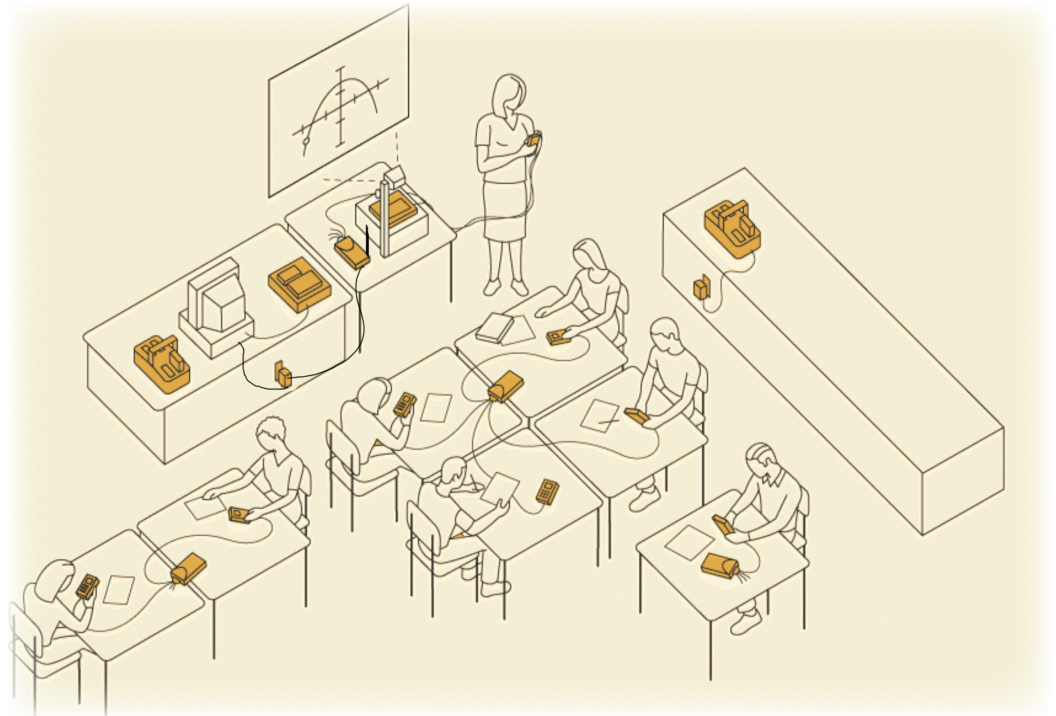


MathForward™

District Report



Levittown, NY Union Free School District

November 2008



Levittown, NY Union Free School District

District Context

Levittown Public Schools is a small district located in a suburban community of 53,000 people on Long Island, New York. The district is comprised primarily of White students, most from middle-income families. Relative to other districts in the state, mathematics scores in Levittown are above average. Five teachers from one of the district's two high schools participated in MathForward™ in 2007-08. About 180 students were part of the program. For the district, it was the first year of participation in the program.

Table 1. Characteristics of the Participating School

| | MacArthur High School |
|-----------------------------|-----------------------|
| Ethnicity | Percent of Students |
| African American | 1% |
| Hispanic | 5% |
| White | 90% |
| Asian/Pacific Islander | 4% |
| Native American | 0.1% |
| Free or Reduced Price Lunch | 7% |
| English Language Learners | 3% |
| Students with Disabilities | 15% |

Implementation of MathForward™

In 2007-08, Levittown's implementation was congruent with the MathForward™ program design, except that teachers did not have common planning periods to discuss the program.

| | |
|--|---|
| Professional Development | All teachers participated in initial workshops focused on program as a whole, the use of Navigator, and mathematics; nearly all participated in 5-6 days of follow up workshops and received coaching and feedback on their implementation from TI. |
| Block Scheduling | The school 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. |
| How Teachers Are Using TI-Navigator™ in Classes | Nearly all teachers made use of multiple TI-Navigator tools throughout the school year. When they used Navigator, three teachers sometimes used it to foster discussion; only two reported using feedback from the system to adjust instruction.* |
| Teacher Common Work Time | Teachers in the high school did not have regularly scheduled common planning time in which they could discuss MathForward. Teachers did report in interviews that they shared ideas informally about how to use TI-Navigator. |

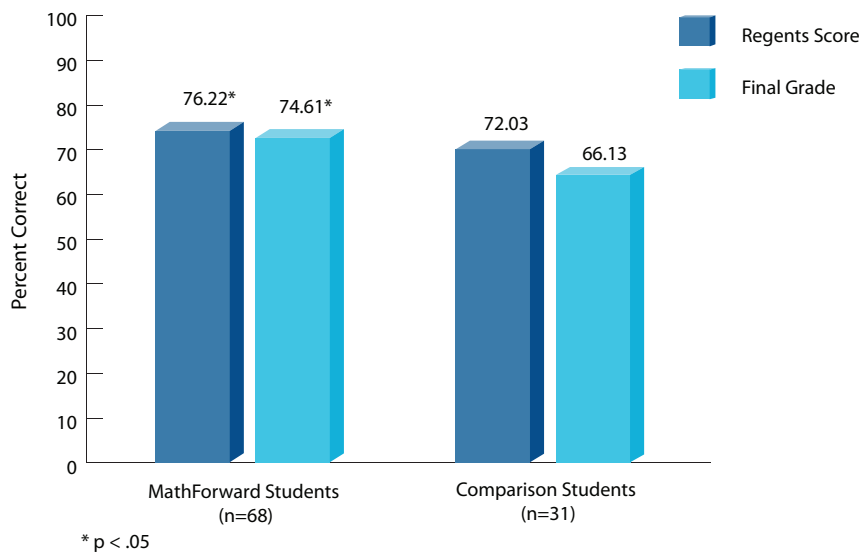
*Answer choices for teachers: hardly ever/never, sometimes, most of the time, nearly every time I used Navigator

Achievement Results

For Levittown, students randomly assigned to MathForward classes were compared with students not assigned to these classes. Random assignment to classes means that the threats to the validity of the findings are greatly reduced. Students final grades and scores on the state Regents examinations were both analyzed. Although the Regents examination is a state test with external validity, students take it in February. Final grades incorporate students Regents' scores but also performance in class in spring.

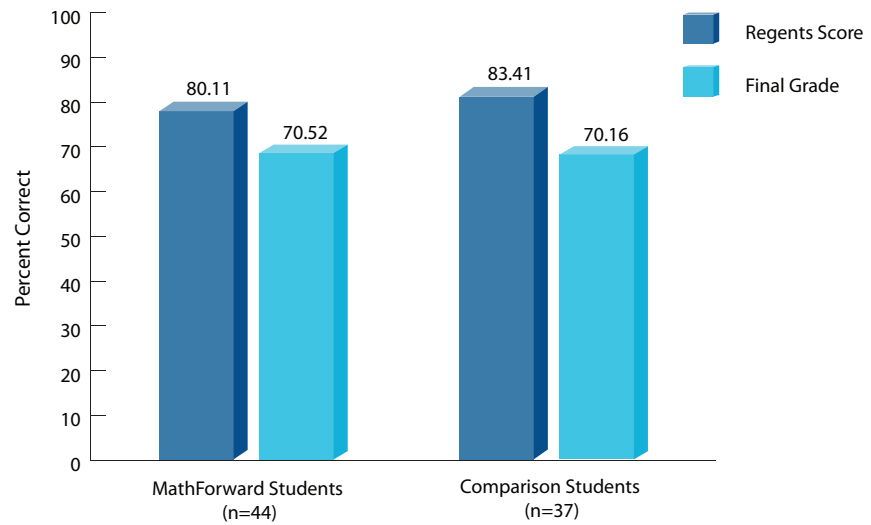
In the 9AX class, where implementation was high, student achievement in the MathForward group was statistically significantly higher than in comparison group on final grades for students' final grades and their Regents' scores (Figure 1).

Figure 1. Overall Results for 9AX Students in Levittown



In the 10AXBX classes, where implementation levels were somewhat more variable than in the 9AX classrooms, MathForward students' scores were not significantly different from comparison students on either their Regents scores or in their final grades (Figure 2).

Figure 2. Overall Results for 10AXBX Students in Levittown



Levittown is the case of a district where implementation was high and in which one of two grade levels' scores were higher for MathForward students than for comparison students. The differences in outcomes may have been due to several reasons, including the fact that implementation was lower for two 10AXBX teachers. Although the sample sizes were small for both groups, the observed effects were large enough among the 9AX students to be statistically significant.



SRI International
Center for Technology in Learning
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
650.859.2000
www.sri.com