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Thank you for participating in the Regional Educational Laboratory Northeast and Islands' evaluation of the Visual Access to Mathematics Professional Development ("VAM PD") program. The following set of questions is expected to take 15 minutes to complete.

POST Teacher Survey Questions for VAM PD Study

As you answer the following questions, consider the grade 7 mathematics classes that you taught during the 2023-24 school year **that were included in this research**.

1. During the current school year, 2023-2024, which role best describes how you spent the majority of your time at work?
 - Teacher, teaching only mathematics
 - Teacher, teaching mathematics and at least one other subject
 - Mathematics instructional coach or mathematics curriculum director
 - ELL or EL Teacher or specialist
 - Special education teacher
 - Other (please specify)
2. What mathematics curriculum materials did you use to teach content related to ratio and proportional reasoning?

Multiple choice responses include the following from a recent CSDE survey, plus an "A curriculum not listed here" option with a box for listing that curriculum.

Achievement First Mathematics
Agile Mind Middle School Mathematics (2016)
Big Ideas Math (2013)
Big Ideas Math: Modeling Real Life (2019)
Carnegie Learning Math Series (2011)
Carnegie Learning Math Solution (2018)
Carnegie Learning Middle School Math Solution 2022

CK-12 Interactive Middle School Math for CCSS
Common Core Coach (2010-2015)
Connected Mathematics Project 3 (2014)
Core Connections (Grades 6-8) (2013)
Core Curriculum by MidSchoolMath (2021)
CPM - College Prep Math
Creative Core Curriculum for Mathematics with STEM, Literacy and Art (2012-2013)
Digits (2014)
EdGems Math (2018)
Edgenuity (2015)
Engage NY
enVision Mathematics Common Core (2020)
enVision Mathematics Common Core (2021)
Eureka Math (2013-2014)
Eureka Math (2015)
Fishtank Math 2019
Fishtank Plus Math
Glencoe Math (2014)
Go Math (2014-2015)
Holt McDougal Mathematics (2010)
Illustrative Mathematics 6-8 Math (Kendall Hunt 2019)
Illustrative Mathematics 6-8 Math (LearnZillion 2019)
Illustrative Mathematics 6-8 Math (McGraw-Hill2020)
Illustrative Mathematics K-5 (Imagine Learning 2018-2019)
Into Math (2020)
iReady Classroom Mathematics (2021)
JUMP Math (2013-2015)
JUMP Math (2019)
Match Fishtank Mathematics
Math in Focus (2013)
Math in Focus (2020)
Math Innovations (2013)
Math Links (2015)
Math Techbook (2017)
Open Up Resources 6-8 Math (2017)
Prentice Hall Mathematics (2013)
Ready (2017)
Ready Classroom Mathematics (2020)
Reveal Math 2020
Singapore Math: Dimensions Math (2013-2015)
Singapore Math: Dimensions Math (2016-2017)
Spider Learning Mathematics (2019)

SpringBoard Middle (2014)
The Utah Middle School Math Project (2019)

3. How often did you introduce visual representations (such as number lines or area models) as part of your instruction in your grade 7 classes?
- Every class period
 - A few times per week
 - A few times per month
 - A few times per year
 - Never (SKIP to #6)

4. What types of mathematical visual representations were part of your ratio and proportion instruction? Select all that apply.
- Number lines
 - Double number lines
 - Area models
 - Tape diagrams
 - Mathematical visual representation not listed above (please specify)

5. Please Indicate how strongly you agree or disagree with the following statements.
(Scale: 1=strongly disagree, 2= disagree, 3= neither agree nor disagree, 4 = agree, 5 = strongly agree)

I used visual representations when teaching ratio and proportion in the following ways:

- Explicitly demonstrate to the whole group how to create a visual representation
 - Prompt students to use visual representations to represent relationships between the quantities in a mathematical task
 - Show the steps in a problem-solving process involving visual representations to help students practice that process
 - Prompt students to use visual representations to solve problems
 - Provide students with a partially-completed visual representation to scaffold their problem solving
 - Provide students with a fully-completed visual representation for a problem
 - Support student communication of their mathematical thinking using visual representations
 - Highlight connections among different solution approaches including ones that use visual representations
 - Not listed (please specify)
6. How often did you incorporate instructional strategies to support multilingual learners' access to language in your grade 7 classes?

- Every class period
 - A few times per week
 - A few times per month
 - A few times per year
 - Never
 - Not applicable because I did not have multilingual learners in my grade 7 classes last year
7. How often did you incorporate instructional strategies to support multilingual learners to talk or write about mathematics in your grade 7 classes?
- Every class period
 - A few times per week
 - A few times per month
 - A few times per year
 - Never
 - Not applicable because I did not have multilingual learners in my grade 7 classes last year
8. Which of the following instructional strategies and classroom structures were part of your grade 7 mathematics classes, if any?

(yes or no/N/A for each)

Instructional strategies

- Sentence starters or frames
- 3 Reads
- Word bank constructed by teacher
- Word bank co-constructed by teacher and students
- Translating words between English and students' home language(s)
- Identifying cognates and false cognates between English and students' home language(s)
- Defining words
- Gesturing
- Showing pictures, showing objects, and/or acting out vocabulary

Classroom structures

- Lecture
- Whole-class discussion
- Small-group work
- Partner work
- Individual work

9. During the 2023-24 school year, which of the following best describes your teaching arrangement?
- I did not participate in any co-teaching arrangements on a regular basis.
 - I co-taught middle school math on a regular basis with another general education teacher.
 - I co-taught middle school math on a regular basis with a special educator.
 - I co-taught middle school math on a regular basis with an ELL or EL specialist.
 - I co-taught middle school math on a regular basis in another type of arrangement.
(Please Specify)

1. **2023-24 Mathematics Professional Development:** Consider your professional development experiences during the 2023-24 school year. About how many hours did you participate in each of the activities below? If you have not participated in the listed activity or are not sure, please enter 0.
- a. Observed other teachers teaching mathematics
 - b. Met individually with a mathematics specialist, coach, department chair, or consulting teacher for instructional support in mathematics
 - c. Participated in a workshop on mathematics content, curriculum, or teaching with other teachers

2. During the 2023-24 school year, did you participate in grade-level or course-level team meetings or study groups with other teachers in your school focused on mathematics teaching?
- a. Yes
 - b. No (skip to 8)
- 7.1 How many hours of these meetings or study groups were focused on mathematics teaching (not including analyzing student work)?
- 7.2 How many hours of these meetings or study groups were **specifically** focused on analyzing student work?

3. Did you participate in any other professional development activities specifically related to **teaching middle school math**, not already reported? If so, please describe each additional activity and include the total hours participated.

<ACTIVITY> <HOURS>

<ACTIVITY> <HOURS>

10. **2023-24 MLL/ELL/EL Professional Development** Consider your professional development experiences during the 2023-24 school year. About how many hours did you participate in each of the activities below? If you have not participated in the listed activity or are not sure, please enter 0.

- o Observed other teachers teaching students who are multilingual learners (MLLs)
- o Met individually with a ELL or EL specialist, coach, department chair, or consulting teacher for EL instructional support
- o Participated in grade-level or course-level **team meetings or study groups** with other teachers in your school, where the focus was **on teaching MLLs**
- o Participated in a **workshop** on teaching ELs with other teachers

11. Did you participate in any other professional development activities specifically related to **teaching MLLs**, not already reported? If so, please describe each additional activity and include the total hours participated.

<ACTIVITY> <HOURS>

<ACTIVITY> <HOURS>

12. Please list the name and/or sponsor of professional development opportunities that you participated in related to middle school mathematics and/or MLLs.