

## **Annotated Bibliography of Research on Full-Day Kindergarten**

Cannon, J. S., Jackowitz, A., & Painter, G. (2011). The effect of attending full-day kindergarten on English learner students. *Journal of Policy Analysis and Management*, 30(2), 287-309.

Researchers examined the impact of full-day kindergarten on academic achievement, retention, and English language fluency, in the Los Angeles Unified School District. The results showed that full-day kindergarten students performed better on kindergarten reading skills assessments, and were 5.2 percentage points less likely to be retained in kindergarten or first grade. Full-day students did not perform any better than half-day students on first-grade reading skills assessments or in math or reading assessments in second or third grade. In addition, there was no difference between full and half-day students in English fluency outcomes.

Cooper, H., Batts Allen, A., Patall, E., & Dent, A. L. (2010). Effects of full-day kindergarten on academic achievement and social development. *Review of Educational Research*, 80(1), 34-70.

The authors conducted a meta-analysis of published research findings to estimate the overall effectiveness of full-day kindergarten. The authors found that, at the end of the kindergarten year, children who attended full-day programs outperformed children who attended half-day programs on tests of academic achievement.

Stuber, G. M., & Patrick, R. M. (2010). Using school readiness data to make a difference in student learning. *Phi Delta Kappan*, 92(3), 35-38.

The Kansas Kindergarten Readiness Project was a three-year statewide study of kindergarten classrooms. Kindergarten teachers used the Kansas Early Learning Inventory (KELI) to assess students across a broad range of skills and competencies at the beginning and end of the year. The teachers also completed self-assessments to identify instructional practices used. Results showed a significant positive effect in full-day kindergarten on math concepts, general knowledge, symbolic development, oral communication and written language, where best practices were used. Best practices were seen more frequently in full-day kindergarten classrooms.

Hall-Kenyon, K. M., Bingham, G. E., & Korth, B. B. (2009). How do linguistically diverse students fare in full- and half-day kindergarten? Examining academic achievement, instructional quality, and attendance. *Early Education & Development*, 20(1), 25-52

In addition to examining the effects of full-day kindergarten programming on instructional quality, researchers investigated the impact of the length of day, language status, and attendance on children's academic achievement. In their study of eight kindergarten classrooms in Utah, the authors found full-day kindergarten positively impacted children's literacy performance. In addition, ELL students appeared to benefit more in the area of language development. Despite these gains in literacy and language, there was no difference between children in full- and half-day settings on math achievement.

Chang, M., & Singh, K. (2008). Is all-day kindergarten better for children's academic performance? Evidence from the early childhood longitudinal study. *Australian Journal of Early Childhood*, 33(4), 35-42.

In order to explore the impact of "all-day kindergarten programs" on children's academic performance, study authors analyzed three waves of ECLS-K data (1998, 1999, and 2000). All-day kindergarten children began with significantly higher scores in both reading and mathematics compared with their half-day counterparts, and maintained a higher level of achievement than did half-day students in first grade.

Votruba-Drzal, E., Grining, L., & Maldonado-Carreño, C. (2008). A developmental perspective on full-versus part-day kindergarten and children's academic trajectories through fifth grade. *Child Development*, 79(4), 957-978.

Researchers used the Early Childhood Longitudinal Study – Kindergarten cohort study (ECLS-K), a nationally representative set of longitudinal data beginning in Kindergarten, to examine whether kindergarten program type explains individual differences in children's academic trajectories over time. Researchers found no difference in the baseline academic achievement, but by spring, full-day students outscored part-day students in both math and reading.

Zvoch, K., Reynolds, R. E., & Parker, R. P. (2008). Full-day kindergarten and student literacy growth: Does a lengthened school day make a difference? *Early Childhood Research Quarterly*, 23(1), 94-107.

Researchers measured literacy skills by comparing full-day kindergarten students in six Title I funded schools and half-day kindergarteners in six schools that were not Title I funded. DIBELS scores showed that full-day kindergarteners had a faster rate of literacy acquisition than their half-day counterparts, particularly in average and below-average size classrooms.

Cannon, J., Jackowitz, A., & Painter, G. (2006). Is full better than half? Examining the longitudinal effects of full-day kindergarten attendance. *Journal of Policy Analysis and Management*, 25(2), 299-321.

Researchers analyzed ECLS-K data to determine the education, social, and maternal employment effects of full-day kindergarten compared to half-day kindergarten. Their analysis showed that attending full-day kindergarten predicted significantly higher test scores for both kindergarten math and reading achievement. While attending a full-day program did not affect the likelihood of exhibiting internal behavior problems, mothers of full-time kindergarteners were more likely to work full time in the kindergarten year.

Wolgemuth, J. R., Cobb, R. B., Winokur, M. A., Leech, N., & Ellerby, D. (2006). Comparing longitudinal academic achievement of full-day and half-day kindergarten students. *The Journal of Educational Research*, 99(5), 260-269.

A retrospective analysis of 489 full-day and half-day kindergarteners from

1995 – 2001 showed that full-day kindergarteners had a moderate advantage on reading ability at the end of kindergarten. This continued in first grade. By the beginning of second grade however, the advantage in mathematics and reading was not significant. Kindergarten teachers listed lack of differentiated instruction after the kindergarten year and degree of parent involvement among contributors to this finding.

Amsden, D., Buell, M., Paris, C., Bagdi, A., Cuevas, T., Edwards, N., Tressell, P., Gamel-McCormick, M., Hartranft, D., Walker, E., Qiu, W., Kamphaus, J., & Turner, J. (2005). *Delaware pilot full-day kindergarten evaluation: A comparison of ten full-day and eight part-day kindergarten programs school year 2004-2005*. Newark, Delaware: Center for Disabilities Studies, College of Human Services, Education, and Public Policy, University of Delaware.

In order to determine the efficacy of delivering differing models of full-day kindergarten programs throughout the state of Delaware, the researchers compared students in full-day kindergarten to those in part-day kindergarten. They found that full-day kindergarteners had improved student outcomes (in the areas of literacy skills and kindergarten performance indicators) as compared to part-day kindergarteners. Students in full-day kindergarten received almost two and a half times as much literacy instruction and spent significantly more time on science and writing instruction than students in part-day kindergarten.

Walston, J., & West, J. (2004). *Full-day and half-day kindergarten in the United States: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-1999 (NCES 2004-078)*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Researchers analyzed ECLS-K data from the fall and spring (school year: 1998 -1999) to measure cognitive gains in mathematics and reading with full-day and half-day public school kindergarteners. Results showed that the full-day kindergarteners made greater gains in both reading/language arts and mathematics achievement during the year when compared to their half-day counterparts.

Weiss, A., & Offenber, R. M. (2003). *Differential impact of three types of kindergarten experience on students' academic achievement through third grade*. Philadelphia, PA: Philadelphia School District, Office of Research and Evaluation.

Researchers conducted an analysis of 17,563 students in an urban Philadelphia school district. Students that attended no kindergarten, full-day and half-day kindergarten were studied over four successive academic years. They concluded that by third grade, children who attended full-day kindergarten performed higher on achievement test scores in reading, math and science (SAT-9). In addition, students that attended full-day kindergarten had better attendance records and higher GPAs and were more likely to be on grade level in third grade than their half-day counterparts.

## References

Kauerz, K. (2005). *Full-Day Kindergarten: A Study of State Policies in the United States*. Washington, DC: Education Commission of the States

This research brief cross-references seven studies that focus on the benefits of full-day kindergarten programs. Evidence of these benefits include: increased school readiness, higher academic achievement, better attendance, faster literacy and language gains (particularly important for the growing population of English language learners) and enhanced social, emotional, and behavioral development. In addition, one study showed that full-day kindergarten students were more likely to remain on grade through third grade, which helped to offset one fifth of the first year's cost of extending the kindergarten day.

WestEd. (2005). *Full-day kindergarten: Expanding learning opportunities* (Policy brief). San Francisco, California: Author.

The policy research in this report was conducted by the Education Commission of the States, including a comprehensive review of state statutes related to kindergarten in all 50 states. Most state policy reported data can be accessed online at [www.ecs.org/kindergarten](http://www.ecs.org/kindergarten) in ECS' Kindergarten Database.

Studies show that full-day kindergarten provides continuity for the increased number of American children that are accustomed to full-day learning environments outside of the home. Full-day kindergarten reduces the number of transitions and disruptions for the student and allows teachers more time to provide meaningful learning opportunities. In addition, full-day kindergarten helps to close achievement gaps.

Plucker, J. A., Eaton, J. J., Rapp, K. E., Lim, W., Nowak, J., Hansen, J. A., & Bartleson, A. (2004). *The effects of full day versus half day kindergarten: Review and analysis of national and Indiana data*. Indianapolis, Indiana: Center for Evaluation and Education Policy.

Results from eight Indiana data sets reflected results of national data regarding research on full-day versus half-day kindergarten. Overall, analyzed data shows that full-day kindergarten is helpful in reducing achievement gaps and is associated with positive social and behavioral development. In the compared studies, teachers reported that they had more time to effectively address state standards and to meet the diverse learning needs of their students with varying abilities. In a full-day kindergarten program, teachers tend to use more developmentally appropriate teaching strategies that researchers recommend to promote children's learning.