

RESEARCH SUPPORTS EXPANDING THE TIME AND WAYS STUDENTS LEARN

ExpandED Schools are built on a framework of four core elements:

1. More time for a balanced curriculum
2. Partnerships between public schools and strong community organizations
3. Engaging and personalized instruction
4. A sustainable cost model.

The first three of these elements are rooted in research on effective learning and development. This brief literature review provides evidence of effectiveness of the first three of these core elements. Please note that some research reports cited below may apply to more than one element of success.

More time for a Balanced Curriculum, Part 1: More Time Well Spent

ExpandED Schools offer students at least 1,600 hours a year of academic instruction and enrichment, opportunities to develop talent and support for healthy development.

Dobbie, W. & Fryer, R.G. (2012). Getting beneath the Veil of Effective Schools: Evidence from New York City. Working paper, Harvard University, Cambridge, MA.

“We show that an index of five policies suggested by over forty years of qualitative research -- frequent teacher feedback, the use of data to guide instruction, high-dosage tutoring, increased instructional time, and high expectations -- explains approximately 50 percent of the variation in school effectiveness.”

Farbman, D. (2012). The Case for Improving and Expanding Time in School: A Review of Key Research and Practice. National Center on Time and Learning.

“Both research and practice indicate that adding time can have a meaningfully positive impact on student proficiency and, indeed, upon a child’s entire educational experience. The evidence makes clear that expanded time holds this potential because more time confers three distinct, though overlapping, benefits for both students and teachers:

- a. More engaged time in academic classes, alongside broader and deeper coverage of curricula;
- b. More time devoted to enrichment classes and activities that enhance students’ educational experiences and engagement in school; and

- c. More dedicated time for teacher collaboration and embedded professional development that together enable educators to strengthen instruction and develop a shared commitment to high expectations.”

Lavy, Victor (2012). Expanding School Resources and Increasing Time on Task: Effects of a Policy Experiment in Israel on Student Academic Achievement and Behavior. NBER Working Paper No. 18369. <http://www.nber.org/papers/w18369>

“Separate estimations of the effect of increasing the length of the school week and the subject-specific instructional time per week also show positive and significant effects on math, science, and English test scores...Additional results suggest that the effect on test scores is similar for boys and girls but it is much larger for pupils from low socioeconomic backgrounds...The evidence also shows that a longer school week increases the time that students spend on homework without reducing social and school satisfaction and without increasing school violence...”

Redd, Z., Boccanfuso, C., Walker, K., Princiotta, D., Knewstubb, D. & Moore, K. (2012) Expanding Time for Learning Both Inside and Outside the Classroom: A Review of the Evidence Base. Child Trends. http://www.childtrends.org/Files/Child_Trends-2012_08_16_RB_TimeForLearning.pdf

“The majority of studies reviewed (20 out of 27 studies) found mostly favorable relationships between ESD [Extended School Day] programs and academic outcomes...Findings from research on ESD, ESY [Extended School Year], and ELO [Expanded Learning Opportunities] models suggest that ELT [Extended Learning Time] programs may be more advantageous for low-income, low-performing, ethnic minority or otherwise disadvantaged students. Results of this research, in turn, suggest that these programs may hold promise to help narrow persisting achievement gaps.”

Pattal, E.A., Cooper, H., & Allen, A.B. (2010). Extending the School Day or School Year: A Systematic Review of Research (1985–2009), Review of Educational Research, 80 (3), 401-436.

“Findings suggest that extending 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.”

Dobbie, W. & Fryer, R.G. (2009). Are High Quality Schools Enough to Close the Achievement Gap? Evidence from a Social Experiment in Harlem." NBER Working Paper 15473.

“The effects of attending the Promise Academy charter middle school are enough to close the black-white achievement gap in mathematics and reduce it by nearly half in English Language Arts. The effects in elementary school close the racial achievement gap in both subjects.”

Hoxby, C. M., Murarka, S., & Kang, J. (2009). How New York City's charter schools affect achievement, August 2009 report. Cambridge, MA: New York City Charter Schools Evaluation Project.

“The following policies are associated with a charter school's having better effects on achievement. We emphasize that these are merely associations and do not necessarily indicate that these policies cause achievement to improve:

- a long school year;
- a greater number of minutes devoted to English during each school day.”

Rocha, E. (2007). Choosing more time for students: The what, why, and how of expanded learning. Washington, DC: Center for American Progress.

“Initiatives that expand learning time have facilitated school and classroom innovation to enhance teaching and learning. Through the expansion of learning time, teachers, for example, can provide students with more one-on-one instruction, teach in longer blocks to emphasize subject content, help students develop portfolios of their work, or utilize hands-on learning activities such as science labs and projects to help facilitate learning through application.”

Farbman, D. and Kaplan, C. (2005). Time for a change: The promise of extended-time schools for promoting student achievement. Boston, MA: Massachusetts 2020.

“In practice, will additional time in school really make a difference in the degree to which all students can achieve proficiency on high standards? Research strongly suggests the answer is yes and that there are five distinct, but mutually reinforcing, means by which more time in school can actually boost learning.”

Smith, B.A. “Extended Learning Time and Student Accountability: Assessing Outcomes and Options for Elementary and Middle Grades,” *EAQ* (2005)

“The strongest case resided in our analysis of third-grade students where clear positive effects between Lighthouse [extended learning time] programs and achievement gains were found. Our sixth-grade findings were positive but were more clearly significant in math than in reading. In both third and sixth grades, we also found greater learning gains in Lighthouse programs serving a large percentage of their enrollment. This goes against the grain of common opinion where smaller, selective support programs are generally thought of as more effective.”

Aronson, J., Zimmerman, J. & Carlos, L. (1999). Improving student achievement by extending school: Is it just a matter of time? San Francisco: WestEd. http://www.wested.org/online_pubs/po-98-02.pdf

“In short, time does matter. How much or little it matters, however, depends greatly on the degree to which it is devoted to appropriate instruction.”

Cotton, K. (1989) Educational time factors. *Northwest Regional Educational Laboratory*. http://educationnorthwest.org/webfm_send/564

“There is a positive relationship between time-on-task and student achievement...This finding comes from virtually all investigators whose work was consulted for this analysis...There is a strong positive relationship between academic learning time and both student achievement and attitudes.”

More time for a Balanced Curriculum, Part 2: Balanced Learning

In ExpandED Schools, students engage in a variety of learning activities based on student needs and interests and school goals for student advancement.

J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D. & Schellinger, K.B. (2011). *The Impact of Enhancing Students’ Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. Child Development, 82(1), 405-432.*

“This article presents findings from a meta-analysis of 213 school-based, universal social and emotional learning (SEL) programs involving 270,034 kindergarten through high school students. Compared to controls, SEL participants demonstrated significantly improved social and emotional skills, attitudes, behavior, and academic performance that reflected an 11-percentile-point gain in achievement.”

Mahoney, J.L., Cairns, B.D., & Farmer, T.W. (2003). *Promoting Interpersonal Competence and Educational Success Through Extracurricular Activity Participation. Journal of Educational Psychology, 95(2), 409-418.*

“Consistent extracurricular activity participation was associated with high educational status at young adulthood, including college attendance. Educational status was, in turn, linked to reciprocal positive changes between extracurricular activity participation and interpersonal competence, and to educational aspirations across adolescence.”

Mahoney, J.L. & Cairns, R.B. (1997). *Do Extracurricular Activities Protect Against Early School Dropout? Joe Mahoney and Robert Cairns. Developmental Psychology, 33(2), 241-253.*

“Findings indicate that the school dropout rate among at-risk students was markedly lower for students who had earlier participated in extracurricular activities compared with those who did not participate.”

Reisner, E.R., White, R.N., Russell, C.A. and Birmingham, J. (2004). Building Quality, Scale and Effectiveness in After-School Programs. Washington, DC: Policy Studies Associates, Inc.

The evaluation collected data on over four school years from 96 TASC after-school projects and their host schools in New York City. Its student sample numbered 52,000 after-school participants...analyses of data on academic performance and school attendance show that participation in TASC activities was linked to improvements in both areas, especially for students who participated regularly in TASC programming over two consecutive years.

Birmingham, J., Pechman, E.J., Russell C.A., and Mielke, M. (2005). Shared Features of High-Performing After-School Programs: A Follow-Up To The TASC Evaluation. Washington, DC: Policy Studies Associates, Inc.

This study examined high-performing after-school projects funded by TASC to determine what characteristics, if any, these projects shared. Evaluators reanalyzed student performance data collected during the multi-year evaluation of the TASC initiative to identify projects where the TASC after-school program was especially likely to have contributed to improvements in students' academic achievement.

This study reinforces the viability of an after-school model that emphasizes a wide variety of compelling youth-oriented activities, a staff with diverse backgrounds and skills, and experienced site coordinator with strong ties to the community, the administrative and fiscal support of a committed sponsoring organization, and ongoing communication and relationship building with the host school and participants' families.

Engaging and Personalized Instruction

ExpandED Schools recognize students' individual needs and strengths and use a range of differentiated instructional approaches throughout the day to engage and motivate learners.

Fryer Jr, R.G. (2011). Creating "No Excuses"(Traditional) Public Schools: Preliminary Evidence from an Experiment in Houston. NBER Working Paper No. 17494.

“We implemented five strategies gleaned from best practices in ‘No Excuses’ charter schools – increased instructional time, a more rigorous approach to building human capital, more student-level differentiation, frequent use of data to inform instruction, and a culture of high expectations – in nine of the lowest performing middle and high schools in Houston, Texas. We show that the average impact of these changes on student achievement is 0.276 standard deviations in math and 0.059 standard deviations in reading”

Reis, S.M., McCoach, D.B., Little, C.A., Muller, L.M. & Kaniskan, R.B. (2011). The Effects of Differentiated Instruction and Enrichment Pedagogy on Reading

Achievement in Five Elementary Schools. *American Educational Research Journal*. 48(2), 462-501.

“These results demonstrate that an enrichment reading approach, with differentiated instruction and less whole group instruction, was as effective as or more effective than a traditional whole group based approach.”

Mioduser, D. & Betzer, N. (2007). The contribution of project-based-learning to high-achievers’ acquisition of technological knowledge and skills. *Int. Journal of Technology and Design Education*, 18, 59-77.

“The findings show a significant increase in formal knowledge as measured by standardized matriculation exams; an expansion in the scope of technological knowledge acquired and implemented, and in the scope of knowledge resources utilized for the projects; a high level of overall performance as regards to the set of design skills studied; a positive change in attitude towards technology and technological studies.”

Marx, R.W., Blumentfeld, P.C., Krajcik, J.S., Fishman, B., Soloway, E., Geier, R. & Tal, R.T. (2004) Inquiry-Based Science in the Middle Grades: Assessment of Learning in Urban Systemic Reform, *Journal of Research and Science Teaching*, 41(10), 1063-1080.

“Data were collected from nearly 8,000 students who participated in inquiry-based and technology infused curriculum units... The results show statistically significant increases on curriculum-based test scores for each year of participation. Moreover, the strength of the effects grew over the years, as evidenced by increasing effect size estimates across the years. The findings indicate that students who historically are low achievers in science can succeed in standards-based, inquiry science when curriculum is carefully developed and aligned with professional development and district policies.”

De La Paz, S., & Hernández-Ramos, P. (2002). Learning History in Middle School by Designing Multimedia in a Project-Based Learning Experience. *Journal of Research on Technology in Education* , 42(2), 151–173.

“Results from content knowledge measures showed significant gains for students in the project-based learning condition as compared to students in the comparison school. Students’ work in the intervention condition also revealed growth in their historical thinking skills, as many were able to grasp a fundamental understanding that history is more than presenting facts.”

Hursh, D.E. (1976). Personalized systems of instruction: What do the data indicate? *Journal of Personalized Instruction*, 1(2), 91-105.

“Generally, personalized courses tend to produce small but reliable performance advantages over traditionally taught courses. Study questions and/or objectives, mastery criterion, proctors, and pacing incentives are all components or variants of PSI [personalized systems of instruction] supported by the experimental literature. The size and format of units, format of

study questions and/or objectives, the quizzing routine and format, specific proctor behavior requirements, proctor training, and the place of lectures are all aspects of PSI that warrant further investigation”

School-and-Community Partnerships

Each ExpandedED School partners with a strong community organization to expand learning with a blended faculty of teachers and educators from the community.

Traphagen, K & Johnson-Staub, C. (2010) “Expanded Time, Enriching Experiences: Expanded Learning Time Schools and Community Organization Partnerships.” Center for American Progress.

http://www.americanprogress.org/wp-content/uploads/issues/2010/02/pdf/elt_partnerships.pdf

“Successful partners bring deep content knowledge to the school by providing expert instruction for different grade levels, increasing access to cultural or educational facilities, and/or leading in-depth professional development. These partnerships benefit students and teachers in ways that would be impossible for the school to replicate on its own. Many partners integrate into the school day approaches that are fine tuned in their afterschool or community-based programming, including leading hands-on, interdisciplinary project-based learning; working with multiage groups of students; emphasizing youth leadership and civic engagement opportunities; and increasing family involvement.”

“Partnerships for Learning: Promising Practices in Integrating School and Out-of-School Time Program Supports.” 2010. Harvard Family Research Project.

“Youth, schools, and OST [out-of-school time] programs can all benefit from strong partnerships for learning. These partnerships can serve to strengthen, support, and even transform individual partners, resulting in improved program quality, more efficient use of resources, and better alignment of goals and curriculum.”

Sheldon, S.B. (2007). Improving Student Attendance With School, Family, and Community Partnerships. *Journal of Educational Research*, 100(5), 267-275.

“Analyses showed that in schools working to implement school, family, and community partnerships, student attendance improved an average of .5%, whereas in comparison schools, rates of student attendance declined slightly from 1 year to the next..”

“Head of the Class: Characteristics of Higher Performing Urban High Schools in Massachusetts.” Center for Education Research and Policy at MassINC. 2003. http://www.renniecenter.org/research_docs/0311_HeadofClass.pdf

“School partnerships with universities, businesses, and city institutions (such as museums, art centers, and libraries) appear to be powerful contributors to promoting student achievement and providing external resources that can promote professional communities and opportunities for teachers.”

Henderson, A. T., & Mapp, K. L. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. Austin, TX: Southwest Educational Development Laboratory

“A new group of studies found that community organizing contributed to these changes in schools:

- Upgraded school facilities.
- Improved school leadership and staffing.
- Higher-quality learning programs for students.
- New resources and programs to improve teaching and curriculum.
- New funding for after-school programs and family supports.”