

SCHOOL READINESS TO LEARN ONTARIO COHORT RESULTS

Based on the Early Development Instrument Data Collection for Senior Kindergarten Students in Ontario Spring 2004

This report covers the EDI results for **Senior Kindergarten** children in Ontario, collected in the Spring of 2004. In the spring of 2004, six 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.

SK-level student populations are examined in the form of two different population cohorts: **Full** and **Selected**.

The **Full** cohort consists of all children for whom the EDI was completed in the early spring of 2004.

The **Selected** cohort is restricted among the SK-level students, to children aged 4.2 to 7.3 years with no special needs and no more than one missing domain. Up to 25% of missing questions were allowed per EDI scale; up to one missing scale was allowed per EDI questionnaire. The questionnaires with more **missing data** than specified above were discarded from the analysis.

The two parts of this report are further subdivided into three sets of tables: **Frequencies, Means & Domain Percentiles**, and **Group Comparisons**.

The first set of tables, **Frequencies** (pages 2-5 for the SK cohort) 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 both types of cohorts: **Full** and **Selected**.

The second set of tables, **Means & Domain Percentiles** (page 6 for the SK cohort), are reported for the **Selected** cohorts only.

The third set of tables, **Group Comparisons** (pages 8-12 for the SK cohort), includes means and statistical comparisons between groups as identified by the demographic and community variables.

The **Group Comparisons** are performed with the **Selected** cohorts 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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SENIOR KINDERGARTEN-LEVEL ONTARIO COHORT RESULTS

FREQUENCIES

Participants in the EDI implementation

| <i>SITE/BOARD/DISTRICT</i> | <i>FULL SK COHORT N</i> | <i>SELECTED SK COHORT N</i> |
|--------------------------------|-------------------------|-----------------------------|
| Toronto District School Board | 4493 | 3973 |
| Mississauga Dixie-Bloor (Peel) | 14009 | 12965 |
| Timmins/James Bay | 442 | 410 |
| Thunder Bay | 14 | 14 |
| Waterloo | 5416 | 5121 |
| Timiskaming | 107 | 89 |
| Total SK population | 24481 | 22572 |

SK Participants in the EDI implementation by language of instruction

| <i>Schools</i> | <i>FULL SK COHORT N</i> | <i>SELECTED SK COHORT N</i> |
|-------------------------------|-----------------------------|---------------------------------|
| Anglophone Schools | 23932 | 22073 |
| Francophone Schools | 549 | 499 |
| Total kindergarten population | 24481 | 22572 |

Descriptive characteristics of the population

| | FULL SK COHORT N=24481 | | SELECTED SK COHORT N=22572 | |
|--------------------------------------|---------------------------|------|-------------------------------|------|
| | Number | % | Number | % |
| Gender | | | | |
| Girl | 11929 | 48.7 | 11142 | 49.4 |
| Boy | 12508 | 51.1 | 11390 | 50.5 |
| Missing | 44 | 0.2 | 40 | 0.2 |
| English as a Second Language (E/FSL) | | | | |
| ESL | 5048 | 20.6 | 4549 | 20.2 |
| Neither ESL | 18907 | 77.2 | 17770 | 78.7 |
| Missing | 526 | 2.1 | 253 | 1.1 |
| Type of class | | | | |
| JK | 6 | 0.0 | 5 | 0.0 |
| SK | 10801 | 44.1 | 9983 | 44.2 |
| JK/SK | 13518 | 55.2 | 12484 | 55.3 |
| JK/SK/1 | 31 | 0.1 | 22 | 0.1 |
| SK/1 | 69 | 0.3 | 50 | 0.2 |
| Missing | 56 | 0.2 | 28 | 0.1 |
| First language | | | | |
| English | 12199 | 49.8 | 11402 | 50.5 |
| French | 2282 | 9.3 | 2069 | 9.2 |
| Other Only | 2641 | 10.8 | 2453 | 10.9 |
| English & French | 115 | 0.5 | 101 | 0.4 |
| English & Other | 4967 | 20.3 | 4612 | 20.4 |
| French & Other | 10 | 0.0 | 10 | 0.0 |
| Two Other | 1684 | 6.9 | 1464 | 6.5 |
| Missing | 583 | 2.4 | 461 | 2.0 |
| French Immersion | | | | |
| French Immersion | 465 | 1.9 | 442 | 2.0 |
| Regular Class | 23564 | 96.3 | 21953 | 97.3 |
| Missing | 452 | 1.8 | 177 | 0.8 |
| Other Immersion | | | | |
| Other Immersion | 66 | 0.3 | 52 | 0.2 |
| No Other Immersion | 24011 | 98.1 | 22409 | 99.3 |
| Missing | 404 | 1.7 | 111 | 0.5 |
| Special Needs (SN) | | | | |
| SN | 651 | 2.7 | 0 | 0.0 |
| Not SN | 23285 | 95.1 | 22572 | 100 |
| Missing | 545 | 2.2 | 0 | 0.0 |

| | | | | |
|----------------|-------|------|-------|------|
| Aboriginal | | | | |
| Aboriginal | 24 | 0.1 | 20 | 0.1 |
| Not Aboriginal | 24059 | 98.3 | 22456 | 99.5 |
| Missing | 398 | 1.6 | 96 | 0.4 |

Age composition

For the table below the age (at the time of testing) was divided into 3-month intervals. The age categories are expressed as year-months of age: for example, 5-11 means age 5 years and 11 months. Months were rounded down for ages less than 15 days, and up for more than 15 days. That means that 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.

| Age Category | FULL SK COHORT N=24481 | | SELECTED SK COHORT N=22572 | |
|--------------|---------------------------|------|-------------------------------|------|
| | Number | % | Number | % |
| 3-11 to 4-1 | 0 | 0.0 | 0 | 0.0 |
| 4-2 to 4-4 | 4 | 0.0 | 3 | 0.0 |
| 4-5 to 4-7 | 4 | 0.0 | 4 | 0.0 |
| 4-8 to 4-10 | 2 | 0.0 | 1 | 0.0 |
| 4-11 to 5-1 | 189 | 0.8 | 167 | 0.7 |
| 5-2 to 5-4 | 4498 | 18.4 | 4137 | 18.3 |
| 5-5 to 5-7 | 6208 | 25.4 | 5726 | 25.4 |
| 5-8 to 5-10 | 6204 | 25.3 | 5776 | 25.6 |
| 5-11 to 6-1 | 5874 | 24.0 | 5436 | 24.1 |
| 6-2 to 6-4 | 1309 | 5.3 | 1181 | 5.2 |
| 6-5 to 6-7 | 61 | 0.2 | 45 | 0.2 |
| 6-8 to 6-10 | 26 | 0.1 | 18 | 0.1 |
| 6-11 and up | 14 | 0.1 | 6 | 0.0 |
| Missing | 88 | 0.4 | 72 | 0.3 |

Frequencies of answers to questions in Section D and E

| | FULL SK COHORT N=24481 | | SELECTED SK COHORT N=22572 | |
|---|---------------------------|------|-------------------------------|------|
| | Number | % | Number | % |
| D10: Teacher feels that child needs further assessment | | | | |
| Yes | 2563 | 10.5 | 2114 | 9.4 |
| No | 19596 | 80.0 | 19116 | 84.7 |
| Missing | 2322 | 9.5 | 1342 | 5.9 |
| E1: Child attended an early intervention program | | | | |
| Yes | 978 | 4.0 | 696 | 3.1 |
| No | 16174 | 66.1 | 15711 | 69.6 |
| Missing | 7329 | 29.9 | 6165 | 27.3 |
| E3: Child attended any other language or religion classes | | | | |
| Yes | 1478 | 6.0 | 1422 | 6.3 |
| No | 10615 | 43.4 | 10090 | 44.7 |
| Missing | 12388 | 50.6 | 11060 | 49.0 |
| E4: Child attended an organized part-time pre-school/nursery school | | | | |
| Yes | 1914 | 7.8 | 1751 | 7.8 |
| No | 10118 | 41.3 | 9717 | 43.0 |
| Missing | 12449 | 50.9 | 11104 | 49.2 |
| E5: Child attended Junior Kindergarten | | | | |
| Yes | 21125 | 86.3 | 20271 | 89.8 |
| No | 1806 | 7.4 | 1632 | 7.2 |
| Missing | 1550 | 6.3 | 669 | 3.0 |

Frequencies of answers to questions in Section E2

| | FULL SK COHORT N=24481 | | SELECTED SK COHORT N=22572 | |
|---|---------------------------|------|-------------------------------|------|
| | Number | % | Number | % |
| E2: Child attended a non-parental care arrangement | | | | |
| Yes | 5458 | 22.3 | 5183 | 23.0 |
| No | 10425 | 42.6 | 9977 | 44.2 |
| Missing | 8598 | 35.1 | 7412 | 32.8 |
| E2a: Centre-based, licensed, non-profit arrangement | | | | |
| Yes | 1057 | 4.3 | 981 | 4.3 |
| E2b: Centre-based, licensed, for profit arrangement | | | | |
| Yes | 1168 | 4.8 | 1091 | 4.8 |
| E2c: Other home-based, licensed arrangement | | | | |
| Yes | 188 | 0.8 | 177 | 0.8 |
| E2d: Other home-based, unlicensed, non-relative arrangement | | | | |
| Yes | 1403 | 5.7 | 1353 | 6.0 |
| E2e: Other home-based, unlicensed, relative arrangement | | | | |
| Yes | 599 | 2.4 | 580 | 2.6 |
| E2f: Child's home, non-relative arrangement | | | | |
| Yes | 246 | 1.0 | 231 | 1.0 |
| E2g: Child's home, relative arrangement | | | | |
| Yes | 1124 | 4.6 | 1080 | 4.8 |
| E2i: Type of arrangement | | | | |
| Full-time | 3642 | 14.9 | 3485 | 15.4 |
| Part-time | 1470 | 6.0 | 1374 | 6.1 |
| Missing | 19369 | 79.1 | 17713 | 78.5 |

MEANS & DOMAIN PERCENTILES

Means, standard deviations, & domain percentiles for selected SK-level cohort: N=22572

The table below includes the means, standard deviations, and percentile boundaries for the selected SK-level cohort of children. This includes all students for whom we collected data in the 2003/04 school year, except for those outside of the set age range, those with special needs, and those with missing data (as explained on page 1).

* Standard Deviation (\pm SD) indicates the range in which approximately two-thirds of the scores fall. For example, two-thirds of the scores on "physical health and well-being" fall between 8.85 - 1.02 (7.83) and 8.85 + 1.02 (9.87).

| <i>EDI Domains</i> | <i>Mean</i> | \pm <i>SD</i> * | <i>SK PERCENTILES</i> | | | |
|--|-------------|-------------------|-----------------------|------------|------------|------------|
| | | | <i>75%</i> | <i>50%</i> | <i>25%</i> | <i>10%</i> |
| Physical health and well-being | 8.85 | 1.02 | 9.62 | 9.04 | 8.27 | 7.50 |
| Social competence | 8.17 | 1.81 | 9.62 | 8.75 | 7.12 | 5.38 |
| Emotional maturity | 8.01 | 1.48 | 9.14 | 8.33 | 7.17 | 5.98 |
| Language and cognitive development | 8.37 | 1.88 | 9.62 | 9.20 | 7.69 | 5.60 |
| Communication skills and general knowledge | 7.66 | 2.00 | 9.44 | 8.06 | 6.39 | 5.00 |

**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 | 11109 | 8.98 | 11351 | 8.72 | <0.001 |
| Social competence | 11141 | 8.55 | 11388 | 7.80 | <0.001 |
| Emotional maturity | 11064 | 8.39 | 11280 | 7.64 | <0.001 |
| Language and Cognitive development | 11096 | 8.65 | 11343 | 8.11 | <0.001 |
| Communication skills and general knowledge | 11134 | 7.94 | 11382 | 7.39 | <0.001 |

2. Age of child (mean age is 5.68 years)

| EDI Domains | SK MEANS | | | | P |
|--|--------------------|------|--------------------|------|--------|
| | Above the mean age | | Below the mean age | | |
| | N | Mean | N | Mean | |
| Physical health and well-being | 11204 | 8.97 | 11296 | 8.73 | <0.001 |
| Social competence | 11235 | 8.38 | 11334 | 7.97 | <0.001 |
| Emotional maturity | 11137 | 8.14 | 11247 | 7.88 | <0.001 |
| Language and Cognitive development | 11196 | 8.69 | 11283 | 8.06 | <0.001 |
| Communication skills and general knowledge | 11229 | 7.92 | 11327 | 7.40 | <0.001 |

3. Aboriginal versus Not Aboriginal

| EDI Domains | SK MEANS | | | | P |
|--|------------|------|----------------|------|-------|
| | Aboriginal | | Not Aboriginal | | |
| | N | Mean | N | Mean | |
| Physical health and well-being | 20 | 8.58 | 22384 | 8.85 | 0.196 |
| Social competence | 20 | 7.53 | 22453 | 8.17 | 0.066 |
| Emotional maturity | 20 | 7.83 | 22269 | 8.01 | 0.389 |
| Language and cognitive development | 20 | 7.63 | 22365 | 8.37 | 0.059 |
| Communication skills and general knowledge | 20 | 7.33 | 22440 | 7.66 | 0.397 |

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 | 694 | 8.46 | 15669 | 8.87 | <0.001 |
| Social competence | 696 | 7.55 | 15710 | 8.24 | <0.001 |
| Emotional maturity | 692 | 7.57 | 15621 | 8.06 | <0.001 |
| Language and Cognitive development | 694 | 7.89 | 15662 | 8.40 | <0.001 |
| Communication skills and general knowledge | 696 | 6.71 | 15700 | 7.73 | <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 | 1417 | 9.03 | 10069 | 8.79 | <0.001 |
| Social competence | 1422 | 8.55 | 10090 | 8.15 | <0.001 |
| Emotional maturity | 1416 | 8.27 | 10052 | 7.96 | <0.001 |
| Language and Cognitive development | 1419 | 8.94 | 10075 | 8.29 | <0.001 |
| Communication skills and general knowledge | 1420 | 8.00 | 10085 | 7.71 | <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 | 1746 | 9.04 | 9699 | 8.78 | <0.001 |
| Social competence | 1751 | 8.50 | 9717 | 8.09 | <0.001 |
| Emotional maturity | 1742 | 8.22 | 9689 | 7.94 | <0.001 |
| Language and Cognitive development | 1748 | 8.95 | 9699 | 8.19 | <0.001 |
| Communication skills and general knowledge | 1751 | 8.42 | 9710 | 7.47 | <0.001 |

7. Children who attended JK

| <i>EDI Domains</i> | SK MEANS | | | | <i>P</i> |
|---|-----------|-------------|--------------|-------------|----------|
| | <i>JK</i> | | <i>No JK</i> | | |
| | <i>N</i> | <i>Mean</i> | <i>N</i> | <i>Mean</i> | |
| Physical health And well-being | 20207 | 8.87 | 1626 | 8.65 | <0.001 |
| Social competence | 20268 | 8.22 | 1632 | 7.78 | <0.001 |
| Emotional maturity | 20115 | 8.04 | 1613 | 7.67 | <0.001 |
| Language and cognitive development | 20198 | 8.45 | 1624 | 7.65 | <0.001 |
| Communication skills and general knowledge | 20260 | 7.74 | 1628 | 7.02 | <0.001 |

8. Type of Care

| <i>EDI Domains</i> | SK MEANS | | | | <i>P</i> |
|---|------------------|-------------|------------------|-------------|----------|
| | <i>Full-time</i> | | <i>Part-time</i> | | |
| | <i>N</i> | <i>Mean</i> | <i>N</i> | <i>Mean</i> | |
| Physical health And well-being | 3478 | 8.88 | 1367 | 8.84 | 0.206 |
| Social competence | 3485 | 8.07 | 1374 | 8.34 | <0.001 |
| Emotional maturity | 3469 | 7.88 | 1362 | 8.08 | <0.001 |
| Language and Cognitive development | 3484 | 8.49 | 1374 | 8.62 | 0.004 |
| Communication skills and general knowledge | 3481 | 7.96 | 1374 | 8.00 | 0.304 |

9. Type of Class

| <i>EDI Domains</i> | SK MEANS | | | | <i>P</i> |
|---|----------------|-------------|----------------------------------|-------------|----------|
| | <i>SK Only</i> | | <i>SK split with JK and/or 1</i> | | |
| | <i>N</i> | <i>Mean</i> | <i>N</i> | <i>Mean</i> | |
| Physical health And well-being | 9960 | 8.88 | 12512 | 8.83 | 0.001 |
| Social competence | 9982 | 8.22 | 12559 | 8.14 | 0.003 |
| Emotional maturity | 9858 | 8.00 | 12498 | 8.02 | 0.036 |
| Language and Cognitive development | 9969 | 8.56 | 12483 | 8.23 | <0.001 |
| Communication skills and general knowledge | 9974 | 7.74 | 12554 | 7.59 | <0.001 |

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 | 4403 | 8.63 | 17350 | 8.90 | <0.001 |
| Social competence | 4420 | 7.68 | 17401 | 8.30 | <0.001 |
| Emotional maturity | 4392 | 7.74 | 17252 | 8.09 | <0.001 |
| Language and cognitive development | 4392 | 7.48 | 17343 | 8.60 | <0.001 |
| Communication skills and general knowledge | 4413 | 5.93 | 17396 | 8.08 | <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 | 15892 | 8.87 | 5668 | 8.76 | <0.001 |
| Social competence | 15942 | 8.24 | 5686 | 7.97 | <0.001 |
| Emotional maturity | 15851 | 8.07 | 5598 | 7.85 | <0.001 |
| Language and cognitive development | 15886 | 8.46 | 5657 | 8.13 | <0.001 |
| Communication skills and general knowledge | 15940 | 7.91 | 5676 | 6.94 | <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 | 440 | 9.05 | 21387 | 8.84 | 0.002 |
| Social competence | 442 | 8.34 | 21454 | 8.17 | 0.571 |
| Emotional maturity | 439 | 7.71 | 21280 | 8.02 | <0.001 |
| Language and Cognitive development | 442 | 8.67 | 21368 | 8.37 | 0.081 |
| Communication skills and general knowledge | 440 | 8.28 | 21443 | 7.63 | <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 | 127 | 8.93 | 368 | 9.26 | <0.001 |
| Social competence | 127 | 8.13 | 368 | 8.33 | 0.179 |
| Emotional maturity | 122 | 7.64 | 367 | 7.76 | 0.509 |
| Language and cognitive development | 126 | 8.12 | 367 | 8.61 | <0.001 |
| Communication skills and general knowledge | 127 | 7.65 | 368 | 8.78 | <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 | 367 | 9.28 | 113 | 8.91 | <0.001 |
| Social competence | 367 | 8.33 | 113 | 8.06 | 0.116 |
| Emotional maturity | 366 | 7.76 | 108 | 7.68 | 0.746 |
| Language and cognitive development | 365 | 8.61 | 112 | 8.05 | <0.001 |
| Communication skills and general knowledge | 367 | 8.73 | 113 | 7.67 | <0.001 |

