

2010/11
Manitoba Provincial Report
Are our children ready for school?

Early Development Instrument (EDI) Results for Manitoba

This report shows the “readiness for school” of Kindergarten children in Manitoba, based on results from the EDI. Readiness for school is a baseline of children’s readiness to begin grade one. As children’s readiness for school is influenced by their early years - and the family and community factors that shape children’s early childhood development - EDI results are a reflection of the strengths and needs of children’s communities.

Are we ready?

Research tells us that children who begin school ready to learn will have future successes in learning throughout their lives. But how do we help children get this best start to school? The answer is what societies have known for generations – it takes a village to raise a child.

Ready parents and families, *ready* communities and schools, and *ready* governments and leaders, working together, promote the best possible outcomes for Manitoba’s children. For information on how communities, child care providers, school divisions and schools, community groups, and service providers develop partnerships and programs that best address the needs of communities, as evidenced by EDI results, please read the Healthy Child Manitoba EDI Teacher Newsletter at www.gov.mb.ca/healthychild/edi/resources.html.

Community-level EDI reports are developed for the 26 parent child coalitions in Manitoba. For these community reports, the EDI results are grouped by where children live – rural municipality or Winnipeg neighbourhood – and are used by coalitions to address the strengths and needs of individual communities. To view other community EDI reports, please visit www.gov.mb.ca/healthychild/edi/edi_reports.html.

The EDI measures:

Physical Health and Well-Being

Children are healthy, independent, rested each day

Social Competence

Children play and get along with others, share, show self-confidence

Emotional Maturity

Children are able to concentrate on tasks, help others, show patience, are not often aggressive nor angry

Language and Thinking Skills

Children are interested in reading and writing, can count and recognize numbers, shapes

Communication Skills and General Knowledge

Children can tell a story, communicate with adults and other children



Questionnaires used for Analyses

This table shows the number of children with special needs and with invalid questionnaires. Children without special needs and with valid questionnaires are used in the analyses on the following pages.

Descriptive information	2005/06	2006/07	2008/09	2010/11
Manitoba	Count (%)	Count (%)	Count (%)	Count (%)
EDI questionnaires completed	12,214	12,092	12,069	12,437
Invalid EDI questionnaires	542 (4)	576 (5)	569 (5)	617 (5)
Students with special needs	643 (5)	532 (4)	541 (4)	566 (5)
Invalid EDI questionnaires and Number of special needs (combined)	1,066 (9)	976 (8)	1,051 (9)	1,083 (9)
Number of valid questionnaires without special needs	11,148 (91)	11,116 (92)	11,018 (91)	11,354 (91)

Descriptive Information

This table provides descriptive information on the EDI collection within Manitoba.

Descriptive Information	2005/06	2006/07	2008/09	2010/11
Manitoba	Count (%)	Count (%)	Count (%)	Count (%)
Students who require further assessment	1,421 (12)	1,302 (11)	1,394 (12)	1,418 (11)
Students who are boys	6,300 (52)	6,141 (51)	6,190 (51)	6,300 (51)
Average age of student	5.6 years	5.7 years	5.7 years	5.7 years
Students with EAL	1,075 (9)	1,113 (10)	1,195 (10)	1,401 (12)
Students with FAL	160 (37)	176 (36)	175 (40)	206 (45)
Students who have recently immigrated **	NA	NA	573 (5)	661 (5)
Students who identify as Aboriginal	2,165 (18)	2,181 (18)	2,324 (19)	2,492 (20)

** Students who have Recently Immigrated question was added in the 2008/09 collection.
EAL = English as an additional language (for non-French schools)
FAL = French as an additional language (for French schools)

Canada to Manitoba Comparison Analyses

Comparisons between the Canadian EDI baseline results and Manitoba's EDI results are found on pages 3 to 10. The Canadian EDI baseline is defined as a community representative subgroup of the EDI collected over the years 2004/05, 2005/06 and 2006/07, in Canada. This represents about 53% of all Kindergarten children in Canada.

Average EDI Scores

The EDI has been collected province-wide (all of Manitoba's public schools) from school years 2005/06, 2006/07, 2008/09 and 2010/11. This table shows **average EDI scores** across the five domains of the EDI, and provides a 4 year trend analysis for Manitoba's average scores.

Average scores (‘10’ is best possible score)	2005/06	2006/07	2008/09	2010/11	4 Year Trend	Canadian Baseline
Manitoba						
Physical Health & Well-being	8.8	8.8	8.7	8.8	(no trend)	8.8
Social Competence	8.3	8.4	8.3	8.3	(no trend)	8.3
Emotional Maturity	7.9	8.0	7.8	7.9	(no trend)	8.0
Language & Thinking Skills	8.1	8.2	8.2	8.2	(no trend)	8.5
Communication Skills & General Knowledge	7.6	7.6	7.5	7.6	(no trend)	7.7
Statistical testing was done for trends using regression analysis, controlling for age and gender, with a 95% confidence interval.						



Very Ready and Not Ready Results

The EDI has been collected province-wide (all of Manitoba's public school divisions) from school years 2005/06, 2006/07, 2008/09 and 2010/11. The following tables show the **Very Ready** and **Not Ready** EDI results across the five domains of the EDI, and provides a trend analysis of Manitoba's results from 2005/06 to 2010/11.

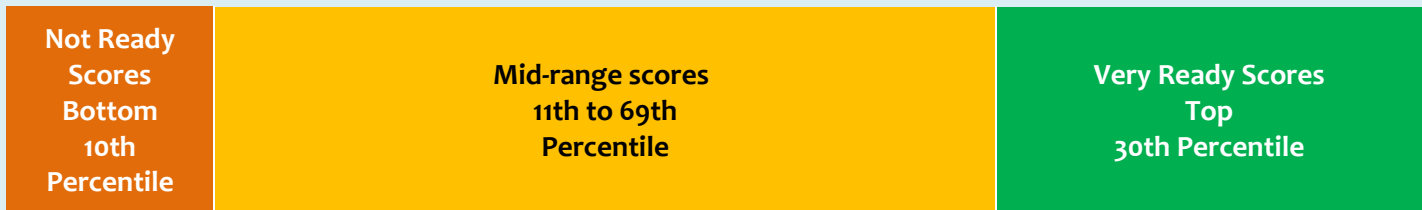
Very Ready Results

Proportion of children whose scores fall within the top 30th percentile of EDI scores.

Very Ready Results (top 30th percentile)	2005/06	2006/07	2008/09	2010/11	4 Year Trend	Canadian Baseline
Manitoba						
Physical Health & Well-being	32	34	32	34	(no trend)	34
Social Competence	34	35	34	34	(no trend)	34
Emotional Maturity	28	29	26	27	(no trend)	31
Language & Thinking Skills	30	33	33	33	(*increasing)	37
Communication Skills & General Knowledge	34	36	33	35	(no trend)	35
In the data table above, more than 30 per cent of children Very Ready reflects a strength in that area						
Very Ready in 1 or more domains	62	65	63	65	(no trend)	66
Very Ready in 2 or more domains	43	46	43	45	(no trend)	46
* The four-year trend is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.						

Reader's Tip

Very Ready results reflect the proportion of children whose scores fall within the top 30th percentile of EDI scores. **Not Ready** results reflect the proportion of children whose scores fall within the bottom 10th percentile of EDI scores. The Very Ready and Not Ready results have been derived using Canadian Standardized cut-off scores for the top 30th percentile category and the bottom 10th percentile category. This allows us to detect gains or losses related to Very Ready results and Not Ready results over the years.



Not Ready Results

Proportion of children whose scores fall within the bottom 10th percentile of EDI scores.

Not Ready Results (bottom 10th percentile)	2005/06	2006/07	2008/09	2010/11	Manitoba (all 4 years)	Canadian Baseline
Manitoba						
Physical Health & Well-being	11	11	11	11	(no trend)	10
Social Competence	9	9	10	11	(*increasing)	9
Emotional Maturity	12	11	11	11	(no trend)	11
Language & Thinking Skills	12	12	11	11	(no trend)	9
Communication Skills & General Knowledge	11	11	12	11	(no trend)	13
In the data table above, more than 10 per cent of children Not Ready reflects a need in that area						
Not Ready in 1 or more domains	29	28	29	28	(no trend)	28
Not Ready in 2 or more domains	14	14	15	15	(*increasing)	15

* The four year trend is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.

Sub-Domain Analyses

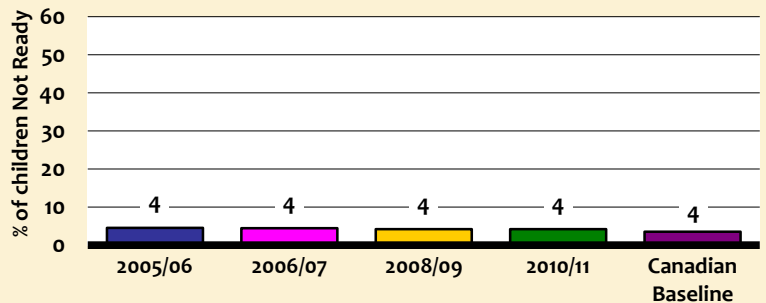
The following data graphs provide additional analyses regarding the domains of the EDI. Each EDI domain contains results for its sub-categories, or **sub-domains**. Sub-domain data provides a more detailed examination of Manitoba's EDI data. The following bar graphs provide a 4 year trend analysis for the **Not Ready** results of the sub-domains for Manitoba's EDI data.

The following graphs illustrate the Not Ready results for **Physical Health and Well-Being** sub-domains for your community over time:

Physical readiness for school day

Not ready in this sub-domain means children come unprepared for the school day (e.g. being dressed inappropriately for the weather; or coming to school late, hungry, and/or tired).

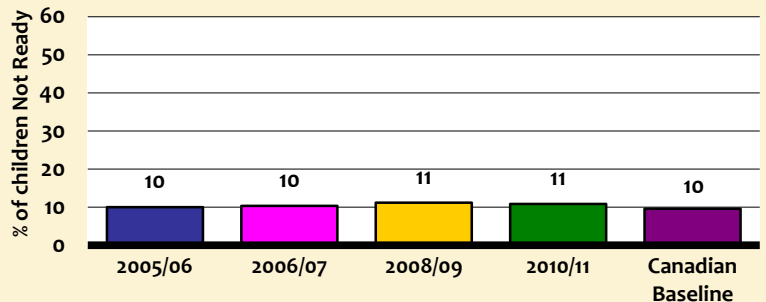
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



Physical independence

Not Ready in this sub-domain means children range 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 the skills and suck a thumb.

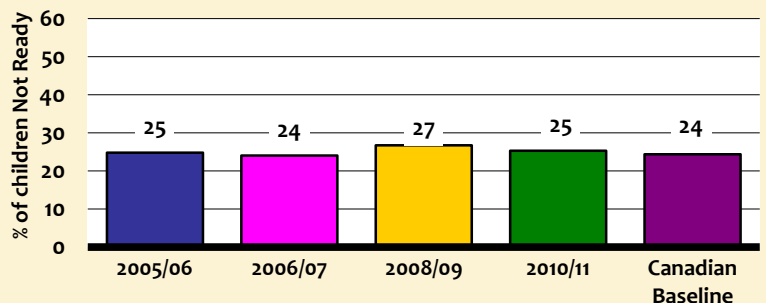
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***increased** in this sub-domain.



Gross and fine motor skills

Not Ready in this sub-domain means children have difficulty performing skills requiring gross and fine motor competence, and have poor overall energy levels and physical skills.

When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



* Difference is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender with a 95% confidence interval.

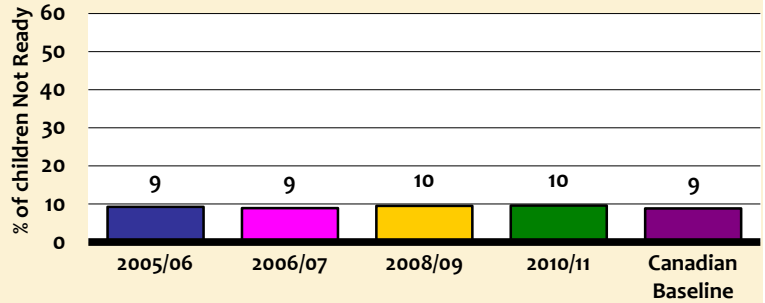
Sub-Domain Analyses

The following graphs illustrate the Not Ready results for **Social Competence** sub-domains for Manitoba over time:

Overall social competence

Not Ready in this sub-domain means children have average to poor overall social skills, low self-confidence and are rarely able to play with various children and interact cooperatively.

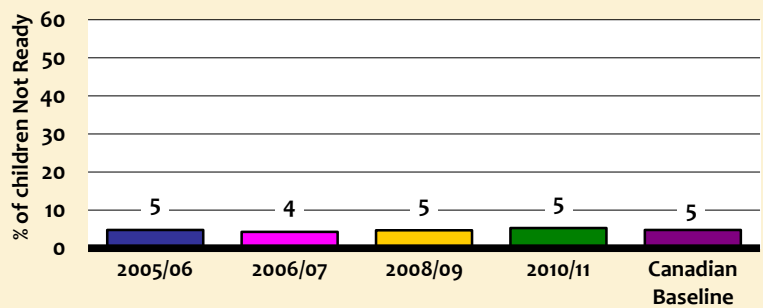
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***increased** in this sub-domain.



Responsibility and respect

Not Ready in this sub-domain means children only sometimes or never accept responsibility for actions, show respect for others and for property, demonstrate self-control, and are rarely able to follow rules and take care of materials.

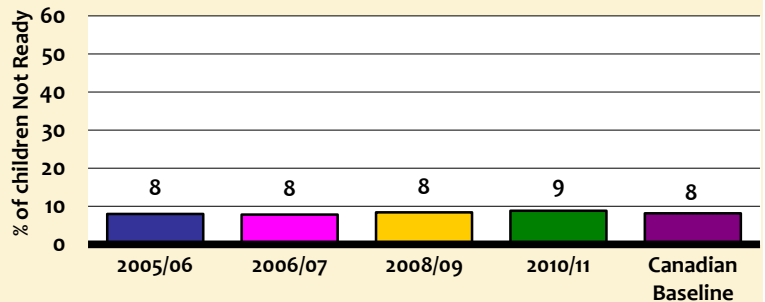
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



Approaches to learning

Not Ready in this sub-domain means children only sometimes or never work neatly, independently, are rarely able to solve problems, follow class routines and do not easily adjust to changes in routines.

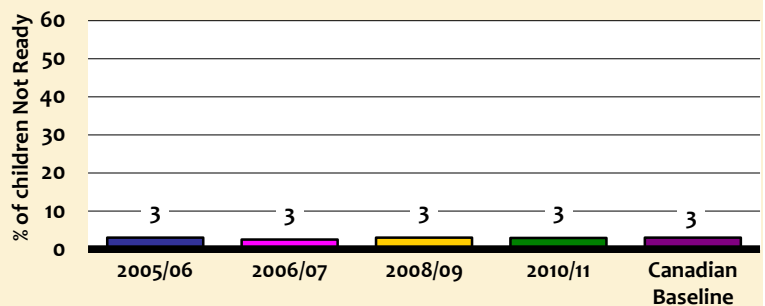
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***increased** in this sub-domain.



Readiness to explore new things

Not Ready in this sub-domain means children only sometimes or never show curiosity about the world, and are rarely eager to explore new books, toys and games.

When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



* Difference is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.

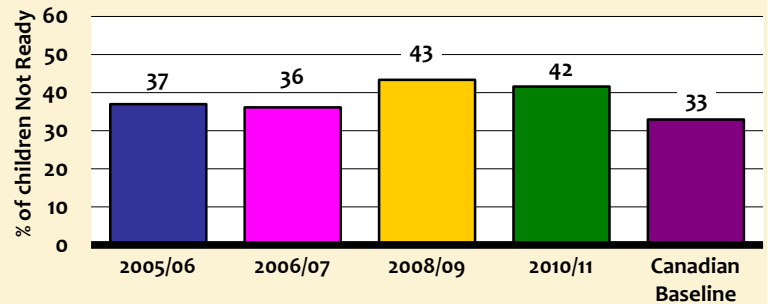
Sub-Domain Analyses

The following graphs illustrate the Not Ready results for **Emotional Maturity** sub-domains for Manitoba over time:

Prosocial and helping behaviour

Not Ready in this sub-domain means children never or almost never show most of the helping behaviours; they do not help someone hurt, sick or upset; and do not invite bystanders to join in.

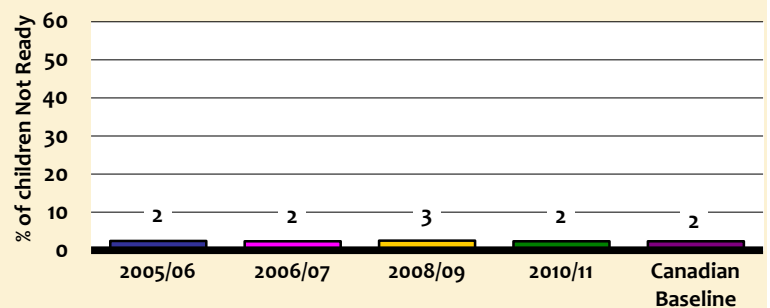
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***increased** in this sub-domain.



Anxious and fearful behavior

Not Ready in this sub-domain means children often show most of the anxious behaviours; they could be worried, unhappy, nervous, sad or excessively shy, indecisive; and they can be upset when dropped off at school.

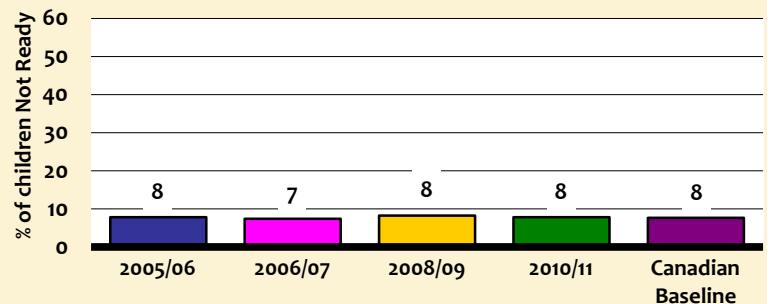
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



Aggressive behaviour

Not Ready in this sub-domain means children often show most of the aggressive behaviours; they get into physical fights, kick or bite others, take other people's things, are disobedient or have temper tantrums.

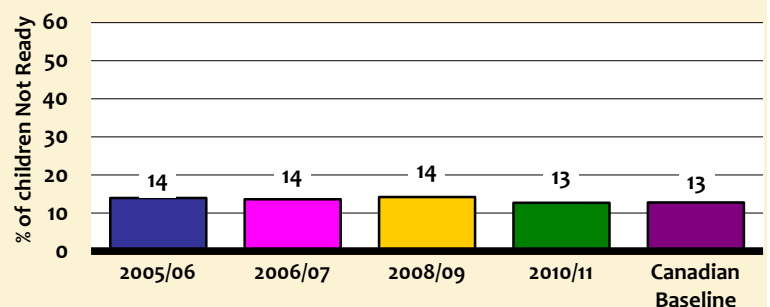
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



Hyperactivity and inattention

Not Ready in this sub-domain means children often show most of the hyperactive behaviours; they could be restless, distractible, impulsive; they fidget and have difficulty settling to activities.

When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***decreased** in this sub-domain.



* Difference is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.

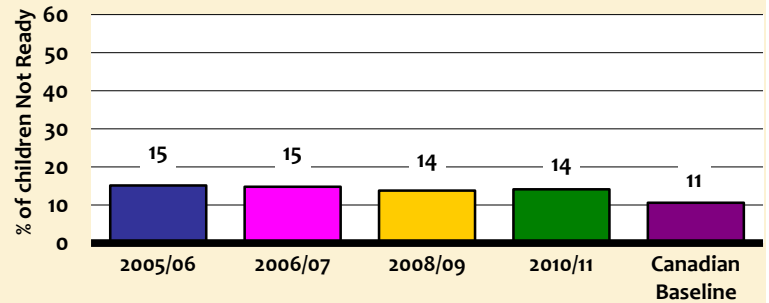
Sub-Domain Analyses

The following graphs illustrate the Not Ready results for **Language and Thinking Skills** sub-domains for Manitoba over time:

Basic Literacy

Not Ready in this sub-domain means children do not have most of the basic literacy skills; they have problems with identifying letters or attaching sounds to them, rhyming; may not know writing direction (left to right), and how to write their own name.

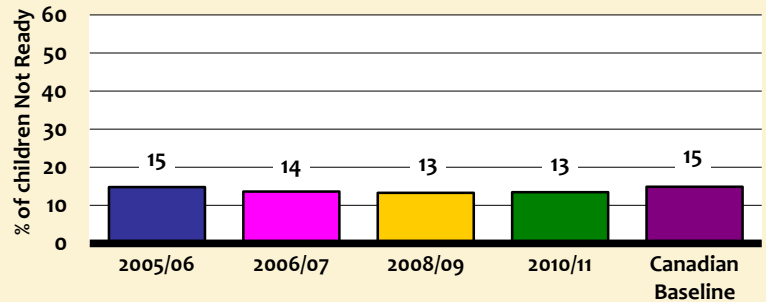
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***decreased** in this sub-domain.



Interest & Memory

Not Ready in this sub-domain means children may not show interest in books and reading, or math and number games, or both; and may have difficulty remembering things.

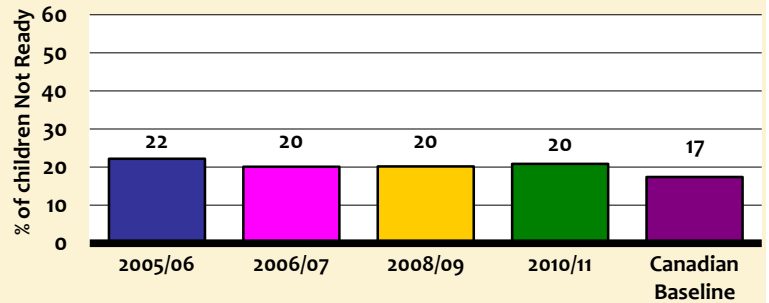
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have ***decreased** in this sub-domain.



Complex literacy

Not Ready in this sub-domain means children have only up to one of the advanced literacy skills; cannot read or write simple words, or sentences and rarely writes voluntarily.

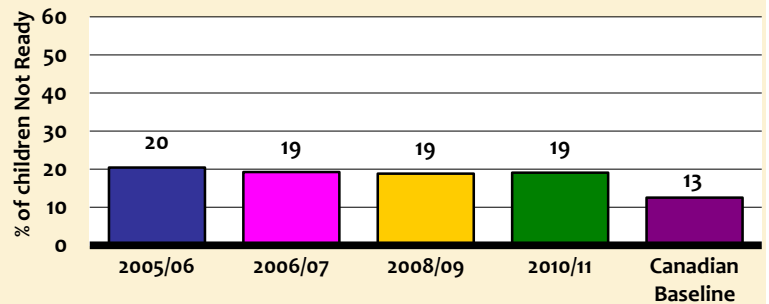
When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



Basic Numeracy

Not Ready in this sub-domain means children 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.

When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



* Difference is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.

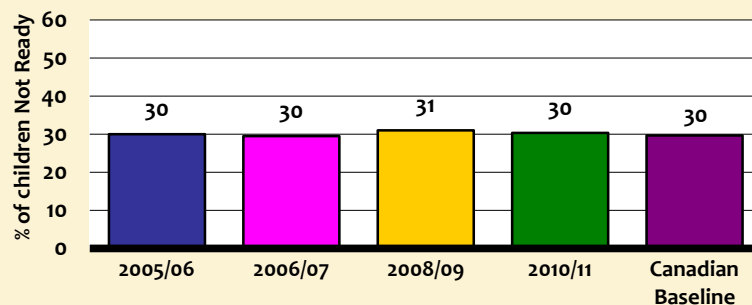
Sub-Domain Analyses

The following graphs illustrate the Not Ready results for **Communication Skills and General Knowledge** sub-domain for Manitoba over time:

Communication Skills & General Knowledge

Not Ready in this sub-domain means children have difficulty speaking and understanding the language of instruction; participating in imaginative play; communicating own needs in understandable ways; and have difficulty in answering questions about the world.

When we look at the yearly trend from 2005/06 to 2010/11, the 'not ready' results in Manitoba have **no significant trend** in this sub-domain.



* Difference is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.

Multiple Challenge Index

There are 16 sub-domains within the domains of the EDI (the previous pages have presented these sub-domain results for Manitoba). This chart presents the multiple challenge index (MCI), which shows the proportion of children who have multiple challenges in **9 or more** sub-domains.

Multiple Challenges	2005/06	2006/07	2008/09	2010/11	4 Year Trend	Canadian Baseline
Manitoba	4.6 %	4.1 %	4.5 %	4.8 %	(*increasing)	3.8 %

* The four year trend is statistically significant. Statistical testing was done using logistic regression, controlling for age and gender, with a 95% confidence interval.

Group Comparisons Between Boys and Girls

There are many different factors that influence EDI results. This table shows the average scores in Manitoba for **boys and girls**.

Differences between these two groups were compared using the results from the 2010/11 school year.

Average scores (‘10’ is best possible score)	Results for 2010/11	
	Girls	Boys
Manitoba:		
Number of Children	5,703	5,651
Physical Health & Well-being	8.9 *	8.6
Social Competence	8.7 *	7.9
Emotional Maturity	8.3 *	7.6
Language & Thinking Skills	8.5 *	7.9
Communication Skills & General Knowledge	7.9 *	7.2

* The average score for girls is significantly higher than boys average score. Statistical testing was done using regression analysis, controlling for age, with a 95% confidence interval.

Group Comparisons Between Age Groups

There are many different factors that influence EDI results. This table shows the average scores in Manitoba for **two age groups** - older than 5.6 years at the time of EDI collection, and younger than 5.6 years at the time of EDI collection. Differences between these two groups were compared using the results from the 2010/11 school year.

Average scores (‘10’ is best possible score)	Results for 2010/11	
	Older than 5.6 years	Younger than 5.6 years
Manitoba:		
Number of Children	6,169	5,126
Physical Health & Well-being	8.9 *	8.6
Social Competence	8.5 *	8.1
Emotional Maturity	8.0 *	7.8
Language & Thinking Skills	8.4 *	7.9
Communication Skills & General Knowledge	7.9 *	7.3

* The average score for older children is significantly higher than younger children’s average score. Statistical testing was done using regression analysis, controlling for gender, with a 95% confidence interval.

Group Comparisons Between Language Groups

There are many different factors that influence EDI results. This table shows the average scores in Manitoba for **children with EAL (English as an additional language) and children without EAL** and for **children with FAL (French as an additional language) and children without FAL**.

Differences between these groups were compared using the results from the 2010/11 school year.

Average scores ('10' is best possible score)	Results for 2010/11			
Manitoba:	Without EAL	With EAL	Without FAL	With FAL
Number of Children	9,689	1,241	230	188
Physical Health & Well-being	8.8	8.8	9.3	9.2
Social Competence	8.3 *	7.9	8.7 **	8.3
Emotional Maturity	7.9 *	7.7	8.0 **	7.7
Language & Thinking Skills	8.3 *	7.4	8.5 **	8.0
Communication Skills & General Knowledge	7.9 *	5.0	8.9 **	6.6

* The average score for children without EAL is significantly higher than children with EAL.

** The average score for children without FAL is significantly higher than children with FAL.

Statistical testing was done using regression analysis, controlling for age & gender, with a 95% confidence interval.

Group Comparisons Between Recently Immigrated and Not Recently Immigrated Groups

There are many different factors that influence EDI results. This table shows the average scores in Manitoba for two groups – **Recently Immigrated children (moved to Manitoba within the past two years) and Not Recently Immigrated Children**.

Differences between these two groups were compared using the results from the 2010/11 school year. (Note: This question is missing on nearly 400 EDI surveys in 2010/11.)

Average scores ('10' is best possible score)	Results for 2010/11	
Manitoba:	Not Recently Immigrated	Recently Immigrated
Number of Children	10,277	576
Physical Health & Well-being	8.7	8.8
Social Competence	8.3 *	8.1
Emotional Maturity	7.9	7.8
Language & Thinking Skills	8.2 *	7.5
Communication Skills & General Knowledge	7.7 *	5.0

* The average score for non-immigrant children is significantly higher than immigrant children's average score.

Statistical testing was done using regression analysis, controlling for age & gender, with a 95% confidence interval.

Group Comparisons Between Aboriginal and Non-Aboriginal Identity Groups

There are many different factors that influence EDI results. This table shows the average scores in Manitoba for two groups - **children with Non-Aboriginal Identity and Children with Aboriginal Identity**. Differences between these two groups were compared using the results from the 2010/11 school year.

Average scores ('10' is best possible score)	Results for 2010/11	
	Non-Aboriginal	Aboriginal
Manitoba:		
Number of Children	8,920	2,104
Physical Health & Well-being	8.9 *	8.2
Social Competence	8.5 *	7.6
Emotional Maturity	8.0 *	7.4
Language & Thinking Skills	8.4 *	7.3
Communication Skills & General Knowledge	7.8 *	6.8

* The average score for non-Aboriginal children is significantly higher than Aboriginal children's average score. Statistical testing was done using regression analysis, controlling for age & gender, with a 95% confidence interval.

Important Note:

The above chart does not tell the whole story related to Aboriginal children and their readiness for school. A larger proportion of Aboriginal children live in lower socio-economic conditions, so we investigated whether this was why so many Aboriginal children were Not Ready for school. We analyzed a sample from the 2005/06 Manitoba EDI Parent Survey data and controlled parental income, education and other risk factors. We found most of the differences between Non-Aboriginal children and Aboriginal children were **no longer statistically significant**. That is to say, socio-economic status and other risk factors, not Aboriginal identity, determined the lower EDI scores we see in the chart above.

Aboriginal Children and Readiness for School

This table shows the **2005/06 Manitoba** comparison results between children with Non-Aboriginal Identity and Children with Aboriginal Identity when **controlling for socio-economic demographics and other risk factors** (using data from the 2005/06 Manitoba EDI Parent Survey). This analysis shows us that the differences between the Non-Aboriginal Children and Aboriginal Children are **not** statistically significant.

Average scores ('10' is best possible score)	From the Manitoba 2005/06 EDI Parent Survey	
	Non-Aboriginal	Aboriginal
Manitoba:		
Number of Children	8,256	2,373
Physical Health & Well-being	9.0	8.7
Social Competence	8.5	8.3
Emotional Maturity	8.0	8.0
Language & Thinking Skills	8.5	8.2
Communication Skills & General Knowledge	8.0	7.6

None of these differences are statistically significant. These results are from the 2005/06 Manitoba EDI Parent Survey. Statistical testing was done using regression analysis, controlling for age, gender, parental income and education, and other risk factors, with a 95% confidence interval.

**For more information on Manitoba's EDI,
visit the Healthy Child Manitoba website at
www.gov.mb.ca/healthychild/edi**

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