THE WINNETKA PUBLIC SCHOOLS DISTRICT 36

Mathematics Goals & Measures

October 20, 2015

Essential Questions

- What conditions should organizations foster to support student growth and achievement in mathematics?
- What essential elements are necessary to achieve mathematical proficiency for all students?
- How do the proposed goals and measures for Mathematics support out District's Mission and Beliefs?

Math Implementation Overview

Year	Actions/Products
2011-2012	• Pre-Implementation Math Program Evaluation
2012-2013	• K-8 Common Core Aligned KUDs • K-8 Overarching Essential Questions and Understandings • Common Instructional Materials K-5
2013-2014	• K-8 KUDs implemented in classrooms • Teacher feedback and KUD revisions
2014-2015	• Review of supplementary materials • Revised scope and sequences to integrate materials • Materials adoption for Grades 6-8
2015-2016	• Proposed potential students outcome and measures • Post-Implementation Math Program Evaluation

Essential Conditions for Successful Implementation

- Shifts in Beliefs and Mindsets
- Develop a Written Shared Vision
- Designate Mathematics Leaders

"The Mission of The Winnetka Public Schools mathematics program is to engage all students in a challenging curriculum of high quality mathematics."

Student Learning Outcomes

- GOAL #1 : Students will demonstrate mastery of and fluency with grade-level content

- GOAL #2: Students will understand, apply, and demonstrate competency with the Standards for Mathematical Practice

- GOAL #3: Students will demonstrate a positive disposition toward mathematics

Goal #1: Students will demonstrate mastery of and fluency with content

Do our students…

- demonstrate both conceptual and procedural understanding?
- transfer or apply what they have learned to authentic situations?
- display strong number sense?
- display strong algebraic thinking?

Goal #1: Students will demonstrate mastery of and fluency with content

Current measures:

- Standardized, nationally normed assessments
  - STAR and PARCC assessments

Potential measures:

- Mathematical tasks aligned to grade level outcomes
- Technology based programs that support individualized instruction

Goal #2: Students will understand, apply, and demonstrate competency with the Standards for Mathematical Practice

Do our students…

- persevere when solving problems?
- use models to solve problems?
- apply reasoning to solutions?
- construct viable arguments?
- collaborate with other students to solve problems?
- use appropriate math vocabulary?
- recognize or seek out mathematical patterns?

Goal #2: Students will understand, apply, and demonstrate competency with the Standards for Mathematical Practice

Current measure:

- PARCC assessment data (not yet available)
- Standards for Mathematical Practice Matrix

Potential measure:

- Mathematical tasks aligned to grade level content
  - Silicon Valley Mathematics Initiative and Inside Mathematics

Goal #3: Students will demonstrate a positive disposition toward mathematics

Do our students…

- feel confident in their math abilities?
- see math as sensible, relevant, and important?
- understand that math is about more than isolated facts and procedures?
- understand that anyone can be good at math with reasonable effort?
- believe becoming mathematically proficient is worthwhile?

Goal #3: Students will demonstrate a positive disposition toward mathematics

Current measure:

- 5Essentials School Survey (Grades 6-8)

Potential measures:

- Research based self-perception survey
- Student interviews

Sample Matrix for Goal #1: Students will demonstrate mastery of and fluency with content

Measure: STAR	Spring Success Target
Growth	Percent of students exceeding typical growth (>SGP 50) at each quartile is at least 10% greater than State average
Achievement	Percent of students in quartile 1 & 2 decrease from 5% from previous year
	Percent of students in 90th percentile is at least 30%

Next Steps

Timeframe	Action/Product
Oct. - Feb.	Collaborate with District Math Committee to select math measures
January	Conduct post-implementation Math Program Evaluation
February	Provide clearly defined success targets for each measure
February	Provide recommendation to Board

Q&A