



## SCHOOL READINESS TO LEARN NATIONAL SK COHORT RESULTS

### Based on the Early Development Instrument Data Collection for Senior Kindergarten Students in Canada Spring 2007

This report covers the EDI results for **Senior Kindergarten** children in Canada, collected in the Spring of 2007.

**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 Canada.

The second set of tables, **Frequencies** (pages 6-10) 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 11-16), 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.

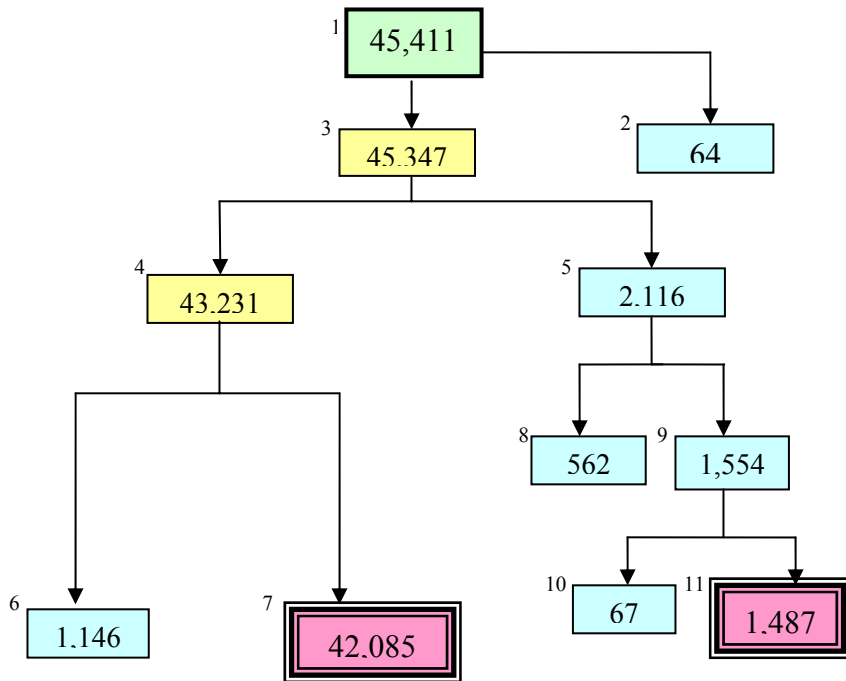
Please keep in mind the following: (1) while the comparisons are controlled for the effects of age and gender, no other variables are controlled for, and (2) these are statistical comparisons for the whole of the selected cohorts, and may not reflect differences occurring within individual sites. Therefore, 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 42,085 in the specific domains. The table below indicates the number of students with valid data in each domain.

	PHYS	SOC	EMOT	LANGCOG	COMGEN
<b>Missing</b> (More than 25% of questions left blank or with "I don't know" answered)	124	16	310	214	13
<b>Valid</b>	41,961	42,069	41,775	41,871	42,072

## National SK Cohort EDI results 2006/2007

### Descriptive Statistics

The EDI was completed for 42,085 non-special needs Senior Kindergarten students in Canada. The table below illustrates the descriptive statistics of the Canadian cohort.

Domains					Percentile Boundaries			
	Items	Min-Max	Mean	Standard Deviation	75	50	25	10
<b>Physical Health and Well-Being</b>	13	0.77-10.00	8.74	1.33	10.00	9.23	8.08	6.92
<b>Social Competence</b>	26	0.00-10.00	8.25	1.81	9.81	8.85	7.31	5.58
<b>Emotional Maturity</b>	30	0.67-10.00	7.99	1.49	9.14	8.28	7.17	5.89
<b>Language and Cognitive Development</b>	26	0.00-10.00	8.28	1.89	9.62	8.85	7.60	5.38
<b>Communication Skills and General Knowledge</b>	8	0.00-10.00	7.47	2.66	10.00	8.57	5.63	3.75

### 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 10<sup>th</sup> percentile cut-off of the site population) in one or more of the five domains.

#### National Cohort non-special needs students (N=42,085)

	Percentage
	<i>National SK Cohort</i>
Low	
Low on at least <b>one</b> readiness to learn domain	26.5%
Low on at least <b>two</b> readiness to learn domains	13.1%

## **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>.

<b>Percentage of SK children in Canada with Multiple Challenges</b>	Percentage
	<i>National SK Cohort</i>
Multiple Challenges	5.1%

## SENIOR KINDERGARTEN-LEVEL NATIONAL COHORT RESULTS

### FREQUENCIES

#### *Participants in the EDI implementation*

<i>Province</i>	<i>VALID SK COHORT N</i>
British Columbia	9,120
Manitoba	11,134
Ontario	19,077
Saskatchewan	1,486
New Brunswick	370
Quebec	898
<b>SK Totals</b>	<b>42,085</b>

## 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 Canada  
Spring 2007**

#### *Descriptive characteristics of the population*

	<b>VALID SK COHORT N=42,085</b>	<b>Percentage %</b>
<b>Gender</b>		
Girl	20716	49.2
Boy	21364	50.8
Missing	5	0.0
<b>English/French as a Second Language (E/FSL)</b>		
ESL	7651	18.2
FSL	236	0.6
Not E/FSL	33926	80.6
Missing	272	0.6
<b>Type of class</b>		
JK	18	0.0
SK	27214	64.7
JK/SK	12132	28.8
JK/SK/1	40	0.1
SK/1	1213	2.9
Other	520	1.2
Missing	948	2.3
<b>First language</b>		
English	27664	65.7
French	1435	3.4
Other Only	4182	9.9
English & French (Bil)	440	1.0
English & Other (Bil)	5910	14.0
French & Other (Bil)	26	0.1
Two Other Lang. (Bil)	499	1.2
Missing	1929	4.6
<b>French Immersion</b>		
French Immersion	3048	7.2
Non- French Immersion	38937	92.5
Missing	100	0.2

**Descriptive characteristics of the population continued**

	Number	%
Other Immersion		
Other Immersion	228	0.5
No Other Immersion	41738	99.2
Missing	119	0.3
Aboriginal		
Aboriginal	2935	7.0
Not Aboriginal	38475	91.4
Missing	675	1.6

**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	0	0.0
3-11 to 4-1	27	0.1
4-2 to 4-4	161	0.4
4-5 to 4-7	196	0.5
4-8 to 4-10	168	0.4
4-11 to 5-1	326	0.4
5-2 to 5-4	8144	19.4
5-5 to 5-7	10316	24.5
5-8 to 5-10	10407	24.7
5-11 to 6-1	10231	24.3
6-2 to 6-4	1665	4.0
6-5 to 6-7	216	0.5
6-8 to 6-10	55	0.1
6-11 and up	46	0.1
Missing	127	0.3

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	3133	7.4
D2a: Physical Disability		
Yes	77	0.2
D2b: Visual Impairment		
Yes	114	0.3
D2c: Hearing Impairment		
Yes	126	0.3
D2d: Speech Impairment		
Yes	1311	3.1
D2e: Learning Disability		
Yes	340	0.8
D2f: Emotional Problem		
Yes	493	1.2
D2g: Behavioural Problem		
Yes	742	1.8
D2h: Home Environment/problems at home		
Yes	762	1.8
D2i: Other		
Yes	547	1.3
D3: Teacher feels that child needs further assessment		
Yes	4016	9.5
No	33133	78.7
Missing	4936	11.7

**Frequencies of answers to questions in Section E**

	Number	%
E1: Child attended an early intervention program		
Yes	2249	5.3
No	24068	57.2
Missing	15768	37.5
E3: Child attended any other language or religion classes		
Yes	2960	7.0
No	16683	39.6
Missing	22442	53.3
E4: Child attended an organized part-time pre-school/nursery school		
Yes	6772	16.1
No	14353	34.1
Missing	20960	49.8
E5: Attended Junior Kindergarten		
Yes	19516	46.4
No	11050	26.3
Missing	11519	27.4
E2: Child attended a non-parental care arrangement		
Yes	9986	23.7
No	14814	35.2
Missing	17285	41.1
E2a: Centre-based, licensed, non-profit arrangement		
Yes	2755	6.5
E2b: Centre-based, licensed, for profit arrangement		
Yes	1989	4.7
E2c: Other home-based, licensed arrangement		
Yes	924	2.2
E2d: Other home-based, unlicensed, non-relative arrangement		
Yes	2459	5.8
E2e: Other home-based, unlicensed, relative arrangement		
Yes	1050	2.5
E2f: Child's home, non-relative arrangement		
Yes	342	0.8

	Number	%
E2g: Child's home, relative arrangement		
Yes	1496	3.6
E2h: Other		
Yes	1152	2.7
E2i: Type of arrangement		
Full-time	5970	14.2
Part-time	3610	8.6
Missing	32505	77.2

**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 Canada**

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

**1. Girls versus boys**

Domain	Girls			Boys			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	20643	8.92	1.23	21313	8.56	1.41	<0.001
Social competence	20710	8.66	1.56	21354	7.85	1.95	<0.001
Emotional maturity	20574	8.39	1.29	21197	7.60	1.57	<0.001
Language and cognitive development	20614	8.59	1.70	21252	7.99	2.01	<0.001
Communication skills and general knowledge	20711	7.87	2.52	21356	7.10	2.74	<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	20982	8.88	1.27	20979	8.60	1.39	<0.001
Social competence	21040	8.46	1.71	21029	8.04	1.89	<0.001
Emotional maturity	20896	8.12	1.46	20879	7.85	1.51	<0.001
Language and cognitive development	20965	8.55	1.71	20906	8.01	2.02	<0.001
Communication skills and general knowledge	21044	7.81	2.52	21028	7.14	2.76	<0.001

**3. Children with Aboriginal Status**

Domain	Aboriginal			Not Aboriginal			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	2932	8.00	1.60	38358	8.80	1.29	<0.001
Social competence	2934	7.65	2.06	38460	8.30	1.78	<0.001
Emotional maturity	2898	7.54	1.64	38210	8.03	1.47	<0.001
Language and cognitive development	2911	7.17	2.33	38288	8.37	1.82	<0.001
Communication skills and general knowledge	2934	6.55	2.78	38464	7.55	2.64	<0.001

**4. 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	2245	8.61	1.48	24004	8.85	1.29	<0.001
Social competence	2248	8.01	1.95	24063	8.35	1.77	<0.001
Emotional maturity	2234	7.77	1.59	23935	8.06	1.46	<0.001
Language and cognitive development	2242	8.03	2.08	23952	8.33	1.88	<0.001
Communication skills and general knowledge	2249	7.14	2.76	24058	7.67	2.60	<0.001

**5. 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	2958	8.94	1.24	16636	8.77	1.36	<0.001
Social competence	2960	8.54	1.62	16680	8.24	1.84	<0.001
Emotional maturity	2944	8.13	1.42	16590	7.98	1.52	<0.001
Language and cognitive development	2944	8.61	1.66	16612	8.23	1.94	<0.001
Communication skills and general knowledge	2959	7.82	2.52	16680	7.61	2.62	0.004

**6. Children who attended part-time preschool**

Domain	Preschool			No Preschool			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	6755	8.98	1.19	14322	8.69	1.41	<0.001
Social competence	6768	8.59	1.62	14351	8.14	1.88	<0.001
Emotional maturity	6738	8.19	1.43	14274	7.93	1.51	<0.001
Language and cognitive development	6727	8.63	1.65	14299	8.07	2.04	<0.001
Communication skills and general knowledge	6769	8.17	2.28	14348	7.30	2.75	<0.001

**7. Children who attended Junior Kindergarten**

Domain	JK			No JK			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	19435	8.82	1.29	11027	8.81	1.34	0.230
Social competence	19511	8.25	1.82	11046	8.34	1.76	<0.001
Emotional maturity	19366	8.07	1.46	10969	7.94	1.50	<0.001
Language and cognitive development	19431	8.37	1.86	10976	8.17	1.98	<0.001
Communication skills and general knowledge	19511	7.57	2.58	11045	7.65	2.64	0.104

**8. Type of non-parental care arrangement**

Domain	Full Time			Part Time			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	5956	8.86	1.31	3604	8.92	1.25	0.038
Social competence	5968	8.20	1.90	3610	8.48	1.68	<0.001
Emotional maturity	5947	7.90	1.60	3586	8.10	1.47	<0.001
Language and cognitive development	5945	8.41	1.85	3587	8.51	1.72	0.009
Communication skills and general knowledge	5968	7.94	2.47	3610	8.09	2.31	0.006

**Comparisons for Anglophone population:****9. Children with ESL status**

Domain	ESL			Not ESL			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	7630	8.54	1.39	32112	8.75	1.33	<0.001
Social competence	7649	7.88	1.91	32196	8.33	1.79	<0.001
Emotional maturity	7583	7.81	1.43	31986	8.04	1.50	<0.001
Language and cognitive development	7617	7.70	2.12	32037	8.44	1.80	<0.001
Communication skills and general knowledge	7646	5.41	2.92	32201	7.92	2.37	<0.001

**10. Children with English as a first language**

Domain	English			Other			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	33445	8.73	1.34	4638	8.56	1.38	<0.001
Social competence	33535	8.29	1.81	4652	7.88	1.91	<0.001
Emotional maturity	33303	8.02	1.50	4618	7.78	1.44	<0.001
Language and cognitive development	33367	8.39	1.83	4629	7.67	2.14	<0.001
Communication skills and general knowledge	33541	7.77	2.46	4650	5.23	2.96	<0.001

**11. Children who attended French Immersion**

Domain	French Immersion			No French Immersion			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	3047	8.87	1.26	36867	8.70	1.35	<0.001
Social competence	3048	8.63	1.62	36970	8.21	1.83	<0.001
Emotional maturity	3037	8.17	1.51	36701	7.99	1.49	<0.001
Language and cognitive development	2956	8.51	1.60	36868	8.28	1.91	<0.001
Communication skills and general knowledge	3047	8.37	2.18	36973	7.36	2.69	<0.001

**Comparisons for Francophone population:****12. Children with FSL status**

Domain	FSL			Not FSL			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	235	9.12	1.21	1713	9.30	1.03	0.016
Social competence	235	8.15	1.70	1717	8.46	1.64	0.005
Emotional maturity	231	7.67	1.58	1707	7.81	1.53	0.191
Language and cognitive development	233	7.76	2.06	1715	8.04	1.83	0.027
Communication skills and general knowledge	235	6.05	2.77	1718	8.63	1.99	<0.001

**13. Children with French as a first language**

Domain	French			Other			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	1761	9.28	1.05	188	9.17	1.16	0.127
Social competence	1765	8.44	1.64	188	8.26	1.71	0.097
Emotional maturity	1755	7.78	1.53	184	7.87	1.58	0.511
Language and cognitive development	1763	8.06	1.83	186	7.59	2.05	0.001
Communication skills and general knowledge	1766	8.61	1.99	188	5.66	2.86	<0.001