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# Understanding the Early Years

Measuring 'Readiness to Learn' in  
Winnipeg  
(The Winnipeg School Division)

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## A Community Report



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Terra Orlikow

2004

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## Acknowledgements

My sincerest thank you to everyone who helped in the development of this report:

- The Winnipeg School Division
- The Understanding the Early Years community coalition
- The Downtown Parent-Child centred coalition
- The Elmwood Parent-Child centred coalition
- The Inkster Parent-Child centred coalition
- The North End Point Douglas Parent-Child centred coalition
- The River Heights/Fort Rouge Parent-Child centred coalition
- Healthy Child Manitoba
- The Offord Centre of Child Studies

And a special thank you to the all of the Winnipeg School Division Kindergarten teachers for their exceptional efforts in contributing to the Understanding the Early Years project.



## Understanding the Early Years



### What is the Understanding the Early Years project?

- Understanding the Early Years—or UEY—is a national research project that focuses on child development. The Winnipeg UEY site (the geographical boundaries of The Winnipeg School Division) is one of 12 national UEY sites across Canada.

### Who is involved in UEY?

- Parents/guardians, schools and teachers, community groups and the government of Canada work in partnership to gather information on how children are developing in Winnipeg.

### Why is UEY so important?

- In order to know how to help children do better in the future, we need to know how they are doing right now. UEY answers this question, and then shares the information on Winnipeg's children with parents, community organizations, policy makers, schools, and governments in order to influence the social policies, programs, and services that affect children and families.

### What information does UEY collect?

- How well are young children doing in our community compared to children in other Canadian communities?
- Are our preschoolers 'ready to learn' when they enter into school?
- What effect do the social and economic resources in our neighbourhoods have on early childhood development?
- Are our community programs and services making a difference?

### How does UEY collect this information?

- The **Early Development Instrument**—or EDI—is a Kindergarten teacher questionnaire designed to measure the development level of a Kindergarten class. The results from the EDI are used to help communities identify their strengths and needs so they can best support early child development.
- The **National Longitudinal Survey of Children and Youth**—or NLSCY—looks at how children develop over the course of their childhood (birth to 18 years), and identifies the family and community factors that influence child development.
- The **Community Mapping Study** gathers information about the physical and socio-economic characteristics of the neighbourhoods in which children live; the kinds of programs and services that are available to children and parents; and where these programs are located.

## What is the Early Development Instrument?

The Early Development Instrument—or EDI—is a questionnaire for Kindergarten teachers that measures the development level of a Kindergarten class in the following areas:

- Physical health and well-being
- Emotional maturity
- Social competency
- Language and cognitive development
- Communication skills and general knowledge.

As an instrument designed to measure children’s ‘readiness to learn’, the EDI assesses how prepared children are to participate in school activities. Developed by Dr. Magdalena Janus and Dr. Dan Offord of the Offord Centre of Child Studies, the instrument was designed and tested in collaboration with teachers, educators and several pilot projects.

The EDI gathers important information about *groups* of children and does not focus on any individual child. In other words, it is a population-based measurement that determines how a *group* of children are developing relative to other *groups* of children in their community.

## Why is the EDI important?

The EDI shows how children are doing at the community level. This information can help individual communities assess how well they are doing to support young children and their families, and can assist communities to make decisions about programs and services that best suit the needs of the children within their unique community.

By profiling early childhood development in a community, information from the EDI enables communities to align programs and services for children and parents based on the identified *need* of that community. For example, if a community shows poor levels of development in the physical health and well-being area, the community can steer community based programs and services to best meet this high *need* area. Furthermore, information from the EDI can help children both before and after they enter Kindergarten. By highlighting the needs of children at the Kindergarten level, communities can put in place *intervention* programs and services—programs that will help children ‘*catch up*’. As well, communities can put in place *prevention* programs and services—programs that will address the identified areas of need to ensure preschoolers are ‘ready to learn’ *before* they enter into school.

*See Appendix B for more information on the Early Development Instrument*

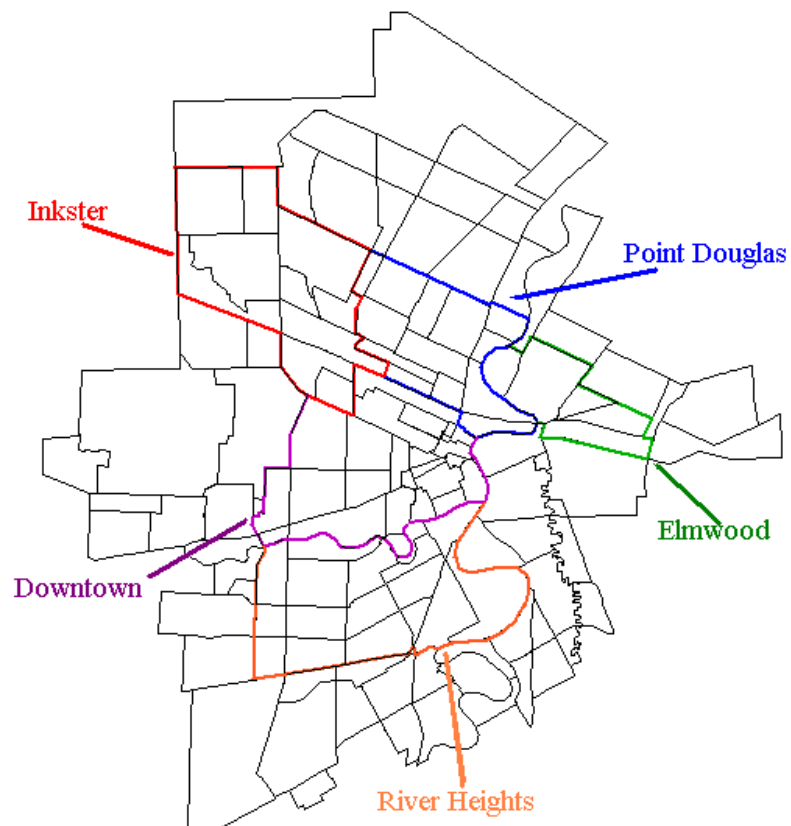
## The Communities

The Understanding the Early Years (UEY) Winnipeg site is within the geographical catchment area of the Winnipeg School Division. The five communities that comprise the Winnipeg UEY site include:

- Inkster
- Point Douglas
- Elmwood (part of River East)
- River Heights
- Downtown

Using EDI results from the past and present, this report highlights the *strengths* and *needs* of these five community areas as they relate to early childhood development.

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## What are the characteristics of The Winnipeg School Division area?

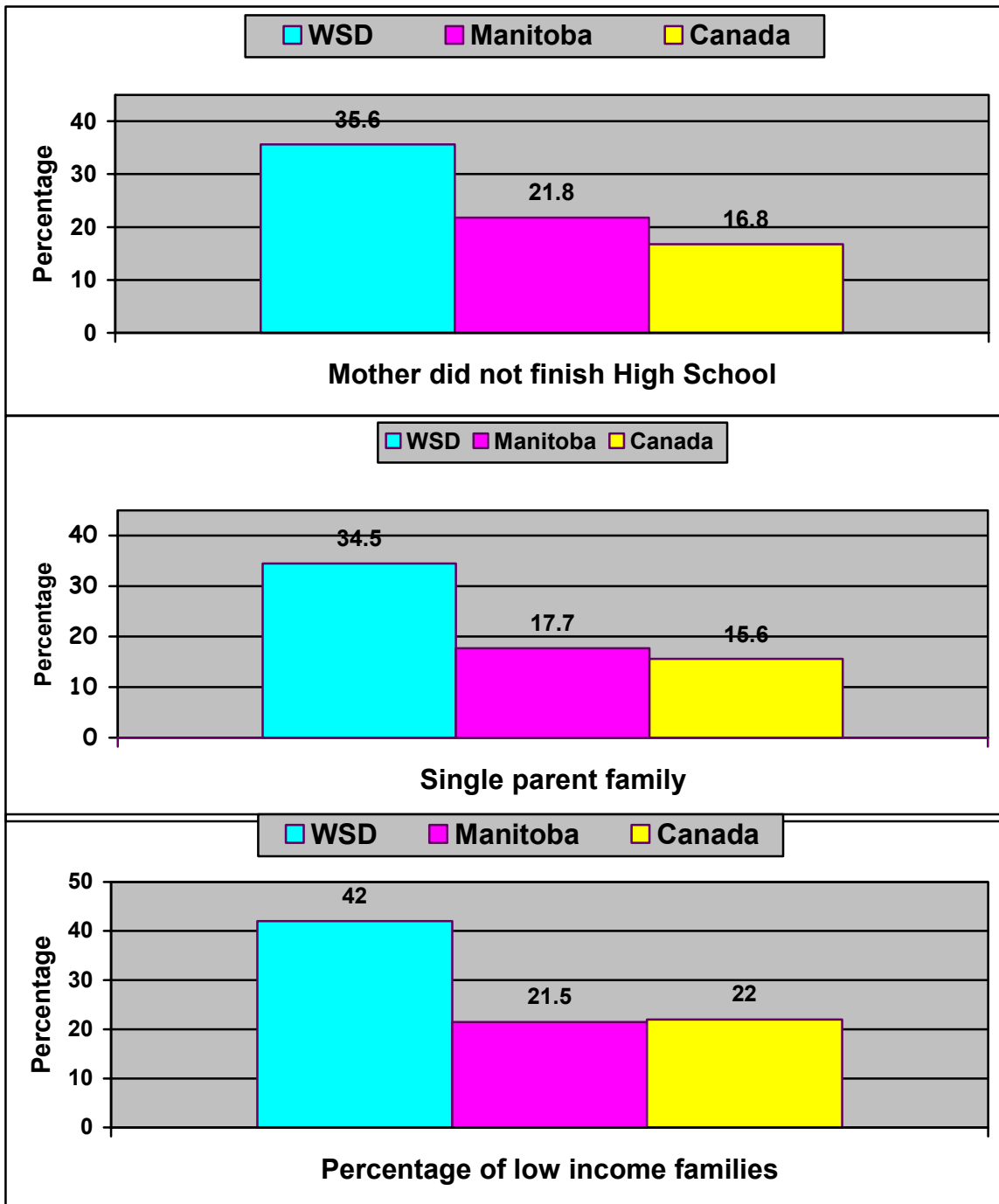
Table 1 EDI 2002/03 results of The Winnipeg School Division Kindergarten classrooms

Number of teachers participating	83
Number of children participating	2155
Average age of children (in years)	5.7
Percentage of girls	47.9%
Percentage of ESL (English as a second language)	11.5%
Average number of school days absent (From September to February)	6.9
Number of children rated by teachers as requiring further assessment	325 (13.2%)
Number of children with documented Special needs	126 (5.1%)
Number of Aboriginal Children	547 (22.3%)

According to census data, the geographical area of The Winnipeg School Division (WSD) covers 16% of the city area and contains 35% of the city's population. The WSD area also contains a high percentage of the city's immigrant and ESL population, and 60% of the city's aboriginal population (Early Childhood Development in Winnipeg, 2001).

The WSD area reflects a significant diversity of socio-economic and cultural backgrounds, as well as many socio-economic needs within some of its communities. According to data from the National Longitudinal Survey of Children and Youth (NLSCY cycle 3), the WSD community area has 42.2% of families with low income (less than \$25 000 per year) compared to the Manitoban and Canadian averages, 25% and 22.5% respectively. As well, the WSD community has 34.5% of its families headed by a single parent, compared to the Manitoban and Canadian averages of 17.7% and 15.6% respectively (Early Childhood Development in Winnipeg, 2001).

## Community Challenges



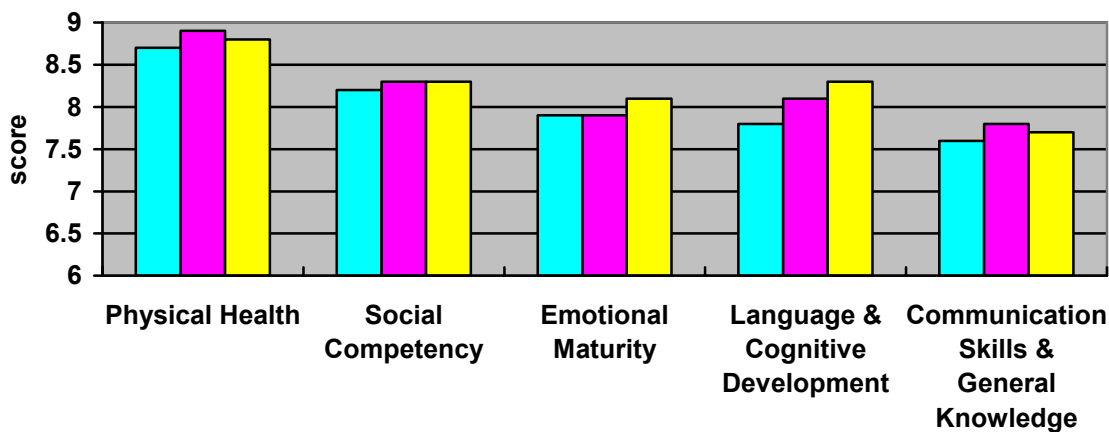
Despite the higher levels of poverty and greater number of single parent families compared to the Canadian averages, the WSD area communities show ‘**positive parenting**’ and ‘**family functioning**’ levels to be *comparable* to the Canadian average (NLSCY cycle 3).

## The Early Development Instrument (EDI) Results: How do the EDI results of the WSD compare to other communities?

Table 2 2002/03 EDI average scores of Kindergarten classrooms

Scores range from 0 to 10, with 10 indicating a 'perfect' score	WSD Average Results	Manitoba Average Results (participating school divisions in Manitoba)	Canada Average Results
Physical Health and Well being	8.7	8.9	8.8
Social Competence	8.2	8.3	8.3
Emotional Maturity	7.9	7.9	8.1
Language and Cognitive Development	7.8	8.1	8.3
Communication Skills and General Knowledge	7.6	7.8	7.7

■ WSD   
 ■ Manitoba   
 ■ Canada



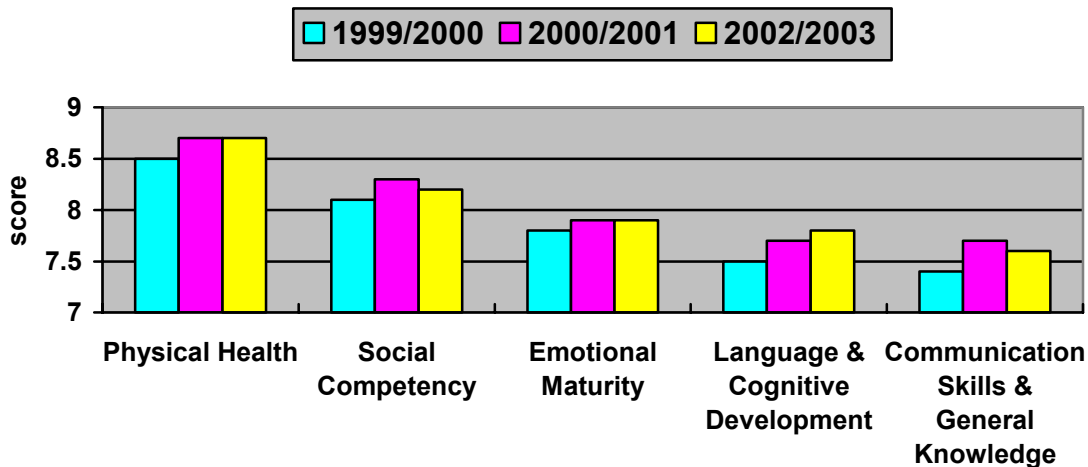
These results tell us that the children in the WSD area show lower levels of development across all areas—with the *highest level of need* in the **‘language and cognitive development’** **‘communication skills and general knowledge’** areas.

*See Appendix A for more information on the EDI communities that comprise the Manitoban and Canadian averages.*

## How do the EDI results of the WSD compare to previous years?

Table 3 EDI average scores for The Winnipeg School Division

Score is based on 10 as the 'perfect' score	WSD Results 1999/2000	WSD Results 2000/2001	WSD Results 2002/2003
Physical Health and Well being	8.5	8.7	8.7
Social Competence	8.1	8.3	8.2
Emotional Maturity	7.8	7.9	7.9
Language and Cognitive Development	7.5	7.7	7.8
Communication Skills and General Knowledge	7.4	7.7	7.6

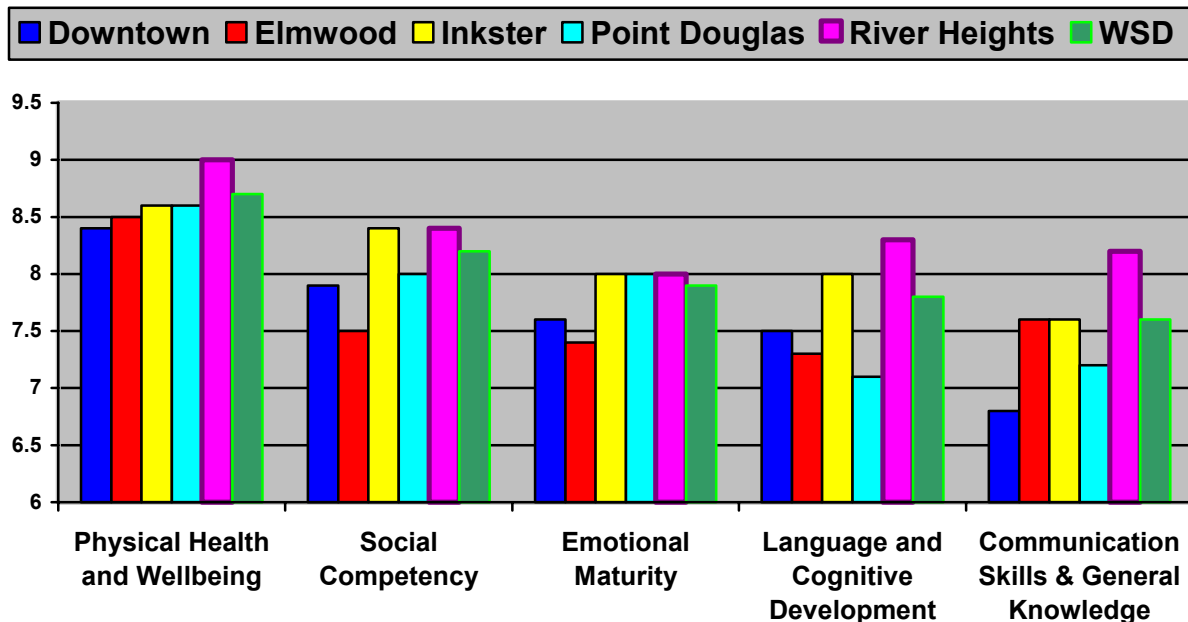


Comparing the years 1999 to 2002, results show that developmental levels of Kindergarten classrooms are improving across all areas—with the *greatest improvements* in the areas of **‘language and cognitive development’** and **‘communication skills and general knowledge’**. Results comparing the years 2000 to 2002 show that gains in developmental levels have ‘plateaued’, and indicate that the scores of **‘social competency’** and **‘communication skills and general knowledge’** have slightly dropped.

## What are the EDI Average score results for the five communities?

Table 4 2002/03 EDI average scores for Kindergarten classes

Score is based on 10 as the 'perfect score'	WSD average	Downtown	Elmwood	Inkster	Point Douglas	River Heights
Physical Health & Well being	8.7	8.4	8.5	8.6	8.6	9.0
Social Competence	8.2	7.9	7.5	8.4	8.0	8.4
Emotional Maturity	7.9	7.6	7.4	8.0	8.0	8.0
Language & Cognitive	7.8	7.5	7.3	8.0	7.1	8.3
Communication Skills & General knowledge	7.6	6.8	7.6	7.6	7.2	8.2



Community scores are reflective of their unique community characteristics. For example, the Downtown community's low scores on the 'communication skills and general knowledge' and 'language and cognitive development' areas may be reflective of the large ESL population of the Downtown community.

## What do the EDI Scores Mean?

Thus far, EDI results have been presented in score averages, with scores ranging from 0 to 10. While these score averages demonstrate the differences in scores from community to community, they do not, however, present information on the *range* of each score average. The following pages identify the range of scores within each of the 5 WSD communities.

The EDI average scores for each developmental area—physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge—are divided into categories representing the highest scores to the lowest scores. Groups of children who score in the top 25 percent among all WSD children are classified as having ‘excellent’ scores, while children who score in the lowest 10 percent among all WSD children are classified as having ‘vulnerable’ scores.

<b>Excellent</b> <b>75-100%</b>	<b>Good</b> <b>50-75%</b>	<b>Fair</b> <b>25-50%</b>	<b>Poor</b> <b>10-25%</b>	<b>Vulnerable</b> <b>10%</b>
25	25	25	15	10

There is a statistical expectation that 25% of children will fall within the ‘excellent’ category, 25% within the ‘good’ category, 25% within the ‘fair’ category, 15% within the ‘poor’ category, and 10% within the ‘vulnerable’ category.

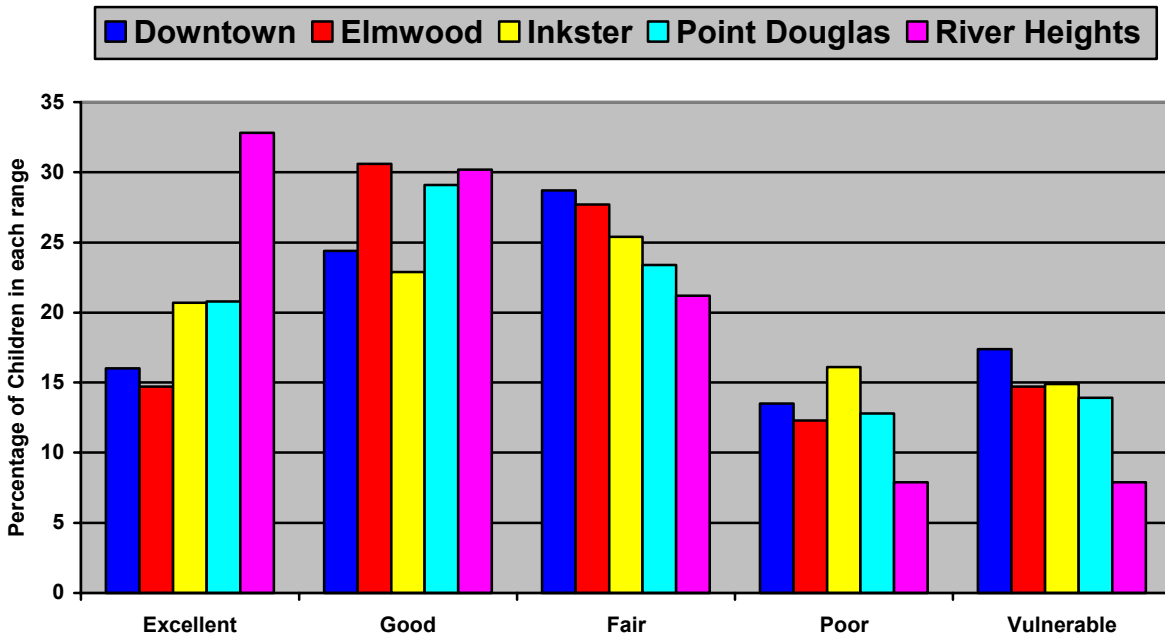
A detailed look at the children who fall in the ‘vulnerable’ category is a strong focus of this report, as ‘vulnerable’ scores from the previous EDI collections, beginning in 1999/2000 are presented in the following pages.

## How are the five Communities doing in the area of PHYSICAL HEALTH AND WELL-BEING?

Table 5 EDI 2002/03 results--percentage of students scoring within the five percentiles

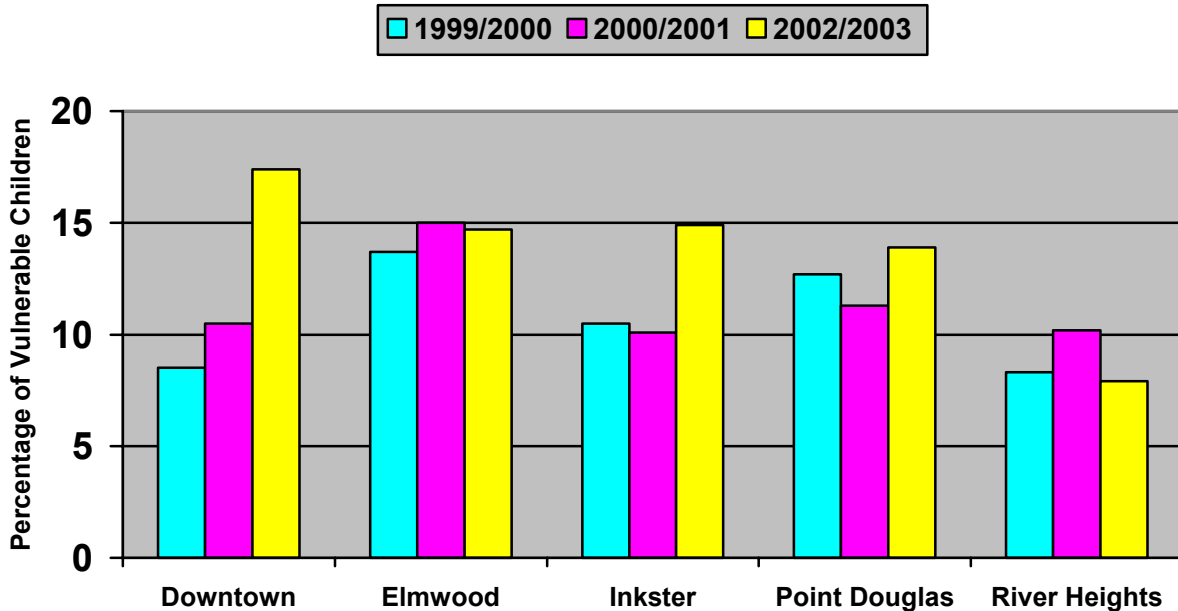
% of K students	75-100% <b>Excellent</b>	50-75 % <b>Good</b>	25-50 % <b>Fair</b>	10-25 % <b>Poor</b>	Lowest 10% <b>Vulnerable</b>
<b>Downtown</b>	16.0	24.4	28.7	13.5	17.4
<b>Elmwood</b>	14.7	30.6	27.7	12.3	14.7
<b>Inkster</b>	20.7	22.9	25.4	16.1	14.9
<b>Point Douglas</b>	20.8	29.1	23.4	12.8	13.9
<b>River Heights</b>	32.8	30.2	21.2	7.9	7.9

There is a statistical expectation that *10% of children will fall within the 'vulnerable' range of performance*. More than 10% of children in the 'vulnerable' range indicates a community *need*, and less than 10% of children in the 'vulnerable' range indicates a community *strength* in the area of 'physical health and well-being' for young children.



See Appendix C for more information on percentile ranges

## What are the ‘VULNERABLE’ scores for Physical Health and Well-Being from previous years?



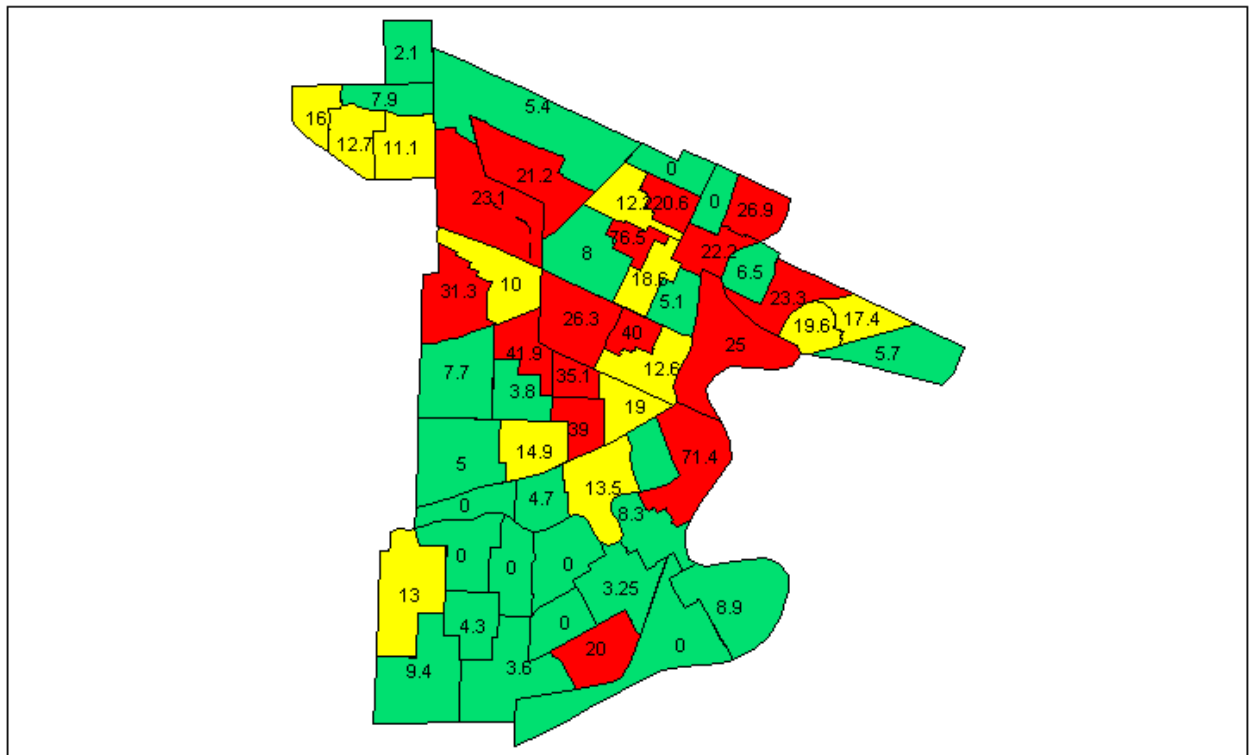
Communities that show a steady gain in a specific developmental area would be considered to have a *strength* in that area. Conversely, communities that show a steady drop in a specific developmental area would be considered to have a *need* in that area. It is important to note that gains and drops in early childhood development do fluctuate, and that the goal for communities should be long range *sustained* improvement. Thus, if a community shows a *strength*—or an improvement in EDI scores—in a specific developmental area, communities may wish to focus their efforts to build upon this success. Likewise, if a community shows a *need*—or a drop in EDI scores—in a specific developmental area, communities may wish to target this area as a community priority.

*The concept of ‘vulnerability’ is based on the percentile ranking using the WSD 2002/2003 EDI score averages. The ‘vulnerable’ scores reflect the percentage of children who score below the 10<sup>th</sup> percentile. As percentile rankings are based on yearly EDI scores within the WSD, the cut-off scores for the ‘vulnerable’ range (the 10<sup>th</sup> percentile) fluctuate year to year, and from UEY community to UEY community.*

*See Appendix D for more information on vulnerable cut-off scores.*

## Where are the Vulnerable Children?

Physical Health and Well-Being  
EDI 2002/2003 Results



Physical Health 'Vulnerability' Scores  
Percentage of K students who score within the 'vulnerable' range

- 0 to 10
- 10 to 20
- 20 to 76.5

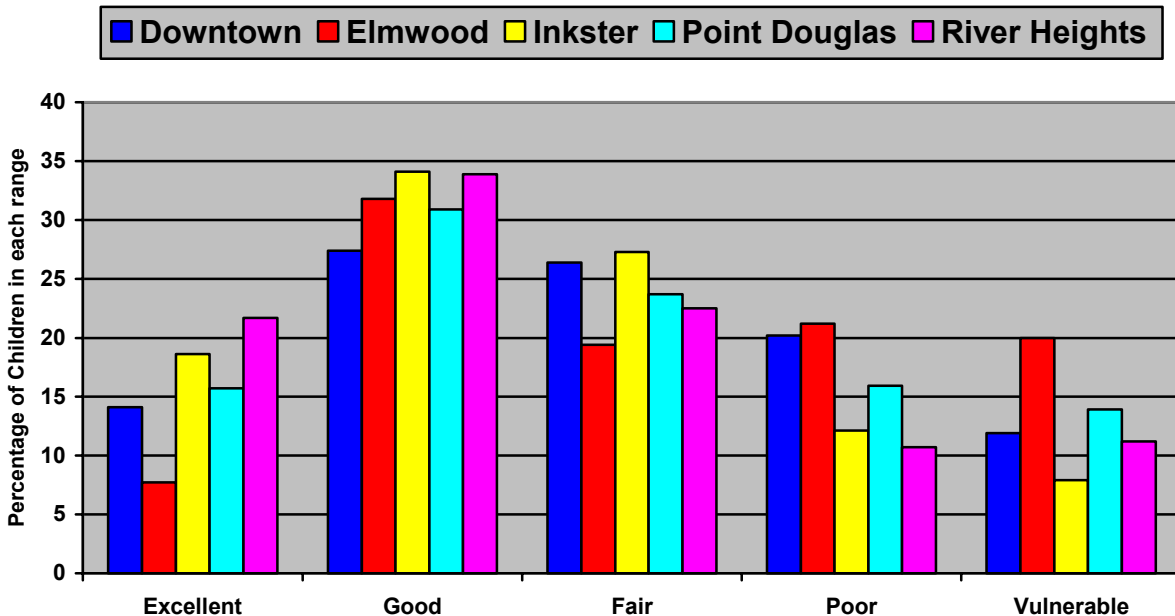
See Appendix E for a detailed map of the Winnipeg U.E.Y. community

## How are the five Communities doing in the area of SOCIAL COMPETENCY?

Table 6 EDI 2002/03 results--percentage of students scoring within the five percentiles

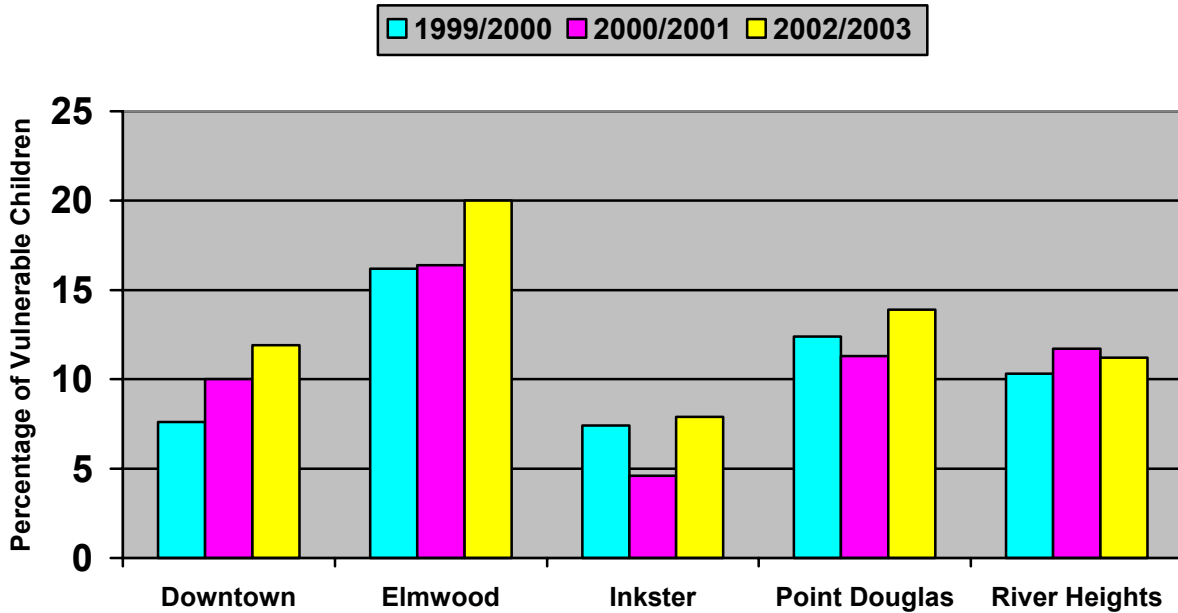
% of students	75-100% <b>Excellent</b>	50-75% <b>Good</b>	25-50% <b>Fair</b>	10-25% <b>Poor</b>	Lowest 10% <b>Vulnerable</b>
<b>Downtown</b>	14.1	27.4	26.4	20.2	11.9
<b>Elmwood</b>	7.7	31.8	19.4	21.2	20.0
<b>Inkster</b>	18.6	34.1	27.3	12.1	7.9
<b>Point Douglas</b>	15.7	30.9	23.7	15.9	13.9
<b>River Heights</b>	21.7	33.9	22.5	10.7	11.2

There is a statistical expectation that *10% of children will fall within the 'vulnerable' range*. Results of more than 10% of children in the 'vulnerable' range indicate a community *need* in the area of 'social competency' for young children. Results of less than 10% of children in the 'vulnerable' range indicate a community *strength* in the area of 'social competency' for young children.



See Appendix C for more information on percentile ranges

## What are the ‘VULNERABLE’ scores for Social Competency from previous years?



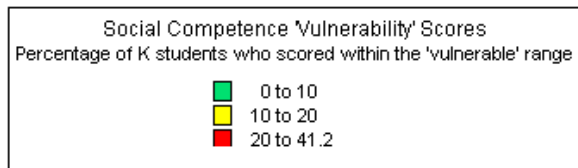
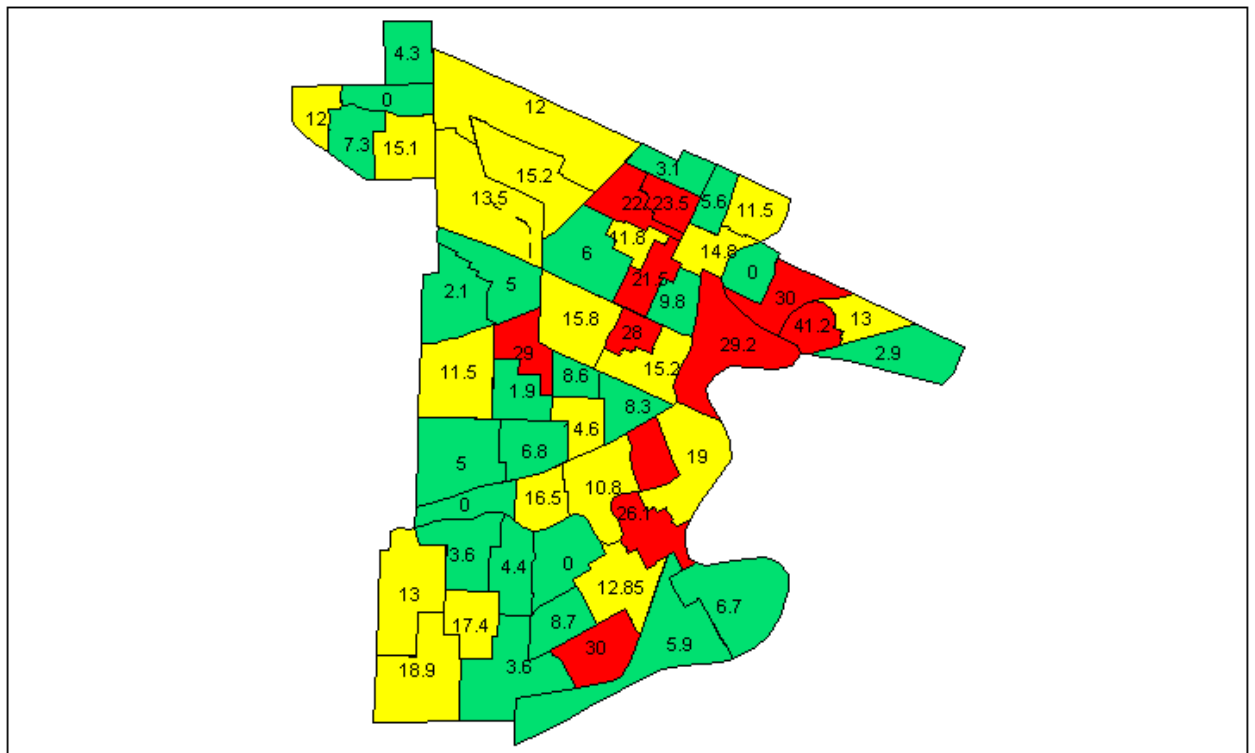
Communities that show a steady gain in a specific developmental area would be considered to have a *strength* in that area. Conversely, communities that show a steady drop in a specific developmental area would be considered to have a *need* in that area. It is important to note that gains and drops in early childhood development do fluctuate, and that the goal for communities should be long range *sustained* improvement. Thus, if a community shows a *strength*—or an improvement in EDI scores—in a specific developmental area, communities may wish to focus their efforts to build upon this success. Likewise, if a community shows a *need*—or a drop in EDI scores—in a specific developmental area, communities may wish to target this area as a community priority.

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*See Appendix D for more information on vulnerable cut-off scores.*

## Where are the Vulnerable Children?

Social Competency  
EDI 2002/2003 Results



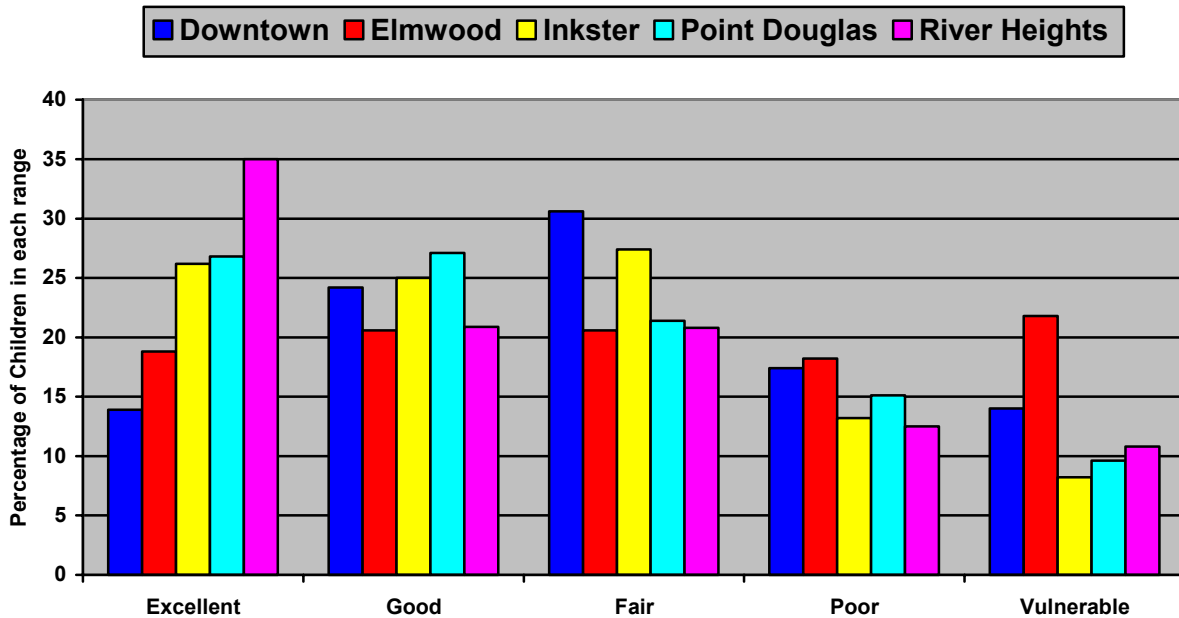
*See Appendix E for a detailed map of the Winnipeg U.E.Y. community*

## How are the five Communities doing in the area of EMOTIONAL MATURITY?

Table 7 EDI results--percentage of students scoring within the five percentiles

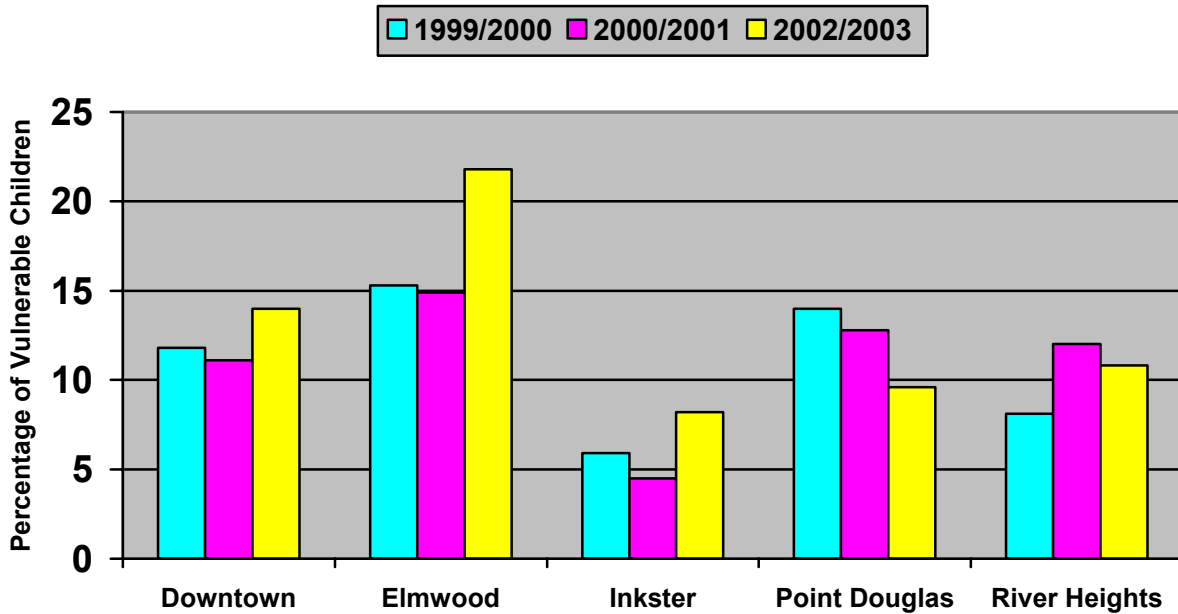
% of students	75-100% <b>Excellent</b>	50-75% <b>Good</b>	25-50% <b>Fair</b>	10-25% <b>Poor</b>	Lowest 10% <b>Vulnerable</b>
<b>Downtown</b>	13.9	24.2	30.6	17.4	14.0
<b>Elmwood</b>	18.8	20.6	20.6	18.2	21.8
<b>Inkster</b>	26.2	25.0	27.4	13.2	8.2
<b>Point Douglas</b>	26.8	27.1	21.4	15.1	9.6
<b>River Heights</b>	35.0	20.9	20.8	12.5	10.8

There is a statistical expectation that 10% of children will fall within the ‘vulnerable’ range. Results of more than 10% of children in the ‘vulnerable’ range indicate a community *need* in the area of ‘emotional maturity’ for young children. Results of less than 10% of children in the ‘vulnerable’ range indicate a community *strength* in the area of ‘emotional maturity’ for young children.



See Appendix C for more information on percentile ranges

## What are the ‘VULNERABLE’ scores for Emotional Maturity from previous years?



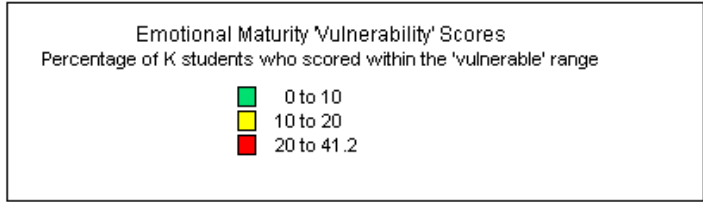
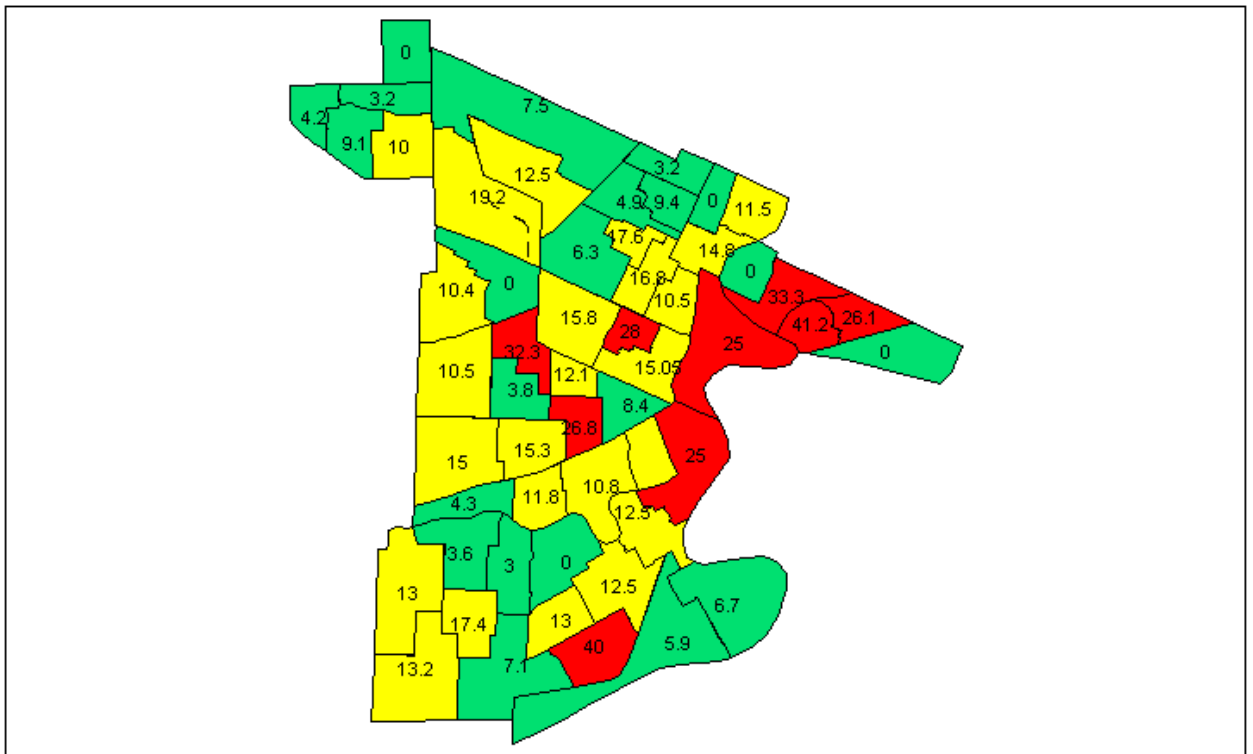
Communities that show a steady gain in a specific developmental area would be considered to have a *strength* in that area. Conversely, communities that show a steady drop in a specific developmental area would be considered to have a *need* in that area. It is important to note that gains and drops in early childhood development do fluctuate, and that the goal for communities should be long range *sustained* improvement. Thus, if a community shows a *strength*—or an improvement in EDI scores—in a specific developmental area, communities may wish to focus their efforts to build upon this success. Likewise, if a community shows a *need*—or a drop in EDI scores—in a specific developmental area, communities may wish to target this area as a community priority.

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*See Appendix D for more information on vulnerable cut-off scores.*

## Where are the Vulnerable Children?

Emotional Maturity  
EDI 2002/2003 Results



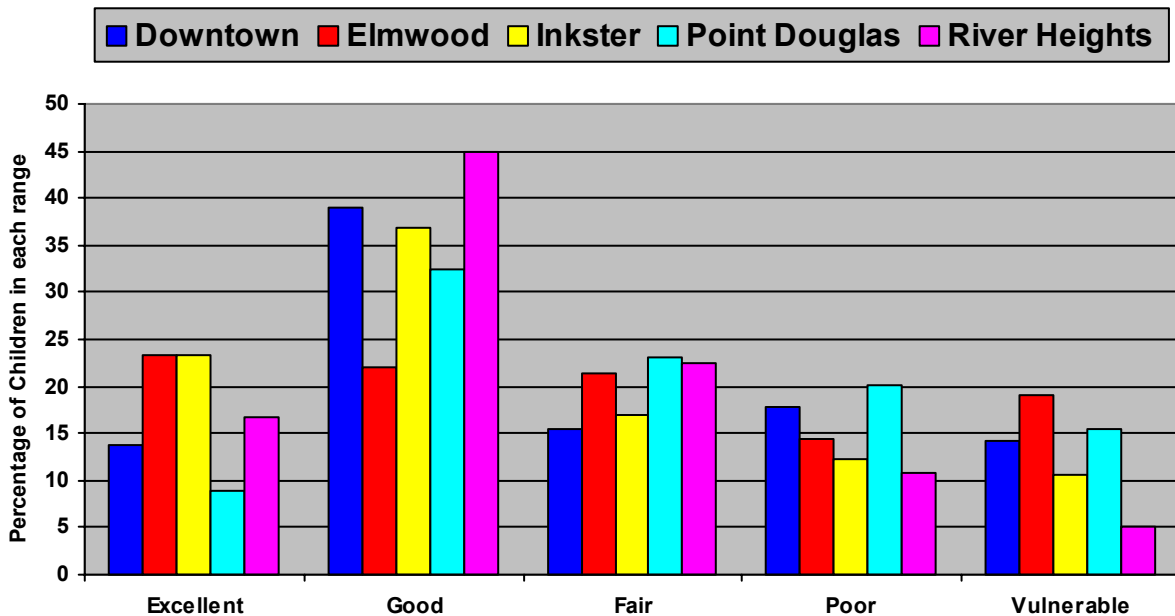
See Appendix E for a detailed map of the Winnipeg Uey community

## How are the five Communities doing in the area of LANGUAGE AND COGNITIVE DEVELOPMENT?

Table 8 EDI 2002/03 results--percentage of students scoring within the five percentiles

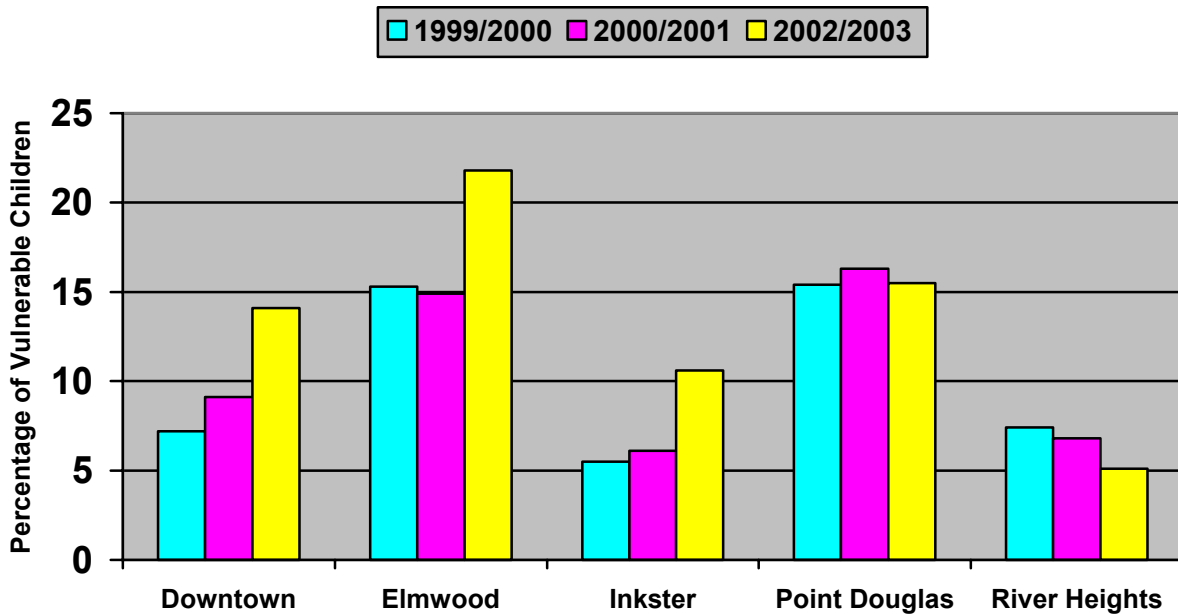
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<b>Downtown</b>	13.7	38.9	15.5	17.9	14.1
<b>Elmwood</b>	23.2	22.0	21.4	14.4	19.1
<b>Inkster</b>	23.4	36.8	16.9	12.3	10.6
<b>Point Douglas</b>	8.8	32.4	23.1	20.2	15.5
<b>River Heights</b>	16.7	45.0	22.5	10.7	5.1

There is a statistical expectation that *10% of children will fall within the 'vulnerable' range*. Results of more than 10% of children in the 'vulnerable' range indicate a community *need* in the area of 'language and cognitive development' for young children. Results of less than 10% of children in the 'vulnerable' range indicate a community *strength* in the area of 'language and cognitive development' for young children.



See Appendix C for more information on percentile ranges

## What are the ‘VULNERABLE’ scores for Language and Cognitive Development from previous years?



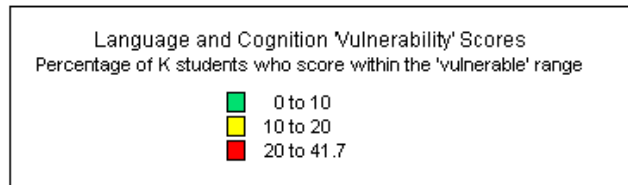
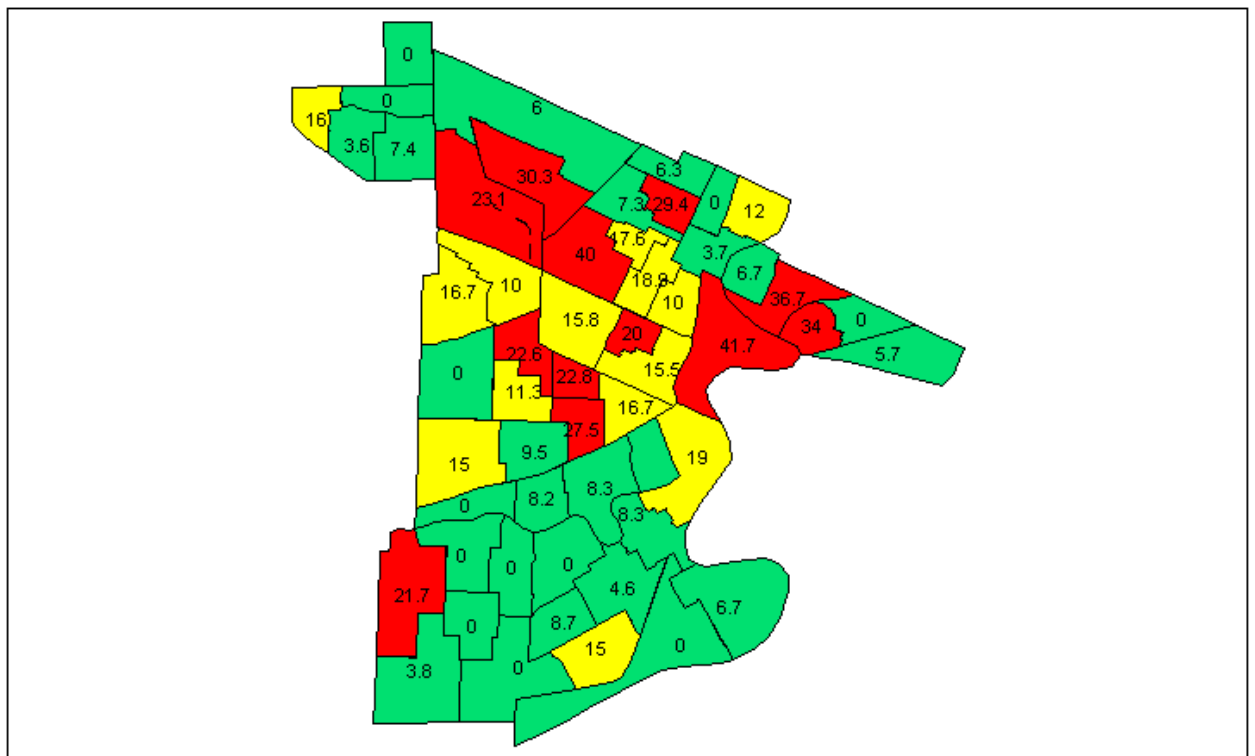
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*See Appendix D for more information on vulnerable cut-off scores.*

## Where are the Vulnerable Children?

Language and Cognitive Development  
EDI 2002/2003 Results



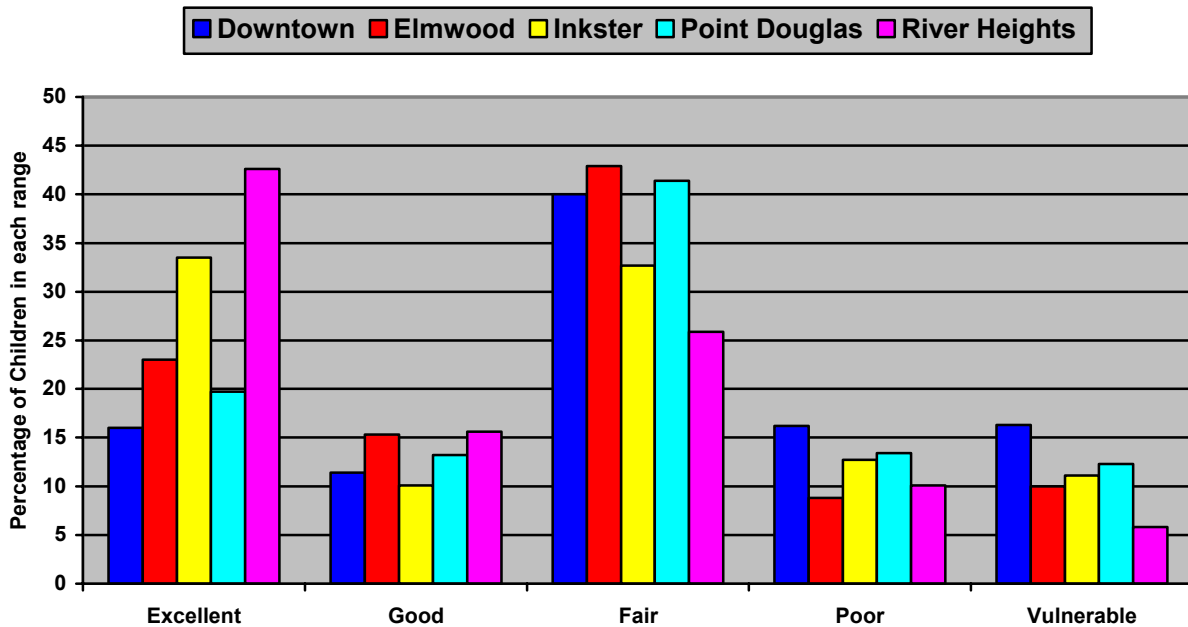
See Appendix E for a detailed map of the Winnipeg U.E.Y. community

## How are the five Communities doing in the area of COMMUNICATION SKILLS AND GENERAL KNOWLEDGE?

Table 9 EDI 2002/03 results--percentage of students scoring within the five percentiles

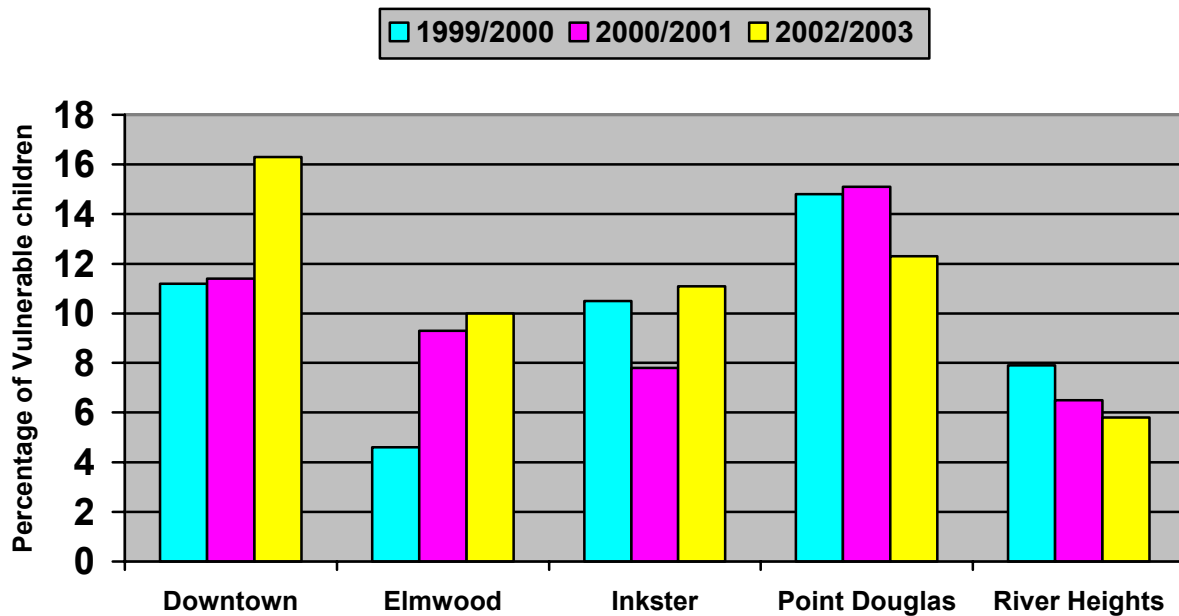
% of students	75-100% <b>Excellent</b>	50-75% <b>Good</b>	25-50% <b>Fair</b>	10-25% <b>Poor</b>	Lowest 10% <b>Vulnerable</b>
<b>Downtown</b>	16.0	11.4	40.0	16.2	16.3
<b>Elmwood</b>	23.0	15.3	42.9	8.8	10.0
<b>Inkster</b>	33.5	10.1	32.7	12.7	11.1
<b>Point Douglas</b>	19.7	13.2	41.4	13.4	12.3
<b>River Heights</b>	42.6	15.6	25.9	10.1	5.8

There is a statistical expectation that *10% of children will fall within the 'vulnerable' range*. Results of more than 10% of children in the 'vulnerable' range indicate a community *need* in the area of 'communication and general knowledge' for young children. Results of less than 10% of children in the 'vulnerable' range indicate a community *strength* in the area of 'communication and general knowledge' for young children



See Appendix C for more information on percentile ranges

## What are the ‘VULNERABLE’ scores for Communication Skills and General Knowledge from previous years?



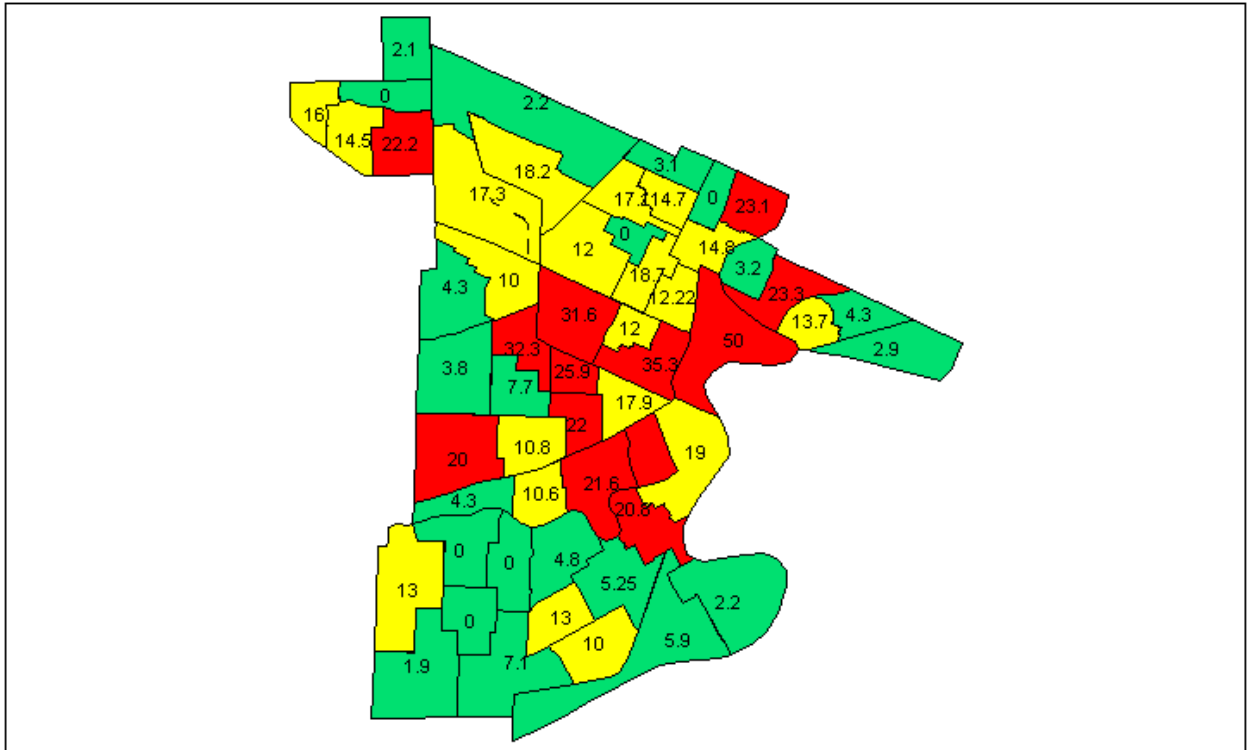
Communities that show a steady gain in a specific developmental area would be considered to have a *strength* in that area. Conversely, communities that show a steady drop in a specific developmental area would be considered to have a *need* in that area. It is important to note that gains and drops in early childhood development do fluctuate, and that the goal for communities should be long range *sustained* improvement. Thus, if a community shows a *strength*—or an improvement in EDI scores—in a specific developmental area, communities may wish to focus their efforts to build upon this success. Likewise, if a community shows a *need*—or a drop in EDI scores—in a specific developmental area, communities may wish to target this area as a community priority.

*The concept of ‘vulnerability’ is based on the percentile ranking using the WSD 2002/2003 EDI score averages. The ‘vulnerable’ scores reflect the percentage of children who score below the 10<sup>th</sup> percentile. As percentile rankings are based on yearly EDI scores within the WSD, the cut-off scores for the ‘vulnerable’ range (the 10<sup>th</sup> percentile) fluctuate year to year, and from UEY community to UEY community.*

*See Appendix D for more information on vulnerable cut-off scores.*

## Where are the Vulnerable Children?

Communication Skills and General Knowledge  
EDI 2002/2003 Results



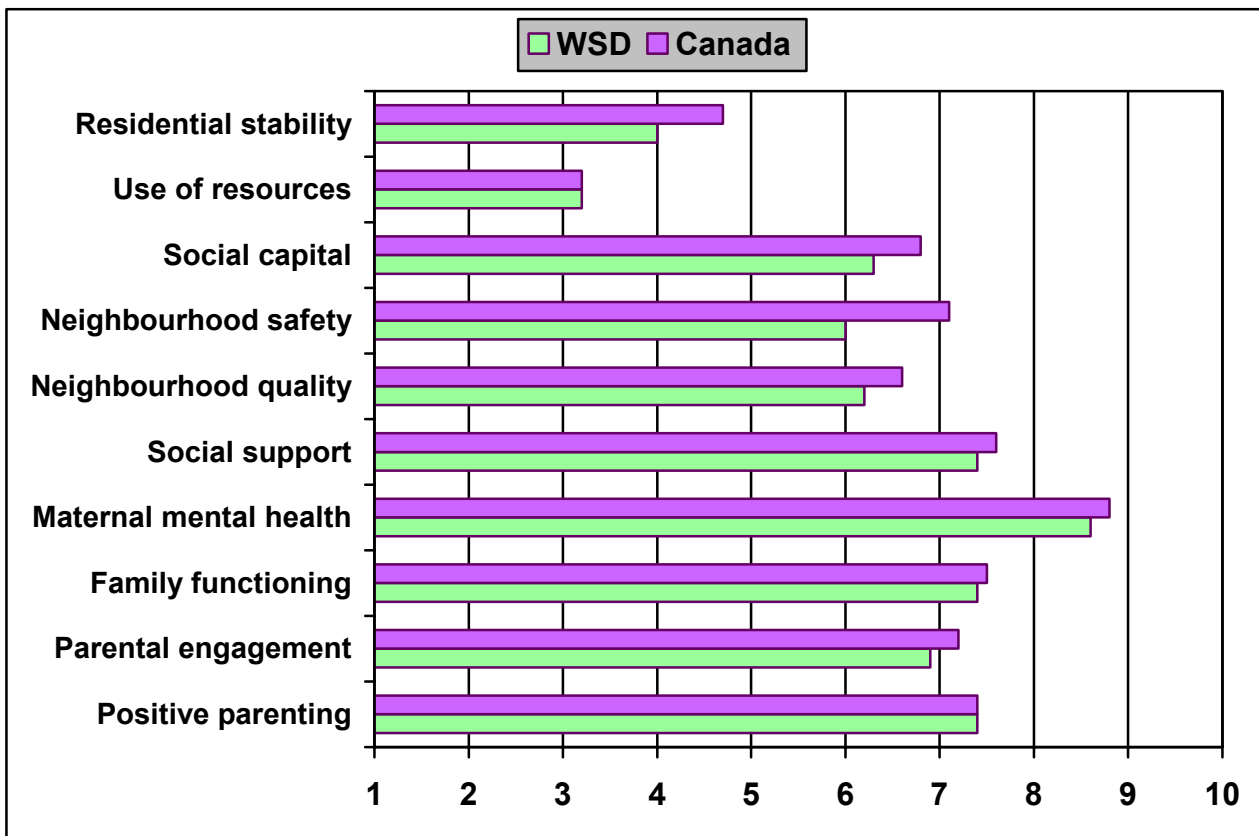
Communication and General Knowledge 'Vulnerability' Scores  
Percentage of K students who score within the 'vulnerable' range

■	0 to 10
■	10 to 20
■	20 to 50

*See Appendix E for a detailed map of the Winnipeg U.E.Y. community*

## FAMILY AND COMMUNITY FACTORS that influence Early Childhood Development

Results from the National Longitudinal Survey of Children and Youth (NLSCY, 1996, cycle 2) identify 10 key family and community factors that influence early childhood development. The following chart presents these 10 factors and shows the levels (based on a score from 1 to 10) of each factor found in the Winnipeg School Division (WSD) communities compared to Canadian averages.



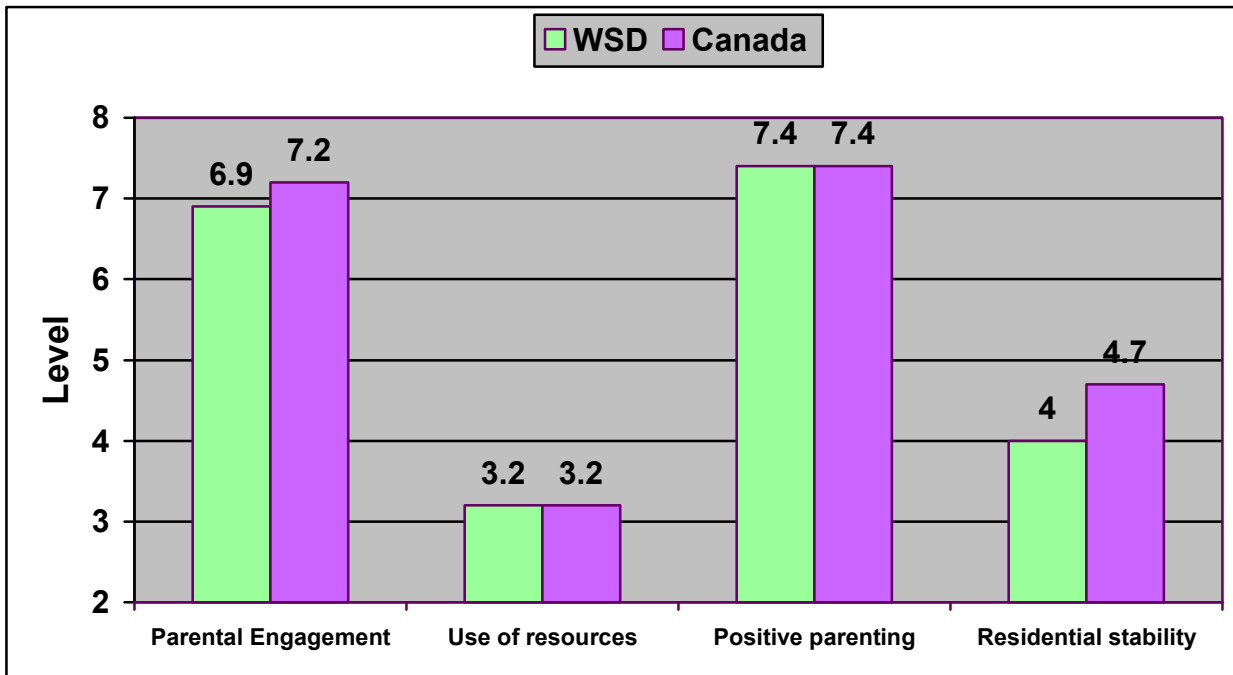
Despite many difficult circumstances such as higher levels of unemployment and poverty, and a greater number of single parent families compared to the Canadian average, the WSD area communities show ‘**positive parenting**’ and ‘**family functioning**’ levels to be *comparable to the Canadian average*. While the WSD area communities show a *low* level of ‘**use of resources**’, this level is also *comparable to the national average*. The family and community factors that fall most significantly *below the Canadian average* for the WSD area communities include ‘**residential stability**’, ‘**social capital**’, ‘**neighbourhood safety**’, and ‘**neighbourhood quality**’ (Early Childhood Development in Winnipeg, 2001).

*See Appendix F for further description of family and community factors*

## Factors that have the greatest influence on a child's COGNITIVE DEVELOPMENT

According to the results from the NLSCY (cycle 3), the family and community factors that have the greatest influence on cognitive development are:

- Parental engagement
- Use of resources
- Positive parenting
- Residential stability



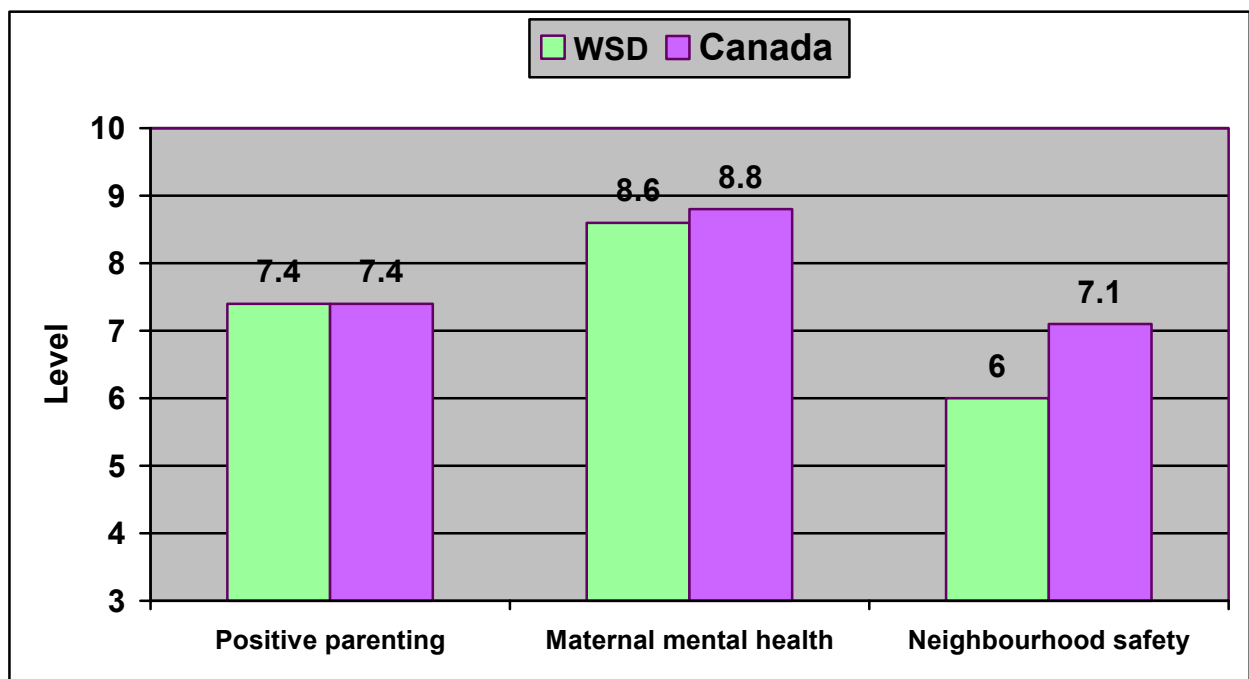
According to NLSCY results, the WSD area communities have *comparable levels to the Canadian average* in ‘**parental engagement**’, ‘**use of resources**’, and ‘**positive parenting**’. However, the WSD area communities have a *greater level of ‘residential transience’* compared to the national average. This community factor may be considered an area of *need* for the WSD area communities (Early Childhood Development in Winnipeg, 2001).

*See Appendix F for further description of family and community factors*

## Factors that have the greatest influence on a child's BEHAVIOURAL DEVELOPMENT

According to the results from the NLSCY (cycle 3), the family and community factors that have the greatest influence on cognitive development are:

- Positive parenting
- Maternal mental health
- Neighbourhood safety



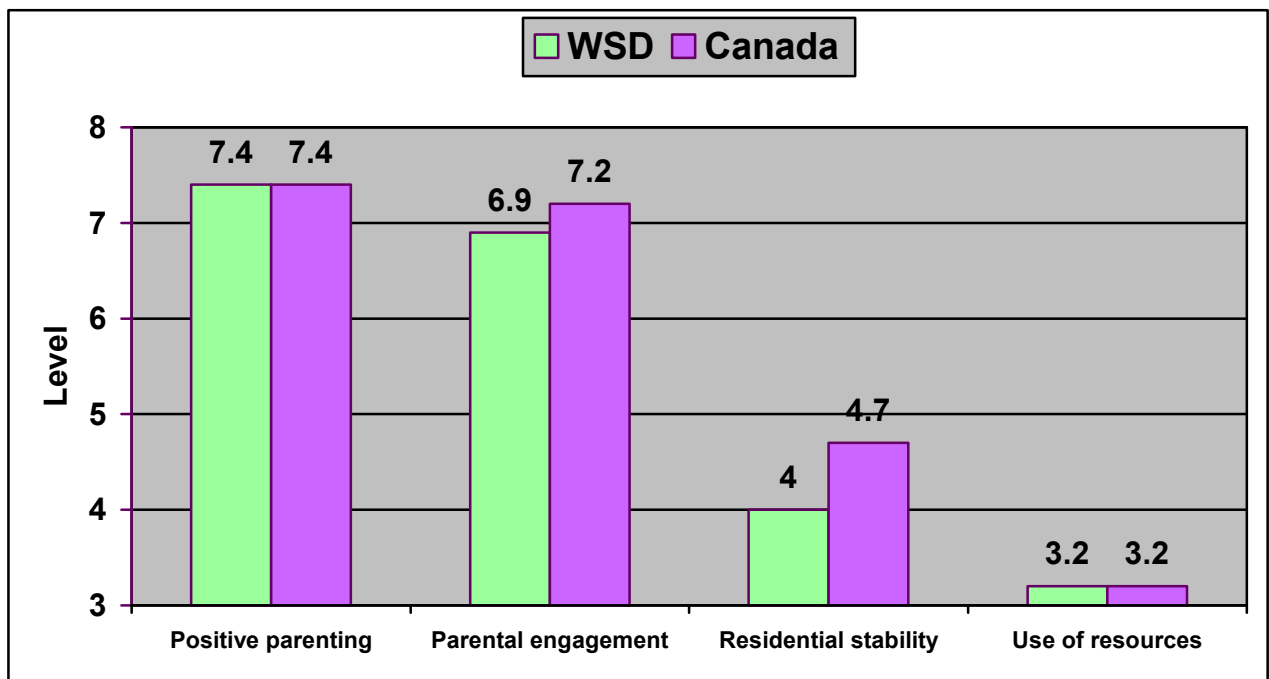
According to NLSCY results, The Winnipeg School Division communities have *comparable levels to the Canadian average* in **‘positive parenting’** and **‘maternal mental health’**. However, the level of **‘neighbourhood safety’** in the Winnipeg School Division communities is *lower than the national average*. This community factor may be considered an area of *need* for the Winnipeg School Division communities (Early Childhood Development in Winnipeg, 2001).

*See Appendix F for further description of family and community factors*

## Factors that have the greatest influence on a child's PHYSICAL DEVELOPMENT

According to the results from the NLSCY (cycle 3), the family and community factors that have the greatest influence on cognitive development are:

- Positive parenting
- Parental engagement
- Residential stability
- Use of resources



According to NLSCY results, the WSD area communities have *comparable levels to the Canadian average* in ‘**positive parenting**’, ‘**parental engagement**’, and ‘**use of resources**’. However, the level of ‘**residential stability**’ is *lower than the national average*. This community factor may be considered an area of *need* for the WSD area communities (Early Childhood Development in Winnipeg, 2001).

*See Appendix F for further description of family and community factors*

## **Appendix A**

**The Manitoba averages are based on the Manitoba school divisions that participated in the EDI study in 2002/03. These divisions include:**

- Border Land
- Brandon
- Division Scolaire Franco-Manitobaine
- Evergreen
- Flin Flon
- Fort La Bosse
- Hanover
- Kelsey
- Lakeshore
- Lord Selkirk
- Louis Riel
- Mountain View
- Park West
- Pine Creek
- Prairie Rose
- Prairie Spirit
- Red River Valley
- Seine River
- Seven Oaks
- Southwest Horizon
- Swan Valley
- Turtle Mountain
- Western
- Winnipeg

**The Canadian EDI averages include the EDI results from the following provinces:**

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan

## Appendix B

### Profiles of the EDI development scales:

(The following examples demonstrate an *excellent* measure of each developmental scale)

#### 1. Physical Health and Well-Being

- Have an established hand preference, are well-coordinated, Come to school on time looking rested, appropriately dressed and well-fed
- Are able to perform activities involving gross and fine motor skills

#### 2. Social Competency

- Play and get along with other children, are cooperative and respectful of other people and their property
- Are curious about the surrounding world, and are eager to explore new books, toys and games
- Show some self-control, follow instructions and class routines, adjust to changes

#### 3. Emotional Maturity

- Show helping behaviours (help someone whose hurt, invite others to play)
- Are able to concentrate, settle into chosen activities
- Do not show aggressive behaviours, do not have temper tantrums, and are not mean to others

#### 4. Language and Cognitive Development

- Have all the basic literacy skills, know how to handle a book, can identify some letters and attach sounds to some letters
- Show an interest in math and numbers, can count to 20 and understand simple time concepts

#### 5. Communication Skills and General Knowledge

- Can communicate easily and effectively, can participate in story-telling or imaginative play
- Proficient in their native language
- Shows adequate general knowledge

## **Subscales of the five EDI development scales:**

### **1. Physical Health and Well-being**

- Physical readiness for school day
- Physical independence
- Gross and fine motor skills

### **2. Social Competency**

- Overall social competence
- Responsibility and respect
- Approaches to learning
- Readiness to explore new things

### **3. Emotional Maturity**

- Prosocial and helping behaviour
- Anxious and fearful behaviour
- Aggressive behaviour
- Hyperactivity and inattention

### **4. Language and Cognitive Development**

- Basic literacy
- Interest in literacy/numeracy and memory
- Advanced literacy
- Basic numeracy

### **5. Communication Skills and General Knowledge**

- Communication skills and general knowledge

## Appendix C Percentile Ranges

### Physical health and well being

Theoretical range: 0-10

Actual range in the sample: 3.27-10.00

Percentile boundaries: score cut-offs

75 <sup>th</sup> percentile	50 <sup>th</sup> percentile	25 <sup>th</sup> percentile	10 <sup>th</sup> percentile	Below 10 <sup>th</sup> percentile
<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>Vulnerable</b>
9.62 to 10	8.85 to 9.61	8.08 to 8.84	7.12 to 8.07	3.27 to 7.11

**Excellent:** A child who is always physically ready to tackle the new day at school, is generally independent, and has excellent motor skills.

**Vulnerable:** A child with average or poor fine (e.g., holding a pencil, manipulating objects) and gross (e.g., climbing stairs) motor skills, sometimes tired or late, usually clumsy, often with flagging energy levels, may occasionally suck a thumb, and has average overall physical development.

### Social competence

Theoretical range: 0-10

Actual range in the full sample: 0.96-10.00

Percentile boundaries: score cut-offs

75 <sup>th</sup> percentile	50 <sup>th</sup> percentile	25 <sup>th</sup> percentile	10 <sup>th</sup> percentile	Below 10 <sup>th</sup> percentile
<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>Vulnerable</b>
9.81 to 10	8.75 to 9.80	7.12 to 8.74	5.58 to 7.11	.96 to 5.57

**Excellent:** A child who almost never has a problem getting along, working, or playing with other children; is respectful to adults, self-confident, has no difficulty following class routines, and is capable of pro-social behaviour.

**Vulnerable:** A child with average to poor overall social skills, with regular serious problems in more than one area of getting along with other children, accepting responsibility for own actions, following rules and class routines, self-confidence, self-control, adjustment to change, and usually unable to work neatly and independently.

## Emotional maturity

Theoretical range: 0-10

Actual range in the full sample: 0-10.00

Percentile boundaries: score cut-offs

75 <sup>th</sup> percentile	50 <sup>th</sup> percentile	25 <sup>th</sup> percentile	10 <sup>th</sup> percentile	Below 10 <sup>th</sup> percentile
<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>Vulnerable</b>
9.00 to 10	8.17 to 8.99	7.04 to 8.16	5.83 to 7.03	0 to 5.82

**Excellent:** A child who has almost never shown aggressive, anxious, or impulsive behaviour, has good ability to concentrate, and is often helping other children.

**Vulnerable:** A child with regular problems with managing aggressive behaviour, prone to disobedience, may sometimes take things belonging to others, and/or be easily distractible, inattentive, impulsive, usually unable to show helping behaviour towards other children, sometimes unhappy, and sometimes upset when left by the caregiver.

## Language and cognitive development

Theoretical range: 0-10

Actual range in the full sample: 0.00-10.00

Percentile boundaries: score cut-offs

75 <sup>th</sup> percentile	50 <sup>th</sup> percentile	25 <sup>th</sup> percentile	10 <sup>th</sup> percentile	Below 10 <sup>th</sup> percentile
<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>Vulnerable</b>
9.62 to 10	8.46 to 9.61	6.80 to 8.45	4.50 to 6.79	0 to 4.49

**Excellent:** A child interested in books, reading and writing, and rudimentary maths, capable of reading and writing simple and complex words, able to count and recognise numbers and geometric shapes.

**Vulnerable:** A child with serious problems with both reading/writing and numeracy, unable to read and write the simplest words, uninterested in trying, and often unable to identify letters and attach sounds to letters, does not show rhyming awareness, has difficulty with remembering things, counting to 20, recognising and comparing numbers and shapes, and time concepts, and is usually not interested in numbers.

## Communication skills and general knowledge

Theoretical range: 0-10

Items: 10

Actual range in the full sample: 0.00-10.00

Percentile boundaries: score cut-offs

75 <sup>th</sup> percentile	50 <sup>th</sup> percentile	25 <sup>th</sup> percentile	10 <sup>th</sup> percentile	Below 10 <sup>th</sup> percentile
<b>Excellent</b>	<b>Good</b>	<b>Fair</b>	<b>Poor</b>	<b>Vulnerable</b>
9.44 to 10	8.06 to 9.43	6.11 to 8.05	4.72 to 6.10	0 to 4.71

**Excellent:** A child who has excellent communication skills, can tell a story and communicate with both children and adults, and has no problems with articulation.

**Vulnerable:** A child with poor communication skills and articulation, whose command of English is poor or very poor, who has difficulties in talking to others, understanding, and being understood, and has poor general knowledge.

## Appendix D

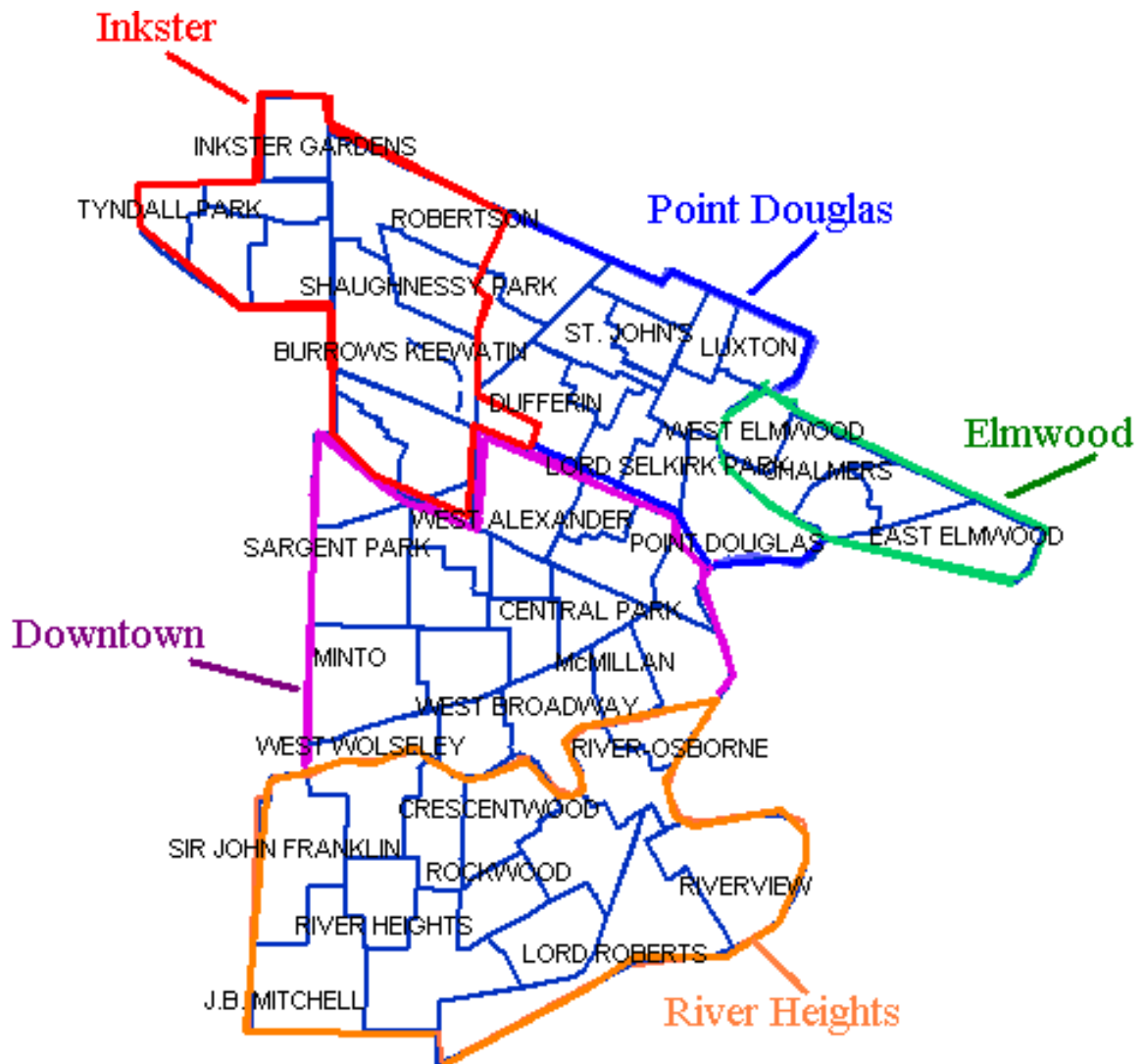
### ‘Vulnerable’ Cut-off Scores

	<b>WSD 1999/00</b>	<b>WSD 2000/01</b>	<b>WSD 2002/03</b>	<b>Canada 1999/00</b>	<b>Canada 2000/01</b>	<b>Canada 2002/03</b>
Physical Health and Well being	6.73	7.30	7.12	7.12	7.31	7.50
Social Competence	5.39	5.58	5.58	5.58	5.67	5.77
Emotional Maturity	5.67	5.83	5.83	5.83	6.00	6.00
Language & Cognitive Development	3.85	4.62	4.5	5.39	5.77	5.77
Communi- cation & General Knowledge	4.50	5.00	4.72	4.25	5.00	5.00

*This table indicates the ‘vulnerable’ cut-off scores. Children that score below this cut-off score are considered ‘vulnerable’. An increase in the cut-off score within a developmental area indicates an improvement in that developmental area for that community.*

## Appendix E

### The community map



## **Appendix F**

### **Family and Community Factors that Influence Early Childhood Development**

#### **Positive Parenting**

- authoritative parenting vs. authoritarian
- praises child for good behaviour

#### **Parental Engagement**

- engaged in learning activities
- tell stories, read, teach numbers, letters

#### **Family Functioning**

- relationship between spouse
- relationship between parent and child
- cohesiveness and adaptability of family

#### **Maternal Mental Health**

- good mental health—free from emotional problems such as depression

#### **Social Support**

- support received from friends/family
- support in emergency situations
- able to confide/seek advice

#### **Social Capital**

- ability of neighbours to work together/help each other out/watch out for one another's children
- provide children with role models outside of the home

#### **Neighbourhood Quality**

- cleanliness, safety
- adequacy of facilities (recreation, health)
- quality of schools and nursery schools

#### **Neighbourhood Safety**

- level of concern for child's safety in their neighbourhood
- safety of play-spaces, crime rates, problems with older children/bullies

#### **Use of Resources**

- use of recreational facilities (pools, rinks, community centers)
- use of educational facilities (libraries, drop-in programs)
- use of cultural facilities (art museums, plays, sport events)

#### **Residential Stability**

- low degree of transience of local population

