
A Brief Review of Research Indicates Expanding Learning Time Leads to Positive Impact for Students & Schools

WHAT HAPPENS WHEN SCHOOLS AND STUDENTS ARE PROVIDED SIGNIFICANTLY MORE TIME FOR LEARNING? Both research and practice indicate that adding time can have a measurably positive impact on student proficiency and a child’s entire educational experience. The evidence makes clear that expanded time used well, benefits students in three distinct and overlapping ways:

- (a) Increased time in **academic classes** allows for broader and deeper coverage of curricula that results in improved student achievement;
- (b) Additional **enrichment** opportunities that enhance students’ educational and life experiences; and
- (c) Dedicated time for **teacher collaboration** and embedded professional development that enable educators to strengthen instruction and improve student outcomes.

Because schoolchildren from high-poverty backgrounds typically enter school and continue to lag behind their more affluent peers, and often lack learning opportunities outside of the school day, the three benefits of additional time *within the school day* hold special weight for them. To be prepared for success in college and careers, more time is an essential component of their educational experience.

Research Demonstrates How Increased Learning Time Can Lead To Higher Achievement

- An analysis of three years of test data from Illinois schools found a direct correlation between more time spent in reading and math class and higher student achievement in those subjects.ⁱ
- Research from Harvard economist Roland Fryer examined charter schools in New York City to identify those elements within schools that had the greatest impact on academic outcomes. The analysis included many traditional measures like teacher credentials and class size, but found that those factors had only weak correlations with student achievement. Instead, the research determined that instructional time—measured as the time students were actually engaged in learning—and high-dosage tutoring were much stronger predictors of higher achievement.ⁱⁱ
- A study of hundreds of students in Wisconsin identified a 10 percent association – a moderately high correlation – between the quantity of time students were engaged in learning and outcomes among higher achieving students, and a much higher association (36 percent) for the lowest achievers.ⁱⁱⁱ
- In an evaluation of the charter schools in New York City, analysts discovered that *among* charter school students those who attended schools with a significantly longer school year (which usually was strongly associated with a longer day) performed much better than their peers in charter schools with years of more conventional length. In fact, expanded time registered one of the strongest correlations among the roughly 30 different factors considered.^{iv}

Research Demonstrates How More Time Can Enhance Students' Educational and Life Experiences

- Many studies have revealed that invigorating the cerebellum through physical exercise can then influence brain capacity to pay attention in class and engage in higher-order thinking like memory, spatial perception and decision making.^v
- One experiment suggests that recess itself can affect the amount of time students focus on learning during class. Comparing two fourth-grade classes, researchers observed student behavior in these classes on randomly chosen days when a recess period was given for 20 minutes. On those days when students had recess, they were observed to fidget less and pay attention in class more.^{vi}

Research Demonstrates How Teacher Collaboration Time Can Improve Instruction and Student Outcomes

- A trio of researchers conducted a study of the teaching staffs in 24 schools to determine those elements that contributed to the formation of strong professional learning communities (PLCs) and identified collaboration time as the most powerful factor, explaining 70 percent of the variation between schools in their relative strength of PLCs.^{vii}
- Separate research has found definitively that in schools with well-developed PLCs students performed better in reading, math, science and history.^{viii}

Additional Studies Demonstrate the Positive Impact of More Time

A meta-analysis that examined 15 empirical studies of expanded school days and/or years showed that, overall, expanding school time can be an effective way to support student learning, particularly (a) for students most at risk of school failure and (b) when considerations are made for how time is used.^{ix}

To better understand how time can be used to maximum effect for at-risk students, the National Center on Time & Learning analyzed the practices of 30 high-performing, high-poverty expanded-time schools (both district and charter) and discovered eight categories of practice that acted to optimize the impact of more time, including individualizing learning for students, building a culture of high expectations and continually analyzing student data.^x

In an analysis of the Massachusetts Expanded Learning Time Initiative, participating schools who have redesigned their school days to add 300 more hours per year for all students have demonstrated improvement trends across all tested subjects. In 2010, all participating schools gained in proficiency at double the rate of the state in ELA and math, and gained at nearly five times the rate of the state in science across all grades.^{xiii}

NOTES

ⁱ Dennis Coates, "Education Production Functions Using Instructional Time as an Input," *Education Economics*, 11:3 (Dec 2003), pp. 273-292.

ⁱⁱ Will Dobbie and Roland G. Fryer, Jr., "Getting Beneath the Veil of Effective Schools: Evidence from New York City," NBER Working Paper, No. 17632, December 2011.

ⁱⁱⁱ R.A. Rossmiller, *Resource Utilization in Schools and Classrooms: Final Report (Program Report 86-7)* (Madison, WI: University of Wisconsin Center for Education Research, 1986).

^{iv} Caroline Hoxby and Sonali Murarka, "New York City Charter Schools: How Well are They Teaching Their Students?," *Education Next*, Summer 2008: 54-61.

^v Eric Jensen, *Teaching with the Brain in Mind* (Alexandria, VA: Association for Supervision and Curriculum Development, 1998); and W. H. Calvin, *How Brains Think: Evolving Intelligence, Then and Now* (New York: Basic Books, 1996); "Physical Activity May Strengthen Children's Ability To Pay Attention" *Science Daily*, 1 April 2009.

^{vi} Olga Jarrett, et al, "The Impact of Recess on Classroom Behavior: Group Effects and Individual Differences," *Journal of Educational Research*, 1998, 92(2), 121-126.

^{vii} Karen Seashore Louis, et al, "Professional Community in Restructuring Schools" *American Education Research Journal*, 33 (1996), pp. 757-798.

^{viii} Fred M. Newmann and Gary G. Wehlage, *Successful School Restructuring: A Report to the Public and Educators* (Washington, DC: American Federation of Teachers, 1995).

^{ix} Erika A. Patall, Harris Cooper and Ashley Batts Allen, "Extending the School Day or School Year: A Systematic Review of Research (1985 – 2009)," *Review of Educational Research*, 80:3, September 2010, 401 – 436.

^x Claire Kaplan and Roy Chan, *Time Well Spent: Eight Powerful Practices of Successful, Expanded-Time Schools* (Boston: National Center on Time & Learning, 2011).

^{xiii} Massachusetts 2020, *More Time for Learning: Promising Practices and Lessons Learned* (Boston: Massachusetts 2020, 2010).