

Plan and Take Action Part I: Planning & Delivering Acceleration Supports

Erin McCopp March 24, 2021



Before we start

- Use the Q & A feature if you have questions about technology or logistics
- Chat "Everyone" when prompted to respond
- Go to "View Options" to exit full screen to access the links in your web browser
- Recorded session and this PPT deck will be available
 at https://www.education.ne.gov/csds/csi-communities-of-practice/

Access Materials....

Access today's Note Catcher at the following link:

https://tinyurl.com/NDESession3NoteCatcher

Zoom Norms



- Audio: stay on "mute" if you are not speaking
- **Engage with others:** Zoom Breakout Rooms feature!
- Chat: use the chat feature when prompted
- Materials: Soft copy of the note catcher; links in chat box

Welcome!

Reflect:

Think back to a skill (i.e., sport, musical instrument, or artistic talent) you developed with the support of a coach or instructor.

Chat:

What actions did the coach or instructor take to support you in your development of that skill?



Learning Series at Glance

Session 1	Session 2	Session 3	Session 4
Defining our Approach to Addressing Unfinished Teaching and Learning in Math	Diagnosing Unfinished Learning in Math	Plan and Take Action Part I: Planning Intentional Acceleration Supports	Planning Intentional Small Group and Individual Supports

Key Points - Session 2

 Uncovering the math and progressions in the standards, equips us to assess and accurately diagnose unfinished learning.

To accurately diagnose unfinished learning, we must:

- look at bite-sized amounts of "just in time" data (formative data at the topic or even lesson level)
- Interpret evidence of student learning and identify specifically what students currently do understand/can do and what they don't yet understand/have the ability to do

Diagnosing Unfinished Learning Reflection

Stop & Jot:

- What went well and what was challenging?
- What did you learn? What might you do the same or differently next time?



Were you able to collaborate with your team to uncover the math progressions and/or look at student work from a just-in-time diagnostic assessment?

Learning Series at Glance

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Defining our Approach to Addressing Unfinished Teaching and Learning in Math	Diagnosing Unfinished Learning in Math	Plan and Take Action Part I: Planning Intentional Acceleration Supports	Planning Intentional Small Group and Individual Supports

What are we doing today? Why?







Session Agenda

Time	Topic			
10 min	Getting Started			
45 min	Planning Acceleration Supports			
30 min	Delivering Acceleration Supports & Monitoring Progress			
5 min	Wrapping Up			

Our Agenda

- Getting Started
- 2. Planning Acceleration Supports
- 3. Delivering Acceleration Supports & Monitoring Progress
- 4. Wrapping Up

Let's Revisit Ms. Hutchins

Diagnostic Assessment: Grade 4
Eureka Module 5, Topic C

Part C: 3.NF.A.3d

7. For the inequality $\frac{1}{2} > \frac{1}{4}$ to be valid, what must be true?

8. Complete the sentence with >, =, or <. Explain your thinking and/or justify your choice with a visual fraction model.







9. Complete the sentence with >, =, or <. Explain your thinking and/or justify your choice with a visual fraction model.

 $\frac{2}{6}$ \rightarrow $\frac{2}{8}$





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Assessment Task	Got It	Almost Got It	Not Yet
#7	Evidence of understanding in models and explanation Dakari	Evidence of understanding in models drawn, no explanation Janelle, Ivette, Kapone	No Evidence Sydney, Rochelle, Nyla, Byrce, Isaiah, Neveah, Anniyah, Edwin, Joseph, Elijah, Kamal, Malayah, Richard, Jeremiah, Andre, Zion
#8	Correct comparison and complete reasoning Dakari, Janelle, Ivette, Kapone, Rochelle, Nyla	Correct Comparison, Incomplete Reasoning and/or Inaccurate Model Sydney, Isaiah, Neveah, Anniyah, Richard, Zion, Edwin, Elijah, Andre	Incorrect Comparison, and/or Faulty Reasoning Byrce, Joseph, Kamal, Malayah, Jeremiah
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Ready to Access

• 11 students

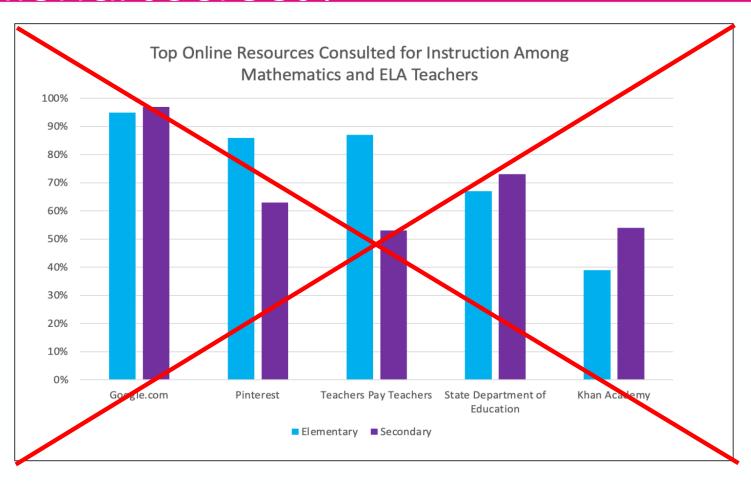
Small Group

• 9 students

Let's Revisit the Unfinished Learning Ms. Hutchins Diagnosed

- Recognizing the whole units must be equal for comparisons to be valid and labeling the whole unit
- Applying whole number reasoning to compare fractions with common numerators (e.g., $\frac{2}{8} > \frac{2}{6}$ because 8 > 6)
- Justifying comparisons by reasoning about the denominator and the size of the fractional parts
- Partitioning a whole unit into equally-sized parts

What's the problem with these online instructional sources?



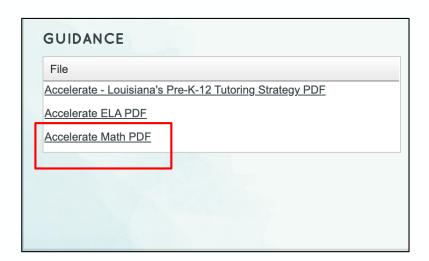
Core Pillars







Resource Spotlight





Math Resources

The Accelerate Math resources are built as proactive support to upcoming classroom content in order to ensure students' readiness for grade level mathematics. Math tutoring resources are designed to provide support on the most essential prerequisite knowledge and skills to support success in next week's upcoming lessons. Materials for each grade-level include correlations to in-class lessons, links to Google slide presentations for each tutoring session, links to virtual manipulatives, and Desmos activities when available. Sessions were designed for one hour of virtual instruction for two sessions per week, but teachers should adjust to the mode of delivery, time, technology, and resources available. Elements of the Google slide presentations can be delivered as is, written on paper and shown to students through a document camera, imported into other presentation software or platforms, or used with students physically present.

Spring Release Schedule							
Set 1 Five weeks of resources	Set 2 Five weeks of resources	Set 3 Five weeks of resources					
January 30	February 15	February 26					

	Accelerate Math Resources									
Pre-K Coming Soon	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6 Eureka Math Grade 6 Illustrative Math	Grade 7 Eureka Math Grade 7 Illustrative Math	Grade 8 Eureka Math Grade 8 Illustrative Math	High School Coming Soon



Accelerate Math Resources

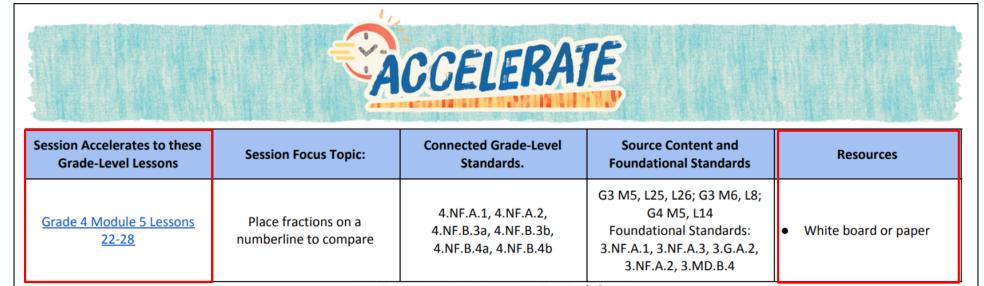
Intended For...

- Support with the most essential prerequisite knowledge and skills
- Designated time outside of the instructional math block
- One hour of virtual instruction for two sessions per week
- Small group (1-3 students) instruction of students with common needs

Not Intended For...

- Intensive interventions (student's individual plan should be followed)
- Whole group minilessons before every topic

Accelerate Math Resources



Weeks 11-15 Coming Soon - Updated 2/7/2021

Zoom In: Accelerate Resources

Access the Module 5, Lessons 12-15 slides

- Click on the grade 4 link
- Scroll down to Module
 5, Lessons 12-15 and click link



Session Accelerates to these Grade-Level Lessons	Session Focus Topic:	Connected Grade-Level Standards.	Source Content and Foundational Standards	Resources
Module 4 Lessons 9-15	Build conceptual understanding of multi-digit addition and subtraction using a variety of strategies	4.MD.C.7	G2 M8 L1, 2, 3, 9 Foundational Standards: 3.OA, 2.NBT.B.7	 Desmos Activity Session 1 Desmos Activity Session 2 Virtual Place Value Disks White board or paper
Grade 4 Module 5 Lessons 1-6	Build conceptual understanding of unit, non-unit fractions Build and write fractions greater than one	4.NF.B.3.b, 4.NF.B.4a	G2 M4, L24, 26, 28, 29, 30 Foundational Standards: 3.NF.A.1, 3.G.A.2	Desmos Activity Session 1 Desmos Activity Session 2 White board or paper
Grade 4 Module 5 Lessons 7-11	Build conceptual understanding of equivalent fractions	4.NF.A.1	G3 M5, L20, 21, 22, 23 Foundational Standards: 3.NF.A.1, 3.NF.A.3, 3.NF.A.2	Desmos Activity Session 1 Desmos Activity Session 2 White board or paper
Grade 4 Module 5 Lessons 12-15	Compare, partition and decompose fractions using visual fraction models	4.NF.A.1, 4.NF.A.2	G3 M5, L28, L29, L30; G4 M5, L6 Foundational Standards: 3.NF.A.1, 3.NF.A.3, 3.G.A.2	White board or paper
Grade 4 Module 5 Lessons 16-19	Place fractions on a numberline	4.NF.B.3a, 4.NF.B.3b, 4.NF.B.3d	G3 M5, L14, L15, L16, L17 Foundational Standards: 3.NF.A.2, 3.NF.A.3	White board or paper



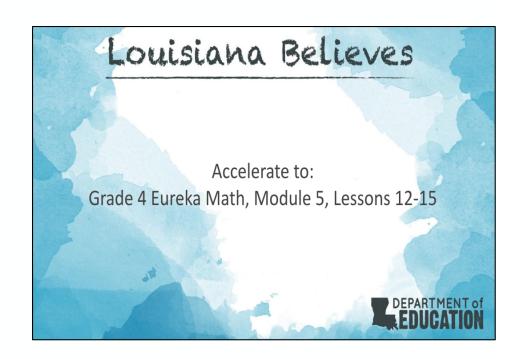
Zoom In: Accelerate Resources



Review the content for Module 5, Lessons 12-15

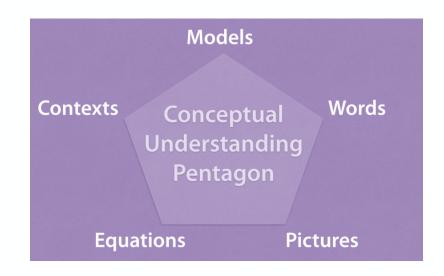
Reflect & Discuss:

- What to do you notice or wonder about these resources?
- How, specifically, does the content support Ms. Hutchins with addressing the unfinished learning she diagnosed?



Let's Debrief

- Draw visual fraction models to compare fractions with common numerators
- Label the whole on visual fraction models
- Explain which fraction is larger using words
- Partition number lines
- Locate fractions on number lines
- Use comparison symbols to record the results of comparisons



Van de Walle, 2006

Planning for Action



Review the Planning for Action Part I Case Study.

Reflect & Discuss:

- What do you notice about how Ms. Hutchins planned for acceleration?
- How does the plan address the learning needs identified from the diagnostic screener student work?





Planning for Action Case Study Part I

Using the evidence from student work on the Eureka Acceleration Tool diagnostic screener, Ms Hutchins formed four flexible groups based on student strengths, learning needs, and what she knows about her students' working preferences and schedules.

Learning Need	Evidence or from Diagnostic & Classwork	Strengths	Group	
Develop conceptual understanding of fractions as numbers and magnitude of unit fractions	Misapplying whole number reasoning to compare fractions	Problem-Solving Listens to others speak	Malayah Kamal Joseph	
Develop conceptual understanding of fractions as numbers and magnitude of unit fractions	Confusing numerator and denominator Misapplying whole number reasoning to compare fractions	Makes real world connections	Jamir *Meet with Mrs. Teal	
Develop conceptual understanding of fractions as equal parts of a whole	Using the number of parts to compare instead of the size of the parts	Work well together Explain reasoning	Bryce Richard	
Develop accurate representations for visual fraction models	No models drawn or have not yet developed equipartitioning strategies	Notice patterns	Neveah Edwin Anniyah	

After assigning students to fluid tutoring groups, Ms. Hutchins determines she will begin the tutoring sessions with 3 of the 4 tutoring groups two weeks before starting the fraction comparison topic with the class, and with the fourth group the week prior to starting instruction on the grade level content.

Ms. Hutchins' school, Brightwood Academy, built a forty-five minute acceleration block into the daily schedule. Ms. Hutchins creates a schedule along with Mrs. Teal, a special education teacher with whom she often plans and co-teaches. They meet every Thursday during their common planning time to plan for tutoring sessions and class.

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Planning Considerations

Strategic Grouping

- Common learning needs
- Strengths and working styles

Timing

- Instructional time for small group instruction
- Just in time or concurrent with grade level content

Content

- Leveraged high quality curriculum aligned, existing resources
- Tied specific content to learning needs

Coming Soon!







Whole Class Acceleration Supports

When warranted by evidence, whole class acceleration supports can address collective learning needs.

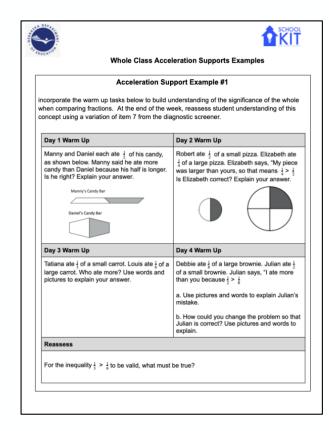
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Whole Class Acceleration Supports

Examine the four Acceleration Support Examples.

Reflect & Discuss:

- What commonalities do you notice across these examples?
- How does each example address the whole class unfinished learning Ms. Hutchins diagnosed within the core math block?



Key Point

Success is a result of intentional planning.

Plan for the who, what, and when of acceleration supports.



Our Agenda

- 1. Getting Started
- 2. Planning Acceleration Supports
- 3. Delivering Acceleration Supports & Monitoring Progress
- 4. Wrapping Up

Taking Action



Review the Delivering Acceleration Supports Case Study Part I.

Reflect:

- What stood out to you about Ms.
 Hutchins' delivery of the Accelerate
 Math Resources?
- What impact do you think her delivery has on students' learning and mathematical experience?





Delivering Acceleration Supports Case Study I

Ms. Hutchins begins the lesson by welcoming her students and having them share one thing that they are truly great at and one thing they are currently getting better at. She starts every tutoring session this way to learn more about her students and keep a pulse on how students are seeing themselves as learners. For example, Ms. Hutchins then reminds students of their math norms and names that in today's session she wants the group to work on asking questions about other's ideas.

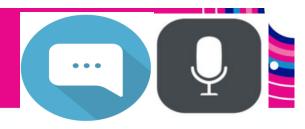


She shows the session 1 welcome slide to share the "I can" statement they will be working on today, and asks students to share something hey think they afreed, know about comparing fractions with the same numerators. After reading the application problem three times and having students visualize the application problem to set them up to work independently, Ms. Hutchins has students draw their models of the problem on their white boards. She then asks them to show their boards so she can see their thinking. She notes Kamal has drawn the two not dogs referenced the problem side-by-side and the hot dogs are different lengths which lead him to an inaccurate conclusion. Malayah also drew a picture of the hot dogs, but aligned them to show they were the same length. Ms. Hutchins quickly referave two of the student models on a whiteboard under her document camera and asks the group to discuss how the models are similar and different.

During the discussion, Kamal names he would revise his drawing by making his pictures of the hot dogs the same length because the hot dogs in the problem were equal-sized hot dogs. Joseph shares he noticed the size of the parts got smaller the more parts the hot dog was cut into. Ms. Hutchins asks Malayah to restate Joseph's observation in her own words. Malayah saks Joseph to repeat what he said one more time, and then rephrases, "When the whole hot

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Let's Consider...



Review the Delivering Acceleration Supports Case Study Part II.

Reflect:

- What stood out to you about Ms.
 Fields' delivery of the Accelerate
 Math Resources?
- What impact do you think her delivery has on students' learning and mathematical experience?





Delivering Acceleration Supports Case Study II

Ms. Fields begins her lesson by instructing students to read the session objective and get their materials ready. She tells students that they will be working on comparing fractions with the same numerators so they can catch up and be ready for forufn grade math. After reading the application problem that starts the session, Ms. Fields instructs students to draw two tape diagrams on their white boards like she just did on the paper under the document camera. She then thinks-aloud and models what she would do next to partition the two tape diagrams to match the hot dosp that are referenced in the problem. After partitioning the tape diagrams, she instructs students to shade \(^2\) of the first tape diagram and asks them how many pieces they need to shade in the second tape diagram in oranch the shaded amount in the first tape diagram. Jaleel answers correctly, 4 pieces, and she instructs the other two students to shade 4 pieces on their tape diagrams. Ms. Fields directs the group to erase their boards to move to the next problem. After having them draw two circles to represent pizzes on their boards, where the circles are the same size. She then shows them how to partition the first circle into eighths.

Ms. Fields: Now shade in 3 pieces in each circle. Which fraction is greater, $\frac{3}{4}$ or $\frac{3}{8}$?

Brian: 3/8 is more because that pizza has more slices in it.

Ms. Fields: Yes, that's true but the fourths are bigger slices than the eighths so $\frac{1}{2}$ is the greater fraction. Comparing fractions with the same numerator is actually very easy, because you just need to look at which fraction has the smaller number in the denominator. The fraction with the smaller number in the denominator will be the larger fraction.

She models two more of the independent practice problems and has the students copy her work on their boards. Then she has the students try one of the problems on their own. After working for 2 minutes independently, Jadeel tells Ms. Fields he doesn't know how to make fifths on a number line. Ms. Fields draws a number line under the document camera and tells Jaleel to make four lines like hers because that will make five parts. Below the first number line with fifths, she draws a second number line and partitions it lino in inths.

Ms. Fields: So which fraction is greater, 3 or 3

Jaleel: 3 because it has the smaller number at the bottom

Ms. Fields: Yes, very good. That's right.

Ms. Fields closes the lesson by asking students if they have any questions. None of the students respond. She tells them they are showing improvement and they will continue practicing tomorrow.

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Core Pillars









Effective Mathematics Teaching Practices

- 1. Establish mathematics goals to focus learning.
- 2. Implement tasks that promote reasoning and problem solving.
- 3. Use and connect mathematical representations.
- 4. Facilitate meaningful mathematical discourse.
- 5. Pose purposeful questions.
- 6. Build procedural fluency from conceptual understanding.
- 7. Support productive struggle in learning mathematics.
- 8. Elicit and use evidence of student thinking.

Key Point

When delivering acceleration supports, build the conceptual understanding students need to access grade level content by...

- actively involving students in making meaning of mathematics
- engaging students in meaningful discourse that gives them opportunities to share ideas and clarify understanding
- posing purposeful questions to assess and advance student thinking

Monitoring Progress

Review Ms. Hutchins' Approach to Monitoring.

Reflect & Discuss:

 How does this approach to monitoring support Ms.
 Hutchins' with making instructional decisions?

Date	Student	Acceleration Session	Tutoring Task	Classwork Task	Notes:	Next Step
3/9	Malayah	Module 5, Lessons 12-15 Session 1	#7 (Slide 20) Got It Almost Got It Not Yet	L6 Exit Ticket Got It Almost Got It Not Yet	Explained thirds were larger parts than fourths; Struggled to represent area model decomposition as the sum and product of unit fractions on Exit Ticket	Prioritize writing equivalent fractions as the sum of unit fractions in session 2
3/9	Kamal	Module 5, Lessons 12-15 Session 1	#7 (Slide 20) Got It Almost Got It Not Yet	L6 Exit Ticket Got It Almost Got It Not Yet	Drew different size whole units; Did not use parentheses to show the relationship between the addition and multiplication number sentences on Exit Ticket	Use additional practice problems (slide 20 & 21) in session 1
3/9	Joseph	Module 5, Lessons 12-15 Session 1	#7 (Slide 20) Got It Almost Got It Not Yet	L6 Exit Ticket Got It Almost Got It Not Yet	Labeled whole on each model; Knew 2 thirds was closer to 1 and 2 fourths was equivalent to one-half	Prioritize writing equivalent fractions as the sum of unit fractions in session 2
3/9	Byrce	Module 5, Lessons 12-15	#9 (Slide 27) Got It Almost Got It Not Yet	L6 Exit Ticket Got It Almost Got It Not Yet	Struggled with decomposing area models to generate equivalent fractions on Exit ticket	Continue with Session 2 content next week
3/9	Richard	Module 5, Lessons 12-15	#9 (Slide 27) Got It Almost Got It Not Yet	L6 Exit Ticket Got It Almost Got It Not Yet	Explained even though ninths meant there were more parts in the whole, fifths were larger parts	No further tutoring needed for this topic
3/11	Jamir -	Module 5 lessons 1-6	#2 & 3 (Slide 52) Got It Almost Got It Not Yet	L6 Exit Ticket Got It Almost Got It Not Yet	Drew accurate model to show 5-halves; Wrote 16/16 instead of 16/18 for 3b; Is decomposing area models to generate equivalent fractions, but not yet writing number sentences to show the decomposition as the sum and product of unit fractions	Focus on session 1 Module 5, Lessons 12-15 next week; Use additional practice problems (slides 48-49) to continue to work on fractions greater than 1

Why is this important?

"Classroom instruction needs to promote student agency and identity-as-learners through classroom discussion, challenging tasks, and ongoing formative assessment that provides feedback to guide the learning process. . . The process of continuously monitoring students' learning progress allows teachers to clarify learning goals, respond adaptively based on individual learning patterns, and involve students in the process of peer- and self-assessment."

Goldman, Susan R. and James W. Pellegrino. "Research on Learning and Instruction: Implications for Curriculum, Instruction, and Assessment." *Policy Insights from the Behavioral and Brain Science*, vol. 2, no. 1, 2015, pp. 33-51.

Eliciting & Using Evidence of Student Thinking to Monitor Progress

Monitor the progress of students receiving acceleration support.

- Use student work from tutoring sessions
- Use curriculum-embedded formative assessments such as classwork, exit tickets, anecdotal records
- Use the evidence to inform decisions about flexible grouping and instructional content to prioritize in tutoring sessions

Key Point

How do we know if our teaching = learning?

Monitor student work.

Our Agenda

- 1. Getting Started
- 2. Planning Acceleration Supports
- 3. Delivering Acceleration Supports & Monitoring Progress
- 4. Wrapping Up

What's Next?

Before our next session...

School-based leaders: Select one teacher to support in planning "just in time" acceleration supports (small group or whole group) based on their data

District-based leaders: observe the co-planning session and/or observe the teacher's instruction

Looking Ahead

Session 1	Session 2	Session 3	Session 4
Defining our Approach to Addressing Unfinished Teaching and Learning in Math	Assessing and Diagnosing Unfinished Learning in Math	Plan and Take Action Part I: Planning Intentional Core Supports	Planning Intentional Small Group and Individual Supports

Thank You!

Please give us your feedback:

https://tinyurl.com/NDESession3