Math 180®

Meets ESSA “MODERATE” Evidence Criteria

The Every Student Succeeds Act (ESSA) promotes evidence-based education programs by ensuring that programs are proven to be effective in increasing student achievement. ESSA includes four levels of evidence: strong, moderate, promising, and evidence that demonstrates a rationale. The ratings of the ESSA level of evidence reflect the quality, rigor, and statistical significance of the research study design and findings of the study.

PROGRAM OVERVIEW
Math 180® is a blended learning program designed to address the needs of struggling students in Grades 5 and up, and their teachers, equally—building students’ confidence with Mathematics and accelerating their progress to algebra.

EVIDENCE CRITERIA STUDY EVIDENCE & HIGHLIGHTS

Well-designed & well-implemented quasi-experimental design study (QED)

The QED study took place in four representative middle schools in the district. Two were chosen as Math 180 implementation and two were chosen as comparisons. The Math 180 and comparison group students were compared at baseline and determined to be statistically equivalent with respect to their level of Math achievement. Results were analyzed using matched pretest/post-test scores.

Students in the Math 180 classrooms were provided print materials and access to the software. Math 180 teachers were also provided start-up training and periodic coaching visits to ensure on-model program implementation. Students in the comparison group received their school’s usual supplemental Math instruction.

Large & multi-site sample, overlapping with populations or settings proposed to receive the intervention

Math 180 was studied in Clark County School District, a large regional district in Nevada. This Math 180 study, in combination with the Math 180 QED study conducted in Hillsborough County Public Schools, Florida, represents a multi-site sample.

ANALYTIC SAMPLE:

• Large and diverse school district
• 4 schools
• Grades 6–8
• 187 participating students

• 18% African American; 39% Hispanic; 28% Caucasian; 12% Multi-Racial; 4% Other

Shows statistically significant & positive effects

Students in the Math 180 treatment classrooms demonstrated significantly greater gains in Math achievement than students in the comparison classrooms. This differential growth was demonstrated using the Math Inventory® assessment with increasing levels of growth being associated with number of topics completed in the program.

Fall and Spring Math Inventory scores for Math 180 and comparison groups

Fall
Spring

Math Inventory Score (Quantile Measures)

Math 180 (n=87)
Non-Math 180 (n=91)

463Q 447Q 482Q 587Q

Change in Math Inventory scores by software usage (engagement)

Low Engagement (n=42)
High Engagement (n=45)

1920 510
DISTRICT: Hillsborough County Public Schools, Florida
STUDY YEAR: 2013–2014
STUDY CONDUCTED BY: RMC Research

EVIDENCE CRITERIA

Well-designed & well-implemented quasi-experimental design study (QED)

STUDY EVIDENCE & HIGHLIGHTS

The QED study took place in six representative middle schools in the district. Three were chosen as Math 180 implementation and three were chosen as comparisons. The Math 180 and comparison group students were compared at baseline and determined to be statistically equivalent with respect to their level of Math achievement. Results were analyzed using matched pretest/post-test scores.

Students in the Math 180 classrooms were provided print materials and access to the software. Math 180 teachers were also provided start-up training and periodic coaching visits to ensure on-model program implementation. Students in the comparison group received their school’s usual supplemental Math instruction.

Large & multi-site sample, overlapping with populations or settings proposed to receive the intervention

Math 180 was studied in Hillsborough County Public Schools, Florida. This Math 180 study, in combination with the Math 180 QED study conducted in Clark County Public Schools, Nevada, represents a multi-site sample.

ANALYTIC SAMPLE:

• Large and diverse school district
• 6 schools
• Grades 6–8
• 287 participating students

• 22% African American;
• 58% Hispanic; 17% Caucasian
• 41% English learners
• 35% Students with disabilities
• 79% Free/reduced-priced meals

Shows statistically significant & positive effects

Students in the Math 180 treatment classrooms demonstrated significantly greater gains in Math achievement than students in the comparison classrooms. This differential growth was demonstrated using the Math Inventory and NWEA® MAP® assessments.

Math Inventory Growth from Fall 2013 to Spring 2014

NWEA-MAP Score Growth from Fall 2013 to Spring 2014

To learn more about the research behind Math 180, visit hmhco.com/Math180

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