Early Development Instrument
2018 Results for Niagara Region

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What is the Early Development Instrument (EDI)?

- Validated tool that measures developmental health and wellbeing of children in year 2 of kindergarten
- Mandated and funded by Ministry of Education
- 103 questions/child
What is the Early Development Instrument (EDI)?

5 domains of child development:

- Physical Health and Wellbeing
- Social Competence
- Emotional Maturity
- Language and Cognitive Development
- Communication and General Knowledge
Niagara’s Results
Physical Health and Wellbeing

% vulnerable

<table>
<thead>
<tr>
<th>Year</th>
<th>Niagara</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>16.7</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>18.9</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>16.3</td>
<td></td>
</tr>
</tbody>
</table>

Subdomains

- Physical readiness for the school day: None
- Physical independence: None
- Gross and fine motor skills: None

Change between 2015 and 2018

- Physical readiness for the school day: None
- Physical independence: None
- Gross and fine motor skills: None

Difference between provincial average

- Physical readiness for the school day: None
- Physical independence: None
- Gross and fine motor skills: None
Social Competence

<table>
<thead>
<tr>
<th>% vulnerable</th>
<th>Subdomains</th>
<th>Change between 2015 and 2018</th>
<th>Difference between provincial average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niagara 2005</td>
<td>Overall social competence with peers</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Niagara 2008</td>
<td>Responsibility and respect</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Niagara 2011</td>
<td>Approaches to learning</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Niagara 2015</td>
<td>Readiness to explore new things</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Niagara 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ontario 2018</td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Emotional Maturity

<table>
<thead>
<tr>
<th>Subdomains</th>
<th>Change between 2015 and 2018</th>
<th>Difference between provincial average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prosocial and helping behaviour</td>
<td>Down</td>
<td>None</td>
</tr>
<tr>
<td>Anxious and fearful behaviour</td>
<td>None</td>
<td>Up</td>
</tr>
<tr>
<td>Aggressive behaviour</td>
<td>None</td>
<td>Up</td>
</tr>
<tr>
<td>Hyperactive and inattentive behaviour</td>
<td>Down</td>
<td>Up</td>
</tr>
</tbody>
</table>

% vulnerable

Niagara 2005: 11.1
Niagara 2008: 10.3
Niagara 2011: 12.2
Niagara 2015: 14.3
Niagara 2018: 13.4
Ontario 2018: 11.3
% vulnerable in Emotional Maturity, 2018, by neighbourhood

White line indicates neighbourhood boundary
Qualitative Data Collection

• EDI cannot be used to determine causation

• Pilot: Teachers provided additional relevant information in the comment section

• Themes can provide context, to allow our discussions about “why?” to be data-driven
Community Impact: Who Uses the Data and How
Community impact: Who uses the data and how?

Public Health

• Objective of Parenting Strategy (Family Health Division): To identify and understand the needs of priority populations

• A geographical approach was taken, at a neighborhood level

• 4 population-level data sources were used:
  • Percentage of Children scoring as vulnerable on two or more domains (EDI, 2015)
  • Percentage of mothers exclusively breast feeding (BORN, 2013-2017)
  • Percentage of Healthy Babies Healthy Children screens classified as medium to high risk (HBHC, 2013-2018)
  • Derived neighbourhood material deprivation, (ON-MARG, Census 2016)
\[(\text{EDI}^w_1) + (\text{BORN}^w_2) + (\text{HBHC}^w_3) + (\text{ONMARG-DEP}^w_4) = \text{Neighbourhood Score}\]
Public Health: Parenting Strategy
Priority Areas & Population Identification

Databases → Priority Neighbourhoods → Priority Populations

- Census profiles
- Staff Consultation
- Environics Data
Community impact: Who uses the data and how?

- Niagara Children’s Planning Council (40+ agencies)

- Publicly funded School Boards

- Niagara Region
  - Innovation and Business Excellence: Council Strategic Dashboard
  - Children’s Services
  - Public Health

Many community partners
EDI Data: Next Steps

- Deeper analysis of qualitative data to identify themes
- Analysis by EarlyON Child and Family Centre service delivery zone
- Collection of Middle Years Development Instrument data (grades 4 & 7)
Thank you

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