

**Data Tables for  
FACES 2009  
Report: *Getting  
Ready for  
Kindergarten:  
Children's  
Progress During  
Head Start***

**OPRE Report 2013-21b  
June 2013**



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# Data Tables for FACES 2009 Report *Getting Ready for Kindergarten: Children's Progress During Head Start*

**OPRE Report 2013-21b**

**June 2013**

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## ABSTRACT

This set of tables describes the developmental outcomes and family backgrounds for children who entered Head Start for the first time in fall 2009 and completed one or two years of the program before entering kindergarten. It is designed to accompany the report *Getting Ready for Kindergarten: Children's Progress During Head Start* (Aikens et al. 2013), which is the third in a series of reports describing data from the 2009 cohort of the Head Start Family and Child Experiences Survey (FACES 2009). Previous FACES 2009 reports and data tables described the characteristics of children and their families and programs as they entered Head Start in fall 2009 (Aikens et al. 2011; Hulseley et al. 2011) and, in spring 2010, at the end of one year in the program (Aikens et al. 2012; Moiduddin et al. 2012). This set of tables and accompanying report focus on the population of children who entered Head Start for the first time in fall 2009 and completed one or two years of the program before entering kindergarten. We include a set of tables focusing on household/family characteristics as children entered the program in fall 2009, and a separate set focused on characteristics as children exited Head Start. The table set also provides information about child cognitive, social-emotional, and health outcomes, including description of children's outcomes as they completed the program and progress in outcomes between Head Start entry and exit.

FACES 2009 is the fifth in a series of nationally representative cohort studies of Head Start children, their families, and the programs they attend (previous cohorts were initiated in 1997, 2000, 2003, and 2006). The FACES 2009 child sample was selected to represent 3- and 4-year-old children as they entered their first year of the program, drawing on participants from 60 selected programs from across the country. FACES includes a battery of child assessments across many developmental domains; interviews with children's parents, teachers, and program managers; and observations of classroom quality. The study is conducted by Mathematica Policy Research and its partners—Educational Testing Service and Juárez and Associates—under contract to the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

## INTRODUCTION

Head Start is a national program that aims to promote school readiness by enhancing the social and cognitive development of children through the provision of educational, health, nutritional, social, and other services to enrolled children and families. The Head Start program provides grants to local public and private nonprofit and for-profit agencies to provide comprehensive child development services to economically disadvantaged children and families; the Office of Head Start places special emphasis on helping preschoolers develop the reading and mathematics skills they need to be successful in school. The program also seeks to engage parents in their children's learning and to promote their progress toward their own educational, literacy, and employment goals (Administration for Children and Families [ACF] 2009).

This set of tables is designed to accompany the report *Getting Ready for Kindergarten: Children's Progress During Head Start* (Aikens et al. 2013), which is the third in a series of reports describing data from the 2009 cohort of the Head Start Family and Child Experiences Survey (FACES 2009). Previous FACES 2009 reports and data tables described the characteristics of children and their families and programs as they entered Head Start in fall 2009 (Aikens et al. 2011; Hulseley et al. 2011) and, in spring 2010, at the end of one year in the program (Aikens et al. 2012; Moiduddin et al. 2012). This set of tables and accompanying report describe children who entered Head Start for the first time in fall 2009 and completed one or two years of the program, as well as their family backgrounds.

FACES was first launched in 1997 as a periodic, longitudinal study of program performance. Successive nationally representative samples of Head Start children, their families, classrooms, and programs provide descriptive information on the population served; staff qualifications, credentials, and opinions; Head Start classroom practices and quality measures; and child and family outcomes. FACES includes a battery of child assessments across many developmental domains; interviews with children's parents, teachers, and program managers; and observations of classroom quality. In 2008, the Office of Planning, Research and Evaluation in the HHS Administration for Children and Families (ACF) funded Mathematica Policy Research and its partners—

Educational Testing Service and Juárez and Associates—to design and conduct FACES 2009.

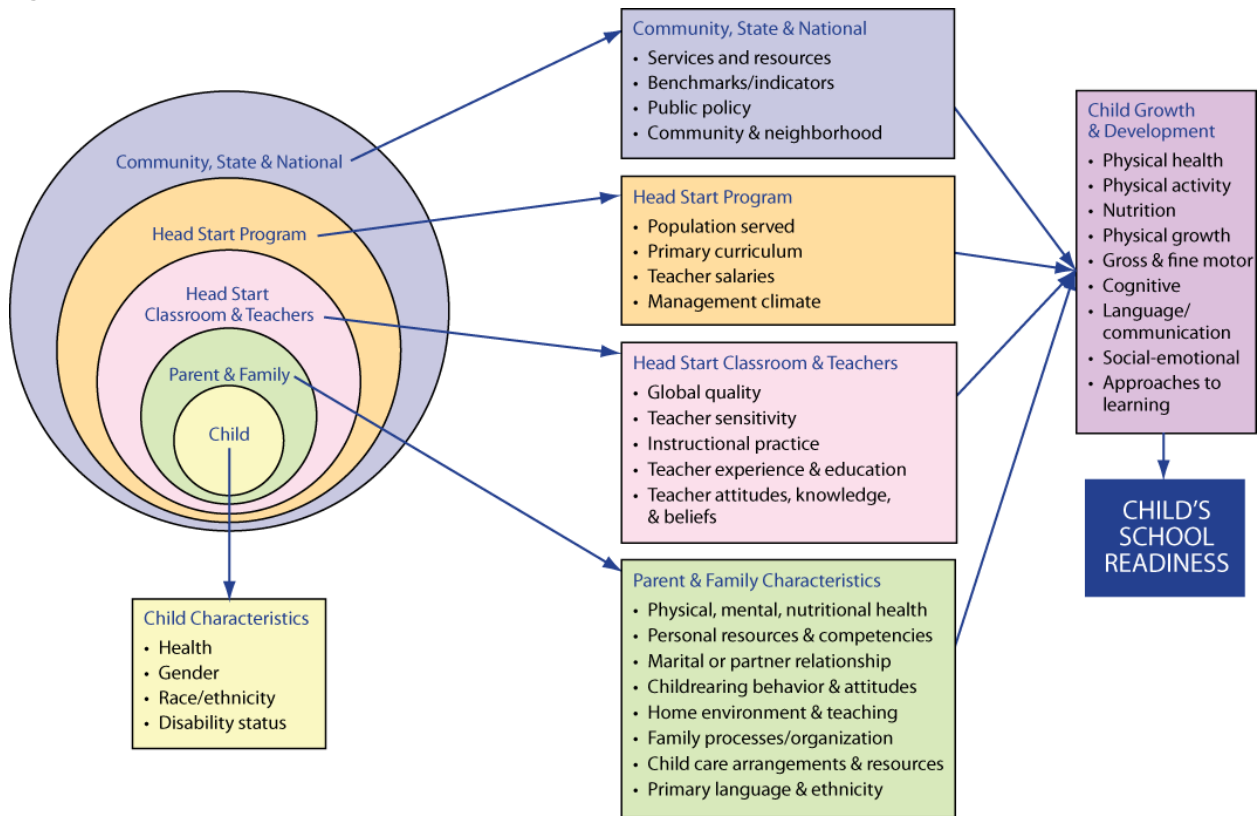
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Following this introduction to the study methodology and sample as well as the measures used in FACES 2009, the tables in the first section (Section A) provide information on the children's characteristics and family demographics. This section includes a set of tables focusing on characteristics as children entered the program in fall 2009, and a separate set focused on characteristics as children exited Head Start. In the next three sets of tables, we provide information about child cognitive (Section B) and social-emotional (Section C) development, and health outcomes (Section D). These sections include a set of tables focusing on characteristics in spring 2010 or 2011, as children completed the program. They also include tables focusing on change in outcomes between Head Start entry and exit (fall 2009 to spring 2010 or 2011). Estimates for certain characteristics may differ from those reported previously for FACES 2009, because they are based on a different sample of children.

## CONCEPTUAL MODEL AND FRAMEWORK

The conceptual framework for FACES 2009 illustrates the complex interrelationships that help shape the developmental trajectories of children in Head Start (Figure 1). The child's place is primary and constitutes the central core of the relationships depicted in the figure; fostering his or her progress toward school readiness, broadly construed, is Head Start's ultimate goal. The family context—health, economic, and educational resources, as well as cultural factors—forms the first ring of influences surrounding the child. Membership in the Head Start community is reflected in the child's classroom and teachers and the wider Head Start program, all of which influence the quality of the early childhood learning experience. Factors affecting the child's development and well-being also include teacher credentials, classroom quality, and program management. Finally, community, state, and national policy decisions, depicted in the outer ring, also affect the life of a Head Start child. These

**Figure 1. Conceptual Model for FACES 2009**



multidimensional contexts guide all aspects of the FACES study, from the selection of measures to the multilevel analyses needed to fully address program and policy issues in today's Head Start program.

The Head Start experience is designed to promote immediate, short- and long-term goals for children and families. For children, the experience includes preschool education, health screenings and examinations, nutritionally adequate meals, and opportunities to develop social-emotional skills that support school readiness. For parents, the experience involves opportunities to participate in policy and program decisions. The program provides parents with chances to participate in the classroom and strives to encourage their active involvement in the education and development of their children. Head Start seeks to promote adult literacy and further parent education, where needed and appropriate, and to provide opportunities for careers and training in early childhood education. The program also seeks to promote family self-sufficiency through provision of case management, assessment, referral, and crisis intervention services. Head Start acts as an advocate for necessary family-focused social services through

interagency coordination and agreements.

Measurement of these child and family outcomes, both during the program years and through followup at the end of kindergarten, allows fuller understanding of Head Start's efforts to prepare children and their parents for the school experience.

## METHODS

The FACES 2009 sample provides information at the national level about Head Start programs, centers, classrooms, and the children and families they serve. A sample of Head Start programs was selected from the 2007–2008 Head Start Program Information Report (PIR),<sup>2</sup> with approximately two centers per program and three classrooms per center selected for participation. Within each classroom, an average of eight newly enrolled 3- and 4-year-old children was randomly selected for the study. Sixty programs, 129 centers, 486 classrooms, 439 teachers, and 3,349 children participated in the study in fall 2009.<sup>3</sup> Children in the study were administered a battery of direct child assessments, their parents and teachers were interviewed, and interviews were conducted with

the directors of the programs and centers in the sample and with education coordinators.

In spring 2010 and 2011, data were collected again for the group of children as they were completing Head Start.<sup>4</sup> In both spring 2010 and 2011, data were collected over a five-month period (February–June).<sup>5</sup> Mathematica data collection teams assessed the children at their Head Start centers. Children’s parents were interviewed by phone<sup>6</sup> and teachers were asked to complete a set of ratings for each sampled child in their classroom using either a web-based or a paper instrument.<sup>7</sup>

Eighty-nine percent of eligible 3- and 4-year-old children and 84 percent of eligible 3-year olds participated in the spring 2010 and spring 2011 follow-ups respectively.<sup>8</sup> Child assessments were completed for 95 percent of 3- and 4-year-old children and 86 percent of their parents were interviewed in spring 2010. The rates for 3- year olds in spring 2011 were 98 percent and 81 percent, respectively. A set of teacher ratings was completed for 96 percent of the 3- and 4-year-old children and 95 percent of the 3-year-old children in spring 2010 and spring 2011, respectively. Data from the direct child assessments are used here to report on children’s cognitive, executive functioning, and physical outcomes at the beginning and end of their Head Start experience. Parent and teacher ratings provide information about children’s social skills, approaches to learning, and problem behaviors during Head Start. Assessor ratings are another source of information about children’s social-emotional outcomes. We also use parent interview data to describe children’s backgrounds and family demographics.

**Direct Child Assessments.** The spring 2010 and 2011 battery of direct child assessments, like the fall 2009 battery, included a set of standardized preschool assessments designed to measure children’s cognitive outcomes (language, literacy, and mathematics), executive functioning (pencil tapping), and physical outcomes (height and weight) through an untimed, one-on-one assessment of each child. The actual measures used are described in the next section.

Except for a few differences, the procedures used to administer the direct child assessments were the same as those used in the fall. It began with a

language screening to determine whether children from households where English was not the primary spoken language should be assessed in English, Spanish, or administered an abbreviated battery that included the Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4) (Dunn and Dunn 2006), the Expressive One-Word Picture Vocabulary Test (EOWPVT; EOWPVT-SBE; Brownell 2000), and the measurement of height and weight.<sup>9</sup> However, if a child had been assessed in English in an earlier round, he or she was assessed in English in the spring regardless of his or her spring score on the language screener.<sup>10</sup> The assessments themselves used the same standard materials that were used in the fall such as stimulus and response pages from the PPVT-4 and Woodcock-Johnson Tests of Achievement, Third Edition (WJ III) (Woodcock et al. 2001) measures. Computer-assisted personal interviewing (CAPI) was used when administering the assessments to facilitate the movement from one measure to the next without the assessor having to calculate stopping or starting points (that is, basals and ceilings). Assessors read the questions and instructions from a computer screen. The child responded by pointing to the correct answers on the assessment easel or giving a verbal response. Assessors entered the responses into a laptop computer using software that ensured all basal and ceiling rules were followed.

**Parent Interviews.** FACES 2009, using CAPI, collected information from Head Start parents in a variety of areas including characteristics of households (such as income, number of adult household members, languages spoken in the home) and household members (including relationship to study child).<sup>11</sup> Information was also collected on parents’ ratings of their children’s social skills, problem behaviors, and health status.<sup>12</sup>

**Teacher Child Reports.** As in the fall, using a web-based Teacher Child Report (TCR) form, lead teachers were asked to rate each FACES child in their classroom on a set of items assessing the child’s cooperative classroom behavior, behavior problems, and their approaches to learning. Teachers also provided reports of children’s health and developmental conditions.<sup>13</sup>

**Assessor Ratings.** At the end of the fall and spring one-on-one assessments, the assessor completed a

set of rating scales evaluating the child's behavior in the assessment situation using the Leiter-R Examiner Rating Scales (Roid and Miller 1997).

**Population Estimates.** The statistics found in these tables are estimates of key characteristics of the population of newly entering Head Start children who completed one or two years of the program, their parents and families. The data used to report on child and family characteristics and child outcomes were weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.<sup>14</sup>

## OVERVIEW OF MEASURES

In this section we provide an overview of the measures used to describe child cognitive, social-emotional, and physical outcomes in FACES 2009. We provide detail for any scales that are based on multiple items summarized for the purpose of addressing a particular construct; note that this includes all of the child outcome measures in the FACES battery. We include information on the samples that are used to establish norms for certain measures and any limitations on who is administered the measures in the FACES sample. Unless otherwise noted, the measures are included in all waves of FACES 2009 (fall 2009, spring 2010, spring 2011, and spring 2012).

### CHILD COGNITIVE DEVELOPMENT

To assess children's skills and knowledge, norm- and criterion-referenced measures of language, writing, and math development are directly administered to the children. Receptive and expressive vocabulary are measured using the PPVT-4 and EOWPVT, both the English and the conceptually scored Spanish-Bilingual Edition (EOWPVT; EOWPVT-SBE; Brownell 2000). In addition, the Test de Vocabulario Imágenes Peabody (TVIP) (Dunn et al. 1986) is used to measure children's receptive vocabulary in Spanish. The assessment battery also measures children's letter-word knowledge, skills in applied problems and writing, and phonic and structural analysis skills in English or Spanish, using the Letter-Word Identification, Applied Problems, Spelling, and Word Attack subtests from the Woodcock-Johnson Tests of Achievement, Third Edition (WJ III) and the Bateria III

Woodcock-Muñoz Tests of Achievement (WM III; Woodcock et al. 2004), respectively. Word Attack is only administered to children in kindergarten (spring 2011 or 2012 only). A supplemental set of math items from the Early Childhood Longitudinal Study-Birth and Kindergarten cohort (ECLS-B and ECLS-K) math assessment are used to assess a broader set of skills than is captured by Applied Problems. Similarly, to tap the skills of children who progress beyond letter knowledge on the WJ III Letter-Word Identification subtest but have not yet acquired sight words, a supplemental set of letter-sounds items from the ECLS-B are included. We describe each of these measures in a subsequent section.

In fall 2009, the direct child assessment begins with a screening to determine whether children who primarily speak a language other than English at home should be assessed in English, Spanish, or administered a short assessment battery including vocabulary and height and weight measurements. Two subtests from the Preschool Language Assessment Survey 2000 (*preLAS* 2000) (Duncan and DeAvila 1998), Simon Says and Art Show, are used as screening tools. All children are also administered the PPVT-4 to measure English receptive vocabulary and EOWPVT or EOWPVT-SBE to measure expressive vocabulary. In addition, the TVIP is used with children whose primary home language is Spanish, regardless of performance on the *preLAS*. Thus, children whose parents speak Spanish to them at home receive the receptive vocabulary component of the battery in English (PPVT-4) as well as in Spanish (TVIP). They also receive the Spanish-bilingual version of the EOWPVT (EOWPVT-SBE).

Following administration of these vocabulary measures, children whose home language is Spanish and who make five consecutive errors on Simon Says and Art Show are routed to the Spanish-language cognitive assessment. Similarly, a child who makes five consecutive errors on both Simon Says and Art Show and primarily speak a language other than English or Spanish are routed out of the cognitive assessment following administration of the vocabulary measures and are weighed and measured for height. Children who pass the screener and whose primary home language is a language other than English receive the cognitive assessment battery in English. Children from homes in which English is primarily spoken are administered the cognitive assessment

battery in English, regardless of their scores on the language screener.

In subsequent springs, an adapted version of the screening procedure was used. All children are administered the Simon Says task of the *preLAS* 2000. Following this task (and the receptive and expressive vocabulary measures), those who primarily speak English at home and those who have passed the language screener in the prior round(s) are routed to the English version of the assessment. All other children are administered both Simon Says and Art Show, and, as in the fall, performance on both tasks is used to determine whether these children should be assessed in English, assessed in Spanish, or administered a short assessment of vocabulary and height and weight measurements. Table 1 presents the routing procedures for the assessment based on a child's home language and performance on the

screener. Table 2 presents the number of children routed along each of the language paths in fall 2009, spring 2010, and spring 2011.

Child assessment scores in FACES include raw, standard, and Item Response Theory (IRT)-based scores, or *W*-scores. Raw scores refer to counts, averages, or the like of the individual items that a child completed. They are indicators of absolute rather than relative performance.<sup>15</sup> In contrast, standard scores allow for comparisons of an individual child's performance relative to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. Scores above or below the mean indicate that compared to same-age peers, the child's skills are more or less advanced, respectively. It is important to take note of the norming sample used for each test when considering how children compare.

**Table 1. FACES 2009 Language Routing Assessment Paths**

English	Home Language			
	Spanish		Other	
	English Path	Spanish Path	English Path	Non-English Path
Language Screener (Simon Says and Art Show)	Language Screener (Simon Says and Art Show)	Language Screener (Simon Says and Art Show)	Language Screener (Simon Says and Art Show)	Language Screener (Simon Says and Art Show)
PPVT-4	PPVT-4	PPVT-4	PPVT-4	PPVT-4
EOWPVT	EOWPVT-SBE (conceptually scored)	EOWPVT-SBE (conceptually scored)	EOWPVT	EOWPVT
—	TVIP	TVIP	—	—
WJ III (Spelling, Letter-Word Identification, Applied Problems, Word Attack <sup>a</sup> )	WJ III (Spelling, Letter-Word Identification, Applied Problems, Word Attack <sup>a</sup> )	WM III (Spelling, Letter-Word Identification, Applied Problems, Word Attack <sup>a</sup> )	WJ III (Spelling, Letter-Word Identification, Applied Problems, Word Attack <sup>a</sup> )	—
ECLS-B Letter-Sounds Task <sup>b</sup>	ECLS-B Letter-Sounds Task <sup>b</sup>	—	ECLS-B Letter-Sounds Task <sup>b</sup>	—
ECLS Math	ECLS Math	ECLS-B Math (Spanish translation available)	ECLS Math	—
Executive Functioning Pencil Tapping Task <sup>c</sup>	Executive Functioning Pencil Tapping Task <sup>c</sup>	Executive Functioning Pencil Tapping Task <sup>c</sup> (Spanish translation available)	Executive Functioning Pencil Tapping Task <sup>c</sup>	—
Height and Weight	Height and Weight	Height and Weight	Height and Weight	Height and Weight

<sup>a</sup> Word attack is only administered to children in kindergarten.

<sup>b</sup> This task is administered only to children who meet a certain threshold on the WJ III Letter-Word Identification subtest. Therefore, it is only available for children assessed in English.

<sup>c</sup> This task is administered only to children age 4 and older.

**Table 2. FACES 2009 Language Routing Results: Fall 2009, Spring 2010, and Spring 2011**

	Home Language				
	English	Spanish		Other	
		English Path	Spanish Path	English Path	Non-English Path
Fall 2009	2166	382	512	57	33
Spring 2010	1933	613	251	70	12
Spring 2011	1384	660	30	64	3

IRT scale scores from the mathematics assessment provide an estimate of the child’s performance as if he/she had taken all items in an assessment (as the child may not receive all items based on basal or ceiling rules, for example), and is a measure of absolute performance. Additionally, direct assessment measures such as the PPVT–4, WJ III Tests of Achievement, and Bateria III include GSV or W scores, which allow for measurement of change or growth in performance on the same scale over time. Like raw scores, these indicate absolute rather than relative performance.

Each of these scores can be used to address different types of questions about children’s skills and development. Raw and W, GSV or IRT-based scores provide information on children’s absolute performance at a specific point in time. Changes in these scores across waves indicate that the child is progressing developmentally and his/her skills are increasing in absolute terms. In contrast, an increase in a child’s standard score toward the mean of 100 indicates that progress is being made relative to same-age peers or that the gap among peers is closing.

The *PPVT-4* measures children’s receptive vocabulary knowledge relative to English speaking peers in the U.S. Raw, standard, and GSV (the PPVT publishers refer to W scores as GSV scores) scores are derived and reported in FACES.

The *EOWPVT* and *EOWPVT-SBE* measure children’s expressive vocabulary. They include the same items in the same order, but the *EOWPVT-SBE* allows for conceptual scoring (that is, it provides prompts for both English and Spanish and accepts responses in either language, including responses in various Spanish dialects).<sup>16</sup> FACES uses the *EOWPVT-SBE* and conceptual scoring with children whose primary

home language is Spanish. Raw and standard scores are derived. Standard scores based on the *EOWPVT* norms provide a measure of children’s expressive vocabulary relative to English-speaking peers nationally, while those based on the *EOWPVT-SBE* norms reflect these skills relative to Spanish-bilingual and Spanish-dominant peers in the U.S. FACES provides standard scores based on the *EOWPVT* norms for all children, regardless of home language. The study only reports standard scores based on the *SBE* norms for children with a Spanish home language. Standard scores for the *EOWPVT-SBE* are only available for children who are 4 and older. We only report scores on this latter measure for children who entered the program at age 4.

The *TVIP* measures children’s receptive vocabulary in Spanish. Mean raw and standard scores are derived in FACES. The *TVIP* was normed on a sample of individuals in Mexico and Puerto Rico in the early 1980s, so standard scores provide information on children’s vocabulary relative to monolingual Spanish-speaking age-group peers born outside of the U.S.

Selected scales from the *WJ III Psycho-Educational Battery* for children assessed in English provide a picture of letter knowledge, early math, early writing, and phonic and structural analysis skills relative to English-speaking peers in the U.S. Spanish versions of these measures are from the *Bateria-III WM*. The calibration sample for the *WM* was drawn from both inside and outside the U.S. (including Mexico, Costa Rica, Panama, Argentina, Colombia, Puerto Rico, and Spain). Calibration data were then equated to the *WJ* norms. Raw, standard, and W scores are derived in FACES.

*A supplemental set of math items from ECLS–B and ECLS–K* is used to assess a broader set of early math skills than is captured by Applied Problems. Raw



counts of how high children can count, as well as IRT-based scores are derived in FACES.

*A supplemental set of letter-sounds items from ECLS-B* is used to tap the skills of children who have progressed beyond letter knowledge on the WJ Letter-Word Identification subtest but have not yet acquired sight words. IRT scale scores only are derived in FACES from these data. Scores are only available for children assessed in English.

### **Child Social-Emotional Development**

FACES 2009 uses measures from a variety of sources—teacher, parent, assessor, and the child—to provide multiple perspectives on children’s positive and challenging behaviors that may affect their ability to learn and interact with peers and adults. Using items taken from the Behavior Problems Index (BPI; Peterson and Zill 1986), the Personal Maturity Scale (Entwisle et al. 1997), and the Social Skills Rating Scale (SSRS; Gresham and Elliott 1990), teachers report on children’s cooperative classroom behavior or social skills, as well as their problem behaviors in the classroom. Teachers also rate children’s approaches to learning, using the ECLS–K Approaches to Learning Scale (U.S. Department of Education 2002).

Parents also report on children’s social skills and problem behaviors in the home environment using items from the Personal Maturity Scale, Preschool Learning Behavior Scale (McDermott et al. 2000), SSRS, and BPI (see below for details). Using the Leiter International Performance Scale-Revised Examiner Ratings (Leiter-R), assessors rate children’s behaviors during the assessment situation in such areas as attention, organization and impulse control, activity level, and sociability. Finally, for FACES 2009, a pencil tapping task (Blair 2002; Diamond and Taylor 1996; Smith-Donald et al. 2007) was added to capture 4-year-old children’s executive functioning.

Criterion or raw scores capturing children’s social skills, problem behaviors, and approaches to learning are derived from the parent interview and Teacher Child Report. Composite scores are calculated as the sum or mean of items and reflect the extent to which given statements are reflective of a child’s behavior. Assessor-reported scores of children’s behavior during the direct assessment include raw and standard scores derived from Leiter–R Examiner

Rating Scale. Like other standard scores, these have a mean of 100 and a standard deviation of 15, and indicate performance relative to same-age peers.

*Social Skills/Cooperative Behavior Scale* is a summary index based on 12 items with 24 possible points related to children’s cooperative behavior and social skills, as reported by teachers. Parents report on 8 items, with 16 points possible on the summary score. Higher scores indicate more frequent cooperative behavior.

*Approaches to Learning*, as reported by teachers, is based on the mean of six items that comprise the Approaches to Learning Scale from ECLS–K. Higher scores indicate more frequent positive approaches to learning behaviors.

*Behavior Problems Index* is a rating scale of 36 items reported by teachers that contains three subscales—Aggressive Behavior, Withdrawn Behavior, and Hyperactive Behavior. Parents also report on 12 items, which contribute to a summary total behavior problems score. Higher scores represent more frequent negative or problem behavior.

Using the *Leiter-R*, assessors evaluate the child’s behavior in the test situation, including approaches to learning and any problem behaviors. Raw and standard scores are derived and reported in FACES, with higher scores reflecting greater attention, organization/impulse control, activity level, and sociability. Four subscales from the Leiter-R are used for FACES 2009: (1) attention, (2) organization/impulse control, (3) activity level, and (4) sociability. The 27 items and four subscales comprise the cognitive/social scale.

*Pencil tapping*, a direct assessment of executive functioning, provides a measure of children’s inhibitory control, working memory, and attention. Reported scores reflect the percentage of times the child taps correctly and can take on any value from zero to 100. Higher scores indicate better skills on the task. The task is only administered to children age 4 and older at the time of the direct assessment. Normative data are not yet available for this measure. In this document, we only report scores on this measure for children who entered the program at age 4 or older.

## Child Health and Physical Development

Parents and teachers report on several aspects of children's health and physical development, including disability status and health and developmental conditions or concerns. Each child's height and weight are also measured to support analyses of obesity or underweight status.

*Height and weight measurement* is completed on each child using procedures from the ECLS. Body Mass Index (BMI) is calculated as the ratio of an individual child's weight to height (weight in kilograms divided by squared height in meters) and can be used as an indicator of overweight and obese status. Calculation of BMI is specific to gender and age. According to the Centers for Disease Control and Prevention (CDC), a child is considered to be overweight when his/her BMI score is at or above the 85th percentile for age and gender but below the 95th percentile, and obese if his/her BMI is at or above the 95th percentile for age and gender. Children with a BMI score less than the 5th percentile for age and gender are considered underweight, and those between the 5th and 85th percentile are considered normal weight.

## REFERENCES

- Administration for Children and Families. "About the Office of Head Start." Available at [<http://www.acf.hhs.gov/programs/ohs/about/Index.html>]. Accessed July, 2009.
- Aikens, N.L., A. Kopack Klein, L. Tarullo, and J. West. (2013). Getting Ready for Kindergarten: Children's Progress During Head Start. FACES 2009 Report. OPRE Report 2013-21a. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Aikens, N., Moiduddin, E., Xue, Y., Tarullo, L., and West, J. (2012). Data Tables for Child Outcomes and Classroom Quality in FACES 2009 Report. OPRE Report 2011-37b. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Aikens, N., Hulsey, L. K., Moiduddin, E., Kopack, A., Takyi-Laryea, A., Tarullo, L., and West, J. (2011). Data Tables for FACES 2009 *Head Start Children, Families, and Programs: Present and Past Data from FACES* Report. OPRE Report 2011-33b. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Aikens, N, L. Tarullo, L. Hulsey, C. Ross, J. West, and Y. Xue. "A Year in Head Start: Children, Families and Programs." Report submitted to the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation. Washington, DC: Mathematica Policy Research, October 2010.
- Blair, C. "School Readiness: Integrating Cognition and Emotion in a Neurobiological Conceptualization of Children's Functioning at School Entry." *American Psychologist*, vol. 57, 2002, pp. 111–127.
- Brownell, R. "Expressive One-Word Picture Vocabulary Test." San Antonio, TX: Harcourt Assessment, Inc., 2000.
- Diamond, A., and C. Taylor. "Development of an Aspect of Executive Control: Development of the Abilities to Remember What I Said and to "Do as I Say, Not as I Do." *Developmental Psychobiology*, vol. 29, 1996, pp. 315–334.
- Duncan, S.E., and E. A. DeAvila. *Preschool Language Assessment Survey 2000 Examiner's Manual: English Forms C and D*. Monterey, CA: CTB/McGraw-Hill, 1998.
- Dunn, L.M., D.E. Lugo, E.R. Padilla, and L.M. Dunn. *Test de Vocabulario en Imagenes Peabody*. Circle Pines, MN: American Guidance Service, 1986.
- Dunn, L.M., and D.M. Dunn. *Peabody Picture Vocabulary Test. Fourth Edition*. Circle Pines, MS: American Guidance Service, 2006.
- Entwisle, D.R., K.L. Alexander, and L.S. Olson. *Children, Schools, and Inequality*. Boulder, CO: Westview Press, 1997.

Gresham, F.M., and S.N. Elliot. *Social Skills Rating System*. Circle Pines, MN: American Guidance Service, 1990.

Hulsey, L. K., Aikens, N., Kopack, A., West, J., Moiduddin, E., and Tarullo, L. (2011). *Head Start Children, Families, and Programs: Present and Past Data from FACES*. OPRE Report 2011-33a. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

McDermott, P.A., L.F. Green, J.M. Francis, and D.H. Stott. "Preschool Learning Behaviors Scale." Philadelphia: Edumetric and Clinical Science, 2000.

Moiduddin, E., Aikens, N., Tarullo, L., West, J., Xue, Y. (2012). *Child Outcomes and Classroom Quality in FACES 2009*. OPRE Report 2012-37a. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services

Peterson, J., and N. Zill. "Marital Disruption, Parent-Child Relationships, and Behavior Problems in Children." *Journal of Marriage and the Family*, vol. 48, 1986, pp. 295–307.

Roid, G.H., and L.J. Miller. *Examiners Manual: Leiter International Performance Scale-Revised*. Chicago: Stoelting Co., 1997.

Smith-Donald, R., C. Raver, T. Hayes, and B. Richardson. "Preliminary Construct and Concurrent Validity of the Preschool Self-Regulation Assessment (PSRA) for Field-Based Research." *Early Childhood Research Quarterly*, vol. 22, 2007, pp. 173–187.

U.S. Department of Education, National Center for Education Statistics. "Early Childhood Longitudinal Study—Kindergarten Class of 1998–99 (ECLS–K), Psychometric Report for Kindergarten Through First Grade." NCES 2002–05. Washington, DC: U.S. Department of Education, Institute of Education Sciences, NCES, 2002.

West, J., L. Tarullo, N. Aikens, L. Malone and B.L. Carlson. "FACES 2009 Study Design." Washington, DC: Office of Planning, Research

and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, November 2010.

Woodcock, R.W., A.F. Muñoz-Sandoval, K. McGrew, N. Mather, and F. Schrank. *Batería III Woodcock-Muñoz*. Itasca, IL: Riverside Publishing, 2004.

Woodcock, R.W., K. McGrew, and N. Mather. *Woodcock-Johnson III Tests of Achievement*. Itasca, IL: Riverside Publishing, 2001.

## NOTES

<sup>1</sup> For detailed information on the FACES 2009 study design and measures, see West et al. 2010.

<sup>2</sup> Migrant and Seasonal Head Start (MSHS) programs, American Indian and Alaska Native (AI/AN) programs, programs in Puerto Rico and other U.S. territories, and programs not directly providing services to 3-, 4-, and 5-year-olds (such as Early Head Start) were excluded from the frame. The Office of Head Start provided information about any defunded (or soon-to-be defunded) programs before sampling and these programs were then deleted from the sample frame.

<sup>3</sup> Three of the 65 programs originally sampled were determined to be ineligible because we learned they were under provisional management or otherwise in financial jeopardy. In addition, two eligible programs declined to participate.

<sup>4</sup> Depending on age at entry, children completed the program in spring 2010 or 2011. Those who entered at age 4 completed the program in spring 2010. Meanwhile, those who entered at age 3 exited Head Start in spring 2011.

<sup>5</sup> The first visits to Head Start programs were in March of each data collection year; however, parent interviews by telephone began in February.

<sup>6</sup> Parents who did not have telephones, preferred not to be called at home, or did not want to use their own cell phone minutes were offered the option of completing the interview by phone at their child's Head Start center or in a face-to-face interview with a member of the data collection staff. Only 2 percent of parent interviews in spring 2010 were completed in

person. In spring 2011, all parent interviews were completed by phone.

<sup>7</sup> In spring 2010, 80 percent of teachers used the web instrument, and in spring 2011 75 of teachers opted to respond via the internet.

<sup>8</sup> These are all weighted marginal response rates, not accounting for prior stages of sampling and participation. The cumulative weighted response rates, which take into account the response rate for prior stages of the sample (such as, program, center, and child response rates), as well as fall 2009 consent rates, are by definition lower. The cumulative 3- and 4-year-old child response rate through spring 2010 is 82 percent, and the cumulative response rate for 3-year-old children through spring 2011 is 77 percent. The corresponding response rates associated with completing the child assessments, parent interviews, and teacher ratings in spring 2010 are 78 percent, 71 percent, and 79 percent, respectively. The rates for 3-year olds in spring 2011 are 75 percent, 62 percent, and 73 percent, respectively.

<sup>9</sup> The screening process and cognitive assessment measures are described in the next section, the overview of measures used in FACES 2009.

<sup>10</sup> Simon Says, a subtest from the Preschool Language Assessment Survey 2000 (*preLAS 2000*; Duncan and DeAvila 1998), was used as a warm-up activity at that start of the assessment for this group of children.

<sup>11</sup> The preferred respondent for the spring 2010 interview was the child's biological mother or the fall 2009 respondent. Ninety-five percent of the spring 2010 interviews were completed by the same respondent who had been interviewed in the fall (and 87 percent were the child's biological mother). In spring 2011, 89 percent of the respondents were the same person who had been interviewed in spring 2011 (and 87 percent were the child's biological mother).

<sup>12</sup> Additional information on children and families (such as the child's emergent literacy skills, parent depressive symptoms, involvement and satisfaction with Head Start, children's child care arrangements, access to and use of community services and sources of social support, among others) was also captured as

part of the parent interview but are not reported in the brief or accompanying table set.

<sup>13</sup> Teachers also reported on the child's emergent literacy skills and absences during the program year, but we do not include these data in the brief or set of tables.

<sup>14</sup> Weights are used to compensate for the differential probabilities of selection at the sampling stage (for example, we selected programs, center, and classrooms with probability proportional to size; and we selected a fixed number of children per classroom out of a variable number of eligible children) and to adjust for changes in children's eligibility status and the effects of nonresponse.

<sup>15</sup> While raw scores for children's cognitive outcomes are created in FACES, we do not report on these types of score in the brief or set of tables. Only raw scores on social-emotional outcomes are reported.

<sup>16</sup> For the EOWPVT-SBE, some items were not administered in the standardization study because differential item functioning (DIF) was detected. In FACES, those items are excluded from both the EOWPVT and EOWPVT-SBE administration.

**Table A.1. Demographic Characteristics of Children Entering Head Start: Fall 2009**

Characteristic	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
<b>Age as of September 1, 2009</b>			
3 years old or younger	49.6		
4 years old or older	50.4		
<b>Race/Ethnicity</b>			
White, Non-Hispanic	21.3	20.0	22.5
African American, Non-Hispanic	32.2	35.0	29.5
Hispanic/Latino	38.7	36.5	40.8
American Indian or Alaska Native, Non-Hispanic	0.4	0.6	0.3
Asian or Pacific Islander, Non-Hispanic	1.6	1.6	1.6
Multi-Racial/Bi-Racial, Non-Hispanic	5.7	6.2	5.1
Other, Non-Hispanic	0.2	0.2	0.2
<b>Gender</b>			
Female	49.8	48.9	50.7
Male	50.2	51.1	49.3
<b>Participated in Early Head Start</b>			
Yes	12.6	14.1	11.0
No	87.4	85.9	89.0

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

<sup>a</sup>Age as of September 1, 2009.

- Fifty percent of children were 3 years old and 50 percent were 4 years old (as of September 1, 2009) at Head Start entry.
- Thirty-nine percent of children were Hispanic/Latino and another 32 percent were African American.
- Children who entered Head Start at age 3 were more likely (35 percent) to be African American than were children who entered at age 4 (30 percent). Children who entered Head Start at age 4 were more likely (41 percent) to be Hispanic/Latino than were children who entered at age 3 (37 percent).
- Thirteen percent of children had participated in Early Head Start. Children who entered Head Start as 3-year-olds were more likely to have participated in Early Head Start than those who entered Head Start as 4-year-olds, but the difference is small (14 and 11 percent, respectively).

**Table A.2. Home Language Environment at Head Start Entry: Fall 2009**

Language Use in the Home	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
<b>Primary Language Spoken to the Child at Home</b>			
English	70.9	71.7	70.1
Spanish	25.2	23.5	26.8
Other language	2.3	3.2	1.3
<b>Any Languages Other than English Spoken in the Home</b>			
Spanish	34.3	32.5	36.1
Other language	5.2	6.4	4.0

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

<sup>a</sup>Age as of September 1, 2009.

- At Head Start entry, 28 percent of children lived in households where a language other than English was the primary language spoken to them.
- Spanish was by far the most prevalent non-English language spoken in the home (34 percent) and was the primary language spoken to 25 percent of children at home.
- Three-year-olds were more likely to be spoken to primarily in a language other than Spanish or English (3 percent) than were 4-year-olds (1 percent). Three-year-olds were also more likely than 4-year-olds to be in households where a language other than Spanish or English was spoken (6 percent versus 4 percent, respectively).

**Table A.3. Family Structure at Head Start Entry: Fall 2009**

	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
<b>Percent of Children Living with</b>			
Biological <sup>b</sup> mother and biological <sup>b</sup> father	43.1	45.4	40.9
Married	27.9	30.3	25.6
Unmarried	15.0	15.0	15.1
Marital status not reported	0.2	0.1	0.2
Biological <sup>b</sup> mother only	49.5	48.8	50.1
Biological <sup>b</sup> father only	2.7	2.2	3.2
Neither biological <sup>b</sup> mother nor biological <sup>b</sup> father	4.7	3.6	5.8

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

This table focuses on biological/adoptive parents and does not include other adults, such as parents' romantic partners, step-parents, foster parents, or grandparents. Thus, for example, the "Biological mother only" category does not mean that the biological mother is the only adult in the household, but that she is the only biological parent in the household.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Includes both biological and adoptive parents.

- Forty-three percent of children lived with both biological/adoptive parents at Head Start entry.
- Three-year-olds were more likely (45 percent) to live with both biological/adoptive parents than 4-year-olds (41 percent). They were also more likely to live with married parents than were 4-year-olds (30 percent versus 26 percent).

**Table A.4. Parent Education at Head Start Entry: Fall 2009**

	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
Highest Level of Education of Biological or Adoptive Parents Living with Child			
<b>Percentage of Children Living with Either or Both Parents<sup>b</sup></b>	95.3	96.4	94.2
<b>Highest Level of Education Completed by those Parents<sup>o</sup></b>			
Less than high school diploma	32.9	29.5	36.2
High school diploma or GED	35.8	37.5	34.1
Some college/vocational/technical	24.2	25.0	23.4
Bachelor's degree or higher	7.1	8.0	6.2
<b>Percentage of Children Living with their Mother<sup>b</sup></b>	92.6	94.2	91.0
<b>Highest Level of Education Completed by those Mothers<sup>b</sup></b>			
Less than high school diploma	37.1	34.4	39.9
High school diploma or GED	34.6	36.1	33.1
Some college/vocational/technical	22.8	23.3	22.2
Bachelor's degree or higher	5.5	6.2	4.8
<b>Percentage of Children Living with their Father<sup>b</sup></b>	45.9	47.6	44.1
<b>Highest Level of Education Completed by those Fathers<sup>b</sup></b>			
Less than high school diploma	49.9	47.9	51.9
High school diploma or GED	31.7	31.3	32.2
Some college/vocational/technical	12.0	14.0	9.8
Bachelor's degree or higher	6.5	6.9	6.0

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

Households that do not include a mother and/or father are not included in the relevant percentage calculations.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Includes both biological and adoptive parents.

- Sixty-seven percent of children had at least one parent with at least a high school diploma or GED living with them at Head Start entry.
- Four-year-olds were less likely to have a parent with at least a high school diploma or GED than 3-year-olds. They were also less likely to have a mother with at least a high school diploma or GED than 3-year-olds.
- Among children living with their mothers, 63 percent had mothers with at least a high school diploma or GED. Among children living with their fathers, 50 percent had fathers with at least a high school diploma or GED.



**Table A.5. Parent Employment Status at Head Start Entry: Fall 2009**

	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
<b>Employment Status of Biological or Adoptive Parents Living with Child</b>			
<b>Percentage of Children Living with Either or Both Parents<sup>b</sup></b>	95.3	96.4	94.2
<b>Employment Status of the Most Employed of those Parents<sup>b</sup></b>			
Working full time	77.3	76.0	78.7
Working part time	12.3	14.0	10.5
Looking for work	6.6	6.2	7.0
Not in labor force	3.8	3.9	3.7
<b>Percentage of Children Living with their Mother<sup>b</sup></b>	92.6	94.2	91.0
<b>Employment Status of those Mothers<sup>b</sup></b>			
Working full time	26.2	25.7	26.8
Working part time	21.1	20.4	21.8
Looking for work	21.4	22.1	20.7
Not in labor force	31.3	31.8	30.7
<b>Percentage of Children Living with their Father<sup>b</sup></b>	45.9	47.6	44.1
<b>Employment Status of those Fathers<sup>b</sup></b>			
Working full time	57.6	56.0	59.3
Working part time	14.4	16.2	12.5
Looking for work	17.5	18.1	16.8
Not in labor force	10.5	9.8	11.4

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

Households that do not include a mother and/or father are not included in the relevant percentage calculations.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Includes both biological and adoptive parents.

- At Head Start entry, 77 percent of children had at least one parent who was working full time living with them and 12 percent had at least one parent who was working part time.
- Ten percent of children were living with a parent who was not employed, including 7 percent who lived with at least one parent who was looking for work.
- Twenty-six percent of children's mothers were working full time and 21 percent were working part time.
- Fifty-three percent of children's mothers were not employed, including 21 percent who were unemployed/looking for work.
- Fifty-eight percent of children's fathers were working full time and 14 percent were working part time.
- Twenty-eight percent of children's fathers were not employed, including 18 percent who were unemployed/looking for work.

**Table A.6. Household Income as a Percentage of the Federal Poverty Threshold at Head Start Entry: Fall 2009**

Income as a Percentage of Poverty	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
50 percent or less	21.9	20.6	23.1
50 to 100 percent	41.9	43.3	40.5
101 to 130 percent	15.4	15.1	15.8
131 to 185 percent	12.8	12.8	12.8
186 to 200 percent	1.6	1.4	1.7
201 percent or above	6.5	6.8	6.2

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

This table summarizes household income, and therefore should not be used to estimate eligibility for Head Start. Head Start qualifying criteria are based on family (not household) income, and there are other (non-income) ways to qualify for the program.

In 2009, the federal poverty threshold for a family of four was \$22,050.

<sup>a</sup>Age as of September 1, 2009.

- Sixty-four percent of children lived in households where the total household income was at or below the federal poverty threshold at Head Start entry. Ninety-two percent of children lived in households where total income was less than or equal to 185 percent of the poverty threshold.
- Not shown in table: Mean annual household income is \$22,379 (\$22,497 for families with 3-year-olds and \$22,263 for families with 4-year-olds).

**Table A.7. Family Risk Index at Head Start Entry: Fall 2009**

Risk Factors	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
Single Parent Household <sup>b</sup>	52.1	50.9	53.3
Mother Does Not Have High School Diploma <sup>c</sup>	37.1	34.4	39.9
Income Below Federal Poverty Threshold	63.8	63.9	63.6
<b>Family Risk Index<sup>d</sup></b>			
0 risks	13.0	14.0	12.1
1 risk	35.0	35.5	34.5
2 risks	40.0	39.2	40.8
3 risks	12.0	11.3	12.6

Source: Fall 2009 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 FACES Parent Interview and are being used to describe this population at Head Start entry.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>A single parent household includes any household where one biological/adoptive parent lives alone or with a partner to whom they are not married. It does *not* include households where one biological/adoptive parent lives with a partner to whom they are married.

<sup>c</sup>Households that do not include a mother are excluded from this factor.

<sup>d</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

- Fifty-two percent of children had 2 or more family risks at Head Start entry.

**Table A.8. Family Structure at Head Start Exit: Spring 2010 or Spring 2011**

	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
<b>Percent of Children Living with</b>			
Biological <sup>b</sup> mother and biological <sup>b</sup> father	45.8	47.5	44.3
Biological <sup>b</sup> mother only	47.1	46.9	47.3
Biological <sup>b</sup> father only	2.8	2.8	2.8
Neither biological <sup>b</sup> mother nor biological <sup>b</sup> father	4.3	2.9	5.6

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 and Spring 2010 or 2011 FACES Parent Interview and are being used to describe this population at Head Start exit.

Child age at entry is derived from the Fall 2009 FACES Parent Interview. Family structure is derived from the Spring 2010 or Spring 2011 FACES Parent Interview for 4-year-old and 3-year-old children, respectively.

This table focuses on biological/adoptive parents and does not include other adults, such as parents' romantic partners, step-parents, foster parents, or grandparents. Thus, for example, the "Biological mother only" category does not mean that the biological mother is the only adult in the household, but that she is the only biological parent in the household.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Includes both biological and adoptive parents.

- At Head Start exit, 46 percent of children live with both biological/adoptive parents.
- Four-year-olds are more likely (6 percent) to live with neither of their biological/adoptive parents than 3-year-olds (3 percent).

**Table A.9. Parent Employment Status at Head Start Exit: Spring 2010 or Spring 2011**

	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
<b>Employment Status of Biological or Adoptive Parents Living with Child</b>			
<b>Percentage of Children Living with Either or Both Parents<sup>b</sup></b>	95.7	97.1	94.4
<b>Employment Status of the Most Employed of those Parents<sup>b</sup></b>			
Working full time	61.4	52.7	75.0
Working part time	16.7	19.3	12.7
Looking for work	10.1	12.2	6.8
Not in labor force	11.8	15.8	5.6
<b>Percentage of Children Living with their Mother<sup>b</sup></b>	92.9	94.3	91.6
<b>Employment Status of those Mothers<sup>b</sup></b>			
Working full time	29.7	32.0	27.4
Working part time	19.3	19.0	19.6
Looking for work	17.4	14.7	19.9
Not in labor force	33.6	34.4	32.9
<b>Percentage of Children Living with their Father<sup>b</sup></b>	48.6	50.2	47.1
<b>Employment Status of those Fathers<sup>b</sup></b>			
Working full time	59.2	59.2	59.2
Working part time	16.1	16.8	15.4
Looking for work	12.3	12.2	12.4
Not in labor force	12.5	11.8	13.1

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 and Spring 2010 or 2011 FACES Parent Interview and are being used to describe this population at Head Start exit.

Child age at entry is derived from the Fall 2009 FACES Parent Interview. Parent employment is derived from the Spring 2010 or Spring 2011 FACES Parent Interview for 4-year-old and 3-year-old children, respectively.

Households that do not include a mother and/or father are not included in the relevant percentage calculations.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Includes both biological and adoptive parents.

- At Head Start exit, 61 percent of children have at least one parent who is working full time living with them and 17 percent have at least one parent who is working part time. Three-year-olds are more likely to have at least one parent working full time (32 percent) than are 4-year-olds (27 percent)

- Twenty-two percent of children are living with a parent who is not employed, including 10 percent who live with at least one parent who is looking for work. Three-year-olds are more likely than 4-year-olds to have at least one parent looking for work (12 percent versus 7 percent).
- Compared to Head Start entry (Table A.5), a smaller percentage of children is living with a parent who is working full time at program exit (61 versus 77 percent), and a larger percentage live with a parent who is working part time (17 versus 12 percent), unemployed/looking for work (10 versus 7 percent), and not in the labor force at Head Start exit (12 versus 4 percent). This change seems to be driven by the 3-year-olds. In fact, as compared to program entry, a smaller percentage of 3-year-olds is living with a parent who is working full time at program exit (53 versus 76 percent), and a larger percentage is living with a parent who is working part time (19 versus 14 percent), unemployed/looking for work (12 versus 6 percent), and not in the labor force (16 versus 4 percent) at program exit. There are no changes in parent employment among 4-year-olds between program entry and exit.
- Thirty percent of children's mothers are working full time and 19 percent are working part time. Fifty-one percent of children's mothers are not employed, including 17 percent who are unemployed/looking for work. Three-year-olds are less likely than 4-year-olds to have mothers who are unemployed/looking for work (15 percent versus 20 percent).
- Compared to Head Start entry (Table A.5), a larger percentage of children's mothers is working full time at Head Start exit (26 percent versus 30 percent), while a smaller percentage is unemployed/looking for work at program exit (21 versus 17 percent). The same pattern is present among 3-year-olds – a larger percentage has mothers working full time at Head Start exit than at a entry (26 percent versus 32 percent), while a smaller percentage has mothers who are unemployed/looking for work at program exit than at entry (22 versus 15 percent).
- Fifty-nine percent of fathers are working full time and 16 percent are working part time. Twenty-five percent of children's fathers are not employed, including 12 percent who are unemployed/looking for work.
- Compared to Head Start entry (Table A.5), a smaller percentage of children's fathers is unemployed/looking for work at program exit (18 versus 12 percent). The same pattern is present among 3-year-olds – a smaller percentage has fathers who are unemployed/looking for work at program exit than at entry (18 versus 12 percent).

**Table A.10. Household Income as a Percentage of the Federal Poverty Threshold at Head Start Exit: Spring 2010 or Spring 2011**

Income as a Percentage of Poverty	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
50 percent or less	22.7	23.1	22.3
50 to 100 percent	41.1	39.3	42.8
101 to 130 percent	14.6	15.1	14.2
131 to 185 percent	13.4	14.9	11.9
186 to 200 percent	1.6	1.0	2.2
201 percent or above	6.7	6.7	6.6

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 and Spring 2010 or 2011 FACES Parent Interview and are being used to describe this population at Head Start exit.

Child age at entry is derived from the Fall 2009 FACES Parent Interview. Household income is derived from the Spring 2010 or Spring 2011 FACES Parent Interview for 4-year-old and 3-year-old children, respectively.

This table summarizes household income, and therefore should not be used to estimate eligibility for Head Start. Head Start qualifying criteria are based on family (not household) income, and there are other (non-income) ways to qualify for the program.

In 2009, the federal poverty threshold for a family of four was \$22,050.

<sup>a</sup>Age as of September 1, 2009.

- Sixty-four percent of children live in households where the total household income is at or below the federal poverty threshold at Head Start exit. Ninety-two percent of children live in households where total income is less than or equal to 185 percent of the poverty threshold.
- Not shown in table: Mean annual household income is \$23,458 (\$24,046 for families with 3-year-olds and \$22,905 for families with 4-year-olds).

**Table A.11. Family Risk Index at Head Start Exit: Spring 2010 or Spring 2011**

Risk Factors	Percent of Children		
	All Children	3-Year-Olds <sup>a</sup>	4-Year-Olds <sup>a</sup>
Single Parent Household <sup>b</sup>	43.5	43.9	43.0
Mother Does Not Have High School Diploma <sup>c</sup>	38.4	35.5	41.2
Income Below Federal Poverty Threshold	63.7	62.3	65.1
<b>Family Risk Index<sup>d</sup></b>			
0 risks	15.1	16.1	14.0
1 risk	33.6	34.5	32.7
2 risks	40.5	39.3	41.6
3 risks	10.9	10.1	11.7

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Parent Interview.

Notes: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

The data in this table are from the Fall 2009 and Spring 2010 or 2011 FACES Parent Interview and are being used to describe this population at Head Start exit.

Child age at entry is derived from the Fall 2009 FACES Parent Interview. Family risk is derived from the Spring 2010 or Spring 2011 FACES Parent Interview for 4-year-old and 3-year-old children, respectively.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>A single parent household includes any household where one biological/adoptive parent lives alone or with a partner to whom they are not married. It does *not* include households where one biological/adoptive parent lives with a partner to whom they are married.

<sup>c</sup>Households that do not include a mother are excluded from this factor.

<sup>d</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

- At Head Start exit, 51 percent of children have 2 or more family risks. As compared to Head Start entry (Table A.7), a smaller percentage of children live in a household with a single parent at program exit (52 versus 44 percent). This pattern is present for children in the 3-year-old cohort (51 versus 44 percent) and the 4-year-old cohort (53 versus 43 percent).



**Table B.1. Reliability of FACES Direct Child Assessment Measures: Spring 2010 and Spring 2011**

Scales	Cronbach Alphas	
	Spring 2010	Spring 2011
PPVT-4	0.95	0.93
TVIP	0.94	0.92
EOWPVT	0.80	0.90
WJ III: Letter-Word Identification	0.88	0.93
WJ III: Spelling	0.83	0.87
WJ III: Applied Problems	0.89	0.90
ECLS-B Letter-Sounds IRT Score	0.79	0.97
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	0.79	0.97
ECLS-B Math IRT Score	0.82	0.92
ECLS-B Number/Shape Proficiency Probability Score	0.39 <sup>a</sup>	0.20 <sup>a</sup>
Combined ECLS-B Math/WJ III Applied Problems IRT Score	0.82	0.92

Source: Spring 2010 and Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup> This reliability coefficient is split-half.

**Table B.2. FACES Direct Child Assessment Measures — PPVT- 4 and EOWPVT Standard Scores by Child and Family Characteristics: Spring 2010 or Spring 2011**

	PPVT-4			EOWPVT		
	n	Mean	SD	n	Mean	SD
All Children	2,248	88.2	16.4	1,882	84.4	13.9
<b>Age<sup>a</sup></b>						
3 years old or younger	1,124	89.7	15.2	1,127	84.0	13.8
4 years old or older	1,124	86.6	17.3	755	84.9	14.1
<b>Race/Ethnicity</b>						
White, Non-Hispanic	435	97.1	14.1	437	89.5	14.0
African American, Non-Hispanic	705	89.7	13.0	705	83.1	13.1
Hispanic/Latino	927	80.5	17.1	563	81.3	13.5
Other, Non-Hispanic	165	94.1	13.8	163	84.6	14.7
<b>Gender</b>						
Female	1,117	88.6	15.8	934	84.0	13.8
Male	1,121	87.6	17.0	938	84.7	14.0
<b>Family Risks<sup>b</sup></b>						
0	279	93.6	14.5	249	88.5	14.4
1	707	90.8	16.3	607	86.4	13.3
2 or More	1,022	84.8	16.4	809	81.8	13.6

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15.

The PPVT-4 and EOWPVT (or EOWPVT-SBE) are administered to all children, regardless of performance on the language screener. Following administration of these measures, children are administered assessments in English or Spanish, depending on performance on the language screener. Data in this table reflect the performance of all children on the PPVT-4 and EOWPVT assessment, regardless of performance on the screener or language of assessment in the fall. FACES provides EOWPVT standard scores for all children, regardless of home language or performance on the language screener. Mean scores are only reported for those with valid scores in spring 2010 or 2011 (for example, those who established a basal on the PPVT-4).

**Table B.3. FACES Direct Child Assessment Measures — PPVT- 4, EOWPVT, EOWPVT- SBE, and TVIP Standard Scores by Child Assessment Language: Spring 2010 or Spring 2011**

Scale	PPVT- 4 Standard Score <sup>a</sup>					
	n	Mean	SD	Reported Response Range		Possible Response Range
All children	2,248	88.2	16.4	34	- 134	20 – 160
All children: English home language	1,446	93.5	13.6	41	- 134	20 – 160
All dual language learner (DLL) children	707	76.3	15.8	34	- 122	20 – 160
DLL children passing language screener						
Spanish home language	293	84.0	13.0	46	- 122	20 – 160
Other home language	34	88.0	13.5	50	- 108	20 – 160
DLL children not passing language screener						
Spanish home language	354	69.2	14.1	34	- 110	20 – 160
Other home language	26	!	!	!	!	20 – 160
				<b>EOWPVT Standard Score<sup>a, b</sup></b>		
All children	1,882	84.4	13.9	45	- 133	45 – 145
All children: English home language	1,443	86.2	13.5	45	- 133	45 – 145
All DLL children	367	77.1	13.1	45	- 114	45 – 145
DLL children passing language screener						
Spanish home language	105	82.3	10.6	59	- 109	45 – 145
Other home language	34	79.4	15.6	45	- 112	45 – 145
DLL children not passing language screener						
Spanish home language	203	74.9	11.8	45	- 110	45 – 145
Other home language	25	!	!	!	!	45 – 145
				<b>EOWPVT- SBE Standard Score<sup>b, c</sup></b>		
All DLL children: Spanish home language	673	97.7	18.8	45	- 155	45 – 155
DLL children passing language screener: Spanish home language	289	104.8	17.6	58	- 155	45 – 155
DLL children not passing language screener: Spanish home language	384	92.7	18.0	45	- 155	45 – 155
				<b>TVIP Standard Score<sup>c</sup></b>		
All DLL children: Spanish home language	651	85.0	16.6	55	- 145	55 – 145
DLL children passing language screener: Spanish home language	278	83.7	15.6	55	- 118	55 – 145
DLL children not passing language screener: Spanish home language	373	85.8	17.1	55	- 145	55 – 145

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Standard scores on this measure provide information on children's skills relative to English speaking peers nationally.

<sup>b</sup>The EOWPVT standard scores provide a measure of children's expressive vocabulary relative to young children in the U.S., while the EOWPVT-SBE standard scores reflect Spanish-speaking children's vocabulary skills relative to young Hispanic children nationally. EOWPVT-SBE standard scores are only available for children age 4 and older at assessment. FACES provides EOWPVT standard scores for all children, regardless of home language or performance on the language screener. EOWPVT-SBE standard scores are only reported for children with a Spanish home language.

<sup>c</sup>Standard scores on this measure provide information on Spanish-speaking children's skills relative to Spanish-dominant or Spanish-bilingual peers.

! Too few cases for a reliable estimate.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of all children assessed at Head Start exit, regardless of performance or language of assessment at Head Start entry.

In this table, DLL status is based on parent report on the consent form, which was used for the purpose of driving the language of the direct assessment. From these data, children were identified as having an English, Spanish, or Other home language. We define DLLs as those having a Spanish or Other home language.

**Table B.4. FACES Direct Child Assessment Standardized Score Data for Children Taking the Assessment in English: Spring 2010 or Spring 2011**

	n	Reported Response Range	Possible Response Range	Overall	Mean (SD)			
					SD	Bottom Quartile	Top Quartile	
PPVT-4 Standard Score	2,164	39 - 134	20 - 160	89.3	15.4	69.4	108.3	
EOWPVT Standard Score	1,855	45 - 133	45 - 145	84.5	13.9	67.0	101.5	
WJ III: Letter-Word Identification Standard Score	2,160	63 - 164	0 - 200	100.0	14.4	81.7	116.9	
WJ III: Spelling Standard Score	2,160	41 - 142	0 - 200	97.2	15.0	77.8	115.0	
WJ III: Applied Problems Standard Score	2,128	41 - 142	0 - 200	89.4	14.8	70.7	106.5	
ECLS-B Letter-Sounds IRT Score	1,636	0.0 - 9.7	0 - 10	2.0	2.2	0.1	5.3	
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	1,636	1.2 - 46.2	0 - 54	12.8	6.3	6.2	21.4	
ECLS-B Math IRT Score	2,178	3.3 - 26.5	0 - 30	13.0	3.8	8.3	18.0	
ECLS-B Number/Shape Proficiency Probability Score	2,178	0.00 - 1.00	0 - 1.00	0.67	0.31	0.21	0.98	
Combined ECLS-B Math/WJ III Applied Problems IRT Score	2,178	3.9 - 49.8	0 - 56	24.7	7.6	15.0	34.3	
PPVT-4 Growth Score Value (GSV) Score	2,164	60 - 164	12 - 271	117.0	17.0	94.2	136.6	
WJ III: Letter-Word Identification W Ability Score	2,160	276 - 464	N/A	336.2	26.9	301.1	365.5	
WJ III: Spelling W Ability Score	2,160	287 - 447	N/A	381.0	28.0	346.2	413.0	
WJ III: Applied Problems W Ability Score	2,128	332 - 462	N/A	398.7	22.0	373.9	421.3	

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

N/A = Not applicable.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of all children assessed in English at Head Start exit, regardless of performance or language of assessment at Head Start entry.

**Table B.5. FACES Direct Child Assessment Standardized Score Data by Age for Children Taking the Assessment in English: Spring 2010 or Spring 2011**

Scales	3-year-olds <sup>a</sup>			4-year-olds <sup>a</sup>		
	n	Mean	SD	n	Mean	SD
PPVT-4 Standard Score	1,102	90.3	14.8	1,062	88.2	16.0
EOWPVT Standard Score	1,103	84.2	13.7	752	85.0	14.0
WJ III: Letter-Word Identification Standard Score	1,096	101.3	14.1	1,064	98.6	14.6
WJ III: Spelling Standard Score	1,093	97.4	15.4	1,067	97.0	14.5
WJ III: Applied Problems Standard Score	1,081	89.6	14.5	1,047	89.2	15.1
ECLS-B Letter-Sounds IRT Score	839	2.2	2.3	797	1.7	2.0
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	839	13.7	6.2	797	11.8	6.1
ECLS-B Math IRT Score	1,104	13.3	3.7	1,074	12.8	3.9
ECLS-B Number/Shape Proficiency Probability Score	1,104	0.70	0.30	1,074	0.65	0.31
Combined ECLS-B Math/WJ III Applied Problems IRT Score	1,104	25.1	7.4	1,074	24.3	7.7
PPVT-4 Growth Score Value (GSV) Score	1,102	118.3	16.2	1,062	115.7	17.8
WJ III: Letter-Word Identification W Ability Score	1,096	339.1	26.5	1,064	333.2	27.0
WJ III: Spelling W Ability Score	1,093	381.8	29.0	1,067	380.2	26.9
WJ III: Applied Problems W Ability Score	1,081	399.4	21.7	1,047	398.0	22.2

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Age as of September 1, 2009.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271. Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of all children assessed in English at Head Start exit, regardless of performance or language of assessment at Head Start entry.

**Table B.6. FACES Direct Child Assessment Standardized Score Data by Gender for Children Taking the Assessment in English: Spring 2010 or Spring 2011**

Scales	Girls			Boys		
	n	Mean	SD	n	Mean	SD
PPVT-4 Standard Score	1,075	89.6	14.9	1,079	88.9	15.9
EOWPVT Standard Score	921	84.1	13.8	924	84.9	13.9
WJ III: Letter-Word Identification Standard Score	1,074	101.6	14.2	1,076	98.4	14.4
WJ III: Spelling Standard Score	1,072	99.7	14.3	1,078	94.8	15.3
WJ III: Applied Problems Standard Score	1,061	90.0	14.5	1,057	88.6	15.0
ECLS-B Letter-Sounds IRT Score	870	2.1	2.2	759	1.9	2.2
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	870	13.0	6.2	759	12.5	6.3
ECLS-B Math IRT Score	1,080	13.2	3.7	1,088	12.8	3.9
ECLS-B Number/Shape Proficiency Probability Score	1,080	0.69	0.30	1,088	0.65	0.31
Combined ECLS-B Math/WJ III Applied Problems IRT Score	1,080	25.1	7.4	1,088	24.3	7.7
PPVT-4 Growth Score Value (GSV) Score	1,075	117.2	16.5	1,079	116.7	17.6
WJ III: Letter-Word Identification W Ability Score	1,074	338.8	26.4	1,076	333.6	27.2
WJ III: Spelling W Ability Score	1,072	385.0	26.5	1,078	377.0	28.9
WJ III: Applied Problems W Ability Score	1,061	399.4	21.5	1,057	397.9	22.4

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of all children assessed in English at Head Start exit, regardless of performance or language of assessment at Head Start entry.

**Table B.7. FACES Direct Child Assessment Standardized Score Data by Race/Ethnicity for Children Taking the Assessment in English: Spring 2010 or Spring 2011**

Scales	White, Non-Hispanic			African American, Non-Hispanic			Hispanic/Latino			Other, Non-Hispanic		
	n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD
PPVT-4 Standard Score	433	97.2	13.9	705	89.7	13.0	850	82.8	15.9	161	94.5	13.5
EOWPVT Standard Score	436	89.6	13.9	705	83.1	13.1	540	81.5	13.4	160	85.0	14.3
WJ III: Letter-Word Identification Standard Score	430	100.4	13.6	702	102.7	14.9	851	97.0	14.2	162	100.8	12.8
WJ III: Spelling Standard Score	433	96.7	15.8	697	97.6	15.1	854	96.9	14.5	161	98.5	14.1
WJ III: Applied Problems Standard Score	433	95.0	14.5	688	87.1	13.9	832	87.4	15.0	160	91.5	13.7
ECLS-B Letter-Sounds IRT Score	335	1.8	2.2	578	2.3	2.4	584	1.7	2.0	130	1.9	2.0
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	335	12.3	5.9	578	13.8	6.8	584	12.0	5.8	130	12.7	5.5
ECLS-B Math IRT Score	436	14.0	3.8	706	12.8	3.7	859	12.5	3.8	162	13.9	3.8
ECLS-B Number/Shape Proficiency Probability Score	436	0.74	0.28	706	0.66	0.31	859	0.63	0.32	162	0.75	0.28
Combined ECLS-B Math/WJ III Applied Problems IRT Score	436	26.6	7.4	706	24.2	7.4	859	23.6	7.6	162	26.5	7.4
PPVT-4 Growth Score Value (GSV) Score	433	125.0	14.7	705	118.0	14.5	850	109.7	17.9	161	123.2	15.2
WJ III: Letter-Word Identification W Ability Score	430	335.6	24.5	702	342.1	28.1	851	330.5	26.4	162	339.1	24.6
WJ III: Spelling W Ability Score	433	378.8	28.8	697	382.6	28.1	854	380.1	27.8	161	384.8	25.6
WJ III: Applied Problems W Ability Score	433	405.9	20.5	688	396.2	21.0	832	395.5	22.8	160	403.1	20.5

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of all children assessed in English at Head Start exit, regardless of performance or language of assessment at Head Start entry.



**Table B.8. FACES Direct Child Assessment Standardized Score Data by Number of Family Risks for Children Taking the Assessment in English: Spring 2010 or Spring 2011**

Scales	0 Risks <sup>a</sup>			1 Risk <sup>a</sup>			2 or More Risks <sup>a</sup>		
	n	Mean	SD	n	Mean	SD	n	Mean	SD
PPVT-4 Standard Score	275	93.9	14.2	693	91.4	15.7	959	86.5	15.1
EOWPVT Standard Score	248	88.5	14.4	600	86.5	13.3	793	81.9	13.5
WJ III: Letter-Word Identification Standard Score	275	103.4	14.5	692	101.3	14.5	956	98.0	13.9
WJ III: Spelling Standard Score	276	100.6	15.9	691	98.4	14.1	954	95.7	14.9
WJ III: Applied Problems Standard Score	272	93.4	15.1	679	91.2	14.1	945	87.1	14.6
PPVT-4 Growth Score Value (GSV) Score	275	121.6	15.3	693	119.3	17.2	959	114.0	16.9
WJ III: Letter-Word Identification W Ability Score	275	341.7	26.3	692	339.0	27.4	956	332.6	26.1
WJ III: Spelling W Ability Score	276	386.1	28.5	691	383.4	26.3	954	378.4	28.5
WJ III: Applied Problems W Ability Score	272	404.0	20.8	679	401.7	20.5	945	395.5	22.6
ECLS-B Letter-Sounds IRT Score	226	2.2	2.4	539	2.2	2.3	685	1.7	2.0
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	226	13.6	6.6	539	13.5	6.5	685	12.0	5.7
ECLS-B Math IRT Score	278	14.0	3.7	696	13.6	3.7	964	12.5	3.7
ECLS-B Number/Shape Proficiency Probability Score	278	0.74	0.28	696	0.72	0.29	964	0.63	0.32
Combined ECLS-B Math/WJ III Applied Problems IRT Score	278	26.5	7.3	696	25.8	7.3	964	23.6	7.5

Source: Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of all children assessed in English at Head Start exit, regardless of performance or language of assessment at Head Start entry.

<sup>a</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

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**Table B.2a. FACES Direct Child Assessment Measures — PPVT- 4 and EOWPVT Standard Scores by Child and Family Characteristics: Fall 2009- Spring 2010 or Spring 2011**

	PPVT-4				EOWPVT			
		Head Start Entry	Head Start Exit	Entry-Exit Change		Head Start Entry	Head Start Exit	Entry-Exit Change
	n	Mean	Mean	Mean	n	Mean	Mean	Mean
All Children	1,931	85.0	90.6	5.7***	1,768	80.2	84.7	4.5***
<b>Age<sup>a</sup></b>								
3 years old or younger	928	85.9	92.3	6.4***	1,045	78.5	84.6	6.1***
4 years old or older	1,003	84.1	89.0	4.9***	723	82.6	85.0	2.4**
<b>Race/Ethnicity</b>								
White, Non-Hispanic	402	92.5	97.6	5.1***	409	86.7	89.7	3.1**
African American, Non-Hispanic	668	85.6	90.3	4.7***	676	79.0	83.4	4.4***
Hispanic/Latino	701	77.5	84.8	7.3***	517	75.9	82.0	6.2***
Other, Non-Hispanic	149	90.6	95.3	4.7**	155	80.8	84.6	3.8*
<b>Gender</b>								
Female	964	85.5	91.1	5.6***	884	80.1	84.1	4.0***
Male	959	84.4	90.1	5.7***	876	80.3	85.3	5.0***
<b>Family Risks<sup>b</sup></b>								
0	249	90.8	95.0	4.2**	230	83.5	89.1	5.6***
1	615	86.9	92.6	5.7***	575	82.5	86.6	4.1***
2 or More	855	81.5	87.9	6.3***	767	77.7	82.1	4.4***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15.

The PPVT-4 and EOWPVT (or EOWPVT-SBE) are administered to all children, regardless of performance on the language screener. Following administration of these measures, children are administered assessments in English or Spanish, depending on performance on the language screener. Data in this table reflect the performance of all children on the PPVT-4 and EOWPVT assessment, regardless of performance on the screener or language of assessment. FACES provides EOWPVT standard scores for all children, regardless of home language or performance on the language screener. Mean scores are only reported for those with valid scores at Head Start entry and exit (for example, those who established a basal on the PPVT-4 at Head Start entry and exit).

- Children, regardless of demographic characteristics, score below norms in their expressive and English receptive vocabulary skills at Head Start entry and exit. However, across most groups, children make progress towards norms during the year. For example, across groups, they gain about 6 standard score points in English receptive vocabulary and 5 standard score points in expressive vocabulary during Head Start, although some groups show more progress than others. Hispanic/Latino children show the greatest gains in receptive vocabulary and expressive vocabulary during Head Start, gaining about 7 standard score points on the PPVT-4 and 6 points on the EOWPVT. White children gain 5 standard score points during Head Start and score close to norms in English receptive vocabulary.

**Table B.3a. FACES Direct Child Assessment Measures — PPVT- 4, EOWPVT, EOWPVT- SBE, and TVIP Standard Scores by Child Assessment Language: Fall 2009- Spring 2010 or Spring 2011**

Scale	PPVT- 4 Standard Score <sup>a</sup>			
	n	Head Start Entry	Head Start Exit	Entry-Exit Change
		Mean	Mean	Mean
All children	1,931	85.0	90.6	5.7***
All children: English home language	1,410	89.0	93.8	4.7***
All dual language learner (DLL) children	521	71.5	80.2	8.7***
DLL children passing language screener				
Spanish home language	286	76.3	84.4	8.2***
Other home language	34	80.8	88.0	7.3*
DLL children not passing language screener				
Spanish home language	187	63.3	72.7	9.3***
Other home language	14	!	!	!
		EOWPVT Standard Score <sup>a, b</sup>		
All children	1,768	80.2	84.7	4.5***
All children: English home language	1,421	82.9	86.2	3.3***
All DLL children	347	67.6	77.7	10.1***
DLL children passing language screener				
Spanish home language	105	72.8	82.3	9.5***
Other home language	32	65.1	80.4	15.3***
DLL children not passing language screener				
Spanish home language	189	67.0	75.5	8.5***
Other home language	21	!	!	!
		EOWPVT- SBE Standard Score <sup>b, c</sup>		
All DLL children: Spanish home language	378	92.4	96.8	4.4**
DLL children passing language screener: Spanish home language	192	98.8	104.7	5.9**
DLL children not passing language screener: Spanish home language	186	86.1	89.1	2.9
		TVIP Standard Score <sup>c</sup>		
All DLL children: Spanish home language	627	84.2	85.3	1.1
DLL children passing language screener: Spanish home language	273	83.2	83.7	0.5
DLL children not passing language screener: Spanish home language	354	85.0	86.5	1.5

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

<sup>a</sup>Standard scores on this measure provide information on children's skills relative to English speaking peers nationally.

<sup>b</sup>The EOWPVT standard scores provide a measure of children's expressive vocabulary relative to young children in the U.S., while the EOWPVT-SBE standard scores reflect Spanish-speaking children's vocabulary skills relative to young Hispanic children nationally. EOWPVT-SBE standard scores are only available for children age 4 and older at assessment. FACES provides EOWPVT standard scores for all children, regardless of home language or performance on the language screener. EOWPVT-SBE standard scores are only reported for children with a Spanish home language.

<sup>c</sup>Standard scores on this measure provide information on Spanish-speaking children's skills relative to Spanish-dominant or Spanish-bilingual peers.

! Too few cases for a reliable estimate.

- At both Head Start entry and exit and across language groups, children score below norms in the areas of expressive vocabulary and English receptive vocabulary skills, with children from homes where English is primarily spoken having the highest scores in these areas and children who are dual language learners (DLLs) and unable to pass the language screener having the lowest scores. In English receptive vocabulary, all groups make progress towards norms during Head Start. Similarly, all groups make progress towards norms in expressive vocabulary during Head Start. DLLs make greater gains towards norms than children with English home language in both receptive (+8.7 versus 4.7 standard score points) and expressive vocabulary (+10.1 versus 3.3 standard score points), however.
- Among children from Spanish-speaking homes, when looking at expressive vocabulary relative to Spanish-dominant or Spanish-bilingual peers, those who are able to pass the language screener have stronger skills than those who do not pass the language screener at both Head Start entry and exit. Only those who pass the language screener make statistically significant progress towards norms during this time period. In fact, those passing the screener gain nearly 6 standard score points and score above norms at the end of Head Start (104.7). Regardless of performance on the screener, both groups score closer to Spanish-bilingual norms than to English norms on expressive vocabulary at Head Start entry and exit.
- When examining children's Spanish receptive vocabulary skills, there are no differences based on children's ability to pass the language screener. That is, both those who do and do not demonstrate enough English proficiency to be assessed in English have similar Spanish receptive vocabulary skills at Head Start entry and exit, with neither group making progress towards norms in this area during Head Start, on average.

**Table B.4a. FACES Direct Child Assessment — Standardized Scores for Children Taking the Assessment in English at Both Waves: Fall 2009- Spring 2010 or Spring 2011**

Scales	n	Mean		
		Head Start Entry	Head Start Exit	Entry-Exit Change
PPVT-4 Standard Score	1,730	87.2	92.4	5.2***
EOWPVT Standard Score	1,558	82.0	85.9	3.9***
WJ III: Letter-Word Identification Standard Score	1,668	95.8	101.3	5.5***
WJ III: Spelling Standard Score	1,690	94.8	98.2	3.4***
WJ III: Applied Problems Standard Score	1,534	89.5	91.8	2.3***
ECLS-B Letter-Sounds IRT Score	559	0.8	2.9	2.1***
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	559	9.3	15.2	5.9***
ECLS-B Math IRT Score	1,750	8.8	13.4	4.7***
ECLS-B Number/Shape Proficiency Probability Score	1,750	0.30	0.71	0.40***
Combined ECLS-B Math/WJ III Applied Problems IRT Score	1,750	15.8	25.5	9.7***
PPVT-4 Growth Score Value (GSV) Score	1,731	101.6	120.6	19.0***
WJ III: Letter-Word Identification W Ability Score	1,668	309.4	339.2	29.8***
WJ III: Spelling W Ability Score	1,690	348.7	383.3	34.6***
WJ III: Applied Problems W Ability Score	1,534	377.9	402.9	25.0***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit. In addition, mean scores are only reported for those with valid scores at both occasions (for example, those who established a basal on the PPVT-4 at both Head Start entry and exit).

- With the exception of letter-word knowledge, children assessed in English at Head Start entry and exit score below norms across measures of language, literacy, and math development at both waves. However, across areas, children make progress toward norms during Head Start. For example, they gain approximately 4 standard score points in expressive vocabulary, 5 points in English receptive vocabulary, and 2 points in applied problems. They also gain about 3 points in early writing, scoring near norms at the end of Head Start (98.2). They gain almost 6 standard score points in the area of letter-word knowledge during this period and score just above the national average in this area by Head Start exit (101.3). In all other areas, despite making progress towards norms during the program year, children assessed in English remain below norms at the end of Head Start. In fact, in expressive vocabulary, they score nearly one standard deviation below norms at Head Start exit.

- In terms of absolute performance, children assessed in English make progress across developmental areas. For example, on the ECLS-B math items, while only 30 percent of children are able to identify numbers and shapes at the start of Head Start, by program exit 71 percent are able to do so. They also know more letter sounds by the end of Head Start than they do at program entry. However, mean scores on this assessment and the small number of children administered these items suggest that children have not fully developed letter-sound skills by the end of Head Start.



**Table B.5a. FACES Direct Child Assessment — Standardized Scores by Age for Children Taking the Assessment in English at Both Waves: Fall 2009- Spring 2010 or Spring 2011**

Scales	3-year-olds <sup>a</sup>				4-year-olds <sup>a</sup>			
		Head Start Entry	Head Start Exit	Entry-Exit Change		Head Start Entry	Head Start Exit	Entry-Exit Change
	n	Mean	Mean	Mean	n	Mean	Mean	Mean
PPVT-4 Standard Score	825	87.8	93.8	6.0***	905	86.5	91.0	4.5***
EOWPVT Standard Score	842	81.2	86.6	5.3***	716	82.8	85.1	2.3**
WJ III: Letter-Word Identification Standard Score	769	97.4	103.4	6.0***	899	94.5	99.5	5.0***
WJ III: Spelling Standard Score	789	94.8	98.8	4.0***	901	94.7	97.7	2.9***
WJ III: Applied Problems Standard Score	679	89.8	92.3	2.5***	855	89.2	91.3	2.2**
ECLS-B Letter-Sounds IRT Score	166	0.7	4.4	3.8***	393	0.9	2.3	1.3***
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	166	9.1	19.5	10.4***	393	9.3	13.3	4.0***
ECLS-B Math IRT Score	836	7.2	13.7	6.5***	914	10.3	13.2	2.9***
ECLS-B Number/Shape Proficiency Probability Score	836	0.16	0.73	0.57***	914	0.44	0.68	0.25***
Combined ECLS-B Math/WJ III Applied Problems IRT Score	836	12.3	26.0	13.7***	914	19.1	25.0	5.9***
PPVT-4 Growth Score Value (GSV) Score	826	94.8	122.4	27.6***	905	108.0	118.9	10.9***
WJ III: Letter-Word Identification W Ability Score	769	303.0	344.0	40.9***	899	315.0	335.0	20.0***
WJ III: Spelling W Ability Score	789	333.7	385.2	51.6***	901	362.2	381.7	19.5***
WJ III: Applied Problems W Ability Score	679	366.3	404.5	38.2***	855	387.3	401.6	14.2***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

<sup>a</sup>Age as of September 1, 2009.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit. In addition, mean scores are only reported for those with valid scores at both occasions (for example, those who established a basal on the PPVT-4 at both Head Start entry and exit).

- Children who entered the program at age 3 score below national norms across measures of language and math development at both Head Start entry and exit, although they do make progress towards norms in both areas during Head Start. In fact, 3-year-olds gain about 5 standard score points in expressive vocabulary, 6 points in English receptive vocabulary, and 3 points in applied problems during this period, on average. They also make progress towards norms in their literacy development during Head Start. For example, in the area of letter-word knowledge they gain 6 standard score points during this period and score above the national average by Head Start exit (103.4). They gain 4 standard score points in early writing and score near norms by the end of Head Start (98.8).
- Like 3-year-olds, children who entered the program at age 4 score below norms on several measures at both at the beginning and end of Head Start. The one exception is the area of letter-word knowledge, where they gain about 5 standard score points and score at norms by the end of Head Start (99.5). They gain about 3 points in early writing, scoring near norms at Head Start exit (97.7). They make progress towards norms in other areas as well, including gaining approximately 2 points in the area of expressive vocabulary, 5 points in English receptive vocabulary, and 2 points in applied problems, however. Compared to same-age peers, those who entered Head Start at age 3 and took the assessment in English generally perform closer to their same-age peers nationally than those who entered at age 4 across measures.
- In terms of absolute performance, both children who entered at age 3 and age 4 make progress across developmental areas. For example, while 16 percent of children in the 3-year-old cohort are able to identify numbers and shapes at the start of Head Start, by the spring 73 percent are able to do so. The percentage increases from 44 percent to 68 percent among the 4-year-old cohort. Both cohorts also know more letter sounds by Head Start exit.

**Table B.6a. FACES Direct Child Assessment — Standardized Scores by Gender for Children Taking the Assessment in English at Both Waves: Fall 2009- Spring 2010 or Spring 2011**

Scales	Girls				Boys			
		Head Start Entry	Head Start Exit	Entry-Exit Change		Head Start Entry	Head Start Exit	Entry-Exit Change
	n	Mean	Mean	Mean	n	Mean	Mean	Mean
PPVT-4 Standard Score	868	87.3	92.5	5.2***	855	87.0	92.3	5.3***
EOWPVT Standard Score	782	81.8	85.3	3.5***	769	82.2	86.4	4.3***
WJ III: Letter-Word Identification Standard Score	845	97.9	102.7	4.8***	816	93.7	99.8	6.1***
WJ III: Spelling Standard Score	863	96.6	100.1	3.6***	820	92.8	96.2	3.3***
WJ III: Applied Problems Standard Score	776	90.5	92.2	1.7*	751	88.5	91.3	2.8***
ECLS-B Letter-Sounds IRT Score	323	0.9	3.0	2.1***	234	0.8	2.8	2.0***
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	323	9.5	15.4	5.9***	234	8.9	14.8	5.8***
ECLS-B Math IRT Score	880	8.9	13.5	4.6***	863	8.6	13.3	4.7***
ECLS-B Number/Shape Proficiency Probability Score	880	0.32	0.72	0.4***	863	0.29	0.69	0.41***
Combined ECLS-B Math/WJ III Applied Problems IRT Score	880	16.2	25.7	9.5***	863	15.5	25.3	9.8***
PPVT-4 Growth Score Value (GSV) Score	868	102.0	120.6	18.6***	856	101.3	120.6	19.3***
WJ III: Letter-Word Identification W Ability Score	845	312.1	341.4	29.3***	816	306.7	336.8	30.1***
WJ III: Spelling W Ability Score	863	351.9	386.2	34.4***	820	345.5	380.3	34.8***
WJ III: Applied Problems W Ability Score	776	379.4	403.1	23.7***	751	376.5	402.5	26.0***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit. In addition, mean scores are only reported for those with valid scores at both occasions (for example, those who established a basal on the PPVT-4 at both Head Start entry and exit).

- Looking first at children's language development, both girls and boys score below norms in the areas of expressive and English receptive vocabulary skills at both Head Start entry and exit. However, both girls and boys make progress relative to peers during Head Start in their expressive vocabulary (+3.5 and 4.3 standard score points, respectively) and English receptive vocabulary (+5.2 and 5.3 standard score points, respectively).

- Girls score below norms in applied problems at both Head Start entry and exit, but they do make progress toward these norms during the year (+1.7 standard score points). They gain nearly 5 standard score points in the area of letter-word knowledge during this period and score above the national average in this area by Head Start exit (102.7). They also make progress in early writing (+3.6 standard score points), scoring at the national mean by the end of Head Start (100.1).
- In terms of absolute performance, both girls and boys make progress across developmental areas. For example, on the ECLS-B math items, while 32 percent of girls are able to identify numbers and shapes at the beginning of Head Start, by the end of the program 72 percent are able to do so. The percentage increases from 29 percent to 69 percent among boys. Both genders also know more letter sounds by Head Start exit.

**Table B.7a. FACES Direct Child Assessment — Standardized Scores by Race/Ethnicity for Children Taking the Assessment in English at Both Waves: Fall 2009- Spring 2010 or Spring 2011**

Scales	White, Non-Hispanic				African American, Non-Hispanic				Hispanic/Latino				Other, Non-Hispanic			
	n	Head Start Entry	Head Start Exit	Entry-Exit Change	n	Head Start Entry	Head Start Exit	Entry-Exit Change	n	Head Start Entry	Head Start Exit	Entry-Exit Change	n	Head Start Entry	Head Start Exit	Entry-Exit Change
PPVT-4 Standard Score	396	92.8	97.8	5.0***	666	85.6	90.3	4.6***	516	82.6	89.2	6.5***	142	91.5	96.0	4.6**
EOWPVT Standard Score	402	87.2	89.9	2.7*	674	79.1	83.4	4.3***	331	80.7	85.7	4.9***	142	82.7	86.0	3.3
WJ III: Letter-Word Identification Standard Score	381	95.2	100.5	5.4***	638	98.0	103.7	5.7***	502	92.9	98.5	5.6***	137	97.3	101.5	4.2*
WJ III: Spelling Standard Score	385	94.9	96.8	1.9	645	93.7	98.3	4.6***	509	95.4	99.4	3.9***	141	96.9	98.4	1.5
WJ III: Applied Problems Standard Score	370	93.5	95.9	2.5*	581	87.4	88.5	1.1	450	88.0	91.8	3.8***	124	91.6	93.6	2.0
ECLS-B Letter-Sounds IRT Score	108	0.9	3.0	2.0***	249	0.9	3.1	2.2***	147	0.7	2.4	1.7***	53	0.7	3.0	2.3***
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	108	9.6	15.1	5.6***	249	9.6	15.8	6.2***	147	8.4	13.7	5.3***	53	9.0	15.3	6.2***
ECLS-B Math IRT Score	398	9.4	14.1	4.6***	674	8.3	12.9	4.5***	527	8.6	13.4	4.8***	141	9.4	14.2	4.8***
ECLS-B Number/Shape Proficiency Probability Score	398	0.37	0.75	0.38***	674	0.27	0.67	0.40***	527	0.28	0.70	0.42***	141	0.37	0.77	0.39***
Combined ECLS-B Math/WJ III Applied Problems IRT Score	398	17.2	26.8	9.6***	674	14.9	24.4	9.6***	527	15.6	25.4	9.9***	141	17.2	27.0	9.8***
PPVT-4 Growth Score Value (GSV) Score	396	107.2	125.7	18.4***	666	99.6	118.7	19.1***	517	97.9	117.1	19.2***	142	106.7	125.0	18.4***
WJ III: Letter-Word Identification W Ability Score	381	308.1	336.2	28.1***	638	311.8	344.3	32.5***	502	306.6	334.0	27.5***	137	312.0	341.0	28.9***
WJ III: Spelling W Ability Score	385	348.4	379.6	31.1***	645	345.7	384.0	38.3***	509	352.4	385.5	33.1***	141	352.7	384.8	32.0***
WJ III: Applied Problems W Ability Score	370	382.8	407.5	24.8***	581	374.1	398.7	24.6***	450	377.6	402.8	25.1***	124	381.8	406.8	25.0***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit. In addition, mean scores are only reported for those with valid scores at both occasions (for example, those who established a basal on the PPVT-4 at both Head Start entry and exit).

- With the exception of letter-word knowledge, across racial/ethnic groups, children score below national norms on measures of language, literacy, and math development at both Head Start entry and exit. Across groups, in the area of letter-word knowledge children make progress toward norms during Head Start. In fact, children from all racial/ethnic groups score near, at, or above norms in letter-word knowledge by the end of Head Start, with Hispanic/Latino children (+5.6 standard score points) and African American children (+5.7 standard score points) making the greatest gains. All children make progress toward norms in English receptive vocabulary. White, African American, and Hispanic/Latino children make progress in expressive vocabulary; however, White children, who enter with the highest scores in expressive vocabulary, make the least progress toward norms in this area. Only African American and Hispanic/Latino children make progress in early writing during Head Start (+4.6 and 3.9 standard score points, respectively), with both groups scoring near norms in this area at Head Start exit (98.3 and 99.4, respectively). Meanwhile only White and Hispanic/Latino children make progress in applied problems (+2.5 and 3.6 standard score points, respectively).
- In terms of absolute performance, children from all racial/ethnic backgrounds make progress across developmental areas. In fact, across groups, children make similar amounts of progress in number and shape skills during Head Start. For example, while 37 percent of White children are able to identify numbers and shapes at the start of Head Start, by Head Start exit 75 percent are able to do so. The percentage increases from 27 percent to 67 percent among African American children, from 28 percent to 70 percent among Hispanic/Latino children, and from 37 percent to 77 percent among Other race children. Across groups, children also know more letter sounds by Head Start exit.

**Table B.8a. FACES Direct Child Assessment — Standardized Scores by Number of Family Risks for Children Taking the Assessment in English at Both Waves: Fall 2009- Spring 2010 or Spring 2011**

	0 Risks <sup>a</sup>			1 Risk <sup>a</sup>			2 or More Risks <sup>a</sup>					
	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change			
	n	Mean	Mean	n	Mean	Mean	n	Mean	Mean			
PPVT-4 Standard Score	226	92.6	96.6	3.9**	559	88.9	94.1	5.2***	742	84.1	90.1	5.9***
EOWPVT Standard Score	206	85.1	90.4	5.3***	521	84.0	87.2	3.2***	647	79.6	83.4	3.8***
WJ III: Letter-Word Identification Standard Score	226	100.2	104.6	4.5**	549	97.3	102.4	5.1***	702	93.2	99.2	6.0***
WJ III: Spelling Standard Score	223	97.8	102.3	4.5**	549	95.1	98.8	3.7***	719	93.7	96.7	3.0***
WJ III: Applied Problems Standard Score	210	93.6	95.9	2.3	501	90.6	92.9	2.3*	639	87.6	90.1	2.4**
PPVT-4 Growth Score Value (GSV) Score	226	106.5	124.7	18.3***	560	103.3	122.5	19.2***	742	98.6	118.3	19.6***
WJ III: Letter-Word Identification W Ability Score	226	313.2	344.3	31.1***	549	310.9	341.3	30.4***	702	306.3	335.6	29.3***
WJ III: Spelling W Ability Score	223	352.5	389.8	37.3***	549	348.9	384.9	36.0***	719	347.1	380.8	33.7***
WJ III: Applied Problems W Ability Score	210	382.5	408.0	25.5***	501	379.0	404.7	25.7***	639	375.6	400.7	25.0***
ECLS-B Letter-Sounds IRT Score	90	0.9	3.5	2.6***	183	0.9	3.2	2.3***	219	0.6	2.5	1.9***
Combined ECLS-B Letter-Sounds/WJ III Letter-Word Identification IRT Score	90	9.6	16.7	7.1***	183	9.8	16.2	6.4***	219	8.4	13.7	5.3***
ECLS-B Math IRT Score	228	9.5	14.5	5.0***	572	8.9	13.8	4.9***	749	8.4	12.9	4.5***
Combined ECLS-B Math/WJ III Applied Problems IRT Score	228	0.37	0.79	0.42***	572	0.32	0.74	0.42***	749	0.27	0.67	0.39***
ECLS-B Number/Shape Proficiency Probability Score	228	17.4	27.6	10.2***	572	16.1	26.3	10.1***	749	15.1	24.6	9.5***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. W ability scores allow for measurement of change or growth in performance on the same scale over time. Like raw scores, W ability scores are an indicator of absolute, rather than relative, performance. The WJ W scale is centered on 500, which approximates the average score of a 10-year-old child. PPVT-4 Growth Score Value (GSV) scores are similar to W ability scores and can range from 12 to 271.

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit. In addition, mean scores are only reported for those with valid scores at both occasions (for example, those who established a basal on the PPVT-4 at both Head Start entry and exit).

<sup>a</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

- Looking first at children's language development, regardless of number of family risks, children score below norms in the areas of expressive vocabulary and English receptive vocabulary skills at Head Start entry and exit. However, all groups make progress relative to peers during Head Start in their expressive vocabulary, gaining between 3.2 and 5.3 standard score points. Across groups, children also make progress in their English receptive vocabulary and gain between 3.9 and 5.2 standard score points. Children with the greatest number of family risks enter the program with lower expressive vocabulary and English receptive vocabulary than those with 1 or no risks, and they make larger gains during Head Start in their receptive vocabulary than those with fewer risks and smaller gains in expressive vocabulary.
- Regardless of number of family risks, children make progress across literacy measures during Head Start. In fact, all groups make progress in letter-word knowledge (gaining between 4.2 and 5.1 standard score points) and score at or above national norms in this area by the end of Head Start. Children with no family risks begin Head Start with higher letter-word knowledge skills and make the smallest gains during Head Start. While children across groups make progress in the area of early writing (gaining between 3.0 and 4.5 standard score points, respectively) only those with no or 1 family risk score above or near norms by Head Start exit (102.3 and 98.8, respectively). Children with 1 and 2 or more family risks also show progress in applied problems.

- On the ECLS-B math items, all children make progress during Head Start and can correctly answer more items. For example, while 37 percent of children with no family risks are able to identify numbers and shapes at the start of Head Start, by Head Start exit 79 percent are able to do so. The percentage increases from 32 percent to 74 percent among children with 1 risk and from 27 percent to 67 percent among children with 2 or more risks. Across groups, children also know more letter sounds by Head Start exit.



**Table B9a. Head Start Exit PPVT- 4 Standard Score Distribution by Head Start Entry Standard Score Distribution: Fall 2009- Spring 2010 or Spring 2011**

PPVT-4 Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	39.0	5.0	1.5	1.1
71 to 85	48.9	41.9	11.2	1.8
86 to 100	9.6	41.5	48.6	22.2
100 or Higher	2.5	11.6	38.7	74.9
<b>Total<sup>b</sup></b>	16.5	30.3	28.7	16.1

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of children whose scores fell into each standard score group in fall 2009. Eight percent of children did not achieve a basal on the PPVT-4 in fall 2009 and are excluded from this table.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

The PPVT-4 is administered to all children, regardless of performance on the language screener. Following administration of these measures, children are administered assessments in English or Spanish, depending on performance on the language screener. Data in this table reflect the performance of all children on the PPVT-4 assessment, regardless of performance on the screener or language of assessment.

- Many children make progress in English receptive vocabulary during Head Start, regardless of their skills at program entry. A majority of children who enter the program with receptive vocabulary skills at least two standard deviations below norms make progress during this time. For example, only 39 percent of those who enter with English receptive vocabulary skills of at least two standard deviations below norms have skills of similarly low levels at Head Start exit. About half of those who enter with English receptive vocabulary skills at least two standard deviations below norms have vocabulary scores between one and two standard deviations below norms at Head Start exit (49 percent). Few children scoring more than two standard deviations below norms at Head Start entry make enough progress to score at or above norms by Head Start exit (3 percent).
- Seventy-five percent of children who enter Head Start with English receptive vocabulary skills at or above their peers continue to perform at this level at the end of Head Start.

**Table B.10a. Head Start Exit EOWPVT Standard Score Distribution by Head Start Entry Standard Score Distribution: Fall 2009 – Spring 2010 or Spring 2011**

EOWPVT Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	43.0	7.3	2.0	0.0
71 to 85	42.5	51.0	23.7	10.2
86 to 100	12.8	35.4	52.8	29.2
100 or Higher	1.6	6.2	21.5	60.6
<b>Total<sup>b</sup></b>	<b>27.3</b>	<b>34.2</b>	<b>29.5</b>	<b>9.1</b>

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of children whose scores fell into each standard score group in fall 2009.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

The EOWPVT (or EOWPVT-SBE) is administered to all children, regardless of performance on the language screener. Following administration of these measures, children are administered assessments in English or Spanish, depending on performance on the language screener. FACES provides EOWPVT standard scores for all children, regardless of home language or performance on the language screener. Data in this table reflect the performance of all children on the EOWPVT assessment, regardless of performance on the screener or language of assessment.

- Many children make progress in expressive vocabulary during Head Start, regardless of their skills at program entry. Just more than half of children who enter the program with expressive vocabulary skills at least two standard deviations below norms make progress during this time (57 percent). In fact, while 43 percent of those who enter with expressive vocabulary skills of at least two standard deviations below norms have skills of similarly low levels at Head Start exit, nearly half have vocabulary scores between one and two standard deviations below norms at Head Start exit (43 percent). Small percentages of children scoring more than one standard deviation below norms at Head Start entry make enough progress to score at or above norms by program exit (2 percent among those scoring two or more standard deviations below norms at entry and 6 percent among those scoring between one and two standard deviations below norms at entry).
- Nearly two-thirds of children who enter Head Start with expressive vocabulary skills at or above their peers continue to perform at this level at the end of Head Start (61 percent). About one-third score within one standard deviation of norms by Head Start exit (29 percent).

**Table B.11a. Head Start Exit WJ III Letter- Word Standard Score Distribution by Head Start Entry Standard Score Distribution for Children Taking the Assessment in English at Both Waves: Fall 2009 – Spring 2010 or Spring 2011**

WJ III Letter-Word Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	3.4	3.8	0.4	0.2
71 to 85	16.9	24.2	14.4	3.2
86 to 100	38.7	39.5	31.0	11.7
100 or Higher	41.0	32.6	54.2	84.9
<b>Total<sup>b</sup></b>	9.3	22.3	30.2	38.2

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of children whose scores fell into each standard score group in fall 2009.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit.

- Many children assessed in English at Head Start entry and exit who score below norms in letter-word knowledge at Head Start entry show progress during Head Start. At least one-third of children scoring below norms at Head Start entry score at or above norms in this area by the end of Head Start, including those who scored more than two standard deviations below norms at entry (41 percent) and those who scored between one and two standard deviations below norms at entry (33 percent). This pattern differs from what we see in the areas of receptive and expressive vocabulary, where smaller percentages of children make such progress.
- Children who enter the Head Start program with letter-word knowledge skills at or above norms maintain their standing relative to peers at Head Start exit. In fact, at the end of Head Start, 85 percent continue to score at or above norms.

**Table B.12a. Head Start Exit WJ III Spelling Standard Score Distribution by Head Start Entry Standard Score Distribution for Children Taking the Assessment in English at Both Waves: Fall 2009 – Spring 2010 or Spring 2011**

WJ III Spelling Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	22.3	6.5	2.7	1.9
71 to 85	35.0	22.6	14.5	4.9
86 to 100	26.2	47.6	41.6	25.4
100 or Higher	16.6	23.4	41.1	67.8
<b>Total<sup>b</sup></b>	3.5	18.8	43.7	33.9

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of children whose scores fell into each standard score group in fall 2009.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit.

- Many children who enter the program with early writing skills below norms make progress toward norms by the end of Head Start. In fact, a majority of children who enter the program with early writing skills at least two standard deviations below norms make progress during this time (78 percent). For example, about one-third of those who enter with writing skills of at least two standard deviations below norms have early writing scores between one and two standard deviations below norms at Head Start exit (35 percent), about one-quarter have scores within one standard deviation of norms (26 percent), and 17 percent make enough progress to score at or above norms by Head Start exit. Less than one-quarter of those who enter with writing skills of at least two standard deviations below norms have skills of similarly low levels at Head Start exit (22 percent).
- About two-thirds of children who enter the Head Start program with early writing skills at or above norms perform at this level at the end of Head Start (68 percent).

**Table B.13a. Head Start Exit WJ III Applied Problems Standard Score Distribution by Head Start Entry Standard Score Distribution for Children Taking the Assessment in English at Both Waves: Fall 2009 – Spring 2010 or Spring 2011**

WJ III Applied Problems Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	22.6	6.1	3.6	0.7
71 to 85	38.4	39.8	19.2	7.4
86 to 100	34.6	41.8	53.1	36.3
100 or Higher	4.4	12.3	24.2	55.7
<b>Total<sup>b</sup></b>	10.5	24.0	42.6	22.9

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of children whose scores fell into each standard score group in fall 2009.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

Some children were administered the assessments in Spanish at Head Start entry and then in English at Head Start exit. Similarly, some children were unable to achieve a basal at Head Start entry but were able to by Head Start exit. Data in this table reflect the performance of children assessed in English at both Head Start entry and exit.

- Many children who enter Head Start with fewer applied problems skills show progress through the end of the program. More than one-third of children scoring two or more standard deviations below norms at Head Start entry score between one and two standard deviations below norms in this area by the end of Head Start (38 percent), and another third score within one standard deviation of norms at that time point (35 percent).
- Children who enter the Head Start program with applied problems skills at or above norms generally maintain their standing relative to peers through the end of Head Start, with more than half remaining at or above norms at that time point (56 percent).

**Table B.14a. Head Start Exit PPVT- 4 Standard Score Distribution by Head Start Entry Standard Score Distribution for Dual Language Learners (DLLs) from Spanish- Language Homes: Fall 2009 – Spring 2010 or Spring 2011**

PPVT-4 Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	47.2	9.3	0.0	!
71 to 85	46.5	45.0	14.0	!
86 to 100	5.4	36.2	67.2	!
100 or Higher	1.0	9.4	18.7	!
<b>Total<sup>b</sup></b>	35.9	26.8	8.7	1.9

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of DLL children from Spanish-language homes whose scores fell into each standard score group in fall 2009. Twenty-seven percent of DLL children from Spanish-language homes did not achieve a basal on the PPVT-4 in fall 2009 and are excluded from this table.

! Too few cases for a reliable estimate.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

The PPVT-4 is administered to all children, regardless of performance on the language screener. Following administration of these measures, children are administered assessments in English or Spanish, depending on performance on the language screener. Data in this table reflect the performance of all DLLs from Spanish-language households on the PPVT-4 assessment, regardless of performance on the screener or language of assessment.

- Very few Spanish-speaking DLLs have English receptive vocabulary skills at or above norms at Head Start entry or exit. It is important to keep in mind that estimates for some cells in the table are based on small numbers of DLL children.
- Many Spanish-speaking DLLs who enter with English receptive vocabulary skills below norms have similar skills by the end of Head Start. For example, about half of those who score more than two standard deviations below norms at entry score at a similar level at Head Start exit (47 percent). More than half of children who score between one and two standard deviations below norms at Head Start entry have comparable (45 percent) or lower (9 percent) skills at Head Start exit. Two-thirds of those who score within one standard deviation of norms at program entry score similarly at program exit (67 percent).

**Table B.15a. Head Start Exit EOWPVT and EOWPVT- SBE Standard Score Distribution by Head Start Entry Standard Score Distribution for Dual Language Learners (DLLs) from Spanish- Language Homes: Fall 2009 – Spring 2010 or Spring 2011**

EOWPVT Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	40.5	14.0	0.0	!
71 to 85	48.6	51.7	40.7	!
86 to 100	9.6	29.1	36.3	!
100 or Higher	1.3	5.3	22.9	!
<b>Total<sup>b</sup></b>	59.7	26.4	13.2	0.6

EOWPVT-SBE Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	30.7	5.9	2.1	1.4
71 to 85	43.2	51.8	15.6	4.6
86 to 100	17.2	23.5	44.0	14.2
100 or Higher	8.9	18.8	38.3	79.8
<b>Total<sup>b</sup></b>	15.1	20.6	28.4	36.0

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of DLL children from Spanish-language homes whose scores fell into each standard score group in fall 2009.

! Too few cases for a reliable estimate.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

The EOWPVT (or EOWPVT-SBE) is administered to all children, regardless of performance on the language screener. Following administration of these measures, children are administered assessments in English or Spanish, depending on performance on the language screener. FACES provides EOWPVT standard scores for all children, regardless of home language or performance on the language screener. EOWPVT-SBE standard scores are only reported for children with a Spanish home language. The EOWPVT standard scores provide a measure of children's expressive vocabulary relative to young children in the U.S., while the EOWPVT-SBE standard scores reflect children's vocabulary skills relative to young Hispanic children nationally. EOWPVT-SBE standard scores are only available for children age 4 and older at assessment. Data in this table reflect the performance of all DLLs from Spanish-language households on the EOWPVT and EOWPVT-SBE, regardless of performance on the screener or language of assessment.

- There are mixed findings on Spanish-speaking DLLs' progress in expressive vocabulary during Head Start, relative to English speaking peers (EOWPVT). Many Spanish-speaking DLLs who enter with the lowest vocabulary scores on the EOWPVT make progress toward norms by Head Start exit, while those who enter with higher scores score similarly at program exit. For example, at Head Start exit, more than half of those who score more than two standard deviations below norms at entry make progress toward norms and score at higher levels (59 percent). Conversely, about one-third of those who score between one and two standard deviations at Head Start entry improve their skills relative to peers and score within one standard deviation of norms at program exit (29 percent). There are similar patterns among those who score within one standard deviation of norms at Head Start entry. Very few Spanish-speaking DLLs enter Head Start with expressive vocabulary (EOWPVT) scores at or above norms.
- Turning to children's expressive vocabulary scores relative to Spanish-dominant and bilingual peers (EOWPVT-SBE), there are similar patterns. Many Spanish-speaking DLLs who enter with the lowest vocabulary scores make progress toward norms by Head Start exit, while those who enter with higher scores score similarly at program exit. For example, the majority of Spanish-speaking DLLs who enter Head Start scoring two or more standard deviations below norms show progress during Head Start. Forty-three percent of these children score between one and two standard deviations below norms at Head Start, another 18 percent score within one standard deviation of norms, and 9 percent score at or above norms. Conversely, slightly more than half of those who score between one and two standard deviations maintain their standing relative to peers at program exit (52 percent). Among those who score within one standard deviation of norms at Head Start entry, about two-thirds score similarly or more poorly at program exit.



**Table B.16a. Head Start Exit TVIP Standard Score Distribution by Head Start Entry Standard Score Distribution for Dual Language Learners (DLLs) from Spanish- Language Homes: Fall 2009 – Spring 2010 or Spring 2011**

TVIP Standard Score	Head Start Entry (Percentage of Children) <sup>a</sup>			
	70 or Lower	71 to 85	86 to 100	100 or Higher
<b>Head Start Exit</b>				
70 or Lower	50.5	26.9	9.4	4.5
71 to 85	33.0	35.0	20.5	6.7
86 to 100	16.5	25.2	41.9	28.4
100 or Higher	0.0	12.9	28.2	60.4
<b>Total<sup>b</sup></b>	15.3	41.9	29.7	13.1

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

<sup>a</sup>Percentages in each column sum to 100.

<sup>b</sup>Percentages in this row reflect the percentage of DLL children from Spanish-language homes whose scores fell into each standard score group in fall 2009.

Standard scores allow for comparisons of an individual's performance to others of the same age (or grade). These scores have a mean of 100 and a standard deviation of 15. In this table, reported standard scores have been categorized using standard deviation units: scores less than or equal to 70 (at least two standard deviations below norms), 71 to 85 (between one and two standard deviations below norms), 86 to 100 (within one standard deviation of norms), and greater than or equal to 100 (at or above norms).

The TVIP is administered to all children from Spanish-language homes, regardless of performance on the language screener. Data in this table reflect the performance of all children from Spanish-language homes on the TVIP assessment, regardless of performance on the screener or language of assessment.

- Many Spanish-speaking DLLs who enter with Spanish receptive vocabulary skills below norms maintain similar standing relative to peers during at Head Start exit or show declines relative to peers. For example, half (51 percent) of those who score more than two standard deviations below norms at entry score at similar levels at the end of Head Start. Thirty-five percent of those who enter with Spanish receptive vocabulary scores between one and two standard deviations of norms maintain their position relative to peers at Head Start exit, and an additional 27 percent fall even further behind peers by program exit. We see the same pattern among children who enter the program scoring within one standard deviation of norms. Meanwhile, the majority of children who enter with skills at or above norms have comparable skills relative to peers at the end of Head Start. At the same time, however, many children scoring below norms at entry move up one standard score group by program exit. Fifty percent of those scoring two or more standard deviations below norms at entry move up at least one standard score category during the program; 38 percent of those scoring between 71 and 85 standard score points and between 86 and 100 move up a standard score category during this time.

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**Table C.2a. FACES Direct Child Assessment, Teacher Child Report, Parent Interview, and Assessor Rating Measures: Fall 2009- Spring 2010 or Spring 2011**

Scales	n	Head Start	Head Start	Entry-Exit
		Entry	Exit	Change
		Mean	Mean	Mean
<b>Direct Child Assessment</b>				
Pencil Tapping (4-year-olds only) <sup>a</sup>	1,048	41.7	60.3	18.6***
<b>Teacher Child Report</b>				
Social Skills	2,218	15.1	18.3	3.1***
Total Behavior Problems	2,222	4.7	3.8	-0.8***
Aggressive Behavior	2,222	1.4	1.2	-0.2***
Hyperactive Behavior	2,222	1.4	1.1	-0.3***
Withdrawn Behavior	2,222	1.4	1.3	-0.1
ECLS-K Approaches to Learning	2,220	1.6	2.0	0.4***
<b>Parent Interview</b>				
Social Skills/Positive Approaches to Learning	1,926	11.9	12.6	0.7***
Total Behavior Problems	1,920	5.7	5.2	-0.5***
<b>Assessor Rating</b>				
Leiter Cognitive/ Social Raw Score	2,188	51.9	60.2	8.4***
Leiter Cognitive/ Social Standard Score <sup>b</sup>	2,188	87.1	91.2	4.1***
Attention	2,189	18.4	21.8	3.4***
Organization/Impulse Control	2,188	14.7	17.5	2.8***
Activity Level	2,190	7.5	8.5	1.0***
Sociability	2,189	11.3	12.4	1.2***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment, Parent Interview, Teacher Child Report, and Assessor Rating.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p<.05; \*\*p<.01; \*\*\*p<.001.

<sup>a</sup>In the Pencil Tapping task, children are asked to inhibit the natural response to imitate the adult assessor exactly (or to tap repeatedly) and instead to keep in mind that the rule is to do the opposite of what the assessor does. Reported scores reflect the percentage of times the child tapped correctly. They can take on any value from zero to 100, with higher scores indicating better skills on the task. The task is only administered to children age 4 and older at the time of the direct assessment.

<sup>b</sup> This standard score has a mean of 100 and a standard deviation of 15.

- As compared to when they first entered the program, children are able to inhibit their initial impulse and respond correctly across more trials on the pencil tapping task by the end of Head Start. In fact, children are able to do so 60 percent of the time at Head Start exit, which is more than chance. A similar percentage of Head Start children in a small study (59 percent; mean age = 60.5 months) responded correctly across trials (Smith-Donald et al. 2007). In comparison, less than half the time (42 percent) were children able to do so at the beginning of Head Start.
- Teachers report that children demonstrate more social skills, more positive approaches to learning, and fewer total problem behaviors on average by the end of Head Start. Among the behaviors comprising the total problem behavior score, teachers also report children as demonstrating fewer aggressive and hyperactive behaviors by the end of their program experience.
- Similarly, parents report that children demonstrate more social skills and positive approaches to learning on average by the end of Head Start and fewer total problem behaviors.
- Based on the child's behavior during the direct assessment, assessors rate children as demonstrating better social/cognitive skills at the end of Head Start, including attention, organization/impulse control, activity level, and sociability.

**Table C.3a. FACES Direct Child Assessment, Teacher Child Report, Parent Interview, and Assessor Rating Measures by Age: Fall 2009-Spring 2010 or Spring 2011**

Scales	3-year-olds <sup>a</sup>				4-year-olds <sup>a</sup>			
		Head Start Entry	Head Start Exit	Entry-Exit Change		Head Start Entry	Head Start Exit	Entry-Exit Change
	n	Mean	Mean	Mean	n	Mean	Mean	Mean
<b>Direct Child Assessment</b>								
Pencil Tapping (4-year-olds only) <sup>b</sup>	NA	NA	NA	NA	1,048	41.7	60.3	18.6***
<b>Teacher Child Report</b>								
Social Skills	1,069	14.1	18.5	4.4***	1,149	16.1	18.0	1.9***
Total Behavior Problems	1,069	5.2	3.8	-1.4***	1,153	4.1	3.9	-0.2
Aggressive Behavior	1,069	1.6	1.2	-0.4***	1,153	1.3	1.2	0.0
Hyperactive Behavior	1,069	1.6	1.1	-0.5***	1,153	1.3	1.1	-0.2*
Withdrawn Behavior	1,069	1.5	1.2	-0.3***	1,153	1.3	1.4	0.1
ECLS-K Approaches to Learning	1,068	1.5	2.1	0.6***	1,152	1.7	2.0	0.2***
<b>Parent Interview</b>								
Social Skills/Positive Approaches to Learning	915	11.8	12.6	0.8	1,011	12.1	12.6	0.5***
Total Behavior Problems	913	5.6	5.0	-0.6**	1,007	5.8	5.4	-0.4*
<b>Assessor Rating</b>								
Leiter Cognitive/ Social Raw Score	1,079	47.2	60.3	13.1***	1,109	56.6	60.2	3.6***
Leiter Cognitive/ Social Standard Score <sup>c</sup>	1,079	85.8	91.4	5.6***	1,109	88.3	90.9	2.6***
Attention	1,080	16.5	21.7	5.2***	1,109	20.5	22.0	1.5***
Organization/Impulse Control	1,079	13.2	17.6	4.3***	1,109	16.1	17.4	1.3***
Activity Level	1,081	6.9	8.5	1.6***	1,109	8.1	8.6	0.5***
Sociability	1,080	10.6	12.5	2.0***	1,109	12.0	12.3	0.3*

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Assessment, Parent Interview, Teacher Child Report, and Assessor Rating.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

NA = not available. This task is only administered to children age 4 and older at the time of the direct assessment.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup> In the Pencil Tapping task, children are asked to inhibit the natural response to imitate the adult assessor exactly (or to tap repeatedly) and instead to keep in mind that the rule is to do the opposite of what the assessor does. This score reflects the percentage of times the child tapped correctly. Reported scores reflect the percentage of times the child tapped correctly. They can take on any value from zero to 100, with higher scores indicating better skills on the task. The task is only administered to children age 4 and older at the time of the direct assessment.

<sup>c</sup> This standard score has a mean of 100 and a standard deviation of 15.

- Teachers report children who entered at ages 3 and 4 as showing more social skills and positive approaches to learning by Head Start exit, but those who entered at age 3 as showing greater gains in social skills during Head Start than those who entered at age 4. Teachers only report children who entered the program at age 3 as having fewer total problem behaviors, aggressive behaviors, and withdrawn behaviors by Head Start exit. They report both age groups as having fewer hyperactive behaviors by the end of the program. Unlike teachers, parents report that children who entered the program at ages 3 and 4 demonstrate fewer total problem behaviors on average by the end of Head Start but only those who entered at age 3 having more social skills and positive approaches to learning.
- Based on the child's behavior during the direct assessment, assessors rate both 3- and 4-year-olds as demonstrating better social/cognitive skills by the end of the program, including attention, organization/impulse control, activity level, and sociability. Those who entered at age 3 show greater gains in their social/cognitive skills during Head Start, including attention and organization/impulse control.

**Table C.4a. FACES Direct Child Assessment, Teacher Child Report, Parent Interview, and Assessor Rating Measures by Gender: Fall 2009-Spring 2010 or Spring 2011**

Scales	Girls				Boys			
	n	Head Start Entry Mean	Head Start Exit Mean	Entry-Exit Change Mean	n	Head Start Entry Mean	Head Start Exit Mean	Entry-Exit Change Mean
<b>Direct Child Assessment</b>								
Pencil Tapping (4-year-olds only) <sup>a</sup>	540	43.1	63.3	20.2***	508	40.3	57.1	16.8***
<b>Teacher Child Report</b>								
Social Skills	1,098	16.1	19.3	3.1***	1,112	14.1	17.2	3.1***
Total Behavior Problems	1,101	3.6	2.9	-0.7***	1,113	5.7	4.8	-0.9***
Aggressive Behavior	1,101	1.0	0.8	-0.1	1,113	1.9	1.6	-0.3**
Hyperactive Behavior	1,101	1.0	0.8	-0.3***	1,113	1.8	1.4	-0.4***
Withdrawn Behavior	1,101	1.3	1.1	-0.2*	1,113	1.6	1.5	-0.1
ECLS-K Approaches to Learning	1,100	1.8	2.2	0.4***	1,112	1.5	1.9	0.4***
<b>Parent Interview</b>								
Social Skills/Positive Approaches to Learning	952	12.2	12.9	0.7***	974	11.6	12.3	0.7***
Total Behavior Problems	948	5.4	4.8	-0.6**	972	6.0	5.7	-0.4
<b>Assessor Rating</b>								
Leiter Cognitive/Social Raw Score	1,088	54.4	61.7	7.3***	1,092	49.3	58.7	9.4***
Leiter Cognitive/Social Standard Score <sup>b</sup>	1,088	89.0	92.3	3.3***	1,092	85.1	90.0	4.9***
Attention	1,089	19.5	22.4	2.9***	1,092	17.4	21.2	3.8***
Organization/Impulse Control	1,088	15.4	17.9	2.5***	1,092	13.9	17.0	3.1***
Activity Level	1,090	7.9	8.8	0.8***	1,092	7.1	8.3	1.2***
Sociability	1,089	11.6	12.6	1.0***	1,092	10.9	12.2	1.3***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment, Parent Interview, Teacher Child Report, and Assessor Rating.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup> In the Pencil Tapping task, children are asked to inhibit the natural response to imitate the adult assessor exactly (or to tap repeatedly) and instead to keep in mind that the rule is to do the opposite of what the assessor does. Reported scores reflect the percentage of times the child tapped correctly. They can take on any value from zero to 100, with higher scores indicating better skills on the task. The task is only administered to children age 4 and older at the time of the direct assessment.

<sup>b</sup> This standard score has a mean of 100 and a standard deviation of 15.

- Both boys and girls are able to inhibit their initial impulse and respond correctly across more trials on the pencil tapping task by the end of Head Start. In fact, by Head Start exit, boys respond correctly 57 percent of the time and girls are able to do so 63 percent of the time. In comparison, at Head Start entry, boys and girls responded correctly 40 and 43 percent of the time, respectively.
- Teachers report that both boys and girls demonstrate more social skills and more positive approaches to learning by the end of Head Start. They report both boys and girls as having fewer total problem behaviors and hyperactive behaviors, on average by Head Start exit. They only report girls as having fewer withdrawn behaviors and boys as having fewer aggressive behaviors at the end of Head Start.
- Similarly, parents report that both boys and girls demonstrate more social skills and positive approaches to learning on average at Head Start exit. They only report girls as having fewer total problem behaviors by the end of the program.
- Based on the child's behavior during the direct assessment, assessors rate both boys and girls as demonstrating better social/cognitive skills by the end of Head Start, including attention, organization/impulse control, activity level, and sociability.



**Table C.5a. FACES Direct Child Assessment, Teacher Child Report, Parent Interview, and Assessor Rating Measures by Race/Ethnicity: Fall 2009- Spring 2010 or Spring 2011**

Scales	White, Non-Hispanic				African American, Non-Hispanic				Hispanic/Latino				Other, Non-Hispanic			
	n	Head Start Entry	Head Start Exit	Entry-Exit Change	n	Head Start Entry	Head Start Exit	Entry-Exit Change	n	Head Start Entry	Head Start Exit	Entry-Exit Change	n	Head Start Entry	Head Start Exit	Entry-Exit Change
<b>Direct Child Assessment</b>																
Pencil Tapping (4-year-olds only) <sup>a</sup>	198	46.5	66.7	20.2***	304	42.3	59.0	16.8***	471	37.6	57.3	19.7***	73	48.0	63.9	15.9**
<b>Teacher Child Report</b>																
Social Skills	444	15.2	18.1	3.0***	674	14.7	18	3.3***	918	15.5	18.4	3.0***	168	15.2	18.8	3.6***
Total Behavior Problems	444	5.2	4.5	-0.7*	673	4.8	4.1	-0.7*	923	4.3	3.3	-1.0***	168	4.2	3.4	-0.9*
Aggressive Behavior	444	1.5	1.4	-0.2	673	1.6	1.4	-0.1	923	1.3	1.0	-0.3***	168	1.2	0.9	-0.2
Hyperactive Behavior	444	1.5	1.2	-0.3**	673	1.5	1.2	-0.3**	923	1.3	0.9	-0.4***	168	1.3	0.8	-0.5**
Withdrawn Behavior	444	1.7	1.6	-0.1	673	1.4	1.2	-0.1	923	1.3	1.2	-0.2	168	1.3	1.4	0.1
ECLS-K Approaches to Learning	444	1.6	2.0	0.4***	672	1.5	1.9	0.4***	922	1.7	2.1	0.4***	168	1.6	2.1	0.5***
<b>Parent Interview</b>																
Social Skills/Positive Approaches to Learning	374	11.8	12.4	0.6**	574	12.1	12.9	0.7***	857	11.7	12.5	0.7***	118	12.5	12.9	0.4
Total Behavior Problems	373	5.3	5.0	-0.4	573	4.8	4.5	-0.4	854	6.8	6.1	-0.7**	117	4.5	4.5	0.0
<b>Assessor Rating</b>																
Leiter Cognitive/ Social Raw Score	414	53.9	61.2	7.3***	688	49.0	59.7	10.7***	914	52.5	59.5	7.0***	159	55.3	62.7	7.4***
Leiter Cognitive/ Social Standard Score <sup>b</sup>	414	88.5	91.9	3.4**	688	84.7	91.3	6.6***	914	87.7	90.0	2.3**	159	89.3	93.6	4.3**
Attention	414	19.4	22.2	2.8***	688	17.3	21.5	4.2***	914	18.7	21.6	3.0***	160	19.6	22.7	3.1***
Organization/Impulse Control	414	15.3	18.0	2.7***	688	13.8	17.3	3.5***	914	14.9	17.1	2.3***	159	15.7	18.3	2.6***
Activity Level	414	7.7	8.6	0.9***	688	6.9	8.4	1.5***	914	7.8	8.5	0.7***	161	8.0	8.9	0.9*
Sociability	414	11.6	12.5	0.9***	688	11.0	12.5	1.4***	914	11.1	12.3	1.1***	160	11.9	12.7	0.8*

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment, Parent Interview, Teacher Child Report, and Assessor Rating.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup>In the Pencil Tapping task, children are asked to inhibit the natural response to imitate the adult assessor exactly (or to tap repeatedly) and instead to keep in mind that the rule is to do the opposite of what the assessor does. Reported scores reflect the percentage of times the child tapped correctly. They can take on any value from zero to 100, with higher scores indicating better skills on the task. The task is only administered to children age 4 and older at the time of the direct assessment.

<sup>b</sup>This standard score has a mean of 100 and a standard deviation of 15.

- Regardless of race/ethnicity, children are able to inhibit their initial impulse and respond correctly across more trials on the pencil tapping task by the end of the program. In fact, by Head Start exit, across groups children are able to respond correctly about two-thirds of the time. Hispanic/Latino children respond correctly the lowest proportion of times at program entry, but they close the gap with African American children by the end of the program.
- Teachers report that all groups demonstrate more social skills and positive approaches to learning on average by the end of Head Start. They also report all groups as having fewer total problem behaviors and hyperactive behaviors by Head Start exit. However, they only report Hispanic/Latino children as having fewer aggressive behaviors by Head Start exit.
- Parents of all groups report that their children demonstrate more social skills and positive approaches to learning on average by Head Start exit. Only parents of Hispanic/Latino children also report their children as demonstrating fewer total problem behaviors at the end of Head Start.
- Based on the child's behavior during the direct assessment, assessors rate all children, regardless of race/ethnicity, as demonstrating better social/cognitive skills by the end of the program, including attention, organization/impulse control, activity level, and sociability.

**Table C.6a. FACES Direct Child Assessment, Teacher Child Report, Parent Interview, and Assessor Rating Measures by Number of Family Risks: Fall 2009-Spring 2010 or Spring 2011**

Scales	0 risks <sup>a</sup>			1 risk <sup>a</sup>			2 or more risks <sup>a</sup>					
	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change			
	n	Mean	Mean	n	Mean	Mean	n	Mean	Mean			
<b>Direct Child Assessment</b>												
Pencil Tapping (4-year-olds only) <sup>b</sup>	118	47.5	67.4	19.9***	320	43.5	62.3	18.8***	489	39.4	57.7	18.3***
<b>Teacher Child Report</b>												
Social Skills	274	15.4	18.6	3.2***	701	15.3	18.3	2.9***	1,003	15.0	18.2	3.1***
Total Behavior Problems	275	4.7	3.5	-1.2**	702	4.5	3.7	-0.8**	1,005	4.6	3.9	-0.7**
Aggressive Behavior	275	1.4	1.1	-0.3*	702	1.4	1.1	-0.3**	1,005	1.4	1.2	-0.1
Hyperactive Behavior	275	1.5	1.0	-0.5***	702	1.4	1.1	-0.3***	1,005	1.3	1.1	-0.3***
Withdrawn Behavior	275	1.4	1.2	-0.2	702	1.3	1.3	-0.1	1,005	1.4	1.3	-0.1
ECLS-K Approaches to Learning	275	1.6	2.0	0.4***	701	1.6	2.0	0.4***	1,004	1.6	2.0	0.4***
<b>Parent Interview</b>												
Social Skills/Positive Approaches to Learning	249	12.2	12.5	0.3	624	12.0	12.6	0.6***	921	12.0	12.7	0.8***
Total Behavior Problems	249	5.0	4.6	-0.4	621	5.7	5.2	-0.5*	918	5.9	5.4	-0.5**
<b>Assessor Rating</b>												
Leiter Cognitive/Social Raw Score	270	53.6	62.2	8.6***	687	52.8	61.6	8.9***	1,002	50.9	59.2	8.2***
Leiter Cognitive/Social Standard Score <sup>c</sup>	270	88.5	93.4	4.9***	687	87.6	92.3	4.7***	1,002	86.5	90.2	3.7***
Attention	270	19.4	22.9	3.5***	687	18.7	22.3	3.5***	1,002	18.0	21.4	3.4***
Organization/Impulse Control	270	15.2	18.0	2.8***	687	15.0	17.9	2.9***	1,002	14.3	17.1	2.8***
Activity Level	270	7.7	8.7	1.0***	687	7.7	8.8	1.1***	1,002	7.4	8.4	1.0***
Sociability	270	11.3	12.6	1.4***	687	11.4	12.6	1.3***	1,002	11.2	12.2	1.1***

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Assessment, Parent Interview, Teacher Child Report, and Assessor Rating.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

<sup>b</sup>In the Pencil Tapping task, children are asked to inhibit the natural response to imitate the adult assessor exactly (or to tap repeatedly) and instead to keep in mind that the rule is to do the opposite of what the assessor does. Reported scores reflect the percentage of times the child tapped correctly. They can take on any value from zero to 100, with higher scores indicating better skills on the task. The task is only administered to children age 4 and older at the time of the direct assessment.

<sup>c</sup>This standard score has a mean of 100 and a standard deviation of 15.

- Regardless of number of family risks, children are able to inhibit their initial impulse and respond correctly across more trials on the pencil tapping task by the end of the program year. In fact, by Head Start exit, children with no or 1 family risks are able to respond correctly about two-thirds of the time (68 and 62 percent, respectively). Those with two or more risks are able to do so 58 percent of the time.
- Regardless of number of family risks, teachers report that all children demonstrate more social skills, more positive approaches to learning, and fewer total problem behaviors and hyperactive behaviors on average by the end of Head Start. They also report children with no or 1 family risks as demonstrating fewer aggressive behaviors at Head Start exit.
- Parents report that children with 1 and 2 or more risks demonstrate more social skills and positive approaches to learning and fewer total problem behaviors on average at Head Start exit.
- Assessors rate all children, regardless of number of family risks, as demonstrating better social/cognitive skills by the end of the program year, including attention, organization/impulse control, activity level, and sociability.

**Table D.1. Teacher- Reported Disability Categories for Children: Spring 2010 or Spring 2011**

Disability Categorizations	Percent
<b>Percent of Children</b>	
Children with Disabilities	15.3
<b>Percent of Children with Disabilities</b>	
Speech or Language Impairment	74.8
Cognitive Impairment <sup>a</sup>	25.0
Behavioral/Emotional Impairment <sup>b</sup>	13.8
Sensory Impairment <sup>c</sup>	8.6
Physical Impairment <sup>d</sup>	8.2
Have IEP or IFSP	76.3
Have Multiple Impairments	25.7

Source: Spring 2010 or Spring 2011 FACES Teacher Child Report.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Teachers were asked whether a professional had indicated that the child had a developmental problem, delay or other special need, and to indicate the specific need or disability.

Percentages do not sum to 100 because children can be reported to have more than one impairment across the impairment categories.

<sup>a</sup>Cognitive Impairment includes developmental delay, intellectual disability, and autism or pervasive developmental delay.

<sup>b</sup>Behavioral/Emotional Impairment includes behavior problems, hyperactivity, and attention deficit.

<sup>c</sup>Sensory Impairment includes deafness, hearing impairment/hard of hearing, blindness, and vision impairment.

<sup>d</sup>Physical Impairment includes motor impairment.

IEP = Individualized Education Program; IFSP = Individual Family Service Plan

- About 15 percent of children are reported by their teachers to have a diagnosed disability at the end of the Head Start. The majority of children with disabilities are reported to have either speech/language impairments (75 percent) or cognitive impairments (25 percent).
- Seventy-six percent of children with teacher-reported disabilities have an IEP or IFSP.
- Twenty-six percent of children with teacher-reported disabilities have more than one disability or impairment.

**Table D.2. Teacher- Reported Disability Categories for Children by Age: Spring 2010 or Spring 2011**

Disability Categorizations	3-year-olds <sup>a</sup>	4-year-olds <sup>a</sup>
<b>Percent of Children</b>		
Children with Disabilities	17.3	13.7
<b>Percent of Children with Disabilities</b>		
Speech or Language Impairment	79.2	70.3
Cognitive Impairment <sup>b</sup>	24.2	25.9
Behavioral/Emotional Impairment <sup>c</sup>	9.4	18.2
Sensory Impairment <sup>d</sup>	10.5	6.7
Physical Impairment <sup>e</sup>	7.0	9.4
Have IEP or IFSP	82.4	70.2
Have Multiple Impairments	25.8	25.6

Source: Spring 2010 or Spring 2011 FACES Teacher Child Report and Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Teachers were asked whether a professional had indicated that the child had a developmental problem, delay or other special need, and to indicate the specific need or disability.

Percentages do not sum to 100 because children can have more than one impairment across the impairment categories.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Cognitive Impairment includes developmental delay, intellectual disability, and autism or pervasive developmental delay.

<sup>c</sup>Behavioral/Emotional Impairment includes behavior problems, hyperactivity, and attention deficit.

<sup>d</sup>Sensory Impairment includes deafness, hearing impairment/hard of hearing, blindness, and vision impairment.

<sup>e</sup>Physical Impairment includes motor impairment.

IEP = Individualized Education Program; IFSP = Individual Family Service Plan

- A larger percentage of children who entered the program at age 3 than those who entered at age 4 are reported by their teacher to have a disability at the end of the Head Start (17 versus 14 percent, respectively).
- A larger percentage of children with a teacher-reported disability who entered Head Start at age 3 are reported to have a speech or language impairment than those who entered at age 4 (79 versus 70 percent, respectively). For both groups, speech or language impairments are the most common disability. Larger percentages of those who entered at 3 have an IEP or IFSP than those who entered at 4 (82 versus 70 percent, respectively), but similar percentages of children in both age groups have more than one impairment (26 percent each) on average.

**Table D.3. Teacher- Reported Disability Categories for Children by Gender: Spring 2010 or Spring 2011**

Disability Categorizations	Girls	Boys
<b>Percent of Children</b>		
Children with Disabilities	11.2	19.5
<b>Percent of Children with Disabilities</b>		
Speech or Language Impairment	71.9	76.8
Cognitive Impairment <sup>a</sup>	22.7	26.5
Behavioral/Emotional Impairment <sup>b</sup>	11.9	15.0
Sensory Impairment <sup>c</sup>	13.7	5.2
Physical Impairment <sup>d</sup>	7.8	8.5
Have IEP or IFSP	72.1	79.1
Have Multiple Impairments	21.4	28.3

Source: Spring 2010 or Spring 2011 FACES Teacher Child Report and Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Teachers were asked whether a professional had indicated that the child had a developmental problem, delay or other special need, and to indicate the specific need or disability.

Percentages do not sum to 100 because children can be reported to have more than one impairment across the impairment categories.

<sup>a</sup>Cognitive Impairment includes developmental delay, intellectual disability, and autism or pervasive developmental delay.

<sup>b</sup>Behavioral/Emotional Impairment includes behavior problems, hyperactivity, and attention deficit.

<sup>c</sup>Sensory Impairment includes deafness, hearing impairment/hard of hearing, blindness, and vision impairment.

<sup>d</sup>Physical Impairment includes motor impairment.

IEP = Individualized Education Program; IFSP = Individual Family Service Plan

- According to teacher reports, nearly twice as many boys than girls have an identified disability (20 versus 11 percent, respectively). A larger percentage of boys than girls also have a speech/language impairment (77 versus 72 percent, respectively) or cognitive impairment (27 versus 23 percent, respectively), while a larger percentage of girls have a sensory impairment (14 versus 5 percent, respectively). Finally, a larger percentage of boys than girls have an IEP or IFSP (79 versus 72 percent, respectively) and have more than one impairment (28 versus 21 percent, respectively).

**Table D.4. Teacher- Reported Disability Categories for Children by Race/Ethnicity: Spring 2010 or Spring 2011**

Disability Categorizations	White, Non-Hispanic	African American, Non-Hispanic	Hispanic/Latino	Other, Non-Hispanic
<b>Percent of Children</b>				
Children with Disabilities	23.2	14.8	11.8	12.9
<b>Percent of Children with Disabilities</b>				
Speech or Language Impairment	70.3	73.2	82.3	73.7
Cognitive Impairment <sup>a</sup>	20.8	35.8	18.9	26.6
Behavioral/Emotional Impairment <sup>b</sup>	16.2	16.4	9.4	10.6
Sensory Impairment <sup>c</sup>	15.0	3.5	3.8	17.2
Physical Impairment <sup>d</sup>	13.9	1.5	10.4	0.0
Have IEP or IFSP	70.5	73.6	83.9	84.9
Have Multiple Impairments	27.9	28.4	21.5	22.7

Source: Spring 2010 or Spring 2011 FACES Teacher Child Report and Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Teachers were asked whether a professional had indicated that the child had a developmental problem, delay or other special need, and to indicate the specific need or disability.

Percentages do not sum to 100 because children can be reported to have more than one impairment across the impairment categories.

<sup>a</sup>Cognitive Impairment includes developmental delay, intellectual disability, and autism or pervasive developmental delay.

<sup>b</sup>Behavioral/Emotional Impairment includes behavior problems, hyperactivity, and attention deficit.

<sup>c</sup>Sensory Impairment includes deafness, hearing impairment/hard of hearing, blindness, and vision impairment.

<sup>d</sup>Physical Impairment includes motor impairment.

IEP = Individualized Education Program; IFSP = Individual Family Service Plan

- According to teacher reports, a larger percentage of White children (23 percent) have an identified disability than children of all other racial/ethnic groups in Head Start (versus 15, 12, and 13 percent for African American, Hispanic/Latino, and Other children, respectively). Teachers also report Hispanic/Latino children as being more likely to have a speech or language impairment than those from other racial/ethnic backgrounds, and African American children as more likely to have a cognitive impairment.
- Hispanic/Latino (84 percent) and Other race children (85 percent) are more likely than children of other racial/ethnic backgrounds to have IEP or IFSP (versus 71 and 74, respectively). Across racial/ethnic groups, White and African American children are most likely to have more than one impairment.

**Table D.5. Teacher- Reported Disability Categories for Children by Number of Family Risks: Spring 2010 or Spring 2011**

Disability Categorizations	0 risk <sup>a</sup>	1 risk <sup>a</sup>	2 or more risks <sup>a</sup>
<b>Percent of Children</b>			
Children with Disabilities	17.6	14.8	15.2
<b>Percent of Children with Disabilities</b>			
Speech or Language Impairment	75.2	81.1	72.3
Cognitive Impairment <sup>b</sup>	24.7	22.2	28.2
Behavioral/Emotional Impairment <sup>c</sup>	11.4	13.5	13.2
Sensory Impairment <sup>d</sup>	5.5	8.8	8.2
Physical Impairment <sup>e</sup>	14.9	8.2	7.1
Have IEP or IFSP	85.6	82.9	70.3
Have Multiple Impairments	23.6	30.7	23.9

Source: Spring 2010 or Spring 2011 FACES Teacher Child Report and Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

Teachers were asked whether a professional had indicated that the child had a developmental problem, delay or other special need, and to indicate the specific need or disability.

Percentages do not sum to 100 because children can be reported to have more than one impairment across the impairment categories.

<sup>a</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

<sup>b</sup>Cognitive Impairment includes developmental delay, intellectual disability, and autism or pervasive developmental delay.

<sup>c</sup>Behavioral/Emotional Impairment includes behavior problems, hyperactivity, and attention deficit.

<sup>d</sup>Sensory Impairment includes deafness, hearing impairment/hard of hearing, blindness, and vision impairment.

<sup>e</sup>Physical Impairment includes motor impairment.

IEP = Individualized Education Program; IFSP = Individual Family Service Plan

- According to teacher reports, relatively similar percentages of children with no, 1, and 2 or more family risks have a disability (18, 15, and 15 percent, respectively). Similar percentages of children have various identified disabilities, regardless of number of family risks. Exceptions are physical impairments, which higher percentages of children with no family risks are reported to have as compared to those with 1 and 2 or more family risks (15 versus 8 and 7 percent, respectively). Higher percentages of children with 1 family risk are reported to have a speech or language impairment (81 percent) than those with no (75 percent) and 2 or more risks (72 percent).
- A larger percentage of those with no family risks have an IEP or IFSP than those with 1 risk and 2 or more risks (86, 83, and 70 percent, respectively). In other words, those with the greatest number of risks are least likely to have an IEP or IFSP. Higher percentages of children with 1 family risk have multiple impairments (31 percent), as compared to those with no or 2 or more family risks (24 percent each). Head Start allows enrollment by children who are above the federal poverty level if they have a diagnosed disability.

**Table D.6a. Summary Statistics for FACES Child Height and Weight Measures: Fall 2009- Spring 2010 or Spring 2011**

Scales	n	Head Start Entry	Head Start Exit	Entry-Exit Change
		Mean	Mean	Mean
Height (in inches)	2,086	40.5	43.2	2.7***
Weight (in pounds)	2,084	38.6	44.2	5.6***
Body Mass Index (BMI)	2,084	16.5	16.6	0.1
<b>Percent of Children</b>				
Child is Underweight	2,084	3.4	2.8	-0.6
Child is Normal Weight	2,084	63.3	62.3	-1.0
Child is Overweight	2,084	17.3	17.7	0.4
Child is Obese	2,084	16.0	17.2	1.2

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

According to the Centers for Disease Control and Prevention (CDC), a child is considered to be overweight when his/her BMI score is at or above the 85th percentile for his/her age and gender, and obese if his/her BMI is at or above the 95th percentile for his/her age and gender.

- On average, children grew about 3 inches and gained nearly 6 pounds between Head Start entry and exit. On average, there were no changes in their BMI (including percentage overweight or obese) between the beginning and end of their Head Start experience.
- At both Head Start entry and exit, children have an average Body Mass Index (BMI) that is above average for their age range (that is, higher than the 50th percentile).
- Using criteria set by the CDC, about one-third of children are overweight or obese at Head Start entry and exit (33 and 35 percent, respectively).



**Table D.7a. Summary Statistics for FACES Child Height and Weight Measures by Age: Fall 2009- Spring 2010 or Spring 2011**

Scales	3-year-olds <sup>a</sup>				4-year-olds <sup>a</sup>			
	n	Head Start	Head Start	Entry-Exit	n	Head Start	Head Start	Entry-Exit
		Entry	Exit	Change		Entry	Exit	Change
		Mean	Mean	Mean		Mean	Mean	Mean
Height (in inches)	1,017	39.3	43.4	4.1***	1,069	41.7	43.0	1.3***
Weight (in pounds)	1,016	36.1	44.6	8.5***	1,068	41.0	43.8	2.8***
Body Mass Index (BMI)	1,016	16.4	16.6	0.2	1,068	16.5	16.5	0.1
<b>Percent of Children</b>								
Child is Underweight	1,016	3.1	1.6	-1.5*	1,068	3.7	4.0	0.3
Child is Normal Weight	1,016	65.7	64.7	-1.0	1,068	61.0	59.9	-1.0
Child is Overweight	1,016	18.3	17.0	-1.3	1,068	16.3	18.4	2.0
Child is Obese	1,016	12.9	16.6	3.8*	1,068	19.0	17.7	-1.3

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup>Age as of September 1, 2009.

According to the Centers for Disease Control and Prevention (CDC), a child is considered to be overweight when his/her BMI score is at or above the 85th percentile for his/her age and gender, and obese if his/her BMI is at or above the 95th percentile for his/her age and gender.

- On average, children who entered at age 3 and attended Head Start for two years grew approximately 4 inches and gained nearly 9 pounds between Head Start entry and exit. Those who entered at age 4 and attended for 1 year grew about 1 inch and gained nearly 3 pounds. For both age groups, there were no changes, on average, in BMI between the beginning and end of Head Start. However, a smaller percentage of 3-year-olds was underweight by program exit and a larger percentage was obese at the end of the program.
- Three- and 4-year olds are comparable in terms of BMI at Head Start entry and exit.
- Similar percentages of 3- and 4-year-olds are overweight or obese at Head Start entry (31 versus 35 percent, respectively) and exit (34 versus 36 percent, respectively).

**Table D.8a. Summary Statistics for FACES Child Height and Weight Measures by Gender: Fall 2009- Spring 2010 or Spring 2011**

Scales	Girls				Boys			
		Head Start Entry	Head Start Exit	Entry-Exit Change		Head Start Entry	Head Start Exit	Entry-Exit Change
	n	Mean	Mean	Mean	n	Mean	Mean	Mean
Height (in inches)	1,044	40.4	43.0	2.6***	1,034	40.7	43.4	2.8***
Weight (in pounds)	1,044	38.1	43.8	5.6***	1,032	39.1	44.6	5.6***
Body Mass Index (BMI)	1,044	16.4	16.5	0.2*	1,032	16.5	16.6	0.0
<b>Percent of Children</b>								
Child is Underweight	1,044	3.5	2.1	-1.4	1,032	3.3	3.4	0.0
Child is Normal Weight	1,044	64.9	63.5	-1.4	1,032	61.9	61.2	-0.7
Child is Overweight	1,044	17.4	18.2	0.8	1,032	16.9	17.1	0.2
Child is Obese	1,044	14.2	16.1	1.9	1,032	17.9	18.4	0.5

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

According to the Centers for Disease Control and Prevention (CDC), a child is considered to be overweight when his/her BMI score is at or above the 85th percentile for his/her age and gender, and obese if his/her BMI is at or above the 95th percentile for his/her age and gender.

- On average, both boys and girls grew about 3 inches and gained nearly 6 pounds between Head Start entry and exit. There were no changes in children's BMI between the beginning and end of Head Start for boys, on average. However, girls had higher BMIs by program exit.
- Boys and girls are comparable in terms of BMI at Head Start entry and exit.
- Similar percentages of girls and boys are overweight or obese at Head Start entry (32 versus 35 percent, respectively) and exit (34 versus 36 percent, respectively).

**Table D.9a. Summary Statistics for FACES Child Height and Weight Measures by Race/Ethnicity: Fall 2009- Spring 2010 or Spring 2011**

	White, Non-Hispanic			African American, Non-Hispanic			Hispanic/Latino			Other, Non-Hispanic						
	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change				
<b>Scales</b>	n	Mean	Mean	Mean	n	Mean	Mean	Mean	n	Mean	Mean	Mean	n	Mean	Mean	Mean
Height (in inches)	402	40.0	42.6	2.5***	662	40.8	43.9	3.1***	858	40.5	43.0	2.5***	151	40.5	43.1	2.6***
Weight (in pounds)	402	37.5	42.4	4.8***	662	38.6	45.1	6.5***	856	39.2	44.5	5.2***	151	38.6	44.2	5.7***
Body Mass Index (BMI)	402	16.4	16.4	0.0	662	16.2	16.4	0.2	856	16.7	16.8	0.1	151	16.4	16.6	0.2
<b>Percent of Children</b>																
Child is Underweight	402	1.8	1.9	0.1	662	5.2	3.7	-1.4	856	2.4	2.3	-0.1	151	5.3	3.3	-2.0
Child is Normal Weight	402	68.3	67.9	-0.4	662	67.7	66.1	-1.6	856	57.3	55.0	-2.3	151	61.5	66.0	4.5
Child is Overweight	402	16.7	17.9	1.2	662	16.3	14.7	-1.6	856	18.2	20.9	2.7	151	17.2	13.6	-3.6
Child is Obese	402	13.3	12.3	-0.9	662	10.8	15.5	4.7*	856	22.1	21.8	-0.3	151	16.1	17.2	1.1

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

According to the Centers for Disease Control and Prevention (CDC), a child is considered to be overweight when his/her BMI score is at or above the 85th percentile for his/her age and gender, and obese if his/her BMI is at or above the 95th percentile for his/her age and gender.

- Regardless of race/ethnicity, on average all children grew about 2 1/2 to 3 inches between Head Start entry and exit. While most groups gained between 5 and 6 pounds during this period, African American children gained about 6 1/2 pounds, almost two more pounds than White children. On average, there were no changes in children's BMI between the beginning and end of Head Start, across racial/ethnic groups. However, a higher percentage of African American children were obese at Head Start exit than at entry.
- Hispanic/Latino children have higher BMI scores than White and African American children at program entry and exit.
- Using criteria set by the CDC, Hispanic/Latino children are more likely than White and African American children to be overweight or obese at Head Start entry (40 versus 30 and 27 percent, respectively) and exit (43 versus 30 and 30 percent, respectively).

**Table D.10a. Summary Statistics for FACES Child Height and Weight Measures by Number of Family Risks: Fall 2009- Spring 2010 or Spring 2011**

Scales	0 risks <sup>a</sup>			1 risk <sup>a</sup>			2 or more risks <sup>a</sup>					
	n	Head Start Entry Mean	Head Start Exit Mean	Entry-Exit Change Mean	n	Head Start Entry Mean	Head Start Exit Mean	Entry-Exit Change Mean	n	Head Start Entry Mean	Head Start Exit Mean	Entry-Exit Change Mean
Height (in inches)	253	40.5	43.3	2.8***	660	40.6	43.3	2.7***	954	40.5	43.2	2.7***
Weight (in pounds)	253	38.6	44.7	6.1***	660	38.7	44.4	5.7***	952	38.6	44.1	5.5***
Body Mass Index (BMI)	253	16.4	16.7	0.3	660	16.4	16.6	0.1	952	16.5	16.5	0.0
<b>Percent of Children</b>												
Child is Underweight	253	2.1	2.0	-0.1	660	4.1	2.9	-1.2	952	3.4	2.9	-0.5
Child is Normal Weight	253	67.6	65.1	-2.6	660	61.3	61.7	0.4	952	64.0	61.7	-2.3
Child is Overweight	253	13.9	11.9	-2.0	660	19.0	18.6	-0.4	952	15.9	18.6	2.7
Child is Obese	253	16.3	21.0	4.8	660	15.6	16.8	1.2	952	16.6	16.7	0.1

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment and Fall 2009 Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

According to the Centers for Disease Control and Prevention (CDC), a child is considered to be overweight when his/her BMI score is at or above the 85th percentile for his/her age and gender, and obese if his/her BMI is at or above the 95th percentile for his/her age and gender.

<sup>a</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

- Regardless of number of family risks, on average all children grew approximately 3 inches and gained about 6 pounds between Head Start entry and exit. On average, there were no changes in children's BMI between the beginning and end of the year across number of family risks.
- Regardless of number of family risks, children are comparable in terms of BMI at Head Start entry and exit.
- Similar percentages of children with no, 1, and 2 or more family risks are overweight or obese at Head Start entry (30 versus 35 and 33 percent, respectively) and exit (33 versus 35 and 35 percent, respectively).

**Table D.11 a. Parent- Reported Child Health Status by Child and Family Characteristics: Fall 2009- Spring 2010 or Spring 2011**

	Percent of Children								
	Excellent/Very Good			Good			Fair/Poor		
	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change	Head Start Entry	Head Start Exit	Entry-Exit Change
All Children	80.4	80.3	0.0	13.5	13.8	0.4	6.2	5.8	-0.4
<b>Age<sup>a</sup></b>									
3 years old or younger	82.4	81.1	-1.3	11.2	13.3	2.2	6.4	5.6	-0.8
4 years old or older	78.4	79.7	1.2	15.6	14.3	-1.3	6.0	6.0	0.1
<b>Race/Ethnicity</b>									
White, Non-Hispanic	86.4	82.9	-3.5	10.3	12.7	2.4	3.2	4.4	1.1
African American, Non-Hispanic	83.5	84.5	1.0	11.8	10.7	-1.1	4.7	4.8	0.1
Hispanic/Latino	72.7	75.2	2.6	17.9	17.0	-0.9	9.5	7.8	-1.7
Other, Non-Hispanic	93.7	83.6	-10.1*	4.5	12.9	8.4*	1.7	3.5	1.8
<b>Gender</b>									
Female	83.5	82.2	-1.3	11.5	13.0	1.4	5.0	4.9	-0.1
Male	77.3	78.5	1.3	15.4	14.7	-0.7	7.4	6.8	-0.6
<b>Family Risks<sup>b</sup></b>									
0	85.8	84.9	-0.9	11.6	11.6	0.1	2.7	3.5	0.8
1	81.7	82.3	0.6	12.7	12.7	0.0	5.6	5.0	-0.6
2 or More	77.8	78.3	0.5	14.7	15.0	0.3	7.5	6.7	-0.9

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Parent Interview.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011. All reported differences are statistically significant at the .05 level. Estimates for entry-exit change are rounded in the table, but differences are not calculated using rounded estimates.

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001.

Child and family characteristics are derived from the Fall 2009 FACES Parent Interview.

<sup>a</sup>Age as of September 1, 2009.

<sup>b</sup>Number of family risks is based on three family characteristics: whether the child resides in a single parent household, whether the household income is below the poverty threshold, and whether the mother has less than a high school diploma.

- Across groups, there were no changes in reports of children's health status between Head Start entry and exit. The one exception is Other race children, where at least 10 percent of children are no longer reported as being in excellent or very good health by the end of Head Start.

- Across groups, the majority of children are reported by their parents as being in excellent or very good health at Head Start entry and exit. Hispanic/Latino children are least likely to have a parent report their health as being excellent or very good at either time point. As are children with 2 or more family risks.

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