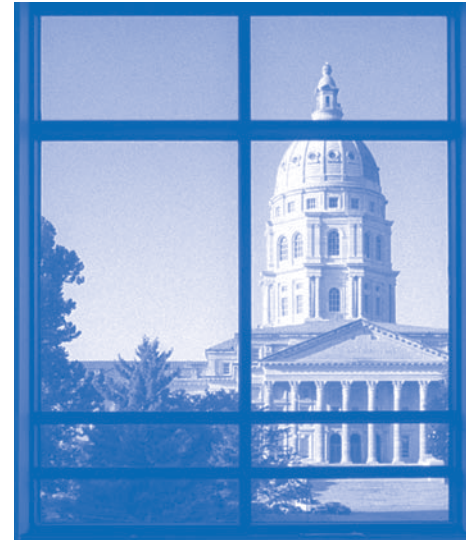


Issue Brief



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Are Kansas Children Prepared to Succeed in Kindergarten?

Findings from the Kansas Kindergarten Assessment Initiative (KS-KAI)

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More Information

Funding for this project was provided by the Kansas Health Foundation, Wichita, Kansas. The Kansas Health Foundation is a philanthropic organization whose mission is to improve the health of all Kansans.

This Issue Brief summarizes the key findings from a new comprehensive assessment of school readiness. The full report can be found online at www.khi.org.

Study Results

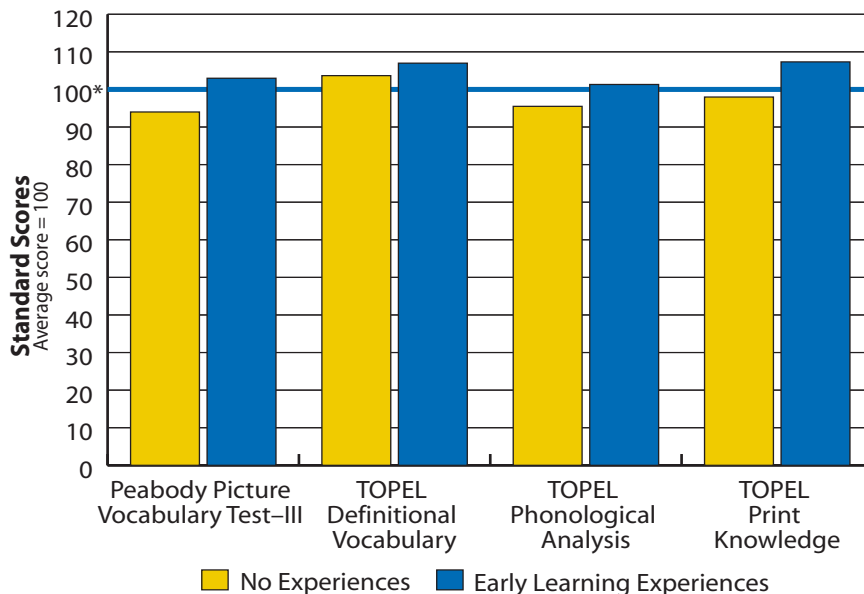
The news is mixed about the readiness of Kansas children to begin school with the skills they need to do well. A new comprehensive assessment of school readiness shows that children who participated in an early learning program before starting kindergarten did better on all academic assessments than children who did not. This is an encouraging finding given recent decisions by policymakers to increase the state's investment in early-learning programs. However, the news is not good for Kansas children most at risk for school failure.

KEY FINDINGS INCLUDE:

- Children who participated in an early learning program before starting kindergarten have higher skills in all academic areas than children who did not.
- Overall, 82 percent of children have the academic and social skills they need at kindergarten entry.
- However, only 44 percent of the most vulnerable children (low-income, English Language Learners, special education needs) have the overall skills they need to do well in school.
- In social and behavior areas, 95 percent of children have the behavior control they need but only 80 percent have the ability to get along with peers and adults.
- In academic areas, 88 percent have language skills, 86 percent have literacy skills, 75 percent have science and social studies skills, and 70 percent have math skills they need at kindergarten entry.

CHILDREN WITH PREVIOUS EARLY LEARNING EXPERIENCES SCORE HIGHER IN LANGUAGE AND LITERACY

Academic Measures — Early Learning Experiences



Note: Differences shown between the two groups are all statistically significant at the $p < 0.01$ level

EARLY EXPERIENCES MAKE A DIFFERENCE

Almost 85 percent of children entering kindergarten in Kansas participated in some kind of early learning program before starting kindergarten. As the chart above shows, these children scored higher on all academic and social skill assessments than children who did not. While the differences may appear small, they are statistically and meaningfully different.

BACKGROUND

Scientific evidence shows that children who start school with the skills they need to succeed are healthier and are more likely to graduate from high school. Knowing what children can and cannot do well in skill areas that predict later school achievement can help inform decisions about allocating resources to programs designed so children have the skills they need at kindergarten entry.

The Kansas State Department of Education (KSDE) has been evaluating school readiness with support from the Kansas Children’s Cabinet for the past three years. Those evaluations have been done by kindergarten teachers on a voluntary basis using the Kansas Early Learning Inventory (KELI), an observational measure that rates children’s skills and knowledge on a scale of 0–3. In 2004, teachers’ reports showed that only about half (47 percent) of students entering kindergarten were prepared to succeed. This often-used data is out of date and not as robust as necessary to

really understand how prepared Kansas children are to start school.

A NEW ASSESSMENT

A new assessment was recently developed with support from the Kansas Health Foundation, a philanthropy based in Wichita. The Kansas Kindergarten Assessment Initiative (KS-KAI) combines direct child assessments with teacher observations. It was created through a collaboration between the Kansas Health Institute, KSDE and two centers at the University of Kansas. It builds on the strengths of the KELI while increasing the rigor of the research in part by selecting teachers to complete the KELI observations from those who had students who were directly assessed.

In August 2007, external assessors conducted direct child assessments during the first weeks of kindergarten on a random sample of 2,666 children. The sample was representative of all Kansas kindergartners. It included children from 54 counties and 110 elementary schools in 73 school districts.

The assessment measures covered all domains of school readiness. They either utilized standardized national norms or a cut-off score established by experts drawn from across the state. In addition to the direct assessments, 264 teachers rated the readiness of 1,988 kindergartners.

This unique combination of direct child assessments, teacher ratings and parent reports of children’s abilities sets Kansas apart as one of only a handful of states with such a comprehensive picture of school readiness.

OVERALL FINDINGS

Direct child assessments and teacher reports paint similar pictures of how ready Kansas children are to enter kindergarten. There are a range of skills that predict success in kindergarten in both academic and social areas. The findings show how

Kansas children performed on a variety of academic and social tasks. They also show how different groups of children performed. Though many Kansas children performed at a level that suggests they are ready for kindergarten, there is reason to be concerned that fewer than half of the children who are most at risk for academic failure (low-income, English Language Learners, students with special education needs) do not have the academic and social skills they need at kindergarten entry.

RESULTS BY SKILL SET

Language

When all the language assessments are averaged together, 88 percent of Kansas children have the skills they need at kindergarten entry. Almost all (98 percent) are ready based on the Peabody Picture Vocabulary Test of listening comprehension, which measures the ability of children to point to the correct picture of the object described by the assessor. Teachers' ratings of children's language skills also were high (2.39 on a 3 point scale). However, on assessments of more advanced language skills necessary for kindergarten, such as writing, both direct assessments and teacher ratings show that fewer children are ready. On the Emergent Writing Task, 75 percent of children met the expectations that Kansas experts have set for entering students. Teacher ratings of how well children performed in writing were very low (average of 1.36 on a 0–3 scale), in part because they assessed a wide range of writing skills.

Literacy

When all the literacy assessments are averaged together, 86 percent of Kansas children have the skills they need at kindergarten entry. In the area of literacy measured by the ability to recognize letters on the Woodcock Johnson, 75 percent of children met the Kansas raters' expectations for school readiness. On the Test of Preschool Early

Literacy, 95 percent of children scored as being ready in vocabulary and print awareness (identifying letters or print in a book) and 90 percent scored as being ready in phonological awareness (sounds that letters make) and phonemic awareness (sounds that make up words, rhyming).

Science and Social Studies

In science and social studies, 75 percent of Kansas children have the skills they need at kindergarten entry based on Woodcock Johnson scores.

Mathematics

In math, 70 percent of Kansas children have the overall skills they need at kindergarten entry. While 90 percent of children have basic counting skills, only 50 percent are able to solve problems or do simple addition and subtraction. Teacher ratings were a little bit higher (1.94 on the 3 point scale) but they were based only on counting skills.

Social Skills

Kansas children have many of the social skills they need to be successful in a kindergarten classroom. About 95 percent scored at or above the national average on the Devereux Assessments, meaning that they are ready to function well in a group setting, take initiative and exhibit self-control. But only 80 percent are as ready as their peers in other states in their ability to get along positively with peers and adults (teachers). Teachers reported similar results, rating the children they observed as being ready to cope with frustration, pay attention, cooperate with others and complete work independently (2.42 on a 3 point scale).

CHILDREN AT RISK

Based on data from both direct child assessment and teacher observation, it is clear that some children are less likely to have the academic skills they need to be successful in kindergarten. About 45 percent of children entering kindergar-

DIRECT CHILD MEASURES

Peabody Picture Vocabulary Test III

measures receptive language (listening comprehension) by asking a child to point to one picture that shows the concept “empty” in a set of four pictures

Test of Preschool Early Literacy (TOPEL)

measures knowledge of print (ability to recognize letters), phonological awareness (sounds that letters and words make), and vocabulary

Emergent Writing Task

measures how well children can write their name

Woodcock Johnson III—Letter Word Identification

measures how well children recognize letters in the alphabet and read simple and more complex words

Woodcock Johnson III—Applied Problems and Quantitative Concepts

measures identifying numbers, shapes, sequences, counting, addition, subtraction, math logic

Woodcock Johnson III—Science

asks children to point to the “fish” or name “kangaroo”

Woodcock Johnson III—Social Studies

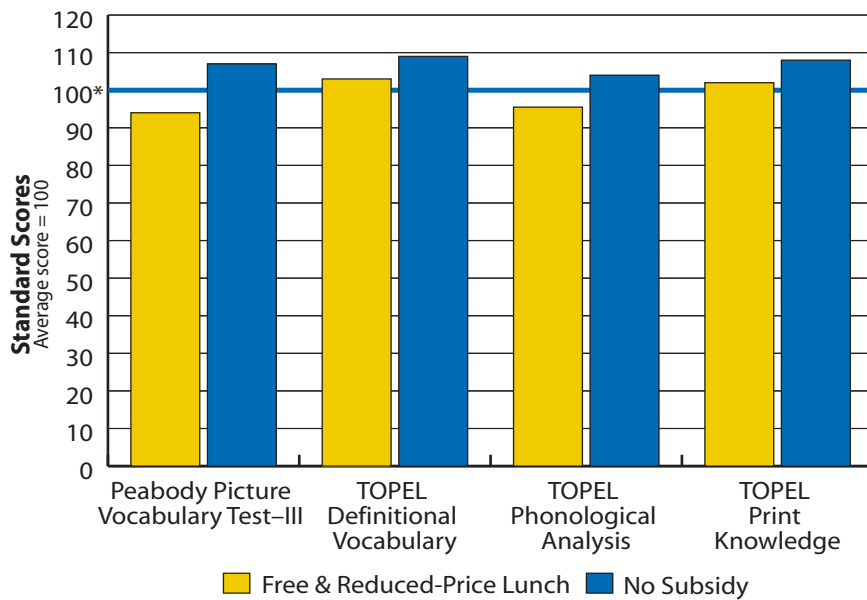
asks children to point to pictures of common objects such as “house” or “hammer” and measures what different people do (police, firefighters)

Devereux Early Childhood Assessment

measures social skills including initiative, self-control, attachment, behavior concerns

LOW-INCOME CHILDREN SCORE LOWER IN LANGUAGE AND LITERACY

Language and Literacy Comparisons



Note: Differences shown between the two groups are all statistically significant at the $p < 0.01$ level



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The Kansas Health Institute is an independent, nonprofit health policy and research organization based in Topeka, Kansas. Established in 1995 with a multi-year grant from the Kansas Health Foundation, the Kansas Health Institute conducts research and policy analysis on issues that affect the health of Kansans.

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ten in Kansas receive either free or reduced-price lunch, an indicator often used as a proxy for low income. These children scored lower on all academic and social measures, especially in the areas of language and literacy. Again, while the differences in the chart above may appear small, they are statistically significant.

In addition, students enrolled in English as a Second Language services and students with disabilities scored lower on most academic and social measures. Teacher reports confirmed this finding. Also, children who come to kindergarten with an Individualized Education Plan (IEP) scored lower in all subject areas than children who did not have special education needs. These findings also were consistent with teacher reports.

PARENTS MATTER

Findings from this study are consistent with national research showing that families play an important role in preparing children for school success. On a parent survey, two-thirds (66 per-

cent) of parents of new kindergartners in Kansas reported that they read to their children at home every day; 30 percent reported reading to them weekly. When the KELI scores are compared, children whose parents read to them on a daily basis had higher reading scores and scored higher on all measures of academic achievement.

RECOMMENDATIONS

The results of the KS-KAI assessment provide a snapshot of the skills Kansas children have as they enter kindergarten. Future research is needed to determine what helps children maintain success as they continue in school.

Findings from the KS-KAI can be used together with the Kansas School Readiness Framework and the Kansas Early Childhood Comprehensive System (KECCS) plan to inform programs and policies that enhance early care and education so all Kansas children are prepared for success in school. Specific suggestions include:

- 1) Continue to invest in effective early learning programs so more Kansas children have the necessary skills they need at kindergarten entry.
- 2) Enhance and expand professional development for teachers as one of the keys to high quality early learning.
- 3) Align curriculum and activities in preschool and child care with the Kansas Early Learning Document so early learning is directly linked to K-12 education expectations.
- 4) Evaluate early learning programs to determine what else families, schools, and communities can do to prepare children for school.
- 5) Assess the impact of early learning programs (preschool through grade 3) to determine how children are progressing.