EARLY DEVELOPMENT INSTRUMENT
MEASURING CHILDREN’S READINESS TO LEARN
SUMMARY OF NWT BASELINE RESULTS FOR THE 2012, 2013 AND 2014 SCHOOL YEARS
Measuring readiness to learn

All children are born ready to learn, but not all children arrive at school ready to learn. Children are ready to learn when they can meet the expectations placed on them and when their development allows them to fully benefit from the learning experiences at school. Children who are not ready are at a disadvantage from the beginning and often never catch up. This highlights the importance of being able to assess the learning readiness of children early on in their development.

The Offord Centre for Child Studies at McMaster University developed a standardized method of measuring readiness to learn at school in 2000. It has been implemented in school districts all across Canada and in several other countries around the world. This measure, called the Early Development Instrument (EDI), is a checklist completed by kindergarten teachers. EDI does not diagnose individual children but instead provides a snapshot of the learning readiness of groups of five year olds as they get ready to enter grade one.

The EDI measures children’s developmental health by asking questions about the five areas of their early development – referred to by researchers as developmental domains (Figure 1).

**Figure 1** The five developmental domains

<table>
<thead>
<tr>
<th>Physical Health &amp; Well-Being</th>
<th>Emotional Maturity</th>
<th>Communication Skills and General Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Competence</td>
<td></td>
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<tr>
<td>Language and Cognitive</td>
<td></td>
<td></td>
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<tr>
<td>Development</td>
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**Physical Health & Well-Being** - Examples: running on the playground, holding a pencil, muscular coordination and having enough energy for classroom activities.

**Social Competence** - Examples: curiosity about the world, willingness to try new things, ability to control own behaviour, ability to play and work with other children, following the rules.

**Emotional Maturity** - Examples: thinking before acting, a balance between fearful and impulsive behaviour, ability to deal with feelings appropriately, consider feelings of others.

**Language and Cognitive Development** - Examples: likes to listen to stories, developing beginning reading, writing and number skills, plays board games, ability to see things that are the same and different, ability to repeat information from memory.

**Communication Skills and General Knowledge** - Examples: ability to communicate needs and wants in socially appropriate ways, storytelling ability, some knowledge about life and the world around them.

The information gathered through the EDI helps us understand the current state of children’s development in the NWT. It then connects the conditions of early childhood experiences to learning outcomes, or success (Figure 2).
The results from the EDI determine the percentage of children who are ready to learn as they enter grade one and the percentage who are falling behind. The average EDI scores are divided into four segments as illustrated in Figure 3.

Children falling into the bottom 10% are considered ‘vulnerable’ and children scoring in the lower 10% to 25% are considered ‘at risk.’ Children scoring above 25% are considered to be on track and ready to learn. These segments are based on established norms for child development across Canada.
The Northwest Territories (NWT) has collected EDI data each year at a territorial level since 2012. All Education Authorities participate in the EDI collection. With three years of data now available, a baseline has been created. The age of children included in the NWT’s EDI survey was between five and six years (with an average of 5.7 years). The EDI data included 1,725 children, evenly divided between boys and girls. Of the total, 94% of the children had English or French as their first language. The EDI data included 769 kindergarten children in Yellowknife, 384 children in the regional centres and 572 children in the small communities.

Table 1 shows the percentage of NWT children who scored in the Vulnerable category based on the Canadian norms for any of the five domains. Figure 4 shows the percentage of NWT children who were found to be vulnerable in one or two domains of their development.
Each of the five domains is divided into sub-domains, except Communication Skills and General Knowledge. The individual subdomains provide a more detailed picture of child development in the NWT. For instance, within Physical Health and Well-Being, developmental expectations were measured by observing gross and fine motor skills, physical readiness for school and physical independence. Table 2 shows each domain’s respective subdomains.

<table>
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<tr>
<th>Physical Health &amp; Well-Being</th>
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<th>Language &amp; Cognitive Development</th>
<th>Communication and General Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical readiness for the school day</td>
<td>Overall social competence</td>
<td>Pro-social &amp; helping behaviour</td>
<td>Basic literacy</td>
<td>Communication skills and general knowledge</td>
</tr>
<tr>
<td>Physical independence</td>
<td>Responsibility &amp; respect</td>
<td>Anxious &amp; fearful behaviour</td>
<td>Interest in literacy/numeracy &amp; memory</td>
<td></td>
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<tr>
<td>Gross &amp; fine motor skills</td>
<td>Approaches to learning</td>
<td>Aggressive behaviour</td>
<td>Advanced literacy</td>
<td></td>
</tr>
<tr>
<td>Readiness to explore new things</td>
<td>Hyperactivity &amp; inattention</td>
<td></td>
<td>Basic numeracy</td>
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</table>

Children who score low in nine or more of the subdomains are considered to be facing multiple challenges. This means they are especially vulnerable. The percentage of children with challenges across multiple domains ranged from a low of roughly 4% for Yellowknife, to nearly 6% for Regional Centres and over 16% in the smaller centres (Figure 5).
The Sense of Identity Questionnaire (SIQ) has been developed specifically for use in the Northwest Territories to help understand the role of cultural identity in child development. This questionnaire was developed with NWT kindergarten teachers, Aboriginal cultural advisors, Department of Education, Culture and Employment (ECE) and McMaster University to be part of the EDI across the NWT. The SIQ asks kindergarten teachers to answer eighteen questions which describe three aspects of a child’s sense of identity, including:

- A sense of community and/or family;
- A sense of place (the land, local community and/or the North); and
- A sense of belonging.

As the SIQ is still a new initiative it requires further study in order to understand its full potential. Early findings suggest much can be learned from linking children's sense of identity with information on their developmental health. For example, early results of the SIQ suggest:

- Children with higher EDI scores tend to demonstrate a greater sense of identity;
- Children who are not vulnerable in the EDI tend to demonstrate a greater sense of identity;
- Older children tend to demonstrate a greater sense of identity than younger children;
- Girls tend to demonstrate a slightly greater sense of identity than boys; and
- Children with Aboriginal status tend to demonstrate a greater sense of community and/or family.
Now that a three year baseline is established, we can track trends over time in order to plan and address gaps in early childhood development programs and services.

The Early Development Instrument is a significant component of the Right from the Start Framework and Action Plan, a 10-year strategy developed in partnership between ECE and the Department of Health and Social Services (HSS) to focus investments in early childhood. The Action Plan provides detailed actions to guide planning initiatives, moving us towards the goals and commitments made within the Framework. The goals of the Early Childhood Framework include:

- Increased accessibility and participation in early childhood development programs, services and supports for children and families;
- Enhanced quality of early childhood programs, services and supports; and
- Improving integration and collaboration at all levels of the early childhood development system.

The EDI information reflects that many NWT children are not receiving the proper supports and rich early learning opportunities necessary for healthy growth and development and that immediate action is required to address this critical situation. Though there are currently many actions the GNWT is undertaking to ensure children have high quality early childhood learning opportunities, it is evident that more focused and targeted initiatives are required as soon as possible.

For example, ECE has introduced scholarships available for northerners pursuing diploma and degree programs with a focus on early childhood development. ECE is offering new professional development opportunities for early childhood workers as well as wage subsidies. ECE has made changes to the Licenced Family Day Home Regulations in order that Day Home operators have more flexibility in working with children between 2-3 years old.

ECE has introduced a free, optional developmentally appropriate, play based Junior Kindergarten Curriculum for all 4 year old children, beginning in 23 small communities during the 2014-15 school year.

In partnership with HSS, new parents will be provided with baby bags and electronic tablets loaded with helpful and important information for new parents.

All of these initiatives, including those being delivered from HSS, are aligning to ensure our children have the right start in life, with opportunities available to all children in the NWT. This is work that no one group or organization can accomplish alone. Building our partnerships with quality organizations like Aboriginal Head Start, ensuring that Aboriginal Governments and community leaders are aware of the challenges and opportunities for children, and working with parents and families will secure a future where every child, family, and community in the NWT, particularly those most at risk, has access to high quality, comprehensive and culturally infused early childhood development programs and services.