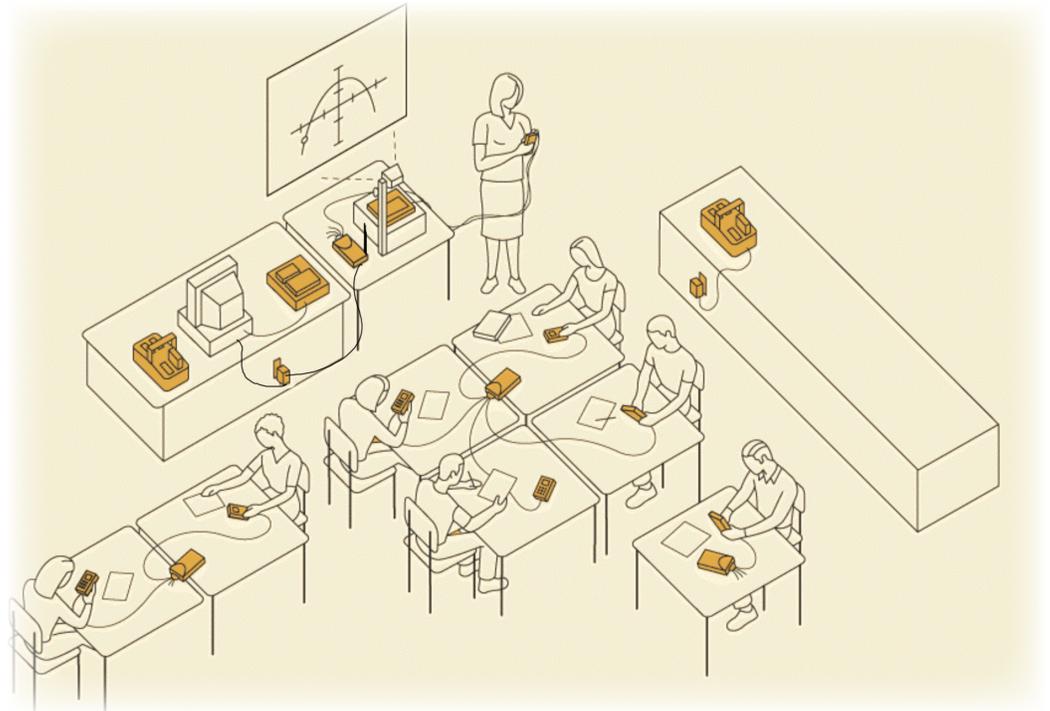


# MathForward™

## District Report



**Springfield, Ohio** Local School District

September 2008

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# Springfield, Ohio Local School District

## District Context

Springfield Local School District is a small district located in Akron, OH, a diverse urban center of over 200,000 residents. The district is comprised primarily of White students, and about one third are from low-income families. Participants in the program also included a significant portion of special education students (16 percent). Relative to other districts in the state, mathematics scores in Springfield are above average. An elementary and a middle school in the district participated in MathForward™ in 2007-08. For the district, it was the first year of participation in the program.

Table 1. Characteristics of Students in the Participating Schools in the District

	Schrop Intermediate	Spring Hill Middle School
Ethnicity	Percent of Students	Percent of Students
African American	1.7%	1.0%
Hispanic	1.0%	1.1%
White	96.2%	96.4%
Asian/Pacific Islander	0.9%	1.5%
Native American	0.2%	0%
Free or Reduced Price Lunch	42%	42%
English Language Learners	N/A	N/A
Students with Disabilities	N/A	N/A

## Implementation of MathForward™

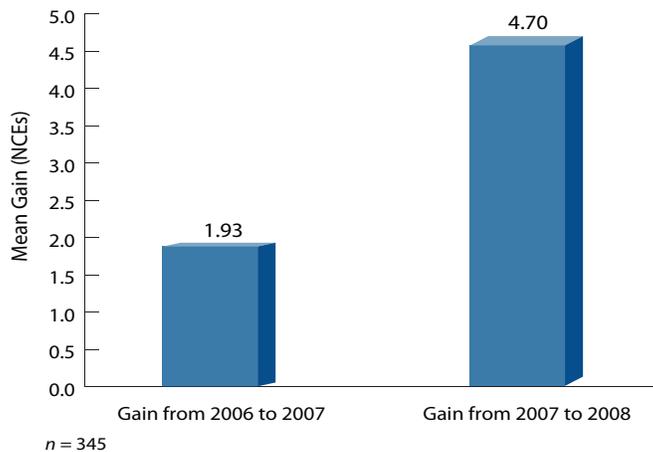
In 2007-08, Springfield's implementation was congruent with the MathForward™ program design, except that teachers had limited time to plan for implementation in common planning periods.

<b>Professional Development</b>	All teachers participated in initial workshops, and nearly all participated in follow up workshops and received coaching from TI.
<b>Block Scheduling</b>	Both schools implemented double blocks of mathematics instruction for students in the program, who were exposed to 7 or more hours of instruction in mathematics each week.
<b>How Teachers Are Using TI-Navigator™ in Classes</b>	Teachers in Springfield schools made use of the full range of TI-Navigator™ functionality on a regular basis. All used Navigator sometimes to help foster student discussion and to adjust instruction on the basis of feedback from the system.
<b>Teacher Common Work Time</b>	Teachers in the middle school had common planning time in which they discussed MathForward™. Only one teacher from the elementary school participated, and she did not discuss MathForward™ with colleagues in her school during planning periods.

## Achievement Results

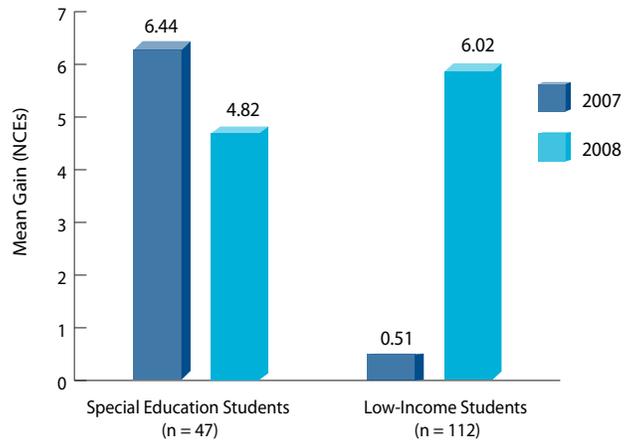
For Springfield Local Schools, no comparison groups were possible; students' achievement gains from 2007 to 2008 in mathematics were compared to the same students' gains from 2006 to 2007. Such an analysis permits comparison of growth rates for the same students; however, there is instability in estimates of year to year growth, and other factors besides the program may explain patterns of results. The overall gains made in mathematics by Math-Forward™ students on the Ohio Achievement Test were significantly greater from 2007 to 2008, the year students were exposed to the program, than they were from 2006 to 2007.

Figure 1. Overall Results for Springfield Students  
(Comparison of Gains on OAT)



Gains were not significantly different for special education students or for students eligible for free or reduced price lunches (Figure 2).

Figure 2. Subgroup Results for Springfield Students  
(Comparison of Gains on OAT)



Springfield is a case of a district where implementation was strong, and where the sample size of the MathForward™ group was large enough to detect statistically significant effects, so the results are not due to chance. At the same time, the differences between gains in 2007 to 2008 may have been caused by factors other than MathForward™. In addition, instability in estimates of gain scores from year to year make it difficult to determine whether measurement error or differences in test difficulty from year to year are the cause of the observed change.



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