



SCHOOL READINESS TO LEARN ONTARIO SK COHORT RESULTS

Based on the Early Development Instrument Data Collection for Senior Kindergarten Students in Ontario Spring 2005

This report covers the EDI results for **Senior Kindergarten** children in Ontario, collected in the Spring of 2005. Fourteen Senior Kindergarten sites in Ontario participated in the EDI implementation. The term 'kindergarten' refers to children who entered school the year they turned 5, according to the individual school board specifications.

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 8-12) 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 13-17), 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.

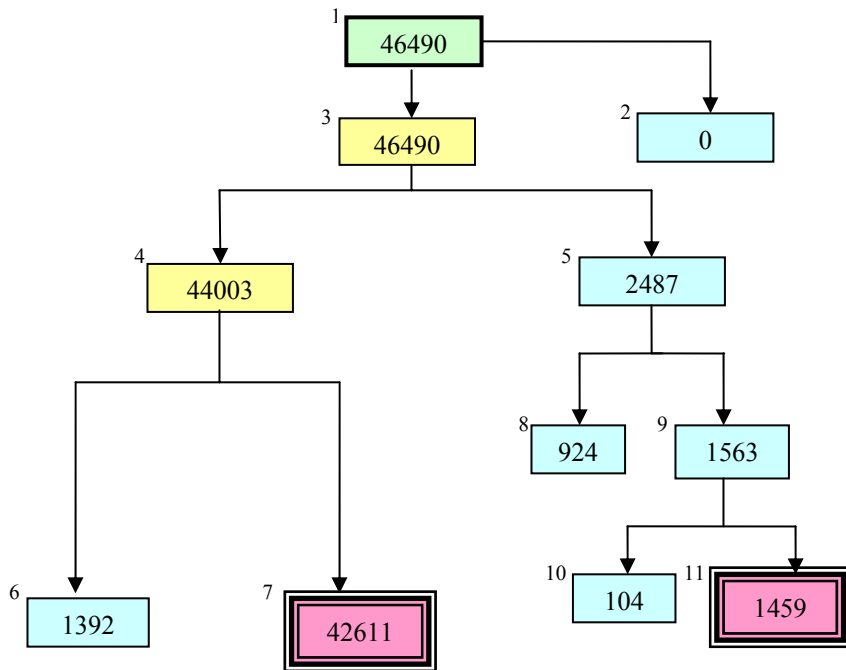
Please keep in mind the following: (1) while the comparisons are controlled for the effects of age and gender, no other variables are controlled for, and (2) these are statistical comparisons for the whole of the selected cohorts, and may not reflect differences occurring within individual sites. Therefore,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

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 42611 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)	117	10	417	214	47
Valid	42494	42601	42194	42397	42564

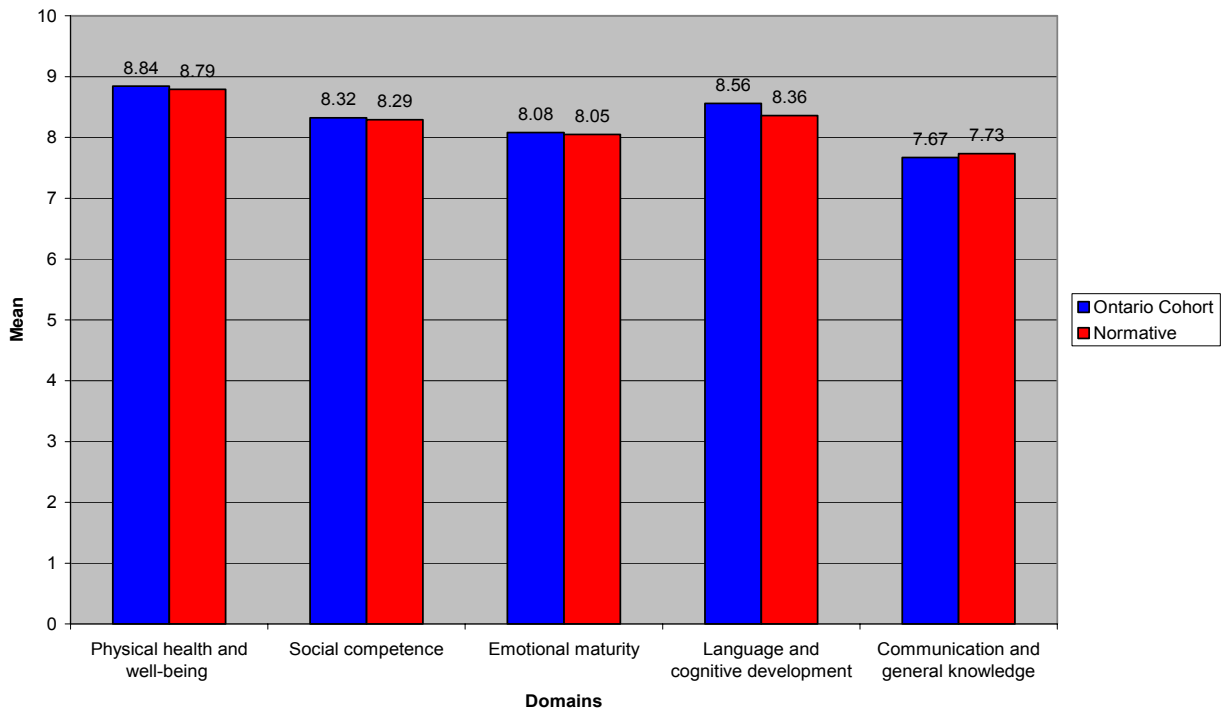
Ontario SK Cohort EDI results 2004/2005

Descriptive Statistics

Domains					Percentile Boundaries			
	Items	Min-Max	Mean	Standard Deviation	75	50	25	10
Physical Health and Well-Being	13	1.25-10.00	8.84	1.29	10.00	9.23	8.08	7.08
Social Competence	26	0.00-10.00	8.32	1.80	9.81	9.00	7.31	5.58
Emotional Maturity	30	0.33-10.00	8.08	1.48	9.17	8.33	7.24	6.00
Language and Cognitive Development	26	0.00-10.00	8.56	1.74	9.62	9.23	8.08	6.15
Communication Skills and General Knowledge	8	0.00-10.00	7.67	2.58	10.00	8.75	5.63	3.75

The graph below indicates the mean scores achieved by Ontario SK Cohort 2004/2005 cohort in comparison with the normative sample. For additional information regarding the Normative Sample please refer to our website at www.offordcentre.com/readiness.

Comparison of Means



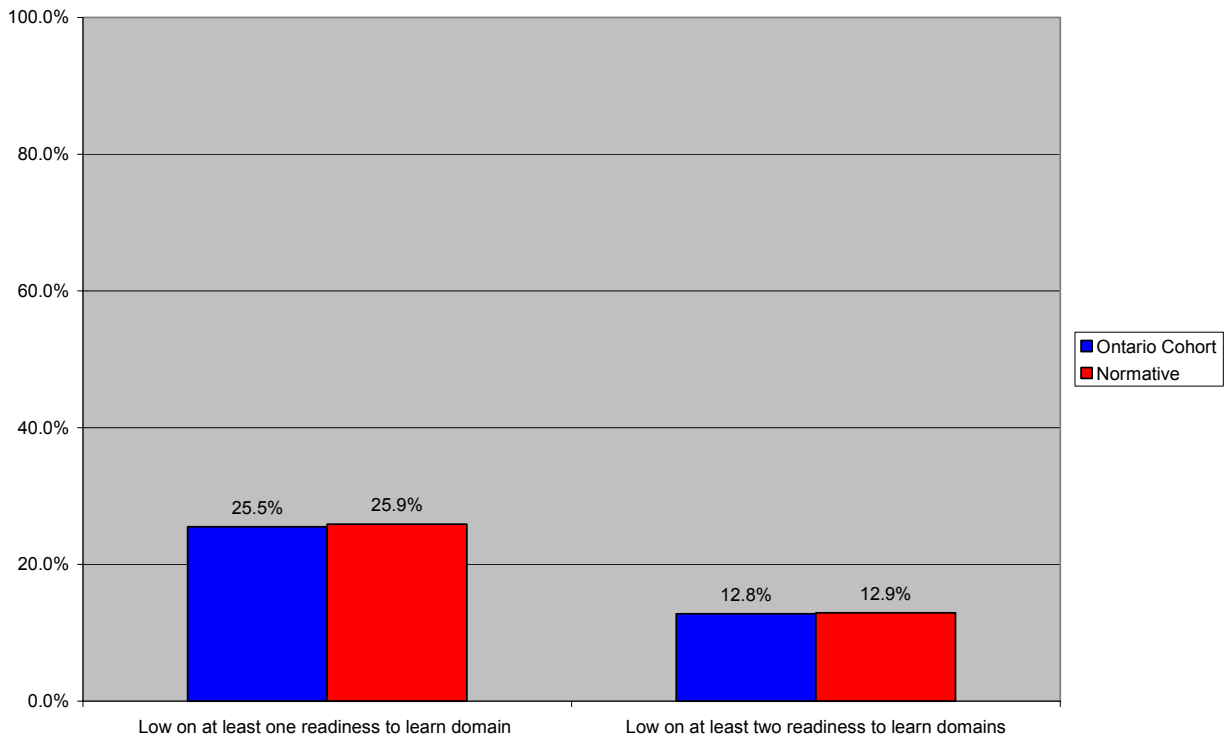
Generally, compared with the five-scale normative means of the EDI for SK-level, SK children in Ontario are doing better than the normative sample on all five of the readiness to learn domains with the exception of the Communication Skills and General Knowledge domains.

Percentage of Vulnerable Children

Normative scores and Ontario SK Cohort 2004/05 (N=42611)

Low	Percentage	
	2004/2005 <i>Ontario SK Cohort</i>	Normative Scores
Low on at least one readiness to learn domain	25.5%	25.9%
Low on at least two readiness to learn domains	12.8%	12.9%

Percentage of Vulnerable Children



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.

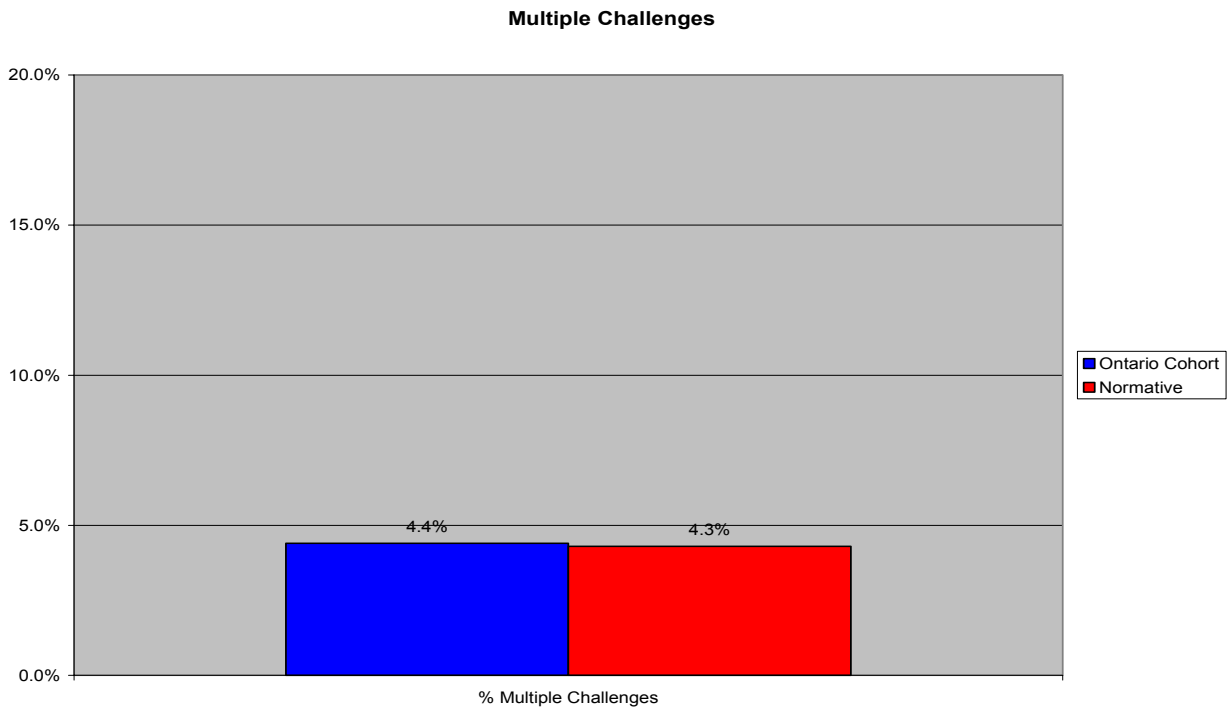
A “challenge” ability range was identified within each sub-domain, based on the range of scores. For each sub-domain, zero (0), equivalent to a child having no ability in all items within the sub-domain, was the lower boundary. The “challenge” cut-off boundary (i.e., the one below which a child would 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	
	2004/2005 Ontario SK Cohort	Normative Scores
Multiple Challenges	4.4%	4.3%



SENIOR KINDERGARTEN-LEVEL ONTARIO COHORT RESULTS**FREQUENCIES*****Participants in the EDI implementation***

SITE	RECEIVED SK COHORT N	VALID SK COHORT N
Algoma/Sault Saint Marie	1035	968
Bruce Grey	1393	1323
Haliburton/Victoria/Brock	722	689
Hamilton	5362	4975
Kenora/Rainy River	798	725
Lanark	194	187
Leeds/Grenville	241	200
Mississauga/Dixie/Bloor ** (UEY)**	707	643
Muskoka/Parry Sound	474	442
Niagara	3185	2998
Peterborough	2290	2188
Stormont/Dundas/Glengarry	1314	1139
Sudbury	1946	1761
Toronto	22617	20433
Windsor	4212	3940
Ontario SK Totals	46490	42611

SK Participants in the EDI implementation by language of instruction

<i>Schools</i>	RECEIVED SK COHORT N	VALID SK COHORT N
Anglophone Schools	44720	41071
Francophone Schools	1770	1540
Total kindergarten population	46490	42611

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
Spring 2005**

Descriptive characteristics of the population

	VALID SK COHORT N=42611	Percentage %
Gender		
Girl	21034	49.4
Boy	21501	50.5
Missing	76	0.2
English as a Second Language (ESL)		
ESL	3948	9.3
FSL	536	1.3
Not ESL	37973	89.1
Missing	154	0.4
Type of class		
JK	0	0.0
SK	23236	54.5
JK/SK	18020	42.3
JK/SK/1	143	0.3
SK/1	512	1.2
Other	36	0.1
Missing	664	1.6
First language		
English	28904	67.8
French	849	2.0
Other Only	5855	13.7
English & French (Bil)	378	0.9
English & Other (Bil)	5862	13.8
French & Other (Bil)	30	0.1
Two Other Lang. (Bil)	161	0.4
Missing	572	1.4
French Immersion		
French Immersion	4015	9.4
Non- French Immersion	38475	90.3
Missing	121	0.3

Descriptive characteristics of the population continued

	Number	%
Other Immersion		
Other Immersion	49	0.1
Non- Other Immersion	42402	99.5
Missing	160	0.4
Aboriginal		
Aboriginal	553	1.3
Not Aboriginal	41906	98.3
Missing	152	0.4

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	%
3-11 to 4-1	0	0.0
4-2 to 4-4	4	0.0
4-5 to 4-7	2	0.0
4-8 to 4-10	5	0.0
4-11 to 5-1	75	0.2
5-2 to 5-4	6456	15.2
5-5 to 5-7	10264	24.1
5-8 to 5-10	10800	25.3
5-11 to 6-1	10470	24.6
6-2 to 6-4	3786	8.9
6-5 to 6-7	265	0.6
6-8 to 6-10	34	0.1
6-11 and up	23	0.1
Missing	427	1.0

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

	Number	%
D1: Special Problems		
Yes	2897	6.8
D2a: Physical Disability		
Yes	640	1.5
D2b: Visual Impairment		
Yes	984	2.3
D2c: Hearing Impairment		
Yes	508	1.2
D2d: Speech Impairment		
Yes	1367	3.2
D2e: Learning Disability		
Yes	748	1.8
D2f: Emotional Problem		
Yes	492	1.2
D2g: Behavioural Problem		
Yes	958	2.2
D2h: Home Environment/problems at home		
Yes	825	1.9
D2i: Other		
Yes	560	1.3
D3: Teacher feels that child needs further assessment		
Yes	4201	9.9
No	33474	78.6
Missing	4936	11.6

Frequencies of answers to questions in Section E

	Number	%
E1: Child attended an early intervention program		
Yes	1945	4.6
No	29032	68.1
Missing	11634	27.3
E3: Child attended any other language or religion classes		
Yes	2459	5.8
No	20131	47.2
Missing	20021	47.0
E4: Child attended an organized part-time pre-school/nursery school		
Yes	4010	9.4
No	18530	43.5
Missing	20071	47.1
E2: Child attended a non-parental care arrangement		
Yes	11021	25.9
No	18968	44.5
Missing	12622	29.6
E2a: Centre-based, licensed, non-profit arrangement		
Yes	3285	7.7
E2b: Centre-based, licensed, for profit arrangement		
Yes	2582	6.1
E2c: Other home-based, licensed arrangement		
Yes	584	1.4
E2d: Other home-based, unlicensed, non-relative arrangement		
Yes	2010	4.7
E2e: Other home-based, unlicensed, relative arrangement		
Yes	1791	4.2
E2f: Child's home, non-relative arrangement		
Yes	1282	3.0

	Number	%
E2g: Child's home, relative arrangement		
Yes	2162	5.1
E2h: Other		
Yes	1718	4.0
E2i: Type of arrangement		
Full-time	6860	16.1
Part-time	3384	7.9
Missing	32367	76.0
E5: Attended Junior Kindergarten		
Yes	39084	91.7
No	2246	5.3
Missing	1281	3.0

**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

EDI Domains	SK MEANS				P
	Girls		Boys		
	N	Mean	N	Mean	
Physical health and well-being	20969	8.99	21449	8.68	<0.001
Social competence	21029	8.70	21496	7.94	<0.001
Emotional maturity	20856	8.46	21262	7.71	<0.001
Language and Cognitive development	20936	8.83	21385	8.29	<0.001
Communication skills and general knowledge	21013	8.06	21476	7.30	<0.001

2. Age of child (mean age is 5.72 years)

EDI Domains	SK MEANS				P
	Above the mean age		Below the mean age		
	N	Mean	N	Mean	
Physical health and well-being	21146	8.98	21348	8.69	<0.001
Social competence	21199	8.50	21402	8.14	<0.001
Emotional maturity	21042	8.20	21152	7.97	<0.001
Language and Cognitive development	21105	8.79	21292	8.33	<0.001
Communication skills and general knowledge	21185	7.97	21379	7.38	<0.001

3. Aboriginal versus Not Aboriginal

EDI Domains	SK MEANS				P
	Aboriginal		Not Aboriginal		
	N	Mean	N	Mean	
Physical health and well-being	552	8.10	41790	8.85	<0.001
Social competence	553	7.62	41896	8.33	<0.001
Emotional maturity	542	7.47	41504	8.09	<0.001
Language and cognitive development	552	7.81	41693	8.57	<0.001
Communication skills and general knowledge	553	6.68	41859	7.69	<0.001

4. Early Intervention versus No Early Intervention

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>Early Intervention</i>		<i>No Early Intervention</i>		
	N	Mean	N	Mean	
Physical health and well-being	1941	8.31	28957	8.89	<0.001
Social competence	1945	7.61	29026	8.42	<0.001
Emotional maturity	1933	7.48	28839	8.16	<0.001
Language and Cognitive development	1939	7.90	28942	8.63	<0.001
Communication skills and general knowledge	1945	6.25	29022	7.79	<0.001

5. Children who attended any other Language or Religion Class

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>Lang/Rel Class</i>		<i>No Lang/Rel Class</i>		
	N	Mean	N	Mean	
Physical health and well-being	2452	8.97	20083	8.82	<0.001
Social competence	2458	8.59	20127	8.29	<0.001
Emotional maturity	2448	8.29	20017	8.05	<0.001
Language and Cognitive development	2454	8.94	20078	8.51	<0.001
Communication skills and general knowledge	2458	7.81	20127	7.74	<0.001

6. Children who attended an Organized Part-time Preschool

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>Preschool</i>		<i>No Preschool</i>		
	N	Mean	N	Mean	
Physical health and well-being	4002	9.09	18489	8.77	<0.001
Social competence	4009	8.67	18527	8.26	<0.001
Emotional maturity	3994	8.25	18429	8.05	<0.001
Language and Cognitive development	4000	9.01	18493	8.44	<0.001
Communication skills and general knowledge	4009	8.51	18525	7.48	<0.001

7. Children who attended JK

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>JK</i>		<i>No JK</i>		
	N	Mean	N	Mean	
Physical health And well-being	38971	8.86	2243	8.47	<0.001
Social competence	39075	8.36	2245	7.72	<0.001
Emotional maturity	38722	8.11	2225	7.66	<0.001
Language and cognitive development	38903	8.64	2227	7.58	<0.001
Communication skills and general knowledge	39047	7.77	2246	6.52	<0.001

8. Type of Care

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>Full-time</i>		<i>Part-time</i>		
	N	Mean	N	Mean	
Physical health And well-being	6845	8.85	3374	8.94	<0.001
Social competence	6859	8.23	3383	8.45	<0.001
Emotional maturity	6830	7.97	3373	8.10	<0.001
Language and Cognitive development	6845	8.70	3374	8.81	<0.001
Communication skills and general knowledge	6857	7.97	3384	8.14	<0.001

9. Type of Class

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>SK Only</i>		<i>Other</i>		
	N	Mean	N	Mean	
Physical health And well-being	41143	8.84	691	8.63	<0.001
Social competence	41247	8.32	690	8.13	0.002
Emotional maturity	40850	8.09	687	7.93	0.001
Language and Cognitive development	41051	8.56	689	8.52	0.336
Communication skills and general knowledge	41210	7.67	690	7.40	0.002

Comparisons for Anglophone population:**10. Children with ESL status**

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>ESL</i>		<i>Non-ESL</i>		
	N	Mean	N	Mean	
Physical health and well-being	3935	8.49	36879	8.85	<0.001
Social competence	3947	7.81	36968	8.37	<0.001
Emotional maturity	3882	7.87	36644	8.11	<0.001
Language and cognitive development	3920	7.68	36804	8.66	<0.001
Communication skills and general knowledge	3942	4.75	36937	7.96	<0.001

11. Children with English as a first language

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>English</i>		<i>Other</i>		
	N	Mean	N	Mean	
Physical health and well-being	34436	8.84	5987	8.70	<0.001
Social competence	34517	8.35	6005	8.10	<0.001
Emotional maturity	34203	8.10	5935	8.06	0.274
Language and cognitive development	34365	8.65	5971	8.11	<0.001
Communication skills and general knowledge	34497	7.96	5989	5.95	<0.001

12. Children enrolled in French Immersion

<i>EDI Domains</i>	SK MEANS				<i>P</i>
	<i>French Immersion</i>		<i>Non-French Immersion</i>		
	N	Mean	N	Mean	
Physical health and well-being	4008	8.91	36833	8.81	<0.001
Social competence	4013	8.42	36930	8.30	0.009
Emotional maturity	3955	8.06	36600	8.10	0.001
Language and Cognitive development	3931	8.71	36820	8.55	<0.001
Communication skills and general knowledge	3987	8.18	36920	7.59	<0.001

Comparisons for Francophone population:**13. Children with FSL status**

<i>EDI Domains</i>	<i>SK MEANS</i>				<i>P</i>
	<i>FSL</i>		<i>Non-FSL</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	534	9.19	993	9.38	0.001
Social competence	536	8.17	996	8.52	<0.001
Emotional maturity	531	7.77	987	7.99	0.027
Language and cognitive development	531	8.09	990	8.51	<0.001
Communication skills and general knowledge	536	7.27	996	8.93	<0.001

14. Children with French as a first language

<i>EDI Domains</i>	<i>SK MEANS</i>				<i>P</i>
	<i>French</i>		<i>Other</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	1059	9.35	443	9.25	0.087
Social competence	1062	8.46	445	8.33	0.309
Emotional maturity	1053	7.95	440	7.88	0.770
Language and cognitive development	1054	8.49	442	8.15	0.001
Communication skills and general knowledge	1062	8.79	445	7.39	<0.001