



TARRANT COUNTY
KINDERGARTEN
READINESS
ASSESSMENT
REPORT

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# **Executive Summary**

More than half (62%) of Texas four-year old children are enrolled in publicly funded pre-k programs yearly<sup>1</sup> and nationally 40.2% of three year olds and 67.9% of four year olds are enrolled in pre-primary programs.<sup>2</sup> However, that means that for many children, kindergarten is their first experience learning in a classroom. Naturally, **kindergarten readiness** is impacted by a child's early experiences, and differences in these experiences may lead to achievement gaps.<sup>3</sup>

A student's abilities in kindergarten has been shown to influence their academic achievement later in life. Broadly, kindergarten readiness is defined as student's preparedness to do well in school. Kindergarten readiness may be measured by kindergarten assessment instruments. These tools help educators measure ability, update classroom instruction, and examine student characteristics such as cognitive, social-emotional, and physical characteristics.

This report explores kindergarten teachers and administrators' perceptions of kindergarten readiness and how educators measure readiness. Tarrant County kindergarten teachers and administrators were surveyed in Fall 2019 (n=104). Overall, the most important skills for kindergarten readiness were from the social-emotional and health and wellness domains, such as 'ability to communicate needs for assistance,' the 'ability to participate safely in activities,' and 'feeling safe asking questions.' Approximately four out of 10 kindergarten teachers reported using self-made assessments. Teachers ranked social-emotional skills as the most important skill domain for readiness, yet they perceived the district viewing literacy and language as most important.

This study highlights that Tarrant County educators perceive social-emotional skills as critically important for kindergarten readiness. This report will support the work of the Early Learning Alliance, as they strive to ensure that children are supported by high-quality early learning, across early childhood environments, for success in elementary school and beyond.

<sup>&</sup>lt;sup>1</sup> United States Department of Education (2015). A Matter of Equity: Preschool in America. [Report]. Retrieved from <a href="https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf">https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf</a>

<sup>&</sup>lt;sup>2</sup> U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October, 1970 through 2017. (This table was prepared July 2018.) Retrieved from <a href="https://nces.ed.gov/programs/digest/d18/tables/dt18\_202.10.asp">https://nces.ed.gov/programs/digest/d18/tables/dt18\_202.10.asp</a>

<sup>&</sup>lt;sup>3</sup> Pressler E., Raver, C.C., Friedman-Krauss, A.H., & Roy, A. (2016). The Roles of School Readiness and Poverty-Related Risk for 6 Grade Outcomes. Journal of Educational and Developmental Psychology, 6(1):140-156. 10.5539/jedp.v6n1p140.

<sup>&</sup>lt;sup>4</sup> Goldstein, J., McCoach D B., & Yu, H. (2016). The predictive validity of kindergarten readiness judgements: Lessons from one state. *The Journal of Educational Research*, 110(1), 50-60. https://doi.org/10.1080/00220671.2015.1039111;

McClelland, M.M., Acock, A.C., & Morrison, F.J. (2006). The impact of kindergarten learning-related skills on academic trajectories at the end of elementary school. *Early Childhood Research Quarterly*, 21(4), 471-490.

# What is Kindergarten Readiness?

Entering kindergarten is a rite of passage for children and their families. However, when to enter kindergarten and if a child is ready is an important consideration among Texas parents. Current Texas legislation details when children are eligible to enter kindergarten based on their age. Children whose birthdays are on or before September 1<sup>st</sup> may enter kindergarten as early as 5 years old<sup>5</sup> and school attendance is compulsory for children starting at 6 years old. Approximately 38% of Texas children, aged 4, are not enrolled in publicly funded pre-k programs yearly.<sup>6</sup> That means that for many children, kindergarten is their first experience learning in a classroom. Naturally, kindergarten readiness is impacted by a child's early experiences, and differences in these experiences may lead to achievement gaps.<sup>7</sup>

Thus, it is vital for teachers to know what skills incoming kindergarteners have and what areas of development the child needs to improve, essentially understanding the student's readiness for kindergarten. Assessments administered at the beginning of the school year provide kindergarten teachers with that knowledge.

Upon entering the first day of kindergarten, each child has had a different educational history and experience. Assessing children as they enter kindergarten is a valuable tool to ascertain what skills and knowledge the child has already developed and which skills they need to focus on in the upcoming school year.

#### **Expected Kindergarten Readiness Competencies**

The Texas Education Agency (TEA) statement on kindergarten readiness states "children are 'ready' for school when families, schools, and communities work together to ensure they enter school with strong foundational knowledge and skills across five primary domains of development:"<sup>8</sup>

- 1. Physical, including gross and fine motor skills
- 2. Literacy, including reading and writing
- 3. Mathematical, including concepts and thinking
- 4. Language and Communication
- 5. Health and Wellness

Moreover, in their official statement on kindergarten readiness, TEA focuses on the need for high-quality early childhood pre-kindergarten programs. They write that these high-quality programs should equip students with the fourteen skills for success in school (see Appendix A for the list of skills).<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> Education Commission of the States (2018). State kindergarten-through-third-grade policies: State profile – Texas. Retrieved from <a href="http://ecs.force.com/mbdata/mbstcprofgnc?rep=KK3QST&st=Texas">http://ecs.force.com/mbdata/mbstcprofgnc?rep=KK3QST&st=Texas</a>

<sup>&</sup>lt;sup>6</sup> United States Department of Education (2015). A Matter of Equity: Preschool in America. [Report]. Retrieved from https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf

https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf

7 Pressler E., Raver, C.C., Friedman-Krauss, A.H., & Roy, A. (2016). The Roles of School Readiness and Poverty-Related Risk for 6 Grade Outcomes.

Journal of Educational and Developmental Psychology, 6(1):140-156. 10.5539/jedp.v6n1p140.

<sup>&</sup>lt;sup>8</sup> Texas Education Agency. (2019). Family resources. Retrieved from: <a href="https://tea.texas.gov/Academics/Early-Childhood Education/Family Resources">https://tea.texas.gov/Academics/Early-Childhood Education/Family Resources</a>

TEA also provides a list of expected skill domain outcomes for finishing pre-kindergarten – the Texas Prekindergarten Guidelines. These are: (1) social and emotional development, (2) language and communication, (3) emergent literacy – reading, (4) emergent literacy – writing, (5) mathematics, (6) science, (7) social studies, (8) fine arts, (9) physical development and health, and (10) technology. It is expected that these guidelines then align prekindergarten with Texas Essential Knowledge and Skills (TEKS).9 Despite specifying these expectations, not all of these domains are measured in kindergarten entry assessments. The vast majority of entry assessments focus on literacy, mathematics, and motor skills.

#### **Review of Kindergarten Readiness Assessments**

The Texas Education Code §28.006 currently requires that the Texas Commissioner of Education, who is also the head of the Texas Education Agency, to formally publish the Approved Kindergarten Assessment Tools list. This list includes a summary and evaluation of each assessment tool's strengths and weaknesses and ranks the feasibility of use. 10 This list provides a ranking of each skill on a 7-point scale ranging from "Excellent" to "Does Not Cover."10 The Commissioner's recommended assessments for 2017-2021 are selected based on 5 areas of development: (1) emergent literacy – reading, (2) emergent literacy – writing, (3) language and communication, (4) health and wellness, and (5) mathematics. 10

In 2017, TEA contracted Southern Methodist University's Center on Research and Evaluation (CORE) to conduct a review of early childhood assessments and inform the Commissioner's instrument recommendations. 11 Forty-two early childhood assessments were reviewed and scored for the report. Of the 42, only 14 kindergarten assessments scored high enough to be recommended by the panel for use in classrooms. These assessments are each intended to identify students who are performing below average and require additional support to reach the kindergarten reading level. Tarrant County districts used six of the 14 recommended assessments in 2015-2019 (see Appendix B for a listing of assessments and domains/skills measured). 12

The top four assessments recommended by the Commissioner's List included the "Texas Kindergarten Entry Assessment (TX KEA)", "DIAL-4", the "Working Sampling System", and "Ready, Set, K!". Each of these assessments are available in English and Spanish, which is important to accurately determine the needs of students across Texas. Many Texas students are bilingual, in fact, 6.5% of Texans between 5 and 17 years old speak Spanish. This figure reflects upwards of 1,642,000 Texas students who benefit from access to Spanish assessments. 13

<sup>&</sup>lt;sup>9</sup> Texas Education Agency (2015). TEXAS Pre-Kindergarten Guidelines. Retrieved from https://tea.texas.gov/sites/default/files/PKG Final 2015 navigation.pdf

<sup>&</sup>lt;sup>10</sup> Texas Education Agency (2017). Commissioner's list of approved kindergarten assessment instruments. Retrieved from http://tea.texas.gov/sites/default/files/Appendix-I\_Final\_List\_K\_Recommendations.pdf

<sup>11</sup> Wright, A., Farmer, D., & Baker, S. (2017). Review of early childhood assessments: Methods and recommendations. Retrieved from

http://tea.texas.gov/sites/default/files/Assessment\_Review\_Final\_Report.pdf

12 Early Learning Alliance (2019). Tarrant County kindergarten entry percentages by district. Fort Worth, TX.

13 United States Cross Bureau (2017). Table S1601: Language Spoken at Home 2013-2017 American Community Survey 5-Year Estimates. Retrieved from <a href="https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF">https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF</a>

#### **Developmental Domains in Recommended Assessments**

Strong *social and emotional* abilities as a child are associated with having positive outcomes as young adults in areas such as education, employment, criminal activity, substance abuse, and mental health. Many social and emotional skills that are necessary for school readiness are built within adult-child relationships. One study found that conflict between teachers and children in kindergarten can predict academic performance and behavior through the eighth grade. Additionally, the concept of self requires the child to identify themselves as an object of analysis as individuals who have their own feelings, thoughts, likes, and dislikes. Emotional awareness includes differentiating between emotions and behaviors and communicating basic feelings and emotions. This also includes the ability to increase or decrease the intensity of emotions on their own or with the guidance of an adult. Social and emotional skills are imperative for students to develop for success in the classroom. These skills are categorized as awareness of self, self-regulation skills, behavior control, emotional control, control of attention, building relationships with others (adults and children), and social awareness.

When teachers and school districts look to TEA's recommended list of assessments, there is not a broad category measuring social and emotional ability. Instead there are a few subcategories such as "self-awareness/self-regulation" under the overarching category "Health and Wellness." However, the category of "Health and Wellness" also includes gross motor and/or fine motor skills and self-care. Only four of the assessments meet the statutory requirements of measuring literacy and also contain a social-emotional component within the Health and Wellness domain, these are:

- TX-KEA
- DIAL-4
- Work Sampling System
- Ready, Set, K!

The DESSA-mini and BASC-3 BESS only measure social-emotional development and therefore do not provide a comprehensive understanding of a child's kindergarten readiness and would need to be combined with other assessments.

*Mathematics* skills are a part of TEA's expected outcomes for pre-kindergarteners (i.e., Texas Prekindergarten Guidelines) and are measured on some of the recommended kindergarten assessments. However, seven out of the 14 of the kindergarten readiness assessments evaluated do not have a math skills component. TEA expects entering kindergarteners to count from 1-30 in proper order, count 1-10 objects in front of them, properly use ordinal terms such as "second," "next," or "last," and recognize numerical digits. Children should also be able to properly demonstrate addition and subtraction with 1-5 objects. They also should begin to develop geometry and measurement skills shown through shape and pattern identification, recognizing objects or people as taller or smaller, or the volume that an object can hold. Early

<sup>&</sup>lt;sup>14</sup> Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health*, *105*(11), 2283-2290.

<sup>&</sup>lt;sup>15</sup> Klein, L. G. (2002). Set for success: Building a strong foundation for school readiness based on the social-emotional development of young children. The Kauffman early education exchange, 1(1), 1-5. Retrieved from <a href="http://www.pyramidmodel.org/wp-content/uploads/2016/10/set">http://www.pyramidmodel.org/wp-content/uploads/2016/10/set</a> for success kaufmann report.pdf#page=12

content/uploads/2016/10/set for success kaufmann report.pdf#page=12

16 Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. Child Development, 72(2), 625-638.

mathematics learning allows students to practice problem solving, ask critical questions, and reach conclusions using math.9

Texas Prekindergarten Guidelines include a physical science component referring to a child's ability to use their senses to make observations about the world around them.9 This includes developing knowledge of life cycles and energy sources, like light, heat, electricity, and magnetism.9 However, physical science nor any of the topics related to it are included in the assessment evaluation on the Approved Kindergarten Assessment Tools list.

Another discrepancy between Texas Prekindergarten Guidelines and the measurements for assessments of incoming kindergarten students is the expectation around writing one's name. The Texas Prekindergarten Guidelines instruct that children should be able to write their first name or nickname, meanwhile assessments used in Tarrant County schools are looking for students to write both their first and last name (see Appendix B). A similar example are the vocabulary expectations. Texas Prekindergarten Guidelines expect students to be able to use new vocabulary and grammar in speech. Additionally, there is not an explicit definition of selfcare expectations within the Texas Prekindergarten Guidelines despite it being evaluated in the kindergarten assessments.

#### **New Requirements for Texas**

Currently, there are fourteen approved kindergarten readiness assessments. However, a recently passed bill (House Bill 3) will require the TEA Commissioner to choose one assessment to be utilized across the state beginning in the Fall of 2020. House Bill 3, which is a school finance and property tax bill signed in 2019, provides directives for assessing kindergarten readiness. 17 House Bill 3 requires that all school districts must administer a Commissioner-approved, multi-dimensional assessment that includes emergent literacy reading and writing, to all kindergarteners. 18 House Bill 3 (§ 29.1543) emphasizes transparency in the assessments by requiring parents be notified of their child's score and mandates that schools publish reports on student's reading proficiency. 19 This emphasis on using a singular assessment will allow for kindergarten readiness to be measured longitudinally using the same metrics.

House Bill 3 includes several stipulations for the chosen readiness assessment. For example, it will be required to "diagnose reading development and comprehension" 18 and test, at a minimum, three developmental domains including literacy. However, the bill does not specify which skills should be appraised. 18 A consistent assessment tool will allow school districts, the county, and the state the ability to discover patterns of student preparedness. Currently, the assessments are not the same across school districts, which makes it difficult to compare across Tarrant County or the state. 12 Over the past five years, school districts in Tarrant County have also been changing which assessment they use, which then makes it difficult to track the readiness of incoming students over time. Appendix B describes the skills measured in each of

<sup>&</sup>lt;sup>17</sup> Texas Education Agency (2019). House Bill 3. Retrieved from

https://tea.texas.gov/About TEA/Government Relations and Legal/Government Relations/House Bill 3

18 H.B. 3, 2019, 86th Reg. Sess. (TX. 2019). Retrieved from https://capitol.texas.gov/tlodocs/86R/billtext/pdf/HB00003F.pdf#navpanes=0

the six assessments used in Tarrant County school districts, and identifies potential gaps in skill measurement based on the *Approved Kindergarten Assessment Tools* list.<sup>12</sup>

With varying kindergarten readiness assessment used across Tarrant County, inconsistencies between pre-kindergarten and kindergarten measures, and a state-wide call for one readiness assessment, there is a growing need for defining and measuring kindergarten readiness. This report seeks to understand the perspectives of kindergarten educators in Tarrant County on kindergarten readiness.

# Assessing Perceptions of Kindergarten Readiness from Tarrant County Educators

In an effort to have a standardized definition of kindergarten readiness for Tarrant County, this study sought to understand what kindergarten educators and administrators perceive are the most valuable skills for a student to possess in order to be considered "ready" for kindergarten.

#### Recruitment

The target population for this study was Tarrant County educators and administrators who work with kindergarten students and who were eighteen years of age or older. Email addresses of kindergarten educators, campus administrators, and early learning school district administrators were collected from publicly available websites (n=1,820). From this list, 83 emails bounced back (this may be due to district firewalls or emails addresses no longer being valid). It is assumed that some districts also flagged the invitation as spam or blocked the email from being received by potential participants. Emails were sent inviting those who qualified to participate in an online survey using Qualtrics. Participants were offered an electronic gift card for completing the survey. This study was approved by the North Texas Regional Institutional Review Board.

Emails were sent starting on August 14, 2019 and three subsequent emails were sent as follow-up until October 13, 2019. Emails included the Early Learning Alliance logo to promote responses. <sup>20</sup> Additionally, leaders in some schools and school districts sent reminder emails to their kindergarten staff to encourage participation. This approach yielded 19 additional responses. Finally, to reach additional participants, recruitment information was shared on the Early Learning Alliance social media page, but this did not yield any responses.

Overall, 108 people participated; however, one was excluded since they were not in Tarrant County and three were excluded since they were not in an administrator or kindergarten teacher role. The final sample size was 104 participants.



Based on the expected reach for contacting participants, this was a response rate of 6%. Using a population size estimate of 1,800 it was estimated that a sample size of 92 would be needed to have no more than a ±10% sampling error with a 95% confidence level.<sup>20</sup> Our sample of 104 exceeded this expectation.

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<sup>&</sup>lt;sup>20</sup> Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3<sup>rd</sup> ed.). Hoboken, NJ; John Wiley & Sons, Inc.

#### Survey

The survey was developed by the Early Learning Alliance PreK and Kindergarten Assessment Work Group with assistance from the University of North Texas Health Science Center research team. The questions focused on asking educators about their opinions of the most valuable skills a child needs to be ready and successful in kindergarten. Additional questions included perceptions of what characterized the most and least prepared students for kindergarten. Demographic questions were also included. All results from the 104 participants were aggregated and analyzed in SAS version 9.4. Note, that participants could elect to skip questions during the survey. Therefore, the denominator or response rate for questions may vary in the survey.

#### Sample

A majority of the 104 participants were from public schools (93%), while 7% of participants were from private and charter schools (Table 1). There was representation from 11 independent school districts in Tarrant County, and the most frequent responses were from Fort Worth ISD and Keller ISD. As for participants' roles, over two-thirds were current kindergarten teachers, a quarter were campus administrators, and the remaining 5% were district administrators. Approximately 77% of participants had over 7 years of experience teaching kindergarten

Table 1: Participant School and Role

		n	%
Type of School	Public	97	93%
	Private	5	5%
	Charter	2	2%
School District for Public Schools	Fort Worth ISD	43	44%
	Keller ISD	22	23%
	Grapevine/Colleyville ISD	6	6%
	HEB ISD	6	6%
	Mansfield ISD	6	6%
	Northwest ISD	6	6%
	Burleson ISD	2	2%
	Carroll ISD	2	2%
	Everman ISD	2	2%
	Godley ISD	1	1%
	White Settlement ISD	1	1%
Role for School Year	Campus Administrator	28	27%
	District Administrator	5	5%
	Kindergarten Teacher	71	68%
Years Taught Kindergarten	1-7	24	23%
	8-14	21	20%
	15-21	27	26%
	22-28	22	21%
	29-35	10	10%

With regard to participant demographics (Table 2), a majority were White, Non-Hispanic, 44% had a graduate degree, and the average age was 44 years. The racial/ethnic composition of this sample is similar to employed teachers across Texas for 2014-2018.<sup>21</sup>

Table 2: Participant Demographics

		N	%
Education Level	Bachelor Degree		56%
	Graduate Degree	46	44%
Participant Age	20-30	14	13%
	31-40	27	26%
	41-50	31	30%
	51-60	29	28%
	61-70	3	3%
Participant Race	American Indian/Alaska Native		2%
	Asian		1%
	Black/African American	14	13%
	Native Hawaiian/Pacific Islander	1	1%
	White/Caucasian		70%
	Other		12%
	Missing	1	1%
Participant Ethnicity	Hispanic or Latino		21%
	Not Hispanic or Latino	82	79%

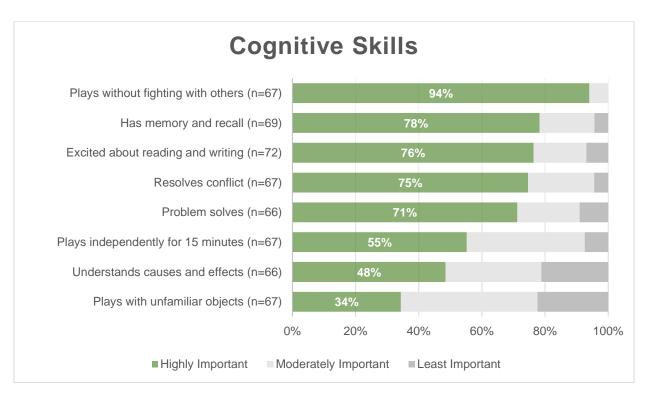
<sup>21</sup> Texas Education Agency (2019). Employed teacher demographics 2014-2018. Retrieved from <a href="https://tea.texas.gov/sites/default/files/Employed%20Teacher%20Demographics%202014-2018.pdf">https://tea.texas.gov/sites/default/files/Employed%20Teacher%20Demographics%202014-2018.pdf</a>

## **Kindergarten Readiness Survey Findings**

#### **Skills Importance**

Survey participants were given a list of 60 skills representing cognitive, health and wellness, language and communication, literacy, math, physical, and social-emotional domains. The skills were a combination of skills recommended from the Early Learning Alliance PreK and Kindergarten Assessment Work Group and based on the Texas Prekindergarten Guidelines and previous work by Cappelloni (2011).<sup>9,22</sup> Note, that seven of the skills listed were not recommended skills for kindergarten readiness and served as control comparisons. Participants rated each skill as highly important (extremely important and very important responses combined), moderately important, and least important (slightly important and not important at all responses combined). The ratings of each skill are described by domain.

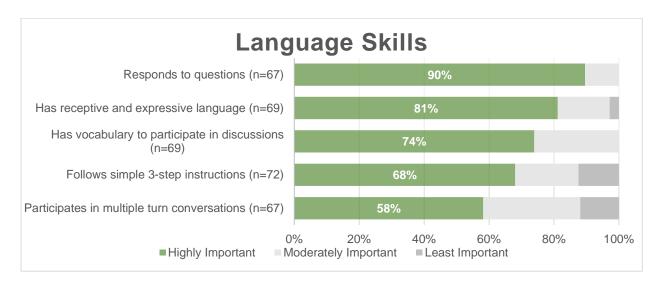
The most important skill reported for the cognitive domain was 'plays without fighting with others' (94%). Over three quarters of participants rated 'memory and recall,' 'excited about reading and writing,' and 'resolves conflict' as 'highly important.' The skills rated least important were 'plays with unfamiliar objects' and 'understands cause and effect.'



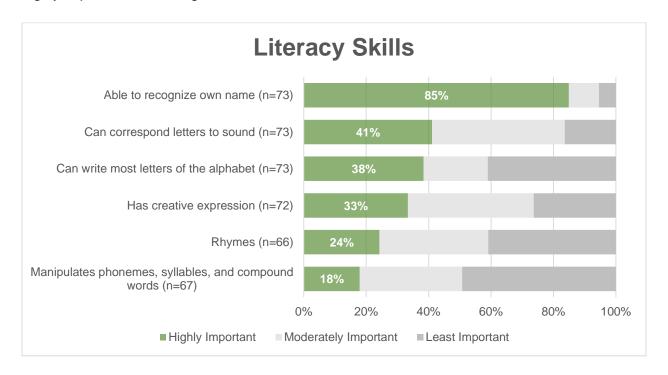
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<sup>&</sup>lt;sup>22</sup> Cappelloni, N. L. (2011). Kindergarten teachers' perceptions of kindergarten readiness (Doctoral dissertations). Retrieved from Semantic Scholar.

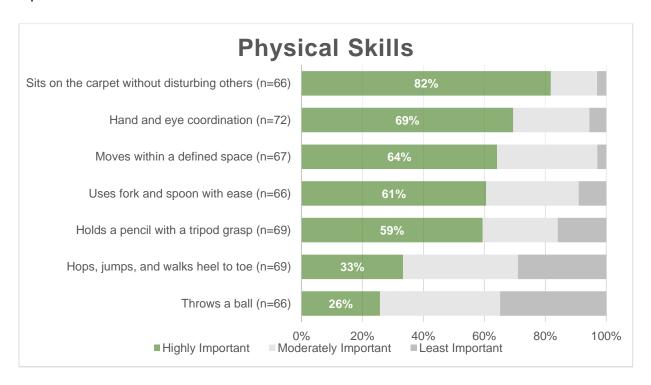
More than half of respondents rated the language skills as highly important. The most important skill was being able to 'respond to questions' (90%).



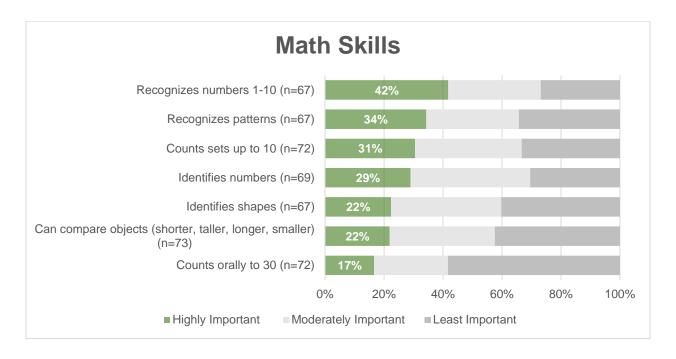
For literacy skills, the most important skills rated by participants was 'able to recognize own name.' For the remainder of the literacy skills, less than half of the sample rated these skills as highly important for kindergarten readiness.



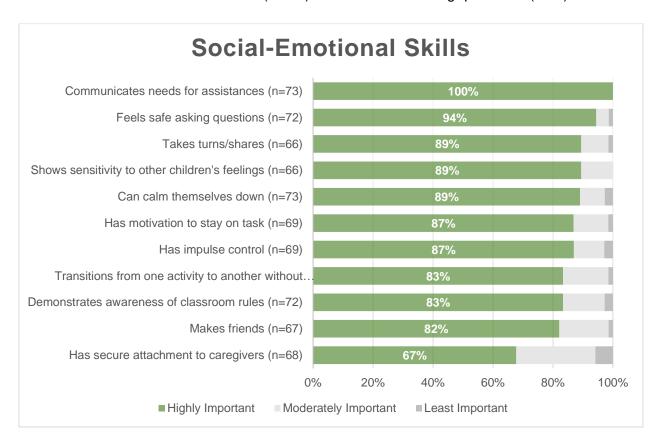
For physical skills, the most important skills rated by participants were 'sits on the carpet without disturbing others,' 'hand and eye coordination,' and 'moves within a defined space.' The least important skill identified was 'throws a ball.'



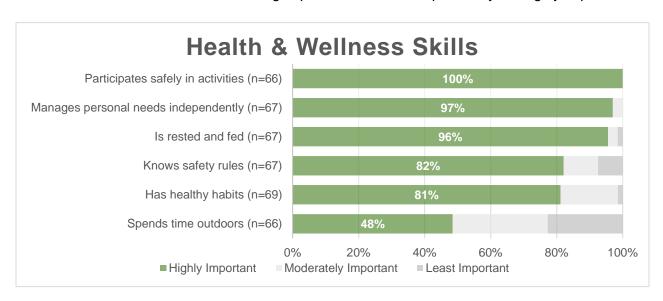
With regard to mathematical skills, students' ability to 'recognize numbers 1-10' and 'recognize patterns' were most frequently rated as highly important. In contrast, higher-level skills such as 'can compare objects' and 'counts orally to 30' were rated as least important by participants.



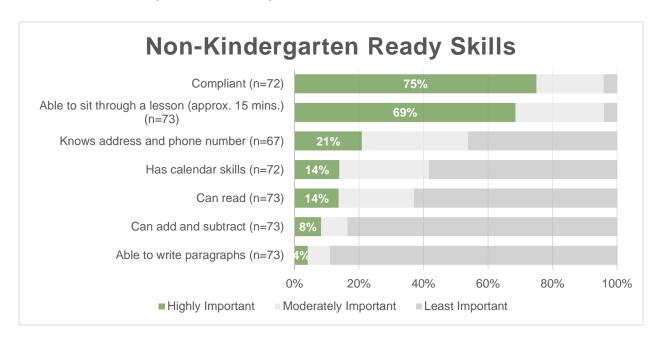
The majority of the social-emotional skills were rated as highly by participants, with more than two-thirds of the sample rating each skill as highly important. The most important skills were the 'communicates needs for assistance' (100%) and 'feels safe asking questions' (94%).



The health domain had one of the only items that was rated as highly important by all participants – 'participates safely in activities.' In line with this item, nearly 100% of participants also rated 'is rested and fed' and 'manages personal needs independently' as highly important.



Since there may be misperceptions about what constitutes readiness for kindergarten, the survey also included skills that are not considered appropriate for kindergarten readiness. The majority of these were listed as least important by most of respondents, with the exception of compliance and being able to sit through a 15-minute lesson.



Overall, the most important skills rated for participants were from the social-emotional and health domains. Moreover, the participants were also able to correctly identify most of the non-kindergarten skills as not important.

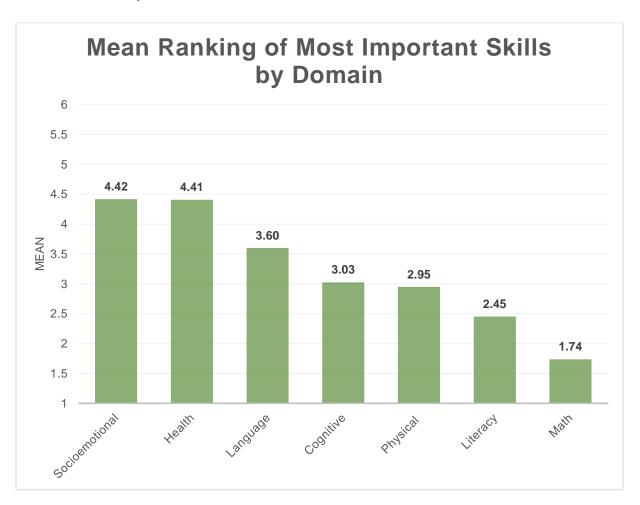
In addition to listing these skills for rating, the participants were asked if there were any other skills children need to be ready for kindergarten. A quarter of participants stated yes, there were other skills not listed above. Kindergarten teachers reported social skills were especially needed. The types of social skills teachers perceive as important include *empathy*, *listening skills*, and *understanding consequences*. Teachers also expressed that entering kindergarten students should demonstrate some *personal responsibility*, such as dressing themselves, using buttons and snaps, standing in line, and knowing how to use the restroom.

Technical skills, such as computer skills and writing skills, were identified as necessary as well. For example, knowing how to write their name was mentioned by three respondents, and writing both their first and last name was specified in one response. Two teachers described computer skills such as using a mouse or "handling technology" for class lessons. However, one teacher expressed concern that fine motor skills for entering kindergarten were underdeveloped due to too much experience with technology, such as tablets and smartphones.

One respondent described wanting students to understand that school is a learning environment and their role is to learn: "To know that it is okay if they don't know an answer and it is ok if they make a mistake."

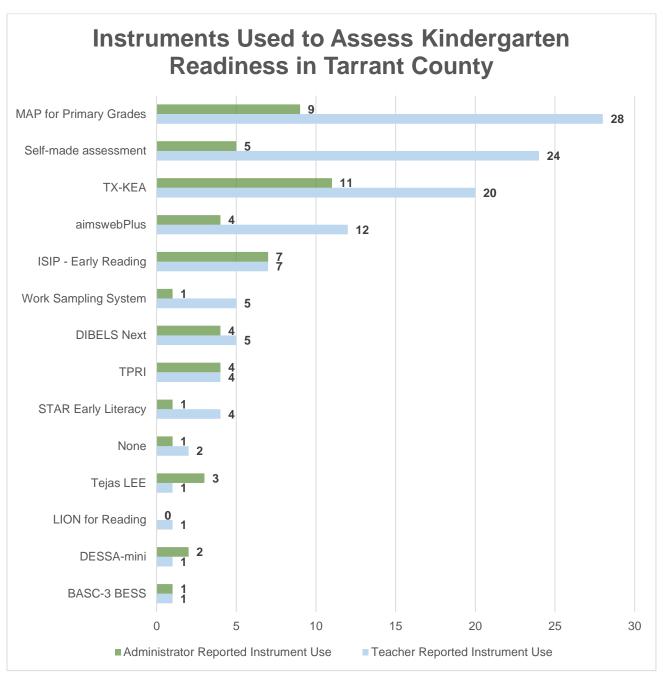
#### **Domain Importance**

In addition to rating the importance of individual skills, participants were provided seven questions and asked to *rank* individual skills by level of importance. In each question were skills representing one of the seven domains (i.e., cognitive, health and wellness, language and communication, literacy, math, physical and social-emotional). These rankings were aggregated by domain to determine the relative importance of each domain. Based on the figure below, social-emotional and health and wellness were ranked as the most important domains with an average rating of 4.4 out of 7 (higher rating = more important). The domains that were rated the lowest were literacy and math skills.



#### **Assessments**

Both kindergarten teachers and administrators were asked which assessments they use to assess kindergarten readiness in their classroom and schools, respectively. The assessments from the TEA Commissioner's List of Approved Assessments were listed as well as a self-made assessment option and participants were asked to check all the assessments they use. The most common instruments used by kindergarten teachers were the MAP for Primary Grades (49%), a self-made assessment (42%), and TX-KEA (35%). As for administrators, the most common instruments used by schools/districts were TX-KEA (41%) and MAP for Primary Grades (16%).



Since self-made assessments were common, participants were asked what components were measured in their self-made assessments. Letter identification, naming, or sounding was mentioned in 16 out of 22 short answer responses. Of those 16 responses, differentiating between lower- and upper-case letters was specifically described by four teachers. Sound identification was also highly cited (n=13) as a skill included in the self-made assessments. Respondents also frequently described knowing numbers or counting as another area to be measured in the self-made assessments (n=16). Among those 16 responses, four specified that students should know the numbers 1-20 and two specified knowing numbers 1-10. There was variation in responses on how incoming kindergarteners should demonstrate their knowledge of numbers; some described identifying numbers (written) (n=11), counting numbers orally (n=2), counting objects (n=2), and counting sets (n=2). Knowledge of shapes (n=7) and colors (n=5) were also listed as important skills measured in self-made assessments.

Self-made assessments measuring social skills were described in terms of listening and "interacting positively with others." One teacher explained the importance of social skill development as it relates to school success by saying "If they can come in knowing some social skills then the academic parts are a little easier to get to." Other specific skills mentioned in the responses include the ability to recognize coins, rhyme, use alliteration, and hold a pencil. Additionally, a few teachers mentioned aligning the skills measured in their self-made assessment with indicators in their school's report cards (n=3).

Additionally, participants who reported using self-made assessments to assess kindergarten readiness (n=28) described that the other available assessments were not reporting on information that they needed and were not useful for placing students in classrooms (n=3). Seven teachers also said they use self-made assessments because it would assist with placing students into classrooms so that classrooms have an even distribution of students at different skill levels. Three teachers preferred self-made assessments because they align with their report card measurements and allowed them to track a student's individual progress "all in one place."

Other teachers indicated that the self-made assessments better informed their own teaching and helped create a plan for each student so they can "teach the child in their level." Two

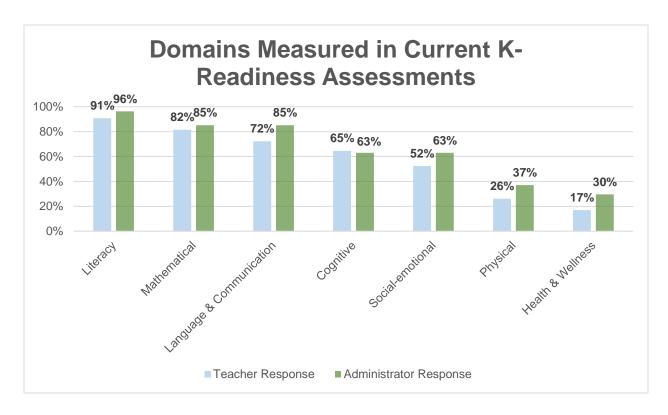
respondents expressed concern about the accuracy of other assessments, particularly the ones where students were assessed by taking a test on a computer rather than based on the teacher's observation. Lastly, two of the responses indicated their students with special needs required a different assessment.

What compelled you to create your own assessment to measure Kindergarten readiness?

We wanted to make sure that we covered a well rounded assessment of the children. It was easier to just make our own, because something seemed to be missing from each assessment.

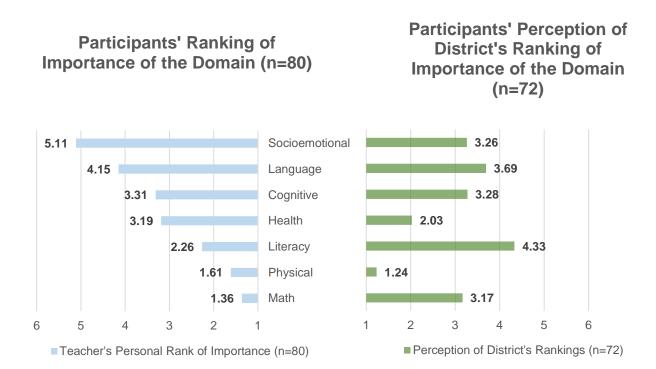
#### **Perceptions of Assessments**

Participants also reported which skill domains were measured in their kindergarten readiness assessments at their school/district. Most teachers reported that their instruments measured literacy, mathematics, language and communication, and cognitive skills. The least rated domains were physical and health and wellness. Similar trends were observed for administrators, with the exception that social-emotional was rated similarly to the cognitive domain.



#### **Perceived Importance of Domains**

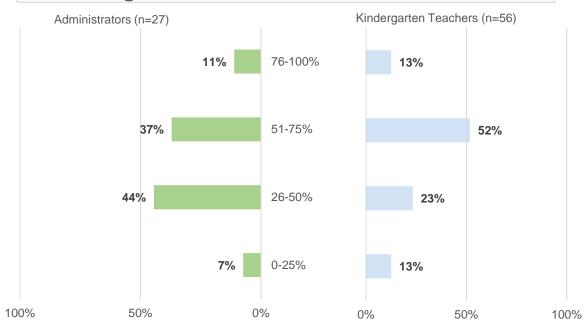
Participants were asked to rank by level of importance the seven learning domains from their perspective and from the perspective of their district. The domain ranked as most important to participants was social-emotional (5.11 out of 7; higher value = more important). In contrast, participants felt this was much less important to their district, ranking social-emotional 4<sup>th</sup>. Participants felt their districts prioritized literacy (4.33) and language (3.69) skills over all others.



#### **Perceptions of Readiness**

Participants were asked for their opinion of what percentage of children entering their kindergarten classroom/school were ready for school. The majority of kindergarten teachers (65%) felt that most of their students were ready for kindergarten. However, administrators believed the majority of the students in their schools were not ready for kindergarten (51%).

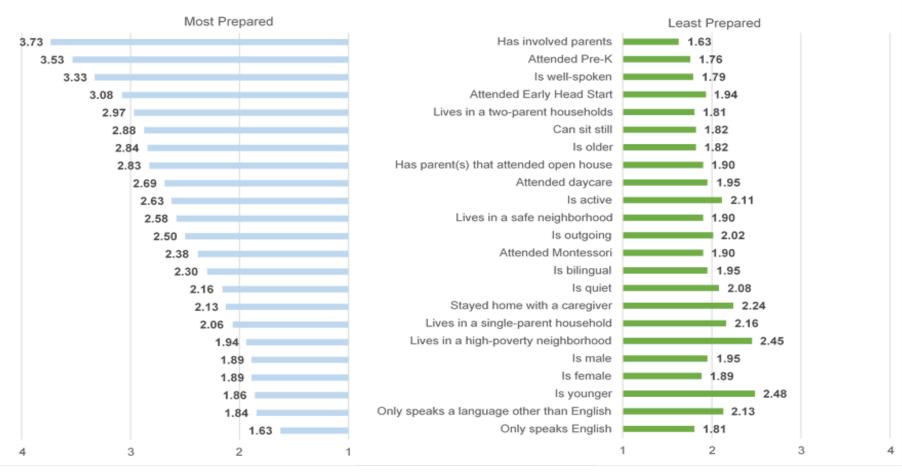




Moreover, participants reported what they perceived to be *most predictive* of measuring kindergarten success. Among the 82 respondents to this question, 49% reported self-made assessments, 23% reported district assessments, 23% reported report cards, and 5% reported state assessments were most predictive of kindergarten student success.

To further assess characteristics that may influence readiness for kindergarten, participants were asked to rate the following statements strongly agree to strongly disagree for "The student who is MOST/LEAST prepared for kindergarten typically...". Statements reflected characteristics of students based on gender, personality, prior education, socioeconomic status, and household structure. Overall, participants agreed that the most prepared students were well-spoken, had involved parents, attended Pre-K, and attended Early Head Start. In contrast, there was less consensus on the characteristics of the least prepared students but students who spoke a language other than English, were younger, lived in a high poverty neighborhood, and stayed home with a caregiver were more commonly agreed upon.

# Teacher's Perceptions of Characteristics of the Most and Least Prepared Kindergartener



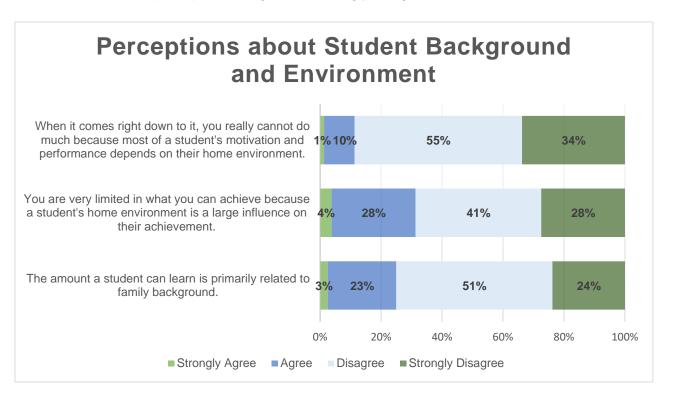
1 - Strongly Disagree

2 - Disagree

3 - Agree

4 - Strongly agree

Finally, participants were asked to respond to three questions about a student's background and environment contributing to ability to learn and achievement. These questions were adapted from Rochmes (2015) paper on teachers' beliefs on social disadvantage and student achievement.<sup>23</sup> Most participants disagreed or strongly disagreed to these statements.



<sup>&</sup>lt;sup>23</sup> Rochmes, J. (2015). Teachers' Beliefs About Students' Social Disadvantage and Student Achievement (CEPA Working Paper No.15-03). Retrieved from Stanford Center for Education Policy Analysis: <a href="http://cepa.stanford.edu/wp15-03">http://cepa.stanford.edu/wp15-03</a>

#### **Conclusions**

From this survey on kindergarten readiness from the perspective of Tarrant County educators, the most important skills rated were from the social-emotional and health and wellness domains, such as 'ability to communicate needs for assistance,' the 'ability to participate safely in activities,' and 'feeling safe asking questions.' Consistent with the findings on individual skills, overall, social-emotional and health and wellness were ranked as the most important skill domains, whereas, literacy and mathematical skill domains were rated least important.

Moreover, the most common assessments reported as used by Tarrant County schools and districts were the MAP for Primary Grades, TX-KEA, and self-made assessments. The MAP for Primary Grades measures emergent literacy – reading, language and communication, and math, whereas the TX-KEA measures emergent literacy – reading, emergent literacy – writing, language and communication, health and wellness, and math. The TX-KEA is rated as having only very minimal coverage of some social-emotional skills, including communicating wishes, feelings, and needs, and fair coverage of self-awareness/self-regulation.<sup>10</sup>

Participants ranked social-emotional skills as the most important skill domain for readiness, yet they perceived the district viewing literacy and language as most important. This incongruence and the lack of Commissioner approved instruments that comprehensively measure social-emotional skills may be contributing to the creation of self-made assessments to fill this void for some teachers. Moreover, half of participants reported that they consider their self-made assessments as most predictive of kindergarten student success. Participants also stated they used self-assessments to assist in placing students in classrooms, or to collect information that they needed that was not available on other assessments.

TEA explains that children are "ready for school when families, schools, and communities work together to ensure they enter school with strong foundational knowledge and skills across the five primary domains of development." These five primary domains include physical, literacy, mathematical, language, and health. Social-emotional skills are highly represented in the Texas Prekindergarten Guidelines and kindergarten educators ranked them as most important in this current study, but yet they are not represented in many of the TEA approved kindergarten readiness assessments, or those assessments utilized in Tarrant County (see Appendix B). Moreover, the differences across assessments lead to inconsistencies in measurements and evaluation. Many teachers in this study also chose to create their own measurement tools, which may contribute to difficulties in consistent evaluation and measurement of kindergarten readiness. Using a universal assessment can allow schools and districts to compare readiness across classrooms, schools, and districts.

Another point to consider are the changing expectations for kindergarten readiness. A recent study examined changes in kindergarten course content and testing from 1998-2010 found that kindergarten course structure has advanced in level, more akin to 1<sup>st</sup> grade classrooms of the

1990s, resulting in a focus towards literacy and math skills.<sup>24</sup> Interestingly, that same national study found that time spent on art, science, and music was reduced over the decade.<sup>24</sup> An understanding of these past trends provides a background for current kindergarten learning expectations. As academic goals of kindergarten change, it is important that readiness assessments are on par with classroom learning and children's ability.

This study highlights that Tarrant County educators perceive social-emotional skills as critically important for kindergarten readiness. This report will support the work of the Early Learning Alliance, as they strive to ensure that children are supported by high-quality early learning, across early childhood environments, for success in elementary school and beyond.

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<sup>&</sup>lt;sup>24</sup> Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade?. AERA Open, 2(1). https://doi.org/10.1177/2332858415616358

# **Appendix**

#### Appendix A

14 Essential Skills Children Learn while Attending High-quality Preschool, according to Texas Education Agency<sup>25</sup>

- 1. Paying attention
- 2. Following 2-3 step directions
- 3. Learning lots of new vocabulary words for objects and ideas that help them to comprehend what they read and hear
- 4. Learning the ABCs and the sounds associated with each letter
- 5. Learning how to read and write short words including their name
- 6. Learning numbers from 1-20 and counting
- 7. Sequencing, sorting and problem-solving skills that will help them with reading and math
- 8. Following daily routines
- 9. Taking turns, sharing and appropriately communicating with others
- 10. Building strength and coordination of muscles for academic and nonacademic activities
- 11. Exploring
- 12. Asking questions
- 13. Seeking answers
- 14. Building confidence as learners and a positive relationship with school

<sup>&</sup>lt;sup>25</sup> Texas Education Agency. (2019). Family resources. Retrieved from: <a href="https://tea.texas.gov/Academics/Early-Childhood Education/Family Resources">https://tea.texas.gov/Academics/Early-Childhood Education/Family Resources</a>

## Appendix B

The table below (Table 1) provides a list of the Kindergarten Readiness Assessments that districts in Tarrant County reported using in the 2018-19 school year (source: ELA) and the developmental domains measured in kindergarten assessments. The domains marked in green represent concepts that had "excellent," "very good," or "good" coverage in the assessment based on the Commissioner's Report.

Table 1: Texas Kindergarten Entry Assessments Used in Tarrant County in 2018-19 and the Domains Measured

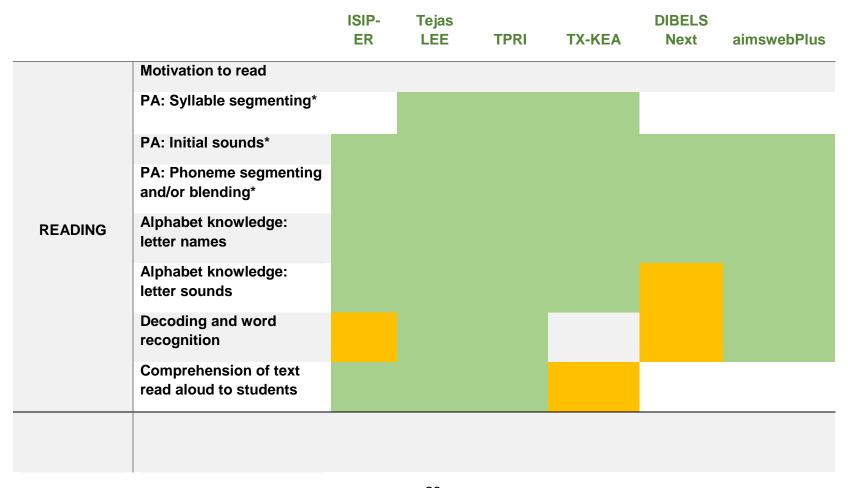
ASSESSMENT NAME	READING	WRITING	COMMUNICATION	HEALTH & WELLNESS	MATHEMATICS
ISTATION'S INDICATORS OF PROGRESS (ISIP-ER) EL INVENTARIO DE LECTURA EN					
ESPANOL DE TEJAS (TEJAS LEE) TEXAS PRIMARY READING INVENTORY (TPRI)					
TEXAS KINDERGARTEN ENTRY ASSESSMENT (TX-KEA) DIBELS NEXT					
AIMSWEBPLUS					

Source: Early Learning Alliance (2019). Tarrant County kindergarten entry percentages by district. Fort Worth, TX.

Texas Education Agency (2017). Commissioner's list of approved kindergarten assessment instruments. Retrieved from http://tea.texas.gov/sites/default/files/Appendix-I\_Final\_List\_K\_Recommendations.pdf

The table below (Table 2) provides a list of skills related to the developmental domains of reading and writing and the Kindergarten Readiness Assessments that districts in Tarrant County reported using in the 2018-19 school year (source: ELA). The areas marked in green represent concepts that had "excellent," "very good," or "good" coverage in the assessment and those marked in orange only have a "fair" amount of coverage. Areas that were only "minimally assessed" or "not assessed at all" are not represented. The ratings are from the TEA Commissioner's List of Kindergarten Readiness Assessment Instruments.

Table 2: Texas Kindergarten Entry Assessments Used in Tarrant County in 2018-19 and the Reading and Writing Skills Measured



WRITING	Motivation to write	
	Writing conventions: first and last name	
	Writing conventions: letters	
	Writing conventions: simple words	

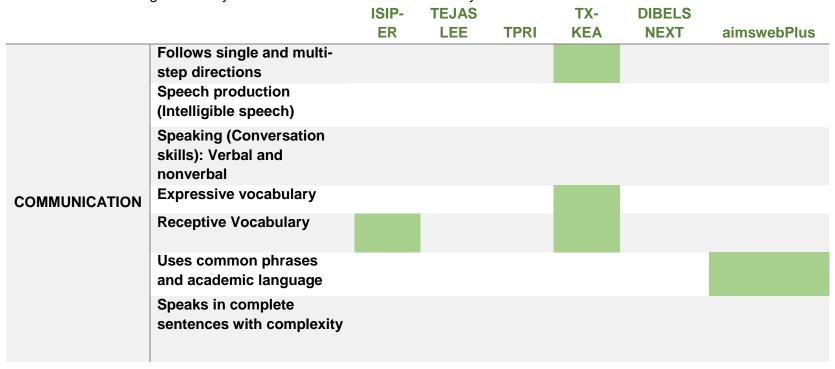
<sup>\*</sup>PA is an abbreviation for Phonemic Awareness.

Source: Early Learning Alliance (2019). Tarrant County kindergarten entry percentages by district. Fort Worth, TX.

Texas Education Agency (2017). Commissioner's list of approved kindergarten assessment instruments. Retrieved from <a href="http://tea.texas.gov/sites/default/files/Appendix-I\_Final\_List\_K\_Recommendations.pdf">http://tea.texas.gov/sites/default/files/Appendix-I\_Final\_List\_K\_Recommendations.pdf</a>

The table below (Table 3) provides a list of skills related to the developmental domain of communication and the Kindergarten Readiness Assessments that districts in Tarrant County reported using in the 2018-19 school year (source: ELA). The areas marked in green represent concepts that had "excellent," "very good," or "good" coverage in the assessment and those marked in orange only have a "fair" amount of coverage. Areas that were only "minimally assessed" or "not assessed at all" are not represented. The ratings are from the TEA Commissioner's List of Kindergarten Readiness Assessment Instruments.

Table 3: Texas Kindergarten Entry Assessments Used in Tarrant County in 2018-19 and the Communication Skills Measured



Source: Early Learning Alliance (2019). Tarrant County kindergarten entry percentages by district. Fort Worth, TX.

Texas Education Agency (2017). Commissioner's list of approved kindergarten assessment instruments. Retrieved from http://tea.texas.gov/sites/default/files/Appendix-I Final List K Recommendations.pdf

The table below (Table 4) provides a list of skills related to the developmental domain of health and wellness and the Kindergarten Readiness Assessments that districts in Tarrant County reported using in the 2018-19 school year (source: ELA). The areas marked in green represent concepts that had "excellent," "very good," or "good" coverage in the assessment and those marked in orange only have a "fair" amount of coverage. Areas that were only "minimally assessed" or "not assessed at all" are not represented. The ratings are from the TEA Commissioner's List of Kindergarten Readiness Assessment Instruments.

Table 4: Texas Kindergarten Entry Assessments Used in Tarrant County in 2018-19 and the Health & Wellness Skills Measured

		ISIP-	<b>TEJAS</b>			<b>DIBELS</b>	
		ER	LEE	<b>TPRI</b>	TX-KEA	NEXT	aimswebPlus
HEALTH &	Gross motor and/or fine motor Self-care						
	Self-awareness and self-regulation						
WELLNESS	Relationship skills						
	Communicate wishes, feelings, and needs						
	Motivation and engagement						

Source: Early Learning Alliance (2019). Tarrant County kindergarten entry percentages by district. Fort Worth, TX.

Texas Education Agency (2017). Commissioner's list of approved kindergarten assessment instruments. Retrieved from http://tea.texas.gov/sites/default/files/Appendix-I\_Final\_List\_K\_Recommendations.pdf

The table below (Table 5) provides a list of skills related to the developmental domain of mathematics and the Kindergarten Readiness Assessments that districts in Tarrant County reported using in the 2018-19 school year (source: ELA). The areas marked in green represent concepts that had "excellent," "very good," or "good" coverage in the assessment and those marked in orange only have a "fair" amount of coverage. Areas that were only "minimally assessed" or "not assessed at all" are not represented. The ratings are from the TEA Commissioner's List of Kindergarten Readiness Assessment Instruments.

Table 5: Texas Kindergarten Entry Assessments Used in Tarrant County in 2018-19 and the Mathematics Skills Measured

		ISIP-ER	TEJAS LEE	TPRI	TX-KEA	DIBELS NEXT	aimswebPlus
	Numeral Identification						
	Verbal and tactile counting						
MATH	Adding and/or subtracting						
	Geometry and spatial sense language						
	Measurement						
	Comparison						

Source: Early Learning Alliance (2019). Tarrant County kindergarten entry percentages by district. Fort Worth, TX.

Texas Education Agency (2017). Commissioner's list of approved kindergarten assessment instruments. Retrieved from http://tea.texas.gov/sites/default/files/Appendix-I\_Final\_List\_K\_Recommendations.pdf