

Full-Day Kindergarten: What the Research Says

As research and practice shed light on the importance and impact of early learning, many states have explored implementing full-day kindergarten. However, funding and requirements differ significantly among states: some states fully fund full-day kindergarten while others provide only partial funding for the additional time and resources involved. Local school districts that seek to offer extended learning or full-day kindergarten are left to find other sources such as tuition, Title I, and local funding to fill the gap (Zvoch & Parker, 2008).

Since 1977, the percentage of kindergartners enrolled in full-day rather than half-day programs has more than doubled, increasing from



28 percent of all kindergartners in 1977 to 76 percent in 2012 (Child Trends, 2013). The basic premise of full-day kindergarten is simple: more student contact leads to more instruction and stronger student outcomes. Research suggests that students who receive a full day of kindergarten outperform their peers who attend half-day (Cooper, Allen, Patall, & Dent, 2010; Elicker, 2000).

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Benefits of Full-Day Kindergarten

According to research over the past three decades, full-day programs have led to stronger achievement, fewer gaps between student subgroups, decreased remediation in subsequent years, and better developed social/emotional skills (Cooper et al., 2010; Raskin, Haar, & Zierdt, 2011). Students are less likely to be retained a grade if they attend full-day kindergarten (Cryan, Sheehan, Wiechel, & Bandy-Hedden, 1992). This not only saves scarce resources but prevents the negative academic and social outcomes associated with retention (Gullo, 2000; National Association of School Psychologists, 2011; Sheehan, Cryan, Wiechel, & Bandy, 1991)

The positive impact of full-day kindergarten has been demonstrated with a number of specific populations, including English learners, at-risk students, and rural students (Bingham & Hall-Kenyon, 2013; Davies & Cress, 2010). In several studies, full-day kindergarten accelerated the growth of students receiving free or reduced-price lunch (Raney, 2014; Zvoch, 2009). Over the past 30 years, differences in student outcomes between full-day kindergarten and half-day kindergarten have become more pronounced (Cooper et al., 2010).

The daily addition of three hours of instruction in kindergarten amounts to another half-year of instruction, which allows for broader and deeper curriculum coverage, a variety of instructional groupings, and diagnosis and intervention of learning challenges (Davies & Cress, 2010; Elicker & Mathur, 1997). Students who receive this additional dosage of kindergarten instruction show better literacy outcomes than their half-day peers (Raskin et al., 2011; Zvoch et al., 2008).

The full-day offering also changes the structure of teachers' workload in ways that create economies for improved learning. In a half-day structure, teachers have two class sections of students. However, since teachers in a full-day program are preparing materials and communicating with the families of half as many students, more time is available for deeper levels of planning and family outreach.

Limitations

While the majority of the literature suggests that full-day kindergarten results in better student learning outcomes, there are limitations to what is known. Not all studies indicate that full-day programs result in different and better student outcomes. In one study, there was no difference between full-day and half-day results because a similar amount of time was spent on academic endeavors despite the additional time in the full-day program (Davies & Cress, 2010). In other words, extra time may be a necessary condition for improved learning, and this time needs to include focused instruction in literacy, math, science, and social-emotional development.

Another limitation related to full-day kindergarten is that it is difficult to generalize implications from existing research. Researchers have described this topic as plagued by weak design, in part because students are not randomly assigned to full-day and half-day kindergarten (Cooper et al., 2010). Nonetheless, it is noteworthy that full-day kindergarten is recommended by early learning researchers as a promising practice.

Third-Grade Fade Out

Full-day kindergarten researchers use the term “third-grade fade out” to describe the comparable outcomes among students who attended full-day kindergarten and their half-day peers by the time they reach third grade. Effective full-day kindergarten programs produce substantial gains at first, compared to half-day programs. However, absent ongoing intervention structures in first grade and higher, the differences between students in full-day and half-day kindergarten diminish over years of schooling to the point that full-day kindergarten students perform similar to their half-day peers by third grade (Cooper et al., 2010).

This is not to say the initial investment in kindergarten isn’t worthwhile. There are a number of potential reasons for this fade. First, full-day kindergarten is more likely to serve students with additional risk factors, who begin school with a lack of learning opportunities, increased learning challenges, and/or lower levels of performance. While no clear difference remains by third grade (i.e., students who attended full-day kindergarten are performing comparably to their former half-day peers), some researchers suggest that this may be because full-day kindergarten equalized outcomes for students who began kindergarten with more risk factors than their half-day peers (Cooper et al., 2010). Students who attended full-day kindergarten did not maintain a faster rate of improvement, but were able to close the achievement gap.

Another reasonable explanation for the lack of differences between full-day and half-day kindergarten students by third grade is that schools intentionally intervene with struggling students.

Other Considerations

When considering the impact of full-day kindergarten, a number of other factors come into play:

Class Size. The literature suggests that full-day kindergarten is most effective when class sizes are small. Students in classrooms with 24 or fewer children gained literacy skills at twice the rate of their half-day kindergarten peers. However, once full-day kindergarten class sizes reached 25 or more, full-day students performed similarly to half-day students (Zvoch et al., 2008).

Cohesion. The literature also suggests that successful programs tend to have strong alignment from preschool through elementary. In these contexts, teachers have opportunities to learn and plan together in an ongoing way. In addition, teachers share responsibility for student achievement and school experiences become more cohesive for young students and families (Raskin et al., 2011). As such, full-day kindergarten programs are most likely to succeed when the entire school functions collaboratively and has systems to align teaching and learning at all levels.

Timing, Quality & Dosage. Kauerz (2014) describes early learning in terms of timing (i.e., how early the instruction begins), quality (i.e., intentional instruction and social-emotional development), and dosage (i.e., both day-to-day and cumulative time). While this paper and full-day kindergarten research as a whole focus heavily on timing and dosage, the quality of kindergarten instruction has a tremendous impact on outcomes. As such, strong materials and professional development must be considered when scaling up a high-quality full-day kindergarten option.

Over time, students who were lower performing and who attended half-day kindergarten may have received enough remediation to be on track by third grade (Davies & Cress, 2010).

Finally, the lack of difference between half-day and full-day kindergarten students by third grade may be attributed to the explanation that full-day kindergarten only temporarily counterbalances the disadvantages of poverty that have accumulated over years (Zvoch, 2009). In order to continue the positive trend, students need additional supports beyond kindergarten, particularly if the underlying causes of struggle have not changed.

Conclusion

Full-day kindergarten is a powerful intervention to address the needs of students who start kindergarten lacking the requisite early literacy and numeracy skills to make the transition to school effectively. However, these students often need continued intervention and additional supports to progress academically at expected rates (Cooper et al., 2010). Policymakers and school leaders should consider full-day kindergarten as one strategy within a larger context of systemwide supports for struggling students (Raskin et al., 2011).

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