



SCHOOL READINESS TO LEARN ONTARIO SK CYCLE 2 RESULTS

Based on the Early Development Instrument Data Collection for Senior Kindergarten Students in Ontario

This report covers the EDI results for all **Senior Kindergarten** children in Ontario, collected in a 3 year cycle running from 2006/07 to 2008/09.

SK-level students are those who enter school the year in which they turn 5 years of age, according to individual school board specifications.

The **valid** analyses are based on all non-missing cases for each category. Children classified as special needs, missing in more than one domain and those who were not in class more than one month are excluded from the cohort report.

The report is divided into three sections. The first being a descriptive summary of EDI Means & Domain Percentiles results for all **valid** EDI's completed for SK-level students in Ontario.

The second set of tables, **Frequencies** (pages 5-9) reports on the frequencies of the demographic and community variables as reported on pages 1 and 8 of the EDI, including age, gender, type of class, etc.

The **Frequencies** are reported for the **Valid** cohort.

The third set of tables, **Group Comparisons** (pages 10-15), includes means and statistical comparisons between groups as identified by the demographic and community variables.

The **Group Comparisons** are performed with the **Valid** cohort only.

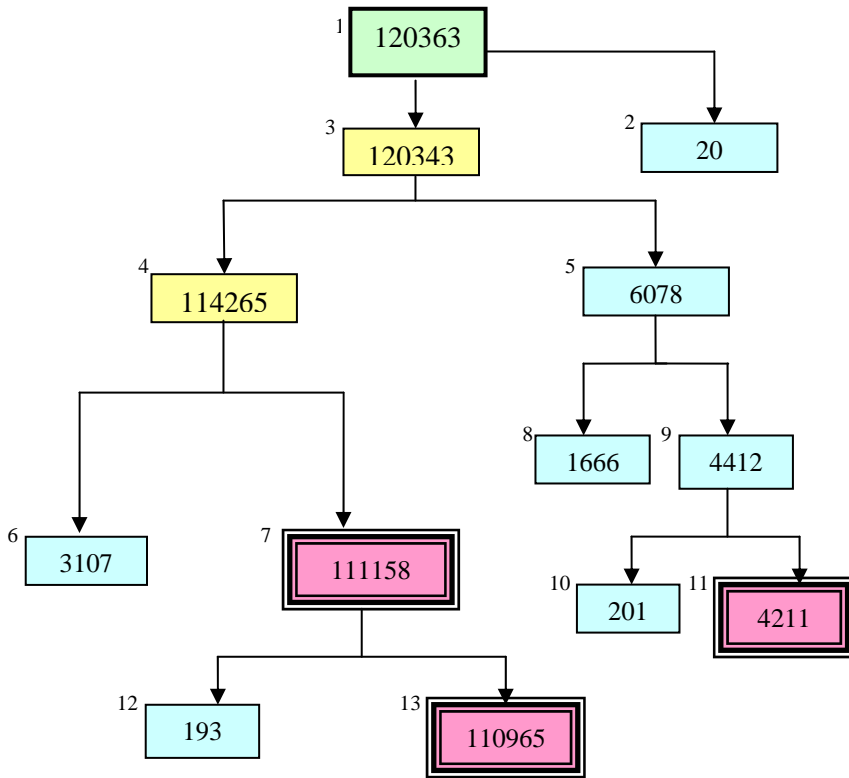
Please keep in mind the following: (1) while the comparisons are controlled for the effects of age and gender, no other variables are controlled for, and (2) these are statistical comparisons for the whole of the selected cohorts, and may not reflect differences occurring within individual sites. Therefore, any interpretation of these comparisons has to be executed with **extreme caution**.

Every caution was used to ensure that data in this report are accurate. For comments or questions please contact:

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Number of Children in Analyses: From Received Questionnaires to Reports

Below is an illustration of the flow of EDI questionnaires from the point of receiving the questionnaires to the final valid number of questionnaires used for analysis.



- 1: Total questionnaires received and scanned.
- 2: Questionnaires missing/incorrect JK/SK assignment.
- 3: Questionnaires with non-missing/correct JK/SK assignment.
- 4 : Questionnaires with correct JK/SK assignment and no Special Needs.
- 5: Questionnaires labeled as Special Needs or missing Special Needs.
- 6: Questionnaires missing more than one scale.
- 7: Questionnaires valid for analyses in reports for children without Special Needs.
- 8: Questionnaires missing SN assignment.
- 9 : Questionnaires labeled as Special Needs.
- 10: Special Needs Children with non-valid EDI.
- 11: Questionnaires valid for analyses in reports for children with Special Needs.
- 12: Questionnaires for children not in class more than one month
- 13: Questionnaires valid for analyses in reports for children without Special Needs.

Missing within Domains

Since scores for children with up to one missing domain are considered valid, the number of students with valid data may be equal to or less than 110,965 in the specific domains. The table below indicates the number of students with valid data in each domain.

	PHYS	SOC	EMOT	LANGCOG	COMGEN
Missing (More than 25%of questions left blank or with "I don't know" answered)	285	21	717	336	46
Valid	110680	110944	110248	110629	110919

Ontario SK Cycle 2 (2007, 2008, 2009) EDI Results

Descriptive Statistics

The EDI was completed for 110,965 non-special needs Kindergarten students in Ontario. The table below illustrates the descriptive statistics of the Ontario cohort.

Domains					Percentile Boundaries			
	# of Questions	Min-Max Score	Mean Score	Standard Deviation	75	50	25	10
Physical Health and Well-Being	13	0.00-10.00	8.86	1.28	10.00	9.23	8.08	7.31
Social Competence	26	0.00-10.00	8.35	1.78	9.81	9.04	7.31	5.58
Emotional Maturity	30	0.67-10.00	8.08	1.49	9.17	8.33	7.24	6.00
Language and Cognitive Development	26	0.00-10.00	8.65	1.71	10.00	9.23	8.08	6.15
Communication Skills and General Knowledge	8	0.00-10.00	7.72	2.52	10.00	8.75	5.63	4.38

Percentage of Vulnerable Children

Scores on each scale for all children in a site can be arranged from the lowest to the highest, and this could be called a “distribution of scores”. Then, they can be divided into groups, based on THE NUMBER OF CHILDREN in the SITE. It is most common to divide distribution into four groups, each consisting of scores of a quarter or one-fourth or 25% of the children in the site. These groups are called percentiles.

Vulnerable are children who score low (below the 10th percentile cut-off of the site population) in one or more of the five domains.

Ontario non-special needs students (N=110,965)

Low	Percentage	Percentage
	Ontario Cycle 2 Cohort (Ontario Cycle 2 cohort site based lows)	Ontario Cycle 2 Cohort (Based on ON Baseline Cut-points)
Low on at least one readiness to learn domain	27.0%	28.5%
Low on at least two readiness to learn domains	13.8%	14.0%

Percentage of Vulnerable Children by EDI Domain

Vulnerable are children who score low (below the 10th percentile cut-off of the site/comparison population) on any of the five domains.

The table below illustrates the percentage of Ontario Cycle 2 Cohort children who fell below the 10th percentile cut-off based on the Ontario Baseline cut-offs.

Domains	% Vulnerable
	Ontario Cycle 2 Cohort (Based on ON Baseline cut-points)
Physical Health Well-Being	14.0
Social Competence	9.2
Emotional Maturity	10.4
Language & Cognitive Development	8.9
Communication Skills & General Knowledge	12.3

Multiple Challenge Index

As outlined in the Behavioural Profiles report, there are 16 sub-domains within the five major domains of the EDI. Each of the sub-domains represents a relatively homogenous aspect of a child’s development.

A “challenge” ability range was identified within each sub-domain, based on the range of scores. For each sub-domain, zero (0), equivalent to a child having no ability in all items within the sub-domain, was the lower boundary. The “challenge” cut-off boundary (i.e., the one below which a child would be classified as having the challenge) was based on a mix of poor and average scores.

Analysis of the distribution of the number of challenges in one or more sub-domain indicated that having scores below the challenge ability in 9 or more pointed to serious problems in multiple domains. Three of the 5 domains have 4 sub-domains, one has 3, and the last one has 1. Therefore experiencing challenge in 9 sub-domains means that they are from at least 3 of the major five developmental domains.

The Multiple Challenge Index is therefore an indicator of a child experiencing challenges in at least three EDI domains. The MCI is scored based on challenges in 9 or more sub-domains, and is expressed as “existence of multiple challenges” (1), or “no multiple challenges” (0).

Detailed descriptions and cut-off boundaries for each of the sub-domains are listed on our website at <http://www.offordcentre.com/readiness/results.html>.

Percentage of SK children in Ontario with Multiple Challenges	Percentage
	<i>Ontario Cycle 2 SK Cohort</i>
Multiple Challenges	3.7%

SCHOOL READINESS TO LEARN DESCRIPTIVE DATA REPORT
For Children with NO Special Needs

**Based on the Early Development Instrument Data Collection for Senior Kindergarten
 Students in Ontario 2007, 2008, 209**

Descriptive characteristics of the population

	VALID SK COHORT N=110,965	Percentage %
Gender		
Girl	54887	49.5
Boy	56036	50.5
Missing	42	0.0
English/French as a Second Language (E/FSL)		
ESL	10833	9.8
FSL	2500	2.3
Not E/FSL	97089	87.5
Missing	543	0.5
Type of class		
JK	57	0.1
SK	48381	43.6
JK/SK	58990	53.2
JK/SK/1	307	0.3
SK/1	1655	1.5
Other	140	0.1
Missing	1435	1.3
First language		
English	78544	70.8
French	2607	2.3
Other Only	5877	5.3
English & French (Bil)	2154	1.9
English & Other (Bil)	12808	11.5
French & Other (Bil)	206	0.2
Two Other Lang. (Bil)	5817	5.2
Missing	2952	2.7
French Immersion		
French Immersion	11797	10.6
Non- French Immersion	98881	89.1
Missing	287	0.3

Descriptive characteristics of the population continued

	Number	%
Other Immersion		
Other Immersion	472	0.4
Non- Other Immersion	110010	99.1
Missing	483	0.4
Aboriginal		
Aboriginal	1464	1.3
Not Aboriginal	108691	98.0
Missing	810	0.7

Age composition

Age (at the time of testing) was divided into 3-month intervals. The categories are expressed as year-months of age: for example, 5-11 means age 5 years 11 months.

Age Category	Number	%
3-8 to 3-10	2	0.0
3-11 to 4-1	2	0.0
4-2 to 4-4	43	0.0
4-5 to 4-7	82	0.1
4-8 to 4-10	80	0.1
4-11 to 5-1	915	0.8
5-2 to 5-4	22324	20.1
5-5 to 5-7	28196	25.4
5-8 to 5-10	27860	25.1
5-11 to 6-1	26237	23.6
6-2 to 6-4	4363	3.9
6-5 to 6-7	223	0.2
6-8 to 6-10	104	0.1
6-11 and up	127	0.1
Missing	407	0.4

Please note: Months were rounded down for ages less than 15 days, and up for more than 15 days. Therefore, children aged less than 6 years 1.5 months belong to the 5-11 to 6-1 category, and children aged from 5 years 1.5 months to 5 years 4.5 months belong to the 5-2 to 5-4 category.

Frequencies of answers to questions in Section D – Special Problems

	Number	%
D1: Special Problems		
Yes	7319	6.6
D2a: Physical Disability		
Yes	228	0.2
D2b: Visual Impairment		
Yes	279	0.3
D2c: Hearing Impairment		
Yes	229	0.2
D2d: Speech Impairment		
Yes	2736	2.5
D2e: Learning Disability		
Yes	932	0.8
D2f: Emotional Problem		
Yes	1193	1.1
D2g: Behavioural Problem		
Yes	1977	1.8
D2h: Home Environment/problems at home		
Yes	1761	1.6
D2i: Other		
Yes	1583	1.4
D3: Teacher feels that child needs further assessment		
Yes	11560	10.4
No	89950	81.1
Missing	9455	8.5

Frequencies of answers to questions in Section E – Additional Questions

	Number	%
E1: Child attended an early intervention program		
Yes	6853	6.2
No	79431	71.6
Missing	24681	22.2
E3: Child attended any other language or religion classes		
Yes	7718	7.0
No	62684	56.5
Missing	40563	36.6
E4: Child attended an organized part-time pre-school/nursery school		
Yes	14361	12.9
No	52494	47.3
Missing	44110	39.8
E5: Attended Junior Kindergarten		
Yes	102000	91.9
No	6106	5.5
Missing	2859	2.6
E2: Child attended a non-parental care arrangement		
Yes	34463	31.1
No	47256	42.6
Missing	29246	26.4
E2a: Centre-based, licensed, non-profit arrangement		
Yes	9648	8.7
E2b: Centre-based, licensed, for profit arrangement		
Yes	8942	8.1
E2c: Other home-based, licensed arrangement		
Yes	2363	2.1
E2d: Other home-based, unlicensed, non-relative arrangement		
Yes	7092	6.4
E2e: Other home-based, unlicensed, relative arrangement		
Yes	3255	2.9
E2f: Child's home, non-relative arrangement		
Yes	1786	1.6

	Number	%
E2g: Child's home, relative arrangement		
Yes	5476	4.9
E2h: Other		
Yes	4132	3.7
E2i: Type of arrangement		
Full-time	23212	20.9
Part-time	10793	9.7
Missing	76960	69.4

SCHOOL READINESS TO LEARN GROUP COMPARISONS
For Children with NO Special Needs

Based on the Early Development Instrument Data Collection for Senior Kindergarten
Students in Ontario 2007, 2008, 209

For all tables below, higher scores indicate better levels of readiness-to-learn at school

P-values <0.050 are statistically significant

1. Girls versus boys

Domain	Girls			Boys			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	54741	9.01	1.19	55897	8.71	1.35	<0.001
Social competence	54877	8.74	1.53	56026	7.97	1.92	<0.001
Emotional maturity	54566	8.47	1.27	55642	7.69	1.59	<0.001
Language and cognitive development	54712	8.90	1.54	55875	8.40	1.82	<0.001
Communication skills and general knowledge	54863	8.09	2.36	56014	7.35	2.61	<0.001

2. Age of child (mean age is 5.66 years)

Domain	Above the mean age			Below the mean age			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	55038	9.01	1.21	55642	8.71	1.34	<0.001
Social competence	55169	8.55	1.68	55775	8.14	1.86	<0.001
Emotional maturity	54839	8.22	1.45	55409	7.94	1.52	<0.001
Language and cognitive development	55044	8.90	1.51	55585	8.39	1.85	<0.001
Communication skills and general knowledge	55161	8.07	2.36	55758	7.37	2.63	<0.001

3. Children with E/FSL status

Domain	E/FSL			Not E/FSL			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	13293	8.70	1.34	96847	8.88	1.27	<0.001
Social competence	13326	7.97	1.88	97075	8.40	1.76	<0.001
Emotional maturity	13200	7.84	1.45	96510	8.11	1.49	<0.001
Language and cognitive development	13269	7.87	2.10	96825	8.75	1.62	<0.001
Communication skills and general knowledge	13317	5.72	2.94	97061	7.99	2.33	<0.001

4. Children with English as a first language

Domain	English			Other			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	93278	8.86	1.29	14455	8.88	1.25	<0.001
Social competence	93493	8.37	1.77	14500	8.19	1.83	<0.001
Emotional maturity	92975	8.09	1.50	14356	8.01	1.41	<0.001
Language and cognitive development	93249	8.73	1.64	14431	8.18	1.99	<0.001
Communication skills and general knowledge	93481	7.92	2.37	14488	6.59	3.01	<0.001

5. Children with French as a first language

Domain	French			Other			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	4945	9.23	1.11	102788	8.84	1.29	<0.001
Social competence	4965	8.53	1.71	103028	8.34	1.79	<0.001
Emotional maturity	4903	7.90	1.58	102428	8.09	1.49	<0.001
Language and cognitive development	4952	8.70	1.52	102728	8.66	1.71	0.104
Communication skills and general knowledge	4966	8.51	2.16	103003	7.71	2.52	<0.001

6. Children who attended French Immersion

Domain	French Immersion			No French Immersion			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	11779	8.92	1.21	98617	8.85	1.29	<0.001
Social competence	11794	8.47	1.67	98863	8.33	1.79	<0.001
Emotional maturity	11693	8.07	1.46	98268	8.08	1.49	<0.005
Language and cognitive development	11708	8.76	1.48	98634	8.63	1.73	<0.001
Communication skills and general knowledge	11793	8.04	2.29	98839	7.68	2.54	<0.001

7. Children with Aboriginal Status

Domain	Aboriginal			Not Aboriginal			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	1464	8.20	1.55	108411	8.87	1.27	<0.001
Social competence	1464	7.79	2.07	108670	8.36	1.78	<0.001
Emotional maturity	1460	7.59	1.72	107990	8.09	1.49	<0.001
Language and cognitive development	1462	8.12	2.09	108363	8.65	1.70	<0.001
Communication skills and general knowledge	1464	6.79	2.84	108645	7.73	2.51	<0.001

8. Children who attended an early intervention program

Domain	Early Intervention			No early intervention			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	6836	8.54	1.48	79247	8.90	1.25	<0.001
Social competence	6852	7.90	1.98	79422	8.44	1.73	<0.001
Emotional maturity	6829	7.68	1.67	79107	8.15	1.45	<0.001
Language and cognitive development	6843	8.31	1.94	79251	8.71	1.67	<0.001
Communication skills and general knowledge	6851	6.79	2.76	79401	7.84	2.48	<0.001

9. Children who attended Language/Religion classes

Domain	Language/Religion classes			No Language/Religion classes			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	7705	9.04	1.16	62537	8.83	1.31	<0.001
Social competence	7717	8.59	1.64	62679	8.34	1.80	<0.001
Emotional maturity	7684	8.26	1.41	62466	8.06	1.52	<0.001
Language and cognitive development	7692	8.98	1.47	62559	8.64	1.72	<0.001
Communication skills and general knowledge	7713	7.92	2.47	62663	7.78	2.50	0.002

10. Children who attended part-time preschool

Domain	Preschool			No Preschool			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	14332	9.07	1.14	52379	8.78	1.34	<0.001
Social competence	14360	8.64	1.64	52487	8.29	1.82	<0.001
Emotional maturity	14308	8.22	1.46	52301	8.05	1.51	<0.001
Language and cognitive development	14333	9.06	1.36	52377	8.53	1.79	<0.001
Communication skills and general knowledge	14359	8.38	2.16	52468	7.53	2.61	<0.001

11. Children who attended Junior Kindergarten

Domain	JK			No JK			P
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	101746	8.88	1.268	6086	8.51	1.52	<0.001
Social competence	101983	8.39	1.76	6105	7.79	2.05	<0.001
Emotional maturity	101399	8.11	1.48	6064	7.62	1.64	<0.001
Language and cognitive development	101719	8.71	1.64	6086	7.78	2.30	<0.001
Communication skills and general knowledge	101960	7.79	2.46	6103	6.77	3.00	<0.001