

The Joy of Discovering Mathematics

*Inspiring **ALL** K-5 Math Learners to Reach their Potential*



Oak Park Elementary School District 97

Committee of the Whole Meeting

January 28, 2025

Presenters:

Patrick Robinson, Assistant Superintendent for Elementary Schools

Dr. Tawanda Lawrence, Senior Director of Teaching and Learning

Jennifer Logan, Curriculum Coordinator (PreK-5)

What's the big idea?

The Joy of Discovering Mathematics

Inspiring **ALL** K-5 Math Learners to Reach their Potential



Agenda

01 Mathematics and
the Path to Equity

03 Timeline and Next
Steps

02 K-5 Math Curriculum
Committee Priorities for
SY24-25

04 Questions from the
Board of Education





“The powerful thinkers in today’s world are not those who can calculate fast, as used to be true; fast calculations are now fully automated, routine, and uninspiring. The powerful thinkers are those who make connections, think logically, and use space, data, and numbers creatively.”

—**Dr. Jo Boaler**



The Joy of Discovering Mathematics

Inspiring **ALL** K-5 Math Learners to Reach their Potential

Collaboration

Exploration

Real World
Application

Explain
the WHY

Make
Connections

Student
Choice

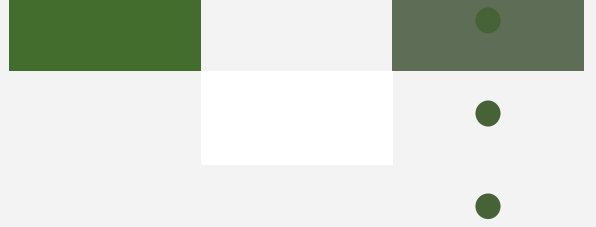
Productive
Struggle

Hands-on
Activities

Celebrate
Achievements

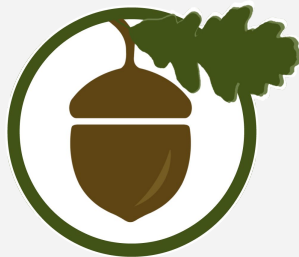
Curiosity





01

Mathematics and the Path to Equity



Board Policy 7:12 Ensuring Racial and Educational Equity



A: Equitable Access

"D97 shall provide every student with equitable access to high-quality instruction, culturally relevant curriculum, grade appropriate assignments, high expectations, facilities, and other educational resources necessary for them to succeed."



C: Eliminating Disproportionality

"District 97 will eliminate disproportionality in discipline, especially by race/ethnicity and gender, and support students' social, emotional, and cultural needs. The District shall achieve this through measures such as a district-wide emphasis on social-emotional learning and supports and culturally responsive teaching pedagogy."



F: Professional Development

"Our staff will also undergo training on the importance and value of a curriculum that is culturally relevant and not based on euro-centric traditions that have historically permeated all of our curricula. Teachers will continue to undergo training on effective in-class learning differentiation."



H: Recognizing and Valuing Diversity

"The District shall incorporate teaching and learning materials and assessments that are intentionally designed to reduce bias and are geared toward the understanding and appreciation of culture, class, language, ethnicity, and other differences that contribute to the uniqueness of each student and staff member."

THE FRAMEWORK FOR TEACHING

AT A GLANCE

DOMAIN 1

PLANNING AND PREPARATION

- 1a Applying Knowledge of Content and Pedagogy
- 1b Knowing and Valuing Students
- 1c Setting Instructional Outcomes
- 1d Using Resources Effectively
- 1e Planning Coherent Instruction
- 1f Designing and Analyzing Assessments

DOMAIN 2

LEARNING ENVIRONMENTS

- 2a Cultivating Respectful and Affirming Environments
- 2b Fostering a Culture for Learning
- 2c Maintaining Purposeful Environments
- 2d Supporting Positive Student Behavior
- 2e Organizing Spaces for Learning



THE
DANIELSON
GROUP

DOMAIN 4

PRINCIPLED TEACHING

- 4a Engaging in Reflective Practice
- 4b Documenting Student Progress
- 4c Engaging Families and Communities
- 4d Contributing to School Community and Culture
- 4e Growing and Developing Professionally
- 4f Acting in Service of Students

DOMAIN 3

LEARNING EXPERIENCES

- 3a Communicating About Purpose and Content
- 3b Using Questioning and Discussion Techniques
- 3c Engaging Students in Learning
- 3d Using Assessment for Learning
- 3e Responding Flexibly to Student Needs

Mathematics and the Path to Equity

1) Offer all students high-level content

Broaden the number of students who are given high-level opportunities is a clear way of improving achievement and promoting equity.

2) Work to change ideas about who can achieve in mathematics

The mindset beliefs held by teachers about learning mathematics open or close pathways for students. It is important for teachers to transmit growth mindset messages to students.

3) Encourage students to think deeply about mathematics

Many students, particularly girls prefer a connected approach to mathematics to understand why, when, and how methods work. When mathematics is taught in a connected, inquiry-based way, inequities disappear and achievement increases.

Boaler, 2022

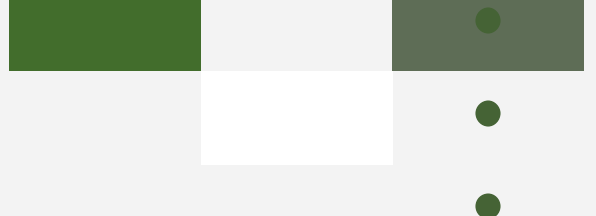
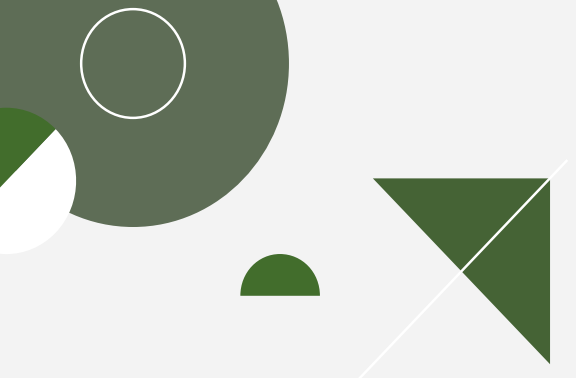
Mathematics and the Path to Equity

4) Teach students to work together

Research has shown the advantages of students working together for mathematics understanding and group work is also a critical strategy for countering racial inequities in mathematics.

5) Give girls and students of color additional encouragement to learn math

In addition to collaboration and inquiry-based approaches, girls and students of color need thoughtful and positive messages communicated with them about their valued place in mathematics.



02

K-5 Math Curriculum Committee Priorities for SY24-25



Meet the K-5 Math Curriculum Committee!

Math Curriculum Committee Members <i>Brooks Feeder Schools</i>		Math Curriculum Committee Members <i>Julian Feeder Schools</i>
Linda Chrystall - Hatch Taylor Bowman - Hatch Noah Zand - Hatch Rachel Wheatley - Lincoln Julie King - Lincoln Karri Spillane - Lincoln Courtney Tyler - Lincoln Don Shanahan - Lincoln Catina Burries - Lincoln Arnetta Thompson - Lincoln	Christy Carlson - Holmes Elizabeth Vietzen - Holmes Charlee Moss - Holmes Anna Kalember - Holmes Elisa Vella - Holmes Rosie Espinosa - Holmes Nicole Mendez - Holmes Taylor Kula - Whittier Leslie Weiss - Whittier	Mark Bulger - Beye Sarah Adduci - Beye Natalie Bauman - Beye Kara Sakellaris - Irving Betsy Parkinson - Irving Sara Falkin - Irving Jen Buckley - Mann Michelle Bolis - Mann Lindsay Golemes - Longfellow Ahzea Makhubu - Longfellow

K-5 Math Curriculum Committee Priorities for SY24-25

Priority #1	Gather feedback from all elementary teachers to inform the resource review process	✓
Priority #2	Develop a mission statement for K-5 mathematics to guide the selection of comprehensive resources	✓
Priority #3	Establish a shared understanding of the Illinois Learning Standards for Mathematics and evaluation tools	✓
Priority #4	Select two comprehensive mathematics resources to pilot during the 2025-2026 school year	✓
Priority #5	Identify the pilot units of instruction based on the scope and sequence and develop a professional learning plan	✓

Priority #1

Gather feedback from all elementary teachers to inform the resource review process

Grade Level Team	What aspects of the Enkwa Math resource have been effective in your classroom?	What barriers have you encountered with the Enkwa Math resource?	What features or qualities do you hope to find in a new mathematics resource for Tier 1 instruction?	Are there K-5 comprehensive mathematics resources for Tier 1 instruction that your team would like the Math Curriculum Committee to review as a potential resource to pilot and adopt district-wide? If so, please list this resource(s) and company below.	What areas of professional development to your team interested in exploring to advance your mathematics instruction?
Kindergarten	Math manipulatives, practice sets/worksheets for addition and subtraction, (it's easy to follow teacher's guide, workbooks are provided, easy to access online resources, and not a ton of teacher prep/teacher having to provide extra supplies.	Journals/worksheets/curriculum are not very engaging, challenging or intuitive. It's repetitive and boring. Teachers have to supplement a lot.	Engaging and intuitive student activities, differentiation built in, still easy to follow, materials/worksheets included, easy to access online resources, possibly having an app or tech engagement piece. Small group activities included. Everything provided including workbooks.	Bridges (if not using for tier 2)	Rocket Math (if app)
First Grade	exit tickets, application problems, problem set workbooks, differentiated problem set, homework books.	not having all of the materials necessary (ex. 5-group cards), not sufficient time to get through a lesson and still have to appropriately differentiate, not kid-friendly language, don't like the Enkwa final assessments, Enkwa terminology, hard program for at/below grade level students, ignores and quick.	Differentiated component, kid-friendly, centers provided, student tech component	Savvas, Everyday Math, Bridges	If we get a new curriculum, official training from the curriculum.
Second Grade	Problem Set/Exit Tickets.	Length of lesson, the language is not child-friendly too wordy for math. Differentiation is lacking.	Differentiated options available for classroom/homework, kid-friendly language, less words more math.	N/A	Training on the new curriculum.
Third Grade	Everyday fluency, application problems, it aligns with Zoom, and good math strategies are taught.	Lack of manipulatives, curriculum doesn't spiral, no games, workbook isn't engaging nor does it have enough space for students to show their work.	Math games, application problems, more spiraling of the curriculum, an online option like MyMath or SplashLearn, student material more engaging (color, etc)	Everyday Math, My Math.	Math games, small group resources for standards tier++
Fourth Grade	Providing multiple strategies and tools for solving word problems and comparison. The fluency Spirals and Exit Tickets as formative assessments.	No resources and manipulatives and not having colored blocks to help students. There is no online component.	As mentioned above and built in enrichment activities and PBL.	Everyday Math was effective as it had spiraling approach and revisited skills.	Teachers should be introduced to Building Thinking Classrooms.
Fifth Grade	I appreciate the structure of the lesson with Zoom (we use Zoom to preview), lesson instruction with video support (if needed), Problem Set, Homework Problems for extra practice, and daily exit tickets.	We try to pace at one lesson a day, which is sometimes too fast. Also - drawing tape diagrams and area models for some students is challenging, their success is varied more in understanding the standard algorithm process.	If a new math curriculum came with supplemental ideas for both enrichment and reinforcing the basic lesson goal, this would be helpful - especially for small group instruction.	Our team has only worked with Enkwa Math, and we have not used additional resources, so I am not aware of anything different.	Our team would love supplemental ideas to creatively use.

Grade Level Team



- ➔ Provided time to reflect on their mathematics instruction and current adopted resource
- ➔ Submitted a survey reflecting their thoughts on effective resources to support student learning and professional learning opportunities to enhance their practice

Building Leadership Team

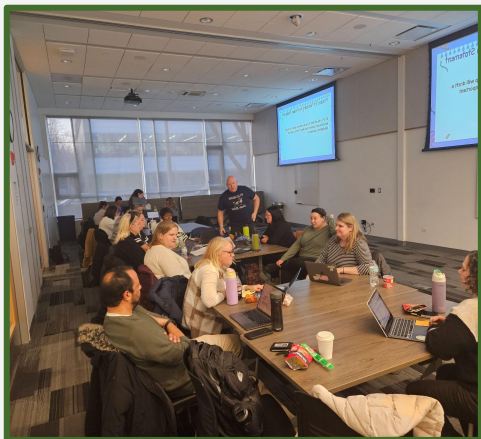


- ➔ Conducted a meeting with each Building Leadership Team to discuss the grade level survey results for their school and share the resource review and pilot plan



Priority #2

Develop a mission statement for K-5 mathematics to guide the selection of comprehensive resources

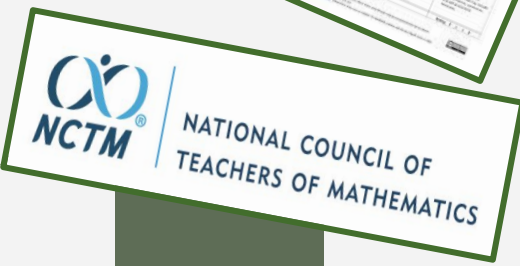
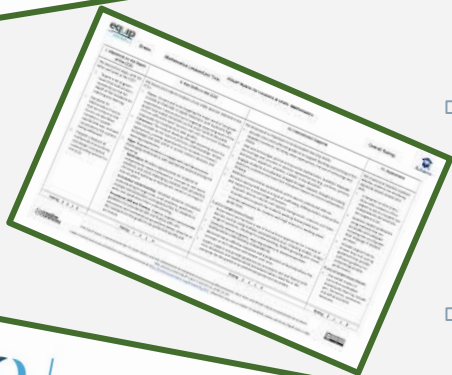


K-5 Math Mission Statement will...

- ➡ Outline the overall purpose, values, and intended student outcomes of the K-5 mathematics program
- ➡ Serve as a guiding compass, ensuring the resource fulfills the mission and effectively supports the learning of all students
- ➡ Focus the evaluation of pilot resources on its content, learning objective, and teaching method alignment to the mission statement

Priority #3

Establish a shared understanding of the Illinois Learning Standards for Mathematics and evaluation tools



- ➔ Engaged in a deep dive into the Illinois Learning Standards for Mathematics and the Common Core Shifts
- ➔ Analyzed the standards and shifts, to help identify pilot resources that align with these expectations and support our district's unique needs
- ➔ Allowed the committee to level-set our understanding and ensure all committee members are equipped to evaluate potential math curricular resources effectively
- ➔ Established a shared understanding to guide the committee in making an informed decision to select pilot resources that foster mathematical growth and success for all students

Priority #4

Select two comprehensive mathematics resources to pilot during the 2025–2026 school year

3 Stage Process: K-5 Math Resource Selection

Stage 1

Identify Resources to Review

Gather math resources recommendations from various stakeholders and school districts

Utilize EdReports to identify resources that Meet Expectations

Provide a survey of questions to all vendors

Score vendor survey responses & identify 5–6 vendors to present to the committee

Stage 2

Select Resources to Pilot

Conduct vendor presentations for 5–6 resources

Utilize demo accounts to explore each resource

Rate each resource utilizing the agreed upon evaluation tool(s)

Utilize a decision-making protocol to select 2 resources to pilot

Stage 3

Conduct Pilot & Gather Data

Conduct pilot of two resources at the selected pilot schools

Gather feedback from teachers, students, & families

Analyze pre/post assessment data

Rate each resource utilizing the agreed upon evaluation tool(s)

Utilize a research-based framework to determine resources to recommend for adoption

Priority #5

Identify the pilot units of instruction based on the scope and sequence and determine professional learning needs

Pilot Units of Instruction



- ➔ Review the D97 scope and sequence for mathematics that includes the Illinois Learning Standards that students need to know and be able to do by the end of each grade level
- ➔ Select units of instruction for each pilot resource that aligns with the priority standards identified in the D97 scope and sequence to ensure each standard is taught by the end of the school year
- ➔ Support teachers with reporting on student progress in mathematics to families

Professional Learning Opportunities



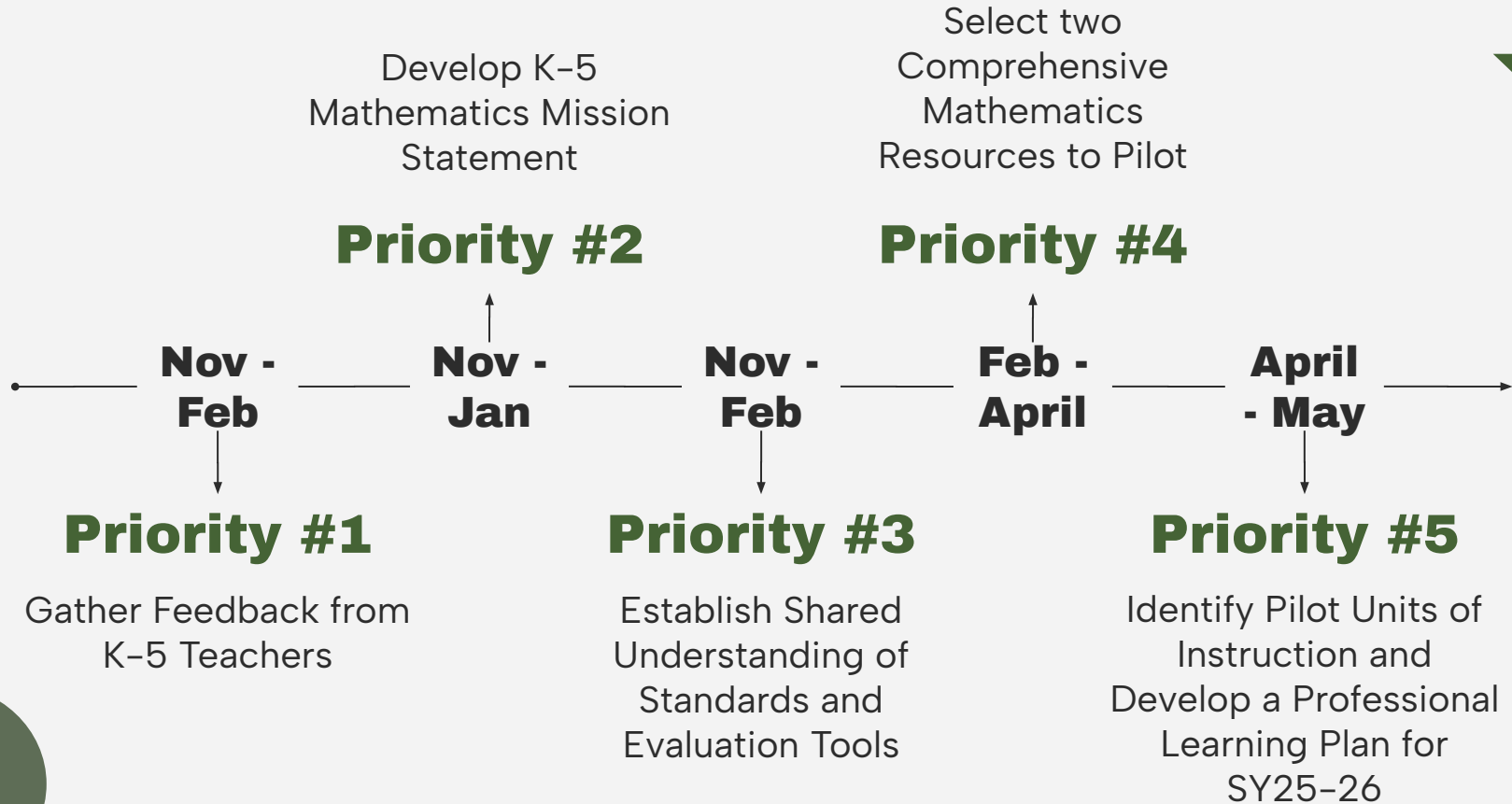
- ➔ Design professional learning opportunities for K-5 teachers to support mathematics instruction
 - Pilot Schools – Initial and follow-up coaching for pilot resources
 - Non-Pilot Schools – Apply strategies from *Mathematical Mindsets* by Jo Boaler and *Building Thinking Classrooms* by Peter Liljedahl

03

Timeline and Next Steps



SY24-25 Timeline and Next Steps



04

Questions

from the Board of Education

