



SCHOOL READINESS TO LEARN ONTARIO SK COHORT 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 2003/04 to 2005/06.

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 missing JK/SK classification 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.

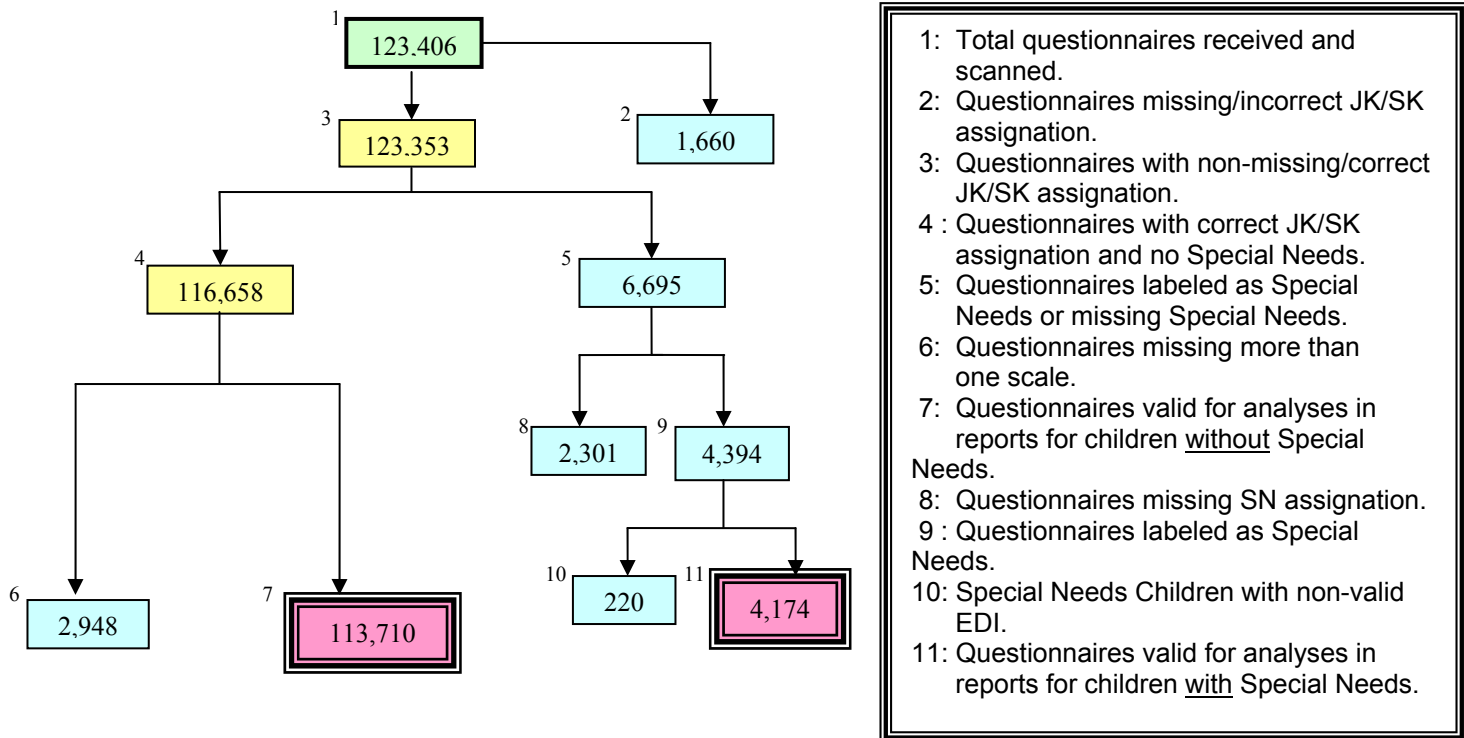
Please keep in mind the following: (1) while the comparisons are controlled for the effects of age and gender, no other variables are controlled for, and (2) these are statistical comparisons for the whole of the selected cohorts, and may not reflect differences occurring within individual sites. Therefore,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

Ashley Gaskin
(905) 521-2100 ext. 74352
agaskin@mcmaster.ca

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.



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 113,710 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)	303	26	886	452	79
Valid	113,407	113,684	112,824	113,258	113,631

Ontario SK Baseline EDI Results

Descriptive Statistics

The EDI was completed for 113,710 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	0.77-10.00	8.91	1.27	10.00	9.23	8.08	7.31
Social Competence	26	0.00-10.00	8.34	1.79	9.81	9.04	7.31	5.58
Emotional Maturity	30	0.33-10.00	8.09	1.48	9.17	8.33	7.32	6.00
Language and Cognitive Development	26	0.00-10.00	8.57	1.73	9.62	9.23	8.08	6.15
Communication Skills and General Knowledge	8	0.00-10.00	7.80	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=113,710)

Low	Percentage
	Ontario SK Cohort
Low on at least one readiness to learn domain	27.3%
Low on at least two readiness to learn domains	13.8%

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 SK Cohort</i>
Multiple Challenges	4.2%

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**

Descriptive characteristics of the population

	VALID SK COHORT N=113,710	Percentage %
Gender		
Girl	56285	49.5
Boy	57180	50.3
Missing	245	0.2
English/French as a Second Language (E/FSL)		
ESL	11057	9.7
FSL	2016	1.8
Not E/FSL	100103	88.0
Missing	534	0.5
Type of class		
JK	35	0.0
SK	58557	51.5
JK/SK	52377	46.1
JK/SK/1	314	0.3
SK/1	835	0.7
Other	112	0.1
Missing	1480	1.3
First language		
English	82302	72.4
French	2363	2.1
Other Only	10666	9.4
English & French (Bil)	2012	1.8
English & Other (Bil)	13336	11.7
French & Other (Bil)	204	0.2
Two Other Lang. (Bil)	630	0.6
Missing	2194	1.9
French Immersion		
French Immersion	10626	9.3
Non- French Immersion	102708	90.3
Missing	376	0.3

Descriptive characteristics of the population continued

	Number	%
Other Immersion		
Other Immersion	333	0.3
Non- Other Immersion	112913	99.3
Missing	464	0.4
Aboriginal		
Aboriginal	1271	1.1
Not Aboriginal	111658	98.2
Missing	781	0.6

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	12	0.0
4-5 to 4-7	16	0.0
4-8 to 4-10	13	0.0
4-11 to 5-1	396	0.3
5-2 to 5-4	18712	16.5
5-5 to 5-7	27616	24.3
5-8 to 5-10	29269	25.7
5-11 to 6-1	28539	25.1
6-2 to 6-4	7904	7.0
6-5 to 6-7	412	0.4
6-8 to 6-10	76	0.1
6-11 and up	50	0.0
Missing	691	0.6

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	6709	5.9
D2a: Physical Disability		
Yes	845	0.7
D2b: Visual Impairment		
Yes	1306	1.1
D2c: Hearing Impairment		
Yes	781	0.7
D2d: Speech Impairment		
Yes	3583	3.2
D2e: Learning Disability		
Yes	1354	1.2
D2f: Emotional Problem		
Yes	1410	1.2
D2g: Behavioural Problem		
Yes	2643	2.3
D2h: Home Environment/problems at home		
Yes	2457	2.2
D2i: Other		
Yes	1856	1.6
D3: Teacher feels that child needs further assessment		
Yes	11719	10.3
No	90952	80.0
Missing	11039	9.7

Frequencies of answers to questions in Section E – Additional Questions

	Number	%
E1: Child attended an early intervention program		
Yes	6021	5.3
No	77697	68.3
Missing	29992	26.4
E3: Child attended any other language or religion classes		
Yes	71562	6.3
No	57649	50.7
Missing	48899	43.0
E4: Child attended an organized part-time pre-school/nursery school		
Yes	13705	12.1
No	49977	44.0
Missing	50028	44.0
E5: Attended Junior Kindergarten		
Yes	102079	89.8
No	8080	7.1
Missing	3551	3.1
E2: Child attended a non-parental care arrangement		
Yes	31780	27.9
No	48648	42.8
Missing	33282	29.3
E2a: Centre-based, licensed, non-profit arrangement		
Yes	7750	6.8
E2b: Centre-based, licensed, for profit arrangement		
Yes	7482	6.6
E2c: Other home-based, licensed arrangement		
Yes	1841	1.6
E2d: Other home-based, unlicensed, non-relative arrangement		
Yes	7868	6.9
E2e: Other home-based, unlicensed, relative arrangement		
Yes	4051	3.6
E2f: Child's home, non-relative arrangement		
Yes	2196	1.9

	Number	%
E2g: Child's home, relative arrangement		
Yes	5632	5.0
E2h: Other		
Yes	4674	4.1
E2i: Type of arrangement		
Full-time	19905	17.5
Part-time	10789	9.5
Missing	83016	73.0

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**

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	56124	9.06	1.18	57040	8.76	1.34	<0.001
Social competence	56277	8.72	1.55	57162	7.95	1.93	<0.001
Emotional maturity	55919	8.48	1.27	56660	7.71	1.58	<0.001
Language and cognitive development	56075	8.85	1.54	56938	8.30	1.87	<0.001
Communication skills and general knowledge	56250	8.18	2.35	57137	7.44	2.62	<0.001

2. Age of child (mean age is 5.70 years)

Domain	Above the mean age			Below the mean age			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	56827	9.05	1.19	56580	8.77	1.33	<0.001
Social competence	56950	8.54	1.69	56734	8.13	1.87	<0.001
Emotional maturity	56558	8.22	1.45	56266	7.96	1.51	<0.001
Language and cognitive development	56757	8.83	1.53	56501	8.31	1.88	<0.001
Communication skills and general knowledge	56931	8.11	2.37	56700	7.49	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	13020	8.81	1.34	99855	8.92	1.26	<0.001
Social competence	13067	7.93	1.93	100083	8.39	1.77	<0.001
Emotional maturity	12911	7.85	1.47	99385	8.12	1.48	<0.001
Language and cognitive development	12992	7.82	2.11	99735	8.67	1.65	<0.001
Communication skills and general knowledge	13056	5.71	2.99	100042	8.08	2.31	<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	97406	8.91	1.27	13814	8.92	1.29	0.034
Social competence	97628	8.36	1.78	13862	8.15	1.87	<0.001
Emotional maturity	96945	8.11	1.49	13703	7.97	1.44	<0.001
Language and cognitive development	97283	8.64	1.68	13792	8.12	1.99	<0.001
Communication skills and general knowledge	97598	8.01	2.36	13842	6.51	3.07	<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	4567	9.22	1.10	106653	8.89	1.27	<0.001
Social competence	4581	8.43	1.75	106909	8.33	1.79	0.016
Emotional maturity	4506	7.86	1.60	106142	8.10	1.48	<0.001
Language and cognitive development	4552	8.62	1.60	106523	8.58	1.73	0.902
Communication skills and general knowledge	4581	8.46	2.16	106859	7.79	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	10608	8.90	1.19	102425	8.91	1.28	0.043
Social competence	10625	8.46	1.71	102685	8.32	1.80	<0.001
Emotional maturity	10504	8.11	1.43	101952	8.09	1.49	0.367
Language and cognitive development	10490	8.72	1.55	102396	8.56	1.75	<0.001
Communication skills and general knowledge	10595	8.04	2.31	102663	7.78	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	1268	8.20	1.49	111358	8.92	1.26	<0.001
Social competence	1271	7.69	2.03	111632	8.34	1.79	<0.001
Emotional maturity	1254	7.50	1.71	110798	8.10	1.48	<0.001
Language and cognitive development	1263	7.95	2.09	111217	8.58	1.73	<0.001
Communication skills and general knowledge	1271	6.77	2.71	111579	7.82	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	6009	8.53	1.45	77507	8.96	1.24	<0.001
Social competence	6020	7.86	2.02	77680	8.43	1.74	<0.001
Emotional maturity	5995	7.70	1.68	77276	8.17	1.45	<0.001
Language and cognitive development	6007	8.19	1.99	77503	8.64	1.69	<0.001
Communication skills and general knowledge	6020	6.76	2.78	77664	7.92	2.47	<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	7141	9.05	1.17	57526	8.88	1.29	<0.001
Social competence	7161	8.63	1.58	57635	8.33	1.81	<0.001
Emotional maturity	7132	8.32	1.36	57382	8.08	1.51	<0.001
Language and cognitive development	7136	8.95	1.45	57533	8.55	1.75	<0.001
Communication skills and general knowledge	7157	7.96	2.49	57633	7.86	2.48	0.063

10. Children who attended part-time preschool

Domain	Preschool			No Preschool			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	13681	9.10	1.14	49881	8.84	1.31	<0.001
Social competence	13703	8.65	1.64	49968	8.28	1.82	<0.001
Emotional maturity	13645	8.28	1.44	49717	8.06	1.50	<0.001
Language and cognitive development	13685	9.01	1.38	49883	8.46	1.82	<0.001
Communication skills and general knowledge	13701	8.46	2.13	49956	7.61	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	101814	8.93	1.25	8061	8.62	1.44	<0.001
Social competence	102058	8.38	1.76	8075	7.93	2.03	<0.001
Emotional maturity	101311	8.12	1.47	8028	7.77	1.62	<0.001
Language and cognitive development	101706	8.64	1.67	8046	7.90	2.22	<0.001
Communication skills and general knowledge	102019	7.89	2.45	8072	7.00	2.95	<0.001

12. Type of non-parental care arrangement

Domain	Full Time			Part Time			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	19866	8.91	1.26	10763	8.95	1.23	0.008
Social competence	19901	8.26	1.86	10786	8.47	1.72	<0.001
Emotional maturity	19827	7.99	1.59	10728	8.16	1.48	<0.001
Language and cognitive development	19879	8.69	1.64	10769	8.81	1.51	<0.001
Communication skills and general knowledge	19898	8.06	2.37	10788	8.13	2.30	0.003