

SCHOOL READINESS TO LEARN MANITOBA COHORT RESULTS

Based on the Early Development Instrument Data Collection for Kindergarten Students in 24 Sites in Manitoba Spring 2003

This report covers the EDI results for kindergarten children in the 24 sites in Manitoba, collected in the Spring of 2003. The term 'kindergarten' refers to children who entered school the year they turned 5, according to the individual school board specifications.

The kindergarten 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 2003.

The **Selected** cohort is restricted among the kindergarten-level students, to children aged 4.7 to 6.7 years with no special needs and no missing data.

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** (page 2-6) 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 7), are reported for the **Selected** cohort only.

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

The **Group Comparisons** are performed with the **Selected** 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: Dr. Magdalena Janus (905) 521-2100 ext. 74377, srledi@mcmaster.ca

KINDERGARTEN LEVEL MANITOBA COHORT RESULTS**FREQUENCIES*****Participants in the EDI implementation***

<i>SCHOOL DIVISION</i>	<i>FULL COHORT N</i>	<i>SELECTED COHORT N</i>
Borderland	186	161
Brandon	482	441
DSFM	353	330
Evergreen	114	109
Flin Flon	95	82
Fort Labosse	104	95
Hanover	500	443
Kelsey	135	122
Lakeshore	76	54
Lord Selkirk	319	274
Louis Riel	897	889
Mountainview	220	203
Park West	127	114
Pine Creek	78	75
Prairie Rose	182	162
Prairie Spirit	172	159
Red River Valley	152	141
Seine River	248	230
Seven Oaks #10	569	522
South West Horizon	106	90
Swan Valley	110	101
Turtle Mountain	81	66
Western	101	89
Winnipeg School Division No. 1	2443	1978
Total kindergarten population	7850	6930

Participants in the EDI implementation by language of instruction

<i>Schools</i>	<i>FULL COHORT N</i>	<i>SELECTED COHORT N</i>
Anglophone Schools	7497	6600
Francophone Schools	353	330
Total kindergarten population	7850	6930

Descriptive characteristics of the population

	FULL COHORT N= 7850		SELECTED COHORT N=7022	
	Number	%	Number	%
Gender				
Girl	3762	47.9	3419	48.7
Boy	3976	50.6	3512	50.0
Missing	112	1.4	91	1.3
English/French as a Second Language (E/FSL)				
E/FSL	707	9.0	614	8.8
Neither E/FSL	6943	88.4	6356	90.5
Missing	200	2.5	52	0.7
Type of class				
JK	7	0.1	1	0.0
SK	6928	88.3	6301	90.7
JK/SK	519	6.6	386	5.6
JK/SK/1	11	0.1	7	0.1
SK/1	266	3.4	228	3.3
Missing	119	1.5	7	0.1
First language				
English	6290	80.1	5705	81.2
French	172	2.2	166	2.4
Other Only	341	4.3	292	4.2
English & French	139	1.8	132	1.9
English & Other	647	8.2	583	8.3
French & Other	4	0.1	3	0.0
Two Other	45	0.6	38	0.5
Missing	212	2.7	103	1.5
French Immersion				
French Immersion	1134	14.4	1079	15.4
No French Immersion	6556	83.5	5922	84.3
Missing	160	2.0	21	0.3
Other Immersion				
Other Immersion	76	1.0	69	1.0
Regular Class	7569	96.4	6892	98.1
Missing	205	2.6	61	0.9
Special Needs (SN)				
SN	274	3.5	0	0.0
Not SN	7310	93.1	0	0.0
Missing	266	3.4	0	0.0

Aboriginal				
Aboriginal	1095	13.9	872	12.4
Not Aboriginal	6565	83.6	6102	86.9
Missing	190	2.4	48	0.7

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 COHORT N= 7850		SELECTED COHORT N=7022	
	Number	%	Number	%
4-5 to 4-7	3	0.0	2	0.0
4-11 to 5-1	37	0.5	32	0.5
5-2 to 5-4	1242	15.8	1094	15.6
5-5 to 5-7	1892	24.1	1708	24.3
5-8 to 5-10	1982	25.2	1807	25.7
5-11 to 6-1	1930	24.6	1749	24.9
6-2 to 6-4	552	7.0	482	6.9
6-5 to 6-7	83	1.1	49	0.7
6-8 to 6-10	51	0.6	38	0.5
6-11 and up	25	0.3	15	0.2
Missing	53	0.7	46	0.7

Frequencies of answers to questions in Section D and E

	FULL COHORT N= 7850		SELECTED COHORT N=7022	
	Number	%	Number	%
D10: Teacher feels that child needs further assessment				
Yes	921	11.7	711	10.1
No	6257	79.7	6014	85.6
Missing	672	8.6	297	4.2
E1: Child attended an early intervention program				
Yes	513	6.5	396	5.6
No	5204	66.3	4974	70.8
Missing	2133	27.2	1652	23.5
E3: Child attended any other language or religion classes				
Yes	847	10.8	797	11.4
No	3147	40.1	2957	42.1
Missing	3856	49.1	3268	46.5
E4: Child attended an organized part-time pre-school/nursery school				
Yes	2223	28.3	2105	30.0
No	2527	32.2	2341	33.3
Missing	3100	39.5	2576	36.7

Frequencies of answers to questions in Section E2

	FULL COHORT N= 7850		SELECTED COHORT N=7022	
	Number	%	Number	%
E2: Child attended a non-parental care arrangement				
Yes	2489	31.7	2318	33.0
No	3038	38.7	2844	40.5
Missing	2323	29.6	1860	26.5
E2a: Centre-based, licensed, non-profit arrangement				
Yes	847	10.8	774	11.0
E2b: Centre-based, licensed, for profit arrangement				
Yes	379	4.8	341	4.9
E2c: Other home-based, licensed arrangement				
Yes	277	3.5	262	3.7
E2d: Other home-based, unlicensed, non-relative arrangement				
Yes	536	6.8	511	7.3
E2e: Other home-based, unlicensed, relative arrangement				
Yes	279	3.6	271	3.9
E2f: Child's home, non-relative arrangement				
Yes	95	1.2	89	1.3
E2g: Child's home, relative arrangement				
Yes	308	3.9	299	4.3
E2i: Type of arrangement				
Full-time	1243	15.8	1161	16.5
Part-time	1002	12.8	935	13.3
Missing	5605	71.4	4926	70.2

MEANS & DOMAIN PERCENTILES

Means, standard deviations, & domain percentiles for selected kindergarten level cohort: N=7022

The table below includes the means, standard deviations, and percentile boundaries for the selected kindergarten level cohort of children. This includes all students for whom we collected data in the 2001/02 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 $8.87 - 1.04$ (7.83) and $8.87 + 1.04$ (9.91).

<i>EDI Domains</i>	<i>Mean</i>	<i>* ± SD</i>	<i>PERCENTILES</i>			
			<i>75%</i>	<i>50%</i>	<i>25%</i>	<i>10%</i>
Physical health and well-being	8.87	1.04	9.79	9.04	8.27	7.50
Social competence	8.26	1.73	9.62	8.85	7.31	5.67
Emotional maturity	7.92	1.52	9.00	8.17	7.00	5.83
Language and cognitive development	8.09	1.97	9.62	8.85	7.31	5.00
Communication skills and general knowledge	7.79	2.01	9.72	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	MEANS		P
	Girls N=3345	Boys N=3391	
Physical health and well-being	9.01	8.72	<0.001
Social competence	8.62	7.91	<0.001
Emotional maturity	8.28	7.57	<0.001
Language and Cognitive development	8.40	7.78	<0.001
Communication skills and general knowledge	8.10	7.50	<0.001

2. Age of child (mean age is 5.71 years)

EDI Domains	MEANS		P
	Above the mean age N=3403	Below the mean age N=3404	
Physical health and well-being	8.96	8.77	<0.001
Social competence	8.43	8.09	<0.001
Emotional maturity	8.04	7.80	<0.001
Language and Cognitive development	8.40	7.78	<0.001
Communication skills and general knowledge	8.00	7.61	<0.001

3. English as a Second Language (ESL); Anglophone schools

EDI Domains	MEANS		P
	ESL N=452	Not ESL N=6304	
Physical health and well-being	8.77	8.85	0.148
Social competence	7.93	8.28	<0.001
Emotional maturity	7.72	7.93	0.008
Language and Cognitive development	7.19	8.17	<0.001
Communication skills and general knowledge	5.67	7.98	<0.001

4. Child's first language in Anglophone schools: English versus Other (non-French)

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>English N=6226</i>	<i>Other (excluding French) N=479</i>	
Physical health and well-being	8.85	8.81	0.539
Social competence	8.27	7.92	<0.001
Emotional maturity	7.92	7.68	0.003
Language and Cognitive development	8.15	7.12	<0.001
Communication skills and general knowledge	7.92	5.60	<0.001

5. Child's first language in Francophone schools: French versus Other (non-English)

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>French N=296</i>	<i>Other (excluding English) N=6409</i>	
Physical health and well-being	9.40	8.85	0.087
Social competence	8.69	8.24	<0.001
Emotional maturity	8.37	7.90	<0.001
Language and Cognitive development	8.25	8.08	<0.001
Communication skills and general knowledge	8.62	7.77	<0.001

6. French Immersion versus No French Immersion (Anglophone schools)

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>French Immersion N=1039</i>	<i>Regular Class & Other Immersion N=5728</i>	
Physical health and well-being	9.06	8.80	<0.001
Social competence	8.29	8.24	0.781
Emotional maturity	7.94	7.90	0.910
Language and Cognitive development	8.20	8.08	0.185
Communication skills and general knowledge	8.41	7.68	<0.001

7. Other Immersion versus No Other Immersion (Anglophone schools)

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>Other Immersion N=67</i>	<i>Regular Class & French Immersion N=6680</i>	
Physical health and well-being	8.90	8.84	0.591
Social competence	8.20	8.25	0.899
Emotional maturity	7.92	7.91	0.600
Language and Cognitive development	8.66	8.09	0.008
Communication skills and general knowledge	8.05	7.79	0.174

8. Aboriginal versus Not Aboriginal

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>Aboriginal N=839</i>	<i>Not Aboriginal N=5922</i>	
Physical health and well-being	8.32	8.95	<0.001
Social competence	7.63	8.36	<0.001
Emotional maturity	7.46	7.99	<0.001
Language and Cognitive development	6.92	8.26	<0.001
Communication skills and general knowledge	6.84	7.95	<0.001

9. Early Intervention versus No Early Intervention

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>Early Intervention N=381</i>	<i>No Early Intervention N=4850</i>	
Physical health and well-being	8.53	8.96	<0.001
Social competence	7.86	8.37	<0.001
Emotional maturity	7.66	7.99	<0.001
Language and Cognitive development	7.75	8.15	<0.001
Communication skills and general knowledge	6.89	7.94	<0.001

10. Children who attended any other Language or Religion Class

<i>EDI Domains</i>	MEANS		<i>P</i>
	<i>Lang/Rel Class N=778</i>	<i>No Lang/Rel Class N=2892</i>	
Physical health and well-being	9.08	8.87	<0.001
Social competence	8.62	8.22	<0.001
Emotional maturity	8.15	7.90	<0.001
Language and Cognitive development	8.62	8.00	<0.001
Communication skills and general knowledge	8.23	7.77	<0.001

11. Children who attended an Organized Part-time Preschool

<i>EDI Domains</i>	MEANS		<i>P</i>
	<i>Preschool N=2062</i>	<i>No Preschool N=2258</i>	
Physical health and well-being	9.07	8.75	<0.001
Social competence	8.51	8.10	<0.001
Emotional maturity	8.12	7.79	<0.001
Language and Cognitive development	8.54	7.72	<0.001
Communication skills and general knowledge	8.23	7.46	<0.001

12. Type of Care

<i>EDI Domains</i>	MEANS		<i>P</i>
	<i>Full-time N=1139</i>	<i>Part-time N=915</i>	
Physical health And well-being	8.81	9.01	<0.001
Social competence	7.99	8.42	<0.001
Emotional maturity	7.70	7.99	<0.001
Language and Cognitive development	8.03	8.32	<0.001
Communication skills and general knowledge	7.85	8.19	<0.001

13. Type of Class

<i>EDI Domains</i>	<i>MEANS</i>		<i>P</i>
	<i>Kindergarten N=6194</i>	<i>Split with grade 1 N=606</i>	
Physical health And well-being	8.87	8.86	0.739
Social competence	8.26	8.26	0.700
Emotional maturity	7.93	7.83	0.049
Language and Cognitive development	8.11	7.91	0.005
Communication skills and general knowledge	7.82	7.61	0.009