

SCHOOL READINESS TO LEARN MANITOBA COHORT RESULTS

Based on the Early Development Instrument Data Collection for Kindergarten Students in 28 Sites in Manitoba Spring 2004

This report covers the EDI results for kindergarten children in the 28 sites in Manitoba, collected in the Spring of 2004. 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 2004.

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 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** (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:

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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>
Beautiful Plains	110	107
Borderland	111	101
Brandon	499	476
DSFM	250	238
Flin Flon	67	59
Fort Labosse	92	88
Hanover	860	815
Interlake	204	186
Kelsey	132	126
Lakeshore	73	69
Lord Selkirk	309	286
Louis Riel	960	884
Mountain View	234	223
Mystery Lake	267	213
Park West	140	124
Pine Creek	92	89
Pine Falls	13	13
Prairie Rose	126	119
Prairie Spirit	171	157
Red River Valley	105	100
Seine River	77	76
Seven Oaks	564	528
South West Horizon	115	105
Swan Valley	119	111
Turtle Mountain	66	62
Turtle River	69	60
Western	105	101
Winnipeg School Division No. 1	2247	1923
Total kindergarten population	8177	7439

Participants in the EDI implementation by language of instruction

<i>Schools</i>	<i>FULL COHORT N</i>	<i>SELECTED COHORT N</i>
Anglophone Schools	7813	7093
Francophone Schools	364	346
Total kindergarten population	8177	7439

Descriptive characteristics of the population

	FULL COHORT N=8177		SELECTED COHORT N=7439	
	Number	%	Number	%
Gender				
Girl	3972	48.6	3674	49.4
Boy	4197	51.3	3759	50.5
Missing	8	0.1	6	0.1
English/French as a Second Language (E/FSL)				
E/FSL	634	7.8	559	7.5
Neither E/FSL	7279	89.0	6701	90.1
Missing	127	1.6	50	0.7
Type of class				
JK	1	0.0	1	0.0
SK	7354	89.9	6741	90.6
JK/SK	527	6.4	434	5.8
JK/SK/1	15	0.2	15	0.2
SK/1	261	3.2	237	3.2
Missing	19	0.2	11	0.1
First language				
English	6584	80.5	6033	81.1
French	187	2.3	178	2.4
Other Only	315	3.9	280	3.8
English & French	152	1.9	145	1.9
English & Other	753	9.2	674	9.1
French & Other	1	0.0	1	0.0
Two Other	45	0.6	38	0.5
Missing	140	1.7	90	1.2
French Immersion				
French Immersion	1210	14.8	1160	15.6
No French Immersion	6876	84.1	6242	83.9
Missing	91	1.1	37	0.5
Other Immersion				
Other Immersion	92	1.1	81	1.1
Regular Class	7917	96.8	7249	97.4
Missing	168	2.1	109	1.5
Special Needs (SN)				
SN	265	3.2	0	0.0
Not SN	7715	94.4	7439	100

Missing	197	2.4	0	0.0
Aboriginal				
Aboriginal	1330	16.3	1061	14.3
Not Aboriginal	6711	82.1	6315	84.9
Missing	136	1.7	63	0.8

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=8177		SELECTED COHORT N=7439	
	Number	%	Number	%
3-11 to 4-1	1	0.0	1	0.0
4-2 to 4-4	1	0.0	1	0.0
4-5 to 4-7	3	0.0	1	0.0
4-8 to 4-10	2	0.0	2	0.0
4-11 to 5-1	35	0.4	31	0.4
5-2 to 5-4	1415	17.3	1290	17.3
5-5 to 5-7	1971	24.1	1810	24.3
5-8 to 5-10	2114	25.9	1961	26.4
5-11 to 6-1	1922	23.5	1749	23.5
6-2 to 6-4	537	6.6	471	6.3
6-5 to 6-7	66	0.8	46	0.6
6-8 to 6-10	42	0.5	23	0.3
6-11 and up	24	0.3	15	0.2
Missing	44	0.5	38	0.5

Frequencies of answers to questions in Section D and E

	FULL COHORT N=8177		SELECTED COHORT N=7439	
	Number	%	Number	%
D10: Teacher feels that child needs further assessment				
Yes	1017	12.4	829	11.1
No	6446	78.8	6260	84.2
Missing	714	8.7	350	4.7
E1: Child attended an early intervention program				
Yes	577	7.1	449	6.0
No	5692	69.6	5495	73.9
Missing	1908	23.3	1495	20.1
E3: Child attended any other language or religion classes				
Yes	985	12.0	944	12.7
No	3490	42.7	3277	44.1
Missing	3702	45.3	3218	43.3
E4: Child attended an organized part-time pre-school/nursery school				
Yes	2862	35.0	2712	36.5
No	2883	35.3	2723	36.6
Missing	2432	29.7	2004	26.9
E5: Child attended Junior Kindergarten				
Yes	1541	18.8	1452	19.5
No	5314	65.0	5042	67.8
Missing	1322	16.2	945	12.7

Frequencies of answers to questions in Section E2

	FULL COHORT N=8177		SELECTED COHORT N=7439	
	Number	%	Number	%
E2: Child attended a non-parental care arrangement				
Yes	2871	35.1	2713	36.5
No	3224	39.4	3052	41.0
Missing	2082	25.5	1674	22.5
E2a: Centre-based, licensed, non-profit arrangement				
Yes	958	11.7	886	11.9
E2b: Centre-based, licensed, for profit arrangement				
Yes	494	6.0	452	6.1
E2c: Other home-based, licensed arrangement				
Yes	295	3.6	284	3.8
E2d: Other home-based, unlicensed, non-relative arrangement				
Yes	588	7.2	572	7.7
E2e: Other home-based, unlicensed, relative arrangement				
Yes	301	3.7	285	3.8
E2f: Child's home, non-relative arrangement				
Yes	99	1.2	96	1.3
E2g: Child's home, relative arrangement				
Yes	301	3.7	296	4.0
E2i: Type of arrangement				
Full-time	1431	17.5	1353	18.2
Part-time	1173	14.3	1108	14.9
Missing	5573	68.2	4978	66.9

MEANS & DOMAIN PERCENTILES**Means, standard deviations, & domain percentiles for selected kindergarten level cohort: N=7439**

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 8.82 - 1.09 (7.73) and 8.82 + 1.09 (9.91).

<i>EDI Domains</i>	<i>Mean</i>	\pm <i>SD</i> *	<i>PERCENTILES</i>			
			<i>75%</i>	<i>50%</i>	<i>25%</i>	<i>10%</i>
Physical health and well-being	8.82	1.09	9.79	9.04	8.13	7.31
Social competence	8.24	1.76	9.62	8.85	7.31	5.58
Emotional maturity	7.87	1.50	9.00	8.17	7.00	5.83
Language and cognitive development	8.04	2.01	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		Boys		
	N	Mean	N	Mean	
Physical health and well-being	3666	9.00	3755	8.65	<0.001
Social competence	3673	8.65	3759	7.85	<0.001
Emotional maturity	3645	8.26	3716	7.50	<0.001
Language and Cognitive development	3635	8.39	3722	7.69	<0.001
Communication skills and general knowledge	3672	8.10	3756	7.50	<0.001

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

EDI Domains	MEANS				P
	Above the mean age		Below the mean age		
	N	Mean	N	Mean	
Physical health and well-being	3718	8.95	3709	8.69	<0.001
Social competence	3719	8.45	3719	8.04	<0.001
Emotional maturity	3682	8.00	3685	7.74	<0.001
Language and Cognitive development	3682	8.32	3681	7.75	<0.001
Communication skills and general knowledge	3718	8.02	3716	7.57	<0.001

3. Aboriginal versus Not Aboriginal

EDI Domains	MEANS				P
	Aboriginal		Not Aboriginal		
	N	Mean	N	Mean	
Physical health and well-being	1060	8.14	6304	8.94	<0.001
Social competence	1060	7.54	6315	8.36	<0.001
Emotional maturity	1050	7.37	6254	7.96	<0.001
Language and cognitive development	1048	6.80	6253	8.24	<0.001
Communication skills and general knowledge	1061	6.78	6310	7.97	<0.001

4. Early Intervention versus No Early Intervention

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>Early Intervention</i>		<i>No Early Intervention</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	449	8.41	5485	8.90	<0.001
Social competence	449	7.61	5494	8.34	<0.001
Emotional maturity	445	7.47	5450	7.95	<0.001
Language and Cognitive development	447	7.51	5461	8.17	<0.001
Communication skills and general knowledge	449	6.80	5491	7.94	<0.001

5. Children who attended any other Language or Religion Class

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>Lang/Rel Class</i>		<i>No Lang/Rel Class</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	943	9.07	3269	8.78	<0.001
Social competence	944	8.65	3277	8.11	<0.001
Emotional maturity	940	8.15	3235	7.81	<0.001
Language and Cognitive development	938	8.66	3257	7.98	<0.001
Communication skills and general knowledge	943	8.28	3276	7.72	<0.001

6. Children who attended an Organized Part-time Preschool

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>Preschool</i>		<i>No Preschool</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	2709	8.99	2716	8.71	<0.001
Social competence	2712	8.51	2723	8.01	<0.001
Emotional maturity	2699	8.12	2690	7.69	<0.001
Language and Cognitive development	2700	8.47	2706	7.75	<0.001
Communication skills and general knowledge	2711	8.24	2720	7.44	<0.001

7. Type of Care

<i>EDI Domains</i>	<i>MEANS</i>				<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	1351	8.84	1106	8.88	0.417
Social competence	1353	8.05	1108	8.26	0.002
Emotional maturity	1348	7.69	1102	7.89	0.001
Language and Cognitive development	1346	8.10	1104	8.34	0.001
Communication skills and general knowledge	1353	8.01	1108	8.09	0.253

8. Type of Class

<i>EDI Domains</i>	<i>MEANS</i>				<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	6729	8.85	687	8.57	<0.001
Social competence	6740	8.26	687	8.09	0.013
Emotional maturity	6682	7.89	674	7.73	0.010
Language and Cognitive development	6671	8.09	681	7.49	<0.001
Communication skills and general knowledge	6736	7.85	687	7.19	<0.001

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

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>ESL</i>		<i>Non-ESL</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	557	8.69	6475	8.81	0.006
Social competence	559	7.94	6484	8.27	<0.001
Emotional maturity	551	7.74	6422	7.90	0.014
Language and cognitive development	547	7.15	6421	8.10	<0.001
Communication skills and general knowledge	556	5.66	6483	7.97	<0.001

10. Children with English as a first language

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>English</i>		<i>Other</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	6672	8.81	319	8.71	0.120
Social competence	6682	8.26	320	7.80	<0.001
Emotional maturity	6618	7.90	314	7.59	<0.001
Language and cognitive development	6618	8.08	309	6.85	<0.001
Communication skills and general knowledge	6681	7.91	317	5.28	<0.001

11. Children enrolled in French Immersion

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>French Immersion</i>		<i>Non-French Immersion</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	1159	8.96	5887	8.77	<0.001
Social competence	1160	8.34	5897	8.22	0.078
Emotional maturity	1157	7.85	5829	7.89	0.192
Language and Cognitive development	1112	8.05	5869	8.01	0.756
Communication skills and general knowledge	1160	8.17	5892	7.70	<0.001

12. Children enrolled in Other Immersion

<i>EDI Domains</i>	<i>MEANS</i>				<i>P</i>
	<i>Other Immersion</i>		<i>No Other Immersion</i>		
	<i>N</i>	<i>Mean</i>	<i>N</i>	<i>Mean</i>	
Physical health and well-being	76	8.90	6898	8.80	0.287
Social competence	76	8.27	6908	8.24	0.689
Emotional maturity	75	7.96	6838	7.88	0.460
Language and Cognitive development	76	8.20	6834	8.02	0.319
Communication skills and general knowledge	76	7.78	6903	7.78	0.848

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

<i>EDI Domains</i>	<i>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	129	9.04	216	9.29	0.008
Social competence	129	7.92	216	8.50	0.002
Emotional maturity	128	7.57	216	7.64	0.636
Language and cognitive development	129	7.98	216	8.53	0.001
Communication skills and general knowledge	129	6.46	216	8.98	<0.001

14. Children with French as a first language

<i>EDI Domains</i>	<i>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	252	9.25	94	9.04	0.046
Social competence	252	8.36	94	8.08	0.177
Emotional maturity	252	7.60	93	7.65	0.840
Language and cognitive development	252	8.51	94	7.85	<0.001
Communication skills and general knowledge	252	8.66	94	6.38	<0.001

