



## SCHOOL READINESS TO LEARN NATIONAL SK COHORT RESULTS

### Based on the Early Development Instrument Data Collection for Senior Kindergarten Students in Canada Spring 2008

This report covers the EDI results for **Senior Kindergarten** children in Canada, collected in the Spring of 2008.

**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.

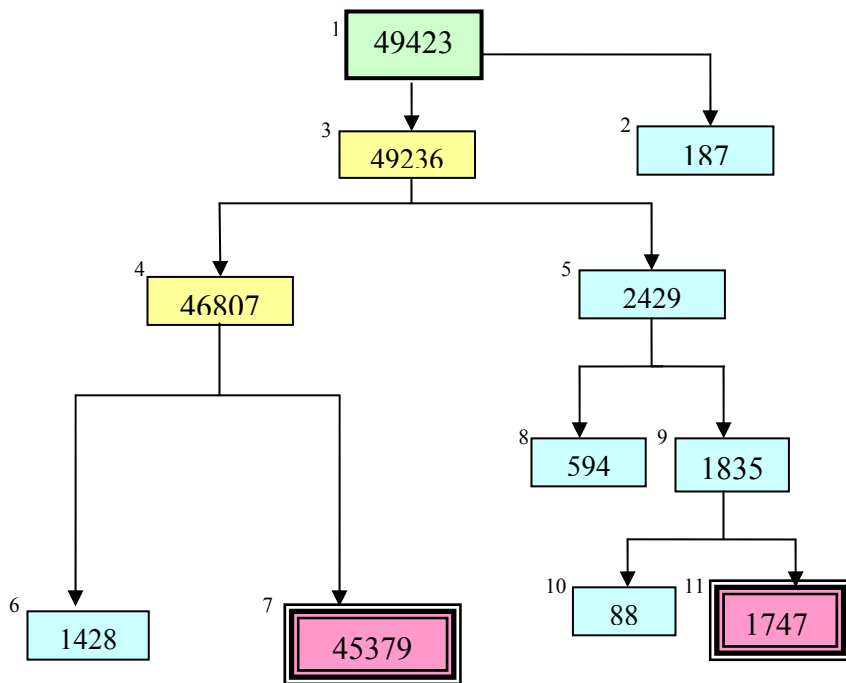
Please keep in mind the following: (1) while the comparisons are controlled for the effects of age and gender, no other variables are controlled for, and (2) these are statistical comparisons for the whole of the selected cohorts, and may not reflect differences occurring within individual sites. Therefore, 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 45,379 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)	126	13	332	185	29
<b>Valid</b>	45253	45366	45047	45194	45350

## National SK Cohort EDI results 2007/2008

### Descriptive Statistics

The EDI was completed for 45,379 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	8.81	1.32	10.00	9.23	8.08	7.00
<b>Social Competence</b>	26	0.00-10.00	8.28	1.81	9.81	8.85	7.31	5.58
<b>Emotional Maturity</b>	30	0.50-10.00	8.05	1.49	9.17	8.33	7.17	6.00
<b>Language and Cognitive Development</b>	26	0.00-10.00	8.48	1.78	9.62	9.23	7.69	5.77
<b>Communication Skills and General Knowledge</b>	8	0.00-10.00	7.63	2.58	10.00	8.75	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=45,379)

	Percentage
	<i>National SK Cohort</i>
Low	
Low on at least <b>one</b> readiness to learn domain	25.5%
Low on at least <b>two</b> readiness to learn domains	12.8%

## **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>.

<b>Percentage of SK children in Canada with Multiple Challenges</b>	Percentage
	<i>National SK Cohort</i>
Multiple Challenges	4.2%

## SENIOR KINDERGARTEN-LEVEL NATIONAL COHORT RESULTS

### FREQUENCIES

#### *Participants in the EDI implementation*

<i>Province</i>	<i>VALID SK COHORT N</i>
British Columbia	2,978
Manitoba	1,381
Ontario	37,392
Saskatchewan	969
Quebec	610
Newfoundland	330
Prince Edward Island	1,098
Alberta	181
Nova Scotia	440
<b>SK Totals</b>	<b>45379</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 2008**

#### *Descriptive characteristics of the population*

	<b>VALID SK COHORT N=45,379</b>	<b>Percentage %</b>
<b>Gender</b>		
Girl	22295	49.1%
Boy	23049	50.8%
Missing	35	0.1%
<b>English/French as a Second Language (E/FSL)</b>		
ESL	3598	7.9%
FSL	635	1.4%
Not E/FSL	40961	90.3%
Missing	185	0.4%
<b>Type of class</b>		
JK	43	0.1%
SK	23442	51.7%
JK/SK	19953	44.0%
JK/SK/1	97	0.2%
SK/1	880	1.9%
Other	162	0.4%
Missing	802	1.8%
<b>First language</b>		
English	30984	68.3%
French	1400	3.1%
Other Only	1542	3.4%
English & French (Bil)	618	1.4%
English & Other (Bil)	4632	10.2%
French & Other (Bil)	90	0.2%
Two Other Lang. (Bil)	5286	11.6%
Missing	827	1.8%
<b>French Immersion</b>		
French Immersion	4305	9.5%
Non- French Immersion	40677	89.6%
Missing	397	0.9%

**Descriptive characteristics of the population continued**

	Number	%
Other Immersion		
Other Immersion	250	0.6%
No Other Immersion	44879	98.9%
Missing	250	0.6%
Aboriginal		
Aboriginal	1205	2.7%
Not Aboriginal	43838	96.6%
Missing	336	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	1	0.0%
3-11 to 4-1	1	0.0%
4-2 to 4-4	3	0.0%
4-5 to 4-7	7	0.0%
4-8 to 4-10	9	0.0%
4-11 to 5-1	534	1.2%
5-2 to 5-4	9195	20.3%
5-5 to 5-7	11363	25.0%
5-8 to 5-10	11309	24.9%
5-11 to 6-1	10512	23.2%
6-2 to 6-4	2071	4.6%
6-5 to 6-7	165	0.4%
6-8 to 6-10	48	0.1%
6-11 and up	60	0.1%
Missing	101	0.2%

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	3372	7.4%
D2a: Physical Disability		
Yes	114	0.3%
D2b: Visual Impairment		
Yes	126	0.3%
D2c: Hearing Impairment		
Yes	107	0.2%
D2d: Speech Impairment		
Yes	1319	2.9%
D2e: Learning Disability		
Yes	492	1.1%
D2f: Emotional Problem		
Yes	589	1.3%
D2g: Behavioural Problem		
Yes	903	2.0%
D2h: Home Environment/problems at home		
Yes	853	1.9%
D2i: Other		
Yes	747	1.6%
D3: Teacher feels that child needs further assessment		
Yes	4738	10.4%
No	36579	80.6%
Missing	4062	9.0%

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

	Number	%
E1: Child attended an early intervention program		
Yes	2428	5.4%
No	30372	66.9%
Missing	12579	27.7%
E3: Child attended any other language or religion classes		
Yes	2878	6.3%
No	22920	50.5%
Missing	19581	43.1%
E4: Child attended an organized part-time pre-school/nursery school		
Yes	5537	12.2%
No	20335	44.8%
Missing	19507	43.0%
E5: Attended Junior Kindergarten		
Yes	35009	77.1%
No	5595	12.3%
Missing	4775	10.5%
E2: Child attended a non-parental care arrangement		
Yes	13160	29.0%
No	18418	40.6%
Missing	13801	30.4%
E2a: Centre-based, licensed, non-profit arrangement		
Yes	4637	10.2%
E2b: Centre-based, licensed, for profit arrangement		
Yes	3136	6.9%
E2c: Other home-based, licensed arrangement		
Yes	850	1.9%
E2d: Other home-based, unlicensed, non-relative arrangement		
Yes	2103	4.6%
E2e: Other home-based, unlicensed, relative arrangement		
Yes	1364	3.0%
E2f: Child's home, non-relative arrangement		
Yes	740	1.6%

	Number	%
E2g: Child's home, relative arrangement		
Yes	2475	5.5%
E2h: Other		
Yes	1104	2.4%
E2i: Type of arrangement		
Full-time	8749	19.3%
Part-time	3997	8.8%
Missing	32633	71.9%

**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	22230	8.96	1.23	22988	8.66	1.38	<0.001
Social competence	22291	8.65	1.60	23041	7.93	1.94	<0.001
Emotional maturity	22144	8.42	1.30	22870	7.69	1.58	<0.001
Language and cognitive development	22195	8.71	1.65	22964	8.26	1.87	<0.001
Communication skills and general knowledge	22274	7.98	2.45	23041	7.29	2.66	<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	22587	8.97	1.23	22666	8.65	1.38	<0.001
Social competence	22645	8.48	1.72	22721	8.08	1.89	<0.001
Emotional maturity	22495	8.17	1.46	22552	7.93	1.52	<0.001
Language and cognitive development	22585	8.74	1.59	22609	8.23	1.92	<0.001
Communication skills and general knowledge	22641	7.99	2.42	22709	7.26	2.69	<0.001

**3. Children with Aboriginal Status**

Domain	Aboriginal			Not Aboriginal			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	1201	7.93	1.64	43718	8.83	1.30	<0.001
Social competence	1205	7.57	2.06	43825	8.30	1.80	<0.001
Emotional maturity	1197	7.43	1.64	43519	8.07	1.48	<0.001
Language and cognitive development	1201	7.51	2.26	43662	8.51	1.75	<0.001
Communication skills and general knowledge	1205	6.46	2.77	43809	7.66	2.57	<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	2424	8.40	1.52	30284	8.89	1.27	<0.001
Social competence	2428	7.75	2.00	30368	8.39	1.76	<0.001
Emotional maturity	2420	7.60	1.64	30229	8.13	1.45	<0.001
Language and cognitive development	2426	7.91	2.08	30269	8.55	1.74	<0.001
Communication skills and general knowledge	2427	6.45	2.82	30355	7.78	2.54	<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	2868	9.02	1.15	22865	8.81	1.33	<0.001
Social competence	2877	8.62	1.63	22918	8.27	1.83	<0.001
Emotional maturity	2866	8.29	1.40	22839	8.02	1.50	<0.001
Language and cognitive development	2866	8.88	1.46	22854	8.44	1.81	<0.001
Communication skills and general knowledge	2874	7.92	2.48	22909	7.71	2.57	<0.001

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

Domain	Preschool			No Preschool			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	5519	9.05	1.16	20281	8.75	1.36	<0.001
Social competence	5536	8.59	1.64	20333	8.22	1.85	<0.001
Emotional maturity	5510	8.18	1.45	20255	8.01	1.50	<0.001
Language and cognitive development	5518	8.81	1.50	20269	8.35	1.88	<0.001
Communication skills and general knowledge	5535	8.32	2.19	20323	7.46	2.67	<0.001

**7. Children who attended Junior Kindergarten**

Domain	JK			No JK			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	34923	8.86	1.28	5575	8.74	1.42	<0.001
Social competence	35000	8.33	1.79	5594	8.18	1.88	<0.001
Emotional maturity	34759	8.11	1.46	5561	7.85	1.53	<0.001
Language and cognitive development	34874	8.58	1.70	5576	8.01	2.09	<0.001
Communication skills and general knowledge	34988	7.70	2.53	5592	7.47	2.79	<0.001

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

Domain	Full Time			Part Time			p
	N	Mean	SD	N	Mean	SD	
Physical health and well-being	8725	8.88	1.29	3982	8.93	1.23	0.040
Social competence	8748	8.27	1.83	3997	8.41	1.78	<0.001
Emotional maturity	8718	7.98	1.56	3987	8.08	1.49	<0.001
Language and cognitive development	8722	8.62	1.67	3991	8.67	1.63	0.081
Communication skills and general knowledge	8740	8.05	2.38	3996	8.11	2.30	0.161

**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	3589	8.51	1.39	39050	8.81	1.31	<0.001
Social competence	3594	7.77	1.95	39136	8.32	1.80	<0.001
Emotional maturity	3560	7.78	1.44	38871	8.09	1.49	<0.001
Language and cognitive development	3577	7.51	2.23	38993	8.58	1.71	<0.001
Communication skills and general knowledge	3586	4.77	2.91	39129	7.85	2.40	<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	35148	8.79	1.33	6846	8.74	1.28	0.099
Social competence	35224	8.32	1.80	6861	8.09	1.87	<0.001
Emotional maturity	34997	8.07	1.50	6807	8.04	1.39	0.447
Language and cognitive development	35096	8.57	1.71	6823	8.07	2.04	<0.001
Communication skills and general knowledge	35219	7.90	2.39	6848	6.08	2.98	<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	4293	8.92	1.24	38145	8.77	1.33	<0.001
Social competence	4303	8.40	1.75	38225	8.27	1.82	<0.001
Emotional maturity	4242	8.09	1.46	37987	8.06	1.48	0.741
Language and cognitive development	4237	8.59	1.52	38127	8.48	1.80	0.005
Communication skills and general knowledge	4303	7.95	2.36	38208	7.56	2.61	<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	630	9.13	1.23	1800	9.22	1.16	0.024
Social competence	635	8.32	1.74	1816	8.37	1.83	0.261
Emotional maturity	631	7.80	1.63	1800	7.75	1.62	0.733
Language and cognitive development	632	8.50	1.67	1812	8.36	1.74	0.186
Communication skills and general knowledge	635	7.44	2.51	1817	8.63	2.07	<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	1868	9.18	1.19	566	9.24	1.13	0.925
Social competence	1884	8.34	1.84	571	8.44	1.69	0.687
Emotional maturity	1871	7.73	1.63	564	7.90	1.58	0.096
Language and cognitive development	1881	8.30	1.75	567	8.74	1.58	<0.001
Communication skills and general knowledge	1885	8.48	2.20	571	7.85	2.34	<0.001