Closing the Achievement Gap

St. Louis County Schools

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ISD 2142 St. Louis County Schools

Small Schools with Big Opportunities – Where Everybody is Somebody

- HOME
- STUDENTS
- PARENTS
- EARLY CHILDHOOD
- EDUCATION SERVICES
- COMMUNITY
- HEALTH SERVICES
- EMPLOYEES
- ADMINISTRATION

1701 N. 9th Ave.
Virginia, Mn 55792
Phone: (218)-749-8130
Fax:(218)-749-8133

Virgina
October 17, 2014, 12:00 am
Cloudy

isd2142.net/elementary-track-and-field-day-at-northeast-range/

St. Louis County Schools Needs Your Input for the Strategic Plan!

The St. Louis County School District is in the initial stage of developing a strategic plan. The school board is working with the Minnesota School Boards Association (MSBA) to provide guidance and assist with the planning.
The school board is seeking input from school district residents to help in identifying the school district's strengths and areas for improvement. School district residents can give the school board feedback by completing a survey. The information gathered from the survey will be analyzed by the MSBA and used to help identify school district strategic priorities.

- You can provide input by filling out the online version of the "St. Louis County School District Strategic Planning Survey;" just click [redacted]y.com/s/GYKSJHH before 11 p.m. on November 2, 2014, to fill it out;

Variables Impacting Student Success

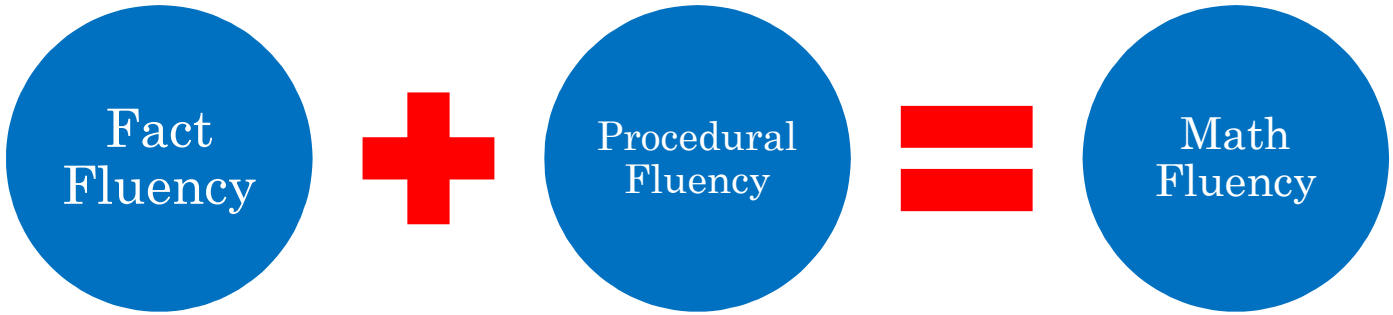
Quality of the Curriculum	Quality of the Instruction
Quality of the School Environment	Quality of the Student's Home Environment

- Schools control three out of four of the critical variables that determine student success in mathematics.

Fennel, 2002

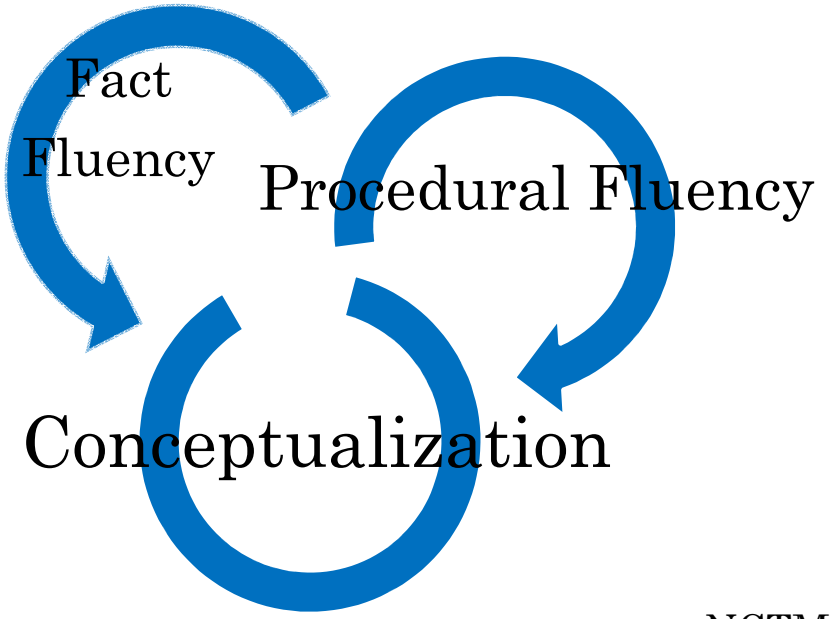
Traditional Paradigm

U.S. Math Education



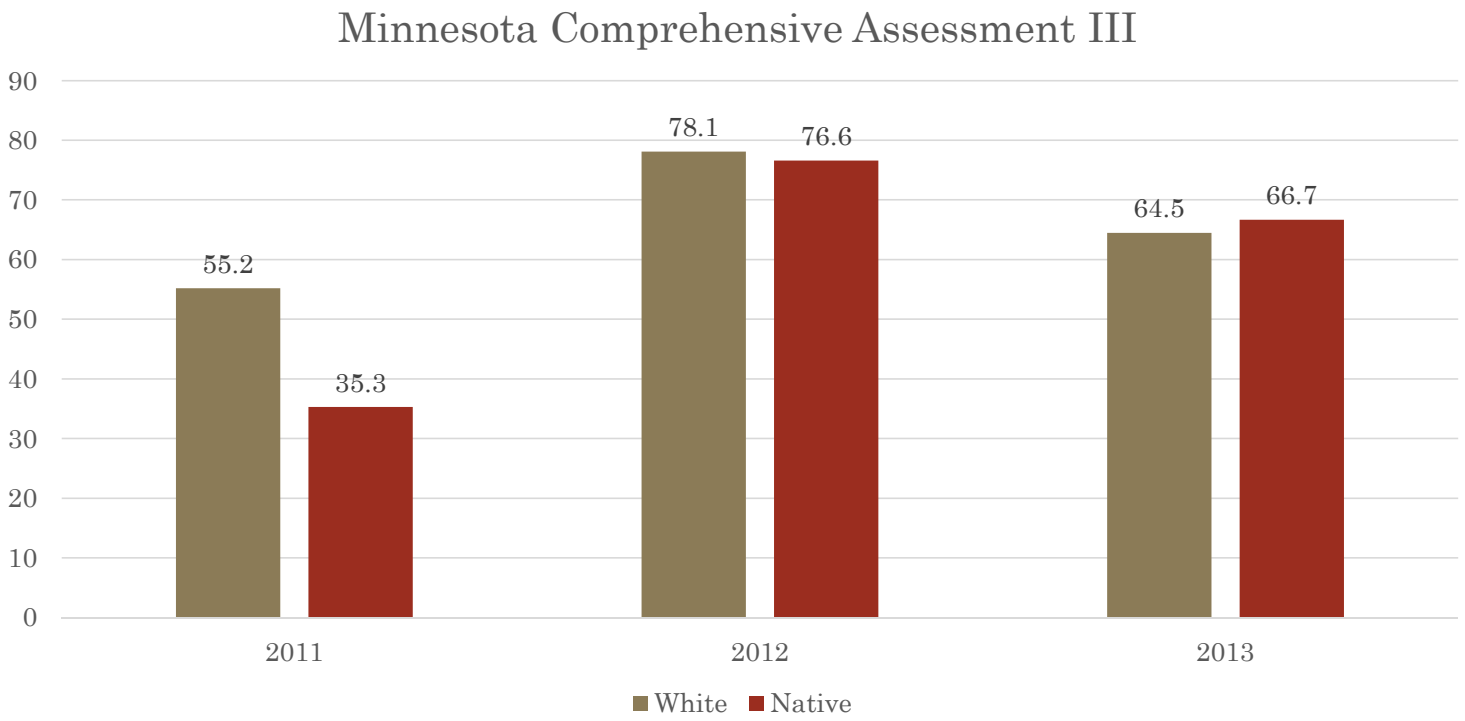
Modern Paradigm

Global Math Education



NCTM, 2000
Add it Up, 2001

Achievement Data (Grades 3-6)



Group Activity

5 Minutes

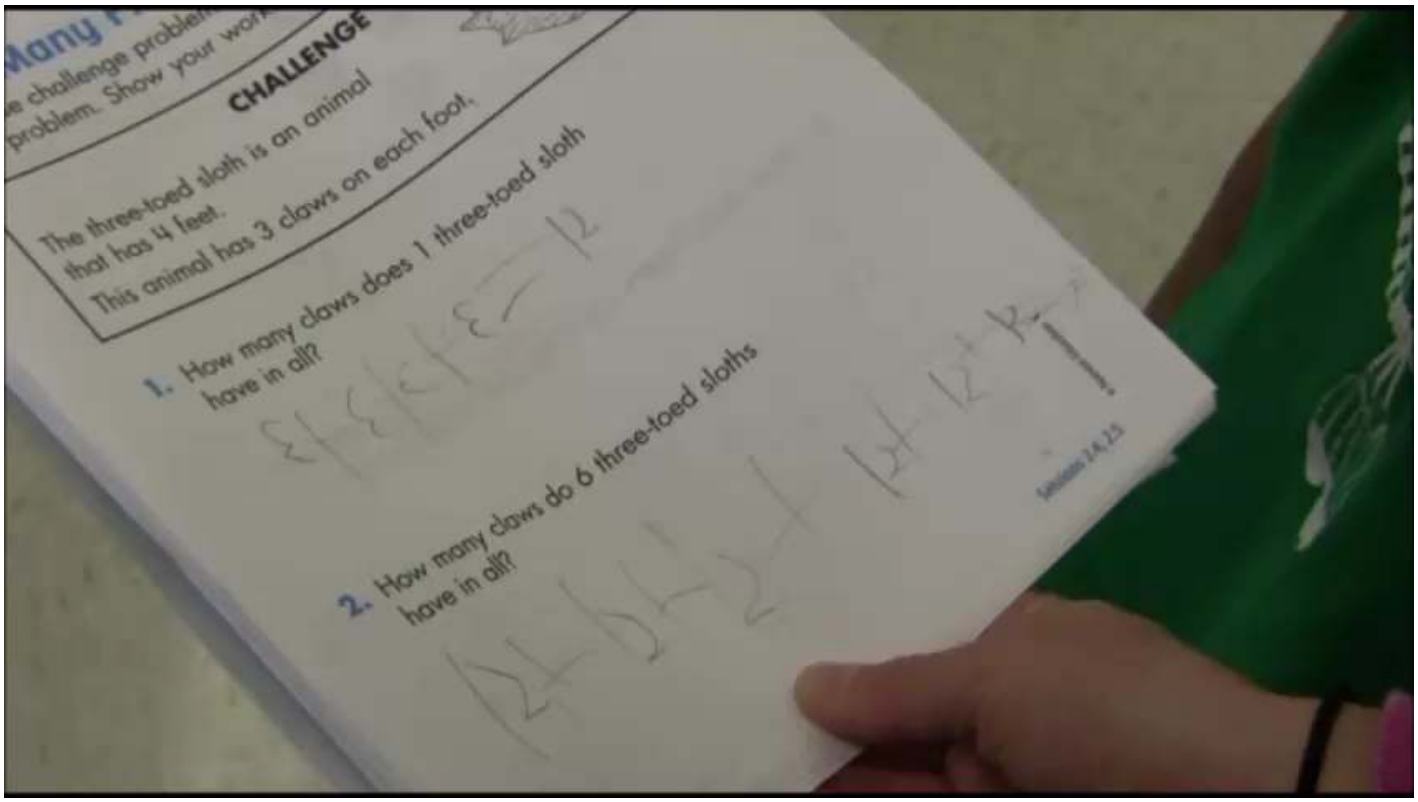
The Standards

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique reasoning
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

www.corestandards.org

Look for and express regularity in repeated reasoning

- Children notice similarities in problems
- Children create “shortcuts”
- Children understand place value
- Children use and understand invented algorithms for larger numbers



1st Grade Multiplication 6 x 12

Make sense of problems and persevere in solving them

- Children don't rely on teacher for solution
- Predictions to problems are reasonable
- Children recall information correctly
- Children can repeat question
- Children don't give up easily
- Children ask for harder problems

1st Grade Division with Remainder 14 ÷ 5

Reason abstractly and quantitatively

- Children can explain what numbers mean
- Children can write equations to problems
- Children can match numbers and objects
- Children understand operations
- Children use inverse operations
- Children use multiple solution strategies

1st Grade Addition (3-digit) with Regrouping 488+145

Construct viable arguments and critique the reasoning of others

- Children can prove their answer
- Children can disprove other answers
- Children can identify counterexamples
- Children use mathematical vocabulary
- Children make accurate predictions
- Children can explain another's solution

5th Grade Adding Unlike Fractions ½ + ¼ = ¾

Model with mathematics

- Children make statements such as, “that’s like…” or “hey we did this before!”
- Children can choose an operation that matches a problem
- Children can connect formal and informal notation
- Children can create a story problem

Kindergarten Non-Routine $3x + 2y = 36$

Use appropriate tools strategically

- Children use many manipulatives
- Children frequently draw math pictures
- Children have math journals
- Children can explain a solution by showing what the did with manipulatives or drawings
- Children use and understand metric and standard rulers

Attend to precision

- Children can use own words to define math concepts
- Children use math vocabulary to describe a solution
- Children are often asked to explain their solutions to class
- Teachers commonly rephrase thinking
- Teachers create many opportunities for children to share thinking

Look for and make use of structure

- Children understand inverse and relative operations
- Children use math facts to derive solutions
- Children notice numerical relationships
- Children use base-10 knowledge

Timberjay

46° Mostly Cloudy Complete Forecast | Wednesday, June 13, 2012 | Last Update: 6:00pm | tower math | Search

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Shops-Virginia area Automotive Legal/Financial Local Specialties

4/25/12 SHARE

COUNTY SCHOOLS

Board excited by math scores in Tower-Soudan

By Marshall Helmberger

School officials say they're excited by the apparent success of a new concept in math instruction that they believe played a part in improving test scores in the Tower-Soudan Elementary this year. The new program, known as Cognitively Guided Instruction, or CGI, allows students to use multiple approaches to solving math problems and once-skeptical teachers in Tower-Soudan told ISD 2142 school board members at a Monday study session that they've seen dramatic results firsthand.

"They couldn't say enough about it," said Tower-Soudan board representative Troy Swanson. "You could really see the fire in the teachers' eyes, and that's important. They said they would never teach any other way."

Currently the program is in place on a pilot basis in Tower-Soudan and at the North Woods Elementary. Test scores in Tower-Soudan did show a significant jump, but the results were less dramatic at North Woods. In Tower-Soudan, where test scores have typically lagged other elementary schools in the district, scores jumped to at or near the top in the district in every elementary grade tested.

The board plans to continue the program next year and expand it to more sites

27% proficient in 2010
90% proficient in 2011
Grades 3-6


d: Data - mishtadim@g
minncan.org/sites/minnc
'sites/minncan.org/files/report_cards/MinnCANTop10Schools.pdf
K-12 Edu...
Fantasy Football - Fr...
NFL.com - Official S...
TED | Talks | List
Illuminations: Welco...
LearnZillion
Khan Academy
TOP 10 ELEMENTARY SCHOOLS
Performance gains
T Traditional public school
C Charter school
RANK
NAME
% POINT CHANGE IN PROFICIENCY
1 T St. Louis County School District
Tower-Soudan Elementary School
31.1
2 C Aurora Charter School District
Aurora Charter School
29.1
3 T Long Prairie-Grey Eagle School District
Long Prairie Elementary School
24.4
4 T Grygla Public School District
Grygla Elementary School
21.1
5 C Cyber Village Academy District
Cyber Village Academy
19.3
6 C Learning for Leadership Charter School District
Learning for Leadership Charter School
18.4

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Thank you for attending!