

Math RTI

Action Research Project

Suburban Minnesota School District

Problem & Project Goal

- Eighty 1st – 5th grade students scoring below the 40th percentile on Fall '09 NWEA*
- Maximize mathematics achievement of target students by implementing a Math Response to Intervention (RTI) program

** does not include SpED and immersion students*

Math RTI Curriculum Research

Intermediate Grades – Math Elevations

- Comprehensive math intervention program for Grades 3-8 designed to help all students reach their grade-level expectations in mathematics.
 - Manipulatives for every lesson
 - Full color student books
 - Comprehensive assessments, diagnostic tests, lesson quizzes, and unit reviews
 - Engaging, interactive student software that automatically adjusts to the students' abilities (future implementation)



Math Elevations Curriculum

Research Based Instructional Approach

- Concrete - 'touch the math'
 - students *model* the math skill using manipulatives



Math Elevations Curriculum

Research Based Instructional Approach

- Representational – ‘draw the math’
 - students visually represent concepts on paper to *transform* the skill from the concrete to the abstract.



Math Elevations Curriculum

Research Based Instructional Approach

- Abstract – ‘think the math’
 - students *bridge* their understanding of the skill to the symbolic form of mathematics



Math RTI Implementation

Tier Schedules & Staffing

- **Staffing**
 - .5 FTE + paraprofessional support
- **1st grade**
 - 3 twenty minute sessions per week in Tier 2
 - 2 add'l twenty minute sessions per week in Tier 3*
- **2nd – 5th grade**
 - 3 thirty minute sessions per week in Tier 2
 - 2 add'l thirty minute sessions per week in Tier 3*

** Initial implementation of Tier 3 in progress May 2010*

Math RTI Implementation

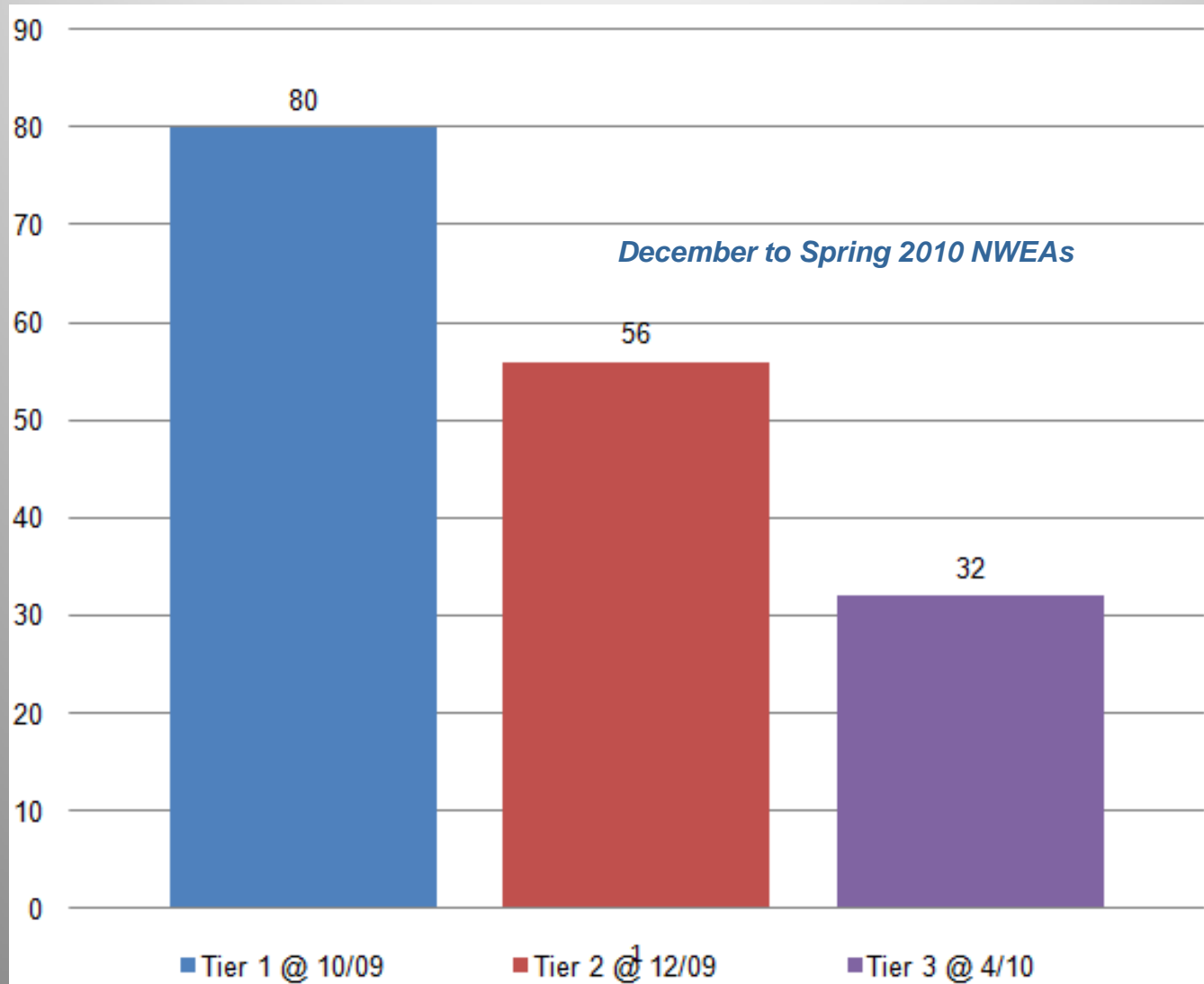
Identification of Target Students

- School's students in grades 1-5 scoring < 40% on Fall '09 NWEA (80) *
- AIMSweb CBM screening probes < 25% (also used for biweekly progress monitoring)
- Teacher input

** does not include SpED and immersion students*

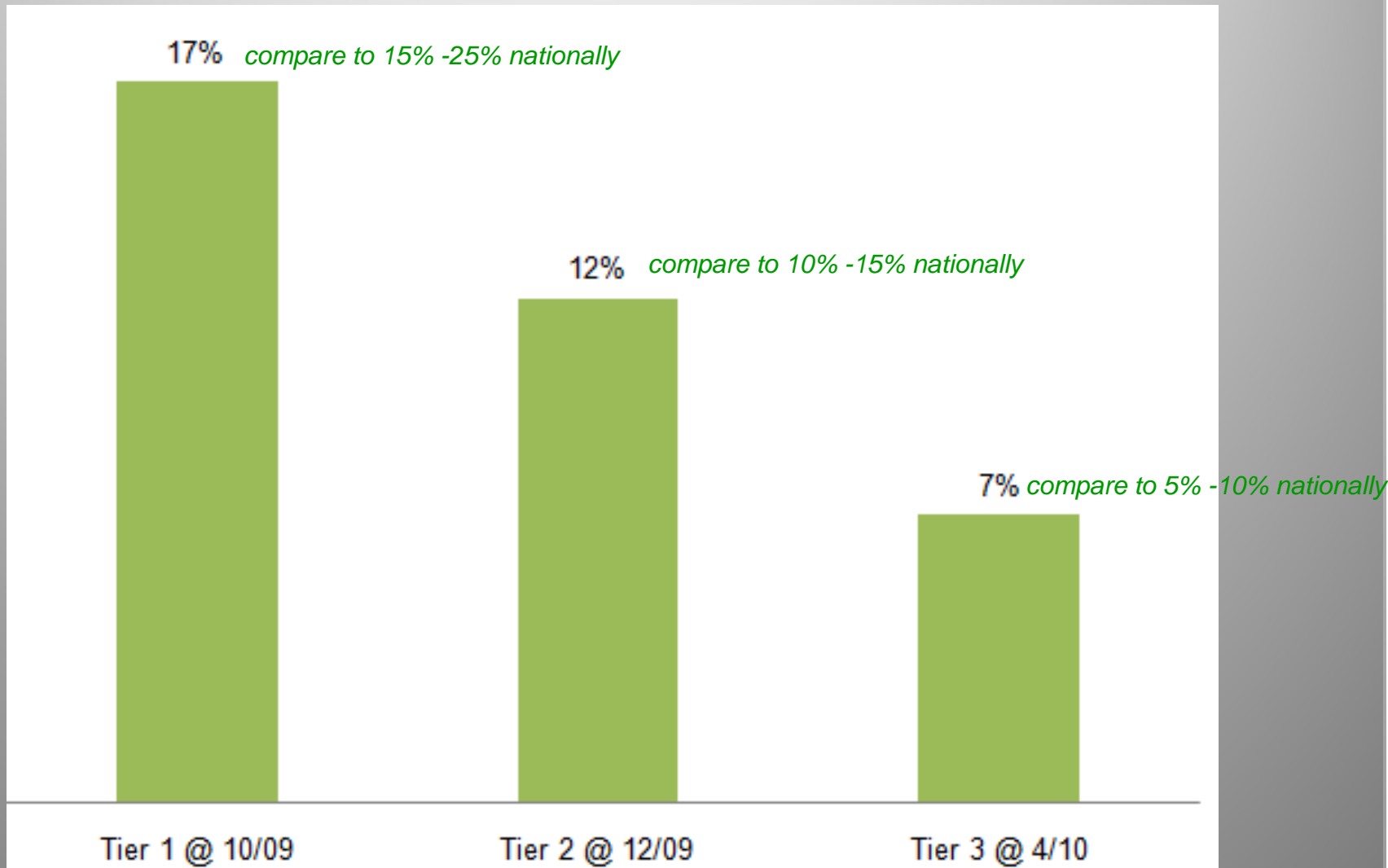
Math RTI Results

Number of Students by Tiers (grades 1-5)



Math RTI Results

Percentage of Students by Tiers (grades 1-5)

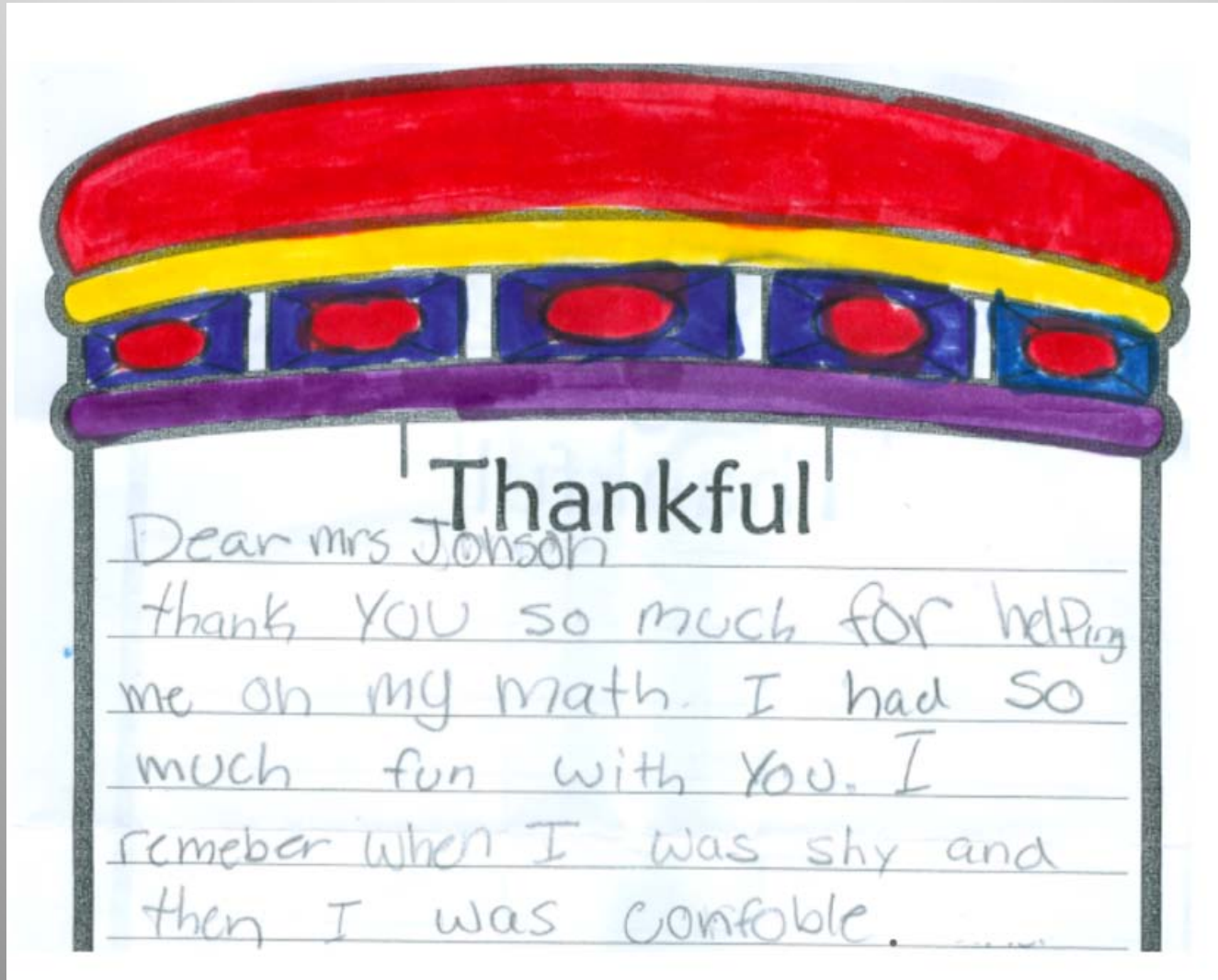


Math RTI Results

- 74% of our initial Math RTI Tier 2 students met their Fall to Spring NWEA target growth goal (64.1% MWA)

Math RTI

What the Data Doesn't Show . . . 😊



- a Math RTI fifth grader