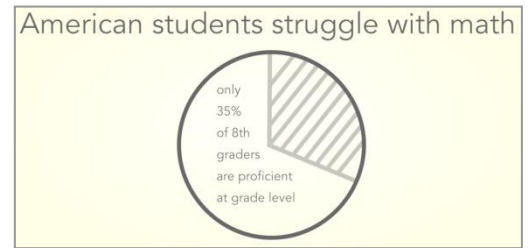


Facts About The RAND Corporation Research on Carnegie Learning's Blended Learning Curriculum in Algebra

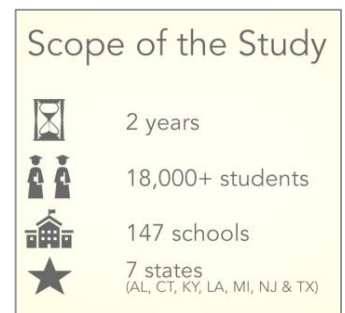
The Problem

- Only 35% of American 8th grade students score at or above proficiency for their grade level.
- Per the latest Trends in International Math And Science Study, U.S. 8th graders scored just above the international average, while the Program for International Student Assessment (PISA) shows 17 countries have higher average math literacy.
- Algebra is critical because it is considered a “gateway” subject for higher-level coursework, including college.
- 45 states have adopted Common Core State Standards for mathematics, meaning Algebraic concepts will be introduced as early as the 6th grade.



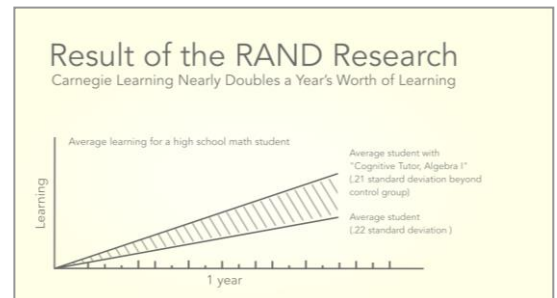
The Research

- U.S. Department of Education awarded RAND Corporation a \$6 million grant to study Carnegie Learning's Blended Curriculum Algebra I over two years.
- No other high school or middle school curriculum has been subjected to a study this comprehensive: 17,000+ students across 147 schools in 7 states.
- Schools were randomly assigned to the control or experimental group – abilities, demographics, geographic location, etc. – to ensure unbiased results.
- Schools did not receive extra assistance to implement the curriculum and researchers used “intent-to-treat-analysis” so data from schools failing to properly administer the program is included.



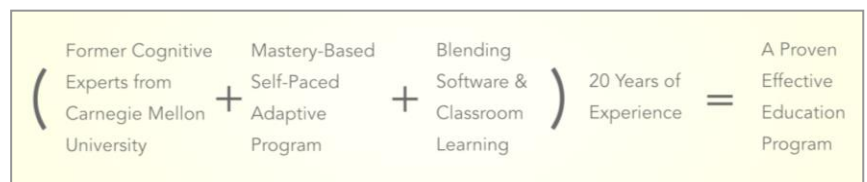
The Results

- On average, Carnegie Learning® Blended Curriculum (software and textbooks) moved students at the 50th percentile to the 58th - this is nearly double the gains of a typical year's worth of learning.
- The results are impressive because of the size, diversity, and age of participants.
- The curriculum served as an aid to teachers to improve their students' outcomes and researchers concluded students' improvements were not correlated to their teachers' implementation ability.



The Explanation

- The Carnegie Learning curriculum was created by cognitive scientists from Carnegie Mellon University working with experienced math teachers. It is engineered to adapt to individual students' understanding of algebraic concepts to improve their problem-solving skills.
- The Carnegie Learning curriculum focuses on deep understanding and problem-solving, which, while not the primary focus of the study, is a primary component of new standardized tests, like the Common Core State Standard assessments.
- A composite of 46 studies concluded that blended learning – which is a combination of face-to-face and online learning – is more successful than either approach by itself.



To learn more about the RAND Corporation research results and what it means for mathematics, visit www.AlgebraEffectiveness.org