

Better Beginnings:

The State of Early Learning and Kindergarten Readiness in East Yakima and White Center







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Diane Paulsell

Kimberly Boller

Nikki Aikens

Martha Kovac

Patricia Del Grosso

MATHEMATICA
Policy Research, Inc.

P.O. Box 2393
Princeton, NJ 08543-2393
(609) 799-3535
www.mathematica-mpr.com

FINDINGS IN BRIEF

- Children’s performance on standardized measures of kindergarten readiness was substantially below national norms, putting them at educational risk.
- Parents of entering kindergartners reported a range of strengths and needs and a high prevalence of risk factors, such as poverty and low maternal education levels.
- The availability of early care and education, parent education, and family support services in the demonstration communities was insufficient to meet families’ needs.
- The quality of early care and education services for children varied, with most care in the minimal-to-good quality range.

As the nation focuses more than ever on educational accountability and performance of public schools, policymakers, educators, and concerned parents are taking stock of developmental milestones children must reach to enter kindergarten prepared to succeed. A sound beginning in school is critical to later achievement, yet many children lack key building blocks.

Research suggests that many of Washington state’s children need enhanced early learning support to improve their readiness for school. In its strategy document, “Investing in Children: An Early Learning Strategy for Washington,” the Bill & Melinda Gates Foundation identified six key demographic risk factors that put significant numbers of Washington state children at a disadvantage when they enter kindergarten, such as living in poverty and living with a single parent or no parent.

Almost a quarter of Washington state’s children under age 5 experience two or more risk factors. Furthermore, in a 2005 survey, teachers judged that 75 percent of their kindergartners from lowest-income families were not ready when they began school.



THE EARLY LEARNING INITIATIVE

In 2006, the Gates Foundation launched the Early Learning Initiative, a 10-year effort to improve school readiness of Washington state’s children through three main strategies: (1) development of high-quality, community-wide early learning initiatives in two communities; (2) enhancement of statewide systems that support early learning; and (3) support for implementation of promising practices. The foundation joined with other private funders and state officials to form Thrive by Five Washington to energize development and support of high-quality early learning opportunities for all children in the state.

The Local Level

In tandem with the formation of Thrive by Five Washington, the Gates Foundation sought two communities with a high level of need for early learning services and the capacity to develop and implement high-quality, community-wide early learning initiatives. After researching possibilities and consulting with community stakeholders, the Gates Foundation selected White Center, an unincorporated area just outside Seattle, and East Yakima, a neighborhood in the central Washington community of Yakima.



Both communities have a strong dedication to the family unit . . . most families eat dinner together more than five times a week.

Mathematica's Evaluation

Mathematica Policy Research, Inc., a nonpartisan research firm, was enlisted to evaluate the Early Learning Initiative. The study is providing information to East Yakima and White Center for continuous improvement, informing state policy and the development of best practices, and assessing effects of long-term investments in early learning systems.

Road Map to this Brief

This brief summarizes the status of the communities at baseline, before Early Learning Initiative implementation. It describes a representative sample of entering kindergartners and their families, children's performance on school readiness indicators, early learning service delivery systems, and quality of regulated early care and education services.

DETAILS ON THE RESEARCH DATA

Data for this brief were collected from multiple sources in summer and fall 2007:

- 38 on-site interviews with intermediary and partner agency staff
- 10 focus groups with parents and community residents, service provider staff, and child care center directors
- Observations in a representative sample of child care settings (45 family child care homes, 32 infant-toddler classrooms, and 38 preschool classrooms) and surveys of center directors, lead teachers, and family child care providers in these settings
- Direct child assessments, teacher ratings of children's abilities, and in-home parent interviews with a representative sample of about 300 entering kindergartners (150 in each community)

The Study Communities: An Overview

Both communities in the study have a strong dedication to the family unit. On average, families reported eating dinner together more than five times a week. Overall, they are described as hardworking, family-oriented, and dedicated to the health and well-being of their children. Although they have limited access to quality child care and other resources, they are working hard to provide the best environment for their children.

East Yakima. In the early stages of the Early Learning Initiative, Educational Service District 105 led planning in collaboration with local service providers, stakeholders, and parents. Planners identified a neighborhood on the east side of Yakima, a city of about 84,000 in central Washington, for the demonstration. According to the U.S. Census, the neighborhood has approximately 28,000 residents, including about 3,000 children age 5 or younger. Nearly two-thirds of residents are Hispanic, and more than half speak Spanish at home. The population has a high rate of poverty and low educational attainment. A nonprofit organization, Ready by Five, was created to implement the initiative with Educational Service District 105 serving as fiscal intermediary.

Substantial proportions of children face significant challenges—such as poverty, living with a single parent, and limited English-language skills—as they enter kindergarten.



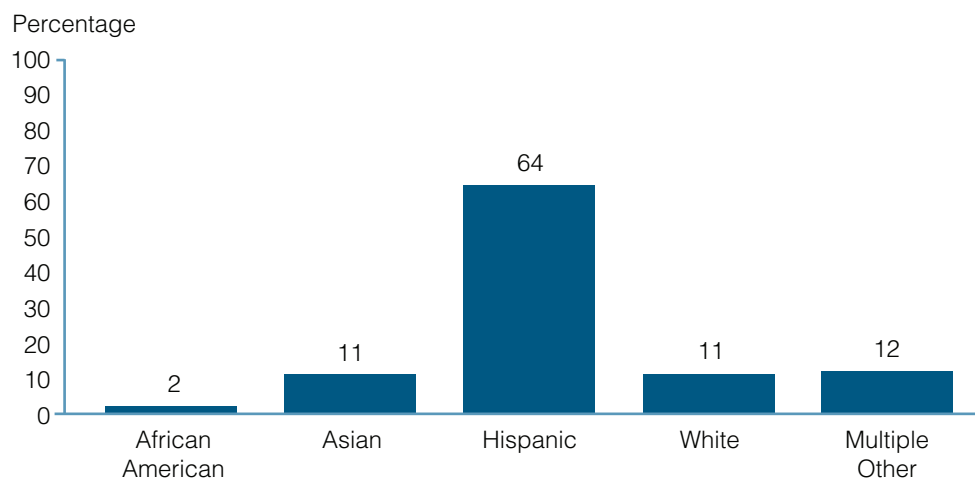
White Center. Puget Sound Educational Service District led planning for the Early Learning Initiative in collaboration with a team of 5 area service providers and 14 work groups of community service providers, residents, and parents. Planners identified an unincorporated community in King County, southwest of Seattle and just north of the city of Burien, comprised of two similar adjacent neighborhoods—White Center and Boulevard Park. According to the U.S. Census, the areas contain approximately 32,000 residents, including 2,500 children age 5 or younger. These neighborhoods, rich in cultural and ethnic diversity, have many residents who report a strong sense of community. At the same time, substantial proportions of children face significant challenges—such as poverty, living with a single parent, and limited English-language skills—as they enter kindergarten. Puget Sound Educational Service District coordinates implementation of the White Center Early Learning Initiative.

A Look at Kindergartners and Their Families

Especially for our nation’s youngest citizens, the family is the primary learning environment. Early experiences lay the foundation for later development and act as a lens through which a child interprets the world. Information about family characteristics, risks, resources, and practices sheds light on critical influences on children’s early development.

Kindergartners in the study communities represent a diversity of racial/ethnic backgrounds, with more than 60 percent Hispanic, followed by white and Asian (Figure 1). Parents in White Center also reported children of multiple or other races, including African American-Asian, African American-white, Asian-white, Ethiopian, Eritrean, Iraqi, Native American-white, Somali, and Turkish. About 37 percent of parents were born in the U.S. (Figure 2); of those not born in the U.S., about half had been here for fewer than 10 years.

Figure 1:
Race/Ethnicity of Entering Kindergartners

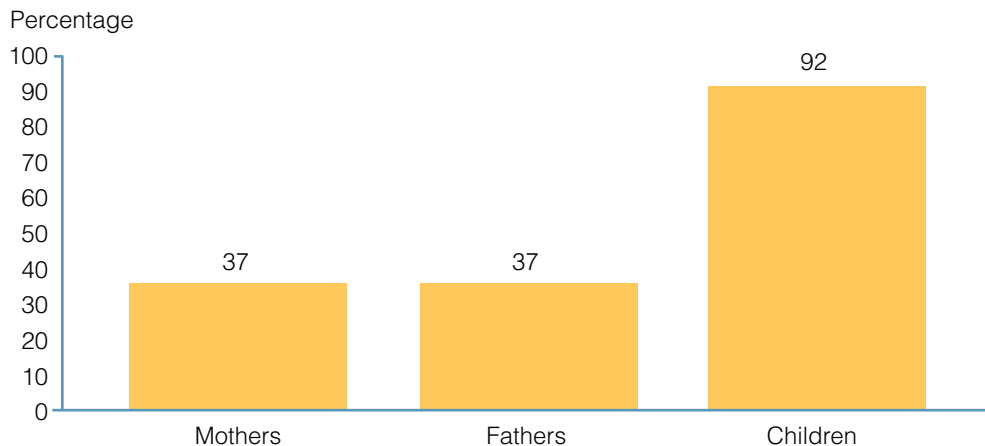


Source: Parent interview.



Most mothers had less than a high school diploma or GED.

Figure 2:
Percentage of Parents and Children Born in the U.S.

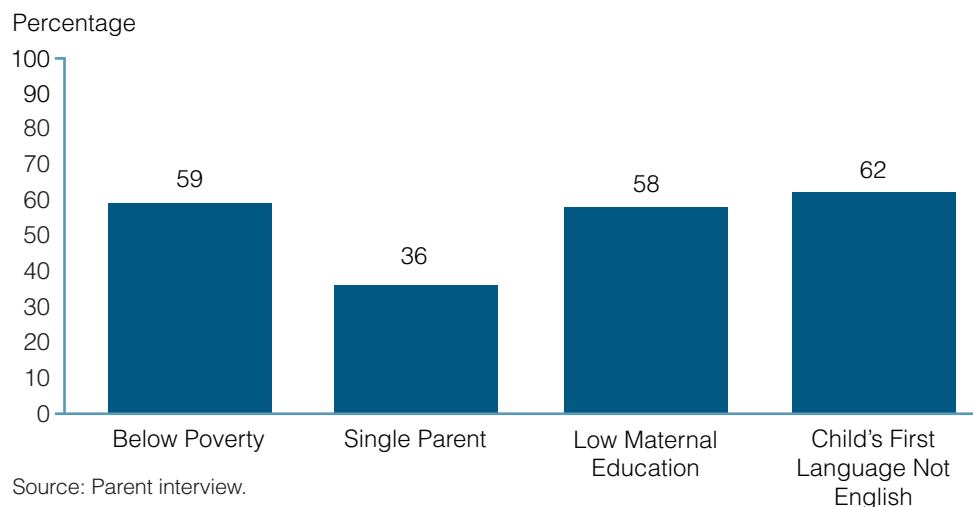


Source: Parent interview.

Parent interviews revealed a high level of family risk factors (Figure 3):

- Nearly 60 percent of families lived below the poverty line.
- More than a third of the children lived with a single parent.
- About 58 percent of mothers had less than a high school diploma or GED.
- More than 60 percent reported their child’s first language was not English.

Figure 3:
Percentage of Children with Specific Family Risk Factors



Source: Parent interview.

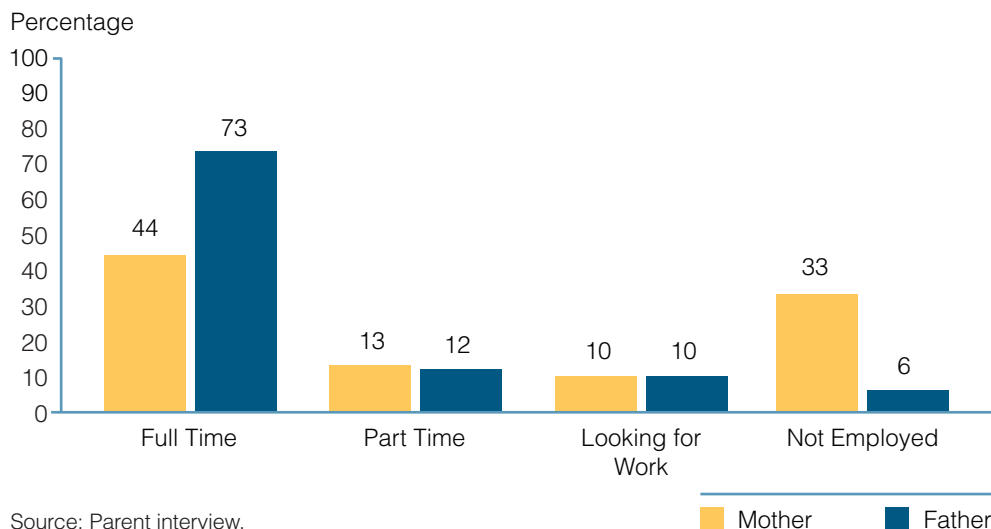
Approximately 85 percent of fathers and 57 percent of mothers worked at least part-time (Figure 4). At the same time, exposure to English at home was limited—55 percent of mothers understood English well or very well, and 40 percent of parents usually spoke to



English was not the first language of most children, but many parents used English to speak and read to their children at home.

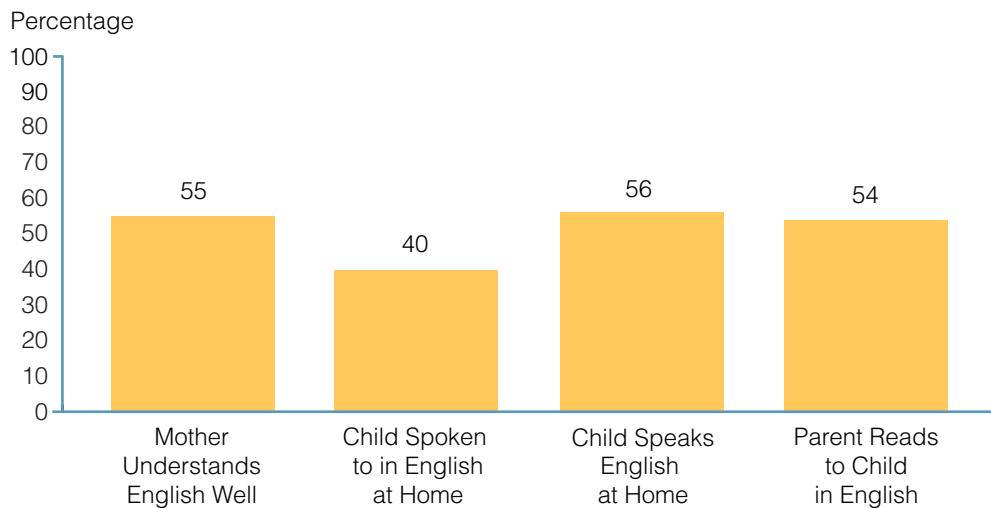
their kindergartner in English at home. A higher percentage—56 percent—reported their child usually spoke English at home, and 54 percent reported reading to their child in English (Figure 5).

Figure 4:
Employment Status of Parents



Source: Parent interview.

Figure 5:
Children’s Exposure to English at Home



Source: Parent interview.

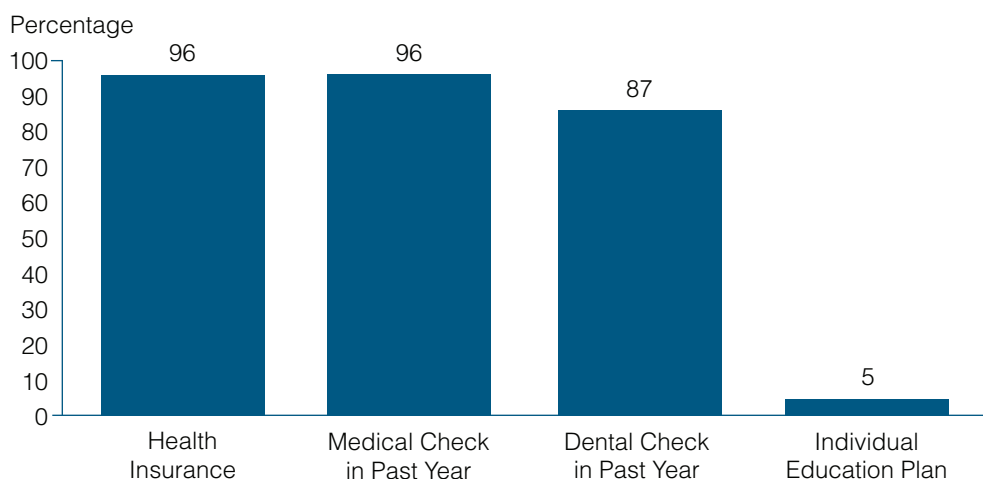
Parents reported on services their children received before kindergarten entry. About half said their child had been enrolled in Head Start, 10 percent in Early Head Start, and 7 percent in the Early Childhood Education and Assistance Program (ECEAP). About 96 percent of parents reported children had either private and/or public health insurance. The same



Ninety-six percent of parents reported their child had health insurance and a medical checkup in the past year.

percentage—96 percent—reported a child’s medical checkup in the past year, and 87 percent reported a dental exam. About 5 percent said their child had an Individual Education Plan (IEP), indicating services for a diagnosed disability or developmental delay (Figure 6).

Figure 6:
Use of Child Health Insurance and Services



Source: Parent interview.

Parents reported having an average of 28 children’s books in the home. This is comparable to findings from the Early Children Longitudinal Study—Kindergarten Cohort, a national study in which parents reported 25 children’s books, on average. About a third of parents in the study communities read to their children daily, compared to 45 percent nationally.

Children’s television access in the U.S. is almost universal, with national estimates of viewing for children under age 7 ranging from 2 to 2.5 hours per day. In the study communities, 46 percent of parents reported 1 to 2 hours of television daily for kindergartners, with 15 percent at 2 or more hours daily. Computer access was prevalent as well. By national estimates, 78 percent of children 6 years old and younger have access to a computer at home; in the study communities, 44 percent of children had access (Figure 7).

In terms of discipline, almost a fifth of parents reported spanking their kindergartner in the past week, and more than 60 percent reported using “time out.” In a national sample of Head Start parents, almost half reported spanking, and more than two-thirds reported using “time out.”

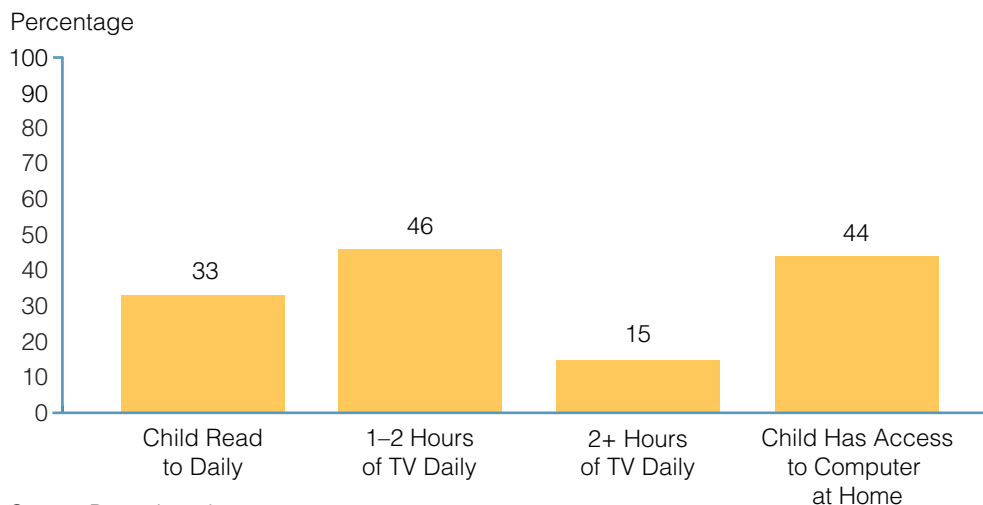
Are Children Ready for School?

Assessing the readiness of kindergartners to succeed in school is an important concern for policymakers, preschool program staff, parents, teachers, administrators, and many others. Many home, community, preschool, and school influences contribute to a child’s development. Understanding children’s early learning and development at kindergarten entry can help in planning interventions to support areas in need of improvement.

About a third of parents in East Yakima and White Center read to their children daily, compared to 45 percent nationally.



Figure 7:
Child's Daily Activities in the Home



Source: Parent interview.

The research team assessed entering kindergartners in the study communities using common measures of vocabulary, letter and word identification, early writing, early mathematics, and social skills. In standardized scoring for these measures, a mean of 100 signifies average performance for an age group; one standard deviation (SD) below the mean, or a score of less than 85, indicates delayed performance or educational risk. About 16 percent of children in the general population score below this threshold.

In the **Peabody Picture Vocabulary Test-Fourth Edition (PPVT-4)**, which measures receptive vocabulary, children are shown four pictures and have to point to the one that matches the spoken word. On average, 15 percent of children in the study communities scored at or above the national norm, and 54 percent scored one or more standard deviation below. All Spanish-speaking children also took the Spanish version of the vocabulary test (Test de Vocabulario en Imagenes Peabody [TVIP]). About 10 percent scored at or above the national norm, and two-thirds scored one or more standard deviation below (Figure 8).

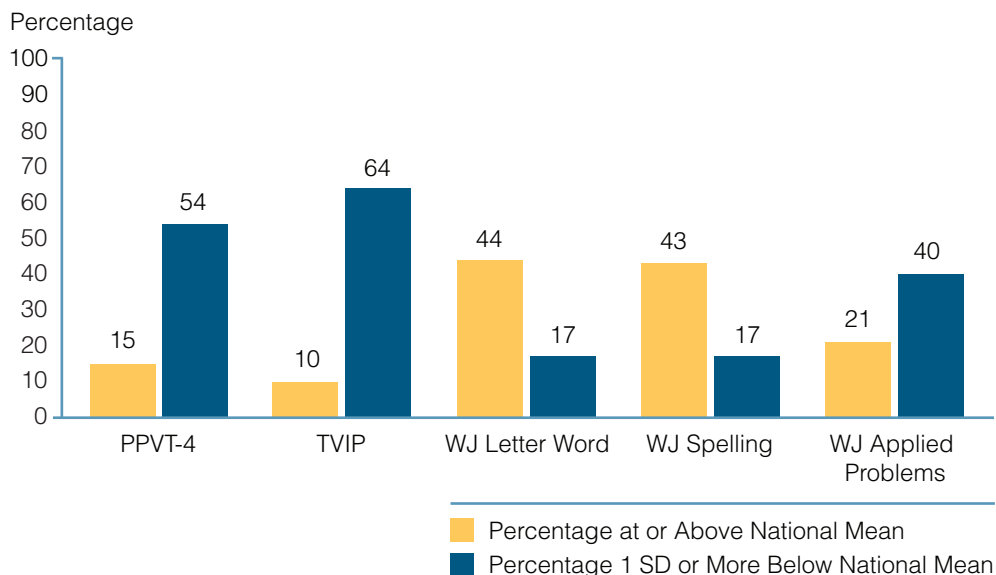
The **Woodcock-Johnson Letter-Word Identification** subtest focuses on recognizing letters, linking letters to sounds, and reading simple words. Forty-four percent scored at or above the national norm, and only 17 percent scored at least one standard deviation below. The **Woodcock-Johnson Spelling** subtest assesses fine motor coordination; prewriting skills such as drawing; and writing of letters, words, and phrases. Forty-three percent of children scored at or above the national norm, with 17 percent at least one standard deviation below. These scores compare to those of other large-scale studies of low-income children, such as the Head Start Family and Child Experience Survey (FACES).

The **Woodcock-Johnson Applied Problems** subtest involves counting and simple addition and subtraction. Twenty-one percent scored at or above the national norm, and 40 percent scored at least one standard deviation below. Overall, parents and teachers rated children higher on measures of prosocial development and relatively lower on measures of problem behaviors. Child assessors rated behavior using the **Leiter Examiner Rating Scale**. On the Cognitive-Social Scale, which includes measures of attention, organization, impulse con-



Parents reported a shortage of licensed child care, especially for infants and toddlers and during nonstandard work hours.

Figure 8:
Children’s Language, Literacy, and Math Skills



Source: Child assessments.

Note: The gold bar shows the percentage of children at or above the national norm on each measure. The blue bar shows the percentage of children who scored at least one standard deviation below the national norm, indicating educational risk. The percentages reported for each measure do not add to 100 because some children scored below the national norm, but not so low as to indicate educational risk.

ontrol, activity level, and sociability, 17 percent scored at least one standard deviation below the national norm.

Children’s health status is also important to kindergarten readiness. Seventy percent of parents rated their kindergartner’s health as excellent or very good; 7 percent rated it as fair or poor. Child assessors measured children and researchers calculated body mass index (BMI)—the ratio of height to weight—a useful tool to help identify possible weight problems in children. A BMI at or above the 85th percentile for age and gender signals being overweight or at risk; 42 percent of the kindergartners in the communities were overweight or at risk.

Services Available in the Community

Early Care and Education. The choices—or lack thereof—available to parents can have a large impact on children. At the time of the baseline study, parents with young children residing in East Yakima and White Center reported a shortage of licensed child care, especially for infants and toddlers and during nonstandard work hours. They also needed more access to parent education and family support programs. In addition, White Center residents lacked preschool services, and East Yakima needed more adult education programs, especially in Spanish literacy, mental health services, and professional development for child care providers.

Barriers to using services included language, culture, limited transportation, eligibility requirements, long waiting lists, and fear and distrust of government agencies and service providers. East Yakima residents also reported limited hours of operation, lack of information about services, and mistrust of interpreters.



EAST YAKIMA'S SERVICES AT BASELINE

- Preschool services included Head Start, ECEAP, the Yakima school district prekindergarten program, and a summer academy for entering kindergartners. Most operated part-day, and few full-day spaces were available.
- Fourteen Head Start, ECEAP, and licensed child care centers and 41 family child care homes served about 175 infants and toddlers and 800 preschoolers. Family child care providers held licenses to care for about 250 children.
- Four programs offered home visiting services for low-income pregnant women—First Steps, the Maternal Child Health program, Nurse/Family Partnership, and Early Head Start.
- Several clinics and neighborhood organizations offered parenting education programs, meetings, and workshops. Residents reported a lack of culturally relevant parent education programs in Spanish and programs for fathers.
- Some technical assistance and STARS workshops offered professional development for early learning professionals. Enterprise for Progress in the Community (EPIC) Head Start, and some child care providers offered staff development. The county has one two-year and one four-year college, with another four-year college close by.

WHITE CENTER'S SERVICES AT BASELINE

- Preschool services included Highline Head Start, several part-time or summer options, and few full-day, full-year preschool spaces.
- Seventeen child care centers and 66 family child care homes enrolled about 200 infants and toddlers, and 800 preschoolers. Family child care providers had licenses to serve about 550 children.
- Services for pregnant women, parent education, and family support services were limited. First Steps, WIC, and Family Connections served selected families.
- Child Care Resources, Highline Head Start, and community colleges in other areas of King County offered professional development for early learning professionals.

Who Works in the Early Childhood Field?

Doing more to improve the qualifications and skills of early childhood professionals can have a lasting impact on a community and raise the overall quality of early care and education services available. The baseline findings below on the characteristics of the child care workforce can help compare changes over time in the experience, education, training, and diversity of staff working with young children in East Yakima and White Center.

The average age range for early childhood professionals in both communities is from the mid-30s to early 40s. Over half of infant-toddler and preschool teachers are white, along



Over half of family child care providers do not have a high school degree or GED.

with smaller proportions who are African American, Asian, and Hispanic; 83 percent of center directors are white. Most family child care providers are Hispanic (58 percent), and 78 percent speak a home language other than English.

Education levels of early childhood professionals vary by setting. Over half of family child care providers do not have a high school degree or GED, and only 5 percent have a bachelor's degree or higher. In contrast, less than a fourth of infant-toddler teachers and 5 percent of preschool teachers do not have a high school degree; 36 percent of infant-toddler teachers and 41 percent of preschool teachers have a bachelor's or higher degree. Early childhood professionals have substantial experience caring for children—on average, family child care providers and preschool teachers have about 10 years; infant-toddler teachers have about 8 years.

Overall, pay is low. Family child care providers earned the highest salaries, averaging \$32,198, compared to \$22,643 for infant-toddler teachers and \$25,920 for preschool teachers. Fifty-six percent of family child care providers reported that their business provided health insurance coverage. Forty-five percent of infant-toddler teachers and 57 percent of preschool teachers reported health insurance as part of compensation.

Quality of the Environment Counts

Many children spend the most active and important parts of their day in child care. High-quality child care settings help children develop skills that are important for later success in school. Increasing the availability of good-to-excellent quality care is a priority for the initiative.

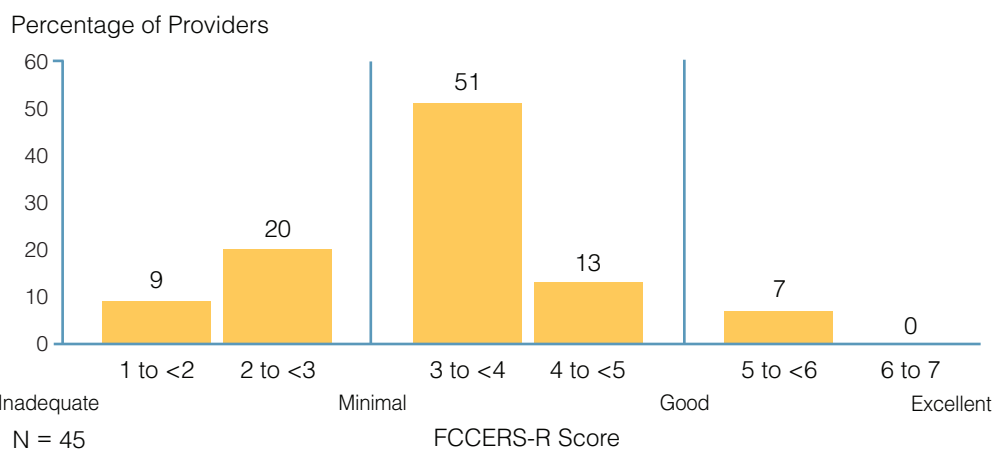


Most early care and education settings in the study are in the minimal-to-good quality range.

To assess quality of early care and education settings in the study communities, interviewers conducted structured observations using the widely employed Environmental Rating Scales. These scales share a format and scoring system but vary in design for age groups and types of settings. Items are rated from 1 to 7, with descriptors provided by the authors for ratings of 1 for inadequate, 3 for minimal, 5 for good, and 7 for excellent. Overall, most early care and education settings in the study are in the minimal-to-good quality range. About 45 percent of preschool classrooms and less than 10 percent of infant-toddler classrooms and family child care homes are in the good-to-excellent range.

The average Family Child Care Environment Rating Scale-Revised (FCCERS-R) score was 3.4, in the minimal-to-good quality range. Figure 9 displays the distribution of scores, with 29 percent of providers in the inadequate-to-minimal range, over 64 percent in the minimal-to-good range, and 7 percent in the good-to-excellent range. The average child-to-caregiver ratio was about 2.5 children per caregiver, with a group size of about 4 children.

Figure 9:
The Quality of Most Family Child Care Is Minimal



Source: Child care observations.

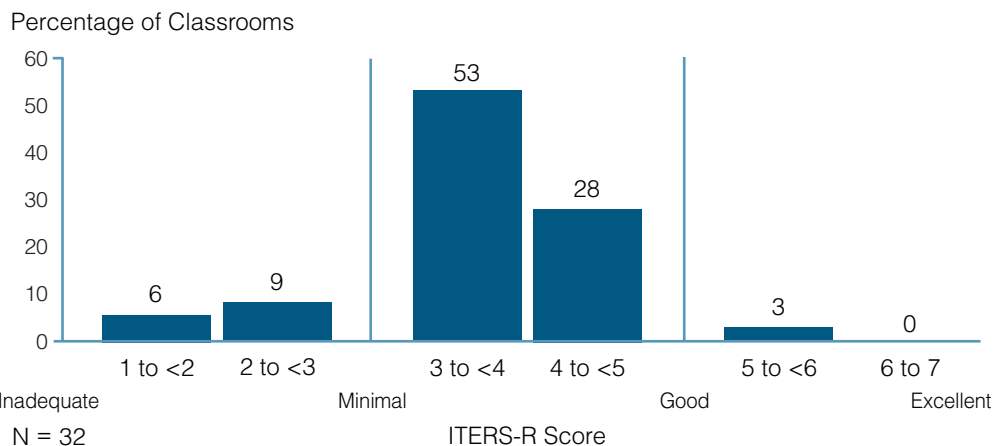
The average Infant-Toddler Environment Rating Scale-Revised (ITERS-R) score was 3.7, in the minimal-to-good range. Figure 10 shows about 15 percent in the inadequate-to-minimal range, 81 percent in the minimal-to-good range, and 3 percent in the good-to-excellent range. On average, there were about 3.9 children per teacher, with a group size of about 6.8.

The average Early Childhood Environment Rating Scale-Revised (ECERS-R) scores in child care classrooms serving preschoolers was 4.7, in the minimal-to-good range. Figure 11 illustrates that about 11 percent scored in the inadequate-to-minimal range, 45 percent in the minimal-to-good range, and 45 percent in the good-to-excellent range. The average number of children per teacher was 5.5, with a group size of about 10.9.



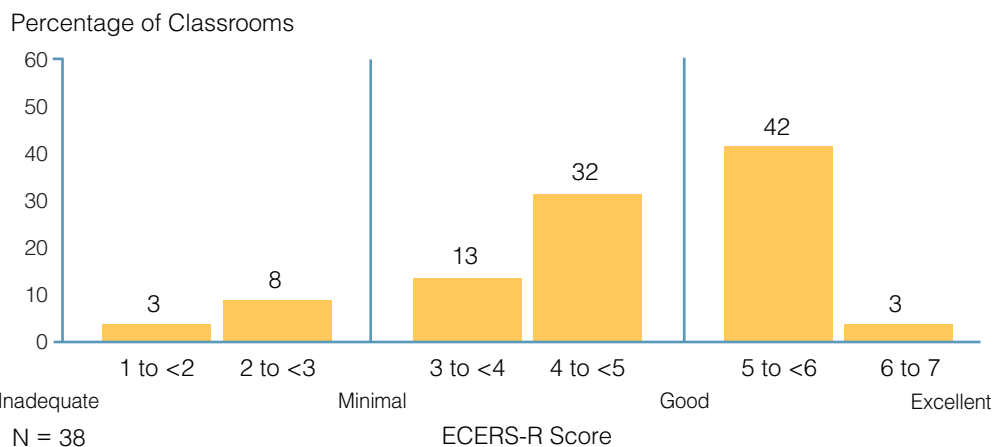
Children entering kindergarten in the study communities are achieving at levels substantially below national norms.

Figure 10:
The Quality of Most Center-Based Infant-Toddler Child Care Is Minimal



Source: Child care observations.

Figure 11:
The Quality of Most Center-Based Preschool Care Is Minimal-to-Good



Source: Child care observations.

What's on the Horizon?

Preparing Washington state's youngest and most vulnerable citizens for academic success and later achievement is a policy imperative. Children in the study communities are at risk of school failure, with substantial proportions of those entering kindergarten achieving at levels significantly below national norms. The baseline findings reported here on kindergartners' readiness and other factors can help inform decisions about how to plan and deliver services in the future. The strengths and needs of the children and families suggest that high-quality services could make a measurable difference in multiple areas of kindergarten readiness outcomes—particularly in vocabulary, early mathematics skills, and physical health.

The information about strengths and needs of the children and families illustrates opportunity for high-quality early learning services to make a measurable difference in kindergarten readiness outcomes.

Furthermore, high-quality out-of-home care can enhance school readiness by exposing children to environments designed to stimulate development. Services dedicated to parenting behaviors and the home environment can support parents as first teachers of their children. Recognizing these factors, Thrive by Five Washington, WCELI, and Ready by Five have begun to implement quality improvement initiatives for early care and education settings and have launched home visiting programs to support parents.

Mathematica's evaluation will continue to inform program development in support of preparing children for kindergarten and eventual school success. The full reports on kindergarten readiness at baseline, "A Profile of Kindergarten Readiness in East Yakima: Fall 2007" and "A Profile of Kindergarten Readiness in White Center: Fall 2007," contain data and background that can serve as additional guideposts for planning in the study communities. They are available on the web at www.mathematica-mpr.com, along with "Building a Community-Wide Early Learning System: East Yakima at Baseline, May 2008," and "Building a Community-Wide Early Learning System: White Center at Baseline, May 2008." The Gates Foundation report, "Investing in Children: An Early Learning Strategy for Washington," is available on the web at www.gatesfoundation.org.





EAST YAKIMA FACT SHEET

- East Yakima has about 28,000 residents, including 3,000 children age 5 and under.

Kindergartners and Their Families

- Of entering kindergartners, 84% were Hispanic, 10% white, and 5% multiple or another race.
- 37% of parents of entering kindergartners were born in the U.S.
- 65% of kindergartners' families lived below the poverty line.
- 75% of kindergartners' mothers had less than a high school diploma or GED.
- 64% of kindergartners spoke a first language other than English.
- 80% of fathers and 54% of mothers were employed at least part-time.
- 54% of kindergartners attended Head Start, 11% attended Early Head Start, and 6% attended ECEAP.
- 96% of kindergartners had health insurance, and 94% had a checkup in the past year.
- 27% of parents reported reading to their kindergartner daily.
- Families reported eating dinner together 5.5 nights a week.

Kindergarten Readiness

- 8% of kindergartners scored at or above the national norm on a vocabulary test; 60% showed risk. On the Spanish test, 7% scored at or above the national norm; 61% showed risk.
- One-third to half of kindergartners scored at or above national norms on tests of letter and word identification and early writing skills.
- On a test of simple addition, subtraction, and counting, 14% scored at or above the national norm; 44% showed risk.
- 59% of parents rated their kindergartner's health as excellent or very good; half were overweight or at risk for overweight.

Child Care Quality

- Most licensed child care was in the minimal-to-good quality range; 4% of family child care homes, 7% of infant-toddler classrooms, and 43% of preschool classrooms were in the good-to-excellent range.

Source: 2007 parent interviews, child assessments, and child care observations.



WHITE CENTER FACT SHEET

- White Center has about 32,000 residents, including 2,500 children age 5 and under.

Kindergartners and Their Families

- Of entering kindergartners, 34% were Hispanic, 26% Asian, 13% white, 5% African American, and 22% multiple or another race.
- 37% of parents of entering kindergartners were born in the U.S.
- 49% of kindergartners' families lived below the poverty line.
- 34% of kindergartners' mothers had less than a high school diploma or GED.
- 55% of kindergartners spoke a first language other than English.
- 91% of fathers and 61% of mothers were employed at least part-time.
- 43% of kindergartners attended Head Start, 8% attended Early Head Start, and 8% attended ECEAP.
- 95% of kindergartners had health insurance and 98% had a checkup in the past year.
- 42% of parents reported reading to their kindergartner daily.
- Families reported eating dinner together 5.6 nights a week.

Kindergarten Readiness

- 25% of kindergartners scored at or above the national norm on a vocabulary test; 46% showed risk. On the Spanish test, 22% scored at or above the national norm; 74% showed risk.
- Most kindergartners scored at or above national norms on tests of letter and word identification and early writing skills.
- On a test of simple addition, subtraction, and counting, 31% scored at or above the national norm; 33% showed risk.
- 84% of parents rated their kindergartner's health as excellent or very good; 31% were overweight or at risk for overweight.

Child Care Quality

- Most licensed child care was in the minimal-to-good quality range; 11% of family child care homes and 48% of preschool classrooms were in the good-to-excellent range.

Source: 2007 parent interviews, child assessments, and child care observations.

Thrive by Five is a trademark of financial literacy programs for preschoolers supported by Credit Union National Association, Inc. (“CUNA”) and it is not affiliated with Thrive by Five Washington. Learn more at <http://www.creditunion.coop/thriveby5/>.

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Policy Research, Inc.

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Princeton Office

P.O. Box 2393
Princeton, NJ 08543-2393
(609) 799-3535
Fax: (609) 799-0005

Washington Office

600 Maryland Avenue, SW, Suite 550
Washington, DC 20024-2512
(202) 484-9220
Fax: (202) 863-1763

Cambridge Office

955 Massachusetts Avenue, Suite 801
Cambridge, MA 02139
(617) 491-7900
Fax: (617) 491-8044

Ann Arbor Office

555 South Forest Avenue, Suite 3
Ann Arbor, MI 48104-2583
(734) 794-1120
Fax: (734) 794-0241

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