

Middle School Math Pilot Review & Findings

**Oak Park Elementary School District 97
Board of Education Meeting**

Tuesday, April 9, 2019

PRESENTERS: Dr. Amy Warke, Dr. Tawanda Lawrence, April Capuder, Dr. Todd Fitzgerald, Joe Casanovas, and Sharon Gunnell

D97's vision is to create a **positive learning environment** that is **equitable, inclusive** and focused on the **whole child**.

Our Goals

- 1. Known nurtured and celebrated learner**
- 2. Creative critical thinker and problem solver**
- 3. Confident persistent achiever**
- 4. Empowered passionate scholar**

D97 Math Mission Statement

The curricula focus will allow for common student experiences that include real world context that is focused on research based best practices. Students will develop reasoning and problem-solving skills while exploring engaging CCSS aligned materials. Technology infused instruction will allow students to develop inquiry skills and promote lifelong learning. A constructivist, student centered approach, will support risk-taking and support the development of a growth mindset. Classroom tasks will be differentiated while promoting collaboration and perseverance in our community of learners.

As a Math department we collectively set high expectations and equip students with learning strategies to conquer familiar and unfamiliar tasks. Our daily practices embrace and value a growth mindset and provide students with multiple opportunities to collaborate and persevere through productive struggle and active participation.

As educators, we will establish a safe environment that is focused on learning over grades where students feel comfortable and confident to take risks. Teachers will use multiple ways of assessment for students to demonstrate their level of understanding and mastery of the learning outcomes. These practices are an application of frequent, high quality, meaningful professional development that covers best practices.

Do Humans and A.I. learn the same way?

Launch

-[Season 5 Episode 11 VICE](#) (24th min)

Explore

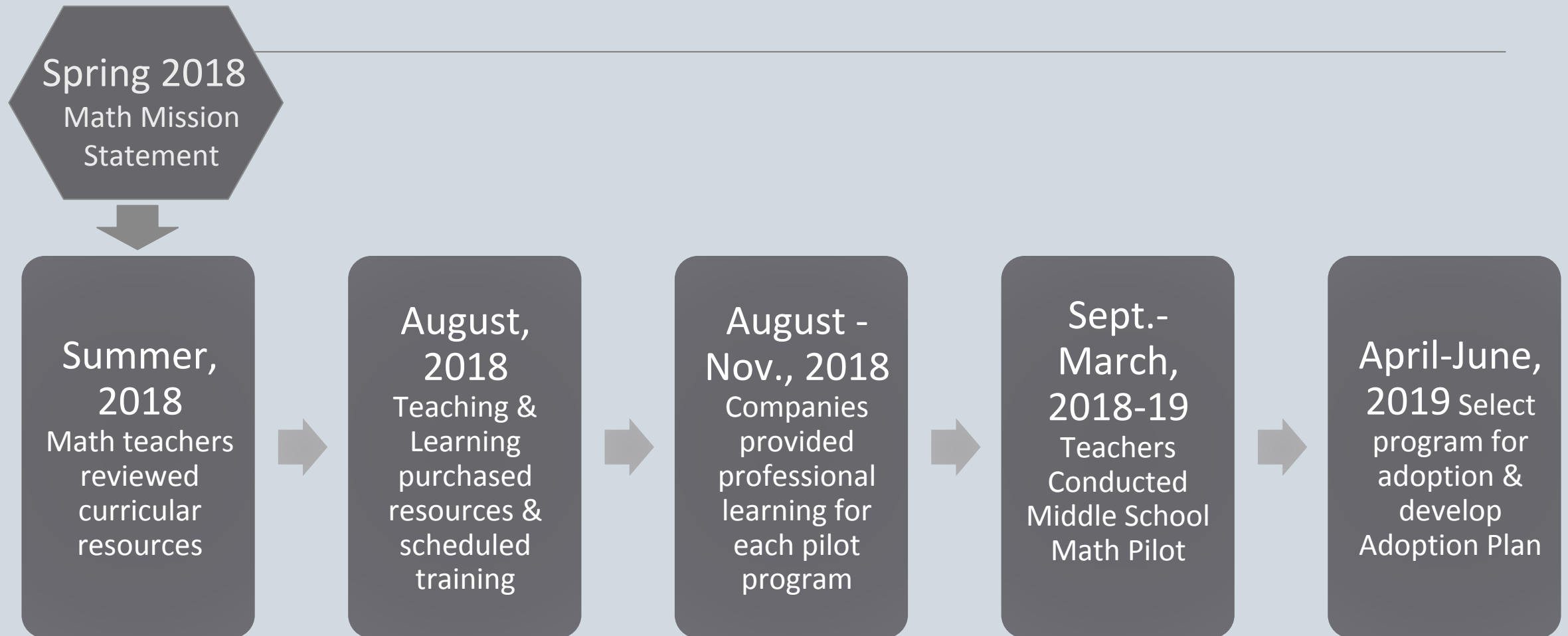
- The Product Game
- What did you learn by playing? How does this experience mimic A.I. growth?

Summarize

- What mathematics is explored in this simulation?
- What connections can we make to the launch based upon our experiences?

Middle School Math Pilot Implementation

Middle School Math Pilot & Adoption Timeline



Math Program Selection Process

To determine the three resources that were best aligned to Common Core and the D97 Math Mission to pilot in 2018-2019

- a team 14 teachers reviewed 7 curricular resources
- summer of 2018
- using the [Equip Rubric](#)

Math Pilot Programs

Program	Company
Middle School Math Solution	Carnegie Learning
enVisionmath2.0	Pearson
Connected Mathematics Project 3	Pearson

Decision Process

Decision Matrix

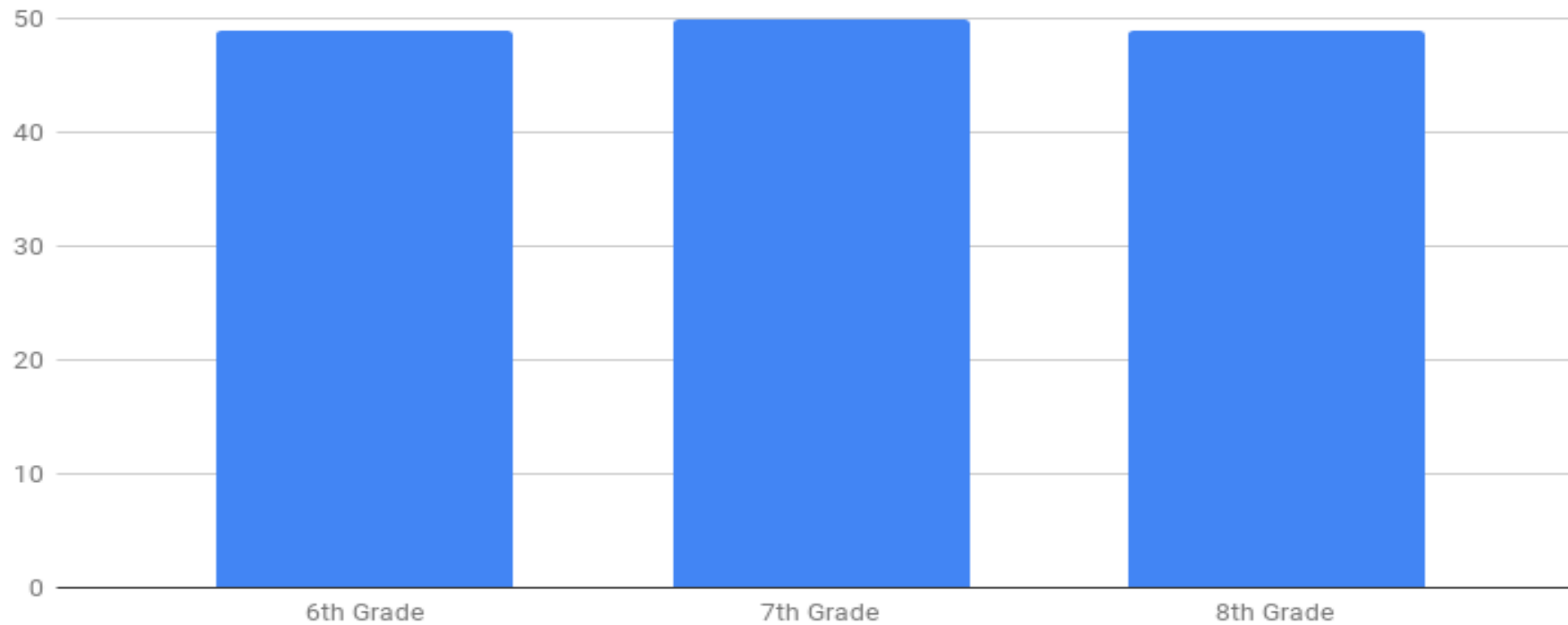
- Teachers scored criteria aligned to D97 Math Mission and IB Middle Years Program for each piloted program
- Teacher and Student Survey Data

Middle School Math Pilot Decision Matrix Total Score		
Carnegie	Envision	CMP3
179.0	141.6	198.2

Middle School Math Pilot Analysis & Findings

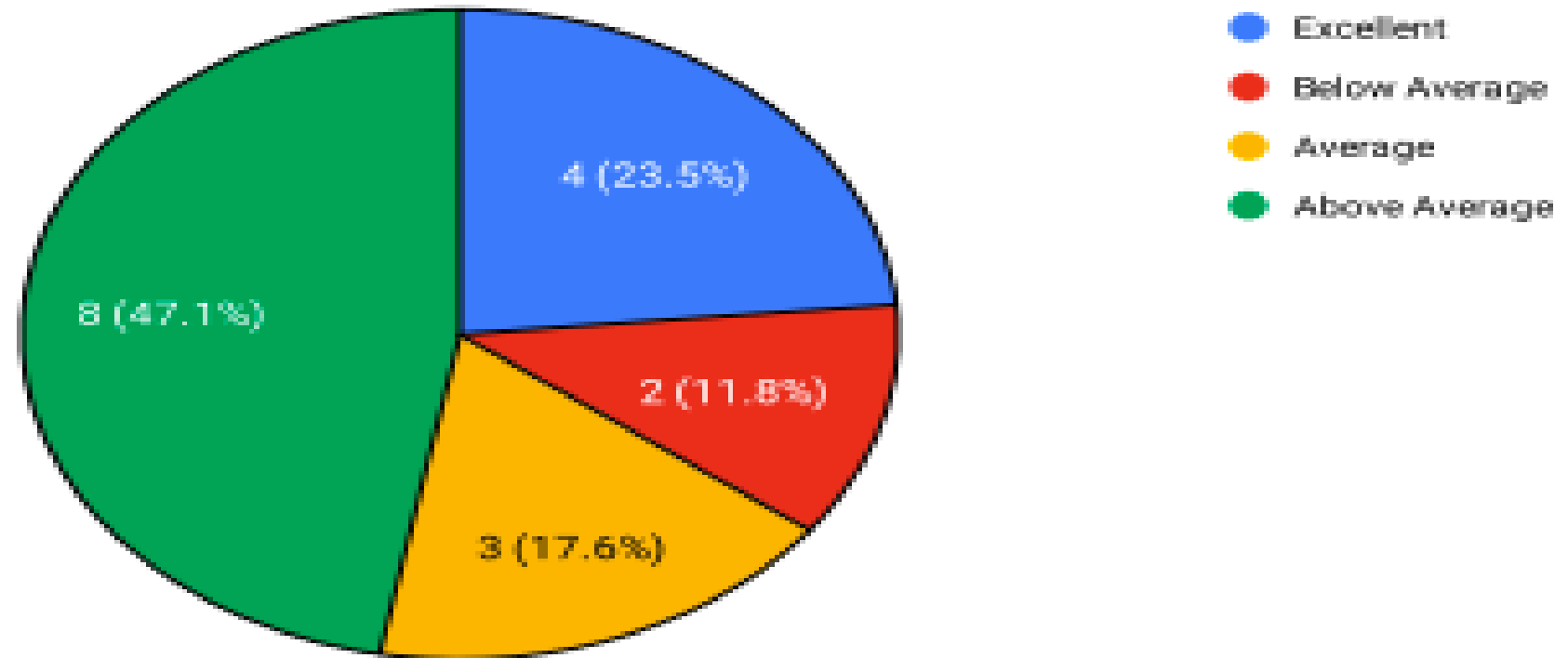
Student Performance Data

Average Percentage Point Growth by Grade Level for CMP3 Pre to Post Test



CMP3 Teacher Survey Results

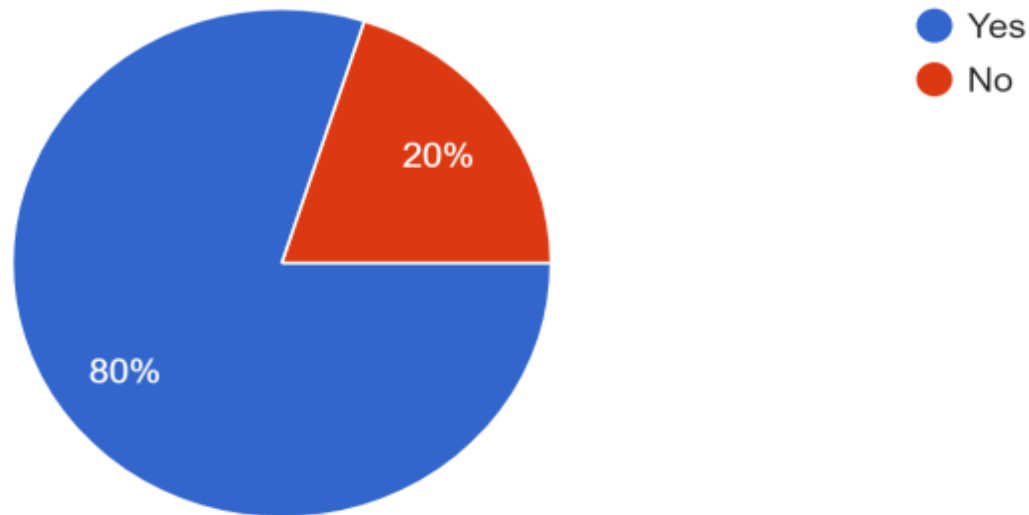
How do you rate this program overall to support student learning?



CMP3 Student Survey Results

This unit allowed for me to work with my peers to learn new information.

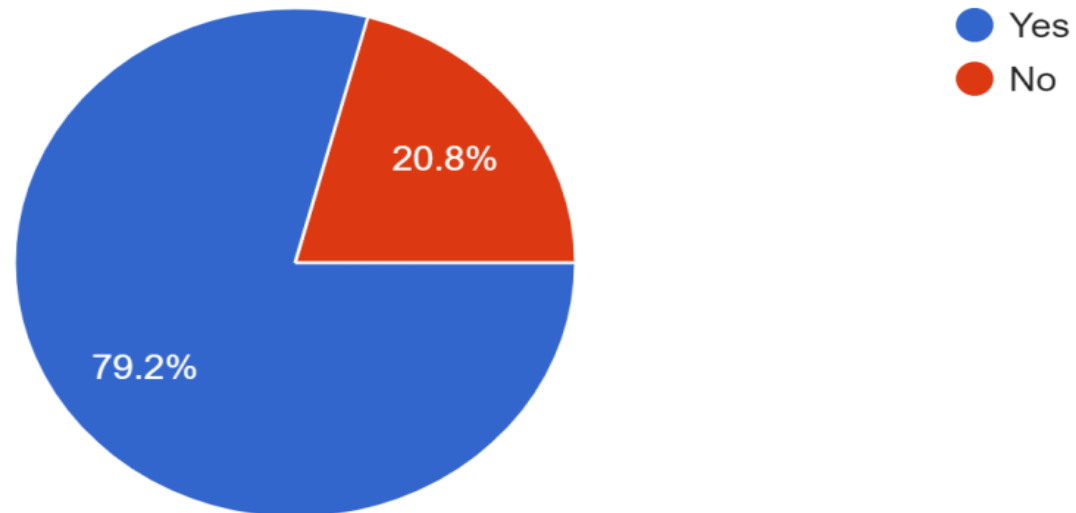
514 responses



CMP3 Student Survey Results

This unit challenged me.

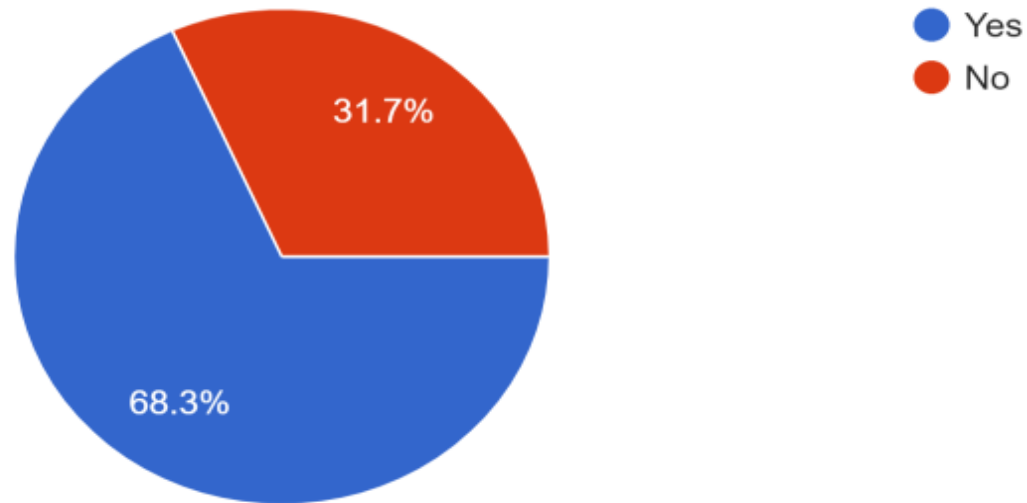
514 responses



CMP3 Student Survey Results

I felt confident in my abilities and learning during this unit.

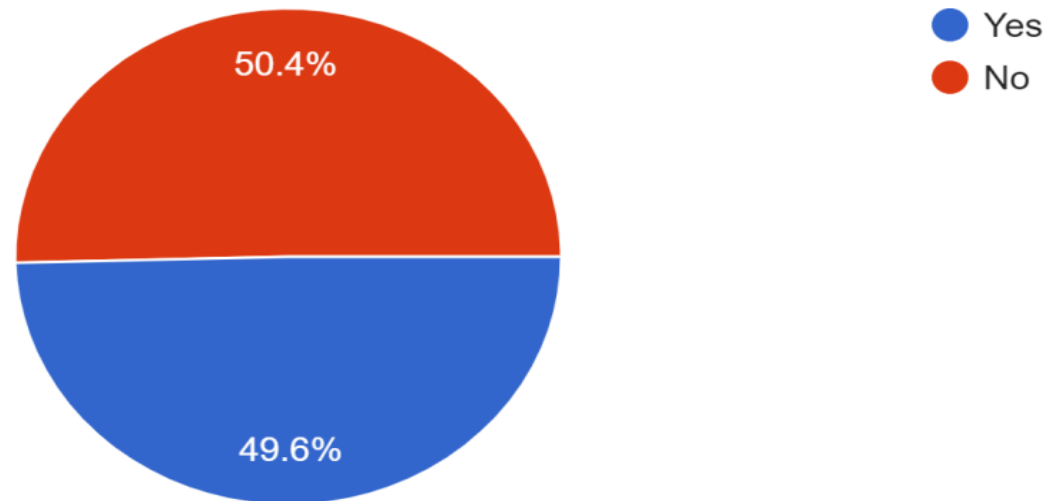
514 responses



CMP3 Student Survey Results

I would like to use CMP3 again for future units.

514 responses



Middle School Math Program Recommendation for Adoption



Pearson Connected Mathematics Project 3

Middle School Math Program Overview

Connect Mathematics Project 3

- Inquiry-based mathematics program for grades 6-8.
- Assists students with math problem solving, reasoning and proof, communication, representation, and connections. These math practices require students to look deeper and connect problem solving to practical situations
- Provides an inquiry model (Launch-Explore-Summarize) for learning mathematics and connects mathematical ideas to students' everyday world. The inquiry model guides the Investigations and supports active mathematical learning.

2019-2020 Middle School Math Program Projected Budget Grand Total: \$273,641

Math Program	Grade Levels	Student Books & Licenses	Professional Learning Consultant Fee	Grand TOTAL
Pearson Connected Mathematics Project 3 (6-year contract)	6th-8th	Julian - \$113,302 Brooks - \$127,039	Year 1: <ul style="list-style-type: none">• Initial PD - \$6,300• On-going PD - \$18,000• Coaching Support - \$9,000	\$273,641

Next Steps

- The teaching and learning department will purchase all resources and materials for Connected Mathematics Project 3
- An Adoption Plan will be developed in collaboration with the teaching and learning department, middle school principals, math department chairs, and IB coordinators. The plan will include:
 - **Initial CMP3 training and ongoing professional learning support**
 - **Scope and sequence for grades 6-8**
- IB Unit plans will be modified to incorporate the adopted curricular resource materials.
- External consultant Lisa Westman will work with 6th-8th grade teachers to develop math differentiation and enrichment units and provide coaching support during the school year.