LDOE's Eureka Remediation Tools Session for Teacher Leaders

Objectives:

- Use the vertical coherence of the standards to provide targeted, just-in-time support for below grade-level students.
- Align interventions to the rigor of the standards and plan to avoid common remediation pitfalls.
- Use the LDOE Eureka Remediation tools to collect and analyze student data and plan how and when to address identified gaps.

Introduction: The Math Shifts

Focus

Notes:

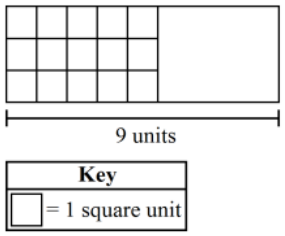
Coherence

Notes:

3rd Grade

3.MD.C.7c: Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the **distributive property** in mathematical reasoning.

Which expression represents the total area, in square units, of the rectangular figure below?



A. $3 \times 4 \times 5$

B. $3 \times 5 \times 9$

C. $(3 \times 5) + (3 \times 4)$

D. $(3 \times 5) \times (3 \times 4)$

6th Grade

6.EE.A.3: Apply the **properties of operations** to generate equivalent expressions. […]

Use the drop-down menus below to make an equivalent expression.

$6x + 15y =$ 3 ▾ (2 ▾ $x +$ 5 ▾ y)

7th Grade

7.EE.A.1: Apply **properties of operations** as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

Which expressions are equivalent to the expression below?

$m(n + p + 6)$

Select **all** that apply.

A. $mn + p + 6$

B. $-m(n - p - 6)$

C. $mn + m(p + 6)$

D. $mn + mp + 6m$

E. $m + (n + p + 6)$

F. $-m(-n - p) + 6m$

Rigor
Notes:

Vertical Coherence Activity

5.NF.1: Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.

Task

Find $\frac{3}{4} + \frac{1}{5}$. Draw a picture that shows your solution.

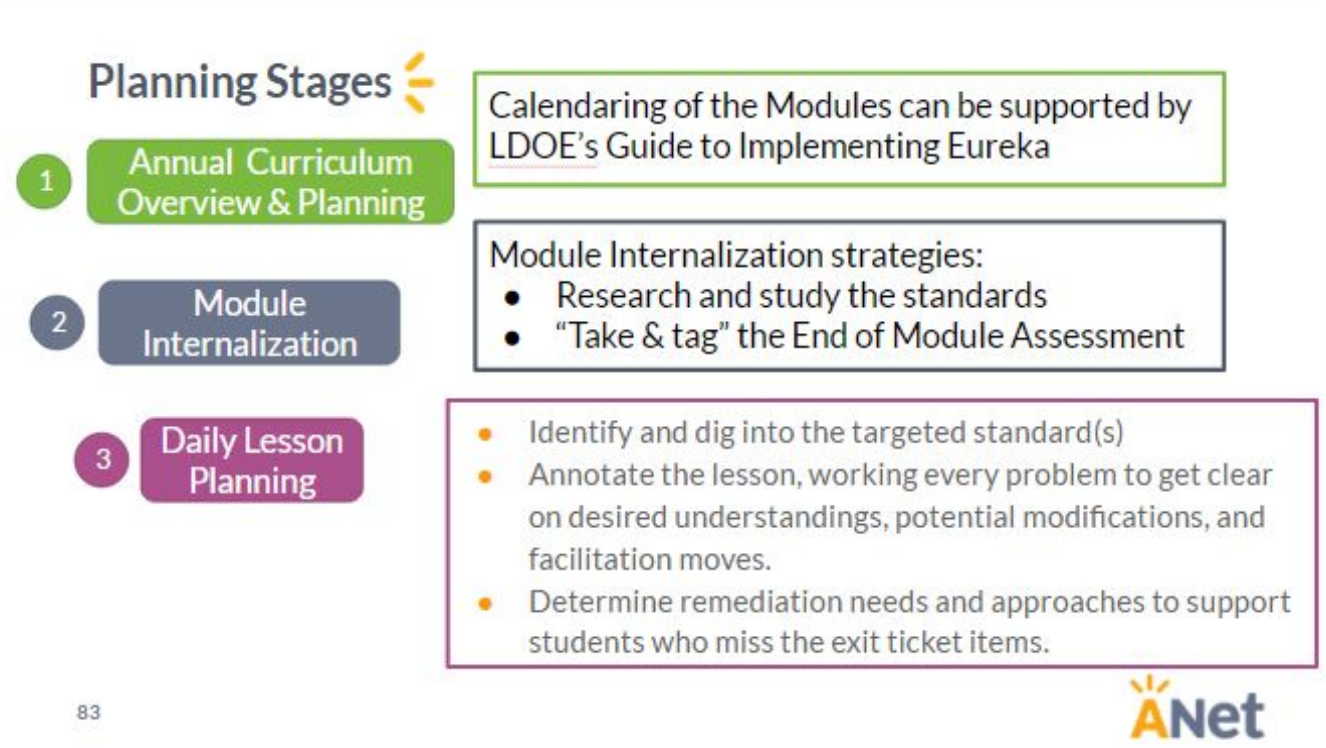
What skills and knowledge are necessary for students to be successful on this task?

Which previous grade level standards are connected to this concept?

What might you do to support students to be successful on this task?

Reflect
What information from this introduction do you want to take back to other teachers at your school?

Strong Eureka Planning Practices



Long-term Planning Pacing Exercise

Sept. 26	**27**	**28**	**29**	**30**
Oct. 3	**4** Benchmark 1	**5**	**6**	**7**
Oct. 10	**11**	**12**	**13** Fall Break	**14** Fall Break
Oct. 17	**18**	**19**	**20**	**21**
Oct. 24	**25**	**26**	**27**	**28**
Oct. 31	**Nov. 1**	**2**	**3**	**4**
Nov. 7	**8**	**9**	**10**	**11**
Nov. 14	**15** Benchmark 2	**16**	**17**	**18**

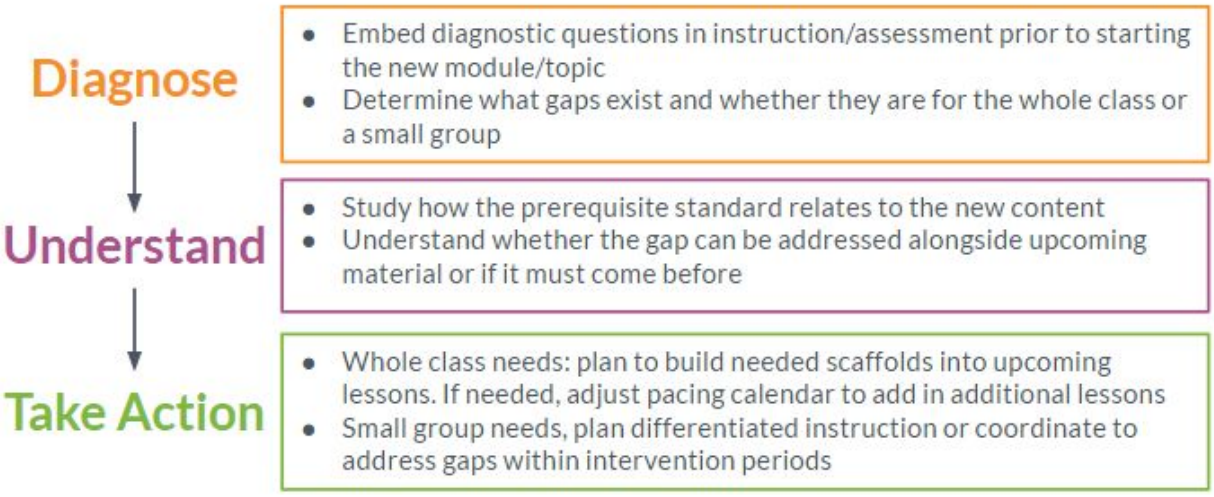
Study the Math Standards.			
1. Close-read and annotate the standard.	7.EE.A.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients to include multiple grouping symbols (e.g., parentheses, brackets, and braces).		
	Conceptual	**Application**	**Procedural**
What skills and concepts do you see within this standard? Which aspect(s) of rigor do they fall under?			

End of Module 3 Assessment	
Question #1	Solve the question. Which part(s) of the standard does it align to?
Question #2	Solve the question. Which part(s) of the standard does it align to?

Important Mindsets for Supporting Struggling Students

	Notes	What might you say to a colleague who displays this mindset?
Mindset #1		
Mindset #2		
Mindset #3		

Using the tools



Grade 5 - Module 1 - Topic A Example

1. Diagnosis

Read the "Diagnostic Assessment" section on page 2 of the Grade 5, Module 1 - Topic A Remediation Guide.

Review the sample student work to determine where gaps exist (which standards?).

2. Understand the Standard & How it Connects to Upcoming Material

For 4.NBT.A.1:

- What component of rigor is addressed by this standard?
- How does 4.NBT.A.1 connect to the 5th grade content in Module 1 - Topic A - Lesson 2?

3. Take Action

Identify which prior grade lessons should be used, when, and with which students.

Excerpt from LDOE's Grade 5 Guide to Implementing Eureka:

Module 1: Place Value and Decimal Fractions

Lesson	Course Level Content Standards	Standards from other Grades	Action	Notes/Rationale for Action
1.1	5.NBT.A.1, 5.NBT.A.2*		O	• This Lesson includes explaining and applying patterns in the values of the digits in the product or the quotient, when a decimal is multiplied or divided by a power of 10 which will lead to mastery of 5.NBT.A.2.
1.2	5.NBT.A.1, 5.NBT.A.2*		O	• This Lesson includes explaining and applying patterns in the number of zeros of the product when multiplying a number by powers of 10 and explaining and applying patterns in the values of the digits in the product or the quotient, when a decimal is multiplied or divided by a power of 10 which will lead to mastery of 5.NBT.A.2.
1.3	5.NBT.A.1, 5.NBT.A.2		O	
1.4	5.NBT.A.1, 5.NBT.A.2, 5.MD.A.1*		O	• This Lesson includes converting among different-sized standard measurement units within a given measurement system which will lead to mastery of 5.MD.A.1.
1.5	5.NBT.A.3a		O	
1.6	5.NBT.A.3a, 5.NBT.A.3b		O	
1.7	5.NBT.A.4		O	
1.8	5.NBT.A.4		O	

R = optional for remediation; E = optional for enrichment; O = on grade level

7

Whole Class Approach - Taking Action Based on Diagnosis & Understanding Standards

- Address **minor gaps** by adding scaffolding and additional supports into the lessons
- Address **major gaps**:
  - For a majority of students: by adjusting your pacing calendar to insert 1-2 prerequisite lessons
  - For a specific group of students: by leveraging intervention or small group time

Reflect: What are the key actions needed to support students who may not be prepared to engage in the grade-level content of all Eureka lessons?

Maximizing Use of Intervention Time

- Standards-aligned work (even if below grade level standards)
- Communication rhythms on plans and data between core math teacher and intervention teachers
- Assessing the quality, alignment, and effectiveness of current intervention programs
- Including intervention teachers in math PD

Reflection/Planning Time

- **Plan how you will personally use the Eureka Remediation Tools**:
  - When and how will you diagnose your students?
  - Who will provide needed remediation and when?

- **Be a leader across your school:**
  - What coordination is required with other teachers and leaders at your school to make this implementation successful?
  - How can you advocate for the appropriate daily/weekly instruction and planning meeting schedule that will best support strong teaching & learning?

- **Connect to the bigger picture:** In a holistic sense, what are your professional goals for yourself in 2017-18? How are you and your fellow math teachers at your school aiming to take instruction to the next level in order to increase student achievement? How does this new approach to remediation fit in with those plans?

Contact Us:
Julia Davis, jdavis@achievementnetwork.org