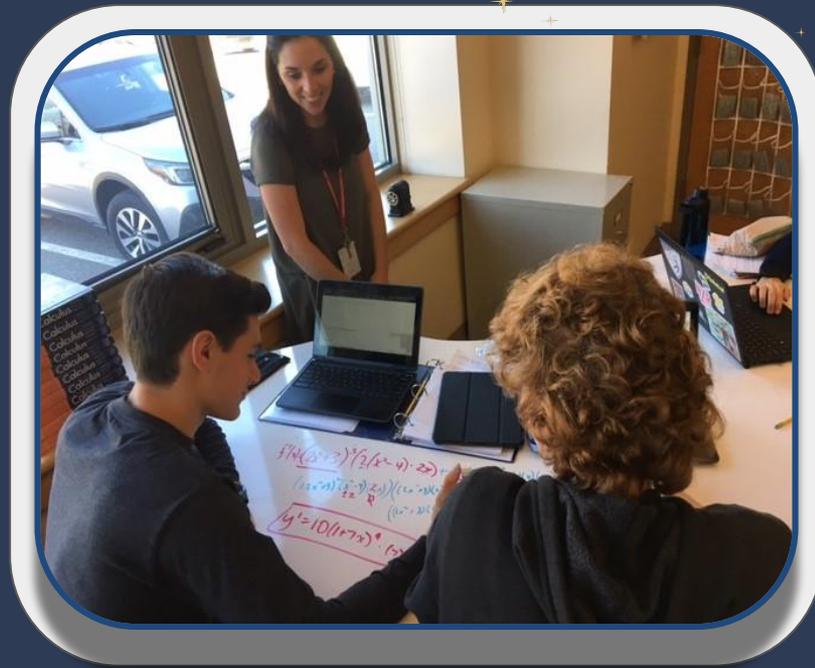


Math K-12

CIA Subcommittee Presentation

June 5, 2023



Agenda

Elementary Mathematics

- Bridges in Mathematics
 - Goals and Objectives
- Structure & Implementation
 - Professional Learning
 - Priorities
 - Sharing Our Practice

Secondary Mathematics

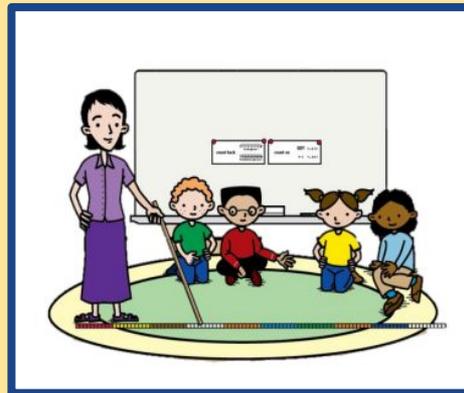
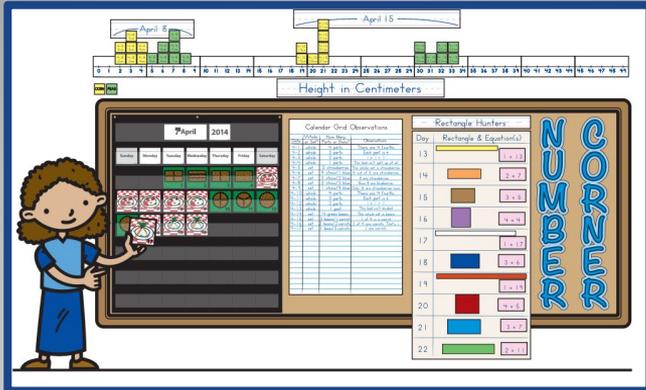
- Who We Are Math 6-12
- Involvement in School Community
 - What We Teach - FLMS
 - FLHS Math Courses
- What's New & Short Term Goals
 - Where We Are Going

Bridges Goals and Objectives



- A **comprehensive** curriculum
- Fully **aligned** to the Next Gen Mathematics Learning Standards both **Content** and the Standards for Mathematical **Practices**
- **Rigorous, coherent,** and **engaging**
- **Accessible** to all learners
- A blend of **direct instruction** with **investigations** and **explorations**

Daily Structure



Number Corner



Problems & Investigations



Work Places

20 Minutes

60 Minutes

Implementation 2022 -2023



K - 2

Number Corner

Problems and Investigation

Work Places

3 - 5

Number Corner

Math In Focus

A Sneak Peek Into Our



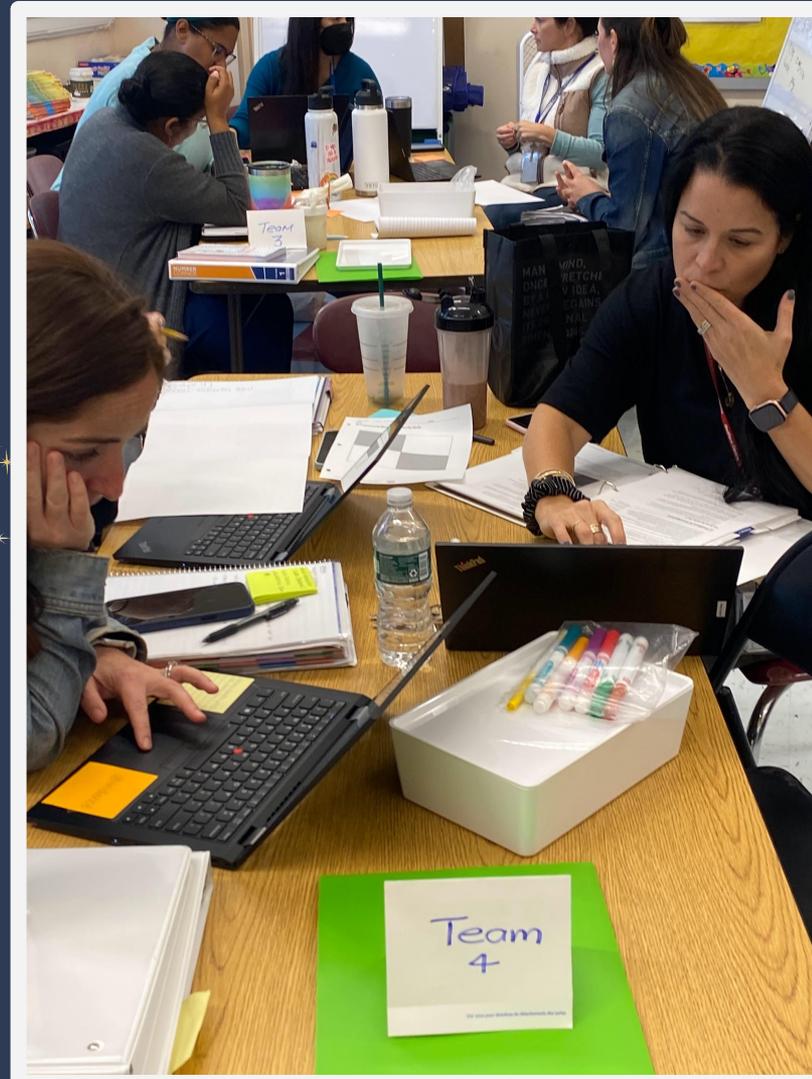
Mathematics Classrooms



Coaching Structure

January

				1	2	3
					BVES	
4	5	6	7	8	9	10
	PRES	PRES		WPES	WPES	
11	12	13	K 3rd	15	16	17
	BHES	BHES		MKES	MKES	
18	19	20	1st 4th	22	23	24
	BVES	BVES		PRES	PRES	
25	26	27	2nd 5th	29	30	31
	WPES	WPES		BHES	BHES	



Professional Development

Sample Agenda

Successes & Challenges

Review Assessments

Unpack Unit – Concepts,
Models & Strategies

Review Work Place Games

Team planning Time



K - 2 Monthly 8:00 - 11:00

3 - 5 Monthly 2:00 - 3:20

2022 - 2023 – Phase I

- Getting Started with Bridges Workshops – **K-5 and 3-5 teachers**
- Monthly Bridges Unit and Number Corner Learning Sessions – **K-2 teachers**
- Number Corner Learning Sessions – **3-5 teachers**
- Intervention training (6hrs) – **Tiered Support teachers**
- Introduction to Bridges training (3 hrs) – **Learning Specialists**
- Introduction to Bridges training – **IA's and TA's**
- Introduction to Bridges training (5 hrs) – **Manhattanville Interns**
- **Coaching** sessions and **modeling** lessons
- Working with **individual and small groups** of students

- Spring 2022 Webinar
- Grades K - 5 Parent Information Night

2023 - 2024 – Phase II

- **K - 2 Teachers:** Monthly 2-hour learning sessions – differentiation, looking at student work and assessments and Standards for Mathematical practices
- **3 - 5 Teachers:** Monthly 2-hour Learning Sessions – unpack the Bridges Units
- **Tiered Support and Learning Specialists:** Intervention Training to engage in a deeper dive into the Intervention Program
- **New To Grade Level Teachers:** Unpack the Bridges Units and implement coaching cycles
- **Model lessons** and support classroom instruction
- **Data Analysis:** Collect and analyze data. Engage in data conversations with building level teams

- Fall 2023 – Grades 3-5 Math Parent Night
- What to Expect by Grade level
- Spring 2024 - Family Math Night
- Monthly Highlights for Families

2024 & Beyond – Phase III

- **K-2 Teachers:** Continuous Improvement – Focus is on listening to teacher feedback and observing teacher practice with a goal of continuously improving teacher support and student outcomes
- **3 - 5 Teachers:** Monthly 2-hour learning sessions – differentiation, looking at student work and assessments and Standards for Mathematical practices
- **New To Grade Level Teachers:** Unpack the Bridges Units and implement coaching cycles
- **Data Informed Decision Making:** Examine progress to goals, identify key successes, and learn from and solve significant challenges. Consider key indicators, make adjustments and plan for the next level of work

- What to Expect by Grade level
- Spring 2025 - Family Math Night
- Monthly Highlights for Families

Sharing In Practice

Making Fraction Strips

- Participating with length models is critical to understanding fractions as numbers and is a good way to transition from area to length models (because they still have area).
- These strips are powerful visual tools that allow students to see the relative size of fractional regions, which is a key concept in understanding fractions.
- Making fraction strips is a hands-on activity that can be used to explore...

In 2nd-Grade, The Learning Continues ...

It started in the classroom right after Spring Break when our second-grade students took their scientific skills to the next level by planting seeds and measuring their seedlings' growth daily. They even charted their findings on a class line plot, which making interesting observations. Fast forward a few weeks, and the second graders at MKES transferred their thriving plants to the garden. They learned important lessons, like making the perfect hole for each seedling based on its container size. And, for those classrooms without direct sunlight, they figured out why their plants took a little longer to grow.



- Teachers maintain an up access.
- Word Resource Cards as math vocabulary.
- Number Corner lessons!
- Number Corner Student assessments.

- Hastings on the Hudson- Bridges Units and Number Corner
- Katonah Visit – Bridges Intervention
- FLMS 6th-grade math teachers – Number Corner
- Weekly Updates



Who We Are

Math 6-12



6th Grade

Dan Caffrey
Danielle Mazzella
Mandi Smalley
Katya Martinez
(ESOL & RTI Support)

7th Grade

Mike Mullen
Alex Atha
Jessica Samoilis

8th Grade

Maria Cambareri
Laura Cirincione
Emily Fenter

High School

Sarah Bazzano
Matt Kimmerle
Rob Morant
Jon Swart

Michael Broder
Alex Kuritzky
Vilma Olego
Will Rolon
(Hillside)

Brittany DaRos
Maria Mazzamuto
Steve Petrillo
Bill Tozzo

Toni Hamilton
Tom McGinn
Liz Sansone
Carols Arias (ESOL IA)



Involvement In School Community

Teachers

- Athletic Coaches
- Instructional Coaches
- Mentors for ASPIRE Students Club Advisors: Mathletes & Girls that Code
- Class Advisors
- Mentors to Student Teachers & Interns
- AVID Strategies
- Support for ESOL students



FLHS Math Courses

ESOL Math
Algebra 1
Algebra 1A
Algebra 1B

Geometry
Geometry Honors
Geometry with Lab
Quantitative Geometry

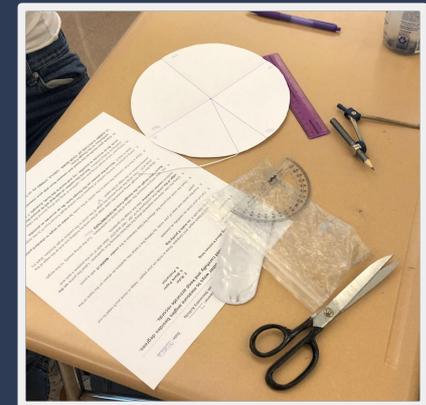
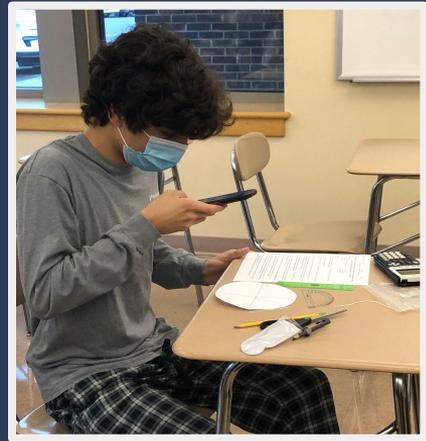
Algebra 2 and Trig
Algebra 2 & Trig H

Precalculus
Precalculus H

Calculus
AP Calculus AB
AP Calculus BC

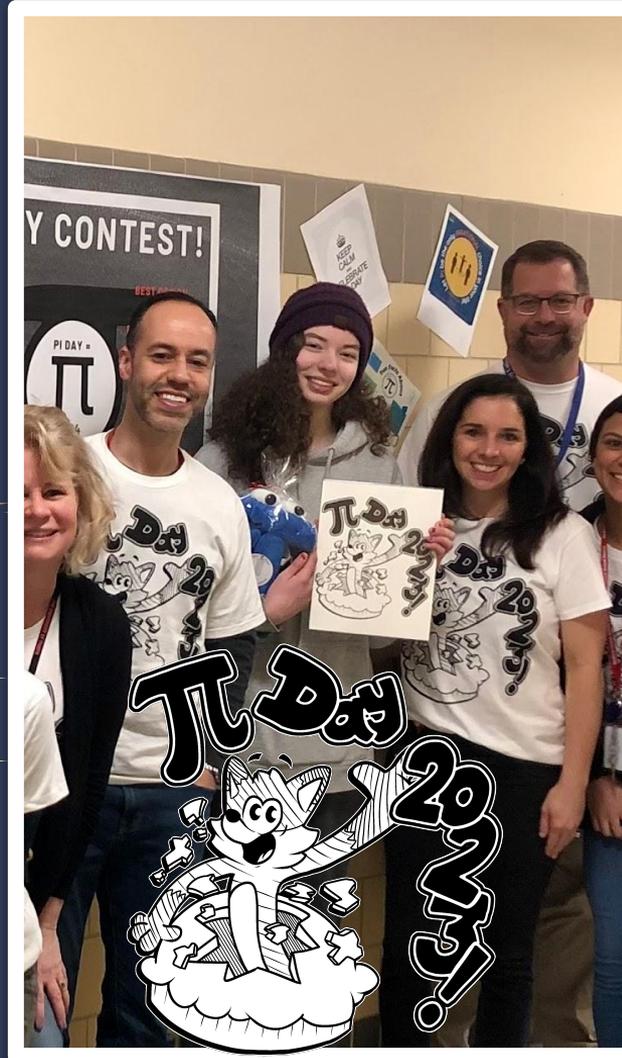
Intermediate Algebra
College Algebra w/Trig
Financial Algebra
Statistics
AP Statistics

[Math Pathways](#)



What's New & Short Term Goals

- Dept. Goal
- 6-12 Curriculum Development and Alignment
- Introduced new Math Lab supports
- New course offerings & Dual Enrollment with WCC
- Increase student, School & Community Involvement
 - 6-12 Pi Day Celebration
 - American Mathematics Competition (AMC)
 - Mathletes
 - Girls that Code MS & HS
- Build upon K-12 Partnerships
 - Members of the K-5 Math Committee
 - 6th Grade teachers visit elementary schools to see Bridges in action



Where We Are Going

2-5 years

- Continue to update how and what we teach.
- Engage department in meaningful and productive professional development opportunities
- Expand Math Celebrations
- Continue collaborating with elementary colleagues

Long Term

- Optimize course offerings through curriculum alignment and development
- Continue to work together to create a dynamic and seamless K-12 mathematical experience for our students.
- Reflect and enhance course offerings
- Considerations for Bilingual Support
- Curriculum Resources
- Interdisciplinary opportunities

