

Selected Research on Effects of Full Day Kindergarten

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Study/ State Report	Short Term Child Cognitive Outcomes	Long Term Child Cognitive Outcomes	Social and Behavioral Outcomes	Program Implementation	Perspectives of Key Stakeholders
<p>Foundation for Child Development: <i>PreK-3rd: Putting Full-Day Kindergarten in the Middle</i> http://www.fcd-us.org/sites/default/files/FINAL%20Kindergarten%20Brief.pdf (June 2010)</p>	<ul style="list-style-type: none"> FDK is especially beneficial for children who are Second Language Learners 	<ul style="list-style-type: none"> To achieve the best outcomes, the quality of FDK matters. Consensus is emerging that the factors that have long-term impact on children's achievement include both the social interactions in classrooms and the quantity of literacy and math instruction (Pianta, Belsky, Vandergrift, Houts & Morrison, 2008). 	<p>FDK also contributes to children's development of other essential learning skills that support social competence and creative problem-solving.</p>	<p>The majority of parents prefer FDK for their children, as evidenced by the fact that the majority of Kindergartners (more than 65 percent) now attend full-day programs (Shin, 2005). Anecdotal evidence and media stories report that parents' support for FDK is two-fold: (1) they recognize the educational value of a full-school-day, and (2) given the prevalence of employed parents across all socioeconomic categories, they depend on the full day to stabilize children's daily schedules, reducing the need to find child care or other arrangements for nonschool hours.</p>	<ul style="list-style-type: none"> FDK takes on even greater importance when viewed vis-à-vis the unprecedented expansion of PreK programs for four-year-olds (and some three-year-olds) across the United States. In 2000, an estimated 69 percent of the nation's Kindergartners had attended some form of center-based preschool program (West, Denton & Germino-Hausken, 2000). With the rapid expansion of state-funded PreK over the past ten years, this number is likely higher today.

<p>The Impact of Full-day vs. Half-day Kindergarten on Student Achievement of Low Socioeconomic Status Minority Students Jeffrey A. Nowak, Joe D. Nichols & Douglass Coutts (Spring 2009) http://opus.ipfw.edu/cgi/viewcontent.cgi?article=1009&context=spe</p>		<ul style="list-style-type: none"> • Scale mean scores on the third grade Indiana State Testing Equivalency and Proficiency (ISTEP+) in math averaged approximately 28 points higher when compared to half-day attendees. • English/language arts mean scores on the third grade Indiana State Testing Equivalency and Proficiency (ISTEP+) averaged 17 points higher than half-day attendees. 		<p>The data set highlights the effects of FDK vs. HDK on the achievement of inner-city minority students with low/moderate income status. The HDK sample of inner-city students were bussed to suburban schools as a result of a desegregation lawsuit. The FDK students remained in inner-city schools where FDK programs are offered due to the school's Title 1 status.</p> <p>The same curriculum and teaching strategies were implemented with both HDK and FDK cohorts respectively.</p>	<ul style="list-style-type: none"> •
<p>The Story on Full Day: An Analysis of Full Day Kindergarten in Washington State (Economic Opportunity Institute, July 2007) http://www.econop.org/early_learning/reports/FullStoryOnFullDay-Jul07.pdf</p>		<ul style="list-style-type: none"> • FDK students perform at higher levels in the fundamental areas of reading and math. • The academic gains made in the full-day classroom may also persist into later grades, bolstering overall early academic achievement. 	<p>Full-day kindergarteners are more socially and emotionally prepared for first grade than their counterparts in half-day classes.</p>	<p>Availability of the program is limited and adequate funding is difficult to secure.</p>	<ul style="list-style-type: none"> • FDK produces cost savings to schools as fewer students will require remediation services in later grades or be retained in a lower grade level. Parents and families also experience financial benefits in the form of increases in income and/or decreases in childcare expenses. • The state's financial responsibility for childcare subsidies may also decrease as kindergarten students

					spend more time in the classroom.
<p>The Piton Perspective, Summer 2006</p> <p>(Denver Public Schools)</p> <p>http://www.piton.org/Documents/thePitonperspective%20sumr06.pdf</p>		<ul style="list-style-type: none"> • Low-income children attending FDK in DPS increased their odds of reading at grade level to 70%, compared to a 48% chance if they only attended HD kindergarten. • Higher income students attending FDK in DPS increased their odds of reading at grade level to 86%, compared to a 70% chance if they only attended HD kindergarten. • The chance of Spanish-speaking students reading at grade level goes from 44% if they attended 		<ul style="list-style-type: none"> • Full-day kindergarten is 6.5 hours of instruction five days a week. • The full-day program provides additional child-directed activities and focuses on expanded development of oral language skills and vocabulary. 	

		HD kindergarten to 54% for students in FDK.			
<p>Full-Day vs. Half-Day Kindergarten: Which Children Learn More in Which Program? (Lee, Burkam, Honigman, & Meisels. <i>American Journal of Education</i>, 112, February 2006). Research summary available at Strategies for Children (Mass.) http://www.strategiesforchildren.org/eea/6research_summaries/06_FD_KvsHDK.pdf</p>				<p>30% more time on reading and literacy instruction</p> <p>46% more time on mathematics</p>	<p>Equally effective for children of different social backgrounds</p>

<p>Full day Kindergarten: A Study of State Policies in the United States (Education Commission of the States, June 2005)</p> <p>http://www.ecs.org/clearinghouse/62/41/6241.pdf</p>	<p>Stronger academic gains over the course of the kindergarten year.</p>			<ul style="list-style-type: none"> • Provides continuity for children accustomed to full-day experiences outside of the home • Provides continuity with schedules in first grade and beyond • Reduces the number of disruptions and transitions children experience in a typical day. • Opportunity to align the policies and practices of the grades that follow kindergarten with those of the early learning programs that typically come before 	<ul style="list-style-type: none"> • Allows the teacher more time for both formal and informal instruction that provide meaningful opportunities • Kindergarten teachers should be expected to have certification or ongoing professional development in early childhood education.
<p>Full day Kindergarten: Expanding Learning Opportunities (WestEd Policy Brief, April 2005)</p> <p>http://www.wested.org/online_pubs/po-05-01.pdf</p>		<ul style="list-style-type: none"> • Improves student attendance, translates to more learning time. • Full day kindergarten students show faster gains on literacy and language measure when compared to half-day kindergarten students, a finding of particular importance for the growing numbers of English language learners. 	<ul style="list-style-type: none"> • High conduct marks (e.g. obeys playground rules, show self-confidence, puts forth best effort, works well with others). • Parents and/or teachers cited improved school socialization skills and less stress and frustration for children. • Full-day kindergarten students do better with the transition to first grade, show significant gains in school socialization (i.e. they understand appropriate behavior), and are equipped with stronger learning skills. 	<ul style="list-style-type: none"> • Children benefit from a developmentally appropriate, full-day program, most notably in terms of early academic achievement – a foundation for school and life success. • Full day programs had more small-group and individual activities as teachers felt less pressured to save time by conveying information to the entire group at once (Hough and Bryde). • A full-day schedule gives teachers more time for elaboration as 	<p>Decreased costs by reducing retention and remediation rates.</p>

				each skill develops and more flexibility to move a child toward more formal instruction as he or she masters a skill (Evansville-Vanderburgh).	
<p>Making the Most of Kindergarten: Present Trends and Future Issues in the Provision of Full-day Programs By Ackerman, Barnett, and Robin (March 2005, NIEER) http://nieer.org/resources/policyreports/report4.pdf</p>		<ul style="list-style-type: none"> • Full-day kindergartners showed a 22 percent advantage in their math score gains and a 32 percent advantage in their reading score gains. • These gains held even after controlling for children's poverty status and their initial reading and math abilities. 	Studies indicate that children who attend full-day kindergarten receive better report card grades in behavior.	Full-day programs offer twice as much instructional time on average as do half-day programs, but children will only benefit from the longer programs if that extra instructional time is devoted to activities that promote learning and development.	Full-day schedules may help increase kindergarten enrollment for families that might keep their children out of half-day programs because they are unable to arrange child care or transportation.
<p>Full-day and Half-day Kindergarten in the United States Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (June 2004) http://nces.ed.gov/pubs/2004/2004078.pdf</p>	<p>The children enrolled in a full-day program make greater gains in reading language arts over the course of the kindergarten year compared to those in half-day classes.</p> <p>Findings from a multi-level regression analysis indicate that children in</p>	<p>This study begins with children in Kindergarten in 1998-1999. Assessments will continue through Fifth grade.</p>		Teachers in full-day kindergarten classes organize for instruction in much the same way as teachers in half-day classes. Full-day kindergarten classes spend, on average, more time each day than half day classes on teacher-directed whole class, small group, and individual	<p>Findings from this analyses indicate that children in very large classes (25+) make gains in reading that are slightly smaller than those made by children in medium size classes (18–24).</p> <p>Classroom instructional aides are more prevalent</p>

	<p>full-day classes make greater gains in both reading and mathematics compared to those in half-day classes after adjusting for gain score differences associated with race/ethnicity, poverty status, fall achievement level, sex, class size, amount of time for subject area instruction, and the presence of an instructional aide.</p> <p>The positive effect associated with full-day programs after accounting for these other variables represents a difference in the reading gain scores of about 32 percent of a standard deviation.</p> <p>After accounting for the same class and child characteristics as for reading, children in full-day programs make gains in mathematics that represent about 22 percent of a standard deviation more than the gains made by children in half-day programs.</p>			<p>activities and they spend more time on child-selected activities. When the total amount of time available in these classes is taken into account, however, the percent of total class time spent in each type of activity is similar for full-day and half-day classes.</p> <p>Full-day classes are more likely to spend time each day on other subjects—math, social studies, and science, compared with half-day classes.</p> <p>Almost all specific skills and activities are more frequently covered daily in full-day classes compared with half-day classes with some of the exceptions being those done daily by a majority of both types of classes (e.g., calendar activities and counting out loud).</p> <p>Nine out of the 11 writing skills and activities are done weekly in more full-day classes compared to half-day classes (e.g., writing in journal, writing stories and reports, and conventional spelling).</p>	<p>in full-day classes. Sixty-one percent of full-day classes and 44 percent of half-day classes have an aide who works for at least an hour per day directly with the children on instructional tasks.</p>
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<p>The Effects of Full Day Versus Half Day Kindergarten: Review and Analysis of National and Indiana Data By Plucker, Eaton, Rapp, Lim, Nowak, Hansen, Bartleson Center for Evaluation and Education Policy January 9, 2004 http://ceep.indiana.edu/projects/PDF/FDK_report_final.pdf</p>		<p>Full day kindergarten appears to be effective in reducing achievement gaps.</p>		<ul style="list-style-type: none"> • The added time in a full day program fundamentally changes the nature of activities that occur in that program. • Not only do teachers tend to do more in full day programs, they tend to do more of the instructional strategies that researchers recommend to promote young children's learning. 	
<p>New Mexico, reported 8/17/01</p>	<p>Students given literacy skill tests at the beginning and end of the term. Schools chose their own testing programs, which were measured against the state standards. "94% of students succeeded in the full-day kindergarten."</p>				
<p>South Carolina, reported 6/00</p>		<p>Analyzed CSAB scores administered from fall 1996 through fall 1999. Students who participated in full-day kindergarten programs scored higher, on average, than did students who were enrolled in half-day kindergarten programs.</p>		<p>Overall mean score on ECERS was 5.67 with highest ratings in student/teacher interactions and language and reasoning activities.</p>	<p>Principals and teachers believe that full-day kindergarten benefits students by providing more instructional time, allowing teachers to incorporate more hands-on learning experiences into the curriculum, providing a richer learning environment and easing the transition to first grade.</p>

<p>Montgomery County Public Schools, Rockville Maryland reported August 2001</p>	<p>Used MCPS Early Childhood Assessment Program in reading to assess full day kindergarten program. Found significant benefits of the full-day program vs. half day program for the highest-risk students (81% vs. 62%) Significant effects for lower-risk students were present as well.</p>				
<p>Gullo, 2000</p>		<p>Found second graders who had participated in full-day kindergarten scored higher on math and reading on Iowa Test of Basic Skills.</p>	<p>FDK were less likely to be retained during their first three years of school.</p> <p>FDK had sig. higher rates of attendance – an average of almost two weeks more.</p> <p>No significant difference in special education placement.</p>		