

# EARLY DEVELOPMENT INDEX (EDI) DISTRICT PROFILE REPORT

#### 2016

#### **Tustin Unified School District**

Prepared by: Children and Families Commission of Orange County and UCLA Center for Healthier Children, Families and Communities

Below is a brief overview of the Early Development Index (EDI), what it measures and how the results can be used. This overview also provides you with an explanation of how to interpret the report.

What is the EDI? It is a checklist filled out on all children in kindergarten that was developed by the Offord Centre for Child Studies at McMaster University in Canada. The Children & Families Commission of Orange County, which invests in programs and organizations to ensure that all children in Orange County are healthy and ready to learn when they enter school, is leading this effort in partnership with the UCLA Center for Healthier Children, Families and Communities.

What does the EDI measure? The EDI includes five key domain areas (described in Figure 1) and is used to produce holistic, community-level measures of childhood development during the kindergarten year. The EDI identifies the percentage of children who are vulnerable and on track by developmental domain and compares this information by target community. The EDI is *not* designed to screen, identify or diagnose individual children. The EDI can be used to monitor populations of children over time, report on populations of children in different communities, predict how groups of children will do in elementary school, and inform policies concerning young children and their families.

Figure 1. Description of EDI Developmental Domains

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Domain	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.						

**How are EDI data interpreted?** This report depicts the percent of children "not on track" and "on track" in your district by the five developmental domains. Children are "not on track" in a domain if their mean EDI score for that domain falls at or below the 25<sup>th</sup> percentile normative cutoff. Conversely, children are "on track" in a domain if their mean EDI score for that domain falls above the 25<sup>th</sup> percentile.

How are the EDI results used in communities? You have received a district profile report that shows the EDI results for the children in your district. The community will receive a community profile report, which combines data from multiple schools to show how EDI results vary neighborhood by neighborhood. For the community profile report, results are geographically mapped to other socio-demographic and community indicators. This allows communities to reflect on where and why children are doing better and or worse in particular geographic and developmental areas. EDI maps help to "put children on the map" and are useful tools to engage communities in a data-driven process to inform and improve early childhood service systems.

The tables below present EDI data collected between 2014 and 2016 for your participating schools from your district as well as all districts in Orange County. The columns labeled "All Participating Schools in District" include all the schools that participated this year and in the prior two school years, as applicable. Table 1 presents data on the number of EDI records collected, as well as the demographic characteristics of the children with EDI records. Table 2 indicates the number and percent of kindergarteners who are categorized as developmentally not on track (this includes *vulnerable* (lowest  $10^{th}$  percentile) and *at risk* ( $10^{th}$ - $25^{th}$  percentile)) as well as children who are developmentally on track ( $25^{th}$  –  $10^{th}$  percentile.

**Table 1. Descriptive Characteristics:** 

		icipating in District	•	ting Districts ge County
Number of EDI Records Collected	1,362		32,074	
Number and Percent of EDI Records Valid for Analysis	1,350	99%	31,496	98%
Number and Percent of Participating Schools in District	18	100%	379	100%
Student Demographics	N	%	N	%
Race/ethnicity*				
African-American, Black	36	3%	502	2%
Asian, Native Hawaiian, or other Pacific Islander	218	16%	5,644	18%
Hispanic, Latino/a	687	51%	14,764	47%
White	334	25%	8,463	27%
Other/Multiracial	74	5%	2,064	6%
Mean Age (years, months)	5 years, 11	L months	5 years, 1	0 months
Females	670	50%	15,269	48%
Students with ELL Status	498	37%	13,832	44%
Students with an IEP	79	6%	2,002	6%
Needs Further Assessment	74	5%	1,916	6%
Waitlisted for Further Assessment	38	3%	762	2%
K Students with TK Experience**	134	10%	3,613	11%
Parents/Guardians Volunteered in Classroom	569	42%	13,011	41%

Data Sources: 1) School district data for race/ethnicity and age; 2) Teacher Reported EDI Checklist for gender, ELL status, IEP status, assessment questions, and special problems.



<sup>\*</sup> Due to missing data, the percents may not add up to 100%.

<sup>\*\*</sup>As of 2015/16 school year, only kindergarten students—rather than kindergarten and transitional kindergarten students—are participating in the EDI data collection.

Table 2. Children Not on Track and On Track by Developmental Domain: Comparison of Individual Districts (N=605) to All Participating Districts in Orange County (N=31,496)

			C	hildren N		Children	On Track					
	Children I		ally Vulnerab centile)	le (lowest	Children	Developmen perce	ntally At Risk ( entile)	(10 <sup>th</sup> -25 <sup>th</sup>	Children Developmentally On Track (25 <sup>th</sup> -100 <sup>th</sup> percentile)			
Domain	All Participating Schools in District		All Participating Districts in Orange County		All Participating Schools in District		All Participating Districts in Orange County		All Participating Schools in District		All Participating Districts in Orange County	
	N*	%	N*	%	N*	%	N*	%	N*	%	N*	%
Physical Health & Well-being	83	6%	2,434	8%	161	12%	3,948	13%	1,106	82%	25,110	80%
Social Competence	89	7%	2,756	9%	192	14%	4,397	14%	1,069	79%	24,342	77%
Emotional Maturity	83	6%	2,327	7%	178	13%	4,004	13%	1,080	81%	24,883	80%
Language & Cognitive Development	112	8%	3,455	11%	196	15%	6,310	20%	1,042	77%	21,711	69%
General Knowledge & Communication	142	11%	3,484	11%	215	16%	5,242	17%	993	74%	22,764	72%

Totals of 99 percent and 101 percent are due to rounding.

	Number of Domains Not on Track											
		None		1		2		:	4		5	5
	N	%	N	%	N	%	N	%	N	%	N	%
All Participating Schools in District	724	54%	230	17%	155	11%	109	8%	76	6%	56	4%
All Participating Districts in Orange County	15,426	49%	5,783	18%	3,816	12%	2,637	8%	2,139	7%	1,695	5%

Data Source: Teacher Reported EDI Checklist

<sup>\*</sup> Due to missing data, the N may differ by developmental domain



Tables 3 through 7 present EDI data, by sub-domain. For the sub-domain 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 publishers at the Offord Centre. This method contrasts with that used for the overarching domain level analysis (Table 2), which categorizes children as "on track" and "not on track" based on how they compare to a cut off value that has been derived from a U.S. normative sample taken in 2009-2010.

Table 3. EDI Sub-domain - Physical Health and Well-being

Sub dancain			rticipating s in District		All Participating Districts in Orange County			
Sub-domain	N	Not Ready	Somewhat Ready	Ready	N	Not Ready	Somewhat Ready	Ready
Physical readiness for school day*	1,350	N/A	2%	98%	31,490	2%	N/A	98%
Physical independence*	1,350	N/A	8%	92%	31,493	11%	N/A	89%
Gross and fine motor skills	1,350	34%	16%	50%	31,488	36%	16%	48%

Data Source: Teacher Reported EDI. Totals of 99 percent and 101 percent are due to rounding.

Table 4. EDI Sub-domain - Social Competence

			rticipating s in District		All Participating Districts in Orange County			
Sub-domain	N	Not Ready	Somewhat Ready	Ready	N	Not Ready	Somewhat Ready	Ready
Overall social competence	1,349	9%	42%	49%	31,487	10%	44%	45%
Responsibility and respect	1,350	5%	18%	77%	31,494	7%	18%	74%
Approaches to learning	1,350	9%	30%	61%	31,495	11%	29%	60%
Readiness to explore new things	1,346	3%	18%	79%	31,086	3%	18%	79%

Data Source: Teacher Reported EDI. Totals of 99 percent and 101 percent are due to rounding.



<sup>\*</sup> The "somewhat ready" category does not apply because the response options on the EDI for these sub-domains were dichotomous (yes/no).

**Table 5. EDI Sub-domain - Emotional Maturity** 

			rticipating s in District		All Participating Districts in Orange County			
Sub-domain	N	Not Ready	Somewhat Ready	Ready	N	Not Ready	Somewhat Ready	Ready
Prosocial and helping behavior	1,274	34%	32%	33%	29,540	32%	31%	37%
Anxious and fearful behavior	1,347	3%	7%	90%	31,461	2%	9%	89%
Aggressive behavior	1,344	4%	4%	91%	31,418	7%	6%	88%
Hyperactive and inattentive behavior	1,345	12%	12%	76%	31,449	14%	14%	72%

Data Source: Teacher Reported EDI. Totals of 99 percent and 101 percent are due to rounding.

**Table 6. EDI Sub-domain - Language and Cognitive Development** 

			rticipating s in District		All Participating Districts in Orange County			
Sub-domain	N	Not Ready	Somewhat Ready	Ready	N	Not Ready	Somewhat Ready	Ready
Basic literacy skills	1,350	4%	15%	81%	31,464	8%	17%	75%
Interest in literacy/numeracy and memory	1,345	10%	9%	81%	31,143	13%	11%	77%
Advanced literary skills	1,350	10%	5%	85%	31,299	16%	7%	78%
Basic numeracy skills	1,350	11%	8%	81%	31,370	12%	8%	80%

Data Source: Teacher Reported EDI. Totals of 99 percent and 101 percent are due to rounding.

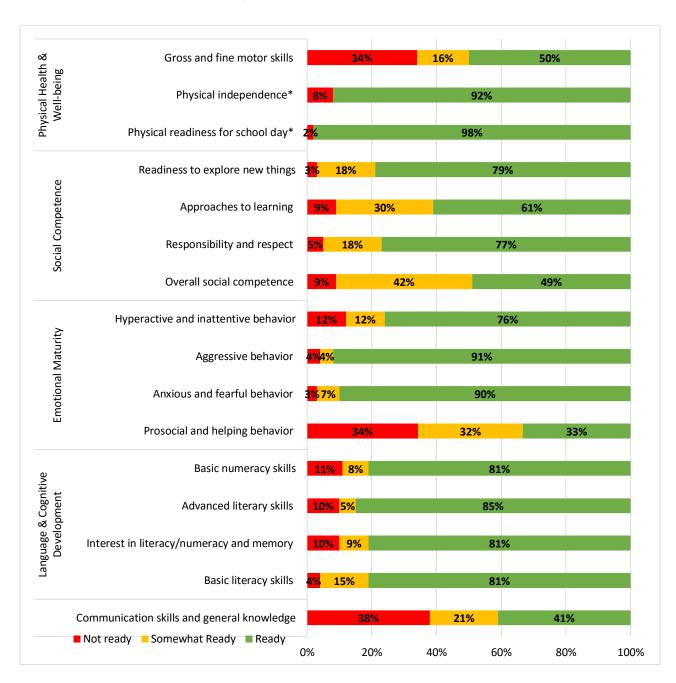
Table 7. EDI Sub-domain - Communication Skills and General Knowledge

		All Par	rticipating		All Participating Districts			
	Schools in District				in Orange County			
Sub-domain	N	Not Ready	Somewhat Ready	Ready	N	Not Ready	Somewhat Ready	Ready
Communication Skills and General Knowledge	1,350	38%	21%	41%	31,482	41%	22%	37%

Data Source: Teacher Reported EDI. Totals of 99 percent and 101 percent are due to rounding.



### **Summary of EDI Results by Developmental Sub-Domain Tustin Unified School District, 2016**



<sup>\*</sup> The "somewhat ready" category does not apply because the response options on the EDI for these sub-domains were dichotomous (yes/no).



#### Appendix A: List of Schools Participating in the EDI, 2014-2016

School	Kindergarten Enrollment (2015/16)
Arroyo Elementary	100
Barbara Benson Elementary	80
Benjamin F. Beswick Elementary	87
C. C. Lambert Elementary	69
Guin Foss Elementary	80
Helen Estock Elementary	59
Hicks Canyon Elementary	165
Jeane Thorman Elementary	96
Ladera Elementary	54
Loma Vista Elementary	73
Marjorie Veeh Elementary	52
Myford Elementary	95
Peters Canyon Elementary	137
Red Hill Elementary	122
Robert Heideman Elementary	133
Tustin Memorial Elementary	88
Tustin Ranch Elementary	81
W. R. Nelson Elementary	144
Total 2015/16 K Enrollment	1,718

Source: California Department of Education, DataQuest



#### **Appendix B: EDI Subdomain Details**

Domain	Subdomain	EDI Questions Contributing to Subdomain	What "Not Ready for School" looks like	What "Ready for School" looks like
Physical Health and Well-being	Physical readiness for school day	<ul> <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> <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> <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> <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> <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> </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	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.

Domain	Subdomain	<ul> <li>Takes care of school materials</li> <li>Shows tolerance to someone who made a mistake</li> </ul>	What "Not Ready for School" looks like of materials.	What "Ready for School" looks like
	Approaches to learning	<ul> <li>Listens attentively</li> <li>Follows directions</li> <li>Completes work on time</li> <li>Works independently 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.
	Readiness to explore new things	<ul> <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> <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> <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> </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.

Domain	Subdomain	EDI Questions Contributing to Subdomain	What "Not Ready for School" looks like	What "Ready for School" looks like
	Aggressive behavior	<ul> <li>Shy</li> <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> <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 into anything 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.
Language and Cognitive Development	Basic literacy skills	<ul> <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> <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> <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> </ul>	Children who have only up to one of the advanced literacy skills; who cannot read or write simple words or	Children who have at least half of the advanced literacy skills: reading simple, complex words or sentences; writing

#### Number of participating schools: 18

Domain	Subdomain	EDI Questions Contributing to Subdomain	What "Not Ready for School" looks like	What "Ready for School" looks like
		Able to write simple words	sentences; and rarely write voluntarily.	voluntarily writing simple words or
		Able to write simple sentences		sentences.
	Basic numeracy skills	<ul> <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> <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, ca participate in story-telling or imaginative play, articulate clearly, shows adequate general knowledge, and are proficient in their native language.