

# Windsor: Early Development Instrument

*A Call to Action*



# Early Development Instrument (EDI)

The Early Development Instrument is a measure of early child (birth-age 5) development.

Goals are to:

- Produce community level data and maps representing children's health and development
- Actively engage community stakeholders in brainstorming local strategies for developmental challenges
- Foster collaboration between community agencies and families

# Early intervention



Brain development occurs early and cognitive pathways are most flexible from birth to age 3.



Families and caregivers are a child's first teachers. Homes and neighborhoods are the first learning environments.

## **The necessity of early intervention:**

Brain development occurs early and cognitive pathways are most flexible from birth to age 3. Early intervention is necessary to ensure healthy development for children. And assessing effectiveness of early intervention ensures children continue to receive support where/when necessary to ensure greater success in school and in life.

Families and caregivers are the first teachers.

And homes and neighborhoods are the first learning environments. Positive relationships and supportive environments guide a young child's development and provide the foundation for future learning and well-being.

Existing research indicates that brain development is happening in earnest for our youngest children. While there are many screenings available to parents families through their health provider or their early childhood center, there are fewer screening mechanisms designed to assess developmental health of children. The screenings in early childhood designed to identify developmental delays and challenges should lead to connections with supportive interventions that ensure the possibility of healthy development. Early intervention to support positive and healthy development may be necessary to prevent children from future struggles in school that interfere with school success and ultimate life success.

# EDI is one way to understand early intervention effectiveness



Survey designed to measure developmental expectations for a cohort of kids.



Teachers administer survey during second half of kindergarten.

The Early Development Instrument (EDI) is a survey designed to measure a child's ability to meet age-appropriate developmental expectations.

This survey has been administered in communities across the country. The survey is completed by teachers in the second half of the kindergarten year.

Data collection—each survey—takes approximately 10-15 time.

Assessed on 5 development areas (referred to as domains - see next slide)

## 5 EDI Domains



Social Competence



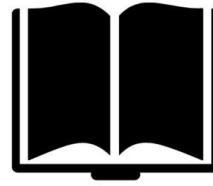
Emotional Maturity



Physical Health and Well-Being



Communication Skills and General Knowledge



Language and Cognitive Development

The EDI instrument assess development in 5 domains:

Social Competence

Emotional Maturity

Physical Health and Well-Being

Language and Cognitive Development

Communication Skills and General Knowledge

Some subdomains include questions that capture developmental milestones that children should have reached by the middle of their kindergarten year (e.g. physical independence) and some sub-domains capture behaviors that are still emerging (prosocial behaviors)

The focus is on both academic success as well as social and emotional development children need.

During the first year of data collection, these data are designed to help communities see a big picture relating to intervention needs. Over the long-term, continuing the data collection enables communities to understand their improving in serving/supporting early development needs.

## 5 Domains: Social Competence

*\*Child's ability to interact in social relationships*

Sample EDI Survey Questions:

Does your child share with others?

Is the child self-confident?



The Social Competence domain is designed to assess children's ability to interact in social relationships. If children are doing well, teachers answering social competence questions will not that they are able to get along with or play with others, that they respect adults, and that they are capable of helping others.

Some sample EDI questions include:

- Would you say this child plays and works cooperatively with other children at the level appropriate for his/her age?
- Would you say that this child is able to play with various children?
- Would you say that this child respects the property of others?

## 5 Domains: Emotional Maturity

### **\*Children's management and expression of individual emotions**

Sample EDI Survey Questions:

Is the child able to concentrate?

Would the child help someone that is hurt or upset?



The Emotional Maturity Domain is designed to assess children's management and expression of individual emotions. Teachers assess whether children exhibit signs of aggression, anxiety or impulsive behavior as well as their ability to concentrate and help other children.

Sample questions include:

- Would you say that this child has temper tantrums?
- Would you say that this child is impulsive, acts without thinking?
- Would you say that this child cannot settle to anything for more than a few moments?

## 5 Domains: Physical Health and Well-being

### \*Child's physical and self care readiness for school

Sample EDI Survey Questions:

Can the child hold a pencil?

Is the child underweight or overweight?



The Physical Health and Well-Being questions are designed to understand if a child is ready for the physical challenges of the school day. The questions assess whether children displays independence (the ability to handle tasks and self-care on their own) and whether the child has strong motor skills.

Some sample questions include:

- Can the child hold a pencil?
- Would you say that this child is independent in washroom habits most of the time?
- Would you say that this child is well coordinated (i.e. moves without running into or tripping over things)?



# 5 Domains: Language and Cognitive Development

**\*Child's ability to understand and use language and concepts**

Sample EDI Survey Questions:

Is the child interested in reading and writing?

Can the child tell a short story?



The Language and Cognitive Development Domain is designed to assess children's interest in books, in reading and writing and basic math, as well as their ability to read/write simple sentence and complex words. Counting and word/shape recognition are also part of this assessment. Children

Sample questions include:

- Would you say this child is able to write simple sentences?
- Would you say that this child is able to remember things easily?
- Would you say that this child is able to recognize the numbers 1-10?

## 5 Domains: Communication Skills and General Knowledge

**\*Child's ability to communicate with others**

Sample EDI Survey Questions:

Can the child communicate his/her own needs?

Can the child communicate with adults and children?



The Communication Skills and General Knowledge Domain is designed to assess a child's ability to tell a story and communicate with other children and adults, including their ability to be understood.

Sample questions include:

- How would you rate this child's ability to communicate own needs in a way understandable to adults and peers?
- How would you rate this child's ability to understand on first try what is being said to him/her?

## What the EDI can tell us....

- Whether children in a community are entering Kindergarten: On track, At Risk or Vulnerable
- Areas of opportunity for community intervention

## What the EDI can't tell us....

- Specific information about individual students, teachers or programs
- Classroom level details about children

### What the EDI can tell us?

The EDI data collection allows parents, teachers and researchers to understand how a group of children fare in terms of developmental benchmarks that put them on track for positive school and life outcomes. The teachers who collect the data answer questions about individual students but the whole data sample is not designed to be used to track individual student progress. Rather, the data within each school, community or district is combined to develop an understanding of their students in the aggregate.

For communities collecting data using the EDI for the first time, the data sample provides a starting point (or benchmark) to children's strengths and challenges. If communities continue to collect data using the EDI, it is possible to

The data are collected about individual students but the EDI data are not designed to track individual student progress. Rather, the data sample is best used to understand the strengths and challenges of children in a community and to provide a starting point (benchmark) for future monitoring.

## Two ways to understand the data....

### Vulnerable/Not vulnerable

*Used in reporting of domain results*

- **On-track:** Meeting developmental milestones for this age group and likely to have success in school
- **At risk:** Not vulnerable but considered lower than expected for this age group. “At risk of being vulnerable”
- **Vulnerable:** not meeting developmental milestones and as such, vulnerable to later life challenges

### Ready/Not ready

*Used in reporting of sub-domain results*

- Ready
- Somewhat ready
- Not ready

Within each sub-domain, the data are organized to understand whether children are ready, somewhat ready or not ready regarding the specific group of questions.

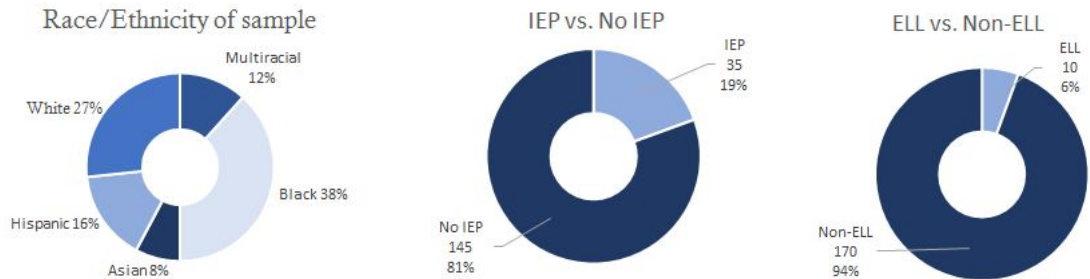
- **Vulnerable:** If the mean score of their EDI items falls at or below the 10th percentile cutoff. Children are at risk for problems in later childhood and, without additional supports and care, may experience future challenges in school.
- **At risk:** Children are not vulnerable, but they are “at risk” for becoming vulnerable. Considering the segment of at-risk children helps us keep in mind populations of children who could use additional supports. The mean score is between the 10th and 25th percentile.
- **On track:** Children are meeting developmental milestones and are expected to be successful. The mean score is above the 25th percentile.

# Student Data overview

Data collected during the 2016-2017 school year

N (schools) = 2

N (students) = 180



Windsor teachers collected data on kindergartners in 2016-2017. The average age of the children in the sample is 5 years and 11 months. The sample is 50% female students. In the donut charts below, we display the race/ethnic breakdown of the sample as well as a breakdown of students considered English Language Learner (ELL) and students with an Individualized Education Profile (IEP).

In this sample:

- 16% of the children are Hispanic

- 38% are black

- 27% are white

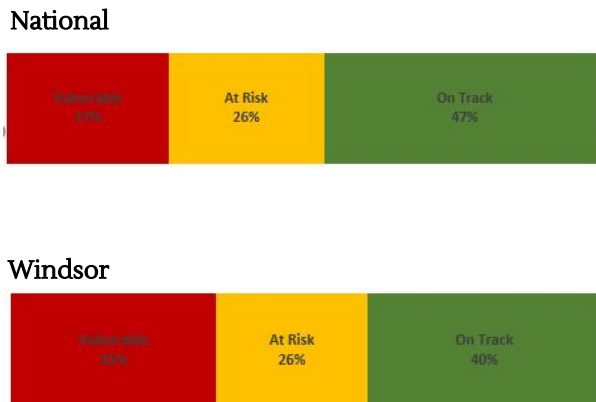
- 8% are Asian

- 12% Other/Multiracial

- 19% of students have an IEP

- 6% of the students are considered ELLs. (This means still learning English)

# Who is considered “vulnerable”?



When we say “vulnerable,” we mean that the child’s scores for specific questions in one domain fell below the 10<sup>th</sup> percentile for that measure.

In order to understand how Windsor children fared, we include the breakdown for vulnerable, at-risk and on track for the national sample of data.

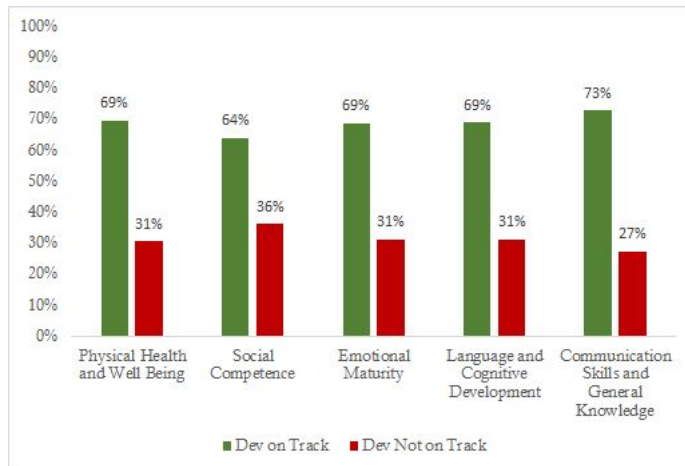
The dark teal section indicates that 35% of the data sample in Windsor is considered vulnerable on at least one domain.

About the same proportion of the data in the national and Windsor data is in the “at-risk” category.

A smaller proportion of the Windsor sample is considered “on track” when compared with the national data.

These categories serve as a reference point to understand the well-being of young children in their community.

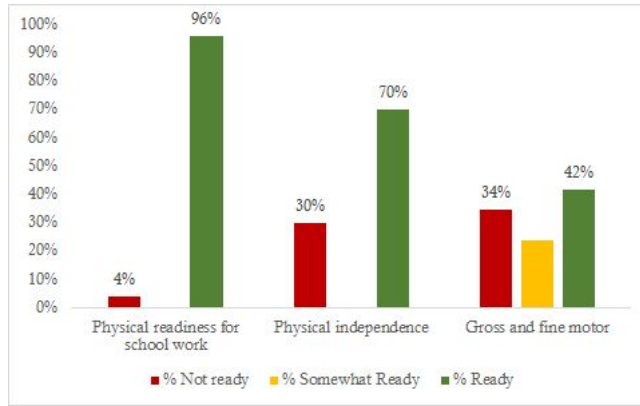
# Assessment of All Competencies



This slide provides an overview of the 5 domains to understand how Windsor students are doing. In most domains, at least two thirds of students are considered developmentally “on track” which means that they are meeting developmental milestones. Recall that some of the EDI questions assess students’ progress on benchmarks/tasks/expectations that are emerging.

This slide provides an overview of the domains but the following 5 slides provide a closer look at the components in every domain. For instance, looking at the “Social Competence” Domain, more than 1 out of 3 children in the sample are considered “not on track.” It would be helpful to understand what specific issues present challenges for these students to direct resources and strategies to this area.

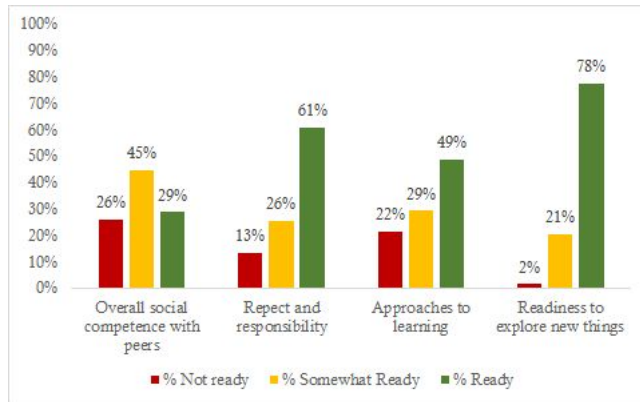
# Physical Health and Well-being Subdomain



In terms of Physical Health and Well-being, the children in Windsor are generally arriving to school ready to learn and exhibit signs of independence in classroom tasks. In terms of Gross and Fine Motor Skills, 42% of the sample is considered “Ready” for kindergarten which means more than half of the children are working towards readiness. Gross and fine motor skills include the ability hold pens and pencils, manipulate objects, manage stairs and maintain a level of energy throughout the school day.

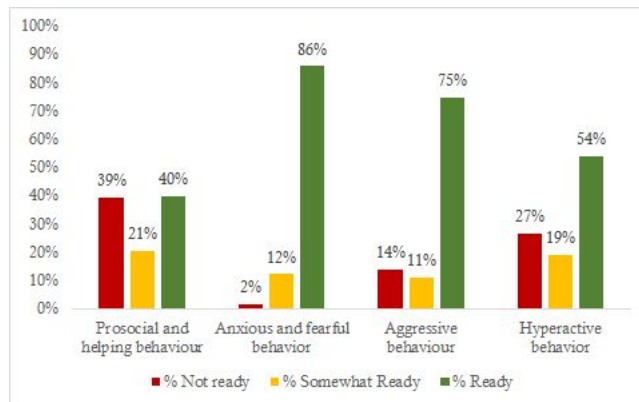


# Social Competence Subdomain



In terms of social competence, a large share of Windsor kindergarteners exhibit readiness regarding “Respect and responsibility” and “exploring new things.” More than half of children in the sample are considered somewhat or not ready regarding “approaches to learning” and “overall social competence with peers.” This means that these children are not consistently playing well/appropriately with others, (explore which questions fit in here).

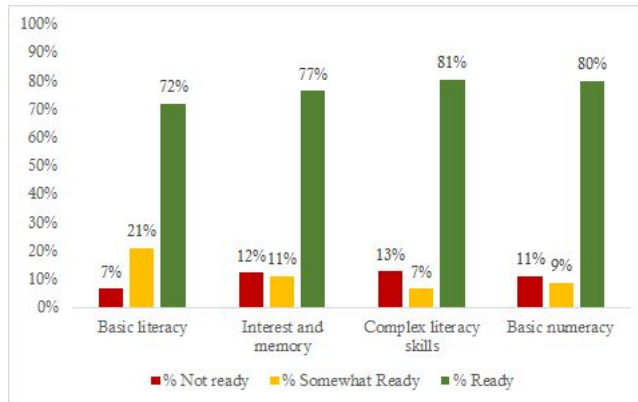
# Emotional Maturity Subdomain



In the area of emotional maturity, a large share of the children in the sample exhibit readiness in terms of their “anxious or fearful” and “aggressive behavior.” This means that teachers responded children are not exhibiting signs of anxiety, bullying, and unruliness.

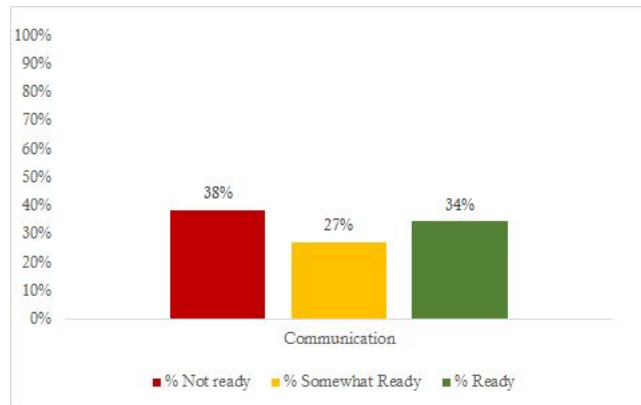
In terms of prosocial/helping behavior and hyperactive behavior, teachers are reporting larger shares of students as somewhat and not ready. This means when it comes to interest and willingness to help others, fewer students exhibit readiness. Additionally, in terms of self control and ability to focus, fewer children are considered ready in this round of the assessment.

# Language and Cognitive Development Subdomain



In the language and cognitive development subdomain, in almost all competency areas  $\frac{3}{4}$  or more of the children are considered ready in terms of their literacy, numeracy skills, and interest and memory skills.

## Communication Skills & General Knowledge Subdomain



In the communications and general knowledge subdomain, 38% of the children are considered “not ready.” This means that children have challenges communicating to adults and other children as well as being understood but adults/peers.

## Works Cited/Consulted

“What is the EDI?”

Retrieved from <https://edi.offordcentre.com/parents/what-is-the-edi/>

“How To Interpret EDI Results”

<https://edi.offordcentre.com/researchers/how-to-interpret-edi-results/>

“Domains and Subdomains”

<https://edi.offordcentre.com/researchers/domains-and-subdomains/>