picking are popular activities. Kinistin Saulteaux Nation organizes an annual family cultural camp. At Red Earth and Shoal Lake Cree is spoken as a first language. Band members also

participate in traditional activities similar to those described above. Red Earth has a youth choir, Oskayak Cree Singers, and runs a youth cultural camp in the summer, and youth cultural and parenting workshops. Shoal Lake runs a school cultural week, summer programs for children, and an annual diabetes educational and fundraising walk. Red Earth, Shoal Lake and Cumberland House First Nations hosted the 2004 First Nations Winter Games.

The communities of Melfort, Tisdale, Nipawin, and Hudson Bay have established *KidSport* committees to reduce financial barriers families may face in having children participate in sport activities. *KidSport* has a program that sponsors registration fees for

'First Nation language is most valuable. That is what is taught and encouraged by our elders — the backbone of the community. They stress that if our young people stop using their first language that is when we begin to lose our identity."

(Community Member)

children to participate in sports activities. In addition to *KidSport*, Nipawin has established a committee that facilitates the participation of children in cultural activities through registration fee sponsorship.

There are a number of excellent physical activity programs geared for young children and available in many communities such as CanSkate, Red Cross preschool swimming lessons, and Learn to Play Ball. Music for Young Children, a group preschool music program, is available in Melfort. The Vopni Music Studio provides group and individual music instruction for children in Tisdale and Zenon Park. The studio also organizes the annual Honey Bee Music Camp in Tisdale. This weeklong event features lessons with certified Suzuki teachers, Kinder Music, dance, music theatre, and crafts.



Community Challenges in North East UEY

All communities present a mixture of assets, which help children in their communities, and challenges

4. Community Challenges in North East UEY

In this section we turn to challenges communities face in raising children to take full advantage of the learning opportunities schools offer when they reach kindergarten. All communities present a mixture of assets, which help children in their communities, and challenges, which may hinder their optimal development. North East UEY is no different. As previous sections of this report have demonstrated, North East UEY provides a compelling set of factors or conditions that help children reach their potential. It is also the case, however, that some communities within North East UEY face challenges that, at this time, may not contribute optimally to children's health and development. These challenges, such as families with low income, unemployment, and lack of parental support are discussed in some detail in this chapter. Data for identifying these challenges are drawn from the 2001 census, which coincides with the year in which children who participated in this UEY study were born.

The factors that we present here have been shown in many other studies to hinder children's health and development (Willms, 2002; Pearl, Braveman, & Abrams, 2001; Shonkoff & Phillips, 2000; Hertzman and Keating, 1999; Duncan, Brooks-Gunn, & Klebanov, 1994). It is important to note that these risk conditions are presented at the community or population level, and therefore they are not necessarily associated with all individual children and families in the study. Also the factors we discuss are representative and are not meant to be a comprehensive array of risk factors. They are provided with the belief that a better understanding of factors that families and communities face could help address challenges, ultimately diminishing risks for children. Because these factors are representative, community members are encouraged to use additional information as they develop plans, make decisions, forge partnerships, and take action on behalf of children and families in Northeast Saskatchewan.

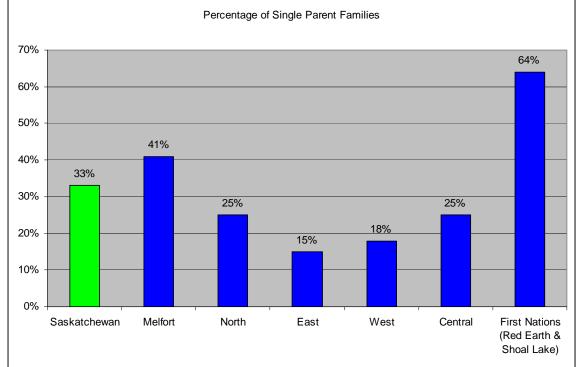
4.1 Single Parent Families

Chart 4.1 on page 37 shows the percentage of single parent headed families with children 0-6 years of age by North East UEY study areas. The first bar in this chart and in following charts, shown in green, represents the Saskatchewan provincial average. Using the Saskatchewan average as a comparison, we see that the First Nations communities of Red Earth and Shoal Lake have 64% of families with young children (0-6 years of age) headed by single parents compared to 33% for Saskatchewan. The city of Melfort also has a slightly larger proportion of single parent families than the average for Saskatchewan (41% versus 33%). It is notable that other study areas within North East UEY—North, East, West and Central—have significantly lower proportion of families headed by single parents. In fact, the proportion of single-parent families in the East study area is only half that of the provincial level (15% versus 33%).

Why is single parenting an important issue to consider in the context of children? It is not that some parents who raise children alone are not capable of raising them well. Rather, single parents often

face challenges in not having support at home, in the neighbourhood and in the community. Studies have repeatedly shown the many challenges in raising children alone without adequate supports. Studies have shown that children raised in single parent families, the majority of which are headed by women, often experience adverse outcomes at birth, challenges in school achievement, development, and other negative outcomes (Pearl et al, 2001; Roberts, 1997). Studies show that single-parent families are at greater risk for experiencing poverty, poor social conditions, and inadequate housing (Pearl, et al., 2001; Roberts, 1997). These factors alone present significant challenges to single-parent families; their ability to raise children is further compromised by lack of resources and opportunities in the immediate social environments (such as neighbourhoods, friends and relatives) as well as by unhelpful social policy and welfare regimes at the societal level (Muhajarine & Vu, 2008; Buka, Brennan, Rich-Edwards, Raudenbush, & Earls, 2003). A few studies have shown that single parent status doesn't always have to lead to poorer health outcomes in children. Single parents who have and raise children in supportive, stable and engaged neighbourhoods (i.e., high social capital) appear to have as much success as others in raising children with positive outcomes.

Chart 4-1 Percentages of single parent families with children 0-6 years by North East UEY study areas Percentage of Single Parent Families 70% 64%



4.2 Educational Attainment

Chart 4.2 on page 38 shows the proportion of adults, 20 years and up, who have not completed high school residing in North East UEY study areas and the comparable proportion for Saskatchewan. The proportion with less than a high school diploma was higher for all six study areas than that for the province. The First Nations communities of Red Earth and Shoal Lake have as much as 50% or more—with other study areas, with the exception of Melfort, slightly less—of their populations without a high school diploma. Parents' education levels have consistently been associated with their children's educational and health outcomes (Bradley & Corwyn, 2002). While it is generally desirable to get more education, a high school diploma is commonly accepted as a minimal standard necessary to effectively take advantage of opportunities in society (Ross & Wu, 1995). From this point of view, as much as half of the adult population in communities in the North East UEY would be considered to have an education level below the necessary minimum standard.

Educational Attainment - did not complete High School 70% 60% 60% 53% 50% 49% 48% 50% 41% 38% 40% 30% 20% 10% 0% Saskatchewan Melfort North East West Central First Nations (Red Earth &

Chart 4-2 Percentages of population 20 years and up in the North East UEY study areas who did not complete high school education

4.3 Renters

The next two sets of factors, proportion of the population who rent their homes ("renters") and proportion of population who reported that they had moved within the last year, relate to stability of location, investment in their homes, and even a deeper sense of connection to a specific locale in a community. Increasingly studies report that a longer term residence in a community, a sense of ownership and stability, and familiarity and opportunity to interact with neighbours and fellow members in a community contribute to better health and wellbeing not only in adults but also among children (Sampson, Morenoff, & Gannon-Rowley; Wilson, 1987). Chart 4.3 on page 39 shows that, with the exception of the city of Melfort, the percentage of renters in all other study

Shoal Lake)

areas within North East UEY is considerably lower than the provincial level. For families who live in North, East, West and Central study areas, to the extent that home ownership might contribute to stability, these results may bode well for children. In the First Nations communities of Red Earth and Shoal Lake housing is provided by the First Nations Band.

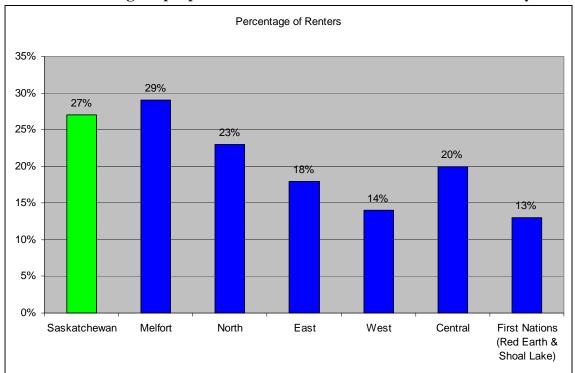


Chart 4-3 Percentage of people who rent their homes in North East UEY study areas

4.4 Mobility

Chart 4.4 on page 40 shows the percentage of the population who had moved at least once within the year before the census was taken. While frequent relocations of homes do not necessarily lead to negative outcomes, frequent moving has been linked to poor outcomes in children (Muhajarine, Vu, & Delanoy, 2003). Consistent with the previous chart on percentages of renters, these results show that most families in North East UEY have location stability, perhaps with the exception of those who dwell in the city of Melfort and in the First Nations communities of Red Earth and Shoal Lake. It is important to note that research has not shown a level of mobility (relocation of homes) in a community at or above which mobility is associated with negative outcomes in children. It is generally assumed that the higher the level of mobility in a community, the greater the risk that this might pose for children's development (Wilson, 1987).

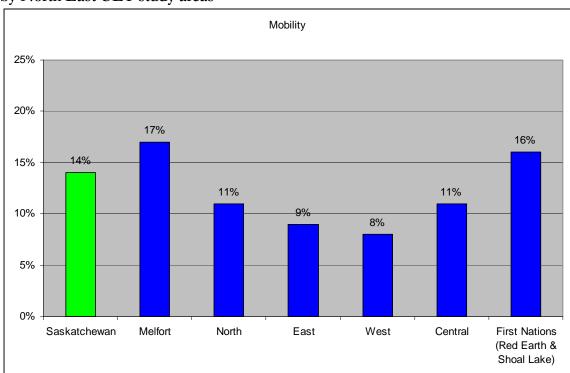


Chart 4-4 Percentage of people who moved within the year before census was taken in 2001 by North East UEY study areas

4.5 Unemployment

Chart 4.5 on page 41 shows the percentage of adult residents in the North East UEY study areas who were unemployed at the time of census in 2001. Compared to the Saskatchewan average of 6%, the First Nations communities of Red Earth and Shoal Lake had an unemployment rate of 40% in 2001. The North East UEY study areas East, West and Central also had considerably higher percentages of people who were unemployed compared to Saskatchewan's average.

Parents who are employed are better able to support their children economically. Studies have shown that young children of parents who are not employed are more likely to have problems at school (Guo, Brooks-Gunn, & Harris, 1996). The results for unemployment rates we report here are consistent with the relatively higher proportion of children living in low-income families, as employment is closely associated with income levels (Muhajarine, Vu, & Delanoy, 2003). Persistent unemployment and underemployment can add stress to families since employment is a critical factor in determining the socioeconomic conditions of a family.

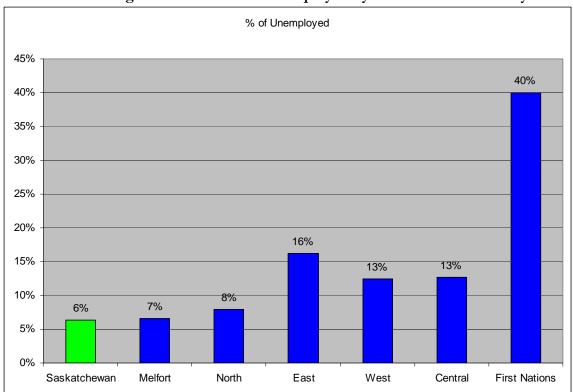


Chart 4-5 Percentage of adults who are unemployed by North East UEY study areas

4.6 Average Income and Government Transfers

Chart 4.6 on page 42 shows the average individual income and average government transfers to study areas within North East UEY and the comparable provincial averages. Average income includes income from all sources; government transfers include income from sources such as pensions, unemployment insurance, social assistance, child tax benefits and tax rebates. For each study area the bar graph shows the average total income and the average total government transfers. Compared to the Saskatchewan average, all study areas show slightly lower average incomes and correspondingly slightly higher government transfers. The First Nations communities of Red Earth and Shoal Lake show average total incomes that are lower than the provincial average. While the government transfers are higher, in these two communities income transfers are able to breach the income gap only somewhat, presumably leaving a large unmet income need.

Household income is a fundamental determinant of health and wellbeing not only in adults but for children as well. In fact, the well known phenomenon of "child poverty" is really a poverty of income resources in families. A large body of studies has shown that children who live in families that are income-poor experience poor developmental outcomes, poor health and poor educational outcomes (Shonkoff, 2006; Duncan, Brooks-Gun, & Klebanov, 1994). The income levels in North East UEY paint a picture that is not as bright as it ought to be for families and children, and it indicates persistent income gaps that exist in our society.

Average Income and Government Transfers

\$30,000
\$25,000
\$20,000
\$15,000
\$10,000

Chart 4-6 Average income and government transfers for families in North East UEY study areas

4.7 Summary of Findings

Melfort

North

East

\$5,000

\$0

Saskatchewan

By looking at these socioeconomic risk factors in the study areas, we can identify some key challenges. The average incomes in the North East study areas are lower than Saskatchewan average incomes. Research indicates that children in families with higher incomes have better developmental outcomes. When you consider the highest level of education attained, the percentage of the population with a high school education or less is greater than the Saskatchewan average, with 38% of the Saskatchewan population indicating that they have not completed high school. This indicates that there are lower levels of educational attainment in North East UEY communities. Higher levels of education of adults in the community positively influence developmental outcomes for children.

First Nations (Red Earth & Shoal Lake)

Central



School Readiness Outcomes in North East UEY

Children are born "ready to learn" ...

5. School "Readiness" Outcomes in North East UEY



This section of the report presents the school readiness outcomes of children who participated in the North East UEY study. First a profile of the children is presented detailing age, sex, ethnocultural background, first language spoken at home, and any special skills or needs shown by children as judged by their kindergarten teachers. Why school readiness is important, how it is measured, how to interpret the findings from the school readiness results are presented next. Then the school readiness results along with social risk scores are presented for each North East UEY study area. This section concludes with a summary of the school readiness findings across the North East UEY study.

5.1 Characteristics of the children who participated in the study

This study included 404 children in kindergarten from 22 elementary schools from the North East School Division and three First Nations. These children were enrolled in kindergarten at the time of Early Development Instrument (EDI) data collection, which was February 2006.

Table 5.1 on page 45 presents characteristics of the North East UEY kindergarten children who participated in the study. In total, data for 403 children were included in the study (one child had no data and dropped in further analysis). As would be expected, there are equal numbers of boys and girls in the sample. The average age of students at the time of EDI data collection was 5 years and 8 months. The youngest kindergartner in the study was 4 years and 8 months, the oldest 7 years and 4 months. Most students however were around the mean age of the sample. Almost 1 in 4 students were of First Nations or Métis ancestry. In terms of first language spoken at home, 83% of students were English speakers and 15% spoke a language other than English. Kindergarten teachers were asked to indicate whether the child was designated "special needs"; for twenty-one (5%) students the teachers responded affirmatively. Later in the EDI survey teachers were given a list of specific problems or challenges children face and were asked to indicate whether any of these pertain to the student. These problems included physical disability, visual impairment, hearing impairment, speech impairment, learning disability, emotional problems, behaviour problems, home problems, or other problems. Teachers indicated that for 345 students (85% of the sample) none of these problems applied. Forty students (10%) had just one problem, 13 (3%) had two and only 6 (2%) had multiple problems (3 or more). Teachers were given a list of special skills as well and were asked to indicate whether any of the special skills were observed in the child. These skills included special skills in numeracy, literacy, visual arts, music, athletics/dance/drama, problem solving, and other special skills. Teachers responded that for 329 (81%) students they had not observed any of these special skills. Thirty-nine students had one of these skills (10%), 20 (5%) had two, and 16 (4%) had multiple skills.

Table 5-1 North East UEY — Kindergarten students participating in the study

Child Characteristics		Number (%)	
Gender	Girls	192 (49%)	
	Boys	199 (51%)	
Age (by 3 month intervals)	4-8 to 4-10	1 (<1%)	
	5-2 to 5-4	40 (11%)	
	5-5 to 5-7	79 (21%)	
	5-8 to 5-10	91 (25%)	
	5-11 to 6-1	84 (23%)	
	6-2 to 6-4	53 (14%)	
	6-5 to 6-7	15 (4%)	
	6-11 and up	4 (1%)	
Ethno-cultural background	Aboriginal	99 (25%)	
	Not aboriginal	299 (74%)	
	Other	5 (1%)	
First language	English	335 (83%)	
	Not English	59 (15%)	
	English and Other	7 (2%)	
Special needs	Yes	21 (5%)	
	No	380 (95%)	
Special skills observed	Not observed	329 (81%)	
	1	39 (10%)	
	2	20 (5%)	
	3 or more	16 (4%)	
Special needs observed	Not observed	345 (85%)	
	1	40 (10%)	
	2	13 (3%)	
	3 or more	6 (2%)	

5.2 What is "Readiness to Learn" and why is it important?

Children are born "ready to learn"—the neurosystem is equipped with the ability to learn and develop, depending on the experience the child receives and the environment she is nurtured in (Janus, 2006). In this study, we are measuring children's ability to meet the task demands of school—how well they get along with others, their coping strategies, and their openness to new experiences—so that they are able to take full advantage of the learning opportunities provided by school.

Research, including work conducted for UEY nationally, has repeatedly shown that a kindergarten teacher's assessment of a child's readiness to learn is the single strongest predictor of academic success in early grades. Subsequently, success in early grades is a strong predictor for high school completion, and measures to improve children's readiness to learn in kindergarten are protective against both premature drop-out (before completing high school) and adolescent delinquency. Research has shown, both SPHERU's own work and that of many others, that children who are successful in school tend to be successful in other parts of their lives—maturing into successful adults (Doherty, 1997).

5.3 How were the outcomes measured?

UEY uses the Early Development Instrument (EDI), a 104-item questionnaire developed by Dan Offord (now deceased) and Magdalena Janus at The Offord Centre for Child Studies at McMaster University. Kindergarten teachers evaluated each of their students in five areas, called domains, using the EDI that measures children's "readiness to learn": Physical health and wellbeing; Social skills; Emotional maturity; Language and cognitive development; and Communication skills and general knowledge (Janus, 2006). Table 5.2 on page 47 describes each of the five domains in more detail, giving an explanation of what each domain consists of and examples of the types of observable behaviours or indicators for each domain. The EDI has been developed to report on the outcomes of groups of children, such as classes or schools or communities. It is not intended as a screening or diagnostic tool or to assess an individual child's progress.



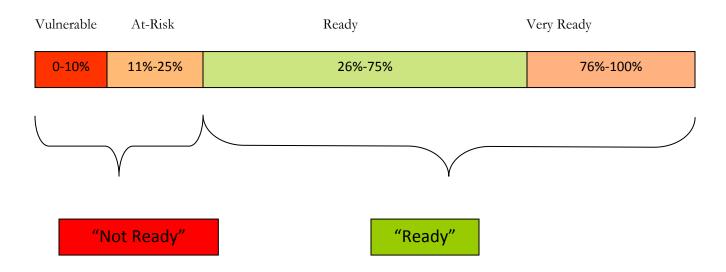
Table 5-2 Explanation of EDI Domain

EDI Domain	What does it mean?	Examples	
Physical Health &	Physical readiness for school	Arrives at school hungry	
Wellbeing	Physical independence	Has well coordinated movements	
	Gross and fine motor skills	Is able to manipulate objects	
Social Competence	Overall social competence	Is able to get along with other children	
	Responsibility and respect	Accepts responsibility for actions	
	Approaches to learning	Works independently	
	Readiness to explore new things	Is eager to explore new items	
Emotional Maturity	Prosocial and helping behaviour	Helps other children in distress	
	Anxious and fearful behaviour	Appears unhappy or sad	
	Aggressive behaviour	Gets into physical fights	
	Hyperactivity and inattention	Is restless	
Language and Cognitive Development	Basic literacy	Is able to write own name	
Development	Interest in literacy/numeracy, and uses memory	Is interested in games involving numbers	
	Advanced literacy	Is able to read sentences	
	Basic numeracy	Is able to count to 20	
Communication Skills & General Knowledge	Communicates easily and effectively; participates in story-telling; articulates clearly; shows adequate knowledge; uses native language proficiently	Is able to clearly communicate one's own needs and understand others'; shows interest in general knowledge about the world	

5.4 How to Interpret the EDI Graphs

The EDI scores for each domain for a group of children can be presented in several different ways. First, for each domain the average score is standardized into a base of 10, meaning the scores can range from a lowest of 0 to a highest of 10. The average or mean scores can then be reported for each domain for a group of children which takes a value from 0-10 (often reported to the nearest 10th) and scores can be compared across different groups of children within a community or to a standard or reference group of children (often a standard or reference group would be a larger external group, such as Canadian children of comparable age). Second, EDI scores for a standard group of children can be ordered from lowest to highest, and based on where children are placed in this continuum of scores they can be grouped as either school ready or not ready in each domain. The standard group of children who score in the top one-quarter or 25th percentile is deemed very ready, followed by those who scored in the next half or 50th percentile as ready and, finally, the bottom quarter or 25th as not ready. Among the children who are deemed not ready, those who score in the bottom one-tenth or 10th percentile are considered vulnerable and the next 15th percentile are considered at-risk for poor outcomes in school. Children who score in ready, at-risk or vulnerable ranges in each community can be compared to a standard group of children. If the percentage of children in a community is substantially above or below a threshold for a category, say vulnerable or bottom 10%, it suggests then the children in that community are faring particularly well or poorly on this domain compared with the results for all Canadian (standard group) children.

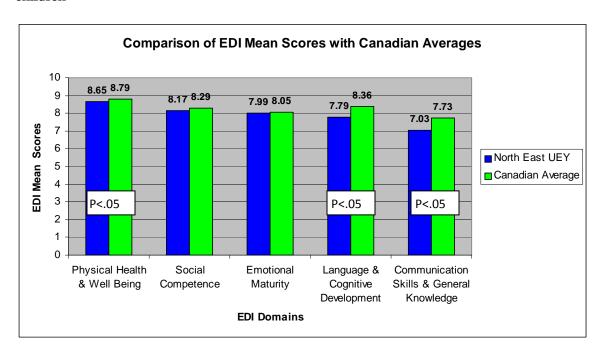
Figure 5-5-1 Interpreting EDI Graphs



5.5 North East UEY School Readiness

How "school ready" are North East UEY children compared to Canadian children? Chart 5.1 below presents the means scores for school readiness measures for each domain for North East UEY children compared to scores for Canadian children. Overall, North East UEY children fare well in some areas of school readiness and lag behind in other areas compared to Canadian children. Specifically, North East UEY children are prepared as well as other Canadian children in Social competence and Emotional maturity domains. North East UEY children, however, lagged behind in Language and cognitive development, Communication skills and general knowledge, and Physical health and wellbeing compared to Canadian children.

Chart 5-1 School readiness mean scores for North East UEY children compared to Canadian children⁶



How do children in each of North East UEY study areas fare in comparison to Canadian children? Table 5.3 on page 50 gives a summary of school readiness strengths and challenges for children in each of the North East UEY study areas. If the average score for children in a given study area is above or below the Canadian average this is indicated as "above" or "below" in Table 5.3.

this report, implies less than a 5% chance of the event or difference occurring by chance alone.

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⁶ The p-value is the probability that a result of a study is not due to chance alone. Typically, a result is considered 'statistically significant' when the probability of obtaining that result by chance is less than 5% if there were, in fact, no relationship in the population. A statistical significance in which p<0.05, which is the level we use throughout

A closer look at the findings shows some variability in school readiness performance across the North East UEY study areas. Children in the North study area scored consistently below the Canadian average in all five EDI domains. Children in Melfort scored below the Canadian average significantly in Social competence and Emotional maturity domains. The First Nations children in Red Earth and Shoal Lake scored lower in three of the five school readiness domains. Language and cognitive development, Communication skills and general knowledge, and Physical health and wellbeing are domains where at least two of the study areas consistently fared below a comparable group of Canadian children.

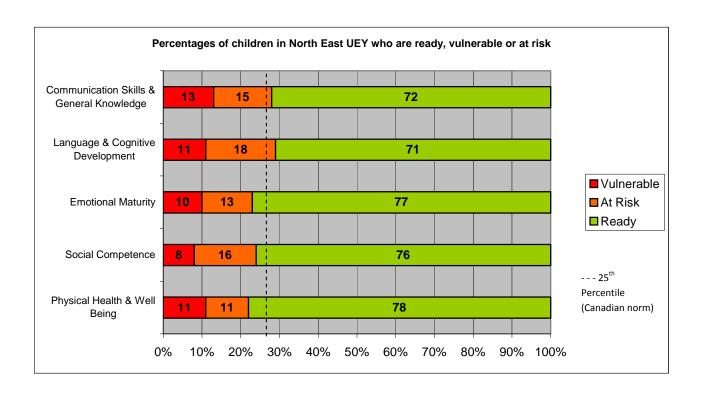
Table 5-3 North East UEY study areas with EDI scores across five domains above the Canadian average or below the Canadian average

	EDI Domains				
North East Study Area	Physical Health & Wellbeing	Social Competence	Emotional Maturity	Language & Cognitive Development	Communication Skills & General Knowledge
Melfort	Below	Below	Below	Below	Below
North	Below	Below	Below	Below	Below
East	Below	Above	Above	Above	Below
West	Above	Above	Above	Below	Above
Central	Above	Above	Above	Below	Above
First Nations	Above	Below	Above	Below	Below

Note: Bold text indicates comparisons that were statistically significant.

How do children in North East UEY fare in terms of their being "ready" or "at-risk" or "vulnerable" in comparison to Canadian children? Figure 5.2 on page 51 shows the percentages of children deemed "ready," "at-risk," or "vulnerable" by each EDI domain for the population of children in the North East UEY area. In three out of the five domains—Physical health and wellbeing, Social competency and Emotional maturity—there are slightly more North East UEY children who are ready for school than what would be expected. In contrast, however, in the Language and cognitive development and Communication skills and general knowledge domains there are slightly fewer than the expected number of North East UEY children scoring in the school "ready" range.

Chart 5-2 Percentage of children in North East UEY who are "ready", "at-risk" or "vulnerable" for school readiness by EDI domain



While Table 5.3 summarizes the average scores for each domain of EDI in each North East UEY study area compared to Canadian children, Table 5.4 on page 52 shows how well North East UEY children do in terms of being "ready" or "not ready" compared to a Canadian cohort. Higher proportions of children in the North study area, and to a lesser extent in Red Earth and Shoal Lake, were deemed not ready for school in multiple school readiness domains. In particular, Language and cognitive development and Communication skills and general knowledge were two domains in which more children in North, Central, Red Earth and Shoal Lake study areas were not ready for school. On the other hand, more children in East and West study areas performed at or above the Canadian average in all five school readiness domains.

Table 5-4 North East UEY study areas with higher than 75% proportion of children that are "ready", or more than 25% that are "not ready" by EDI domain

	EDI Domains				
North East Study Area	Physical Health & Wellbeing	Social Competence	Emotional Maturity	Language & Cognitive Development	Communication Skills & General Knowledge
Melfort	Ready	Not ready	Not ready	Ready	Ready
North	Not ready	Not ready	Not ready	Not ready	Not ready
East	Ready	Ready	Ready	Ready	Ready
West	Ready	Ready	Ready	Ready	Ready
Central	Ready	Ready	Ready	Not ready	Not ready
First Nations	Ready	Not ready	Ready	Not ready	Not ready

Note: Bold text indicates comparisons that were statistically significant.

5.6 Creation of the Social Risk Index

Just as some children experience multiple challenges in being ready for school at kindergarten, some communities have multiple challenges in relation to social, economic and demographic circumstances. To tap into these multiple challenges, we developed a *social risk index* that measures communities' experiences in more than one factor, which in turn could adversely affect readiness to learn in young children. As shown in Table 5.5 on page 53, we used eight selected indicators to include in a social risk index; each of these indicators have been shown in many studies to be associated with adverse outcomes for children. The average values for each of the indicators were compared with the average for Saskatchewan as a whole and if the average for study area fell either above or below the Saskatchewan average (depending on the whether a positive or negative factor being measured) a score of "1" was assigned to an indicator. We then summed the scores for each study area across all eight indicators to obtain a social risk score. The social risk score for study areas ranged from a low of 3 (which we termed "low moderate") to a high of 6 (termed "high") and are shown in maps that follow.

Figure 5-2 The social risk score for study areas.



The approach we have taken to creating a social risk score as described above for the North East UEY, admittedly, has some limitations. First, study areas encompass a wide geographic area that may have communities at both ends of the social risk index. When this occurs we may see a rating that shows low to moderate risk, but in fact this may represent the averaging of risk represented by communities with very high and very low risk factors. In the more useful approach, risk indicators would be available in much smaller geographical units (such as Census Dissemination Areas) which would enable creating a social risk index highlighting areas with particular strengths or challenges at a more detailed level. The second limitation in creating the social risk index is appropriately "weighting" a score for a risk indicator in comparison to a reference score. Which of the risk indicators amongst those selected pose more of a risk than other indicators? How much of a difference makes a real difference when comparing the average for a risk indicator with that of a reference average? These complexities are not taken into account in our social risk index.

The factors that were used in creating the social risk index are listed in the table below.

Table 5-5 Social Risk Index Indicators

Single Parent Status
 Educational Attainment
 Employment Rate
 Mobility
 Language (if English is not language spoken in the home)
 Home Ownership (if primary abode is rented not owned)
 Average Household Income
 Reliance on Government Transfers

 Employment Insurance
 Canada Pension Plan
 Child Tax Benefits
 Social Assistance
 Old Age Security
 Workers Compensation

5.7 School Readiness Outcomes by North East UEY Study Areas

In this section we present school readiness outcomes for each North East UEY study area. For each area we present two school readiness outcomes graphs. First, we present a vertical bar graph representing the average score in each of the five domains comparing it to that of a Canadian average. The Canadian average is based on a subset of the entire database of UEY children (116,860 children) maintained by the Offord Centre for Child Studies. The results presented below help to identify comparatively high or low scores for each school readiness domain compared to a Canadian average for each study area.

The set of horizontal stacked bars represented in the second graph shows for each school readiness domain the percentage of children who scored at a level that would deem them *vulnerable*, *at-risk*, or *ready* for school. As mentioned earlier, compared to a large group of Canadian children those North East UEY children who scored in the bottom 10th percentile are considered *vulnerable*, those who scored in the next 15th percentile *at-risk*, and those who scored in the top 75th percentile *ready* for school.

For each study area we also present the cumulative score for the social risk index.



5.7.1 North Study area

The North study area experienced challenges across all five school readiness domains. Children in the North study area scored below the Canadian average in all five domains as represented in Chart 5-3 below. Further, the percentages of children who are exceeding the "not ready" norm of 25th percentile are high in all domains, and are of particular concern in Social competence, Emotional maturity, Language and cognitive development and Communication skills and general knowledge (see Chart 5-4, page 56). When looking at the subgroup of children among "not ready" who need particular attention—those children scoring in the "vulnerable" range—we see that there is a higher percentage of children who are "vulnerable" in Physical health and wellbeing, Emotional maturity, and Communication skills and general knowledge.

Although the North study area had a score of 3 on the social risk index, which places it in the low-moderate risk category, we found that the children in the North study area have generally poor school readiness outcomes in all five domains. For instance, more than one in four children in the North study area score at a level that would deem them to be "not ready" for school. Nipawin is a relatively large town within the North study area which may have a profile that is quite different from that of its surrounding more rural region. However, Nipawin and its surrounding rural area are aggregated into one study area. By combining Nipawin and surrounding rural areas, it is possible that Nipawin's sociodemographic characteristics are diluted, yet the school readiness outcomes are dominated by the profile of children residing in Nipawin.

Chart 5-3 School readiness average scores for children in North study area compared to Canadian children

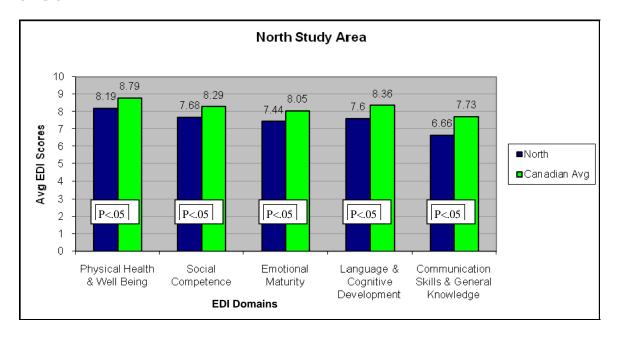
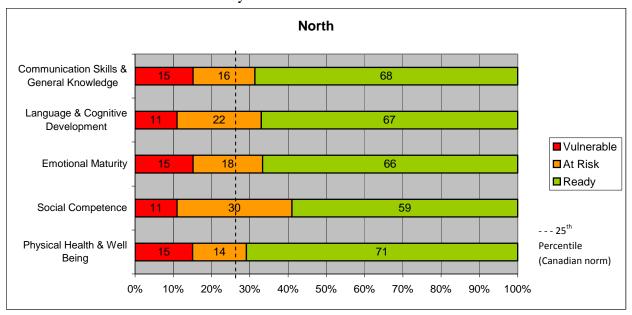
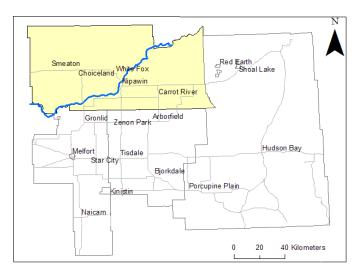


Chart 5-4 Percentages of children in North study area who are "ready", "at-risk", or "vulnerable" for school readiness by EDI domain



Due to rounding, not all numbers add to 100%.

Map 5-5-1 Social Risk Score for North study area



Social risk score = 3 (low moderate)

Data Sources: National Atlas Base Maps,

DMTI Data Library Initiative, Canadian Census Data 2001

5.7.2 Melfort Study Area

For children in Melfort, the average scores for school readiness domains were all below the Canadian averages. However, children in Melfort lagged behind statistically significantly in two school readiness domains, Social competence and Emotional maturity, compared to a standard group of Canadian children. The lower average scores in the school readiness domains for Melfort children were consistent with the percentage of children school-"ready" or "not ready" by EDI domains as shown in Chart 5-6. The two domains of concern for children in Melfort were in Emotional maturity and Social competence. In these categories there were a greater than expected number of children who scored in the vulnerable and at-risk range.

The social risk score for the city of Melfort places it at a moderate-high social risk level. This means that there are multiple socioeconomic challenges facing this area. In Section 4, pages 35-42, we showed that Melfort had a higher percentage than average of single parent families, a larger proportion of the population who didn't finish high school and a level of mobility and proportion of renters that is higher than the Saskatchewan average.

Chart 5-5 School readiness average scores for children in Melfort study area compared to Canadian children

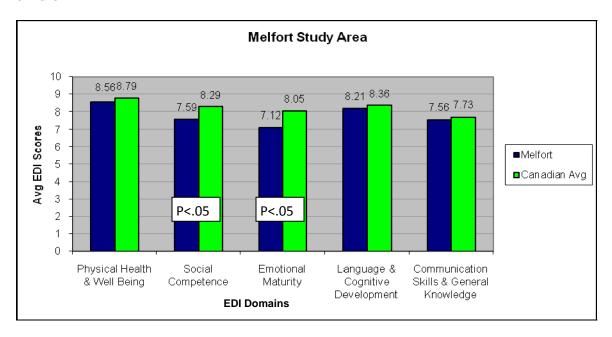
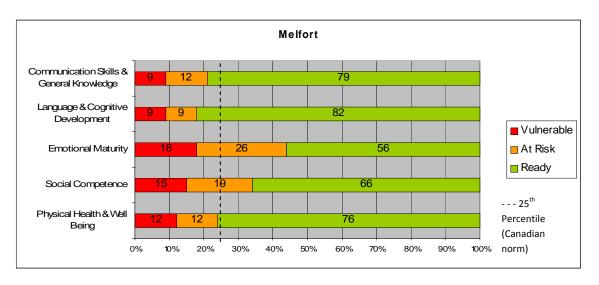
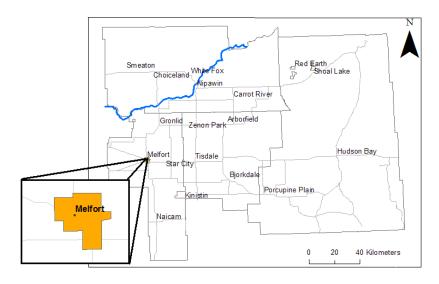


Chart 5-6 Percentages of children in Melfort study area who are "ready", "at-risk", or "vulnerable" for school readiness by EDI domain



Map 5-5-1 Social risk score for Melfort study area



Social risk score = 5 (moderate high)

Data Sources: National Atlas Base Maps,

DMTI Data Library Initiative, Canadian Census Data 2001

Maps Produced by SPHERU

5.7.3 West Study area

Children in the West study area had average school readiness scores that were higher than the Canadian average for all domains except for Language and cognitive development. The average scores for Social competence and Emotional maturity for children in the West study area were particularly higher than the Canadian average, as shown in Chart 5-7 below. In terms of children who are ready for school, the West study area does admirably well compared to the Canadian standard. In all five domains the percentage of children who are ready for school are above the expected 75th percentile, indicating there are more children school ready (see Chart 5-8, page 60).

The social risk score for the West study area is moderate. The school readiness outcomes for children in the West study area were quite positive. Language and cognitive development was the domain with the largest percentage of children who were deemed not ready; however, this number was still low compared to the Canadian norm.

Chart 5-7 School readiness average scores for children in West study area compared to Canadian children

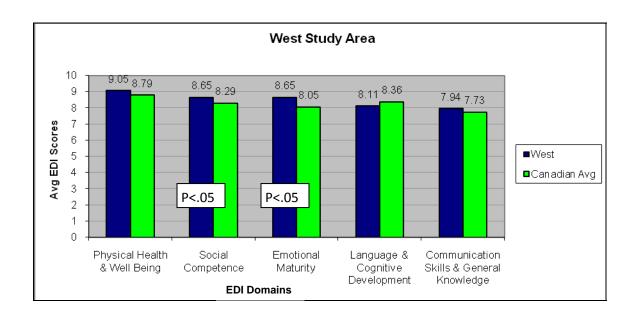
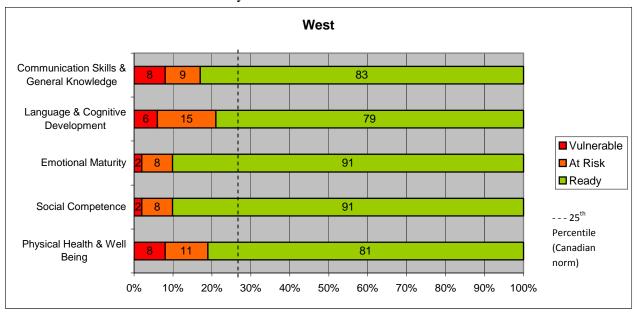
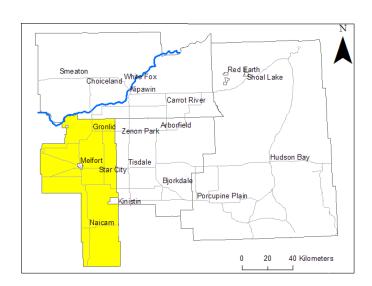


Chart 5-8 Percentages of children in West study area who are "ready", "at-risk", or "vulnerable" for school readiness by EDI domain



Due to rounding, not all numbers add to 100%.

Map 5-5-3 Social risk score for West study area



Data Sources: National Alas Base Maps,

DMTI Data Library Initiative, Canadian Census Data 2001

Social risk score = 4 (moderate)

5.7.4 East Study area

Children in the East study area achieved scores above the Canadian average in the Social competence, Emotional maturity and Language and cognitive development domains. However, children in East study area lagged significantly behind the Canadian children in Physical health and wellbeing domain. Children in the East study area were at par or performed better than standard Canadian children in all other school readiness domains. (See Chart 5-9, below)

The social risk level associated with the East study area is moderate. Correspondingly, the school readiness outcomes for children in the East study area were consistently strong in all domains. While the percentage of children who scored in the not ready range for Communication skills and general knowledge were relatively high, compared to other domains, the total percentage did not reach a level that is cause for concern. (Chart 5-10, page 62)

Chart 5-9 School readiness average scores for children in East study area compared to Canadian children

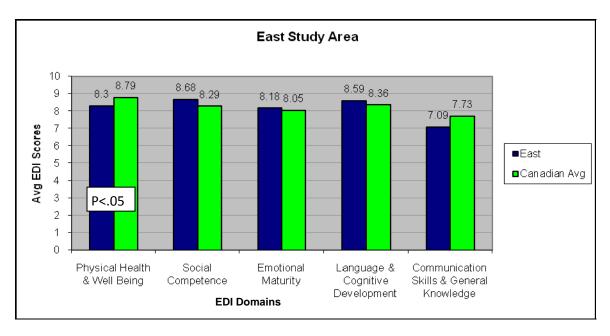
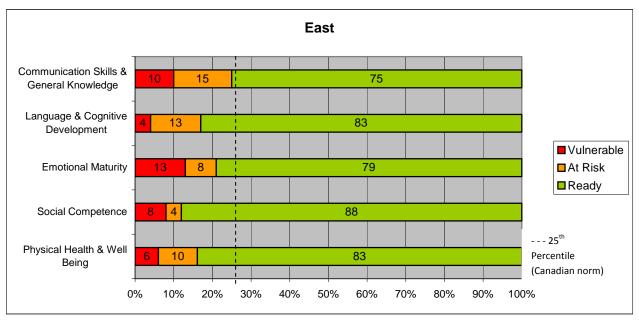
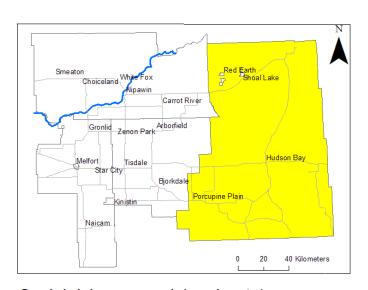


Chart 5-10 Percentages of children in East study area who are "ready", "at-risk", or "vulnerable" for school readiness by EDI domain



Due to rounding, not all numbers add to 100%.

Map 5-5-2 Social risk score for East study area



Social risk score = 4 (moderate)

Data Sources: National Alas Base Maps,

DMTI Data Library Initiative, Canadian Census Data 2001

5.7.5 Central Study area

The children in the Central study area had average school readiness scores that were higher than the Canadian averages in every domain except for Language and cognitive development, as indicated in Chart 5-11 below. The average score for Social competence was significantly higher than that of the Canadian average. In contrast, the average score for Language and cognitive development is statistically significantly lower than that of the Canadian children's average. This corresponds with the findings shown on Chart 5-12 on page 64, that a higher proportion of children in the Central study area scored in the "not ready" range for Language and cognitive development than was expected. In the rest of the school readiness domains, children in the Central study area fared well compared to the Canadian standard, with higher percentages of children scoring in the range deemed "ready to learn" at school.

The Central study area has a moderate social risk rating. The school readiness outcomes for children in the Central study area were at or above the standard to a Canadian norm. The only outcome of concern for children in this study area is Language and cognitive development. The proportion of children who scored in the not ready range for Language and cognitive development was higher than what would be expected based on the Canadian average.

Chart 5-11 School readiness average scores for children in Central study area compared to Canadian children

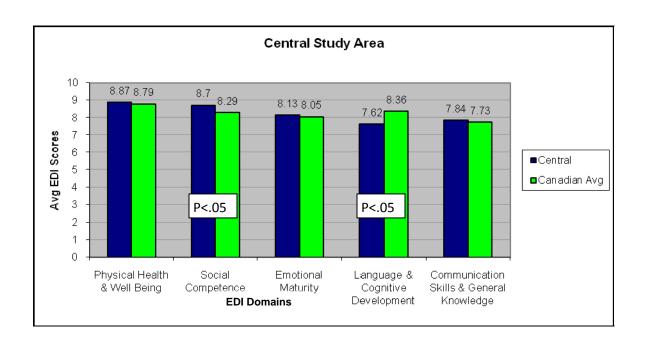
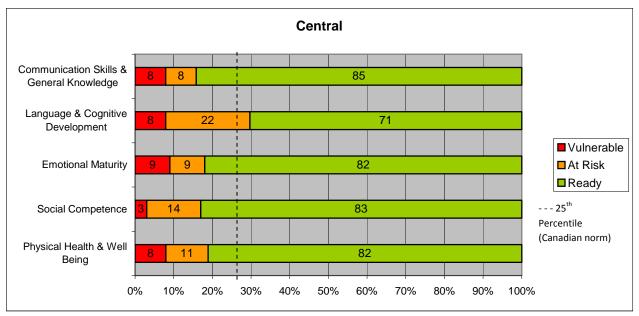
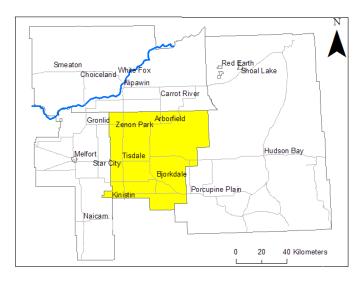


Chart 5-12 Percentages of children in Central study area who are "ready", "at-risk", or "vulnerable" for school readiness by EDI domain



Due to rounding, not all numbers add to 100%.

Map 5-5-3 Social risk score for Central study area



Social risk score = 4 (moderate)

5.7.6 First Nations Study Area (Red Earth & Shoal Lake)

The children in the First Nations communities of Red Earth and Shoal Lake scored at or above the Canadian average in the school readiness domains of Physical health and wellbeing and Emotional maturity. Correspondingly, the percentage of children who scored in the "not ready" range for these two domains were lower than the Canadian norm, indicating children in the communities of Red Earth and Shoal Lake were doing well in these domains. In the domains Communication skills and general knowledge, Language and cognitive development, and Social competence a higher proportion of children scored in the range "not ready" for school. The Communication skills and general knowledge and Language and cognitive development domains are of particular concern as one in every two children in these two communities were "not ready" for school in these domains. Further, almost one in three children in these communities have scores that puts them in the vulnerable category for Language and cognitive development and Communication skills and general knowledge.

The First Nations communities of Red Earth and Shoal Lake had a high social risk rating. There were multiple socioeconomic challenges facing this study area. Some of the challenges were substantial in the numbers of people affected.

Chart 5-13 School readiness average scores for children in Shoal Lake and Red Earth First Nations study area compared to Canadian children

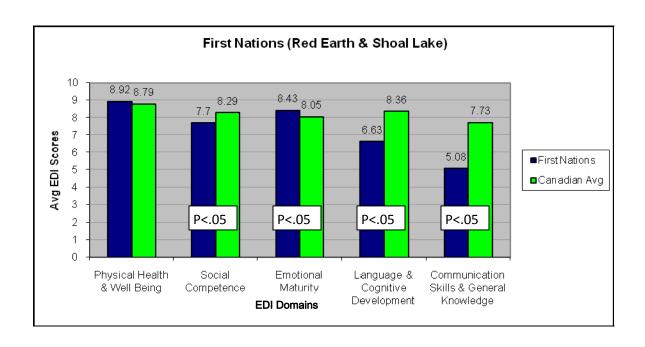
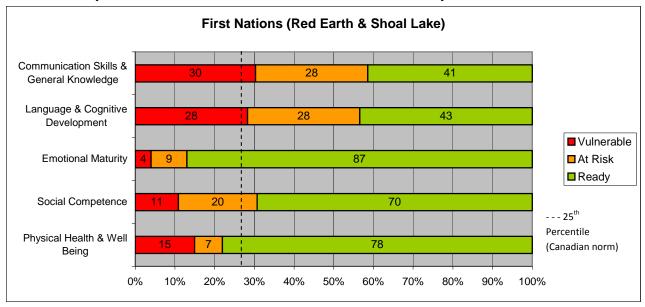
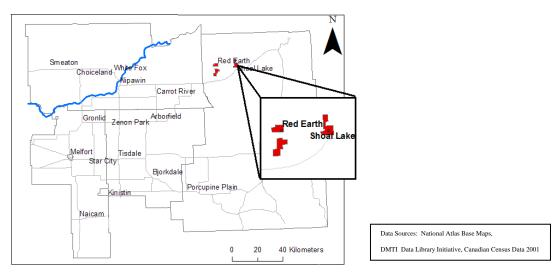


Chart 5-14 Percentages of children in Red Earth and Shoal Lake First Nations study area who are "ready", "at-risk", or "vulnerable" for school readiness by EDI domain



Due to rounding, not all numbers add to 100%.

Map 5-5-4 Social risk score for Red Earth and Shoal Lake First Nations study area



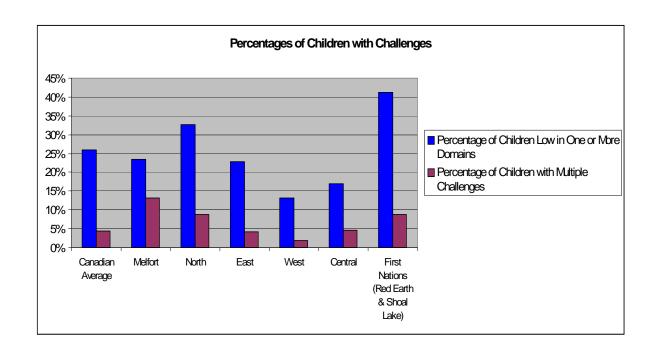
Social risk score = 6 (high)

5.7.7 Children with Multiple Challenges

While many children come to school ready to learn, some may lag behind their peers in one or another specific learning domain. A few children fare worse, experiencing challenges at kindergarten in multiple school readiness domains. Two measurements tap into children's experience of challenges in multiple domains or subdomains. The first measures children who scored low in one or more EDI domains. The second is a measurement of children with multiple challenges (the multiple challenges refer to the many subdomains—16 across all domains—that exist within each domain). Both measurements are offered in percentages and can be compared to averages derived from children across Canada.

The Canadian average for children with challenges in one or more domains is 26%. The North study area (33%) and the First Nations communities of Red Earth and Shoal Lake (41%) have significantly higher percentages of children who scored low in one or more domains. The Canadian average of children with multiple challenges is 4%. Compared to the Canadian average, children in Melfort (13%), the North (9%), and the First Nations communities (9%) all had a higher proportion of children with multiple challenges in school readiness.

Chart 5-15 Percentages of children in North East UEY study areas with multiple challenges



5.8 Summary of School Readiness Results

In this section we have presented the school readiness outcomes for children in North East UEY, comparing each outcome with a Canadian average, for each study area. Children in North East UEY as a whole lag behind their Canadian peers in Language and cognitive development and in Communication skills and general knowledge; two skill areas that are foundational to successs in school. The under-performance in these two domains is not concentrated in one study area or another within North East UEY—it is widespread. Of particular concern however are children in Red Earth and Shoal Lake. One in two children in these two communities are not ready for school in Language and cognitive development and in Communication skills and general knowledge domains. Among the children not ready in these two domains, half are vulnerable to falling behind their peers in school in these learning areas. Not only are there high percentages of children not ready in these two domains, the average scores for Red Earth and Shoal Lake children are also substantially below the average for their Canadian peers. This indicates that there is much more room to improve for each child in these two communities by closing the gap between themselves and the Canadian average.

The communities of Red Earth and Shoal Lake also have children who score below average ("not ready") in the Social competence domain. This is true for children in the North study area and Melfort as well. The school readiness domain of Social competence, and its related domain, Emotional maturity, are about socio-behavioural skills that children exhibit at a young age. Again, these are essential building blocks for children as they make the transition from home and community to a school setting.

Children in the study areas East, West, and Central do as well as if not better than their Canadian peers in almost all school readiness outcomes. The possible exception is in Language and cognitive development, in which, as mentioned above, most of the North East UEY children performed below average.

The North study area presents a picture that is possibly more complex than meets the eye. Generally, children in the North study area lag behind their Canadian peers in almost all school readiness domains. However, it is possible that the results observed for the North study area is a mixture of a relatively dominant large town, Nipawin, and that of the surrounding rural areas to the north and west. It is recommended that in further examinations that Nipawin be separated from its surrounding rural study area in order to identify any patterns that would be seen for Nipawin alone.



Conclusions and Topics for Community Discussion

It takes a "village to raise a child" but also a "child to raise a village."

6. Conclusions and Topics for Community Discussion

The national Understanding the Early Years initiative provides Canadian communities with the valuable opportunity to come together to look at how communities and their children are doing. North East UEY is one of 21 projects (2005-2008) that has formed locally under the national UEY auspices. This research study is intended to benefit children by inspiring community action.

6.1 How was the information collected and organized?

This Community Mapping Study of Children in Northeast Saskatchewan represents information influencing kindergarten children's development as they transition to learn at school. We collected data from an inventory of community resources and programs, Census 2001 and the Early Development Instrument to create a snapshot of Northeast Saskatchewan's families, communities, and children. Our snapshot is formed from two vantage points: one, a "wide angle view" of the children and communities over the entire northeast region and two, a "close-up view" of the children and communities in each of six study areas within the northeast region.

To afford a close-up view of children and families, we divided the North East UEY region into six study areas. We then applied three sources of data to each study area. First, data from an inventory of community resources and programs looked at community assets in the areas of education, health, and recreation resources for families and children in Northeast Saskatchewan. These resources were mapped by study area to show the availability of services by their location. Then, Census 2001 data were used to look at the community social and economic factors in Northeast Saskatchewan. For each of the six study areas we created a social risk score by combining eight socioeconomic indicators drawn from Census 2001 data that are known to influence outcomes for children. Finally, kindergarten teachers completed the Early Development Instrument for each of 404 kindergarten students. These school readiness outcomes were reported by North East UEY study area.

6.2 What did we learn about children and communities?

What did we learn about children and communities in North East UEY?

North East UEY Community Strengths

Overall, education, health, and recreation services are reasonably well distributed across the North East UEY region. These resources are considered to be community assets or community strengths, contributing to the wellbeing of children and families. Over 600 services and resources were

documented in the inventory of resources and programs. Health resources such as acute care facilities, primary health care sites, and community health and programs for families and children are important community strengths in the northeast. Educational resources such as licensed child care, preschools, pre-kindergarten and nursery schools were distributed in all study areas. A public library system was available in five of six study areas. Recreation programs and facilities were evident throughout the northeast.

North East UEY Community Challenges

Geographic distances may be a challenge for families in terms of access to programs and services. Census 2001 data indicate that incomes in the northeast are below the Saskatchewan average and lower levels of education exist among the adult population. Families with higher incomes are better able to meet their children's basic needs and provide greater opportunities for early learning; as well, children living in families where parents or caregivers have higher levels of education generally have better developmental outcomes.

North East UEY School Readiness Outcomes

School readiness outcomes, as measured by the Early Development Instrument, indicated that overall, kindergarten children in North East UEY region are doing as well or better than a comparable group of Canadian children. This is especially true for the two specific domains: Social competency and Emotional maturity. Three domains for improvement are: Physical Health and wellbeing, Language and cognitive development and Communication skills and general knowledge. In these domains North East UEY children lag behind their Canadian counterparts.

What did we learn about children and communities in each study area?

This community mapping study also presented a close-up view for each of the six study areas. For each study area, we can identify unique strengths and challenges in terms of the availability of programs and resources, social risk factors and children's school readiness outcomes.

Melfort Study Area

In the city of Melfort strengths include the availability of education, health and recreation resources for children and families. By combining a number of negative social and economic factors identified, Melfort's community social risk score is rated at 5 (termed "moderate high"). In Melfort, the percentage of single parent families, as well as the percentage of renters and movers is higher than the Saskatchewan average. In addition to a high percentage of adults not completing high school and lower income levels, these social risk factors may have contributed to poorer children's school readiness results in two domains. Greater numbers of children were deemed "not ready" in the Social competence and Emotional maturity domains of the EDI. The EDI results also indicated strengths. Melfort children performed better than their Canadian counterparts in the two domains of Language and cognitive development, and Communication skills and general knowledge.

West Study Area

In the West study area, encompassing the rural area surrounding Melfort, together with the communities of Gronlid, Naicam and Star City, there were many education, health, and recreation resources available. The West was assigned a "moderate" social risk score of 4. In addition to income and education factors, the percentage of unemployed adults was higher in the West study area compared to the Saskatchewan percentage. Given the social and economic challenges, one would expect challenges to be reflected in school readiness outcomes, but this was not the case. Children in the West scored higher than Canadian children in Social competence and Emotional maturity domains. Greater percentages of children in the West were also deemed "ready" to learn at school in all five readiness domains.

East Study Area

Children in the East study area living in Hudson Bay, Porcupine Plain and the surrounding rural area performed at par or better than other Canadian children. Community strengths contributing to the strong EDI results include a good number of education, health and recreation resources. With a "moderate" social risk score of 4, socioeconomic challenges include lower income levels, lower levels of education and higher unemployment in the adult population. In terms of school readiness there is room for some improvement in the East study area, as children had lower average scores in the Physical health and wellbeing domain.

Central Study Area

Children living in Tisdale, Arborfield, Bjorkdale, Kinistin Saulteaux Nation, Sylvania, Zenon Park and the surrounding rural area were part of the Central study area. Programs and services were plentiful throughout the area. Although a "moderate" social risk score of 4 was assigned to the Central study area, compared to their Canadian counterparts, children in this study area had higher average scores in the Social competence domain. Greater percentages of children than the Canadian norm were deemed "ready" for school. Lower average scores in Language and cognitive development domain and slightly more children deemed "not ready" in this domain indicate room for improvement.

North Study Area

Communities in the North study area provided a number of programs and resources which families and children access. The North study area had the largest population of the six study areas and the largest number of young children. This study area's population includes the town of Nipawin plus smaller rural communities of Carrot River, White Fox, Choiceland and Smeaton. When we considered social and economic challenges identified through Census 2001 data, a social risk score of 3, deemed "low moderate", was assigned to the North study area. In terms of school readiness outcomes, average scores of children in the North study were below the Canadian norm in all five EDI domains. The distribution of EDI scores indicated that more than one third of the children were deemed "not ready" for school. The North study area EDI results suggest that we need further study followed by community action and early intervention targeting all areas of early development to ensure that children are ready to take advantage of the learning opportunities of formal schooling.

First Nations Study Area

A variety of health resources and programs were readily available in the First Nations study area, which included the communities of Red Earth and Shoal Lake. This study area had the greatest percentage of children and the fewest recreational resources. The First Nations study area communities of Red Earth and Shoal Lake (as well as Kinistin Saulteaux Nation in the Central study area) also lacked public libraries, an important educational resource available in the five other study areas. Aboriginal Head Start, Nursery School and Kindergarten programs are important education resources available for all children. Fluency in the Cree language is perceived as an important community and cultural strength.

The social risk score for communities in the First Nations study area was 6, deemed "high." Income levels in this study area are about one-third of the Saskatchewan average. It is well-documented in research that children living in families with great economic challenges are most likely to experience challenges in learning and in life. School readiness outcomes for children in the First Nations study area indicate that average scores in Social competence, Language and cognitive development and Communications skills and general knowledge were below the Canadian average. One in every two children is deemed "not ready" in the domains of Language and cognitive development and Communications and general knowledge. It is important to note that the children in the First Nations study area scored at or above the Canadian average in Physical health and wellbeing and Emotional maturity domains of the EDI.

6.3 Mobilizing Community and Inspiring Action

Just as a road map provides a number of possible routes for a journey, our community mapping study provides direction to mobilize the community and inspire action leading to more favourable environments for children and families. Encouraging families and communities to participate in and ensure the best possible future for their children should be one of the highest priorities for communities. Community mapping is a way to illustrate the links between families, communities and children's development.

As concerned citizens we are called to see, judge and act. We need to see and understand the results which provide a snapshot of how the children are doing. We are called to celebrate the community strengths that are supporting children's readiness to learn at school, and called to judge the community challenges which hinder our children's development. Finally, we are called to act by

building on those community strengths and addressing the community challenges which children and their families face.

Communities within each study area of North East UEY will determine how their citizens will work together to improve children's early developmental outcomes based on research evidence. Study area results identifying strengths and challenges will inform the discussion for future action plans. Strategies will have a more lasting effect by ensuring that they take into account the Northeast as a whole community as well as implementing change study area by study area, town by town, rural municipality by rural municipality, First Nation by First Nation.

On a regional level, concerned agencies and organizations will be able to build on strategies for disadvantaged groups throughout the northeast. Community early childhood networks could be established in the Northeast, to improve preschool education programs and the number of child care spaces, for example. Parents have the primary responsibility for children and also have the greatest influence on children's learning. Regional strategies that build awareness of importance of the child's experiences from birth to age six will encourage parents and caregivers to facilitate a variety of learning opportunities such as talking, reading and playing with their children every day. At the same time, it is a societal responsibility of governments, educators, community agencies, municipalities and families to make sure improvements take place for all children.

These results could also inform the coordination of services for families within the northeast region. Program planners can use this Community Mapping Study to see where the strengths and challenges within study areas have been and work towards eliminating service gaps. The report could be used to involve parents and other community members in childhood development programs as well as integrating programs to prevent overlap of services. The end-result that we envision by acting on the information provided in this report is a seamless system of supports for children ages zero to six and for their families.

It has often been said, in relation to children and communities, that it takes a "village to raise a child." While this indeed resonates with many people, it is also the case that "it takes a child to raise a village." The children in Northeast Saskatchewan, as a result of this study have raised the call for their parents, neighbours, teachers and communities to help them set out on the best start in life.

Bibliography

Andrews, S. P., & Slate, J. R. (2001). *Prekindergarten Programs: A Review of the Literature*. Retrieved November 5, 2006, from Current Issues in Education On-Line: http://cie.ed.asu.edu/volume4/number5/.

Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53, 371-379.

Buka, S. L., Brennan, R. T., Rich-Edwards, J. W., Raudenbush, S. W., & Earls, F. (2003). Nieghborhood support and the birth weight of urban infants. *American Journal of Epidemiology*, 1, 1-8.

Cumberland Regional College. (2007). Cumberland Regional College Publications: Regional Needs Assessment. Retrieved March 11, 2008, from http://www.cumberlandcollege.sk.ca/index.php?tid=5&bid=5

Duncan, G. J., Brooks-Gun, J., & Klebanov, P. K. (1994). Economic deprivation and early child development. *Child Development* 1994, 65, 296-318.

Emig, C. (2000). School Readiness: Helping Communities get Children Ready for School and Schools Ready for Children. Washington, DC, USA: Child Trends Research Brief.

Government of Canada. (2007). The Well-being of Canada's Young Children: Government of Canada Report 2006. Ottawa: Government of Canada.

Guo, G., Brooks-Gunn, J., & Harris, K. M. (1996). Parental labor-force attachment and grade retention among urban black children. *Sociology of Education*, 69, 217-236.

Hertzman, C., & Keating, D. (Eds.). (1999). Developmental health and the wealth of nations. New York: Guilford Press.

Industry and Economy of Nipawin. (2008). Retrieved March 11, 2008, from Nipawin: Your New Destination: http://www.nipawin.com/econ.php

Janus, M. (2006). The early development instrument: A tool for monitoring children's development and readiness for school. Retrieved 2008, from Offord Centre for Child Studies:

http://www.offordcentre.com/readiness/files/PUB.11.2006_Janus.pdf

Janus, M., & Duku, E. (2007). The school entry gap: Socioeconomic, family, and health factors associated with children's school readiness to learn. *Early Education and Development*, 18 (3), 375-403.

Janus, M., & Offord, D. (2007). Developmental and psychometric properties of the early development instrument (EDI): A measure of children's school readiness. 39 (1), 1-122.

Kretzmann, J. P., & McKnitght, J. L. (1993). Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets. Evanston, IL, USA: Institute for Policy Research, Northwestern University.

Kelsey Trail Health Region. (2006). Kelsey Trail Health Region Annual Report to the Minister of Health and the Minister of Healthy Living 2005-2006. Tisdale: Kelsey Trail Health Region.

Mayer, S. E., & Jencks, C. (1989). Growing up in poor neighborhoods: How much does it matter? *Science*, 243 (4897), 1441-1445.

Muhajarine, N., & Vu, L. (2008). Nieghbourhood contexts and low birth weight: Social disconnection heightens single parents' risks. Saskatoon, Saskatchewan: Saskatchewan Population Health and Evaluation Research Unit.

Muhajarine, N., Vu, L., & Delanoy, S. (2003). Resilient children: What sets them apart? Paper presented at Canadian Scoeity for Epidemiology and Biostatistics, Halifax, Nova Scotia, Canada

Muhajarine, N., Vu, L., & Labonte, R. (2006). Social contexts and children's health outcomes: Researching across the boundaries. *Critical publich Health* 2006, 16 (3), 205-218.

Northeast RNA. (2006). Northeast Regional Needs Report. Saskatchewan: Cumberland Regional College.

Official Website of Kinistin Saulteaux Nation. (2008). Retrieved March 11, 2008, from Kinistin Saulteaux Nation: http://www.kinistin.sk.ca/

Pearl, M., Braveman, P., & Abrams, B. (2001). The relationship of neighborhood socioeconomic characteristics to birthweight among 5 Ethnic groups in California. *American Journal of Public Health*, 11, 1808-1814.

Pianta, R. C. (2002). School readiness: A focus on children, families, communities and schools. *The Informed Educator Series*.

Canadian Council on Learning. (2007). Report on the State of Early Childhood Learning in Canada. Retrieved March 2008, from The Canadian Council on Learning: www.ccl-cca.ca

Roberts, E. M. (1997). Neighborhood social environmnets and the distribution of low birthweight in Chicago. *American Journal of Public health*, 87 (4), 597-603.

Ross, C. E., & Wu, C. (1995). The links between education and health. *American Sociological Review*, 60, 5, 719-745.

Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "neighborhood effects": Social processes and new direction in research. *Annual Review of Sociology*, 28, 443-478.

Shonkoff, J. P. (2006). A promising opportunity for developmental and behavioral pediatrics at the interface of Neuroscience, psychology, and social policy. *Pediatrics*, 2006, 118, 2187-2191.

Shonkoff, J., & Phillips, D. (2000). From neurons to neighborhoods: The science of early childhood developmnet. Washington, DC, USA: National Academies Press.

Town of Tisdale. (2008). Retrieved March 11, 2008, from Tisdale: http://www.townoftisdale.com/

Willms, J. (Ed.). (2002). Vulnerable Children: Findings from Canada's National Longitudinal Survey of Children and youth. Edmonton, Alberta: The University of Alberta Press.

Wilson, W. J. (1987). The Truly Disadvantaged. Chicago, IL, USA: University of Chicago Press.



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