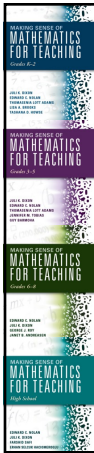


Small Group, Whole Class: Supporting Small Group Instruction within a Whole Class Structure

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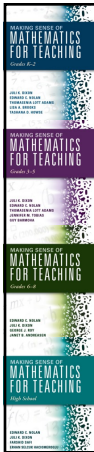
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Find a Colleague

Much of the discussion will be grounded by grade bands. Please find a colleague (or group of colleagues) with whom you share this commonality for the remainder of this session.

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Chat about this:

Connect Concepts on Skills

Lesson 3

Name _____

Explore Division of Mixed Numbers

I can find the quotient of a mixed number or fraction and a mixed number, fraction, or whole number.


Spark Your Learning

Four friends go hiking. They bring snacks, a compass, and $3\frac{3}{4}$ quarts of water. If they share the water equally, how many quarts will each person get?

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Chat about this:

Spark Your Learning 

Four friends go hiking. They bring snacks, a compass, and $3\frac{1}{3}$ quarts of water. If they share the water equally, how many quarts will each person get?

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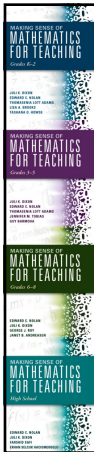

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Goals for this Session

- Discuss the purposes of differentiation and small group instruction;
- Explore strategies to implement effective small group instruction within a whole class structure; and
- Create a shared image of effective differentiation and small group instruction.

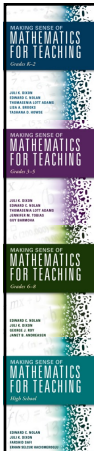
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Chat about this:

- When is differentiation used in mathematics instruction?
- Why is it used?
- What does it look like?

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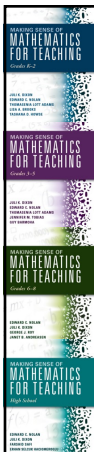


What would you do?

You are supporting a teacher in planning a lesson on one of the following topics:

- Linear Functions
- Equivalent Expressions
- Multiplication

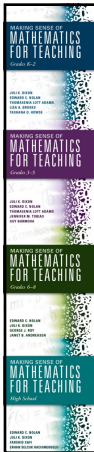
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What would you do?

- What would you address during planning?
- What would you look for during instruction? (Notice “look for” was not in quotes...)

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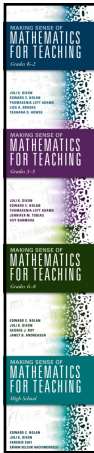


Where did you focus?


Did your discussion include eliciting common errors from students?

How was differentiation addressed?

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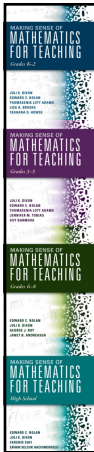


Plan with the TQE Process in Mind



- **Tasks** connect to learning goals and help identify student errors.
- **Questions** elicit mathematical understandings and common errors.
- **Evidence** drives scaffolding and guides extensions.

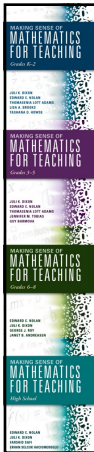
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Purpose of Small Group Instruction:

- Differentiation

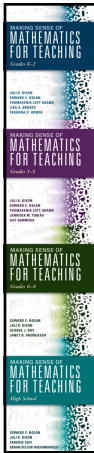
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Purpose of Small Group Instruction:

- Differentiation
 - Adjusting instruction to meet students' individual needs.

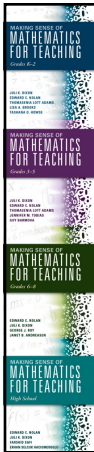
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Purpose of Small Group Instruction:

- Differentiation
- Diagnosis

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Purpose of Small Group Instruction:

- Differentiation
- Diagnosis
 - Learning about what students know and what they have yet to learn.

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Purpose of Small Group Instruction:

Small group instruction provides the opportunity to diagnose student understanding so that differentiation can be targeted and proactive.

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Small Group, Whole Class

What does this look like in High School, Algebra 1?

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Consider this task:

Father (F) & Son (S) Race

Write a story that matches the graph.

Be sure to include what is occurring at A, B, and C as well as the intervals in between.

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Small Group, Whole Class

What does this look like in Grade 7?

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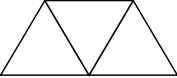
Consider this task:

Bridge of length 2

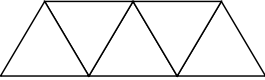
Bridge of length 3

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Consider this task:

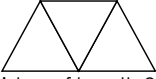


How many beams are in a bridge of length 2?

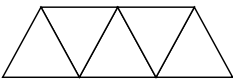


How many beams are in a bridge of length 3?

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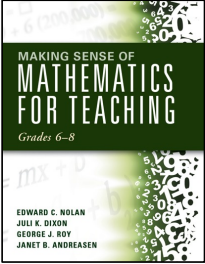
Bridge of length 2



Bridge of length 3

Length	Number of Beams
2	
3	
5	
10	
50	
n	

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Making Sense of Mathematics for Teaching
Grades 6-8

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MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
High School

Small Group, Whole Class

What does this look like in Grade 3?

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MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
Grade 3


MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
High School

Consider this task:

Spark Your Learning

Imagine you are studying monkeys and how they move. Each monkey has 2 arms and 2 legs. Choose any number of monkeys from 1 to 9 to study. How many arms and legs are there?



Show your thinking.

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MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
Grade 3

MATHEMATICS FOR TEACHING
High School



Houghton
Mifflin
Harcourt

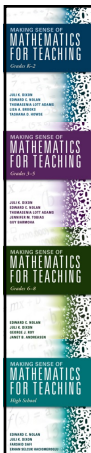
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Discourse Norms

- Provide explanations and justifications with solutions.
- Make sense of others' solutions.
- Communicate when you don't understand or don't agree.

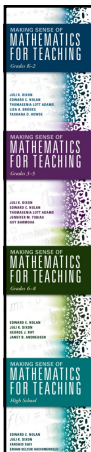
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Four Strategies for Effective and Equitable Differentiation

1. Use moderately heterogeneous groups.
2. Select tasks with multiple access points.
3. Prepare assessing, scaffolding, and advancing questions prior to implementing the task.
4. Provide scaffolding "just in time."

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Structures of Small Group Instruction

Low Performing	Low Performing
Low Performing	Low Performing

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Structures of Small Group Instruction

Beyond proficient	Proficient
Almost proficient	Not yet proficient


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Structures of Small Group Instruction

Beyond proficient	Proficient	Proficient	Almost Proficient
Proficient	Almost Proficient	Almost Proficient	Not yet proficient

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Plan with the TQE Process in Mind



- **Tasks** connect to learning goals and help identify student errors.
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Cultivating Perseverance

- Just-in-case scaffolding
- Just-in-time scaffolding

Blog: <https://tinyurl.com/y5pcxcoq>

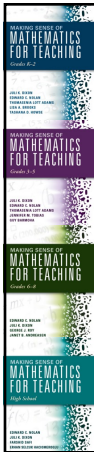
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