BRASS BELL Family Resource Centre



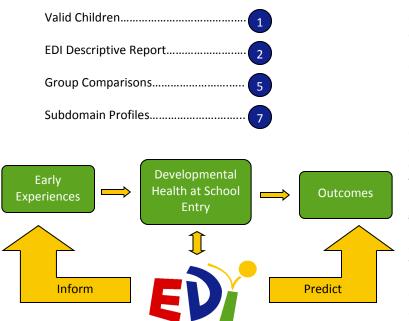
Summary Report

Early Development Instrument Thunder Bay - Superior North Region School Year 2014/15

A snapshot of children's developmental health at school entry



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Acknowledgement

Information and data in this report is provided by the Offord Centre for Child Studies at McMaster University. Thank you to all of those involved in the development and analysis of this valuable tool.

For information on interpreting EDI results, please visit the Offord Centre website at: **www.edi.offordcentre.com**

Thank you to all partners who made EDI data collection possible. A special thank you to the Senior Kindergarten teachers for your time and energy filling out the EDI questionnaires. Without you, none of this would be possible.

What is the EDI?

One of the most important developmental events in a child's life is their transition to school. The Early Development Instrument: A Population-based Measure for Communities (EDI) measures a child's developmental health upon school entry into Grade One. The EDI was developed by the Offord Centre for Child Studies at McMaster University. The instrument was developed to measure the developmental health of Senior Kindergarten students across Canada. The EDI is a guestionnaire which is completed once every three years in Ontario. The EDI is a tool which is feasible, affordable, and able to report on populations of children from all walks of life and ethnic groups over time. The survey includes 104 questions which relate to a child's development in the Early Years. The EDI is a population based measure, able to predict outcomes which may have long-term consequences for populations.

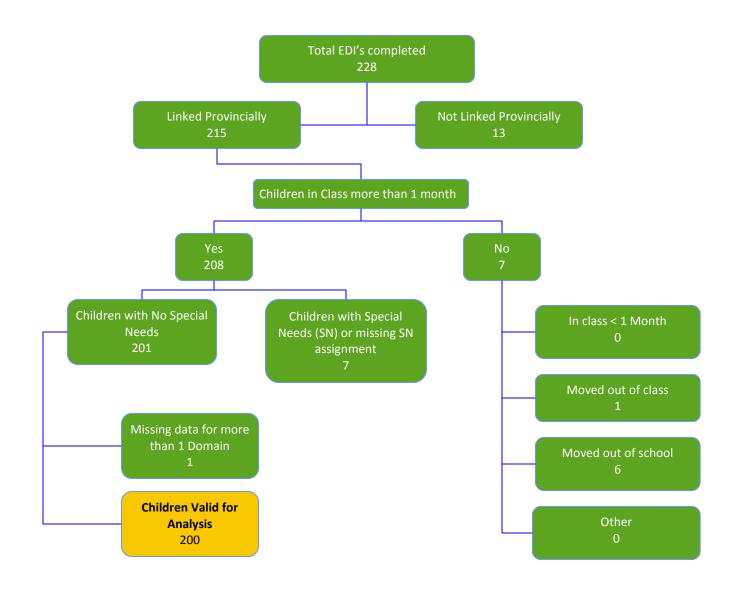
Children are born ready to learn, their brains wired to absorb sensory information at an astounding rate. The knowledge and skills a child gains in their early years (birth to age six) are used to shape their understanding of the world around them. The proportion of positive and negative stimulation that a child receives in the early years lay the foundation for their cognitive and social abilities later in life.

Children who enter Grade One with adequate social and communication skills, the ability to cope with frustration and stress, and age appropriate motor, language, and cognitive development levels are able to take advantage of learning opportunities offered by school. Studies have shown that early EDI child vulnerabilities predicts a child's lifelong health, learning, and behaviour.

The EDI is designed to be a tool to increase mobilization of communities and policy makers in order to have a positive impact on children's developmental health. EDI information is provided to prompt new community policies and programs in order to assist children and families in need.

Number of Valid EDI Children

The following chart shows the total number of EDI questionnaires received and the final number of EDI questionnaires valid for analysis. Only children who fall into the "Children Valid for Analysis" bubble are included in EDI reporting in the Thunder Bay -Superior North Region. The number of valid EDI children in the Thunder Bay - Superior North Region is 200, highlighted in the yellow bubble. The Thunder Bay - Superior North Region includes the townships of Dorion, Red Rock, Nipigon, Rossport, Schreiber, Terrace Bay, Marathon, Manitouwadge, Armstrong, the Municipality of Greenstone, and the First Nations of Gull Bay, Heron Bay, Pays Plat, Pic Mobert, Marten Falls, MacDiarmid, and Aroland.







EDI Domains

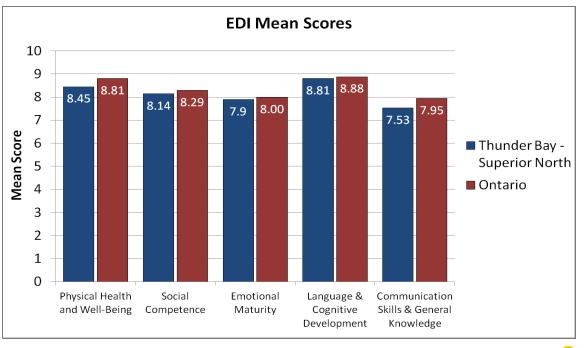
Physical Health and Well-Being - 13 Questions - Physical readiness for school: children are dressed properly, are rested, arrive at school on time and are not hungry. Physical independence: children look after their own needs, have established hand preference, are well coordinated, and do not suck their thumb. Fine and gross motor skills: children can hold a pencil, crayon, or brush, tie their shoes, and play on the playground.

Social Competence - 26 Questions - Overall social competence: children are able to get along with others, usually cooperative and self-confident. Responsibility and respect: children follow rules, take care of materials, and accept responsibility for their own actions. Approaches to learning: children work neatly and independently, solve problems, follow instructions, and adapt easily to change.

Emotional Maturity - *30 Questions* - Prosocial and helping behaviours: children often help others when they are hurt, sick, or upset, offer to help spontaneously and invite bystanders to join in. Anxious and fearful behaviour: children are happy, enjoy school, and are comfortable being left at school by caregivers. Aggressive behaviour: children do not use aggression to solve conflict, do not have temper tantrums, and are not mean to others. Hyperactivity and inattention: children are able to concentrate, settle to chosen activities, wait their turn, and think before they act.

Language & Cognitive Development - 26 Questions - Basic literacy: children know how to handle a book, can identify some letters and attach sounds to some letters, show awareness of rhyming words, know the writing directions, and are able to write their own name. Interest in literacy/numeracy and memory: children have interest in books and reading, math and numbers, and remember things. Advanced literacy: children can read simple and complex words or sentences, write voluntarily, and write simple words or sentences. Basic numeracy: children can count to 20 and recognize shapes and numbers, sort and classify, understand simple time concepts and use one-to-one correspondence.

Communication Skills & General Knowledge - 8 Questions - Children communicate their needs, wants, and feelings easily and effectively, show age appropriate general knowledge, can participate in story telling, articulate words clearly, and are proficient in their native language.



Equity from the Start





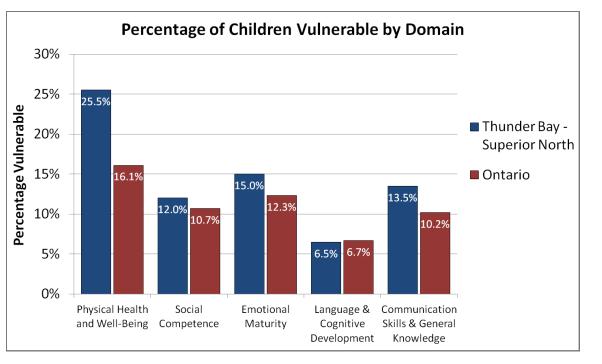
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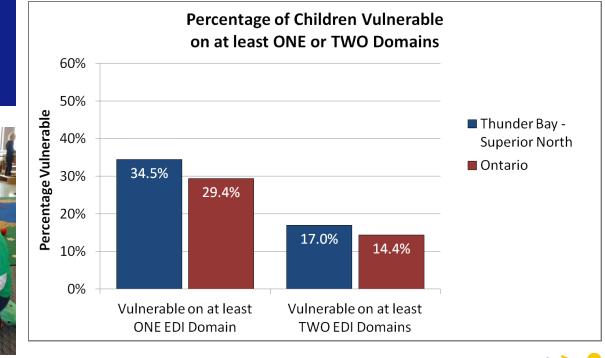
Vulnerable Children

"Vulnerable" describes the children who score low (below the 10th percentile cut-off of the Ontario Baselines population) on any of the five domains. Higher vulnerability indicates that a greater percentage of children are struggling.

The EDI uses the 10th percentile for vulnerability because it captures children who are struggling, even those whose struggles may not be apparent.



The graph below illustrates the Thunder Bay - Superior North 2014/15 results for the percentage of children vulnerable on at least one and at least two domains compared to Ontario 2014/15 population.





3





Research shows that vulnerability at school

entry is associated with

poorer scores on

provincial standardized

tests in Grade 3.

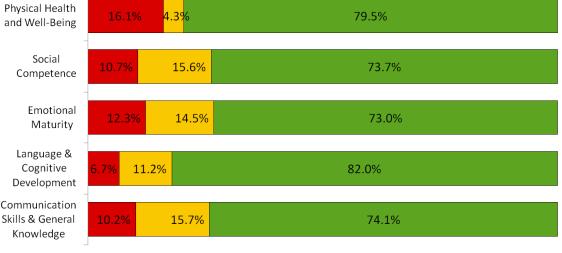
Distribution of EDI Scores

The graphs below illustrate the percentage of children in the Thunder Bay - Superior North Region who fall into the Vulnerable (lowest 10%), At Risk (10%-25%), and On Track (25%-100%) categories for each EDI domain. Children who score in the Vulnerable and At Risk categories are more likely to fall behind in later grades in academic achievement. The scores are shown in relation to the Ontario 2014/15 scores.

Physical Health 4.0% 70.5% and Well-Being Social 12.0% 76.0% Competence Emotional 13.5% 71.5% Maturity Language & Cognitive 82.0% 11.5% Development Communication Skills & General 15.5% 71.0% Knowledge Vulnerable At Risk On Track Children who score between Children who score below Children who score above the 10th percentile the 10th and 25th percentiles the 25th percentile **Ontario (N = 125858)**

Thunder Bay – Superior North (N = 200)





Note: Distributions may not equal 100% due to missing values in a domain.





Group comparisons allow

researchers to understand

contextual factors that

may be influencing EDI

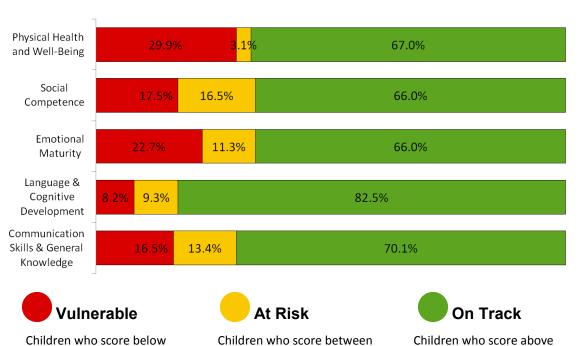
vulnerability rates.

Group Comparisons

the 10th percentile

Comparing children based on certain demographics such as gender and age is an effective way to understand how different factors may be influencing EDI data. It is important to take into account the sample size (N) as large differences in vulnerability for smaller sample sizes between groups may represent smaller numbers of children. The graphs below the show distribution of EDI scores by gender.

Distribution of EDI Scores by Gender

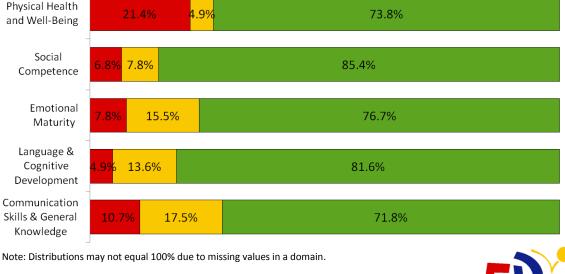


Thunder Bay – Superior North Boys (N = 97)

Thunder Bay – Superior North Girls (N = 103)

the 10th and 25th percentiles





Equity from the Start

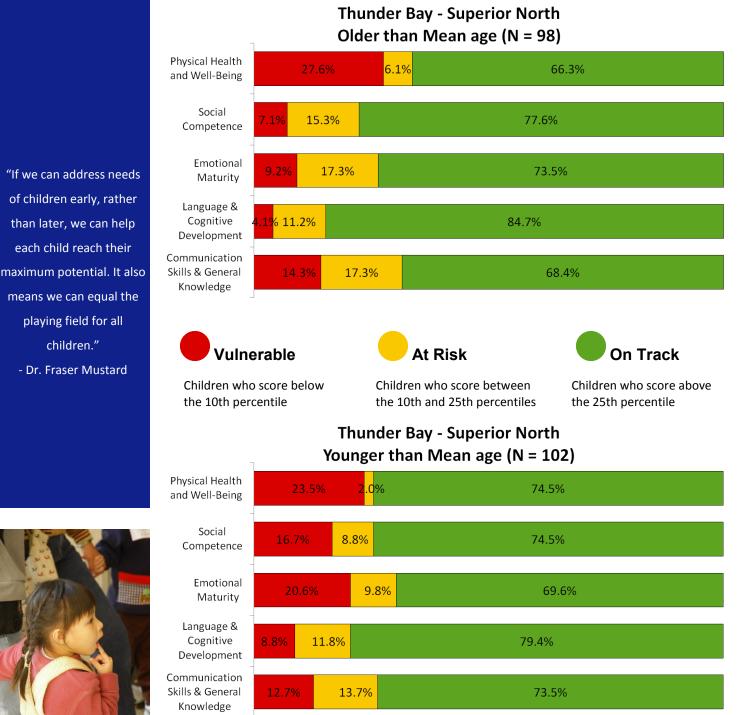
5

the 25th percentile



Distribution of EDI Scores by Age of Child

The graphs below illustrate the distribution of EDI scores of children both older and younger than the mean age. The mean age of children in the Thunder Bay - Superior North Region is 5.68.



Note: Distributions may not equal 100% due to missing values in a domain.





Subdomain Profiles

Each of the five domains are divided into subdomains, except Communication Skills and General Knowledge. The following tables shows the breakdown of subdomains by domain.

Exploring subdomains is an important step in determining areas of development that are influencing child vulnerability rates. Subdomains where large percentages of children are meeting few/none of the developmental expectations can be used to inform actions needed to address children's needs.



Physical Health and Well-Being	Social Competence	Emotional Maturity	Language & Cognitive Development	Communication Skills & General Knowledge
Physical readiness for the school day	Overall social competence	Prosocial and helping behaviour	Basic literacy	Communication Skills and General Knowledge
Physical independence	Responsibility and respect	Anxious and fearful behaviour	Interest in literacy/ numeracy and memory	
Gross and fine motor skills	Approaches to learning	Aggressive behaviour	Advanced literacy	
	Readiness to explore new things	Hyperactivity and inattention	Basic numeracy	

Scores for domains and subdomains on the EDI vary from 0 to 10. Some subdomains represent skills that a child in Kindergarten, based on his or her developmental age, is expected to have mastered already (e.g. physical independence). Other subdomains represent areas of development that are still emerging (e.g. prosocial and helping behaviour).

Based on skills and abilities that each subdomain represents, groups of scores were identified representing children who met all/almost all developmental expectations (reach the expectations for all or most of the subdomain items), some of the developmental expectations (reach the expectations for some of the subdomain items), and met few/none of the developmental expectations (reach the expectations (reach the expectations for some of the subdomain items). In contrast to the "on track", "at risk", and "vulnerable" groups identified for domains in the EDI Descriptive Report, which are based on the distribution scores in the province, the subdomain categories are distribution-free.

In this report, detailed descriptions of children who met all/almost all and of those who met few/none of the developmental expectations are given for each subdomain. There is no detailed description for the "some" category because these children vary widely in their skills and abilities. An investigation of percentages of children who fall into the "few/none" category will identify areas of the greatest weakness in the population. In contrast, an investigation of percentages of children who fall into the greatest strength in the population. The following section outlines the percentage of children who are meeting all/almost all, some, or few/none of the developmental expectations in each of the five domains. The results for Ontario 2014/15 are included as a comparison.

Physical Health and Well-Being

Physical readiness for school day

All/Almost All - Children who never or almost never experienced being dressed inappropriately for school activities, or coming to school tired, late or hungry.

Few/None - Children who have at least sometimes experienced being dressed inappropriately for school activities, or coming to school tired, late or hungry.

Physical independence

All/Almost All - Children who are independent in looking after their needs, have an established hand preference, are well coordinated, and do not suck a thumb/finger.

Few/None - Children who vary from those who have not developed one of the three skills (independence, handedness, coordination) and/or suck a thumb to those who have not developed any of these skills and suck a thumb.

Gross and fine motor skills

All/Almost All - Children who have an excellent ability to physically tackle the school day and have excellent or good gross and fine motor skills. Few/None - Children who range from those who have an average ability to perform skills requiring gross and fine motor competence and good or average energy levels, to those who have poor fine and gross motor skills, poor overall energy levels, and poor physical skills.

Social Competence

Overall Social Competence

All/Almost All - Children with excellent or good overall social development, very good ability to get along with other children, and play with various children; usually cooperative and self-confident.

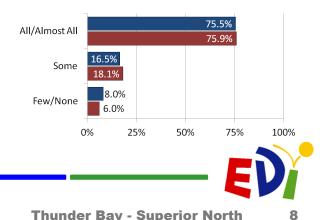
Few/None - Children who have average or poor overall social skills, have low self-confidence, and are rarely able to play with various children or interact cooperatively.

Responsibility and Respect

All/Almost All - Children who always or most of the time show respect for others and for property, follow rules and take care of materials, accept responsibility for actions, and show self-control.

Few/None - Children who only sometimes or never accept responsibility for actions, show respect for other and for property, demonstrate self-control, follow rules, and take care of materials.

Equity from the Start



Subdomain Profiles

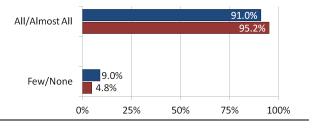
87.5%

75%

100%

89.9%

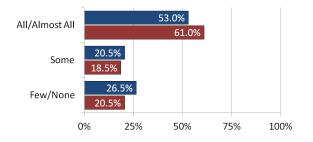
Thunder Bay - Superior North Ontario



All/Almost All

Few/None

0%

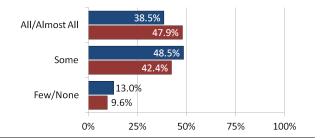


12.5%

25%

50%

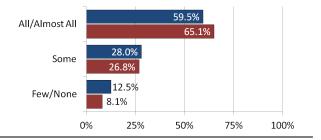
10.1%



Subdomain Profiles

Thunder Bay - Superior North O

Ontario

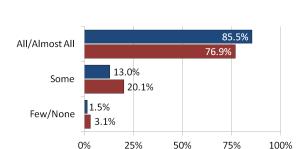




Approaches to Learning

All/Almost All - Children who always or most of the time work neatly, independently, solve problems, follow instructions and class routines, and easily adjust to changes.

Few/None - Children who only sometimes or never work neatly, work independently, solve problems, follow class routines, and adjust to changes in routines.



48.5%

50%

75%

100%

35.5%

25.8%

25.8%

30.7%

32.2%

25%

All/Almost All

Some

0%

Few/None

Readiness to Explore New Things All/Almost All - Children who are curious about the surrounding world and

are eager to explore new books, toys, and games.

Few/None - Children who only sometimes or never show curiosity about the world and are rarely eager to explore new books, toys, and games.

Emotional Maturity

Prosocial and Helping Behaviour

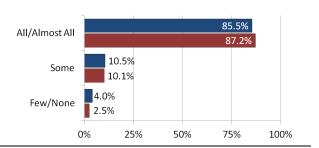
All/Almost All - Children who often show most of the helping behaviours: helping someone hurt, sick, or upset, offering to help spontaneously, invite bystanders to join in.

Few/None - Children who never or almost never show most of the helping behaviours; they do not help someone hurt, sick, or upset, spontaneously offer to help, do not invite bystanders to join in.

Anxious and Fearful Behaviour

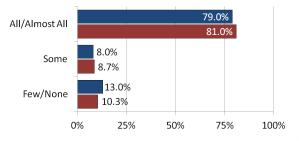
All/Almost All - Children who rarely or never show most of the anxious behaviours; they are happy and able to enjoy school, and are comfortable being left at school by caregivers.

Few/None - Children who often show most of the anxious behaviours; they could be worried, unhappy, nervous, sad, or excessively shy, indecisive; and they can be upset when left at school by caregivers.



Aggressive Behaviour

All/Almost All - Children who rarely or never show most of the aggressive behaviours; they do not get into physical fights, kick or bite others, take other people's things, are disobedient or have temper tantrums. Few/None - Children who often show most of the aggressive behaviours; get into physical fights, kick or bite others, take other people's things, are disobedient or have temper tantrums.



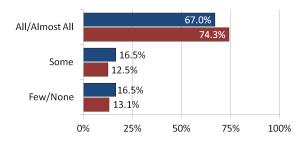
76.5%

79.6%

75%

100%

Thunder Bay - Superior North Ontario



16.5%

25%

14.2%

7.0%

6.1%

0%

All/Almost All

Some

Few/None



Hyperactivity and Inattention

All/Almost All - Children who never show most of the hyperactive behaviours; they are able to concentrate, settle to chosen activities, wait their turn, and most of the time think before doing something.

Few/None - Children who often show most of the hyperactive behaviours; they could be restless, distractible, impulsive, they fidget and have difficulty settling to activities.

Language & Cognitive Development

Basic Literacy

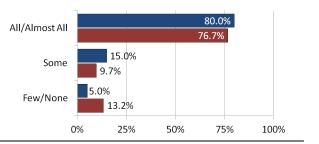
All/Almost All - Children who have all the basic literacy skills: know how to handle a book, can identify some letters and attach sounds to some letters, show awareness of rhyming words, know the writing directions, and are able to write their own name.

Few/None - Children who lack most of the basic literacy skills; they have problems with identifying letters or attaching sounds to them, rhyming, may not know the writing directions or how to write their own name.

Interest in Literacy/Numeracy and Memory

All/Almost All - Children who show interest in books and reading, math and numbers, and have no difficulty with remembering things. Few/None - Children who may not show interest in books and reading, or

math and number games, or both, and may have difficulty with remembering things.

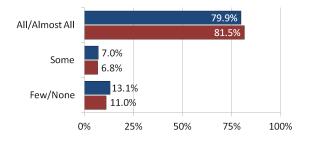


50%

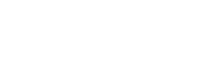
Advanced Literacy

All/Almost All - Children who have at least half of the advanced literacy skills: reading simple, complex words or sentences, writing voluntarily, writing simple words or sentences.

Few/None - Children who have only up to one of the advanced literacy skills; who cannot read or write simple words or sentences, and rarely write voluntarily.







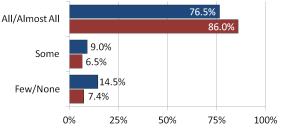
Thunder Bay - Superior North Ontario

Subdomain Profiles

Language & Cognitive Development

Basic Numeracy

All/Almost All - Children who have all the basic numeracy skills: can count to 20 and recognize shapes and numbers, compare numbers, sort and classify, use one-to-one correspondence, and understand simple time concepts. Few/None - Children who have marked difficulty with numbers, cannot count, compare or recognize numbers, may not be able to name all the shapes, and may have difficulty with time concepts.

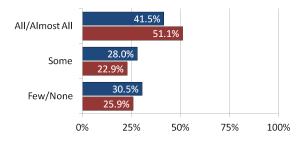


Communication Skills & General Knowledge

Communication Skills and General Knowledge

All/Almost All - Children who have excellent or very good communication skills; can communicate easily and effectively, can participate in story-telling or imaginative play, articulates clearly, show adequate general knowledge, and are proficient in their native language.

Few/None - Children who can range from being average to very poor in effective communication, may have difficulty in participating in games involving the use of language, may be difficult to understand and may have difficulty understanding others; may show little general knowledge and may have difficulty with their native language.



BRASS BELL Family Resource Centre

Telephone: (807) 857-2943

Website: http://www.brassbell.org/

Mailing Address 175 Dorion Loop Rd Dorion, ON, POT 1K0