## TRUMBULL PUBLIC SCHOOLS TRUMBULL, CONNECTICUT

Curriculum Committee of the Trumbull Board of Education

Regular Meeting
Via Audio Conferencing\*

Thursday, May 20<sup>th</sup>, 2021, 8:00 a.m.

### **MINUTES**

I. Call to Order/Introduction. The meeting was called to order by Mr. Ward at 8:15am.

Members Present	<b>Others Present</b>
M. Ward, Chair	Adeline Marzialo
L. Timpanelli	Kristen Kravecs
M. Petitti	Katie Laird
S. Iwanicki, Ed.D., ex officio	Elizabeth Copabianco
	Nancy Cibororwski
	Mary Santilli

- II. Correspondence / Public Comment (The public can send comments via e-mail to siwanick@trumbullps.org; comments will be summarized as Correspondence received.)

  Mr. Ward and Dr. Iwanicki noted that the public was invited to send any comments via email, and that none had been received.
- III. Approval/Minutes Regular Meeting 03/18/20201 Ms. Timpanelli moved to approve the Minutes as presented. Mrs. Petitti seconded. The motion was unanimously agreed to.
- IV. K/1 Elementary Mathematics Pilot—Mr. Ward motioned to add K/1 Elementary Mathematics Pilot to the agenda. Mrs. Petiti moved to add the item to the agenda and Ms. Timpanelli seconded. The motion was unanimously agreed to.

### V. New Business

a. Creative Writing Curriculum Guide— Mrs. Kravecs reviewed the ways in which our Creative Writing Curriculum has been revised to reflect more modern components creative writing skills, analyzing and creating nonfiction, as well as reading and observing as writer's craft. The course now includes a digital portfolio component as well as other aspects that bring the curriculum up-to-date with the current NCTE and Common Core Standards while also

engaging students as "life-long writers and lovers of the written word." After discussion, Mrs. Timpanelli made a motion to pass the Creative Writing Curriculum Guide onto the Board, Mrs. Petitti seconded. The motion was unanimously agreed to.

- b. Algebra B Curriculum Guide— Mrs. Laird introduced Elizabeth Capobianco who was a leader in formalizing the high-quality curriculum for the ACP Algebra 1-B course which has been in a pilot since its introduction in 2018, then called "Algebra I-B Extended Year Two." She noted that Trumbull Public Schools is on track to complete all 14 units, including quadratic functions this school year. After discussion, Mr. Ward requests a motion to rename the title of the course to Algebra I-B. Mrs. Timpanelli moved to approve the change and Mrs. Petitti seconded. The motion was unanimously agreed to.
- c. Math Workshop II Curriculum Guide— Mrs. Laird explained that new Math Workshop II Curriculum Guide was written to document the balanced approach being used to support students who take the class after being identified through a variety of testing data. Mrs. Timpanelli made motion was made to change the credit requirements on page 26 from one full credit to a half credit as the course is taken one class period every other day for a full year. Mrs. Petitti seconded. The motion was unanimously agreed to.
- d. Modeling & Reasoning in Mathematics Curriculum Guide—This course prepares students for college level modeling and reasoning in mathematics. Mrs. Petitti motioned to change the name of the course from Introduction to College Mathematics to Modeling and Reasoning in Mathematics. Mrs. Timpanelli seconded. The motion was unanimously agreed to.
- e. Practical Applications in Mathematics Curriculum Guide—Practical Mathematics is designed to prepare students with an understanding of complex mathematics they will deal with in every day life. Mrs. Petititti noted that each of the new guides were very well written in terms of their mathematical content. After discussion, a motion was made Mrs. Timpanelli to bring the present the Practical Applications in Mathematics Curriculum Guide for approval by the board. Ms. Petitti seconded. The motion was unanimously agreed to.
- f. Elementary Math Update- Mary Santilli, the TPS Math Program Leader K-5 presented an update on current elementary Math Curriculum resources. She noted that in addition to continuing the Zearn/Eureka Math resources the district has been using in grades 2-5, TPS will be piloting Bridges Mathematics in Kindergarten and Grade 1 next year.

Mrs. Timpanelli made the motion to adjourn at 10:10. Mrs. Petitti seconded. The motion was unanimously agreed to.

# Elementary Mathematics Update May 20, 2021

Trumbull
Public
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Mary Santilli, Math Program Leader K-5

Thank you for allowing me to share updates in our current elementary math curriculum.

### Elementary Mathematics History Investigations 2 as Primary Resource

2007: Adopted Pearson Investigations 2nd Edition per Curriculum Director recommendation



2018: Pearson informed districts they plan to shut down the program in 2 years. Pearson phases out the program (Dec 2020) and a new program is needed. Some materials no longer in print.

August 2020: Grade 2-5 begin to use Zearn and Eureka Math products. K/1 uses materials left from Investigations and waits to hear about next programming decision.



# TPS has historically performed well on standardized tests



Grade 3 SBAC District Data

2015-16: 86%

2016-17:84%

2017-18: 81%

2018-19:84%

### Effective Components of Investigations 2 at TPS

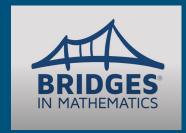
- More hands on approach to teaching & learning math in line with CCSS
- Conceptual approach to teaching discover why procedures/operations work
- Professional Development for Teachers & Families (2008-2012)
  - Math Specialists
  - August/November/March PD
  - Cadre Time provided for teachers to create resources & experience lessons
  - o After School PD grade level planning
  - o Parent Information Nights
- Effects for TPS Students
  - Deeper understanding of number and operations
  - Increased positive Mathematical Mindset
  - Consistent math language skills in students- daily meaningful math conversations

### Recap- Today's Mathematics Materials

- Grades 2-5 are currently using Zearn and Eureka Math; they have been using these materials throughout COVID
- K/1 no longer has a solid resource to use moving forward. Investigations 2 is outdated and incomplete:
  - Missing lessons designed to build stamina and develop problem solving skills.
  - Includes mostly Levels 1 and 2 Depth of Knowledge questions.
  - Minimal opportunities for remediation and extension work.
  - Digital support from Pearson is no longer available.

### Bridges in Math

- National Science Foundation funded
- Highest rating from EdReports
- Resources linked to Seesaw
- Built in platform for meaningful discussion
- Check out videos
  - Engaging Young Learners: Bridges Case Study
  - Confidence is Key
  - The Power of Perseverance 1min 34 sec



### **EdReports Rating for Bridges in Mathematics**



- **Ed Report rates** educational materials.
- Bridges is highly rated in K/1 on all areas

### Kindergarten **Units**

### **Content Outline**

### Unit 1 Numbers to Five & Ten

- Sorting Shoes
- Friendly Fives
- Friendly Tens
- Using Structures & Patterns

#### Unit 4 Paths to Adding, Subtracting & Measuring

- Paths: The Number Line
- Counting, Adding & Subtracting with Forest Animals
- · Comparing & Measuring Length
- Fives & Ones with Money

### Unit 7 Weight & Place Value

- How Heavy? Weight & Number
- Tens & Ones to Twenty
- Addition & Subtraction Story Problems
- · Counting by Tens & Ones

#### Unit 2 Numbers to Ten

- · Dots to Ten
- Introducing the Number Rack
- Five & Some More
- · Composing & Decomposing

#### Unit 5 Two-Dimensional Geometry

- Exploring Shapes
- Circles, Squares, Triangles & Rectangles
- Constructing & Drawing Shapes
- · Sorting, Comparing, Composing & Decomposing

#### Unit 8 Computing & Measuring with Frogs & Bugs

- Catching, Counting &
- Comparing
- Frogs: Estimating & Measuring
- · Tens & Ones
- Addition & Subtraction Equations

#### Unit 3 Bikes & Bugs: Double, Add & Subtract

- Bicycle Doubles
- Adding & Subtracting Ones
- · Add, Subtract & Double It!
- · Put Them in Order

#### Unit 6 Three-Dimensional Shapes & Numbers Beyond Ten

- . What Do You Know About Three-Dimensional Shapes?
- · More Three-
- Dimensional Shapes Exploring the Teen Numbers
- · Combinations to Ten

### **Number Corner**

- Calendar Grid
- Calendar Collector · Davs in School
- Computational Fluency

More about Number Corner

### Grade 1 **Units**

#### **Content Outline**

### Unit 1 Numbers All Around

- · Counting & Data with Popsicles
- · Meet the Number Rack
- · Part-Part-Whole to Ten
- Adding & Subtracting to Ten with the Number Rack

#### Unit 4 Leapfrogs on the Number Line

- · Adding & Subtracting on the Life-Sized Number Line
- Jumping by Fives & Tens
- . Jumping by Fives & Tens on the Open Number Line
- Measuring, Comparing & Subtracting with Penguins

### Unit 7 One Hundred & Beyond

- Grouping Sticks & Bundles Beyond One Hundred
- Hansel & Gretel's Path on the
- · Adding & Subtracting Two-Digit Numbers with Hansel & Gretel Place Value with Money

#### Unit 2 Developing Strategies with Dice & Dominoes

- · Counting, Comparing & Adding with Dominoes
- Fact Families & Story Problems Introducing Fact Strategies
- Counting by Fives & Tens

#### Unit 5 Geometry

- Introducing Two-Dimensional
- Introducing Three-Dimensional Shapes
- Putting Shapes Together & Taking Them Apart
- Sorting & Graphing Shapes

### Unit 8 Changes, Changes

- · Time & Duration
- Patterns, Structure & Change
- Measurement & Data with
- Measuring our Growth

#### Unit 3 Adding, Subtracting, Counting & Comparing

- Single-Digit Sums
- · Combinations with the Number
- Exploring Equations

#### Unit 6 Figure the Facts with Penguins

- · Story Problems for Basic
- Addition & Subtraction
- . Combinations & Story Problems
- . Solving for the Unknown in Penguin Stories
- Measuring & Comparing Emperor & Little Blue Penguins

#### Number Corner

- Calendar Grid
- Calendar Collector
- Days in School
- Computational Fluency
- Number Line

More about Number Corner

### What is Number Corner?

### Daily Workouts that reinforce & extend skills

- •Activities Organized by month (Sept. June)
- •Taught in 5 elements called workouts
- Activities incorporate
  - Games
  - Demonstration
  - Discussion
  - Number Corner Student book



### Importance of Number Corner

- Gives students ongoing practice
- Introduces new skills
- Provides skills practice from previous learning
- Applies common core skills in new settings
- Applies real-world contexts

### Bridges Provides Assessment

TEACHER SUPPORT MATERIALS FOR ASSESSING LEARNING

- Informal student observation throughout lessons
- Structured observation in Work-Place guides
- Individual interviews
  - o Pre and post unit assessments
  - Number Corner Assessments
  - Models good questioning strategies for students and teachers

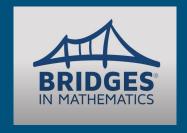
### Bridges Intervention

- Targeted support
- Small group instruction
- Addresses critical computation and numeracy skills



### Bridges Pilot- Good News

- All 6 elementary schools have agreed to pilot Bridges in K/1 next year
- It feeds well into Zearn/Eureka math
- It is used by- New Canaan, Fairfield, Madison, Lyme Old Lyme, Region 4 and many other districts reporting success for students and families
- Bridges Users Group (Thank you Dr. I)



### Elementary Mathematics Update May 20, 2021

Mary Santilli, Math Program Leader K-5 Thank you



Questions?