



# EARLY DEVELOPMENT INDEX (EDI) RESEARCH DOSSIER 2018

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## I. WHAT IS THE EARLY DEVELOPMENT INDEX (EDI)?

The Early Development Instrument (EDI) was developed by Dan Offord and Magdalena Janus at the Offord Centre for Child Studies at McMaster University in Canada.<sup>1</sup> The UCLA Center for Healthier Children, Families and Communities holds a license with the EDI Publishers at McMaster University to implement the EDI with sites in the US, including with the Children and Families Commission of Orange County. The EDI is an observational checklist with 103 core items. Teachers complete a checklist online for each child in their class based on recall, typically during the second half of the school year. The EDI requires approximately 10-15 minutes per child to complete. Information collected using the EDI is reported at a group level (e.g., for a census tract, neighborhood, city, etc.) and is never reported on individual children or used as a screening or diagnostic tool.

The five core developmental areas measured by the EDI are described in the table below, along with a count of the number of items included in each area. These areas are further explained and divided into subareas in *Section III: Detailed Description of EDI Areas and Subareas*.

### Description of EDI Developmental Areas

DEVELOPMENTAL AREA	DESCRIPTION	NUMBER OF ITEMS
 Physical Health & Well-being	Absence of disease or impairment, access to adequate and appropriate nutrition, and gross and fine motor skills. Necessary gross and fine motor abilities to complete common kindergarten and first grade tasks, including items such as controlling a pencil or turning pages without tearing the pages.	13
 Social Competence	Children need to meet general standards of acceptable behavior in public places, control their behavior, cooperate with others, show respect for adult authority, and communicate feelings and needs in a socially acceptable manner.	26
 Emotional Maturity	Emotional maturity is characterized by a balance between a child's curiosity about the world, an eagerness to try new experiences, and some ability to reflect before acting. A child who is fearful and reluctant to engage in new activities misses learning opportunities that are seized upon by a child with a positive approach to life.	30
 Language & Cognitive Development	Language skills refer to vocabulary size and a child's ability to name letters and attend to the component sounds within words. Cognitive skills involve the ways in which children perceive, organize, and analyze information.	26
 Communication Skills & General Knowledge	Children must be able to understand verbal communications with other adults and children and to verbally communicate experiences, ideas, wishes, and feelings in a way that can be understood by others.	8

## II. UNDERSTANDING EDI MEASURES AND RESULTS

The EDI data file includes a number of measures to depict the developmental status of children. The key measures used are the percentage of children “vulnerable,” “at risk (for becoming vulnerable),” and “on track” by neighborhood for each of the five developmental areas. To calculate these percentages, the following four analytic steps are carried out: 1) Determine which EDI student records are valid for analysis; 2) Calculate the average score per record on each of the five developmental areas; 3)

<sup>1</sup> In Orange County, the Early Development Instrument is referred to as the Early Development Index.

Compare the scores of each valid record to the normative population cutoff scores (established in 2009-2010); and 4) Based on this comparison, categorize each child's developmental status (i.e. vulnerable, at risk, or on track) by area. These steps and other considerations are explained further in the paragraphs below.

**Determining which EDI records are valid for analysis.** The following two criteria are applied: a) the child must have been in the classroom for more than one month; and b) the EDI checklist must have at least four of the five developmental areas completed by the teacher.

**Scoring each record.** For each child's record, an average score on each of the five developmental areas is calculated by adding up the scores for all of the core items in that area and dividing by the total number of core items comprising the area. This average score then allows each record to be compared to the normative population cutoffs, specifically the "vulnerable," "at risk" and "on track" cutoffs, which are described below.

**Establishing normative population cutoffs.** The normative population cutoffs were determined using school year 2009-2010 EDI data to set a representative benchmark, which helps to compare how children are doing developmentally both across and within communities and over time. To establish these cutoffs, an average score for each area was first developed per child with data valid for analysis (N=10,244). The averages for all records valid for analysis were then sorted from lowest to highest to determine the 10<sup>th</sup> and the 25<sup>th</sup> percentile population cutoff scores for each developmental area.

- The 10<sup>th</sup> percentile cutoff is the EDI score below which 10 percent of the children are found.
- The 25<sup>th</sup> percentile cutoff is the EDI score below which 25 percent of the children are found.

#### **Categorizing children's developmental status.**

- Children are categorized as "vulnerable" in an area if the mean score of their EDI items for that area falls at or below the 10th percentile population cutoff.
- Children are categorized as "at risk (for becoming vulnerable)" in an area if the mean of their EDI items for that area is above the 10th percentile cutoff but falls at or below the 25th percentile cutoff.
- Children are categorized as "on track" in an area if the mean of their EDI items for that area falls above the 25th percentile cutoff.

NOT ON TRACK		ON TRACK >25% TO 100%
VULNERABLE 0% TO <10%	AT-RISK 10% TO ≤25%	

It is at the discretion of the researcher(s) to decide which cut off to use in any given analysis, and this will typically depend on the need and audience. The three cut off categories are all valid and reliable and have a basis for predictive validity.

Using the "vulnerable" category provides a glimpse into the groups of children who are vulnerable for problems in later childhood by casting a wide net that includes all children who may benefit from universal programs. It captures the children who are struggling, but not only those who are doing so visibly to have already been identified.<sup>2</sup> The "vulnerability" group represents children for whom cost-effective, universal preventive programs are likely to make a difference. Reporting on these children reflects the fundamental premise on which the EDI's concept has been built. It reflects the population that we are most likely to shift without costly and intensive interventions.

<sup>2</sup> For further discussion, see: <https://edi.offordcentre.com/researchers/how-to-interpret-edi-results/>

**Understanding data to use in analysis.** For reasons of confidentiality, neighborhoods with fewer than ten valid EDI records are suppressed (i.e., not reported). Neighborhoods may have less than ten records when there is a very small population of young children living in the area or when there was a low EDI participation rate among the teachers at the schools serving children living in the neighborhood.

**Thoughtful interpretation of results.** In order to use the EDI data for effective local planning and improvement efforts, it is important to consider a variety of factors that will further the understanding about what is working in neighborhoods for young children. For instance, it is important to consider EDI data in light of other important indicators that can help explain the potential reasons for the observed outcomes in child development. To do this, community characteristics should also be considered, such as the percentage of families living in poverty or the degree of linguistic isolation. Community assets such as investments made by the region that are dedicated to young children and the quantity, quality, and accessibility of services should also be considered. This information can provide insight into how service inputs in a community relate to the developmental outcomes observed for children and to identify potential service gaps as well as the areas where investments appear to be working. Additionally, it is important to consider EDI data in the context of both the percentage vulnerable *and* the actual number of children in a community. A high percentage of vulnerability in one community may, in fact, represent a smaller number of vulnerable children as compared to a lower percentage of vulnerability in a larger community.

### Overview of Subareas

Four of the five EDI areas are divided into multiple subareas and one area, Communication Skills and General Knowledge, is treated as a single subarea. Together, the five developmental areas consist of a total of 16 subareas. For the subarea analysis, children are categorized as either “not ready,” “somewhat ready,” or “ready” for school, based on how they compare to a criterion-referenced cutoff value that has been determined by the publisher’s team of experts at the Offord Centre. The criterion-referenced method for calculating subarea results is different from the norm-reference method used to calculate the developmental area level results. Therefore, there will **not be a one-to-one match** between any of the percentages reported in the subarea categories (“not ready,” “somewhat ready,” or “ready”) and the percentages reported in the area level categories (“vulnerable,” “at risk,” and “on track”).






Children who fall in the “not ready for school” category are considered to have developmental challenges in that area. Each subarea represents one aspect of a child’s development. While some subareas represent skills that a child in kindergarten is expected to have already mastered based on his/her developmental age (e.g. physical independence), others represent areas of development that are still emerging (e.g. prosocial behavior).

For more information, see *Section III: Detailed Description of EDI Area and Subareas*.

### III. DETAILED DESCRIPTION OF EDI AREA AND SUBAREAS

The EDI measures children's developmental health across five core areas, as described in the table below.

#### Description of EDI Developmental Areas

DEVELOPMENTAL AREA	DESCRIPTION
 Physical Health & Well-being	Absence of disease or impairment, access to adequate and appropriate nutrition, and gross and fine motor skills. Necessary gross and fine motor abilities to complete common kindergarten and first grade tasks, including items such as controlling a pencil or turning pages without tearing the pages.
 Social Competence	Children need to meet general standards of acceptable behavior in public places, control their behavior, cooperate with others, show respect for adult authority, and communicate feelings and needs in a socially acceptable manner.
 Emotional Maturity	Emotional maturity is characterized by a balance between a child's curiosity about the world, an eagerness to try new experiences, and some ability to reflect before acting. A child who is fearful and reluctant to engage in new activities misses learning opportunities that are seized upon by a child with a positive approach to life.
 Language & Cognitive Development	Language skills refer to vocabulary size and a child's ability to name letters and attend to the component sounds within words. Cognitive skills involve the ways in which children perceive, organize, and analyze information.
 Communication Skills & General Knowledge	Children must be able to understand verbal communications with other adults and children and to verbally communicate experiences, ideas, wishes, and feelings in a way that can be understood by others.

The EDI is further broken out into 16 subareas. For the subarea analysis, children are categorized as either “not ready,” “somewhat ready,” or “ready” for school, based on how they compare to a criterion-referenced cutoff value that has been determined by the publisher’s team of experts at the Offord Centre. The table below lays out the subareas, as well as what “ready” and “not ready” for school looks like.

## EDI Developmental Subarea Details

AREA	SUB-AREA	EDI QUESTIONS CONTRIBUTING TO SUB-AREA	WHAT “NOT READY FOR SCHOOL” LOOKS LIKE	WHAT “READY FOR SCHOOL” LOOKS LIKE
Physical Health and Well-being	Physical readiness for school day	<ul style="list-style-type: none"> <li>• Over- or underdressed for school-related activities</li> <li>• Too tired/sick to do school work</li> <li>• Late</li> <li>• Hungry</li> </ul>	Children have at least sometimes experienced coming unprepared for the school day by being dressed inappropriately, coming to school late, hungry, or tired.	Children who never or almost never experienced being dressed inappropriately for school activities, coming to school late, hungry, or tired.
	Physical independence	<ul style="list-style-type: none"> <li>• Independent in bathroom habits most of the time</li> <li>• Shows an established hand preference</li> <li>• Well-coordinated</li> <li>• Sucks a thumb/finger</li> </ul>	Children range from those who have not developed one of the three skills (independence, handedness, coordination) and/or suck a thumb to those who have not developed any of the skills and suck a thumb.	Children who are independent looking after their needs, have an established hand preference, are well coordinated, and do not suck a thumb/finger.
	Gross and fine motor skills	<ul style="list-style-type: none"> <li>• Proficient at holding a pen, crayons, or a paintbrush</li> <li>• Ability to manipulate objects</li> <li>• Ability to climb stairs</li> <li>• Level of energy throughout the school day</li> <li>• Overall physical development</li> </ul>	Children range from those who have an average ability to perform skills requiring gross and fine motor competence and good or average overall energy levels, to those who have poor fine and gross motor skills, overall energy levels, and physical skills.	Children who have an excellent ability to physically tackle the school day and have excellent or good gross and fine motor skills.
Social Competence	Overall social competence	<ul style="list-style-type: none"> <li>• Overall social/emotional development</li> <li>• Ability to get along with peers</li> <li>• Plays and works cooperatively with other children</li> <li>• Able to play with other children</li> <li>• Shows self-confidence</li> </ul>	Children who have average to poor overall social skills, low self-confidence and are rarely able to play with various children and interact cooperatively.	Children with excellent/good overall social development, very good ability to get along with other children and play with various children, usually cooperative and self-confident.
	Responsibility and respect	<ul style="list-style-type: none"> <li>• Follows rules and instructions</li> <li>• Respects the property of others</li> <li>• Demonstrates self-control</li> <li>• Demonstrates respect for adults</li> <li>• Demonstrates respect for other children</li> <li>• Accepts responsibility for actions</li> <li>• Takes care of school materials</li> <li>• Shows tolerance to someone who made mistake</li> </ul>	Children who only sometimes or never accept responsibility for actions, show respect for others and for property, demonstrate self-control, and are rarely able to follow rules and take care of materials.	Children who always or most of the time show respect for others and for property, follow rules and take care of materials, accept responsibility for actions, and show self-control.
	Approaches to learning	<ul style="list-style-type: none"> <li>• Listens attentively</li> <li>• Follows directions</li> <li>• Completes work on time</li> <li>• Works independently</li> <li>• Works neatly and carefully</li> <li>• Able to solve day-to-day problems by him/herself</li> <li>• Able to follow one-step instructions</li> <li>• Able to follow class routines without reminders</li> <li>• Able to adjust to changes in routines</li> </ul>	Children who only sometimes or never work neatly, independently, are rarely able to solve problems, follow class routines and do not easily adjust to changes in routines.	Children who always or most of the time work neatly, independently, and solve problems, follow instructions and class routines, easily adjust to changes.



AREA	SUB-AREA	EDI QUESTIONS CONTRIBUTING TO SUB-AREA	WHAT “NOT READY FOR SCHOOL” LOOKS LIKE	WHAT “READY FOR SCHOOL” LOOKS LIKE
	Readiness to explore new things	<ul style="list-style-type: none"> <li>• Curious about the world</li> <li>• Eager to play with a new toy</li> <li>• Eager to play a new game</li> <li>• Eager to play with/read a new book</li> </ul>	Children who only sometimes or never show curiosity about the world, and are eager to explore new books, toys and games.	Children who are curious about the surrounding world, and are eager to explore new books, toys and games.
Emotional Maturity	Prosocial and helping behavior	<ul style="list-style-type: none"> <li>• Tries to help someone who is hurt</li> <li>• Volunteers to help clear up a mess someone else has made</li> <li>• Will try to stop a quarrel or dispute</li> <li>• Offers to help other children who have difficulty with a task</li> <li>• Comforts a child who is crying or upset</li> <li>• Spontaneously helps to pick up objects which another child has dropped</li> <li>• Invites bystanders to join a game</li> <li>• Helps other children who are feeling sick</li> </ul>	Children who never or almost never show most of the helping behaviors; they do not help someone hurt, sick or upset, do not spontaneously offer to help, or invite bystanders to join in.	Children who often show most of the helping behaviors: helping someone hurt, sick or upset, offering to help spontaneously, and invite bystanders to join in.
	Anxious and fearful behavior	<ul style="list-style-type: none"> <li>• Is upset when left by a parent/guardian</li> <li>• Seems to be unhappy, sad, or depressed</li> <li>• Appears fearful or anxious</li> <li>• Appears worried</li> <li>• Cries a lot</li> <li>• Nervous, high-strung, or tense</li> <li>• Incapable of making decisions</li> <li>• Shy</li> </ul>	Children who often show most of the anxious behaviors; they could be worried, unhappy, nervous, sad or excessively shy, indecisive; and they can be upset when left at school.	Children who rarely or never show most of the anxious behaviors, they are happy and able to enjoy school, and are comfortable being left at school by caregivers.
	Aggressive behavior	<ul style="list-style-type: none"> <li>• Gets into physical fights</li> <li>• Bullies or is mean to others</li> <li>• Kicks, bites, hits other children or adults</li> <li>• Takes things that do not belong to him/her</li> <li>• Laughs at other children's discomfort</li> <li>• Disobedient</li> <li>• Has temper tantrums</li> </ul>	Children who often show most of the aggressive behaviors; they get into physical fights, kick or bite others, take other people's things, are disobedient or have temper tantrums.	Children who rarely or never show most of the aggressive behaviors; they do not use aggression as means of solving conflict, do not have temper tantrums, and are not mean to others.
	Hyperactive and inattentive behavior	<ul style="list-style-type: none"> <li>• Can't sit still, restless</li> <li>• Distractible, has trouble sticking to any activity</li> <li>• Fidgets</li> <li>• Impulsive, acts without thinking</li> <li>• Has difficulty awaiting turn in games or groups</li> <li>• Cannot settle for more than a few moments</li> <li>• Inattentive</li> </ul>	Children who often show most of the hyperactive behaviors; they could be restless, distractible, impulsive; they fidget and have difficulty settling into activities.	Children who never show most of the hyperactive behaviors; they are able to concentrate, settle to chosen activities, wait their turn, and most of the time think before doing something.



AREA	SUB-AREA	EDI QUESTIONS CONTRIBUTING TO SUB-AREA	WHAT “NOT READY FOR SCHOOL” LOOKS LIKE	WHAT “READY FOR SCHOOL” LOOKS LIKE
Language and Cognitive Development	Basic literacy skills	<ul style="list-style-type: none"> <li>• Knows how to handle a book</li> <li>• Able to identify at least 10 letters of the alphabet</li> <li>• Able to attach sounds to letters</li> <li>• Showing awareness of rhyming words</li> <li>• Able to participate in group reading activities</li> <li>• Experimenting with writing tools</li> <li>• Aware of writing directions in English</li> <li>• Able to write his/her own name in English</li> </ul>	Children who do not have most of the basic literacy skills: they have problems with identifying letters or attaching sounds to them, rhyming; may not know the writing directions and even how to write their own name.	Children who have all of the basic literacy skills: know how to handle a book; can identify some letters and attach sounds to some letters; show awareness of rhyming words; know the writing directions; and are able to write their own name.
	Interest in literacy/ numeracy and memory	<ul style="list-style-type: none"> <li>• Generally interested in books</li> <li>• Interested in reading</li> <li>• Able to remember things easily</li> <li>• Interested in mathematics</li> <li>• Interested in games involving numbers</li> </ul>	Children who may not show interest in books and reading, or math and number games, or both; and may have difficulty remembering things.	Children who show interest in books and reading, math and numbers; and have no difficulty remembering things.
	Advanced literacy skills	<ul style="list-style-type: none"> <li>• Able to read simple words</li> <li>• Able to read complex words</li> <li>• Able to read simple sentences</li> <li>• Interested in writing voluntarily</li> <li>• Able to write simple words</li> <li>• Able to write simple sentences</li> </ul>	Children who have only up to one of the advanced literacy skills; who cannot read or write simple words or sentences; and rarely write voluntarily.	Children who have at least half of the advanced literacy skills: reading simple, complex words or sentences; writing voluntarily writing simple words or sentences.
	Basic numeracy skills	<ul style="list-style-type: none"> <li>• Able to sort and classify objects by a common characteristic</li> <li>• Able to use one-to-one correspondence</li> <li>• Able to count to 20</li> <li>• Able to recognize numbers 1-10</li> <li>• Able to say which number is bigger of the two</li> <li>• Able to recognize geometric shapes</li> <li>• Understands simple time concepts</li> </ul>	Children who have marked difficulty with numbers; cannot count, compare, or recognize numbers; may not be able to name all the shapes and may have difficulty with time concepts.	Children who have all of the basic numeracy skills: can count to 20 and recognize shapes and numbers; compare numbers; sort and classify; use one-to-one correspondence; and understand simple time concepts.
Communication Skills and General Knowledge	Communication Skills and General Knowledge	<ul style="list-style-type: none"> <li>• Ability to use language effectively in English</li> <li>• Ability to listen in English</li> <li>• Ability to tell a story</li> <li>• Ability to take part in imaginative play</li> <li>• Ability to communicate own needs in a way understandable to adults &amp; peers</li> <li>• Ability to understand on first try what is being said to him/her</li> <li>• Ability to articulate clearly, without sound substitutions</li> <li>• Answers questions showing knowledge about the world</li> </ul>	Children who range from being average to very poor in effective communication, may have difficulty in participating in games involving the use of language, may be difficult to understand and may have difficulty understanding others; may show little general knowledge and may have difficulty with their native language.	Children who have excellent or very good communication skills; can communicate easily and effectively, can participate in story-telling or imaginative play, articulate clearly, shows adequate general knowledge, and are proficient in their native language.

## IV. EDI VARIABLES AVAILABLE (2018)

Once EDI data are collected and analyzed, UCLA provides the Commission with a de-identified data file that includes all children with an EDI record, regardless of the year data were collected. The file is stripped of any variable that could potentially identify individual children (such as address and date of birth). As the EDI information is collected at schools on a three-year cycle (e.g., a school participates in year 1 and then again in year 4), the file includes variables that allows for the selection of only those records within a three-year period.

The table below describes the variables available in the data file. Variables in **red** font are those variables that are recommended for inclusion in a typical analysis.

### EDI VARIABLES AVAILABLE (2018)

	Variable
Background Information	EDI valid for analysis
	EDI year
	Name of district
	Identification of repeat schools
	Neighborhood
	City
	Zip code
	Census block group
	Total number of valid records in neighborhood
	Suppress neighborhood—Less than 10 valid records in neighborhood
Info on Child's Health and Education	Student is repeating grade
	Days absent since start of school year
	Days absent due to illness since start of school year
	Customized Question: Child had TK experience
	Customized Question: Child ready for K on first day of school
	Customized Question: How teacher rates child's physical health
Demographics	Customized Question: Child appears sleepy in school
	Gender
	Raw age calculated from EDI completion date
	Child's race/ethnicity (available as all, 5 categories and 3 categories)
	Child receiving free/reduced lunch
	Child's first language
	Child considered ESL
	Child communicates adequately in first language
	Is underweight
Special Needs	Is overweight
	Child has IEP
	Teacher believes child has special need

	Variable
	Child referred for special education assessment
	Has problem that influences ability to do school work in regular classroom
	Physical disability (teacher observed OR Parent/Medical Diagnosis)
	Visual impairment (teacher observed OR Parent/Medical Diagnosis)
	Hearing impairment (teacher observed OR Parent/Medical Diagnosis)
	Speech impairment (teacher observed OR Parent/Medical Diagnosis)
	Learning disability (teacher observed OR Parent/Medical Diagnosis)
	Emotional problem (teacher observed OR Parent/Medical Diagnosis)
	Behavioral problem (teacher observed OR Parent/Medical Diagnosis)
	Problems at home (teacher observed OR Parent/Medical Diagnosis)
	Chronic medical/health problems (teacher observed OR Parent/Medical Diagnosis)
	Unaddressed dental needs (teacher observed OR Parent/Medical Diagnosis)
	Homelessness (teacher observed OR Parent/Medical Diagnosis)
	Received medical diagnosis or identification (With long list of type)
	Receiving school-based support
	Needs further assessment
	Waitlist for further assessment
Demonstrates Special Skills	Numeracy
	Literacy
	Art skills
	Music skills
	Athletic / dance skills
	Other special skills
Parent Involvement	Parent volunteered
	Parent attended at least one parent-teacher conference
	Teacher and parent had one-on-one conversations
EDI Results*	For each of the 5 areas, have data on:
	Mean Score on each of 5 areas
	Not on track: lowest 25th percentile
	Vulnerable: lowest 10th percentile
	At Risk: 10th-25th percentile
	On track: 25th-100th percentile
	Number of Areas not on track
	Number of Areas vulnerable
	Number of Areas at risk
	Number of Areas on track
	For each of the areas, have Subarea data (Not Ready, Middle, and Ready for School)*
	Multiple Challenges Index

Recommend including in analysis

**\*5 AREAS AND 16 SUBAREAS:**

Area	Subarea
<b>Physical Health and Well-Being</b>	Gross and fine motor skills
	Physical independence
	Physical readiness for school day
<b>Social Competence</b>	Readiness to explore new things
	Approaches to learning
	Responsibility and respect
	Overall social competence
<b>Emotional Maturity</b>	Hyperactive and inattentive behavior
	Aggressive behavior
	Anxious and fearful behavior
	Prosocial and helping behavior
<b>Language and Cognitive Development</b>	Basic numeracy skills
	Interest in literacy/numeracy and memory
	Advanced literary skills
	Basic numeracy skills
<b>Communication Skills and General Knowledge</b>	

## V. VALIDITY AND RELIABILITY OF THE EDI

The Early Development Index (EDI) has been found to be a psychometrically good indicator of child well-being. The EDI has undergone psychometric testing in Canada to ensure its reliability and validity.<sup>3</sup> Rigorous validity testing has also been carried out in Australia.<sup>4</sup> Psychometric testing of the EDI in relation to its reliability includes:

- *Internal consistency of the area*: an assurance that all items within a area measure the same concept. The internal consistency of the EDI varies from 0.84 to 0.96, which indicates a high internal consistency.
- *Test-retest-reliability*: the degree to which an informant consistently provides the same responses when questioned twice over a short period of time. The EDI varies from 0.82 - 0.94, measuring at a high level.
- *Inter-rater reliability*: the degree to which two informants agree with each other's responses. Resulting from moderate to high between kindergarten teachers depending on the areas at 0.53 – 0.80.

(Standard: low is less than 0.5; moderate is between 0.5 - 0.7; and high is more than 0.8)

The EDI has also been found to be a valid measure. Concurrent validity—which assess an instrument's performance in comparison with other previously validated instruments—has been found generally moderate when comparing the EDI areas to similar areas tested with direct assessment using three other tools.

Predictive validity—a tool's ability to predict later outcomes—includes:

- High from kindergarten to first grade<sup>5</sup>
- EDI has been found to predict basic skills performance four-years after kindergarten. Groups of children vulnerable on any one of the EDI scales are more likely to perform below expectation in all academic areas in fourth grade.<sup>6</sup>

### Additional Psychometric Research on the EDI

Below is a list of published papers with additional testing of the EDI tool.

#### *Between group reliability*

Guhn, M., Gadermann, A. & Zumbo, B.D. (2007). Does the EDI measure school readiness in the same way across different groups of children? *Early Education and Development*, 18(3), 453-472.

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<sup>3</sup> Janus, M., Offord, D., Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness. *Canadian Journal of Behavioral Sciences*, 2007. 39(1): p. 1-22.

<sup>4</sup> Janus, M., Brinkman, et al., The Early Development Instrument: A Population-Based Measure for Communities. A Handbook on Development, Properties, and Use, Offord Centre for Child Studies, 2007.

<sup>5</sup> Forget-Dubois, N., Lemelin, J., Boivin, M., Dionne, G., Predicting Early School Achievement with the EDI: A Longitudinal Population-Based Study. *Early Education and Development*. 2007. 18(3), 405-426. 6

<sup>6</sup> D'Angiulli, A., Warburton, W., Dahinten, S., Hertzman, C., (2009). PLoS ONE 4(11): Population-Level Associations between Preschool Vulnerability and Grade-Four Basic Skills.

- Guhn, M., Janus, M., & Hertzman, C. (2007). The Early Development Instrument: Translating school readiness assessment into community actions and policy planning. *Early Education and Development*, 18, 369-374. doi: 10.1080/10409280701610622
- Janus, M., & Offord, D. (2007). Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness. *Canadian Journal of Behavioural Science*, 39, 1-22.
- Muhajarine, N., Puchala, C., & Janus, M. (2011). Does the EDI equivalently measure facets of school readiness for Aboriginal and non-Aboriginal children? *Social Indicators Research*, 103(2), 299-314. doi: 10.1007/s11205-011-9847-0.
- Sam, M. A. (2011). An Indigenous knowledges perspective on valid meaning making: A commentary on research with the EDI and Aboriginal communities. *Social Indicators Research*, 103(2), 315-325. doi: 10.1007/s11205-011-9848-z.

### *Construct validity*

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## VI. CURRENT RESEARCH AND APPLICATION OF THE EDI

This section presents a description of recent research and projects that are relevant to furthering the EDI research base. This list is in no way comprehensive, but rather offers a few key examples of how data are being applied and potential uses of the EDI.

### *International Research*

**Name of Research:** Special Issue: Linda J. Harrison and Magdalena Janus (eds.) “International research utilizing the Early Development Instrument (EDI) as a measure of early child development.” *Early Childhood Research Quarterly*, Volume 35, 2nd Quarter 2016.

**Summary:** *Early Childhood Research Quarterly* recently devoted a Special Issue to international research using Early Development Instrument (EDI). The Canadian EDI and its adaptations to the Australian Early Development Census (AEDC), as well as the Chinese version used in Hong Kong, are examples of an assessment tool that brings data on child development at 4–6 years to a population level, in an accessible, feasible, and psychometrically valid manner. EDI measures are increasingly being used by governments, at all levels of jurisdiction, as a means of monitoring the status of early childhood development and then tracking progress over time. Recent innovations linking administrative datasets with EDI data have enabled research into the predictors, correlates, and sequelae of developmental status in early childhood. The eleven papers included in the Special Issue represent thoughtful, systematic, theory-based programs of research, informed by the broad scope of the EDI and supported by the availability of data for large, normative populations and especially often under-reported sub-populations of children.

**Name of Research:** Guhn, M., Janus, M., Enns, J., Brownell, M., Forer, B., Duku, E., Muhajarine, N., & Raos, R. (2016). Examining the social determinants of children's developmental health: protocol for building a pan-Canadian population-based monitoring system for early childhood development. *BMJ Open*, 6(4). doi: 10.1136/bmjopen-2016-012020

**Summary:** The EDI is being used to address a gap in Canada between policies and practices that optimize children's health/development and the lack of nationally representative data on social indicators of children's well-being. The purpose of this protocol is to describe the Canadian Neighbourhoods and Early Child Development (CanNECD) Study, the aims of which are to create a pan-Canadian EDI database to monitor trends over time in children's developmental health and to advance research examining the social determinants of health. The project will take Canada-wide EDI records from 2004 to 2014 (representing over 700,000 children) and link them to Canada Census and Income Taxfiler data. Variables of socioeconomic status derived from these databases will be used to predict neighborhood-level EDI vulnerability rates by conducting a series of regression analyses and latent variable models at provincial/territorial and national levels. Where data are available, the project will measure the neighborhood-level change in developmental vulnerability rates over time and model the socioeconomic factors associated with those trends.

### *Local EDI Use/Projects*

For more details about the status of these projects, contact:

Tiffany Alva, Early Learning Director, Children and Families Commission of Orange County, [tiffany.alva@cfcoc.ocgov.com](mailto:tiffany.alva@cfcoc.ocgov.com); (714) 567-0109

**Name of Research:** Duncan, RJ, Duncan, GJ, Stanley, L, Aguilar, E & Halfon, N (2018). The Kindergarten Early Development Instrument Predicts Third Grade Mathematics and English Language Arts Proficiency.

Note: article not yet published. The preliminary predictive validity research, can be accessed here: <http://occhildrenandfamilies.com/wp-content/uploads/2017/08/EDI-OC-Predictive-Validity-report-v1-5-18-17.pdf>

**Summary:** Study conducted by the University of California-Irvine and the University of California-Los Angeles to examine the ability of the EDI school readiness assessment to predict later educational outcomes. The study used data from roughly 3,000 children followed longitudinally from kindergarten through third grade from seven school districts in Orange County. The study assessed whether EDI ratings in kindergarten predict third grade proficiency in mathematics and English Language Arts on state assessments. Ratings on the EDI were strongly associated with proficiency in both academic areas, even in the presence of controls for child-level factors and neighborhood fixed effects. Among its correlated components, ratings on the language and cognitive development, communication skills and general knowledge, and social competence areas strongly differentiated children's likelihood of later proficiency in both academic areas.

**Name of Project:** Advancing the understanding of influences on child abuse and neglect and early childhood school readiness

**Summary:** Pilot project conducted by the University of Southern California to advance research on factors affecting neighborhood rates of child abuse and neglect and their impact on early childhood development, and on informing community-level maltreatment prevention planning efforts. Pilot will include neighborhood-based resident interviews to assess social/environmental constructs related to child abuse and neglect in 8-10 neighborhoods in Orange County (4-5 with unusually high and 4-5 with unusually low levels of child abuse and neglect, demographically matched). Working with the Children and Families of Orange County of Orange County, USC will match official child abuse and neglect data and neighborhood-level data with EDI data. Matching of these data sources will allow for the highly unusual ability to triangulate on neighborhood levels of child neglect through independent sources, and to test for population differences among young children in levels of social-emotional development in neighborhoods with very similar demographic profiles but very different profiles of overall abuse and neglect rates.

## Exploring EDI Changes Over Time

### **Name of Project:** EDI Wave Data Analysis

**Background:** EDI data are collected in groups called waves. In Orange County, each wave is comprised of data collected from three consecutive school years. Wave 1 encompasses the years 2013-2015 and Wave 2 includes the years 2016-2018.

**Summary:** To assist communities in making informed judgments about change over time in the EDI scores, the Human Early Learning Partnership (HELP) at the University of British Columbia has developed a method called critical difference. HELP defines a critical difference as, “the amount of change over two time points in an area’s EDI vulnerability rate that is large enough to be considered as meaningful in the statistical sense. A meaningful change means we are confident the change in the vulnerability rate is real, rather than as a result of uncertainty due to sampling or measurement issues.”<sup>7</sup>

HELP has developed a critical difference calculator that can be applied in two ways: 1. Calculate if a change in the EDI vulnerability rate for one area (e.g., neighborhood) is significant between two *time periods*, and 2. Calculate if the difference in EDI vulnerability rates between two *areas* (e.g., between two neighborhoods) is significant during the same time period.

With support from the Commission, the UCLA Center for Healthier Children, Families, and Communities is developing the mechanism to analyze change over time in EDI neighborhoods within the two completed waves. Their final report for Orange County is scheduled for release June 2019.

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<sup>7</sup> Human Early Learning Partnership, “Understanding Critical Difference in EDI Results”. 2015 Research Brief [http://earlylearning.ubc.ca/media/publications/critical\\_difference\\_web\\_november\\_2015.pdf](http://earlylearning.ubc.ca/media/publications/critical_difference_web_november_2015.pdf)

## VII. USING THE EDI DATA FOR RESEARCH

Before the local EDI de-identified data file can be shared, the Children and Families Commission of Orange County must first receive:

1. A signed non-disclosure EDI Agreement (see *Section VIII, Letter of Understanding*);
2. A description of the specific research project;
3. A justifiable rationale for why the individual level data are needed (instead of aggregated data);
4. A description of the data use AND security procedures; and
5. Proof that ethics approval from a qualified authority has been received in cases where the data will be used for research.

In addition, researchers must also follow rules their ethics board applies to their research project.

## EDI LETTER OF UNDERSTANDING

(Date)

(Organization)

Attn: (Name)

(Address)

**SUBJECT:** Agreement to Use Early Development Index Data for Local Planning by Non-COMMISSION Grantees

The Children and Families Commission of Orange County (COMMISSION”) will provide Early Development Index (EDI) data for local planning upon evidence of agreement with the following terms and conditions. The EDI Recipient agrees:

1. To properly acknowledge the COMMISSION in any reproduction of the EDI or materials relating to the EDI. The following statement should be included in all collateral materials created: “The Early Development Index (EDI) is funded through the Children & Families Commission of Orange County and developed in collaboration with the UCLA Center for Healthier Children, Families and Communities.”
2. The COMMISSION logo will be included with all EDI-related products developed.
3. That EDI-related data does not include children’s names, it will not be interpreted for individual children, and it will not be used for diagnosis or identification.
4. That data will not be reported at the individual child level.
5. That the data files will be kept in a secure, password-protected location at site of EDI Recipient. Any analysis conducted by EDI Recipient will ensure that all confidentiality is protected and that data are only presented at the group level.
6. The EDI data files may not be shared electronically with any other entities.
7. As of the date of this LOU, EDI data are provided free of charge. The COMMISSION reserves the right to charge money in future years to recover the costs of data analysis.
8. Within 180 days of receiving the EDI data, a report must be submitted to the COMMISSION, which describes how the EDI data was used, any actions triggered by

the data, and the impact of the data. Failure to provide this report may result in denial of future access to EDI data in subsequent years.

9. The data files provided by the COMMISSION are to be used solely for the stated request submitted. If it is used for another purpose (e.g., in addition to using it for the stated purpose, it is used in other presentations), please submit a new EDI Report Use form with the new way data were used.

10. This agreement is effective for EDI data collected during the FY 2017/18 data collection cycle.

11. Please submit a copy of any collateral materials developed with the EDI data to:

Tiffany Alva  
Early Learning Director  
Children and Families Commission of Orange County  
Email: [Tiffany.Alva@cfcoc.ocgov.com](mailto:Tiffany.Alva@cfcoc.ocgov.com)  
1505 E. 17<sup>th</sup> Street, Suite 230  
Santa Ana, California 92705  
(714) 567-0109

The COMMISSION reserves the right to change these terms and conditions periodically at its sole discretion. Recipient's continued use of the EDI data constitutes acceptance of the terms and conditions stated at the time of use.

I concur with the requirements indicated above for use of the EDI data.

_____	_____
Name	Title
_____	
Agency	
_____	_____
Signature	Date

## VIII. 2015 THROUGH 2018 EDI RECORDS SNAPSHOT

The tables below present the number of EDI records available, by year and select demographics.

Year	Total Collected	Total Valid
2010	4,010	3,929
2011	1,305	1,285
2012	6,163	5,912
2013	6,398	6,289
2014	14,674	14,382
2015	13,884	13,644
2016	5,593	5,491
2017	12,406	12,206
2018	14,870	14,645
<b>Total</b>	<b>79,303</b>	<b>77,783</b>

Note: in 2014, there was a spike in the number of EDI records collected due to Commission ramp up and commitment to achieving 100% participation from all public schools with a kindergarten population in Orange County. In 2015, 100% data collection from schools was achieved. 2014 and 2015 data include both kindergarten and transitional kindergarten students.

EDI data are aggregated in three-year cycles so that the 2018 columns below include data collected in 2016, 2017 and 2018, the 2017 columns include data collected in 2015, 2016, and 2017, and so forth. The data in these tables include only valid EDI records for kindergarten students.

Free/Reduced Price Lunch	2015	2016	2017	2018
Free	5,282	6,535	7,343	7,532
Reduced Price	954	1,208	10,442	8,831
No Assistance	8,323	10,532	1,387	1,707
<b>Total</b>	<b>14,559</b>	<b>18,275</b>	<b>19,172</b>	<b>18,070</b>

Note: not all districts provide information on free/reduced price lunch, hence the smaller N.

Gender	2015	2016	2017	2018
Male	14,753	14,213	14,429	14,482
Female	13,826	13,410	13,874	14,235
<b>Total</b>	<b>28,579</b>	<b>27,623</b>	<b>28,303</b>	<b>28,717</b>

Has Individualized Education Plan (IEP)	2015	2016	2017	2018
Yes	1,719	1,743	1,990	2,091
No	26,720	25,804	26,245	26,584
Don't know	141	75	66	40
<b>Total</b>	<b>28,580</b>	<b>27,622</b>	<b>28,301</b>	<b>28,715</b>



Child considered English Language Learner (ELL)	2015	2016	2017	2018
Yes	12,712	11,954	11,987	17,147
No	15,868	15,670	16,316	11,570
<b>Total</b>	<b>28,580</b>	<b>27,624</b>	<b>28,303</b>	<b>28,717</b>

Child's first language	2015	2016	2017	2018
English	15,482	15,346	15,768	16,592
Spanish	9,902	9,138	9,602	8,888
Vietnamese	1,339	1,207	1,131	1,090
Korean	462	441	390	442
Filipino (Pilipino or Tagalog)	96	81	78	96
Cantonese	86	60	37	42
Other	1,213	1,351	1,297	1,567
<b>Total</b>	<b>28,580</b>	<b>27,624</b>	<b>28,303</b>	<b>28,717</b>

Child communicates adequately in first language	2015	2016	2017	2018
Yes	23,827	22,913	23,528	23,659
No	1,499	1,508	1,599	1,581
Don't know	3,254	3,201	3,174	3,476
<b>Total</b>	<b>28,580</b>	<b>27,622</b>	<b>28,301</b>	<b>28,716</b>

Child's race/ethnicity	2015	2016	2017	2018
Asian/Native Hawaiian/other PI	4,794	4,945	4,481	5,219
Hispanic, Latino/a	13,129	12,822	14,667	14,430
White	7,686	7,578	7,167	7,071
Other	2,926	2,222	1,934	1,955
<b>Total</b>	<b>28,535</b>	<b>27,567</b>	<b>28,249</b>	<b>28,675</b>

Parent volunteered in classroom	2015	2016	2017	2018
Yes	11,774	11,508	11,457	11,923
No	16,801	16,107	16,838	16,787
<b>Total</b>	<b>28,575</b>	<b>27,615</b>	<b>28,295</b>	<b>28,710</b>

Had transitional kindergarten experience	2015	2016	2017	2018
Yes	2,731	3,546	4,789	5,858
No	22,787	19,948	18,433	17,731
Don't know	2,789	2,973	2,897	3,193
<b>Total</b>	<b>28,307</b>	<b>26,467</b>	<b>26,119</b>	<b>26,782</b>

## Appendix A: EDI Glossary of Terms

**Children Developmentally Vulnerable:** A Child is “developmentally vulnerable” in an area if the mean of his/her EDI items for that area falls at or below the 10<sup>th</sup> percentile cutoff.

**Children Developmentally At Risk (for becoming vulnerable):** A Child is “developmentally at risk” in an area if the mean of his/her EDI items for that area falls at or below the 25<sup>th</sup> percentile cutoff and above the 10<sup>th</sup> percentile.

**Children Developmentally Not On Track:** A child is “developmentally not on track” in an area if the mean of his/her EDI items for that area falls at or below the 25<sup>th</sup> percentile cutoff. Not On Track is the sum of Vulnerable and At Risk.

**Children Developmentally On Track:** A child is “developmentally on track” in an area if the mean of his/her EDI items for that area falls above the 25<sup>th</sup> percentile cutoff.

**Early Development Index (EDI):** The Early Development Index (EDI), a tool developed by Drs. Dan Offord and Magdalena Janus of the Offord Centre for Child Studies at McMaster University in Canada, is a population measure of young children’s development from a 103-item checklist completed by teachers. The EDI measures five developmental areas:

- Physical health and well-being
- Social competence
- Emotional maturity
- Language and cognitive skills
- Communication skills and general knowledge

The EDI also includes questions on child demographics, special problems, prior childcare, and parent involvement in the classroom.

**EDI Cutoff:** Each of the five areas in the EDI has a population cutoff for “developmentally vulnerable,” “at risk,” and “on track.” The normative population cutoffs were determined using 2009-2010 data to set a representative benchmark which helps to compare how children are doing developmentally both across and within sites and across years. To establish these cutoffs, an average score for each area was first developed per child with valid data (N=10,244). The averages for all records valid for analysis were then sorted from lowest to highest to determine the 10<sup>th</sup> and the 25<sup>th</sup> percentile population cutoffs for each developmental area.

**EDI Participation Rate:** The participation rate is calculated by dividing the total number of students living in the neighborhood with valid EDI records (the numerator) by the estimated total number of eligible children living in the neighborhood (the denominator), based on US Census American Community Survey (ACS) 5-Year estimates. The denominator is a derived calculation of young children between the ages of four and seven years old based on the proportion of the respective age groups within the sample.

For example, if the sample consists of zero percent four-year-olds; 50 percent five-year olds; 49 percent six-year-olds; and one percent 7-year-olds, the calculation for the total count of eligible children in the neighborhood will follow this formula: (ACS 4-year-old count \* 0) + (ACS 5-yearold count \* 0.50) + (ACS 6-year-old count \* 0.49) + (ACS 7-year-olds count \* 0.01).

**Neighborhood:** An EDI neighborhood may be a census tract, an aggregation of census geographies, or some other pre-existing or newly created local geographic boundaries identified by the community. Criteria which guided the selection of neighborhood boundaries included that they should be: 1) Contiguous (no gaps and no overlapping boundaries); 2) Small enough to identify distinct populations of children but large enough to represent a distinct, community defined neighborhood; 3) Recognizable by local residents; 4) Useful from a local planning perspective; 5) Consistent with census lines to maximize data analysis opportunities; and 6) Inclusive of the entire target geography.

**Multiple Challenge Index (MCI):** The Multiple Challenge Index (MCI) identifies groups of children who have multiple challenges and therefore are considered to be experiencing serious problems. Children are categorized as having multiple challenges when they fall in the “not ready” category on nine or more of the 16 subareas, which also translates to being categorized as vulnerable on at least three of the five EDI areas.

**On Track on All Valid Areas:** Children whose EDI score is above the 25<sup>th</sup> percentile (i.e. are “developmentally on track”) on all valid areas. A record may be valid with as few as four completed areas.

**Subarea:** Four of the five areas are divided into multiple subareas and one area (Communication Skills and General Knowledge), is treated as a single subarea. Together, the five areas consist of a total of 16 subarea. For the subarea analysis, children are categorized as either “not ready,” “somewhat ready,” or “ready” for school based on how they compare to a cut off value that has been determined by the publishers at the Offord Centre. This method contrasts with that used for the overarching area level analysis which categorizes children as either “vulnerable,” “at risk,” or “on track” based on how they compare to a cut off value that has been derived from a US normative sample taken in 2009-2010.

**Suppressed Data:** Suppressed data are records with valid addresses but not reported in the maps because they are in neighborhoods with fewer than ten valid records for analysis.

**Valid for Analysis:** For a child’s record to be valid for analysis: 1) Child must have been in the classroom for more than one month; and 2) The EDI must have at least four of the five areas completed by the teacher.

**Vulnerable on One or More Areas:** Children whose EDI score is at or below the 10<sup>th</sup> percentile (i.e. are “developmentally vulnerable”) on at least one of the five areas.

## Appendix B: EDI Questionnaire (2017-2018)

### EARLY DEVELOPMENT INSTRUMENT A Population-Based Measure for Communities 2017-2018



Please fill in the circles like  
this ☒ or ☐ NOT ☒

Please use a blue or black  
ballpoint pen.

Please print in capital letters  
& avoid contact with the  
edge of the box. **A32**

State ID

District ID

Teacher or Class ID

EDI ID

**1. Classroom length/time:**

☐ Half-day a.m.

☐ Half-day p.m.

☐ Full day

☐ Other (specify)

**2. Child's date of birth:**

mm / dd / yy

  /   /  

**3. Sex:** ☐ F ☐ M

**4. Zip code:**

     -    

**5. Date of completion:**

mm / dd / yy

  -   -  

- |   |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|
| 0 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 1 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**6. Child has an Individualized Education Program (IEP) or equivalent?**

☐ Yes ☐ No ☐ Don't know

**7. Do you believe this child has a special need?**

☐ Yes ☐ No

**8. Child has been referred for assessment(s) to determine if s/he qualifies for special education services:**

☐ Yes ☐ No ☐ Don't know

**9. Child considered an English Language Learner (ELL)?**

☐ Yes

☐ No



10. What is the child's first language?

--	--

(See Guide for codes)

 11. Does the child communicate adequately in his/her first language:

☐ Yes ☐ No ☐ Don't know

12. Is this year a repeat of kindergarten for this child?

☐ Yes ☐ No

13. Child's race/ethnicity:

--

(See Guide for codes)

14. Student Status: ☐ in class more than 1 month

(Stop: End survey here)

- ☐ in class less than 1 month
- ☐ moved out of class
- ☐ moved out of school
- ☐ parents opted out
- ☐ other, please specify

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## Section A - Physical Well-being

1. About how many regular days (see *Guide*) has this child been absent since the beginning of the school year?

Number of days absent:

--	--	--

2. How many of these days can be attributed to being sick?

Number of days sick:

--	--	--

**Since the start of the school year, has this child sometimes (more than once) arrived:**

	Yes	No	Don't Know
3. over- or under-dressed for school-related activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. too tired/sick to do school work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. late	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. hungry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Would you say that this child:**

	Yes	No	Don't Know
7. is independent in bathroom habits most of the time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. shows an established hand preference (right vs. left or vice versa)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. is well coordinated (i.e., moves without running into or tripping over things)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Sometimes teachers may observe that their students are either underweight or overweight. Do you feel that this child:**

	Yes	No	Don't Know
10. is underweight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. is overweight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**How would you rate this child's:**

	Very Good/ Good	Average	Poor/ Very Poor	Don't Know
12. proficiency at holding a pen, crayons, or a paintbrush	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. ability to manipulate objects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. ability to climb stairs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. level of energy throughout the school day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. overall physical development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## Section B - Language and Cognitive Skills

*How would you rate this child's:*

	Very Good/ Good	Average	Poor/ Very Poor	Don't Know
1. ability to use language effectively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. ability to listen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. ability to tell a story	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. ability to take part in imaginative play	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. ability to communicate own needs in a way understandable to adults and peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. ability to understand on first try what is being said to him/her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. ability to articulate clearly, without sound substitutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Would you say that this child:*

	Yes	No	Don't Know
8. knows how to handle a book (e.g., turn a page)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. is generally interested in books (pictures and print)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. is interested in reading (inquisitive/curious about the meaning of printed material)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. is able to identify at least 10 letters of the alphabet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. is able to attach sounds to letters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. is showing awareness of rhyming words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. is able to participate in group reading activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. is able to read simple words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. is able to read complex words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. is able to read simple sentences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. is experimenting with writing tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. is aware of writing directions (left to right, top to bottom)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. is interested in writing voluntarily (and not only under the teacher's direction)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. is able to write his/her own name	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. is able to write simple words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


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## Section B - Language and Cognitive Skills

**Would you say that this child:**

	Yes	No	Don't Know
23. is able to write simple sentences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. is able to remember things easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. is interested in mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. is interested in games involving numbers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. is able to sort and classify objects by a common characteristic (e.g., shape, color, size)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. is able to use one-to-one correspondence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. is able to count to 20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. is able to recognize numbers 1 - 10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. is able to say which number is bigger of the two	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 32. is able to recognize geometric shapes (e.g., triangle, circle, square)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. understands simple time concepts (e.g., today, summer, bedtime)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. demonstrates special numeracy skills or talents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. demonstrates special literacy skills or talents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. demonstrates special skills or talents in arts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. demonstrates special skills or talents in music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. demonstrates special skills or talents in athletics/dance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. demonstrates special skills or talents in problem solving in a creative way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. demonstrates special skills or talents in other areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*(If yes, please specify:*

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## Section C - Social and Emotional Development

**How would you rate this child's:**

	Very Good/ Good	Average	Poor/ Very Poor	Don't Know
1. overall social/emotional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. ability to get along with peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Below is a list of statements that describe some of the feelings and behaviors of children. For each statement, please fill in the circle that best describes this child now or within the past six months.**

**Would you say that this child:**

	Often or Very True	Sometimes or Somewhat True	Never or Not True	Don't Know
3. plays and works cooperatively with other children at the level appropriate for his/her age	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. is able to play with various children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. follows rules and instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. respects the property of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. demonstrates self-control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. shows self-confidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 9. demonstrates respect for adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. demonstrates respect for other children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. accepts responsibility for actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. listens attentively	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. follows directions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. completes work on time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. works independently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. takes care of school materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. works neatly and carefully	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
 18. is curious about the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. is eager to play with a new toy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. is eager to play a new game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. is eager to play with/read a new book	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## Section C - Social and Emotional Development

*Would you say that this child:*

	Often or Very True	Sometimes or Somewhat True	Never or Not True	Don't Know
22. is able to solve day-to-day problems by him/herself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. is able to follow one-step instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. is able to follow class routines without reminders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. is able to adjust to changes in routines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. answers questions showing knowledge about the world (e.g., leaves fall in the autumn, apple is a fruit, dogs bark)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. shows tolerance to someone who made a mistake (e.g., when a child gives a wrong answer to a question posed by the teacher)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. will try to help someone who has been hurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. volunteers to help clear up a mess someone else has made	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. if there is a quarrel or dispute will try to stop it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. offers to help other children who have difficulty with a task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. comforts a child who is crying or upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. spontaneously helps to pick up objects which another child has dropped (e.g., pencils, books)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. will invite bystanders to join in a game	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. helps other children who are feeling sick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. is upset when left by parent/guardian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. gets into physical fights	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. bullies or is mean to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. kicks, bites, hits other children or adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. takes things that do not belong to him/her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. laughs at other children's discomfort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. can't sit still, is restless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. is distractible, has trouble sticking to any activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. fidgets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. is disobedient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. has temper tantrums	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. is impulsive, acts without thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## Section C - Social and Emotional Development

Would you say that this child:

	Often or Very True	Sometimes or Somewhat True	Never or Not True	Don't Know
48. has difficulty awaiting turn in games or groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. cannot settle to anything for more than a few moments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. is inattentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. seems to be unhappy, sad, or depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. appears fearful or anxious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. appears worried	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. cries a lot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. is nervous, high-strung, or tense	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. is incapable of making decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. is shy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
58. sucks a thumb/finger or piece of clothing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section D - Special Concerns

- Does the student have a problem that influences his/her ability to do school work in a regular classroom (based on parent information, medical diagnosis, and/or teacher observation)?
  - ☐ Yes
  - ☐ No (Skip to Section E)
  - ☐ Don't Know (Skip to Section E)
- If YES above, please mark all that apply. Please base your answers on teacher observation and/or parent guardian information and/or medical diagnosis.

	Yes, teacher observed	Yes, parent info/medical diagnosis		Yes, teacher observed	Yes, parent info/medical diagnosis
physical disability	<input type="radio"/>	<input type="radio"/>	home environment/problems at home	<input type="radio"/>	<input type="radio"/>
visual impairment	<input type="radio"/>	<input type="radio"/>	chronic medical/health problems	<input type="radio"/>	<input type="radio"/>
hearing impairment	<input type="radio"/>	<input type="radio"/>	unaddressed dental needs	<input type="radio"/>	<input type="radio"/>
speech impairment	<input type="radio"/>	<input type="radio"/>	homelessness	<input type="radio"/>	<input type="radio"/>
learning disability	<input type="radio"/>	<input type="radio"/>	other (if known, please print clearly)	<input type="radio"/>	<input type="radio"/>
emotional problem	<input type="radio"/>	<input type="radio"/>			
behavioral problem	<input type="radio"/>	<input type="radio"/>			

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## Section D - Special Concerns

3. If the child has received a diagnosis or identification by a doctor or psychological professional, please indicate. (See Guide for codes)

☐ Not Applicable

☐ Don't Know

4. Is the child receiving any school based support(s) (e.g., educational assistant, equipment)?

Yes

No

Don't Know

☐

☐

☐

5. a) Do you feel that this child needs further assessment?

☐

☐

☐

- b) Is the child currently on a wait list to receive further assessment?

☐

☐

☐

## Section E - Additional Questions

To the best of your knowledge, please mark all that apply to this child:

1. Has the child attended a special education preschool program or other early intervention program/services (e.g., speech therapy)?

Yes

No

Don't Know

☐

☐

☐

Specify type of program, if known:

2. In the year prior to kindergarten entry, has the child been in non-parental child care on a regular basis?

☐ Yes

☐ No

(Skip to question 3)

☐ Don't Know (Skip to question 3)

- 2a) If yes, please specify type of child care arrangement (see Guide): Mark all that apply.

☐ Center-based

☐ Child's home

☐ Other (please specify )

☐ Other home-based (in someone else's home)

☐ Don't Know (If No or Don't Know, skip to Question 3)

- 2b) To the best of your knowledge, in the year prior to the child's entry to kindergarten, was the child care arrangement:

Full-time

Part-time

Don't Know

☐

☐

☐

3. Since the beginning of the school year, has the parent/guardian volunteered in the classroom, on a classroom project, field trip, etc.?

Yes

No

☐

☐

4. Has a parent/guardian attended at least one parent-teacher conference?

☐

☐

5. Apart from parent-teacher conferences, have you had one-on-one conversations with the student's parent/guardian (either by phone or face-to-face)?

☐

☐

If you have any comments about this child and her/his readiness for school, please print them below. **\*\*Please do not include the child's name below\*\***

