

# K–5 Meets ESSA “STRONG” 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. HMH’s evidence ratings are based on the U.S. Department of Education’s nonregulatory guidance for ESSA. Evidence ratings issued by clearinghouses and independent research agencies (e.g., Evidence for ESSA) may differ due to the varying criteria used to judge evidence.

## PROGRAM OVERVIEW

Houghton Mifflin Harcourt’s *Saxon Math™* K–5 provides a learning structure proven to advance students steadily and assuredly to higher levels of understanding by building on their prior learning so all students can master mathematics. In *Saxon Math* K–5, concepts from every math strand are woven together and connected throughout the year. Skills or concepts are reinforced throughout the years, helping students build a strong foundation of understanding.



**STUDY LOCATION:** 110 Schools across Connecticut, Florida, Kentucky, Minnesota, Mississippi, Missouri, New York, Nevada, South Carolina, and Texas

**STUDY YEAR:** 2007–2008

**STUDY CONDUCTED BY:** Mathematical Policy Institute

## EVIDENCE CRITERIA

Well-designed & well-implemented experimental study or Randomized Control Trial (RCT)

## STUDY EVIDENCE & HIGHLIGHTS

An experimental RCT study, where schools were randomly assigned to use one of four curricula, including *Saxon Math*, *Math Expressions*, Scott Foresman–Addison Wesley, or *Investigations in Number, Data, and Space®* at Grades 1 and 2.

Grades 1 and 2 teachers at the schools were assigned to use the curricula as their core math instruction for the entire school year. Over 98% of teachers reported using their assigned curriculum, while over 75% of those teachers reported using the *Saxon Math* K–5 curriculum as prescribed in the implementation guidelines.

Large & multi-site sample

*Saxon Math* K–5 was studied in 12 districts throughout the United States. While the sample was not a nationally representative sample, the sample included schools from urban and suburban areas with participating schools having a higher percentage of students receiving free or reduced-price lunch than the national norms.

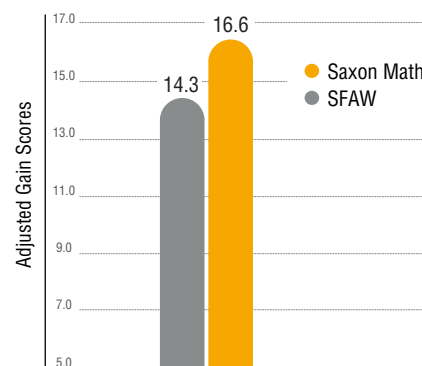
### ANALYTIC SAMPLE:

- Varied school districts with different levels of urbanicity
- 110 schools
- Grades 1–2
- 8,060 participating students

- 32% African American; 26% Hispanic; 39% White; 2% Asian; 1% American Indian/Native Alaskan
- 9% English learner

Shows statistically significant & positive effects

The results of the hierarchical linear modeling indicated that second-grade students in schools randomly assigned to use *Saxon Math* K–5 had significantly greater math achievement than students using the control curriculum Scott Foresman–Addison Wesley (SFAW), as measured by the math assessment designed for the Early Childhood Longitudinal Study.



To learn more about the research behind *Saxon Math*, visit [hmhco.com/saxonmath](http://hmhco.com/saxonmath)

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