

Abstract Title Page

**Title: Evaluation of Massachusetts Expanded Learning Time (ELT) Initiative:
Implementation and Outcomes After Four Years**

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Abstract Body

Background / Context:

Improving student achievement and closing achievement gaps are both at the forefront of America's education policy agenda, and expanding the school day and/or year to provide additional instructional time is one reform initiative that holds promise for achieving both goals. A recent review of the literature found that although designs are generally weak for making causal inferences, findings suggest that extending school time can be an effective way to support study achievement, particularly for disadvantaged students and when attention is paid to how time is used (Patall, Cooper, and Allen, in press; Valentine, Cooper, Patall, Tyson, & Civey Robinson, 2010).

The Massachusetts Expanded Learning Time (ELT) initiative was established in 2005 with state resources to allow a selected number of schools to explore a redesign of their respective schedules and add time to their day or year. Participating schools must expand learning time by at least 300 hours per year and focus on improving student outcomes in core academic subjects, broaden enrichment opportunities, and improve instruction by adding more planning and professional development time for teachers. Three cohorts of schools have been awarded ongoing implementation grants since 2006-2007; the total number of ELT schools in the 2009-2010 school year is 26 schools in 10 districts.

Purpose / Objective / Research Question / Focus of Study:

Description of the focus of the research.

The Massachusetts Department of Elementary and Secondary Education (ESE) has supported a multi-year study of the ELT initiative to learn about the process and impact of ELT. Abt Associates Inc. is conducting this research. The study has two components: 1) a planning and implementation component that explores the decision-making phase and subsequent execution of ELT in funded schools; and 2) an outcomes component that examines the outcomes of ELT for schools, teachers, and students. The overall ELT evaluation is guided by three research questions:

- 1) How has expanded learning time been implemented in schools that receive ELT grants?
- 2) What are the outcomes of expanded learning time for schools, students, and teachers?
- 3) What is the relationship between implementation and outcomes?

Setting:

The ELT initiative is a state-wide initiative administered by the Massachusetts Department of Elementary and Secondary Education. It ELT initiative is currently being implemented primarily elementary (10) and middle (11) schools, with fewer K-8 (4) and high schools (1) in 10 districts.

Population / Participants / Subjects:

Participating schools have a history of lower than average student achievement and the majority of schools serve at least 50 percent minority and low-income student populations.

Intervention / Program / Practice:

The ELT Initiative is based on the following guiding principles:

- **300 Additional Hours of Learning for Every Student** — Each participating school adds 300 hours over the course of the school year. This time can be added in the form of longer school days or additional days in the school year.
- **More Time Requires a Complete School Redesign** — Each participating school must commit to a complete redesign of its educational program tied to student needs, student goals, and a clear, school-wide academic focus.
- **Academics, Enrichment, and Improving Instruction** — Additional time must be aimed at improving academic outcomes and broadening opportunities in three key areas: (1) core academics; (2) enrichment opportunities, and (3) teacher planning and professional development.
- **Flexible** — Participating schools and districts have the flexibility to create their own redesign approach, including goals, staffing plans, labor agreements, compensation, and schedules.
- **Partners Bring New Resources** — ELT partners include universities, community-based organizations, health centers, businesses, artists, and others.
- **State Support and Funding** — State support and funding is provided to ELT schools to expand the school day or year. Currently, ELT schools receive \$1,300 per pupil for every student to implement their expanded learning time plan.

Massachusetts 2020 (Mass 2020), a policy and technical assistance organization, has been a driving force behind the Massachusetts ELT initiative and provides extensive technical assistance to ELT schools. In addition, in the most recently completed school year, the State began to use school-specific Performance Agreements (akin to cooperative agreements) to hold participating schools accountable to benchmarks established by the state.

Research Design:

This study is a continuing quasi-experimental student that collects implementation and impact data each year. The study uses individual state achievement test score data from the Massachusetts Comprehensive Assessment System (MCAS) from ELT and matched comparison schools to estimate the effect of ELT on student outcomes. Each ELT school is matched with a non-ELT comparison schools on a range of academic performance and student characteristic variables.

Data Collection and Analysis:

Each year, longitudinal student-level MCAS data for both ELT and matched comparison schools are provided by ESE. These datasets includes student-level achievement scores (from English Language Arts, Math, and Science exams), student-level demographic and behavior variable, and for 8th grade a self-report questionnaire about time spent on homework, computer usage, and future plans.

During the spring of each year, teachers and students in ELT and matched comparison schools are surveyed to examine their perceptions and attitudes. Site visits are also conducted each year to ELT schools to interview key stakeholders and conduct select focus groups about program implementation. District staff, community partners, and state-level stakeholders are also interviewed each year to provide key contextual information.

The impact analysis relies upon a strong quasi-experimental design: a difference-of-differences approach that leverages 1) pre-program data and 2) data from matched comparison schools, and that yields estimated effects that represent differences between ELT and comparison schools above what one might expect given pre-program measures and other ongoing initiatives that affect schools.

Findings / Results on Implementation:

The patterns of overall implementation indicate that nearly all schools are implementing the core components of ELT to some degree. Among the specific findings (grouped according to major principles of ELT) include the following, based primarily on survey responses:

Expanding Amount of Time

- Having sufficient time for core subject area instruction (87 percent)
- Longer day had improved students' opportunities for enrichment activities (72 percent)
- Sufficient time for common teacher planning (58 percent)
- 22 of 26 schools integrated ELT into school schedule; four schools added separate time blocks onto a traditional school day
- Variation in breadth of teacher participation
 - All teachers teaching the expanded day (10 of 26 schools)
 - Some teachers teaching in expanded day schedule (16 of 26 schools)

Technical Assistance

- Staff from 24 of 26 ELT schools reported having received some technical assistance for ELT implementation from a variety of providers

Core Academics and Instruction

- Most schools focused additional time on English Language Arts (ELA) and math instruction; 10 schools reported spending more time on social studies and science too
- About half of teacher respondents reported that aspects of their teaching had improved because of the longer day (e.g., ability to cover more material and to use different instructional strategies)

Enrichment

- 22 of 26 schools offered students a mix of academic-focused enrichment and non-academic enrichment; 2 each offered only academic or only non-academic
- 24 of 26 schools have partnerships with one or more community organizations to provide enrichment activities.

Common Planning Time and Professional Development

- 93% of ELT teachers participated in some professional development (PD) activities; 45% spent 26+ hours
- 58% reported having sufficient time for collaborative planning, and 42% that the longer day improved collaborative planning time
- Common planning time ranged from one to five hours per week; generally higher in middle than elementary schools
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Stakeholder Perspectives

- 69% indicated that teachers in their schools support ELT
- Respondents consistently reported that resource challenges influence ELT implementation

Findings / Results on Impact:

Figures 1 and 2 and Tables 1 and 2 below summarize the estimated effects of ELT on student outcomes. The major findings from the analyses estimating the effects of ELT on students and teachers are summarized below. These findings will be updated to include results after 3 years of implementation in time for the SREE conference.

Students

- ELT had a significant, positive effect on 5th grade science MCAS scores in the second year of implementation. The difference corresponds to an effect size of .14 standard deviations, which can be considered educationally meaningful. ELT had no statistically significant effects on other MCAS outcomes in either the first or second year of implementation.
- ELT had a statistically significant, negative effect on school attendance rates in both the first and second implementation years, although the estimated difference of less than half a percentage point may not be practically meaningful.
- Overall, very few students received suspensions or were truant. However, ELT schools had slightly higher rates of out-of-school suspensions across both years. In the first year, ELT schools had a slightly lower, and in the second year, a slightly higher rate of in-school suspension. ELT had no effect on truancy rates.
- Eighth grade students in ELT schools were significantly more likely to report using a school computer for school work at least once a month in the first implementation year; there was no difference in the second year. ELT students were less likely to report spending at least three hours per week on homework in the second implementation year; there was no difference in the first year. ELT had no significant effect on 8th grade students' reports of using a home computer for school work at least once a month, using computers two or more hours per week, or plans to attend college.
- Fifth grade ELT students were significantly less likely to report participation in a non-academic club at school; other differences in participation in out-of-school activities were not significant. ELT had no effect on the percentage of students

- reporting they would spend at least three hours today in a variety of common after-school activities.
- ELT had no effect on 5th grade students' perceptions about their relationships with their teachers, including spending more time with teachers this year. ELT also had no effect on 5th grades students' perceptions of the learning environment offered at their school or level of school engagement.

Teachers

- After the first implementation year, teachers in ELT schools were significantly more likely to report that they were satisfied with their salary and that they would still become a teacher if they were to start over. Conversely, they were less likely to report that they were satisfied with being a teacher at their school. These differences do not, however, persist into the second year of implementation.
- Significantly more teachers in ELT schools reported thinking about transferring to another district compared to their peers in non-ELT schools after the second year; there was no difference in the first implementation year.
- There were no significant differences between ELT and non-ELT teachers on their perceptions of the teaching environment within their schools, district leadership, or parent involvement and student attitudes.
- The vast majority of both ELT and non-ELT teachers agreed with positive statements about principal leadership, although ELT teachers were significantly less likely to agree that their principal was an effective manager after the first implementation year.

Conclusions:

The differences noted above are both inconsistent and interesting, yet there are few estimated differences in outcomes for schools, students, and teachers in ELT and non-ELT schools. The lack of consistent differences across outcomes could be due, in part, to the possibility that many of the matched comparison schools are also implementing “ELT-like” practices, based on evidence from qualitative data collection conducted as part of the implementation study. For example, administrators in both ELT and matched comparison schools reported allotting additional time for ELA and math instruction with the goal of improving student achievement.

Note:

Data from the 2010-2011 school year are being analyzed to explore (1) how schools' implementation efforts (and fidelity of implementation) are continuing in the three cohorts' fourth, third, and second years of implementation, respectively, and (2) observed impacts on students and teachers as the initiative continues to mature. Survey data have already been analyzed, and student achievement data were obtained in early September, and the fourth interim report will be completed by mid December, 2010.

Appendix A: References

Patall, E. A., Cooper, H. & Allen, A. B. (In press). Extending the school day or the school year: A systematic review of research (1985-2009). Manuscript accepted for publication at *Review of Educational Research*.

Valentine, J. C., Cooper, H., Patall, E. A., Tyson, D, & Civey Robinson, J. (2010). A Method for Evaluating Research Syntheses: The Quality, Conclusions, and Consensus of Twelve Syntheses of the Effects of After School Programs. *Research Synthesis Methods*, 1, 20-38.

Appendix: Tables and Figures
Not included in page count.

Figure 1: Effects on Student Achievement after 1 year of implementation

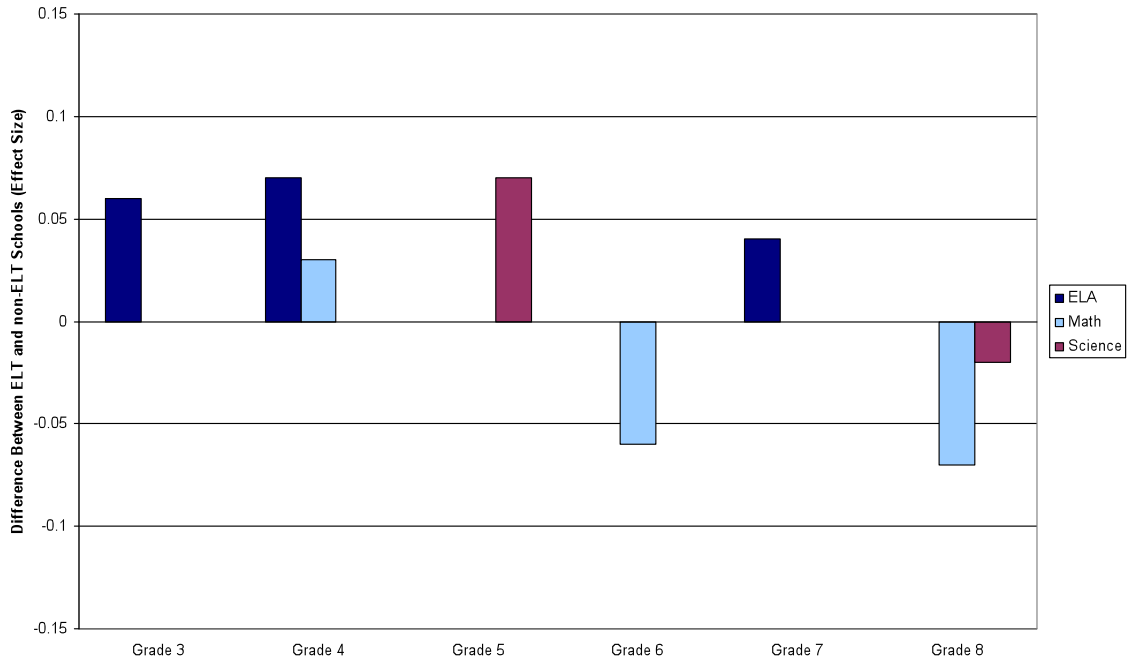


Figure 2: Effects on Student Achievement after 2 years of implementation

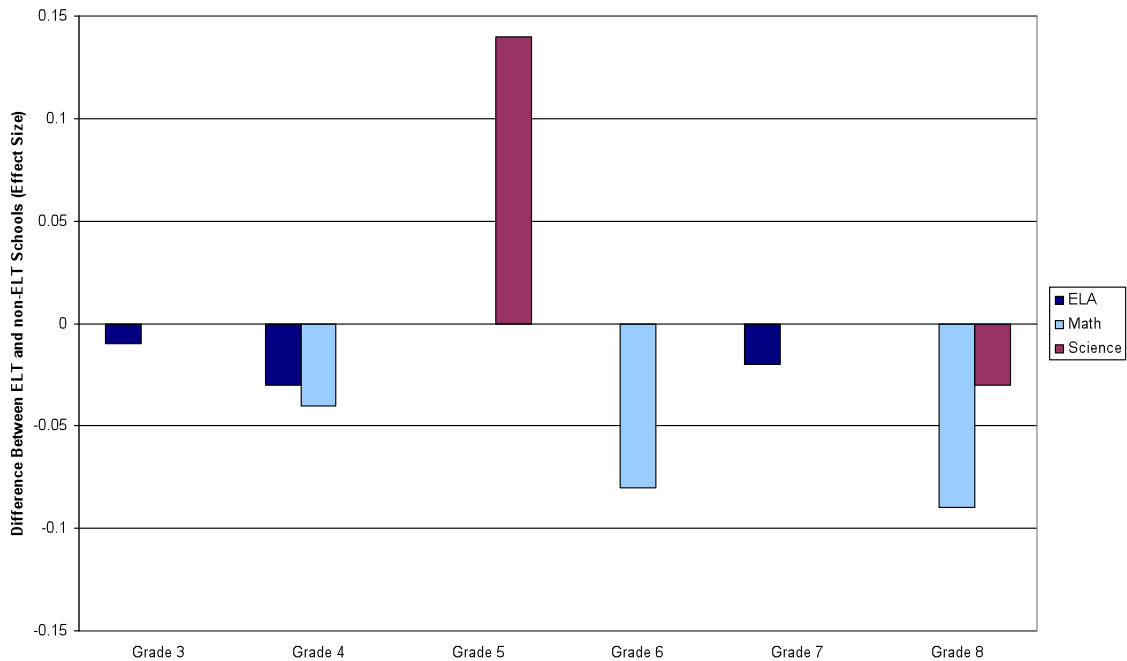


Table 1: Effect of ELT on Student Outcomes: attendance, suspension, and truancy rates

	Actual ELT Mean	Estimated Non-ELT Mean	Estimated Difference	Statistical Significance (p-value)
Implementation Year 1				
Attendance rate	93.72	94.10	-0.38*	<0.001
In-school suspension rate	0.03	0.04	-0.01*	<0.001
Out-of-school suspension rate	0.09	0.08	0.02*	0.003
Truancy rate	0.59	0.55	0.04	0.058
Implementation Year 2				
Attendance rate	93.69	94.00	-0.31*	<0.001
In-school suspension rate	0.04	0.03	0.02*	0.001
Out-of-school suspension rate	0.10	0.06	0.04*	<0.001
Truancy rate	0.79	0.83	-0.04	0.275

Table 2: Effect of ELT on student outcomes: 8th grade survey outcomes

Percent of 8 th grade students who reported:	Actual ELT Mean	Estimated Non-ELT Mean	Estimated Difference	Statistical Significance (p-value)
Implementation Year 1				
Using a school computer at least once a month for school work	75.46	66.43	9.03*	0.026
Using a home computer at least once a month for school work	70.42	70.58	-0.17	0.944
Using computers two or more hours per week	70.95	72.78	-1.84	0.231
Spending at least three hours per week on homework	49.74	56.08	-6.34	0.132
Planning to attend college	72.30	69.99	2.30	0.195
Implementation Year 2				
Using a school computer at least once a month for school work	64.40	62.39	2.02	0.806
Using a home computer at least once a month for school work	71.62	68.09	3.53	0.504
Using computers two or more hours per week	74.42	76.56	-2.14	0.404
Spending at least three hours per week on homework	43.60	55.11	-11.51*	0.041
Planning to attend college	70.48	70.49	-0.02	0.995