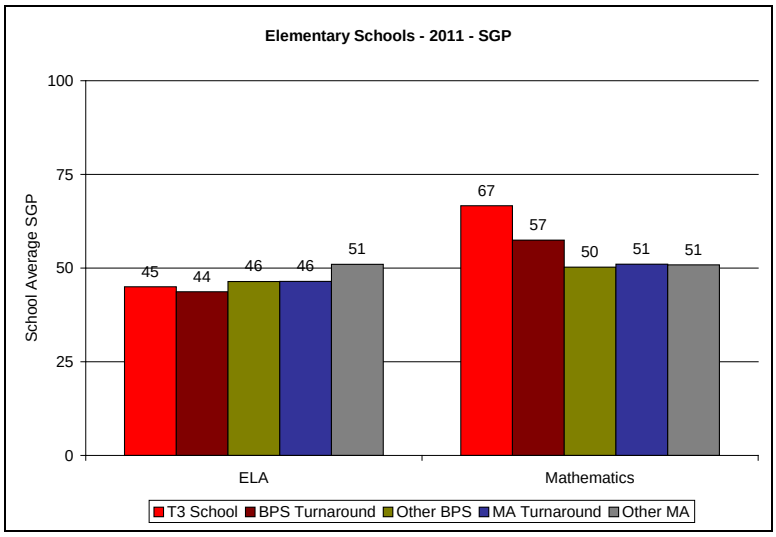
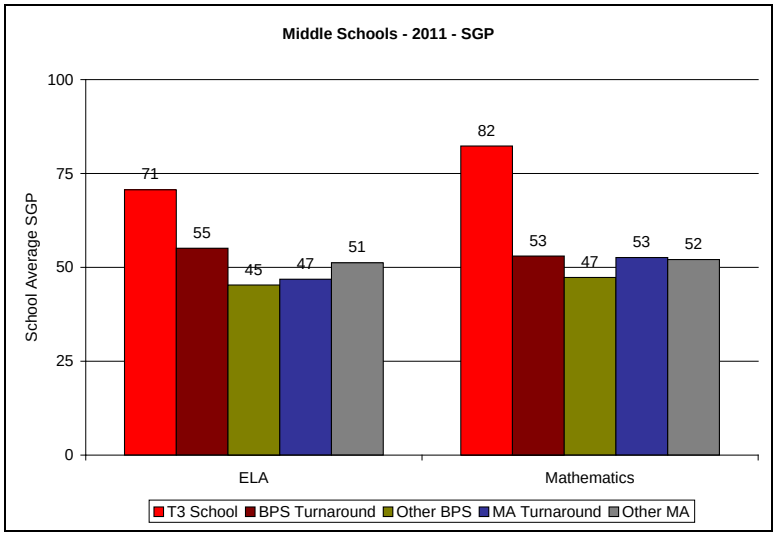
T3 Program Analysis: 2011 MCAS Results

In 2010-11, schools that used the T3 staffing model produced substantially greater achievement growth than other Massachusetts schools, including other turnaround schools in Boston, across most grades and subjects tested. Student achievement growth[i] was concentrated in middle school and elementary school mathematics. In elementary ELA, the T3 schools' performance was on par with students in other types of schools across the state. Although the limited data available does not enable us to make causal claims about the effects of T3, these results suggest that students in T3 schools are making much more academic progress than their peers in other schools after the first year of the program's implementation.

We see these patterns clearly in the figure, which plots the average school Student Growth Percentile for different groups of schools. In particular, Orchard Gardens, the one T3 school with middle school students, was at the 96th percentile of all schools statewide in producing student growth in ELA and at the 98th percentile in mathematics. The *median* middle school student at Orchard Gardens demonstrated more growth in mathematics than 82% of other students statewide.

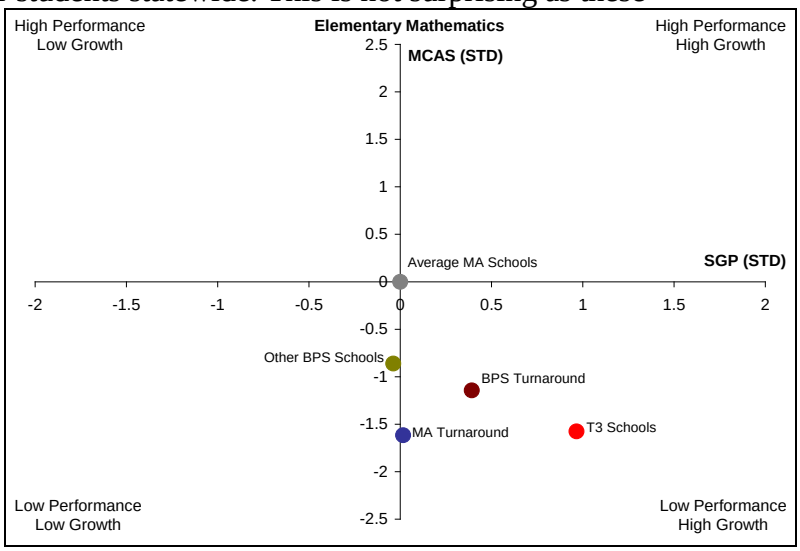




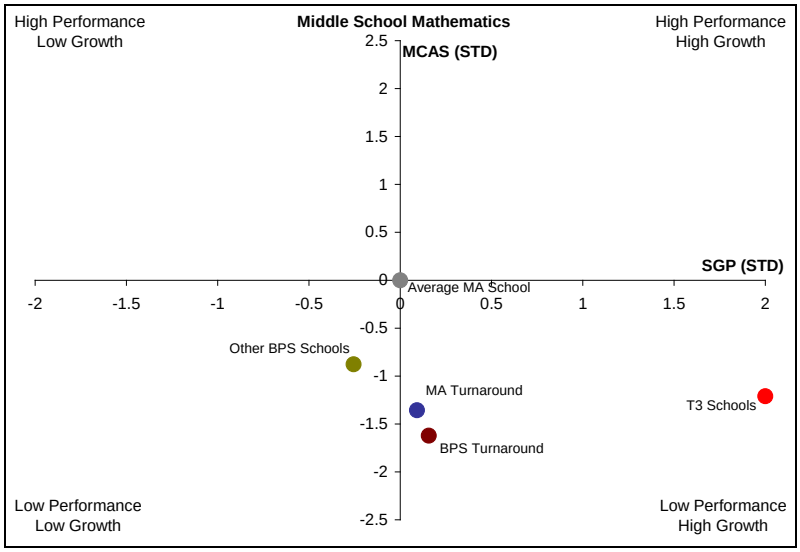
Compared to similar students in other BPS turnaround schools, the average student in a T3 school gained:

- 1 percentile point more in elementary ELA,
- 10 percentile points more in elementary mathematics,
- 16 percentile points more in middle school ELA, and
- 29 percentile points more in middle school mathematics.

Despite this growth, students at T3 schools – and all turnaround schools – continue to score lower on the MCAS tests than other students statewide. This is not surprising as these schools were identified as "turnarounds" because of their low test performance in the first place. The figure below plots average student achievement against average student growth in each type of school, relative to the average school in the state, in mathematics.



Across the board, T3 schools have lower-performing students (lower on the chart) than other BPS schools. However, despite this relatively low *level* of achievement in T3 schools, their students have quite high achievement *growth* (further to the right), as we saw in the figures above. If these patterns continue, T3 schools should continue to rise on the graph as their students demonstrate greater proficiency. Thus, the achievement gaps between T3 schools and other BPS (or other Massachusetts) schools should narrow quickly if such rapid growth persists.



This descriptive analysis does not enable us to claim that the T3 program has caused this improvement because we do not know how these schools would have done in the absence of T3. However, the Student Growth Percentile comparison shows that students in T3 schools are improving at faster rates than students in other schools, particularly in middle school. This is suggestive evidence that the T3 program has had a positive effect, even in its first year of implementation.

Analysis conducted by John Papay of Brown University.

[i] All student achievement data comes from the Massachusetts Department of Elementary and Secondary Education. Student growth information comes from the state's Student Growth Percentile data, which compares each student's performance to that of students who had similar scores in the previous year.