



MATHEMATICS at Work™

EVIDENCE OF EFFECTIVENESS

Anoka-Hennepin School District ANOKA, MINNESOTA

Student proficiency in mathematics more than doubled from 2005–06 to 2012–13.



DEMOGRAPHICS

- 35.55% Free and reduced lunch
- 6.43% Limited English proficient
- 12.86% Special education
- 11.22% African American
- 4.49% Hispanic
- 7.32% Asian/Pacific Islander
- 1.44% Native American

The Anoka-Hennepin School District is Minnesota's largest, serving approximately 38,000 students and 248,000 residents. Anoka-Hennepin has 24 elementary schools, 6 middle schools (grades 6–8), and 5 high schools, plus alternative middle and high school sites, an award-winning Secondary Technical Education Program, and an online high school.

CHALLENGE

The faculty at the five high schools in the Anoka-Hennepin School District needed to work together to focus their energy on substantial changes in mathematics instruction and assessment. Student proficiencies on the Minnesota Comprehensive Assessment (MCA) were below state average with a combined percentage of 26% in the 2005–06 school year. Coon Rapids High School had the lowest proficiency of all five high schools and the highest percentage of students qualifying for free and reduced lunch. Assistant Superintendent of High Schools Jeff McGonigal—who was principal of Coon Rapids at the time—wanted those results to change.

After meeting Dr. Timothy D. Kanold and hearing about the Mathematics at Work™ strategies teachers and administrators could implement to impact student achievement, Jeff believed that this could be the change that would drive continuous improvement in Anoka-Hennepin.

IMPLEMENTATION

Dr. Kanold and nine of his Mathematics at Work™ colleagues came to Anoka-Hennepin, working on-site in each high school and middle school with course-based teacher teams. The consultants visited classrooms, providing meaningful and timely feedback. They also provided a full day of assessment professional development: writing quality exams, creating effective homework assignments, and conducting lesson studies. Their constructive feedback inspired reflection among the teachers and led to more effective mathematics assessment and instruction throughout the district.

Dr. Kanold also reviewed the overall mathematics program and provided an analysis for the district. Over time, he observed a shift away from the all-too-common routine mathematics teachers fall into—starting the class with a review of last night's homework, presenting the next concept from the front of the room, then assigning a new lesson. The Anoka-Hennepin faculty worked with the Mathematics at Work™ team to use more effective in-class teaching strategies and end-of-unit assessment strategies. Eventually, students worked more in peer teams on higher-cognitive-demand tasks to engage one another and gain a deeper understanding of their work. Teachers and students alike focused more on understanding mathematics concepts and demonstrating evidence of learning rather than simply memorizing a routine procedure to get an answer.

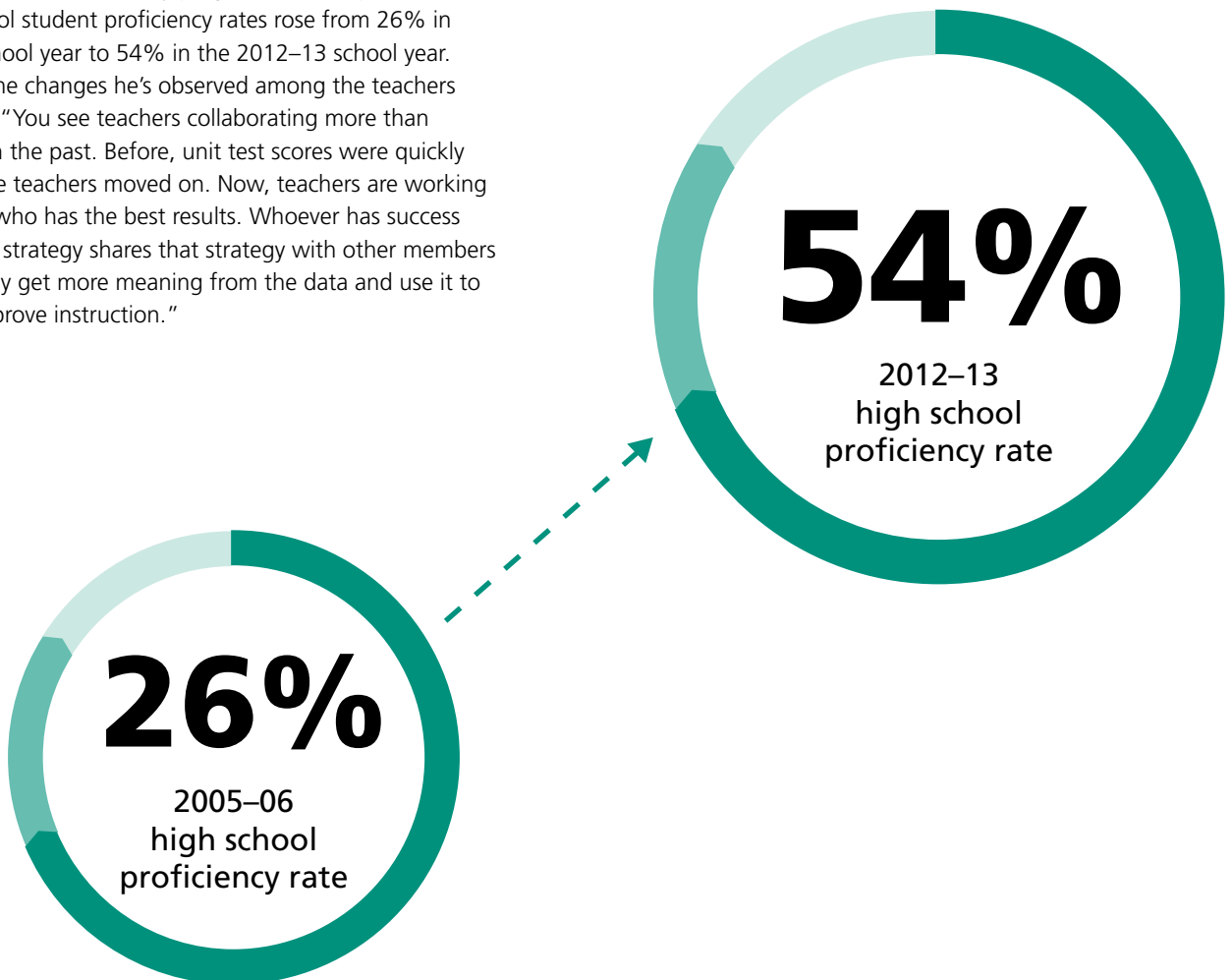


“Tim Kanold and his colleagues helped our teachers look at student data in a different way. Now, they work in collaborative teams to get real meaning from the assessments and use the information to improve instruction in all classrooms for all students.”

—Assistant Superintendent of High Schools Jeff McGonigal

RESULTS

The effort of the Anoka-Hennepin middle school and high school teachers has shown steady progress over the past several years. High school student proficiency rates rose from 26% in the 2005–06 school year to 54% in the 2012–13 school year. Jeff reflects on the changes he’s observed among the teachers at Coon Rapids: “You see teachers collaborating more than they ever have in the past. Before, unit test scores were quickly reviewed and the teachers moved on. Now, teachers are working together to see who has the best results. Whoever has success with a particular strategy shares that strategy with other members of the team. They get more meaning from the data and use it to continuously improve instruction.”



What sets this PD apart?

Integrated, responsive mathematics PD

Find out why an increasing number of educators are choosing to partner with Dr. Kanold and his colleagues. Tailored to satisfy the rigorous demands of the Common Core, their approach to mathematics stands out because it supports implementation that is:

Research affirmed

Gain implementation strategies informed by research that's been proven to impact and increase student achievement.

Practical

Maximize the impact of your implementation by assessing current practices and utilizing recommended strategies and helpful tools.

Paced unit by unit

Find out how to address the needs of your students, and work as a collaborative team before a unit begins, throughout its duration, and after it ends.

Rigorous and relevant

Adjust your current practices to satisfy the more challenging demands of the CCSS while ensuring content coherence, rigor, and focus.

Collaborative and sustainable

Make the most of your implementation by framing it within a professional learning community and the pursuit of equity for every child.

PD for every budget and schedule

Choose from a variety of options for maximum flexibility:

- General overview
- Half-day workshop
- All-day workshop
- Long-term, monthly on-campus coaching
- Long-term, yearly on-campus coaching

Find your rep!
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