

THE SCHOOL READINESS TO LEARN PROJECT in CANADA

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THE IMPORTANCE OF KEEPING SCORE

Readiness to learn concept

Children are born ready to learn:

the neurosystem is pre-programmed to develop various skills and neuropathways, depending on the experience it receives.

Readiness for school

School readiness (to learn):

refers to the child's ability to meet the task demands of school, such as being cooperative and sitting quietly and listening to the teacher, and to benefit from the educational activities that are provided by the school.

NAMING THE INSTRUMENT

- ◆ Looking forward:
 - Readiness to Learn Instrument

- ◆ Looking backward:
 - Early Development Instrument

Purposes of the EDI

- ◆ Report on populations of children in different communities
- ◆ Monitor populations of children over time
- ◆ Predict how children will do in elementary school

Characteristics of the EDI

- ◆ Population Level
- ◆ Feasible, Acceptable, Reasonably Priced
- ◆ Informant is the Teacher
- ◆ Psychometrically Sound

Steps in developing the EDI

- ◆ Consultations with teachers and educators
- ◆ Pre-testing for wording
- ◆ Pilot testing: test-retest, external validity (interviews with parents, direct language tests of children)
- ◆ Inter-rater reliability
- ◆ Cultural validation
- ◆ Continued validity monitoring

Five domains of the readiness to learn

- ◆ Physical health and well-being
- ◆ Social competence
- ◆ Emotional maturity
- ◆ Language and cognitive development
- ◆ Communication skills and general knowledge

EDI Database

◆ 1998/1999:

16,500 students in 6 communities

◆ 1999/2000

45,000 students in 18 communities

◆ 2000/2001

37,000 students in 16 communities

Further Tasks

- ◆ Monitor the EDI in communities
- ◆ Develop more precise interventions for communities and schools for different patterns of scale scores
- ◆ Utilize additional data for ensuring the psychometric properties of the measure
- ◆ Learn more about how to make use of the information from the EDI, with other community data, to improve the readiness to learn scores of children in that community

Steps in Community Mobilization

1

Extent of
Community
Mobilization

2

Provision
of Initial
EDI Results

3

Dissemination
of Results to
Community

4

Integration of EDI
Data with Other
Community Data

5

Evidence of
Community
Actions

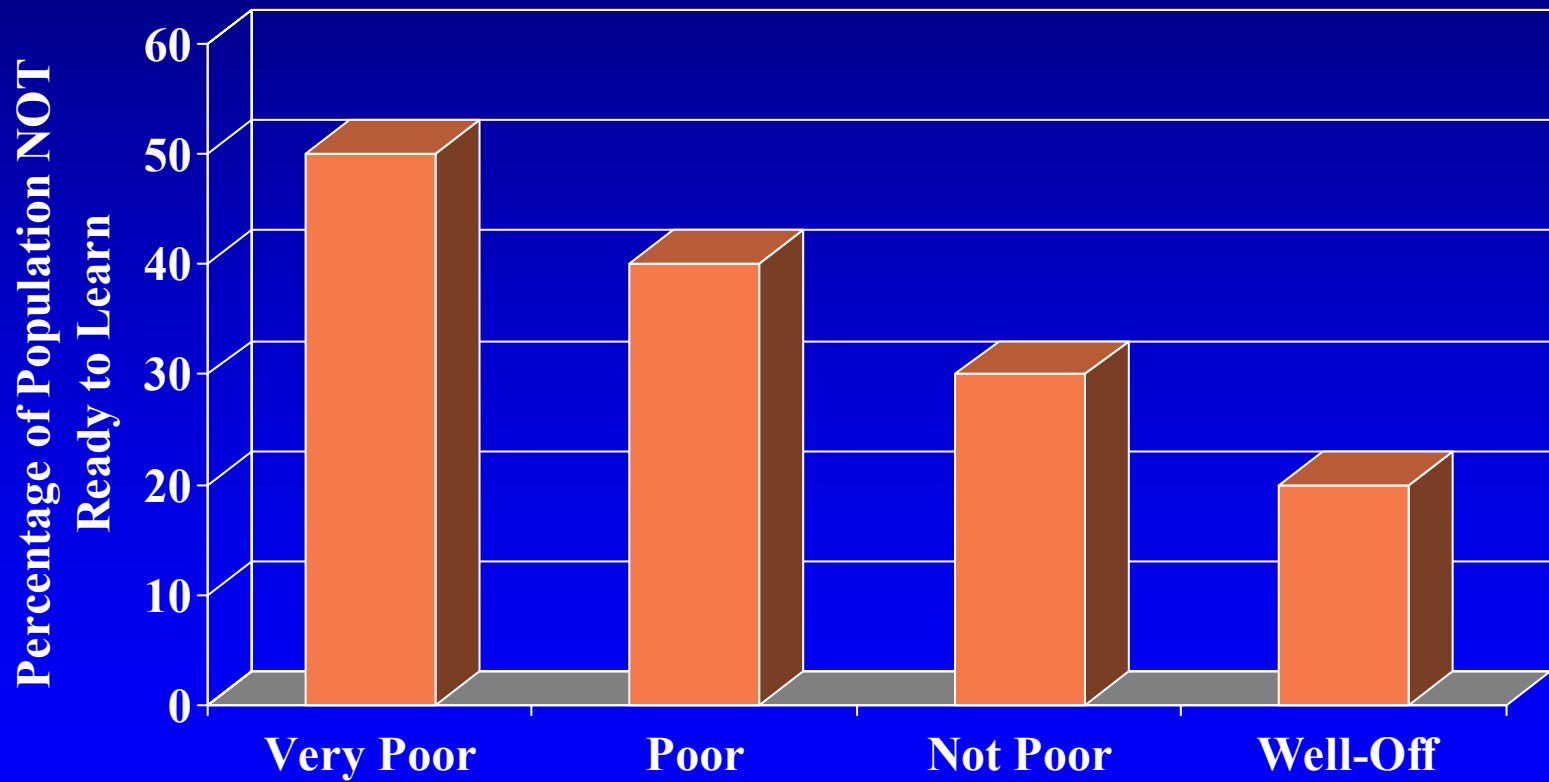
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Effects on
Proximal
Outcome
Variables

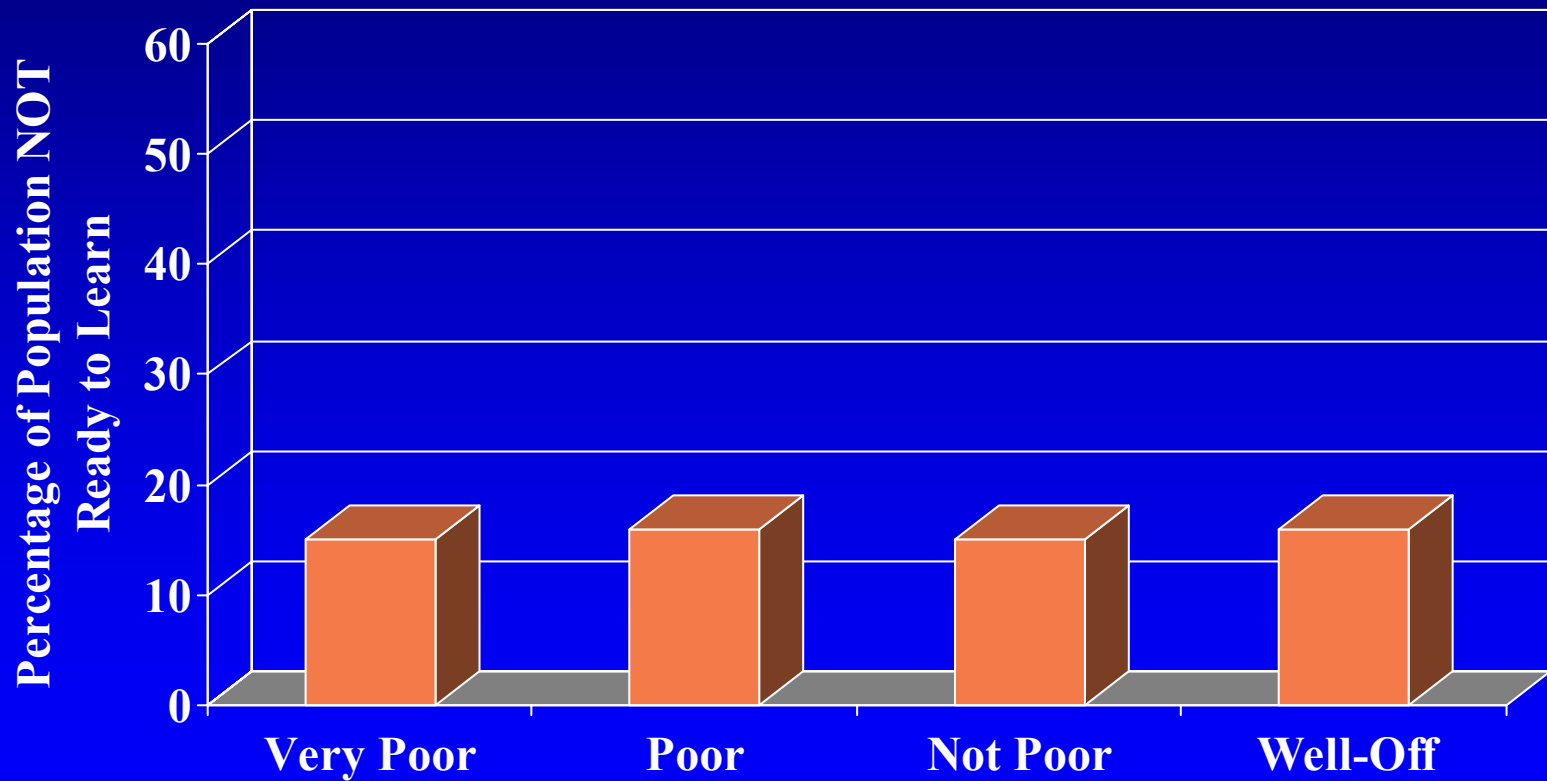
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Effects on
Subsequent
EDI Results

Readiness to Learn by Income Level (Before Intervention)



Readiness to Learn by Income Level (After Intervention)



Reliability of the EDI

- ◆ Internal reliability of the scales (Cronbach alpha): range 0.84-0.96
- ◆ Test-retest reliability (Pearson r): range 0.63-0.93
- ◆ Inter-rater reliability (Pearson r):
 - teacher-parent: 0.36-0.66
 - school teacher-child care teacher: 0.52-0.80

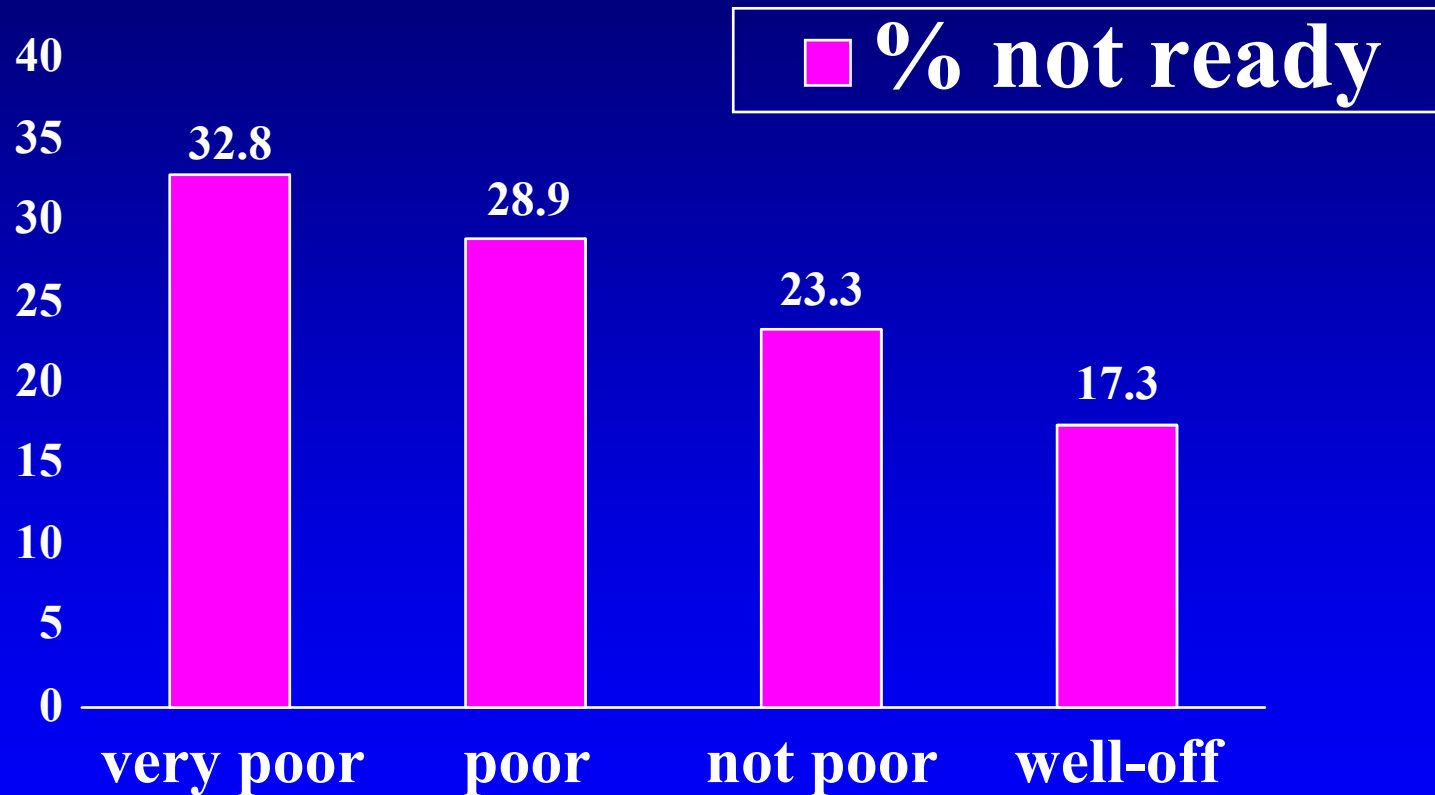
Validity of the EDI

- ◆ Low income (language and communication scales)
- ◆ Less parental education (social competence, language, communication)
- ◆ Low family health and well-being (social, emotional, language, communication)
- ◆ Low frequency of talking and reading to child (all domains)

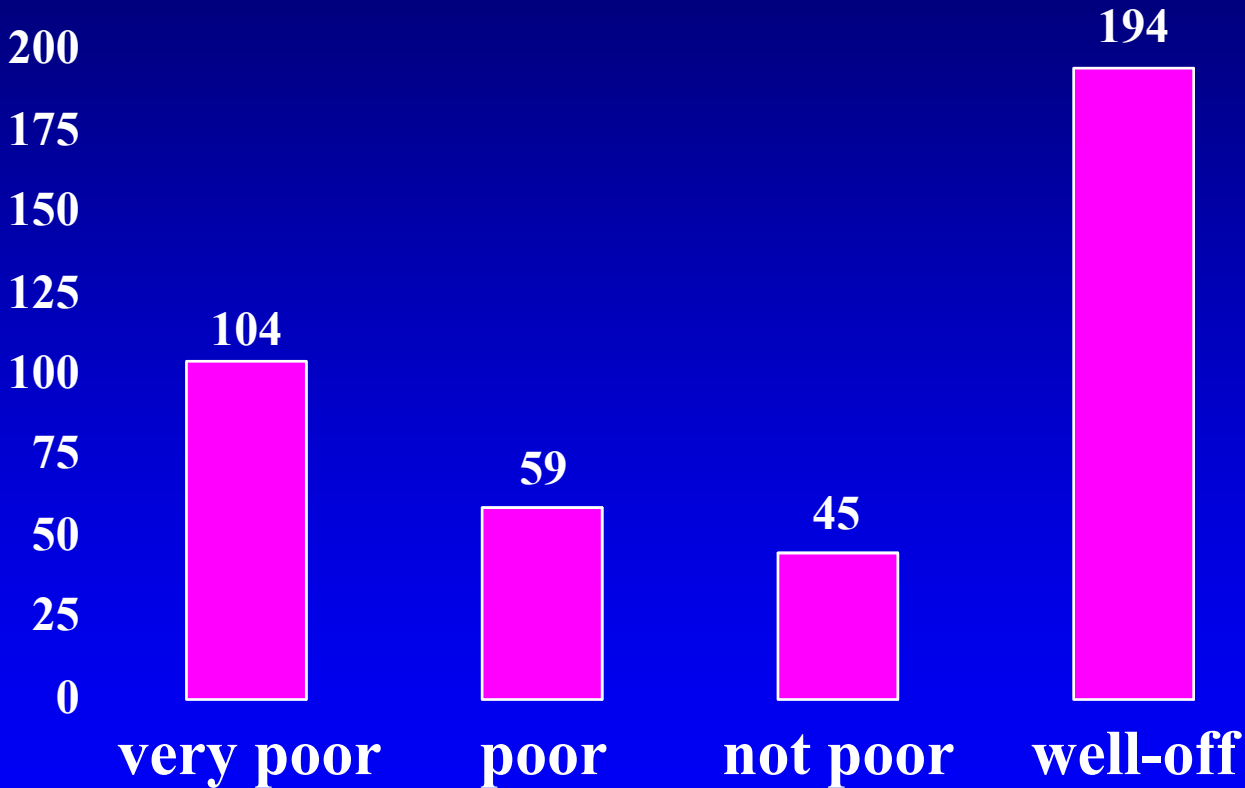
Definition of “not ready”

- ◆ Children who score low in **one or more** of the five domains of the EDI
- ◆ “Low” - in the lowest 10 percent of the population within their site
- ◆ Specific for domain
- ◆ Specific for site

Readiness to Learn at School by Family Income (N=1799)



Number of children “Not ready”



Information from the EDI results

Macro level: Community, City, Province

- ◆ Means, ranges, percentiles of the EDI scores
- ◆ Numbers/percentages of children with increased needs
- ◆ *Global picture - may not be applicable to all areas*

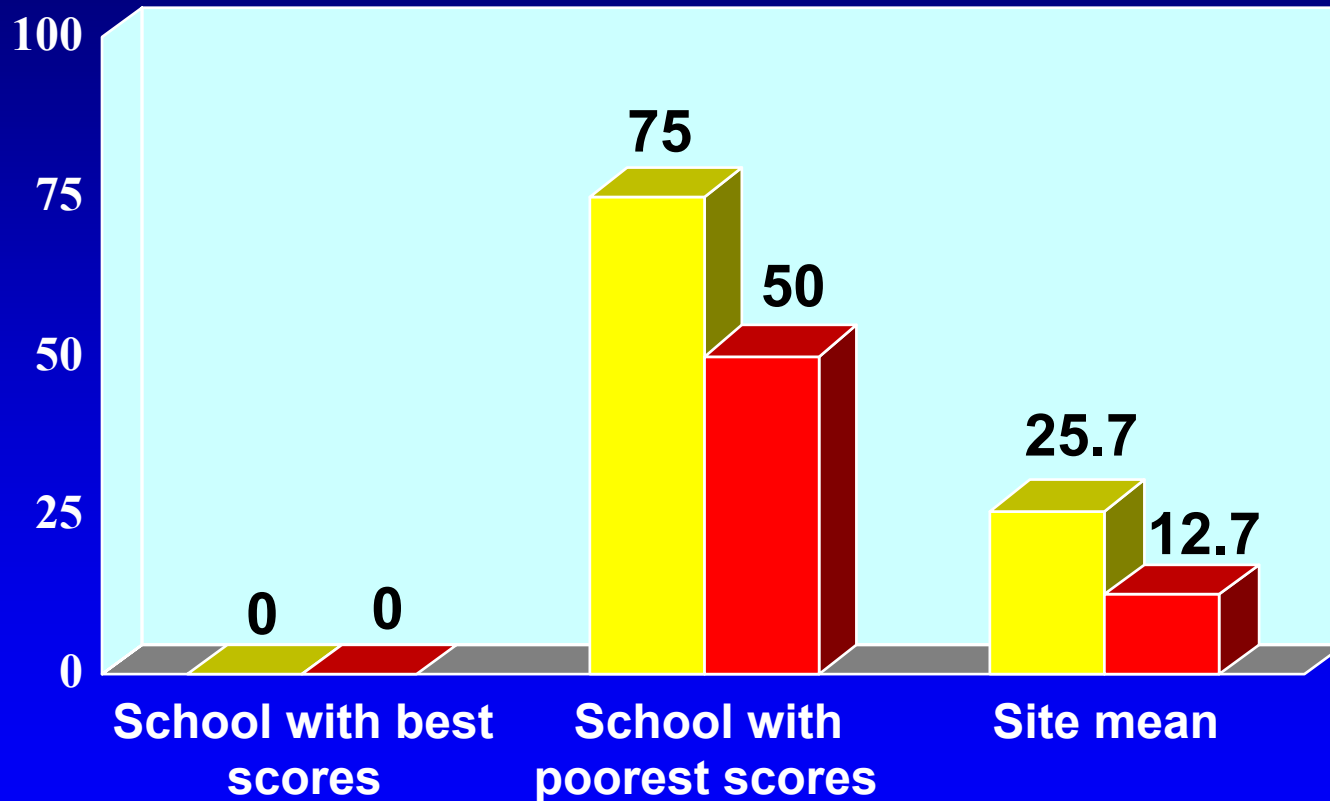
Micro level: Within community, Neighbourhood School

- ◆ Means, ranges of the EDI scores
- ◆ Numbers/percentages of children with increased need in specific areas/neighbourhoods
- ◆ Locally-adjusted comparison between neighbourhoods
- ◆ Assistance with resource allocation
- ◆ School-level management of addressing issues of increased needs
- ◆ *Detailed, locally-relevant picture*

Outline of reporting package

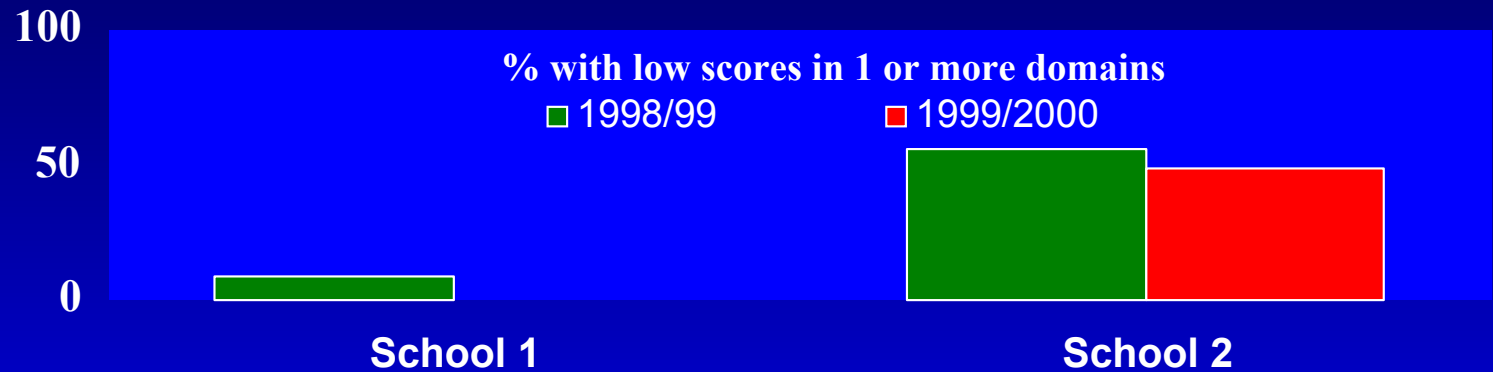
- ◆ Individual school-level reports
- ◆ Summary site-level frequencies and statistics
- ◆ Behavioural profiles of children scoring low on each scale (adjusted for site)
- ◆ Descriptive report

Best vs. Poorest School Scores - 1



■ % with poor scores in 1 or more domains
■ % with poor scores in 2 or more domains

EDI results and community services



Day Care

Yes < 1 km

Yes between 1 and 2 km

Family Resources

Yes < 1 km

No

Parenting Classes

Yes < 1 km

No

Library, Literacy Prgm

Yes < 1 km

Yes < 1 km

Toy Library

Yes < 1 km

Yes between 1 and 2 km

Social Index

2

5.5

(combination of 9 risk factors, higher indicates more risk)

Neighbourhood-level analyses

- ◆ Based on postal code aggregations
- ◆ EDI scores are aggregated for a neighbourhood/Census Tract area
- ◆ Neighbourhood may represent 10 to 200+ 5-year-olds' EDI scores
- ◆ Related to sociodemographic characteristics based on census data for the neighbourhood

Neighbourhoods “at risk” for low readiness to learn at school

- ◆ EDI neighbourhood means lower than site means on at least three domains
- or
- ◆ More than 20% “Not ready” children

Neighbourhoods “at risk” vs. those not at risk

Site 1

- ◆ Lower income
- ◆ Higher % of lone-parent families
- ◆ Higher % of low-income families
- ◆ Higher % of families who moved within the last year

Neighbourhoods “at risk” vs. those not at risk

Site 2

- ◆ Lower income
- ◆ Higher % of lone parent families
- ◆ Higher reliance on social assistance
- ◆ Higher % of parents without high school diploma
- ◆ Higher unemployment rate

Neighbourhoods “at risk” vs. those not at risk

Site 3

- ◆ Higher income
- ◆ Higher % of lone-parent families
- ◆ Lower reliance on social assistance
- ◆ Lower % of families who moved within the last year
- ◆ Lower % of recent immigrants