

Issue Brief



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Early Learning in Kansas: The Impact of Kindergarten on Academic and Social Learning

Findings from the Kansas
Kindergarten Assessment
Initiative and the Length
of School Day in
Kindergarten Study

More Information

This Issue Brief summarizes the key findings from recent assessments of school readiness and the impact of kindergarten on children's academic and social learning. The full reports can be found online at www.khi.org.

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.

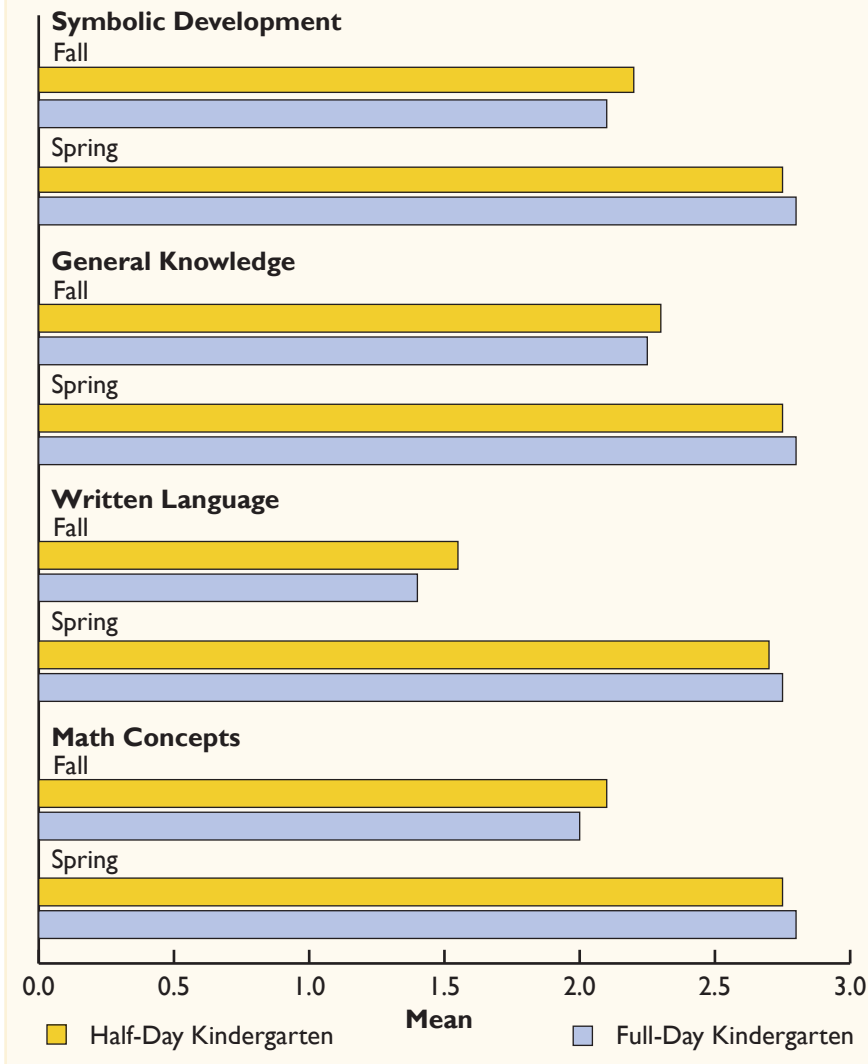
Study Results

Editor's note: This is the second of two issue briefs on school readiness and the impact of kindergarten on children's academic and social learning. It reports the results of two studies undertaken with the Kansas State Department of Education and the University of Kansas. The first, conducted in the 2007–2008 school year, assessed how prepared Kansas children were to enter kindergarten. The second measured the difference in performance between children who attended half-day and full-day kindergarten.

RESULTS IN BRIEF

- Children who attended full-day kindergarten made more progress from the beginning of the school year to the end than those in half-day programs.
- At-risk children in full-day kindergarten (those from low-income families, English Language Learners and those with special education needs) made more progress than their peers in half-day programs.
- Children who participated in early learning programs before starting kindergarten scored higher in language and literacy, science and social studies, math and social skills than children who did not participate in such programs.
- Overall, 82 percent of children had the academic and social skills they needed at kindergarten entry.
- However, only 44 percent of at-risk children had the skills they needed to do well.

Figure 1. Children in Full-Day Kindergarten Make More Progress Than Those in Half-Day Classrooms.



school entry than children who did not have early learning opportunities.

Overall, the assessment of a random sample of 2,666 children from 73 school districts and 110 elementary schools found that 82 percent of incoming kindergarteners had the academic and social skills they needed to succeed in school. However, only 44 percent of at-risk children (those from low-income families, English Language Learners and those with special education needs) had the skills necessary to do well.

Our more recent study was designed to build on those results by answering questions about how different groups of children progress during the kindergarten year. Do children who entered school with better academic and social skills maintain their advantage? And does attending full-day versus half-day kindergarten have an impact on student performance?

To answer these questions, a subset of 1,299 kindergarteners assessed at the beginning of the 2007 school year were assessed again in the spring of 2008. In addition, trained observers used standardized measures to rate levels of language, literacy and instructional interactions among teachers and students in 40 randomly selected kindergarten classrooms in the state.

At the time of the assessment, about 80 percent of kindergartens in the state were full-day programs. In our study, 75 percent of the children (1,090) were in full-day classrooms and 25 percent (209) were in half-day classrooms.

INTRODUCTION

A substantial body of research shows that children who start school with the skills they need to succeed are more likely to stay successful and graduate from high school than children who are behind their peers when they enter kindergarten. The evidence also shows that children who start school ready to learn are healthier.

Our 2007 study — the Kansas Kindergarten Assessment Initiative (KS-KAI) — showed that children who participate in early learning programs such as Pre-K, Head Start and community-based child care are more likely to have the skills they need at

KEY FINDINGS

A comparison of time spent during a typical school day showed that full-day kindergartens provided more time for academic instruction and practice of

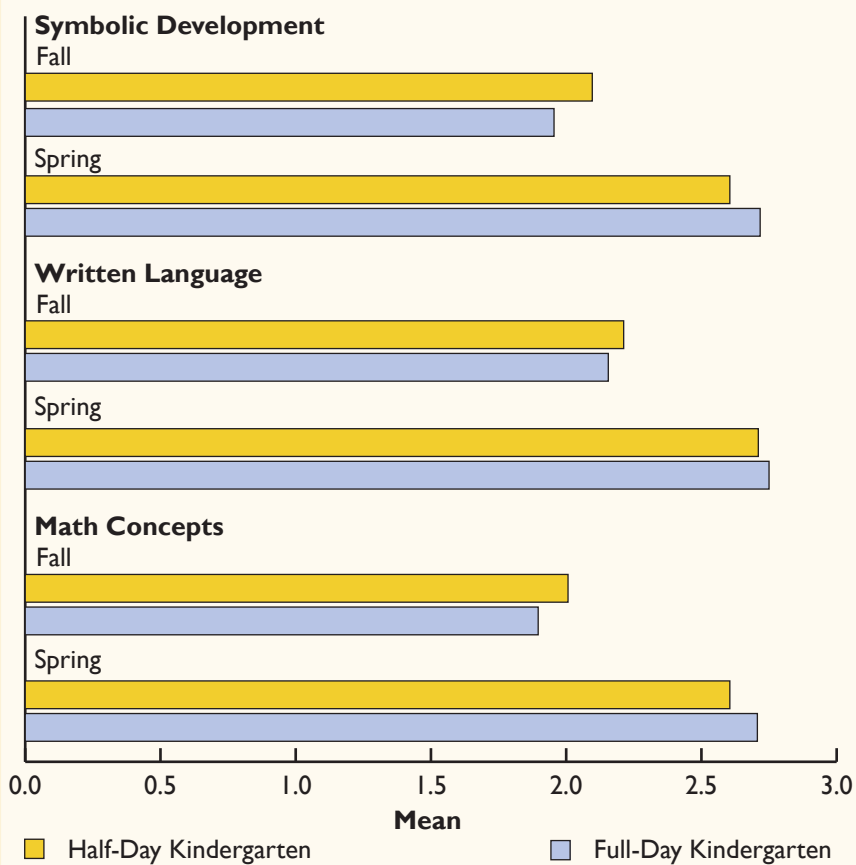
concepts. Even so, the number of instructional interactions between teachers and children did not differ greatly in full-day and half-day settings. This finding indicates that even teachers whose time is limited are doing a good job of structuring learning activities and providing support for students.

Still, the assessment clearly showed that children in full-day classrooms made significantly more progress in most of the five academic measures than children in half-day classrooms. At first glance, the differences depicted in the charts contrasting the academic gains made by children in full- and half-day settings may not appear substantial, but they are statistically significant and meaningful to education experts (Figure 1).

Though the length of the kindergarten day is important to academic performance, the study found that it did not make a significant difference in the development of children’s social and behavioral skills.

Just like at kindergarten entry, low-income children and those with special language and education needs do not perform as well as children who do not face such obstacles. But for many of these students, the length of the school day made a significant difference. Children from low-income families enrolled in full-day kindergartens made greater average gains in symbolic development, math and written language than did their peers in half-day classrooms (Figure 2). Full-day attendees with limited English language skills and those with special education needs also made dramatic progress relative to their peers in half-day classrooms (Figure 3).

Figure 2. Children from Low-Income Families in Full-Day Kindergarten Make More Progress Than Their Peers in Half-Day Classrooms.



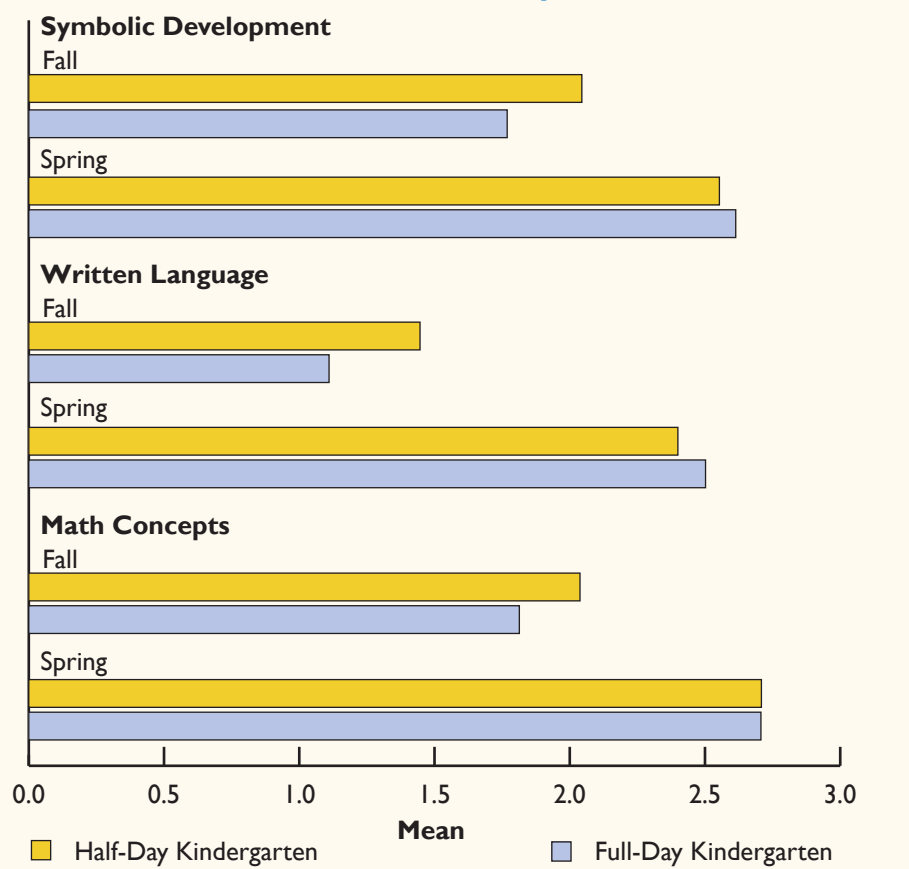
PARENT AND TEACHER ASSESSMENTS

Parents and teachers were surveyed for both studies.

In the study of school readiness, children whose parents reported reading to them before they started kindergarten scored higher on all measures of academic achievement.

In the second study, most parents said they were happy with whatever the length of the school day was for their children. However, some expressed concerns that while half-day instruction was not quite enough, requiring kindergarteners to spend the entire day in school might be too much. Others wanted to be able to choose between half-day and full-day options.

Figure 3. English Language Learners and Students with Disabilities in Full-Day Kindergarten Make More Progress Than Their Peers in Half-Day Classrooms.



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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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KHI/09-08 • August 2009

Teachers were more uniform in their support of full-day instruction. Teachers from full-day classrooms said they believed that children made more significant progress in that setting. Teachers from half-day classrooms said having more instruction time would help them better prepare their students for the first grade.

Some teachers said the state should require children to attend kindergarten. They believed such a requirement could be most beneficial to children most at risk for school failure.

DISCUSSION AND POLICY IMPLICATIONS

Combined, the two studies show that early-learning programs help to prepare children to succeed in school and that children in full-day kindergarten make more academic progress than their peers in half-day programs. The research also demonstrates that at-risk children from low-income families make even more progress in full-day kindergarten than in half-day programs.

The results suggest that continued investment in quality early-learning programs is important to ensure that increasing numbers of Kansas children have the skills they need to succeed when they start kindergarten. The results also suggest that full-day kindergarten programs enhance student performance and can provide an early opportunity to help at-risk children from low-income families catch up academically.

The research results also point to the need to follow the progress of the students who participated in these assessments by reassessing them at the end of third grade to determine if they sustained the gains they made in kindergarten. Such a follow-up assessment would demonstrate whether achievement levels before and after kindergarten predict future school success and provide guidance to policymakers about how best to make investments in early learning.

Acknowledgments

This Issue Brief was prepared by Lisa G. Klein, Ph.D., and is based on a report written by Susan B. Palmer, Ph.D., and Gayle M. Stuber, Ph.D. Both publications can be found online at www.khi.org.