



National Training Network

Methodology Research

Lancaster County Schools
South Carolina
2007–2008

Algebraic Thinking Results for Lancaster County Schools 2007 – 2008

Implementation: Lancaster County Schools began working with National Training Network to implement the Algebraic Thinking curriculum in middle grades in the summer of 2006.

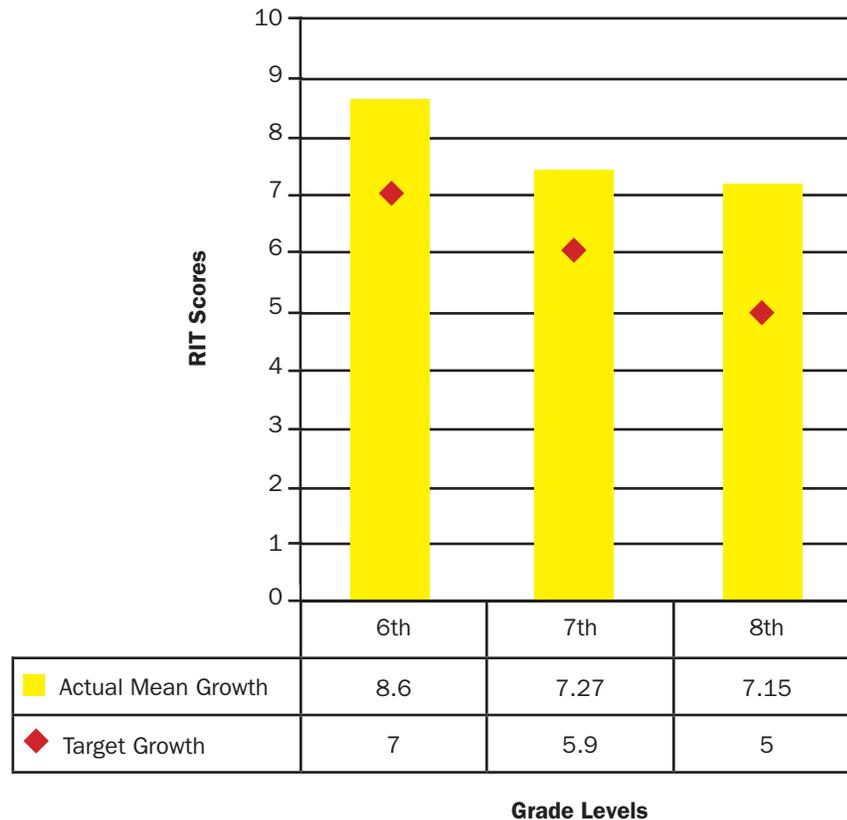
Training: Teachers were trained during the summer of 2006 and 2007.

Support: National Training Network provided onsite coaches in the middle schools in Lancaster County during the 2006 – 2007 and the 2007 – 2008 school years.

Placement/Course Eligibility: Seven hundred and eighty three (783) students were included in this study. These students were selected based on their previous year's end of grade RIT scores (bottom 55%) and teacher recommendation.



Lancaster County, SC RIT Scores For Algebraic Thinking Students 2007 – 2008



The graph illustrates the Actual Mean Growth as compared to the Target Growth expectations at Grades 6, 7, and 8 after Algebraic Thinking was implemented in the 2007-2008 school year. Note that at Grade 6, the students exceeded the growth expectation by **23%** of change (Actual Mean Growth 8.6-Avg. Target Growth 7.0); at Grade 7, the students also exceeded the growth expectation by **23%** of change (Actual Mean Growth 7.27-Avg. Target Growth 5.9); however, at Grade 8, the students exceeded the growth expectation by **43%** of change (Actual Mean Growth 7.15-Avg. Target Growth 5.0).

Information from Lancaster County Public Schools



“RIT” is an abbreviation for “Rausch Unit.” The difficulty and complexity of each ISAT test question is measured using the RIT scale. A student’s RIT score indicates that the student was answering questions correctly 50% of the time at that level of difficulty.

Distinguishing Features of RIT Scores:

- **RIT Scores Indicate a Student’s Instructional Level**

- The student’s RIT score indicates the level of questions that the student was answering correctly 50% of the time. These are the skills that the student should be working on right now. The [Learning Continuum \(pdf\)](#) and [DesCartes](#) match specific skills to RIT scores, so instruction can be planned at an appropriate level for each student.

- **The RIT Scale is an Equal Interval scale**

- The RIT scale is consistent, just like a ruler. One inch is always one inch, and one RIT is always one RIT. A student who grows from 165 to 170 shows the same amount of instructional growth as a student who goes from a 280 to 285 – 5 RIT points of growth.
- Because the RIT score is consistent, it can be used to accurately measure a student’s growth over a period of time.

- **RIT Scores are Completely Independent of Grade Level**

- There are “typical” RIT scores for each grade level, but every student is different. The RIT scale allows for students to be accurately measured regardless of their grade level.
- If a 3rd grade student earns a 210 on the Reading ISAT, and a 8th grader also earns a 210 on the Reading ISAT, these two students are at the same instructional level.

