ACKNOWLEDGEMENTS

The Human Early Learning Partnership (HELP) would like to thank school districts across BC for their participation in the Early Development Instrument (EDI) questionnaire. Involvement of teachers, principals, staff and parents is essential to helping us understand the state of early child development across the province. Together we have collected EDI data for over 245,000 children in BC since 2001, providing rich detail about the patterns and trends in the early development of BC’s children.

HELP would also like to acknowledge the support we have received from the Ministries of Children and Family Development, Education, and Health since 2001. This investment has supported the development of a unique child development monitoring system that provides a foundation for high quality, evidence-informed decisions on behalf of children and their families.

ABOUT THE HUMAN EARLY LEARNING PARTNERSHIP

HELP is an interdisciplinary research institute, based at the School of Population and Public Health at the University of British Columbia. The institute was founded by Drs. Clyde Hertzman and Hillel Goelman in 1999. Clyde’s vision for HELP was to advance knowledge about child development and importantly, to apply this knowledge in communities.

HELP’s unique partnership brings together researchers and practitioners from across BC, Canada and internationally to address complex child development issues. HELP’s research projects explore how different environments and experiences contribute to health and social inequities in children’s development over their life course. To learn more please visit our website at earlylearning.ubc.ca.

Suggested citation

EDI COMMUNITY PROFILE

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COMMUNITY PROFILE OVERVIEW

“The quality of early childhood affects the quality of the future population and the prosperity of the society in which these children are raised.” - Dr. Fraser Mustard

EDI: A LENS ONTO THE EARLY YEARS

The Human Early Learning Partnership (HELP) uses the Early Development Instrument (EDI) to measure the developmental health of the kindergarten population across the province. The EDI measures childhood vulnerability rates, reflecting how children’s experiences and environments in the first five years of their lives have affected their development as a whole.

Children's development is impacted by the broad policy environment, socioeconomic conditions, family and neighbourhood characteristics, play and peers, language and literacy, early learning and care, and their overall health. EDI data illustrate the distinct differences in children's developmental outcomes that exist across communities in BC.

Overall, EDI data are integral to the story of early child development in BC, contributing important evidence for guiding informed responses and investments in children and families as well as helping us to understand the effectiveness of those responses.
INTRODUCTION TO THE EDI

The EDI is a questionnaire used province-wide to measure patterns and trends in children’s developmental health. HELP has been collecting EDI data since 2001. Over the past 15 years, we have collected data for 247,724 kindergarten children in BC. This has established an important foundation for a population health monitoring system that supports an increased understanding of children’s early developmental outcomes over time and across geographies.

EDI COLLECTION HISTORY

Figure 1. EDI Data collection history from 2001-2016

<table>
<thead>
<tr>
<th>WAVE 1*</th>
<th>WAVE 2</th>
<th>WAVE 3</th>
<th>WAVE 4</th>
<th>WAVE 5</th>
<th>WAVE 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF CHILDREN</td>
<td>40,312</td>
<td>37,756</td>
<td>37,398</td>
<td>46,671</td>
<td>42,406</td>
</tr>
<tr>
<td>TOTAL NUMBER OF CHILDREN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please note: A ‘Wave’ is a 2-3 year data collection period, based on the annual school calendar (September – June). Due to changes in the EDI questionnaire after Wave 1 data collection, Wave 2 is HELP’s baseline and Wave 1 data are not publicly reported.

QUICK FACTS ABOUT THE EDI

- Developed by Dr. Dan Offord and Dr. Magdalena Janus at the Offord Centre for Child Studies at McMaster University.
- Designed as a population-level monitoring tool, not for screening or diagnosing individual children.
- The questionnaire includes 104 questions that measure five areas, also called scales, that are important to early child development and are good predictors of health, education and social outcomes in adolescence and adulthood.
- EDI Questionnaires are completed by kindergarten teachers for students in their classroom in February of the school year.
- Teachers participate in a standardized training session prior to completing the EDI questionnaires.

For more information about the EDI please visit: earlylearning.ubc.ca/edi
INTRODUCTION TO THE EDI

The five scales of the EDI are:

**PHYSICAL HEALTH & WELL-BEING**
Assesses children’s gross and fine motor skills, physical independence and readiness for the school day. E.g. Can the child hold a pencil? Is the child able to manipulate objects? Is the child on time for school?

**SOCIAL COMPETENCE**
Assesses children’s overall social competencies, capacity for respect and responsibility, approaches to learning, and readiness to explore new things. E.g. Is the child able to follow class routines? Is the child self-confident? Is the child eager to read a new book?

**EMOTIONAL MATURITY**
Assesses children’s prosocial and helping behaviours, as well as hyperactivity and inattention, and aggressive, anxious and fearful behaviours. E.g. Does the child comfort a child who is crying or upset? Does the child help clean up a mess?

**LANGUAGE & COGNITIVE DEVELOPMENT**
Assesses children’s basic and advanced literacy skills, numeracy skills, interest in math and reading, and memory. E.g. Is the child interested in reading and writing? Can the child count and recognize numbers? Is the child able to read simple sentences?

**COMMUNICATION SKILLS & GENERAL KNOWLEDGE**
Assesses children’s English language skills and general knowledge. E.g. Can the child tell a story? Can the child communicate with adults and children? Can the child take part in imaginative play?

HOW DOES THE EDI MEASURE CHILDHOOD VULNERABILITY?
Data gathered from the EDI are used to report on childhood vulnerability rates. The data illustrate trends in vulnerability over time. Through data analyses and mapping, it also becomes possible to examine regional differences in child vulnerability at multiple geographical levels from a broad provincial snapshot to community and neighbourhood analyses.

Vulnerable children are those who, without additional support and care, are more likely to experience challenges in their school years and beyond. Vulnerability is assessed for each of the five EDI scales. Children whose scores fall below the vulnerability cut-off on a particular EDI scale are said to be vulnerable in that area of development.

REPORTING ON EDI VULNERABILITY

**Vulnerability on the Five EDI Scales**
The percentage of children vulnerable on each of the five scales of the EDI are measured and reported as vulnerability rates.

**Vulnerable on One or More Scales**
Vulnerable on One or More Scales is a summary measure that reports the percentage of children who are vulnerable on at least one or more of the five scales of the EDI. Children represented by this measure may be vulnerable on only one scale or may be experiencing vulnerabilities on two, three, four or all five scales of the EDI.

For more information about vulnerability on the EDI and how it is calculated please see our Fact Sheet: earlylearning.ubc.ca/documents/68
YOUR COMMUNITY DATA
This community profile explores EDI data for Fort Nelson School District. It provides an overview of the patterns and trends in early child development for Wave 6 (2013-2016) and explores change over time from Wave 2 (2004-2007) through Wave 6, based on EDI data collected and analyzed for kindergarten children between 2004 and 2016. These data are reported based on children’s home postal codes and include all children who live in the school district. This includes children attending public schools and participating independent and Aboriginal schools. This profile also provides information on provincial-level results, intended to help communities situate local data in the broader provincial context. Please note: Data are suppressed for school districts and neighbourhoods with fewer than 35 kindergarten children.

Interpreting Maps and Data
EDI data in this report are presented for each of the five scales, and by a summary measure representing children who are Vulnerable on One or More Scales. Graphs, data tables and maps in this report use the following colours and shades to indicate rates of vulnerability. Darker colours represent higher rates of vulnerability.
## WAVE 6 PARTICIPATION

<table>
<thead>
<tr>
<th>WAVE 6 SCHOOL YEAR</th>
<th>PARTICIPATED</th>
<th># OF VALID EDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013/14</td>
<td>Y</td>
<td>68</td>
</tr>
<tr>
<td>2014/15</td>
<td>Y</td>
<td>68</td>
</tr>
<tr>
<td>2015/16</td>
<td>Y</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total District Participation</strong></td>
<td><strong>183</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Total District Participation* refers to the total number of children in the school district for whom an EDI was completed.

Please note: EDI data are aggregated by school district of residence (where children live) using home postal code information. Some children attend school in districts other than where they live, therefore even in years when your district did not participate, some children may be included in the results.
The current provincial vulnerability rate (Wave 6) for children Vulnerable on One or More Scales of the EDI is 32.2%. This means about 1 in 3 children, or about 14,000 kindergarten students in the province, are starting school with vulnerabilities in one or more areas that are critical to their healthy development. This is a meaningful increase (i.e. worthy of attention) from the Wave 2 rate of 29.9% and a small shift from Wave 5 rate of 32.5%. Child vulnerability in the province has meaningfully increased over the last decade.

WAVE 6 DATA

Wave 6 data show that in Fort Nelson School District, 26% or 47 children are experiencing vulnerabilities on at least one area of development in Wave 6. Figure 3 explores vulnerability rates across the five scales of the EDI.

Figure 3. Wave 6 EDI results for Fort Nelson

<table>
<thead>
<tr>
<th>Scale</th>
<th>Provincial Average (Wave 6)</th>
<th>Total Number of Vulnerable Children</th>
<th>Percent Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL HEALTH &amp; WELL-BEING</td>
<td></td>
<td>24</td>
<td>13%</td>
</tr>
<tr>
<td>SOCIAL COMPETENCE</td>
<td></td>
<td>20</td>
<td>11%</td>
</tr>
<tr>
<td>EMOTIONAL MATURITY</td>
<td></td>
<td>28</td>
<td>15%</td>
</tr>
<tr>
<td>LANGUAGE &amp; COGNITIVE DEVELOPMENT</td>
<td></td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>COMMUNICATION SKILLS &amp; GENERAL KNOWLEDGE</td>
<td></td>
<td>13</td>
<td>7%</td>
</tr>
<tr>
<td>VULNERABLE ON ONE OR MORE SCALES</td>
<td></td>
<td>47</td>
<td>26%</td>
</tr>
</tbody>
</table>
SCHOOL DISTRICT RESULTS

SCHOOL DISTRICT TRENDS

Collecting EDI data over multiple years allows for an improved understanding of trends in children’s development.

Figure 4 illustrates EDI vulnerability rates for each of the five scales and Vulnerable on One or More Scales across five points in time (Waves 2 through 6) for Fort Nelson School District. These trend data help identify gradual changes and sustained rates in vulnerability across and between EDI scales over this period.

For the summary measure Vulnerable on One or More Scales, the vulnerability rate was 22% in Wave 5 and 26% in Wave 6. This represents no meaningful change in childhood vulnerability for this time period. The longer-term trend shows that 33% of children were vulnerable in Wave 2 and 26% were vulnerable in Wave 6. This represents a meaningful decrease in childhood vulnerability for this time period.
SCHOOL DISTRICT RESULTS

DIFFERENCES ACROSS BC SCHOOL DISTRICTS

There is a wide range in vulnerability rates across all BC school districts in Wave 6. Provincially, the range differs on each of the five EDI scales. The lowest school district-level vulnerability rate on the measure Vulnerable on One or More Scales is 9%, while the highest is 53%.

For individual scales, the lowest school district-level vulnerability rate in the province is found on the Communication Scale at 2% while the highest is on the Physical Health and Well-Being Scale at 32%.

Figure 5 illustrates Fort Nelson’s vulnerability rates for each scale and the summary measure, Vulnerable on One or More Scales, for Wave 6 in comparison to results from all other school districts in the province. Each coloured bar in Figure 5 represents one school district’s vulnerability rate, which are ordered from lowest to highest vulnerability. The black bar represents this school district’s vulnerability rates.

See Figure 6 (Wave 6 EDI data for all school districts) on the following page for a detailed comparison of EDI results for all school districts in the province.
Figure 6 illustrates the percentage of children vulnerable on each of the five scales and on Vulnerable on One or More Scales for all BC school districts.

Please note: data are suppressed where there are fewer than 35 kindergarten children.
Fort Nelson (SD 81) Wave 6

Vulnerable on One or More Scales

Percent of children Vulnerable on One or More Scales of the EDI.

School District Average: 26%
Provincial Average: 32.2%

For more information please visit: earlylearning.ubc.ca/maps/edi
VULNERABILITY ON THE PHYSICAL HEALTH & WELL-BEING SCALE

Measures things such as motor development, energy level, daily preparedness for school, washroom independence and established handedness.

% VULNERABLE

- 100%
- 75%
- 50%
- 25%
- 15%
- 10%
- 5%
- 0%
- No Data/Suppressed

SCHOOL DISTRICT AVERAGE: 13%
PROVINCIAL AVERAGE: 14.8%

For more information please visit: earlylearning.ubc.ca/maps/edi
VULNERABILITY ON THE SOCIAL COMPETENCE SCALE

Measures behaviour in structured environments including cooperation and respect for others, socially appropriate behaviour, self-control and self-confidence.

% VULNERABLE

100%
-25%
-20%
-15%
-10%
-5%
-0%

SCHOOL DISTRICT AVERAGE 11%
PROVINCIAL AVERAGE 15.7%

For more information please visit: earlylearning.ubc.ca/maps/edi
VULNERABILITY ON EMOTIONAL MATURITY SCALE

Measures things such as behaviour in less formal environments, focusing on helping, tolerance and ability to demonstrate empathy for others.

% VULNERABLE

- 100%
- 75%
- 50%
- 25%
- 15%
- 10%
- 5%
- 0%

SCHOOL DISTRICT AVERAGE
15%

PROVINCIAL AVERAGE
16.1%

For more information please visit: earlylearning.ubc.ca/maps/edi
EDITION

VULNERABILITY ON THE LANGUAGE & COGNITIVE SCALE

Measures things such as interest in books, reading, language-related activities, literacy and interest in simple math-related activities.

% VULNERABLE

SCHOOL DISTRICT AVERAGE
5%

PROVINCIAL AVERAGE
9.4%

For more information please visit: earlylearning.ubc.ca/maps/edi
VULNERABILITY ON COMMUNICATION SKILLS SCALE

Measures things such as the ability to communicate one’s needs, understand others in English, actively participate in storytelling and general interest in the world.

% VULNERABLE

100%

25%

20%

15%

10%

5%

0%

SCHOOL DISTRICT AVERAGE

7%

PROVINCIAL AVERAGE

14.2%

For more information please visit: earlylearning.ubc.ca/maps/edi
VULNERABLE ON ONE OR MORE SCALES

Percent of children Vulnerable on One or More Scales of the EDI.

STARPLOT

How to Read the Starplot:
Each scale of the EDI is represented by a triangle. Larger triangles represent higher vulnerability and smaller triangles represent lower vulnerability for each scale of the EDI.

For more information please visit:
earlylearning.ubc.ca/maps/edi
CHANGE OVER TIME

Collecting EDI data over multiple waves allows us to explore trends in children’s development and to answer the broader question: “Are our kindergarten-aged children doing better, worse or about the same as in the past?” With each new wave of EDI data, vulnerability rates change across the province. While some places see improvements over time for particular aspects of children’s developmental health, others see declines. When looking at all of these changes over time it is important to identify the amount of change in vulnerability that is meaningful - i.e. change that is worthy of further exploration and discussion.

The following maps illustrate the recent (Wave 5 to 6) and long-term (Wave 2 to 6) trends for the Fort Nelson School District, highlighting whether vulnerability rates demonstrate:

- A meaningful increase
- A meaningful decrease
- No meaningful change

Please note: School district trends are not available if there are fewer than 35 kindergarten children in one or both waves.

To learn more about meaningful change in vulnerability in your region, including trends for other EDI scales, visit your district’s interactive Critical Difference Map: www.earlylearning.ubc.ca/maps/edi/sd/81/#critDiff

For more information on Critical Difference calculations visit: earlylearning.ubc.ca/supporting-research/critical-difference
Critical difference is a method that we use to determine whether a change in EDI vulnerability rates from one period to another (shown on this map), or between two neighbourhoods reflects a meaningful change in vulnerability, rather than a more minor change associated with measurement variations.

For more information please visit: earlylearning.ubc.ca/maps/edi
Critical difference is a method that we use to determine whether a change in EDI vulnerability rates from one period to another (shown on this map), or between two neighbourhoods reflects a meaningful change in vulnerability, rather than a more minor change associated with measurement variations.

Change in EDI vulnerability rates

- Meaningful Decrease in Vulnerability
- Meaningful Increase in Vulnerability
- No Change
- No Data/Suppressed

For more information please visit: earlylearning.ubc.ca/maps/edi
USING EDI RESULTS IN COMMUNITIES

“EDI results are an important catalyst to further the work we do in communities to improve child outcomes. The results, in isolation, don’t prescribe our local actions. They do, however, allow us to focus our efforts in particular neighbourhoods and areas of child development; to monitor the impact of our collaborative work; and most importantly, to engage new partners in the importance of supporting children in their earliest years.”
-Joanne Schroeder, Comox Valley Child Development Association

EDI data are a foundation for furthering understanding about children’s development in our communities. While they do not point to specific solutions, these data provide a common starting point for new areas of inquiry and collaborative conversations across sectors. From this process of planning and decision-making, new ideas for investment and action can emerge.

The following section outlines suggested approaches for exploring and using EDI data in communities.

A FOCUS ON LOCAL
EDI data are useful for exploring early childhood outcomes at a community-level while also placing these data within the larger regional and provincial contexts. Interpreting EDI data through a local lens can enhance the work of community, planners, coalitions and governments in decision-making and priority setting to improve early child development. The maps and data in this community profile can support this approach.

USING COMPLEMENTARY DATA
EDI data are particularly valuable when used alongside other data and information including census, administrative health and education data, community knowledge and expertise, and information on local services and programs. Listening to the experiences of parents and caregivers can also provide important context to guide conversations and planning efforts.
USING EDI RESULTS IN COMMUNITIES

COLLABORATIVE CONVERSATIONS
EDI data can provide a platform for facilitating discussion and inquiry across sectors on the status of early child development in communities. Start with highlighting strengths in the data and identifying long-term trends.

It is valuable to explore the main themes included in this report as a starting point for these conversations:

1. What are the major changes or trends in EDI vulnerability in the region?
   - HELP’s interactive Critical Difference Tool allows you to broaden your exploration in this area by looking at the meaningful change over time on all five EDI scales, and on Vulnerability On One or More Scales. Visit www.earlylearning.ubc.ca/maps/edi/sd/81/#critDiff to learn more.

2. Are there particular areas of child development that are pressing in the region?
   - Compare vulnerability rates on each of the scales of the EDI. It is important to remember that all areas of development captured on the EDI are interconnected. EDI subscale data, available for BC school districts in 2017, provide increasingly specific information on children’s developmental health, strengthening our understanding of the influences contributing to their developmental vulnerabilities. Subscale data need to be seen in the context of the whole child and should not be used to select isolated programs that have a singular focus on one particular area of development.

3. What underlying factors might explain the differences that exist in childhood vulnerability in your region?
   - Regional differences can be explained by a wide range of factors including social and economic differences, variations in community networks and collaborations that support children and families, and also the number, quality and accessibility of programs.
   - The large variation in vulnerability rates across school districts and neighbourhoods in the province demonstrates that the experiences of children vary greatly from one region to the next. This is explored through mapping EDI data. Explore HELP’s interactive EDI maps to learn more: earlylearning.ubc.ca/interactive-map.

DECISION-MAKING AND ACTION
As a stronger and shared understanding of child vulnerability emerges through conversation and inquiry in a community or region, it is possible to move toward a collective plan of action. This process might include the creation of a shared vision across organizations and sectors, collective strategic planning, partnership development, and finally the selection of new actions and initiatives.

CONNECT WITH LOCAL EDI LEADS
Learn more about initiatives in your community by connecting with local early childhood coalitions, public partners committees, school district or local leadership, planning or advocacy groups.

Visit www.earlylearning.ubc.ca/maps/edi/sd/81/#contacts to connect with your local EDI leads.
RESOURCES

THE OFFORD CENTRE FOR CHILD STUDIES  edi.offordcentre.com
HELP’S EDI RESOURCES  earlylearning.ubc.ca/edi
INTERACTIVE EDI MAPS  earlylearning.ubc.ca/interactive-map
HELP FACT SHEETS
• The Early Development Instrument (EDI)  earlylearning.ubc.ca/documents/478
• Vulnerability on the EDI  earlylearning.ubc.ca/documents/68
• Proportionate Universality  earlylearning.ubc.ca/documents/475
• What Makes a Difference for Early Child Development  earlylearning.ubc.ca/documents/304

CONTACTS

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FOLLOW US ON SOCIAL MEDIA
HELP Twitter  @HELP_UBC
HELP Facebook  facebook.com/HumanEarlyLearningPartnership

EXPLORE OUR WEBSITE  earlylearning.ubc.ca

Visit www.earlylearning.ubc.ca/maps/edi/sd/81/ to learn more about your results.