

Early Child Development Instrument A Population-based Measure for Communities

Developmental Health at School Entry

A teacher-completed instrument called the Early Development Instrument (EDI) was developed at the Offord Centre for Child Studies at McMaster University, to measure children's ability to meet age appropriate developmental expectation at school entry.

The Early Development project focuses on the outcomes for children as a health-relevant, measurable concept that has long-term consequences for individual outcomes and population health. The data derived from the collection of the EDI facilitates and encourages community, provincial, national and international monitoring of the developmental health of our young learners.

The process of development of the EDI began in 1998 in Ontario, Canada, in Hamilton at McMaster University, under the leadership of Dr. Dan Offord, with an advisory board lead by Dr. Fraser Mustard. The EDI was finalized in 2000 in Ontario, Canada and has since become a population-level research tool utilized to various degrees in all Canadian provinces and territories. By the end of 2012 Ontario, Manitoba, British-Columbia, Saskatchewan, Alberta, PEI, New Brunswick, Yukon, Northwest Territories, and Quebec all have completed full population level implementations, and Nova Scotia, and Newfoundland, have partial coverage.

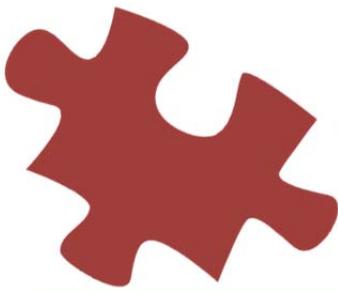
EDI data are also linked to various other sources of information in order to provide a contextual background to children's strengths and vulnerabilities. Ensuring a lasting impact on children's healthy development requires a sophisticated understanding of the character of the experiences that are contributing to the outcomes and the kinds of interventions and activities that can successfully improve the quality of these experiences. The existence of pan-Canadian data on children's developmental status presents a rich opportunity to further our understanding of trends and issues in child development across the country.

Current findings from the administration of EDI in Canada show that in most jurisdictions 25% or more of children entering kindergarten are vulnerable in at least one aspect of their development. Further research linking EDI findings to later educational data demonstrate that, on average, kindergarten vulnerability predicts ongoing vulnerability in the school system. Numerous studies have shown that early vulnerability predicts much about a person's lifelong health, learning and behaviour. Check out the EDI Bibliography (<http://www.offordcentre.com/readiness/pubs/publications.html>) for current and past research utilizing the EDI.

The EDI is designed to be a tool to increase the mobilization of communities and policy makers in order to bring a positive impact on children's development in their local areas.

Understanding the state of children's development at the level of the population, that is for *all* children, is essential to mobilizing stakeholders towards change.





Factsheet

Purposes of the EDI

The EDI is used to look at groups of children, so we can monitor them, compare them with other groups of children, and predict how they will do over time. It is usually used once in a school year.

The EDI can be applied at either the junior or senior kindergarten level, i.e. for either 4- or 5-year old children. A teacher uses her/his observations after several months of classroom/school interaction with the child to complete the questionnaire.

The instrument provides information for groups of children in order to:

- report on areas of strength and deficit for populations of children;
- monitor populations of children over time;
- predict how children will do in elementary school;
- provide a picture of what early learning looks like at the community level;
- help identify gaps in programs and services.

The EDI is...

- A population (or large group) measure
- A way to understand trends in the development of kindergarten children

The EDI is *NOT*...

- An individual child or diagnostic measure
- A way to evaluate teachers or individual programs

FIVE DOMAINS OF SCHOOL READINESS TO LEARN

There are five domains of school readiness to learn included in the EDI.

1. Physical health and well-being

Includes: gross and fine motor skills:

- holding a pencil
- running on the playground
- motor coordination
- adequate energy levels for classroom activities
- independence in looking after own needs
- daily living skills

2. Social knowledge and competence

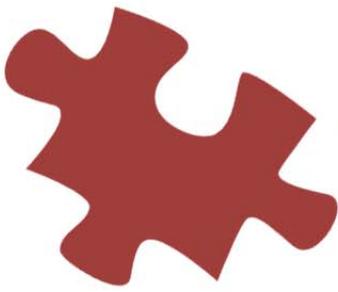
Includes:

- curiosity about the world
- eagerness to try new experiences
- knowledge of standards of acceptable behaviour in a public place
- ability to control own behaviour
- appropriate respect for adult authority
- cooperation with others
- following rules
- ability to play and work with other children

3. Emotional health/maturity

Includes:

- ability to reflect before acting
- a balance between too fearful and too impulsive
- ability to deal with feelings at the age-appropriate level
- empathic response to other people's feelings



4. Language and cognitive development

Includes:

- reading awareness
- age-appropriate reading skills
- age-appropriate writing skills
- age-appropriate numeracy skills
- board games
- ability to understand similarities and differences
- ability to recite back specific pieces of information from memory

5. Communication skills and general knowledge

Includes:

- skills to communicate needs and wants in socially appropriate ways
- symbolic use of language
- story telling
- age-appropriate knowledge about the life and world around

TWO ADDITIONAL INDICATORS:

Special skills

Includes:

- literacy, numeracy, dance, music, etc.

Special problems

Includes:

- health problems, learning problems, behaviour problems

EDI Outcomes

The average EDI scores for each developmental area – Physical Health & Well-Being, Social Competence, Emotional Maturity, Language & Cognitive Development, and Communication Skills & General Knowledge – are divided into categories representing the highest scores to the lowest scores in the community.

On track (Top)

- The total group of children who score in the highest 25th percentile of the distribution

On track (Middle)

- The total group of children who score between the 75th and 25th percentiles of the distribution

Not on track (Vulnerable)

- The total group of children who score below the lowest 10th percentile of the distribution

EDI data and results are shared with schools, communities, and governments so that they can conduct further analyses and use the data for ongoing planning of services and monitoring of children's progress over time.

The EDI data help school administrators and other early-years stakeholders understand more about how groups of children in their communities are doing in order to identify changes that are needed in communities and to monitor the impact of changes over time.

A copy of the EDI, along with further information about its development and use, can be found at: www.offordcentre.com/readiness/SRL_project.html