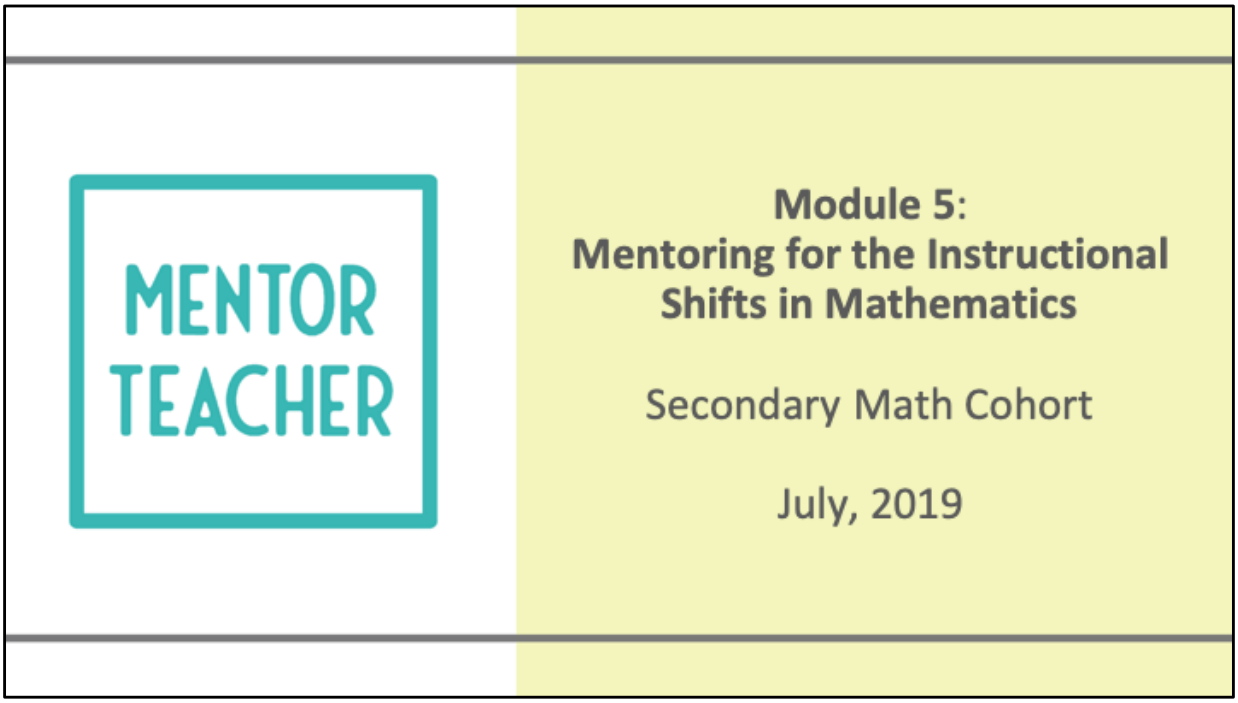
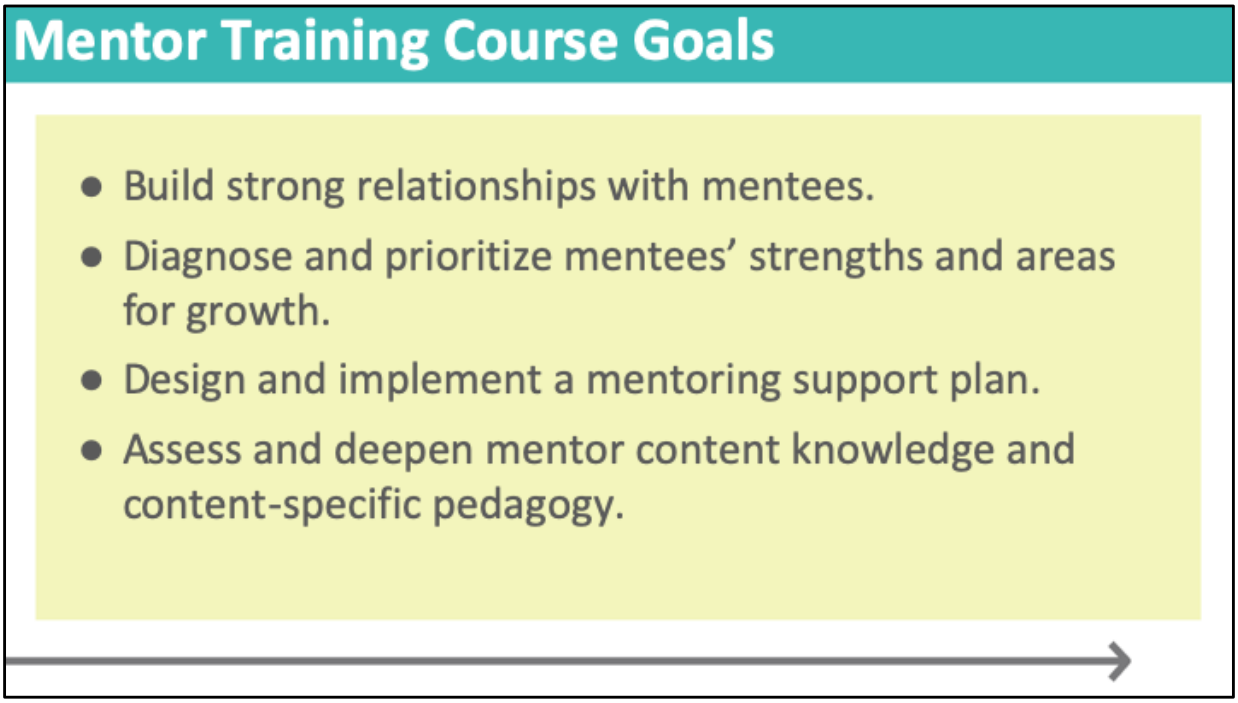


SECTION START: 8:30
●**Duration:** 30 seconds

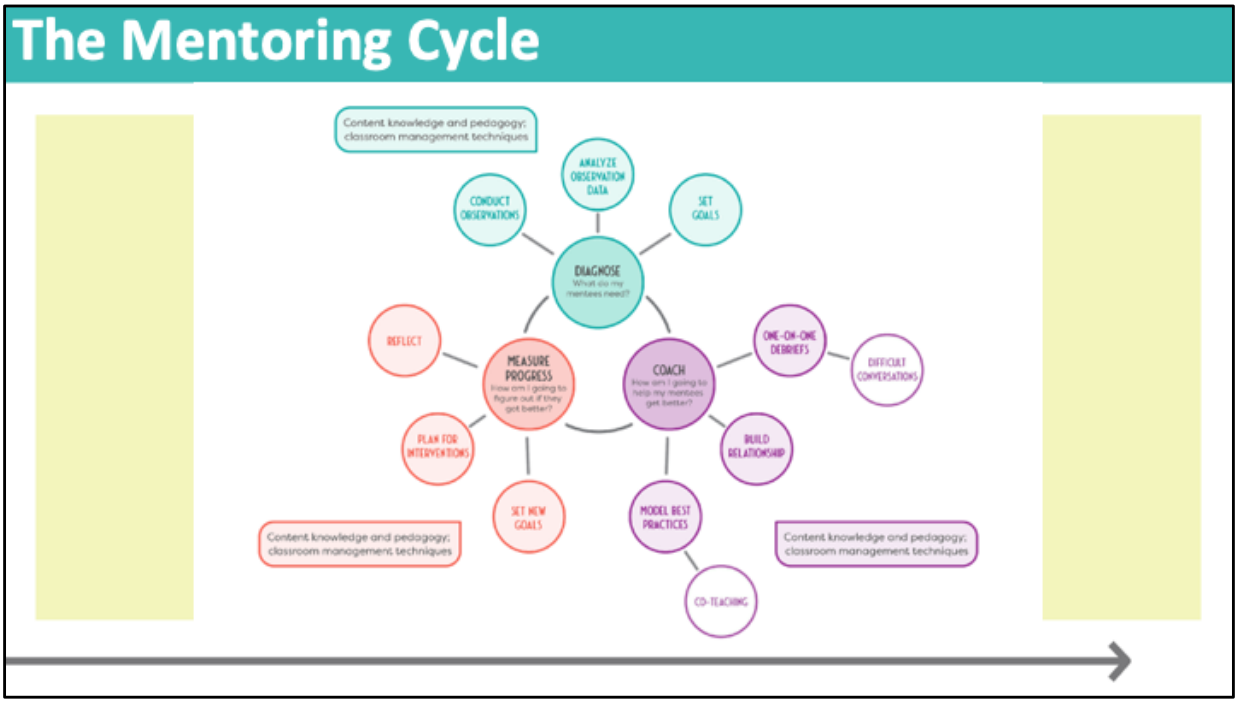
●**Facilitator says**: Welcome to Module 5. We hope you had a good night's rest and look forward to another great day of learning today!

- **Facilitator does**: Ensure everyone has signed in, has materials for the day, is sitting with his or her learning team, is wearing a name tag and has their name table tent out in front of them.
- Review logistics for training (restrooms, times, breaks, lunch, etc.): our morning break will be at 10:20; lunch will be at 11:45; and afternoon break will be at 1:30.



- **Duration:** 30 seconds

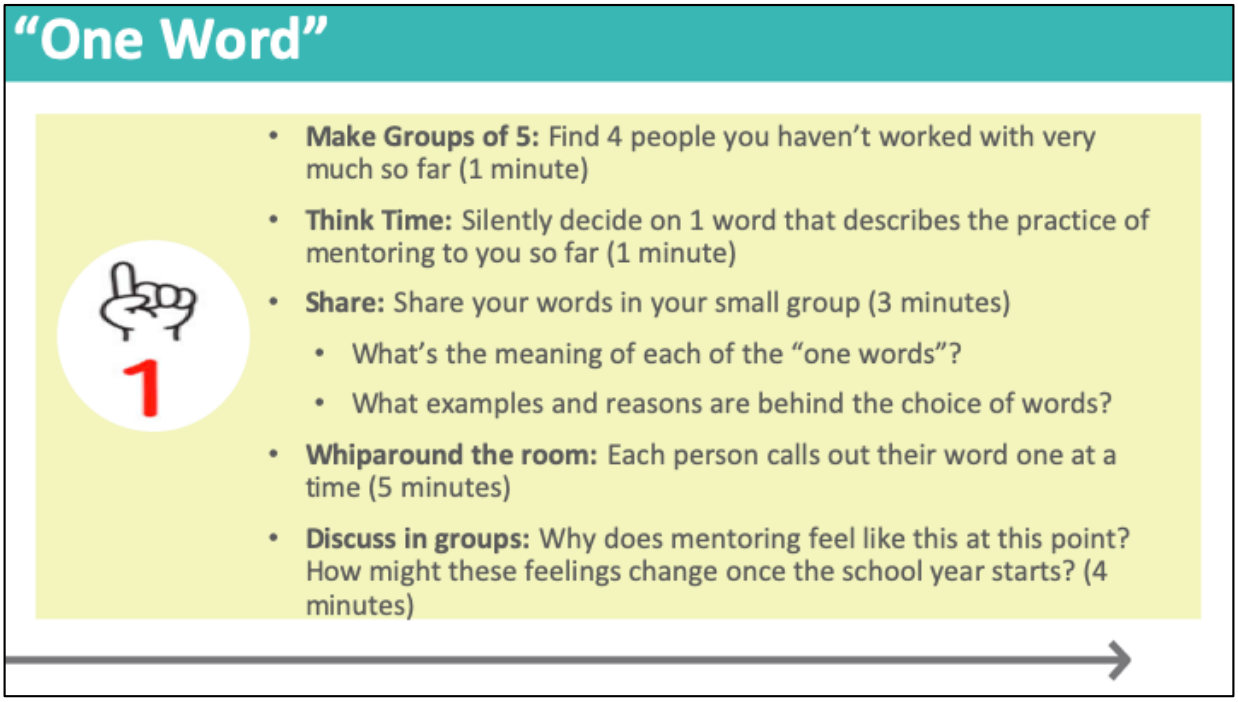
- **Facilitator says:** Let's just take a moment to remind ourselves about the overarching goals of the Mentor Training Course. Today's topics will really focus on that third overall goal, designing and implementing a coaching support plan to develop mentee knowledge and skills.



- **Duration:** 1 minute

- **Facilitator Says:** Remember, this is the mentor cycle that all of our work is grounded in. The mentor cycle illustrates all of the components of your role as a mentor - the concrete actions you will take when working with your mentees. Today, we'll be zooming in on aspects of Coach and Measure Progress. By the end of the nine Modules we will have worked through all of the components of the cycle.

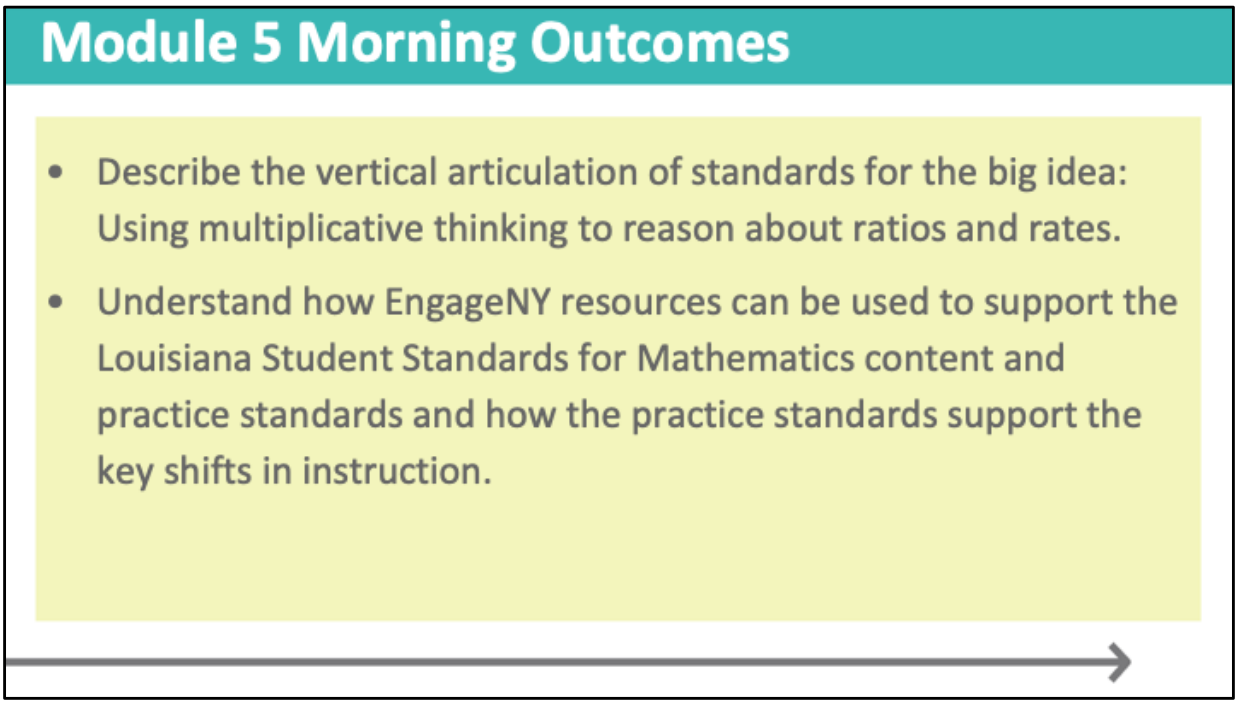
- **Duration**: 5 minutes
- **Facilitator says**: We want to share what you wrote on your exit cards yesterday. These are the highlights of what you said rather than every comment. If you have a question that we have not yet answered, please see us at break or lunch to get some of our thinking.
- **Facilitator does**: read a summary of about 5-8 big ideas for each of the items. Answer questions that are appropriate to answer in the large group.



- **Duration:** 15 minutes

- **Facilitator says:** Today is the halfway point in your mentoring course, and your final module before the school year and your mentoring practice begins! So we're going to take a few minutes to get to know a few more of your fellow participants and to think a little about what "mentoring" means to you at this point halfway through the course. [Read activity instructions on slide].

- **Facilitator does:** Time keep and move activity along

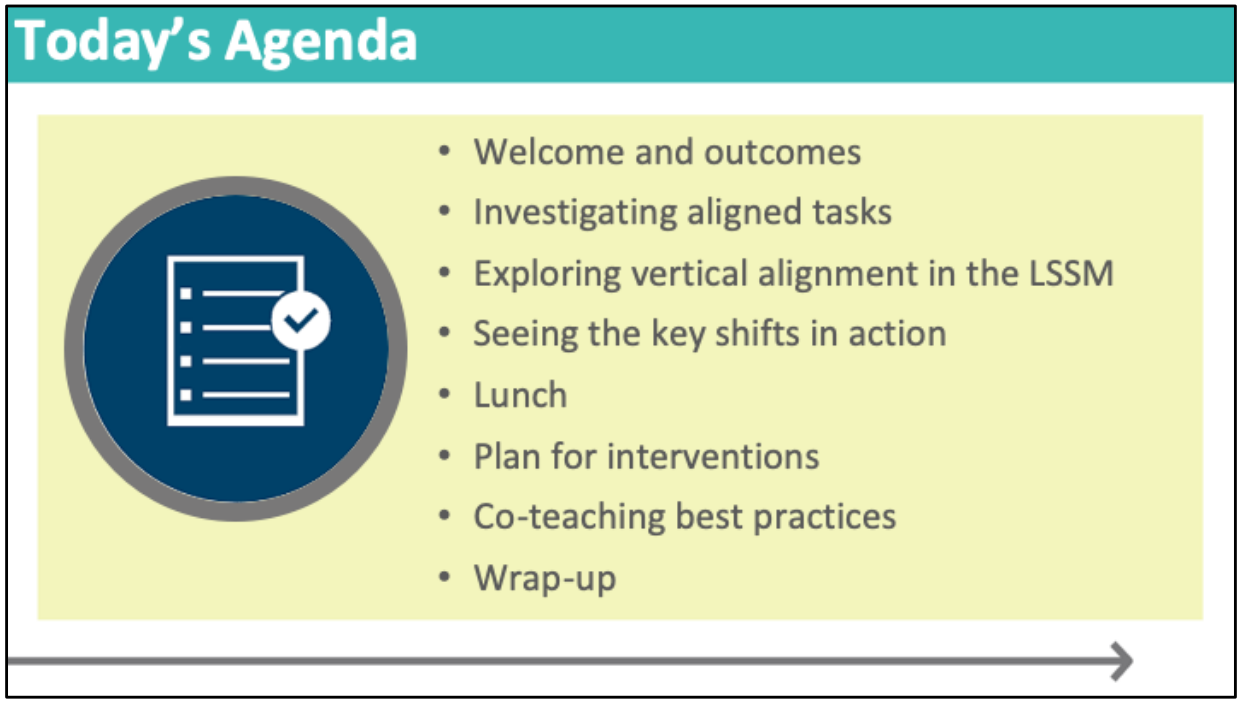


●**Duration:** 1 minute

●**Facilitator says:** This morning, we will focus on two content oriented outcomes, then in the afternoon we will shift our focus to planning for interventions with your mentee, and best practices for co-teaching.

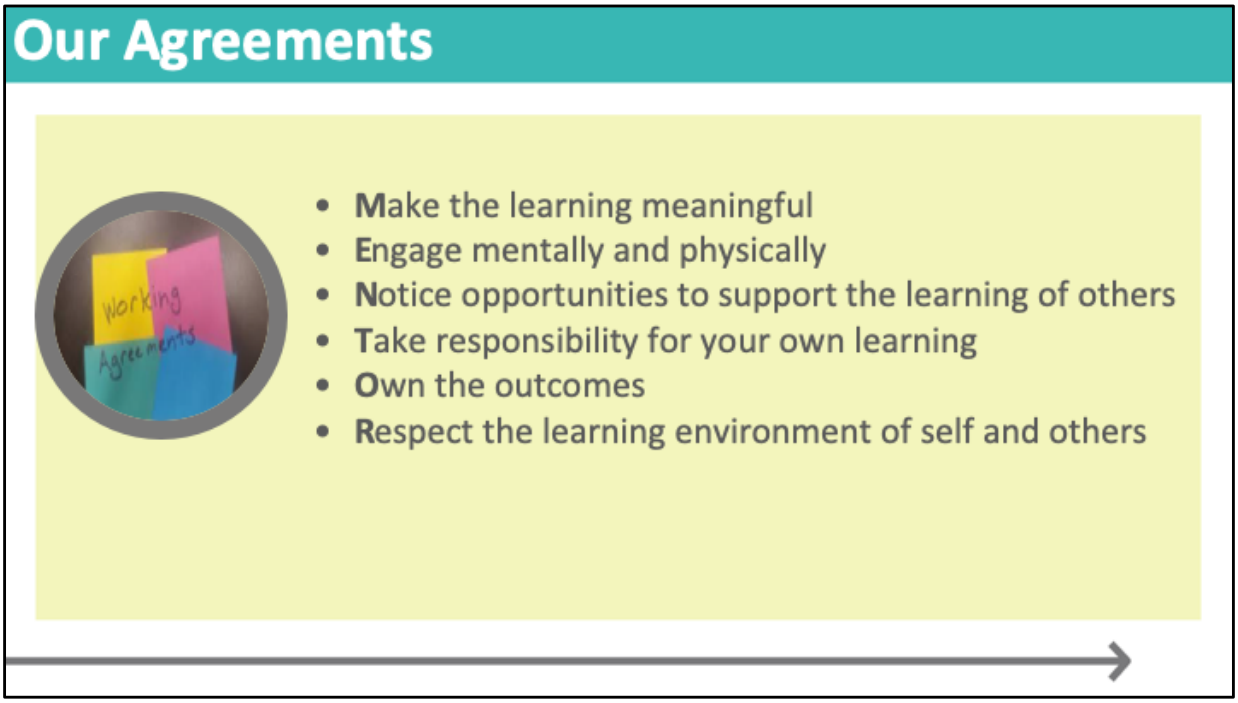
The state of Louisiana has invested significantly in the development of Tier 1 curriculum to ensure all educators have access to high quality curriculum and instructional materials. This investment resulted from compelling research on the impact on students when teachers work with HQ curriculum. We are committed to teachers and students having these materials – particularly our newest teachers and our teachers serving our most vulnerable students. Today's curriculum focus is on coherence and vertical alignment in the Louisiana Student Standards for Mathematics, the LSSM.

●**Facilitator does:** Reminds participants that all of the outcomes appear on **page 4**.



●**Duration**: 30 seconds

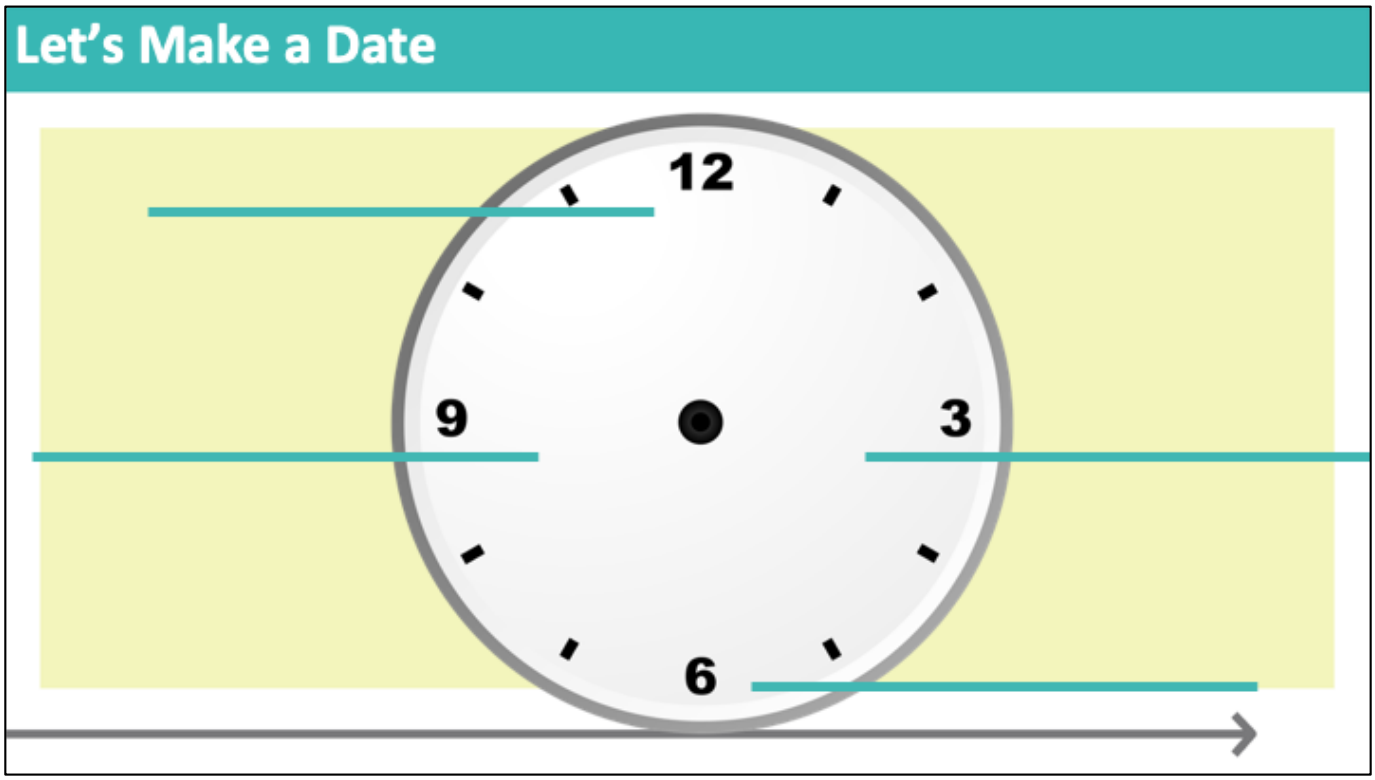
●**Facilitator says:** You will see our agenda on p. 4 of your packet. We will begin with our content focus on coherence and vertical alignment in the LSSM, then move into our mentoring focus of planning for interventions and co-teaching best practices. At the end of the day, after you have time to work on the mentoring assessments, you'll have some time to prepare for the beginning of the school year before we wrap up for the day.



●**Duration**: 1 minute

●**Facilitator says**: Let's take a minute to revisit our agreements that we established at the very beginning of our mentor work together. Make a personal, mental note on which agreement you are going to really focus on during today's learning.

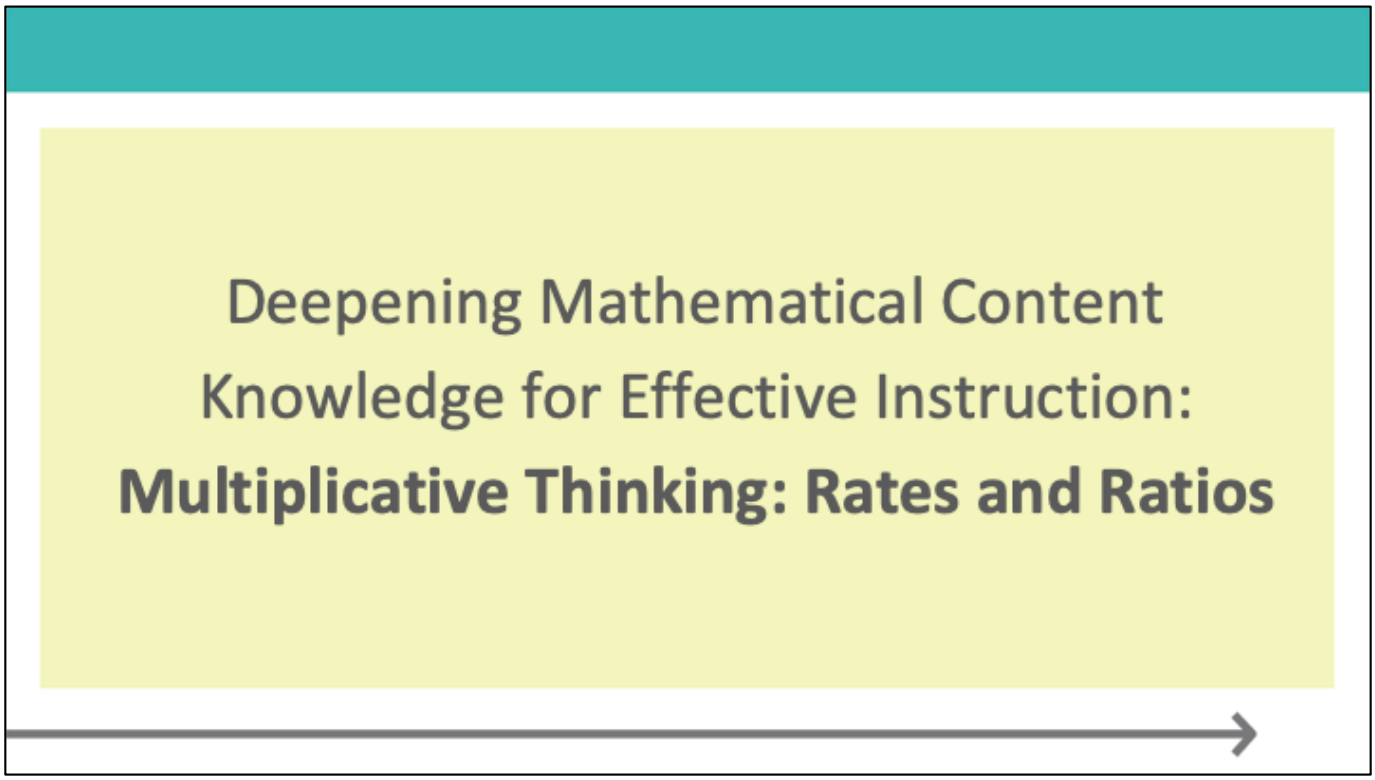
●**Facilitator does**: Allow participants 1 minute of quiet think time to make their personal commitments.



- **Duration**: 5 minutes

- **Facilitator says**: Like yesterday, there are going to be different activities throughout today's training during which we want you to have the opportunity to work with people who are not sitting with you at your table. You'll get plenty of time to chat with the people at your table and your shoulder partners, but it will also be nice to get up and move and gain some insights from other colleagues in the room. Therefore we are going to ask that you make 4 new dates for today: a 12 o'clock, 3 o'clock, 6 o'clock and 9 o'clock date with 4 different people from yesterday that are not sitting at your table. When I say go, everyone will stand up and fill out their clocks on page 5 of your handout. You'll add a person's name to each time slot, you may even want to add in a description of what they look like or where they are sitting to help you remember who that person is, just in case. Once you have your whole clock filled out, you may take a seat.

- **Facilitator does:** Allow time for participants to complete their clocks. Help those who are missing certain time slots and can't seem to find someone who also needs that same time slot find a date.



The timing on this session is tight

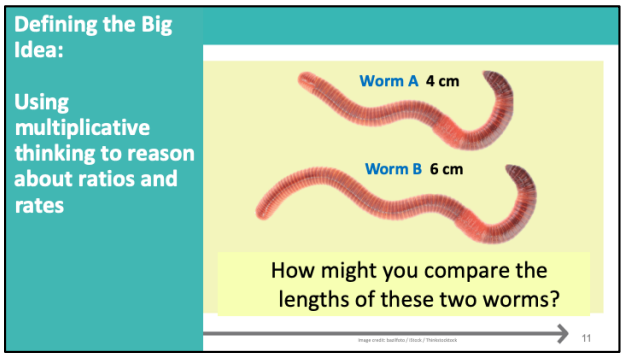
Duration (session): 40 minutes

Duration (slide): 1 minute

- **Facilitator says:** In the previous modules we studied how the key shifts of focus and rigor surface in the classroom. In this module we'll consider the vertical articulation of standards related to multiplicative thinking in ratios and rates. During the next 45 minutes, you will consider how the standards build this idea from late elementary school to early high school, illustrating the key shift of coherence in the standards. Remember, the standards are designed around coherent progressions from grade to grade. You will examine tasks to illuminate this progression and the changes in the LSSM relating to ratios and rates from grade 6 to Algebra I.

- **Facilitator says:** In the next section, you will be building a vertical alignment of standards around a big idea of mathematics. But first, you will study the big idea: Using multiplicative thinking when reasoning with ratios and rates.
- Please quickly regroup and sit in mixed-grade-level groups. Try to have at least one person from grades 6-Alg I in each group.

Words of Wisdom: The big idea of this module is using multiplicative thinking when reasoning with ratios and rates.



Duration: *3 minutes*

Critical Idea

Teachers may be at different places in their understanding of additive and multiplicative thinking. The purpose of this activity is to come to a consensus on the meaning of multiplicative thinking by engaging in a mathematical discussion around a problem that contrasts additive and multiplicative thinking.

- **Facilitator says:** Mentors content knowledge is essential In this Module, you are going to consider the reasoning required when working with ratios, rates, and proportional relationships. Proportionality is a key idea of mathematics that begins in middle school. What students learn in middle school and Algebra sets the foundation for work with derivatives in calculus. As students move from elementary school to middle school, the reasoning they use to compare quantities changes. To help you start thinking about this change, think about the image of the two worms.

- **Facilitator does:** ANIMATE the slide

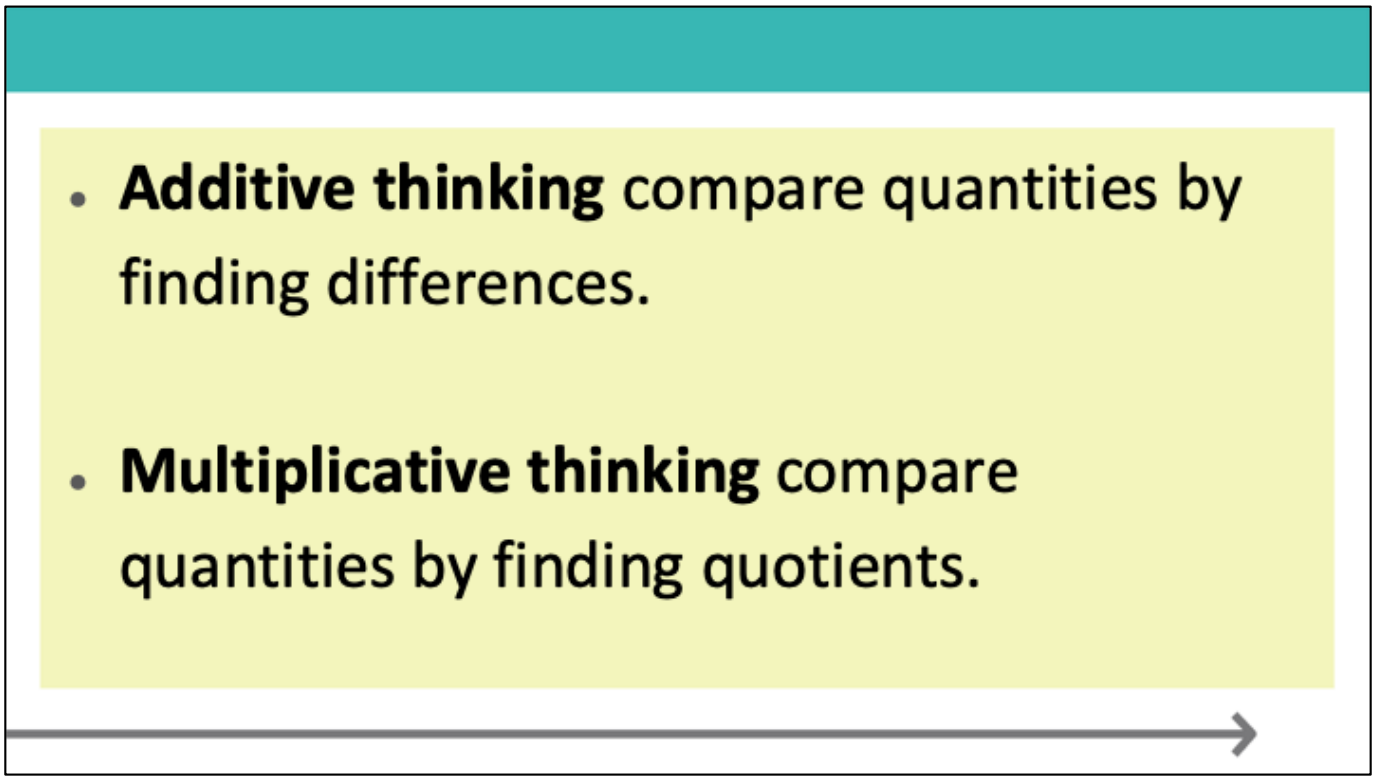
- **Facilitator says:** How might you compare the lengths of these two worms?

- **Facilitator does:**
  - Give participants 1 minute to talk with an elbow partner.
  - Solicit responses from participants that illustrate additive thinking, that is worm A is 2 cm longer than worm B, and responses that illustrate multiplicative thinking, that is worm A is 1.5 times as long as worm B. Note: Teachers may struggle to give comparisons that illustrate multiplicative thinking. You may need to push participants to think of other ways to compare the two worms and in particular to think about how middle school mathematics would support other ways to compare the length of the two worms.

  - Other comparisons that participants might make are:
    - Worm B is 2 cm shorter than Worm A.
    - Worm B is 2/3 the length of Worm A
    - Worm A is 150% the length of Worm B.
    - Worm B is 66 2/3% as long as Worm A.

- **Facilitator does:**
  - Chart participant responses on chart paper.

- **Facilitator says:**
  - What is the difference in these comparisons?
    Teachers may respond by pointing out the operations used in finding each answer, subtraction versus division. Participants may not use the terminology additive and multiplicative thinking.

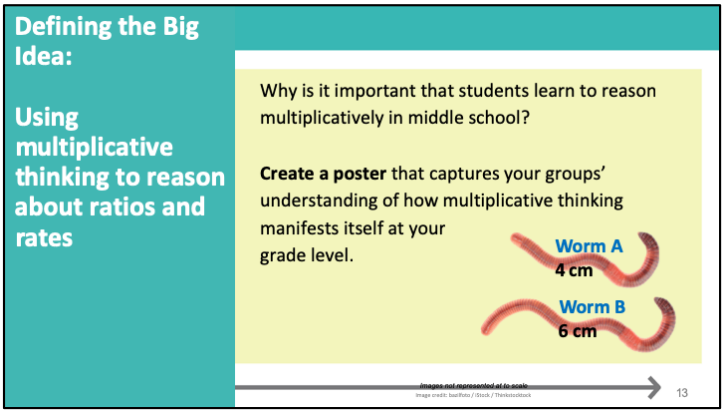


Duration: *2 minutes*

- **Facilitator says:** There are two ways of thinking about how to compare the worms – additive thinking and multiplicative thinking.

- **Facilitator says:** Students who use additive thinking compare quantities by finding differences (noting that some students find differences by adding on). In contrast, students who use multiplicative thinking compare quantities by finding quotients.

- **Facilitator says:** Which type of comparison is more common across the middle school grades?"
    - Teachers should recognize that the multiplicative comparisons are more common because of the focus of ratios and rates across the middle school grades.



Duration: *8 minutes*

- **Facilitator says**: Think about this questions silently. Jot down your response. (give participants about 1 minute to generate ideas)
    - Why is it important that students learn to reason multiplicatively in middle school?

- **Facilitator says (after 1 minute):** Turn and share your response with your table group. Each group be prepared to share one idea. Give 2 minutes for teachers to talk.

- **Facilitator does:** As participants are talking, pass out chart paper and markers to each group.

- **Facilitator does (after 2 minutes):** Elicit one response from each table group. Some responses include:
    - Thinking multiplicatively allows students to:
        - quickly scale quantities up and down
        - make predictions, distinguish between proportional and non-proportional relationships, and
        - use proportional relationships to solve problems.

- **Facilitator says:** As students move from elementary school to middle school, they will need to shift from additive to multiplicative thinking to be successful with ratio reasoning and proportional relationships. This change in thinking needs to be made explicit in instruction to ensure that all students make this shift.

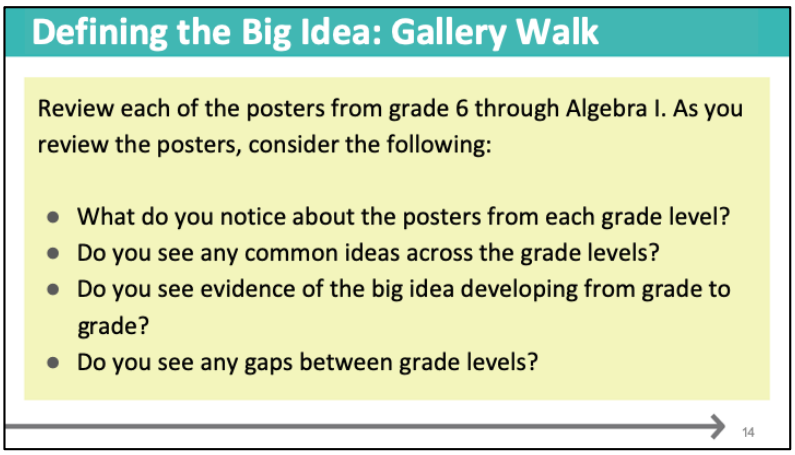
- **Facilitator says:** Now that we have a common understanding of what multiplicative thinking is and why it is important at the middle school level, let's think about how students' use of multiplicative thinking manifests itself at your grade level. On the poster I put at your table, record examples of how multiplicative thinking is used at your grade. You can use words, pictures, equations, tables, or any other representation. Make sure to include your grade level at the top of the poster.

- **Facilitator does:** Monitors table groups.
    - Each group should summarize their discussion on a poster illustrating their understanding of multiplicative thinking at their grade level.
    - Make sure that participants label their poster with the grade level or course they are discussing.
    - Have participants hang their posters. If there are multiple groups with the same grade level, group them by grade level and give a few minutes for the groups to compare their posters and discuss similarities and differences.

Words of Wisdom

- The purpose of charting the big idea is to tap participants' prior knowledge. It is a starting place to acknowledge what they already know before studying the standards. It helps participants make connections to what they already know and to recognize areas where more study is needed.
- It would be easy to let the discussion comparing additive to multiplicative thinking overtake this session. Limit the discussion to the simple example with the worms so there is time for the other

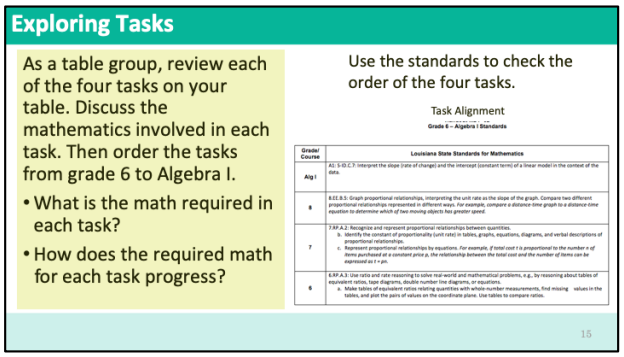
activities in this session.



Duration: 8 minutes

- ***Critical Idea***
- Participants review the description of the big idea at different grade levels.
-
- ***Step-By-Step Instructions***
- Have them do a gallery walk, analyzing the progression of ideas from grade 6 to Algebra I. Ask participants to pay attention to the following questions as they do their gallery walk.
    - What do you notice about the posters from each grade level?
    - Do you see any common ideas across grade levels?
    - Do you see evidence of the big idea growing from grade to grade?
    - Do you see any gaps between grade levels?

- Give participants 5 to 6 minutes to do a gallery walk, reflecting on the 4 questions.
- Take some time to have groups share out comments from their gallery walk and discuss the questions given. Let participants know that they will continue working with this big idea by studying the standards around ratios and rates.
-
- ***Words of Wisdom***
- This activity is an initial brainstorming activity for participants. Participants may have misconceptions about the big idea and the content at each grade level at this time. There may be some disagreement among participants about what is on each poster. Allow for some of this discussion, but it is not necessary to resolve these issues at this time. These discussions motivate the need for studying the standards. At the end of Session 2, teachers will come back to these posters to discuss how their understanding has changed.
- Be sure to collect these posters to use in the next session.



Duration: 10 minutes

Critical Idea
Participants consider four mathematical tasks and decide on how the tasks progress from grade 6 to Algebra I.

- **Facilitator says:** Regroup so you are sitting in mixed-grade-level groups. If possible there should be a teacher from each grade level at each group.

- **Facilitator does:** Distribute **Ratio and Rate problem set** at each table, one set per table.

- **Facilitator does/says:**
  - Review each of the four tasks as a table group, discussing the mathematics involved in each task.
  - Then order the tasks in the way you think the tasks develop from grade 6 to Algebra I.
  - Use these guiding questions to guide group discussions.
    - What is the math required in each task?
    - How does the required math for each task change/develop?

- **Facilitator does (after 5-7minutes):** Monitor group discussion, listening for rationale for ordering the tasks. Remind groups to justify based on the math knowledge, skills, and procedures required to complete the task.

- **Facilitator does: <u>Animate the slide</u>** <u>reveal the task alignment to the LSSM</u>**.**

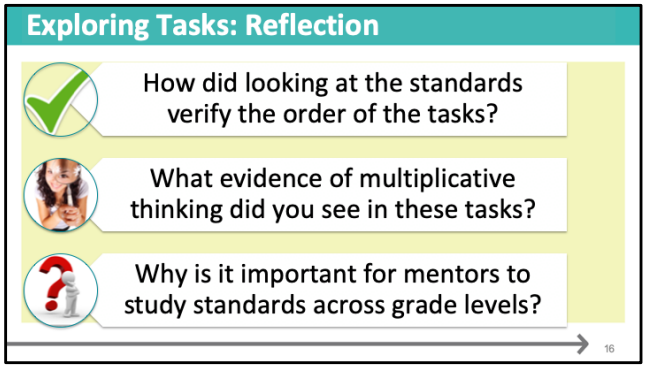
- **Facilitator says:** These four standards correlate to the mathematics in each of the four tasks.

- **Facilitator does:** Give participants **2 minutes** to use the standards to check their order of the four tasks. They should compare the standards at each grade level to the math in the task to see if the task chosen for 6th grade addresses the standard, etc. Some teachers may notice that some tasks do not address all parts of the given standard. This is ok, and teachers should realize that it may take a variety of tasks, activities, and lessons to completely address a standard.

- **Facilitator says:** How does your alignment compare?

- **Facilitator does:** Quickly verify the order of the tasks using **Ratio and Rate problem set: Facilitator**.

Words of Wisdom
In this activity, participants are making an educated guess about the order. They then compare the given standards to the tasks to verify the order.



Duration: 5 minutes

Critical Idea

This activity sets the stage for teachers to begin to see coherence in the standards and understand how ideas in one grade are built off students' understanding from previous grades and how grade level standards lead to understanding in the next grade. Teachers can't depend on tasks or resources to define what they teach at a particular grade level; they must study the standards to have an understanding of key mathematical ideas and how they develop across grade levels.

- **Facilitator says:** As a table group, use the next **3 minutes** to discuss the reflection questions on the slide at their table. We will share as a whole group. Each person needs to be prepared to share a response for each question, because I will use a creative method to choose the spokesperson

- **Facilitator says (after 3 minutes):** The spokesperson for your table is the person sitting at 3 o'clock (12 Noon is is the front of the room).
- Key points that should emerge from the discussions for each question are:
  - ***Question 1:*** *The mathematics called for in the standards is evident in the tasks given. The progression of the mathematics in the standards mirrors the progression of mathematics in the tasks.*
  - ***Question 2:***
    - *Task A (6th grade 6.RP.A.3.a): Students use multiplicative thinking to make a table of equivalent ratios and plot ordered pairs from the table on the coordinate plane. Students also use ratio and rate reasoning in this task to predict values using different representations. Note, this task also relates to 6.EE.C.9 as students use variables to represent quantities in a relationship and write an equation to represent the relationship.*
    - *Task D (7th grade 7.RP.A.2.a,b,c): Students are given two different relationships in different forms. Students must decide if each relationship is proportional or not (7.RP.A.2.a). Then students must write an equation for each proportional relationship (7.RP.A.2.c) and identify the constant of proportionality (7.RP.A.2.b).*
    - *Task B (8th grade 8.EE.B.5): Students compare two proportional relationships represented in different ways.*
    - *Task C (Algebra I A1:S-ID.C.7): Students are given a linear model from data and they interpret the parameters in non-proportional linear relationships. The multiplicative thinking used with proportional relationships is no longer sufficient. Students find and interpret the slope as a rate, but they must also account for the initial value.*
  - ***Question 3.*** *A major responsibility of mentors is to support mentee understand of how* ***students*** *progress from creating a table of equivalent ratios to working with proportional relationships and then to interpreting parameters in non-proportional relationships. The standards clearly define the expectations of students at each grade level for this progression. It's important for teachers to understand how their instruction at their grade level is part of a larger picture.*

Additional notes for facilitator:

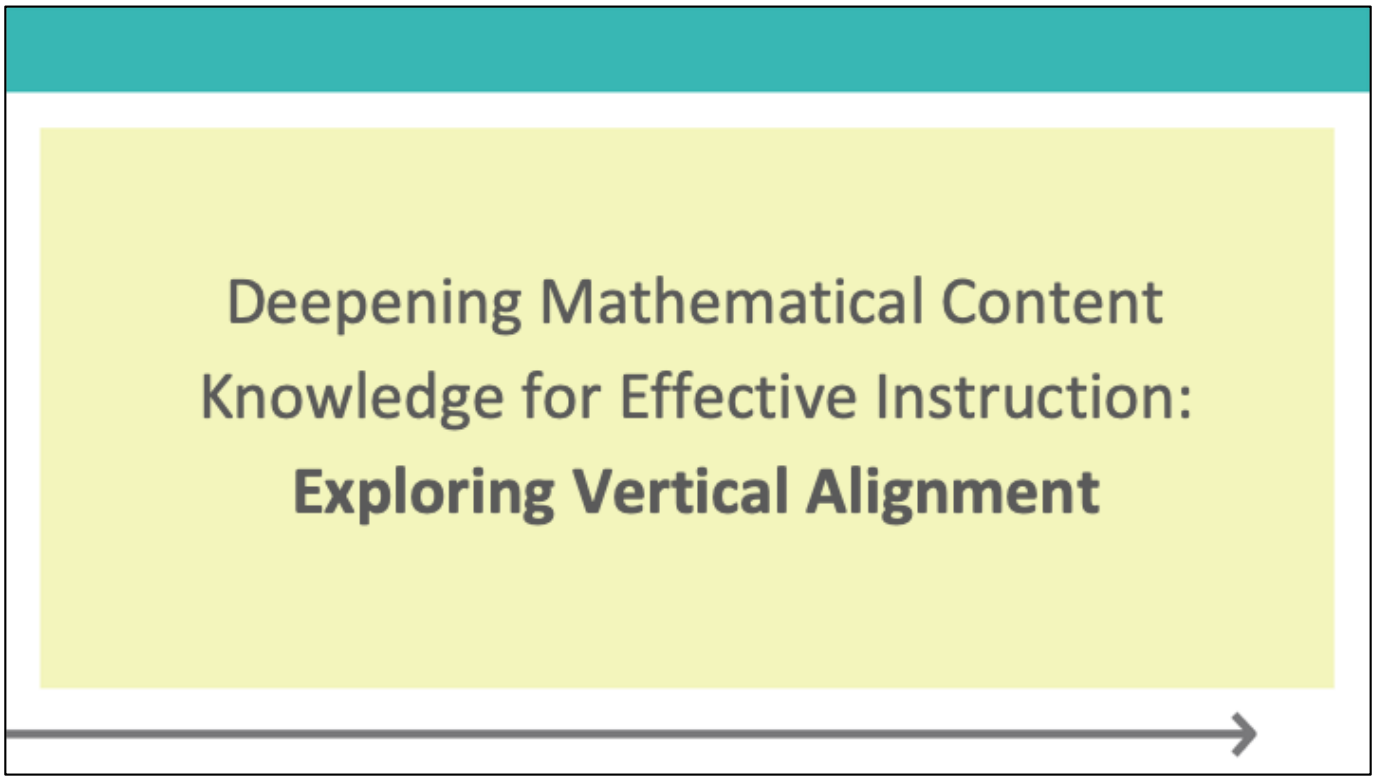
- These four tasks may elicit a discussion between the meaning of ratio, rate, constant of proportionality, and slope. These terms represent the progression of ideas from grade 6 through Algebra I. You may choose to use the comments below to help guide discussion or answer questions that may arise in the session. Students begin to learn about ratios and rates in grade 6.
    - A *ratio* is an association between two or more quantities. The association is described using words such as "to" and "for every." A colon can also be used to indicate the association.
    - Using fraction notation to represent a ratio can lead to student misconceptions and confusion in that ratios can represent part-to-part relationships, not just part-to-whole relationships. Fractions represent part-to-whole relationships.
    - Because of this distinction, using fraction notation to represent ratios, especially as students are solidifying their understanding of fractions from elementary school and are being introduced to the idea of a ratio in grade 6, is problematic. For this reason, the EngageNY resources refrain from representing ratios using fraction notation; only a colon or words are used to represent ratios.
    - Every ratio of two quantities has two associated rates. The *rate* is a quantity derived from the ratio by division, and it includes units. There are two associated rates depending on the order of the division.
    - If two quantities are in a proportional relationship, then the quantities are related by a *constant factor*. The ratios between pairs of quantities in the relationship are equivalent. The value of these equivalent ratios is the constant factor and is called the *constant of proportionality*. A constant of proportionality is a numerical value that has no units.
    - In a proportional relationship, the *slope* of the line representing the relationship is the same as the constant of proportionality. But not all linear relationships are proportional.
    - In general, the slope of a line is the quotient of the change in two *y*-values on the line and the change in the two corresponding *x*-values on the line. The slope of a line indicates its steepness when graphed. It is the geometric representation of the rate of change between the quantities in the relationship.
    - The progression of ideas from *ratio* and *rate* to *constant of proportionality* and *slope* represents students' growing understanding of how to describe relationships between two quantities. As students study rates and proportional relationships, seeing one quantity as a product of a constant and the other quantity will help students understand the power of multiplicative reasoning to scale up or down the quantities in the relationship.

- **Facilitator says: (using the responses to the third question to transition**

to the next section): It's important to study the standards across grade levels. Next, we will continue studying the same big idea. You will take a deeper look at your grade-level standards related to the study of rates and proportional relationships and get a more complete picture of how this big idea builds from grades 4 through 9.

Words of Wisdom

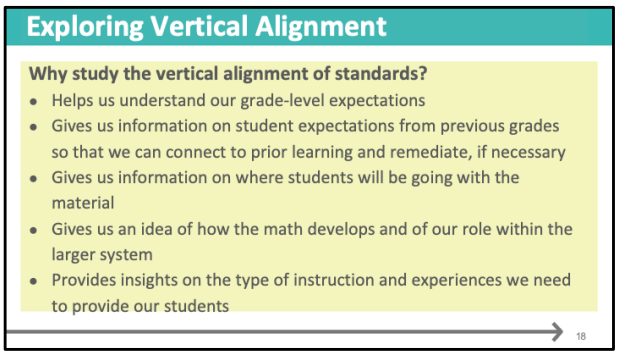
This conversation should prompt the need and value for studying standards across a grade level for a particular concept and is a good segue into the next section.



Duration (section): 50 minutes

Duration (slide): less than 1 minute

Facilitator says: In this session, you'll remain in the mixed grade level groups and study how standards related to the Big Idea: Using multiplicative thinking to reason about ratios and rates, progress from grades 4-9. By studying this progression, participants see how students' understanding of the big idea progresses across grade levels, which is evidence of the key shift of coherence. You will focus on the specific role your grade level standards play in students' understanding and use of ratios and rates to solve problems.



Duration: 2 minutes

Critical Idea
In the previous section, you informally studied the progression of the big idea from grades 6 through 9 by looking at sample tasks that illuminated a subset of standards that addressed the big idea. Now let's take a closer, more formal and complete look of how this big idea is developed, using standards from grades 4 through 9.

- **Facilitator does:**
  - Pose the question on the slide to get participants thinking about why it is important to study the vertical trajectory of standards. Ask them to think quietly about this question, then popcorn out some responses. This should be kept brief—no more than a minute.

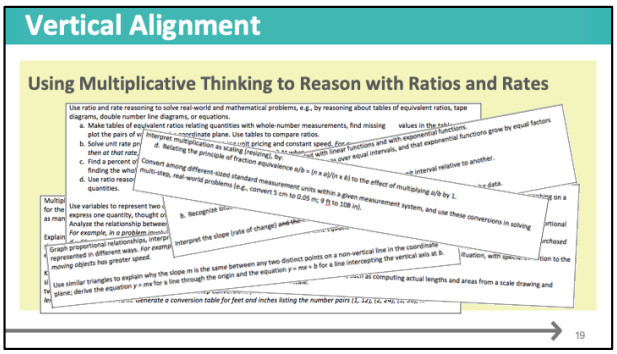
  - **Animate the slide (each bullet automatically enters)**. Build off participants' responses and use the bullets on the slide to provide the rationale for why knowing the vertical trajectory of an idea across grade levels is important.

- **Facilitator says:** This slide provides a rationale for why we want to study the vertical alignment of standards across multiple grade levels. When studying a vertical trajectory of standards, it's important that you work with mixed-grade-level teams in order to gain insights about the standards from teachers from other grade levels.

- Give time for teachers to read through the bullets on the slide.
  - It helps us understand the specific expectations at our grade level.
  - It gives us information on student expectations from previous grades, which will help us connect to prior learning and plan for remediation if necessary.
  - It gives us information on where students are going in future grades with the ideas.
  - It gives us an overview of how the mathematics develops and helps us understand our role within the larger system.
  - It can provide insights on the type of instruction we need to provide our students.

- **Facilitator summarize these points by saying:** Studying the standards at your grade level and across grade levels highlights the key shifts of focus and coherence in the standards.
- When doing a vertical alignment, you need to start with a *big idea*. A *big idea* is a mathematical topic or concept that takes time to develop across grade levels, but is narrow enough to support a focused study. You have investigated the big idea "Using Multiplicative Thinking to Reason About Ratios and Rates" by looking at sample tasks aligned to different grade levels and standards. Now you will study the standards to see how they support a progression of this big idea from grades 4 through 9.
- As a mentor, when you know the vertical trajectory of standards, you can better support your mentee to make instructional decisions aligned to the standards.

Words of Wisdom
Participants are building on the previous section, not repeating it.
It is important to study the vertical trajectory of standards with mixed grade-level teams for the reasons listed in the slide. Armed with this information, teachers can make instructional decisions aligned to the standards.



Duration: 15 minutes

Materials:
One set per table. **Vertical Alignment strips,** cut out and placed into bags or envelopes.

Critical Idea
The power of this activity is the collaborative conversation about carefully selected standards connected to a big idea.

Explain the vertical alignment process to the teachers.

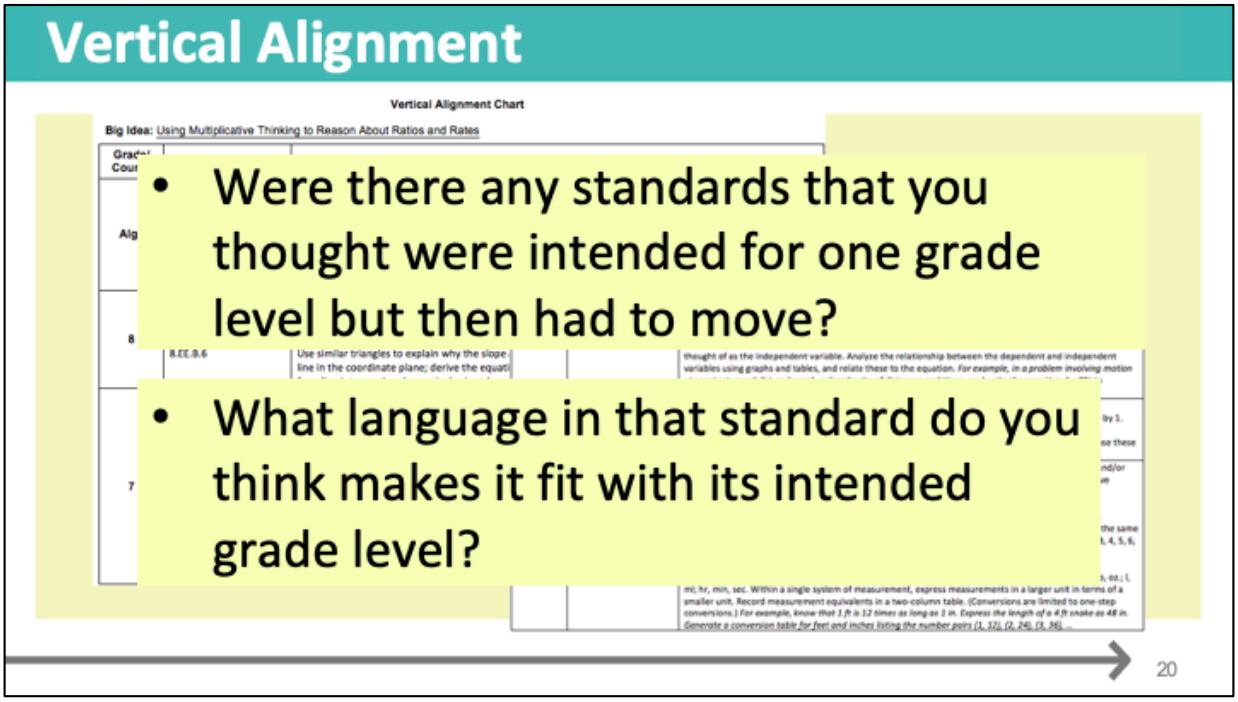
- **Facilitator says:**
  - When discussing the vertical alignment of an idea across grade levels, you need to study the standards from each grade level that are related to the big idea and discuss how the idea develops and changes. You do not necessarily need to study every standard at each grade level that relates to the big idea.
  - For the purposes of the work today, the standards have been chosen for the you and cut into strips. Each group will have a set of the selected standards, with each strip containing the actual language of one or more of the standards from 4th grade to 9th grade.
  - When you look at your strips, you will notice that the grade-level standard coding is not listed with the standard. For the first part of this activity, you will read each of the standard strips with you table group and determine the order of the standards, from 4th grade to 9th grade, based on you experiences and how your group thinks the big idea develops.

- **Facilitator does:**
  - As teachers read and discuss the standards statements, have them think about how the language describes how skills increase in complexity and how the language of the standards affected their group's placement of the cards.
  - Distribute the standards strips to each group. Give groups **10 minutes** to work together to order their standards strips, starting with grade 4, and think about the question "How did the language of the standards affect your group's placement of the strips?"
  - As groups are working, walk around and give each group one sheet of chart paper, and a long strip of tape, 1 - 1.5 feet in length.
  - When it looks like groups have completed the task, call participants back to the whole group.

- **Facilitator says:**
  - How did the language of the standards help you to place them into a progression?

- **Facilitator does:**
  - Call on 3-5 volunteers to share a few specific examples of language from the standards that helped them to determine their placement.
  - Transition to the next slide to reveal the actual order of the standards, from grade 4 to grade 9.

Words of Wisdom
Move around groups, monitoring conversations and answering questions, and prompt discussions around the mathematics in the standards.



Duration: 7 min.

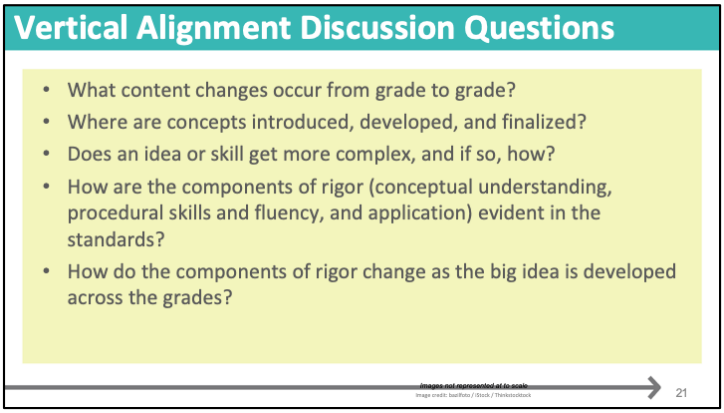
Materials:
Vertical Alignment Chart: Using multiplicative thinking to reason about ratios and rates

Critical Idea

The power of this activity is the collaborative conversation about carefully selected standards connected to a big idea.

- **Facilitator does:**
  - Distribute **Vertical Alignment Chart: Using multiplicative thinking to reason about ratios and rates**, and have groups compare their order of the standards to the actual order of the standards.
  - Give groups **2--3 minutes** to check their order and reorder if necessary.

- **Facilitator <u>animates</u> the slide and says**: Let's debrief with two questions.
  - First, Were there any standards that you thought were intended for one grade level but then had to move?
  - Second, What language in that standard do you think makes it fit with its intended grade level?



Duration: 20 minutes

Critical Idea
The power of the vertical alignment process is the collaborative conversation. It is not about just placing the standards in order or filling out the chart. The process is intended to capture the conversations and common understandings.

Materials:
- **Handout – Vertical Alignment Chart With Changes**
- Facilitator created example vertical alignment chart
- Chart paper (at least 1 sheet per group of 4 mixed grade- level groups)
- Markers
- Tape

This is the remainder of the vertical alignment process.

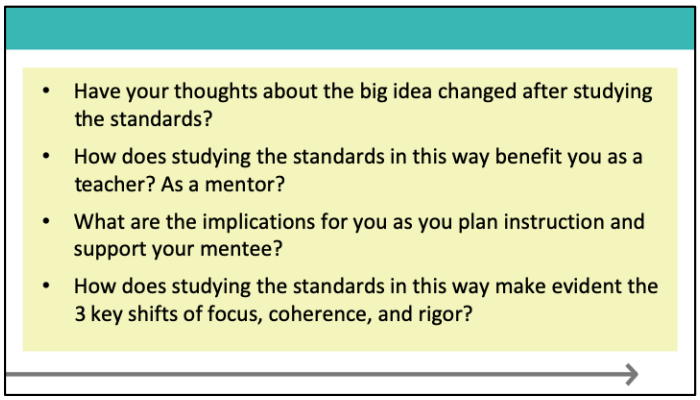
- **Facilitator does:** Show the sample vertical alignment chart created ahead of time to clarify for participants how they should organize and attach the standard strips they have sorted at their tables on the chart paper.

- **Facilitator says:**
  - Use the guiding questions on this slide to discuss the changes that occur from one grade to the next, determine where concepts are introduced, developed and finalized; and describe where and how ideas get more complex.
  - Work as a group to decide the grade level for each strip. Tape the strips on chart paper, beginning with grade 4 at the bottom
  - Include the title of the big idea at the top and the standard coding for each strip.
  - Discuss the changes that occur from grade to grade and starting with grade 4. Write the key ideas of your conversation on the right--hand side of the chart.
  - The creation of the poster should be fast. **(NOTE: The initial taping of the strips and titling of the poster should take less than 3 minutes.)**
  - The bulk of the time should be reserved to discuss the standards and the questions on the slide.
  - You will have about 15 minutes to create your chart and document the changes from grade to grade.
  - Again, use the questions on the slide to guide your conversation.

Facilitator says: I'll model the changes from 4th grade to 5th grade with the whole group (use **Vertical Alignment Chart With Changes** as a guide)

- Circulate around the room as groups are working, encouraging them to use the guiding questions to guide their conversations. Use **Vertical Alignment Chart With Changes** to help you facilitate conversations with different groups.
- When groups finish their work, have each group hang their poster.
- Allow time for table groups to share a few of their findings with the whole group. Some prompts may include:
  - What are some of the important findings your group made?
  - Was there anything that surprised you about the standards?
  - Was there anything that was an ah--ha for you or your group?

Words of Wisdom
- The focus of this work is the conversation and seeing the coherence of the big idea across grade levels. The purpose of the Vertical Alignment is to capture conversations and ideas. It is not about completing the chart.
- It may help to set a timer for teachers to build the initial chart with the strips and the title. This should take less than 3 minutes.



Duration: 8 minutes

Critical Idea: The focus of this work is the conversation and seeing the coherence of the big idea across grade levels.

- **Facilitator says:** To debrief this activity, please stand and regroup and stand near your big idea poster from the our first section earlier today. As a group, discuss the questions on the slide.
    - Have your thoughts about the big idea changed after studying the standards?
    - How does studying the standards in this way benefit you as a teacher? As a mentor?
    - What are the implications for you as you plan instruction and support your mentee?
    - How does studying the standards in this way make evident the 3 key shifts of focus, coherence, and rigor?

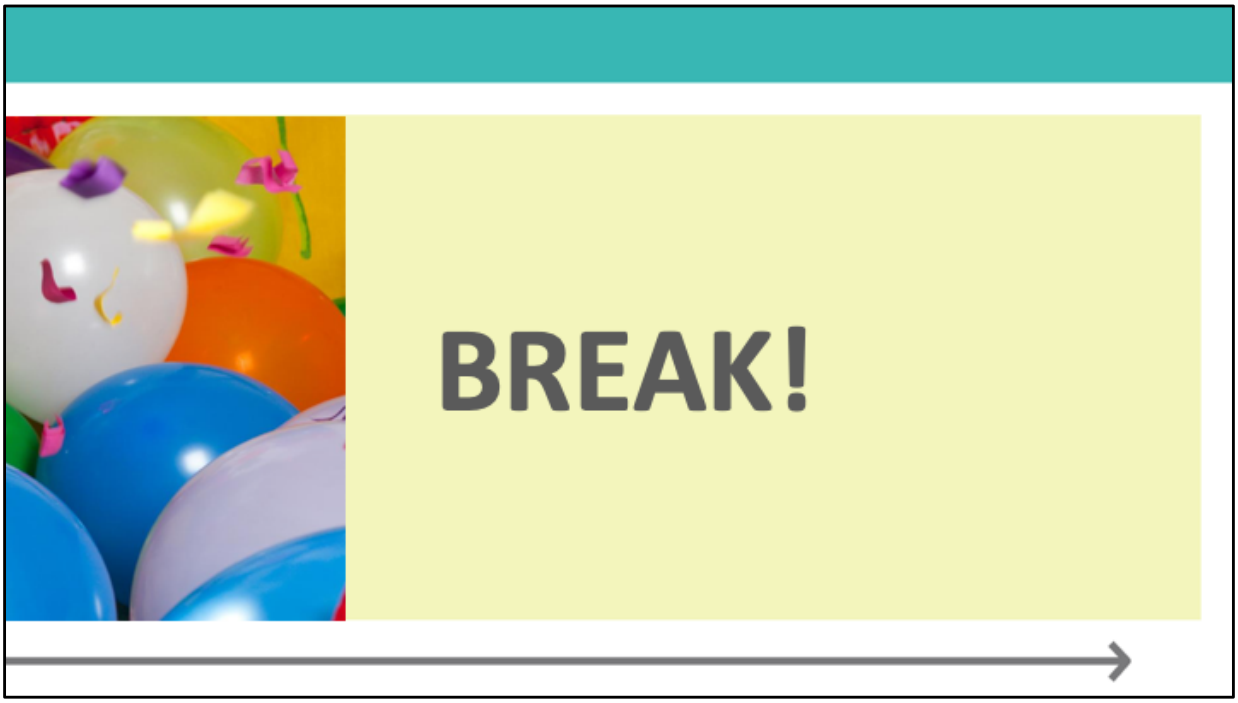
- **Facilitator does:** Give participants 4 minutes to reflect on these questions, then invite them to share out.

- **Notes:** Some important ideas that should surface during the whole group share out are:
    - **Question 1:** Teachers thoughts about this question will depend on their original thinking about the big idea from Session 1.
    - **Question 2:** Teachers are a part of the larger system, are responsible to that system, and fulfill that responsibility by studying and teaching all parts of the standards so as not to cause instructional gaps.
    - **Question 3:** It is important that grade--level/department teams spend collaborative time studying the standards to ensure horizontal and vertical alignment. In addition, studying the standards can be used as a structure that supports differentiation and as a way to identify potential gaps in student learning. Teachers should think about how they can address gaps in studentunderstanding while still teaching the necessary grade level content.
    - **Question 4:** The standards focus teachers on specific content at each grade level and explicitly describe the components of rigor at each grade level. The vertical alignment discussion gives teachers an understanding of the coherence of the standards; that is that ideas build from grade to grade.

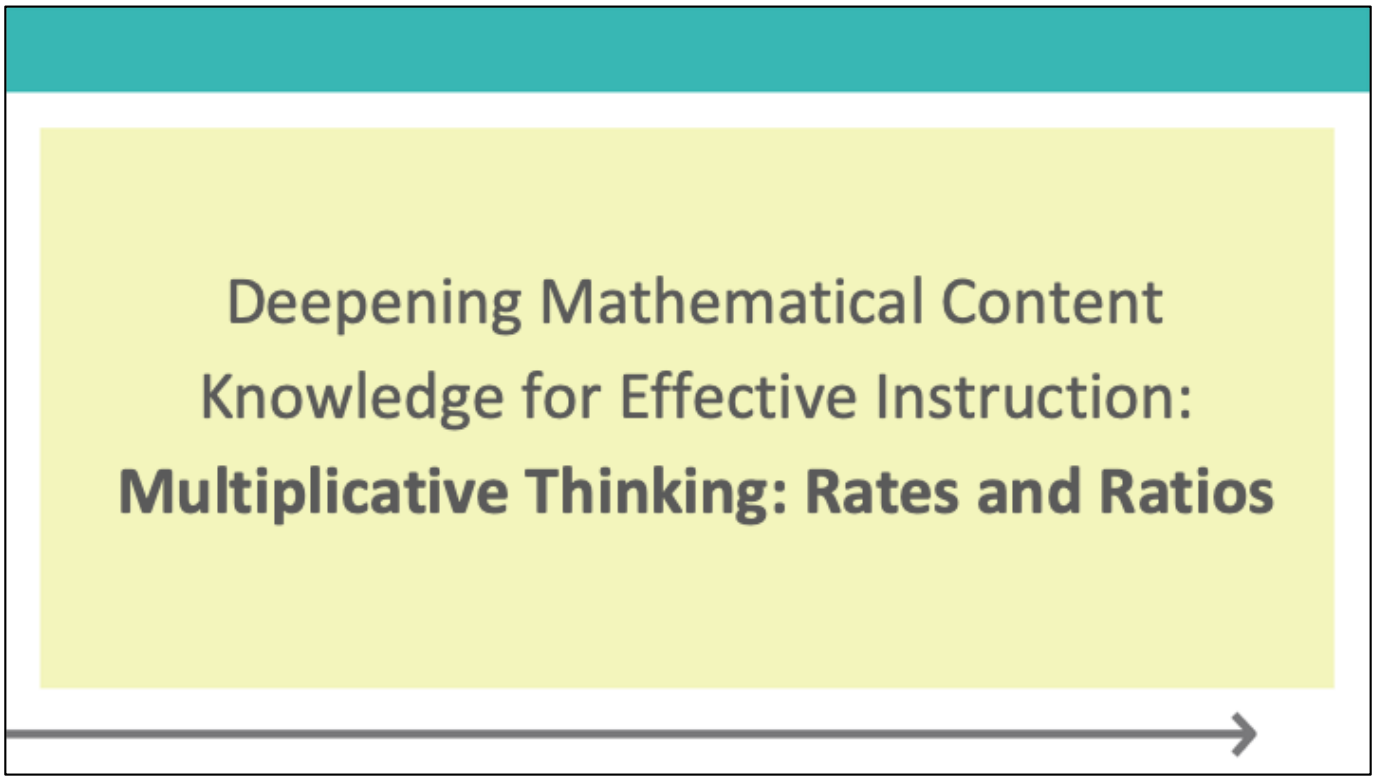
- **Facilitator says:** What happens if a teacher decides not to teach the standards?" Go up to one of the charts hanging in the room and remove a standard strip from the chart. Popcorn some responses.
- **Facilitator says:** We all need to work hard to implement with fidelity for the good of our students.

Words of Wisdom

- The purpose of the vertical alignment process is to capture conversations and ideas. It is not about completing the chart.
- Watch the time carefully. You will probably not have time for participants to revise their Big Idea posters – just allow for the discussion to take place.

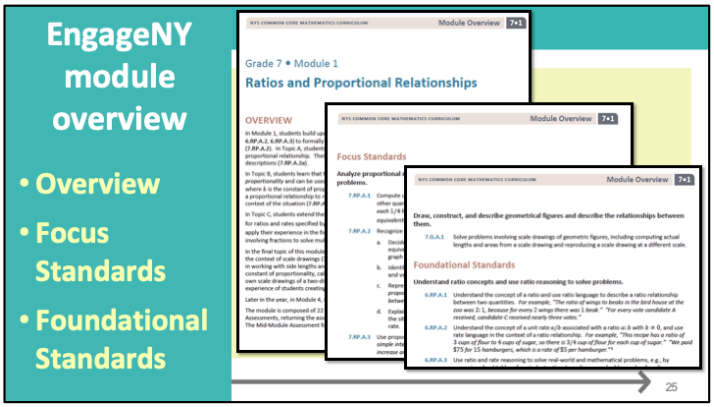


- **Duration**:10 minutes



Duration: 30 seconds

Facilitators says: You will now experience an EngageNY lesson that directly ties to the ratio and rate standards



Duration: 7 minutes

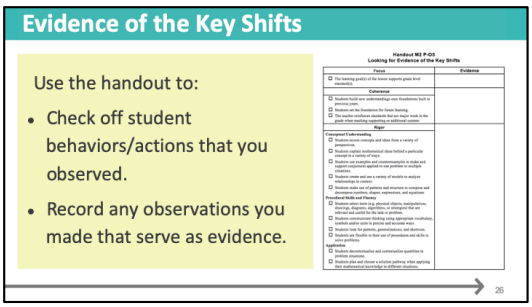
Critical Idea:
The EngageNY Module Overview contains important information to orient teachers to the flow of lessons across the module. It also gives teachers focus standards, foundational standards from prior grades, and links to standard for mathematical practice.

- **Facilitator says:** Turn in your handout to **page 11 Engage NY Module 1 Teacher Materials—New York State Common Core Mathematics Curriculum, Grade 7: Ratios and Proportional Relationships.** This is just the first 5 pages of the Module 1 Teacher Materials document. There is more to this document than what is provided for you.

- **Facilitator says:**
  - Each module in EngageNY has a Module Teacher Material document that provides you with important information as you prepare to teach a module. Take a minute to glance through the handout and see the components of the Module 1 Teacher Materials document, which are listed on this slide. There are more components to EngageNY Module 1 than what is listed here, and some of these other components are specific to Module 1 only.
  - Today's lesson is the culmination of five lessons about proportional relationships in Topic A of this module in grade 7. Read the Module Overview to help you situate the lesson you will experience in the flow of the entire module.

- **Facilitator says:**
  - Now that you have read the Overview, look at the focus content standards and the foundational content standards in Module 1 of EngageNY. These are on pages 3–5 of the Teacher Material document. After the lesson, you will have time to refer back to these pages and discuss which standard the model lesson addresses.
  - It is important to note that in some cases, the focus standards and foundational standards given in the EngageNY materials differ from the standards references in the Eureka guides. In this lesson, that is not the case; however, you should be aware that this might be true in a future lesson.
  - Point out the connection to the work participants have been doing in Module 1 and earlier in this module.
  - The overview helps teachers focus on key content standards and gives teachers a look at foundational standards from prior grades.
  - Some of these standards are on the vertical alignment study we completed earlier.

Words of Wisdom
Stay focused on the connection to standards in the Module Overview. Encourage participants to explore the rest of the Module Overview on their own time.



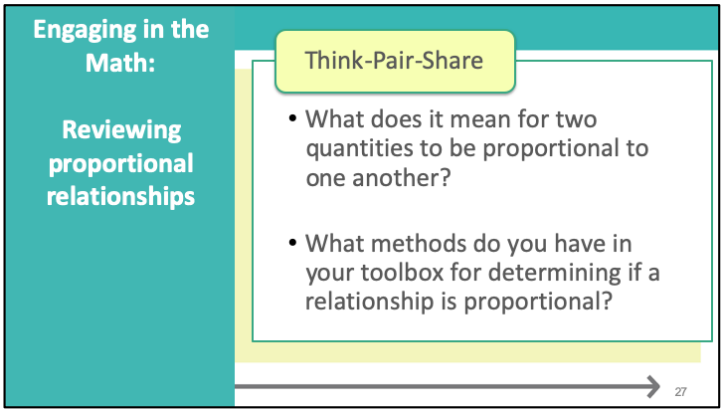
Duration: 2 minutes

Critical Idea
The key shifts are what make the LSSM different from previous standards. These key shifts should guide decisions about teaching and learning.

- **Facilitator says:**
  - In your handout on **page 16** you will find **Looking for Evidence of the Key Shifts**.
  - Before you experience a mathematics lesson from EngageNY, we want to remind you of this tool to observe how the key shifts come to life in the classroom.
  - Remember, the left-hand column contains descriptors of the key shifts. Next to each descriptor is a box that can be used to check off any of the student actions that you observe in the lesson.
  - The right-hand column should be used to document observations of any specific actions that can be used as evidence for the descriptors that have been checked off in the left-hand column.
  - Take 2 minutes to look over the information on the handout and ask questions if they need further clarification.

- **Facilitators says:**
  - As you experience the lesson, please use this tool to capture your observations and experiences. We will discuss your takeaways after the lesson.

Words of Wisdom
This should be kept brief.



Duration: 5 minutes

Critical Idea
The purpose of the think-pair-share is to get teachers thinking about what they already know about proportional relationships and then transitioning to the role of "student."

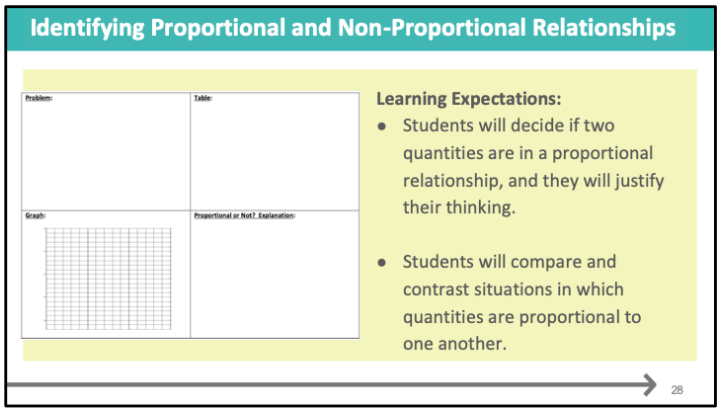
- **Facilitator says:**
  - In this section, you will be experiencing an EngageNY lesson that directly ties to the standards you have been exploring in the vertical alignment from Sessions 1 and 2.
  - This section is about experiencing the lesson as a student. You will have a chance to unpack the lesson and make connections to the standards later.
  - The lesson for today comes from a 7th-grade lesson on proportionality.
  - As the facilitator I will be the "teacher" and you as participants will be the "students".
  - You may find yourself wanting to discuss the lesson or talk about changes you would like to make. You will have time to discuss the lesson afterwards. For now, please stay in your role of "student".
  - Now, please transition to your 7th grade student persona.

- Class, to begin our work today, we are going to do a think-pair-share to activate what you already know concerning proportional relationships. First, think **individually and quietly** for a minute or two about the two questions on the slide. Write your thoughts on a sticky note or index card.
  - What does it mean for two quantities to be proportional to one another?
  - What methods do you have in your toolbox for determining if a relationship is proportional?

- **Facilitator does:**
  - Use a timer to give 1 to 2 minutes of quiet think time and jot down their responses on a sticky note or index card.
  - After participants have had a chance to respond, ask them to get up and meet with their 9 o'clock partner(s).
  - Give participants 2 minutes to discuss the prompts with their partners. Set a timer for this discussion.

- **Facilitator does:**
  - As pairs are talking, walk around and listen for responses. If you hear a response that you'd like to highlight for the whole class, give the pair(s) warning that you will be asking them to share their response (to either the first or second prompt).
  - After 2 minutes of discussion, have participants return to their seats and ask those pairs that you identified earlier to share their responses.

Words of Wisdom
- Don't linger too long on these discussions. Keep the review short and sweet and moving along.
- When possible, use a timer during different sections of the lesson to model for participants how a timer can be used to keep a lesson moving along.



Duration: 30 minutes

Materials:

- EngageNY Math7, M1, TA, L6 Teacher: Lesson 6: Identifying Proportional and Non-Proportional Relationships in Graphs
- EngageNY Math7, M1, TA, L6 Student: Lesson 6: Identifying Proportional and Non- Proportional Relationships in Graphs
- EngageNY Math7, M1, TA, L6 Exit ticket: Lesson 6: Identifying Proportional and Non-Proportional Relationships in Graphs—Exit Ticket

Critical Idea

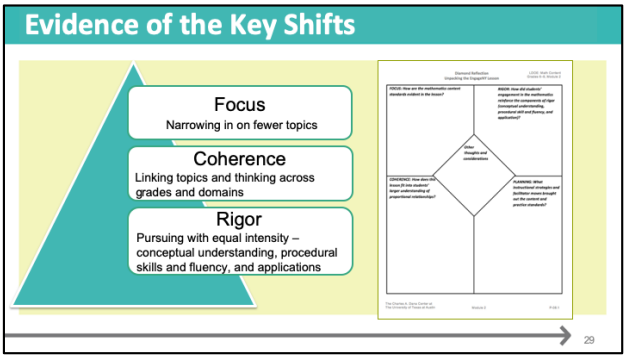
Participants experience an EngageNY lesson related to the big idea studied in sessions one and two.

- **Facilitator says:**
  - Today's lesson will bring together all of your work with proportion relationships up to this point.
  - Today you will:
    - decide if two quantities are in a proportional relationship, and they will justify their thinking.
    - compare and contrast situations in which quantities are proportional to one another.

- **Facilitator does:**
  - In your handout on **page 17** student version of EngageNY lesson to students. This is handout **EngageNY Math7, M1, TA, L6 Student: Lesson 6: Identifying Proportional and Non- Proportional Relationships in Graphs**
  - Teach the EngageNY lesson to the participants, as students, using the Teacher Version of the lesson, **EngageNY Math7, M1, TA, L6 Teacher: Lesson 6: Identifying Proportional and Non-Proportional Relationships in Graphs**
  - Give the students a 'homework' assignment, using the Problem Set from the lesson. It is not expected that participants do this homework. It is assigned so that participants know what is available to them in the EngageNY lessons.
  - Assign the Exit Ticket, **EngageNY Math7, M1, TA, L6 Exit ticket: Lesson 6: Identifying Proportional and Non-Proportional Relationships in Graphs—Exit Ticket** during the last 5 minutes of this lesson and ask participants to complete it.

Words of Wisdom

- Be sure the participants remain in the 'student' role during the duration of the lesson.
- When possible, use a timer during different sections of the lesson to model for participants how a timer can be used to keep a lesson moving along.



Duration: 8 minutes

Materials:

- EngageNY Module 1 Teacher Materials—New York State Common Core Mathematics Curriculum, Grade 7: Ratios and Proportional Relationships
- EngageNY Math7, M1, TA, L6 Teacher: Lesson 6: Identifying Proportional and Non- Proportional Relationships in Graphs
- Looking for Evidence of the Key Shifts
- Diamond Reflection: Unpacking the EngageNY lesson

Critical Idea

Rigorous mathematics teaching and learning is achieved when teachers intentionally integrate the standards for mathematical practice with the standards for mathematical content. This requires that teachers have deep knowledge of the standards so that they can make good use of their instructional resources.

- **Facilitator says:**
  - Refer back to **EngageNY Module 1 Teacher Materials** to identify the content and practice standards that were addressed by this lesson.
  - Use **Diamond Reflection: Unpacking the EngageNY lesson** in your handout on **page 22** to reflect on the lesson.
  - Divide the questions among your table group.
  - For the next 3-4 minutes, silently and individually respond to your assigned question; use the teacher version of the lesson and **Looking for Evidence of the Key Shifts** to help you reflect on these questions.
  - They can look at other questions if you have time.

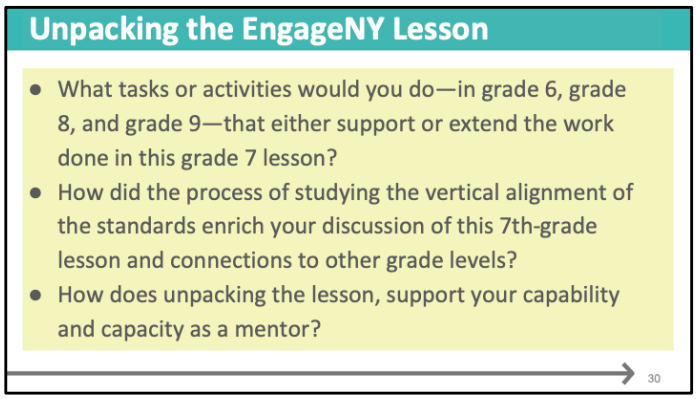
- **Facilitator says (after 3 minutes):** For the next 4 to 5 minutes, share your responses with your table (~1 minute per person). Use handout **Diamond Reflection** to record your conversations.

- **Facilitator says (after 4-5 minutes):** Let's come together as a whole group and gather response to each of the four questions. (Make sure that no questions are left out
  - FOCUS: How are the mathematics content standards evident in the lesson?
  - RIGOR: How did students' engagement in the mathematics reinforce the components of rigor (conceptual understanding, procedural skill and fluency, and application)?
  - COHERENCE: How does this lesson fit into students' larger understanding of proportional relationships?
  - PLANNING: What instructional strategies and facilitator moves brought out the content and practice standards?

- **Facilitator debriefs this conversation saying**:
  - How might you strengthen the connection to the content and/or practice standards?
  - Ask for a few groups to share out.

Words of Wisdom

The standard addressed in the model lesson is 7.RP.A.2a.

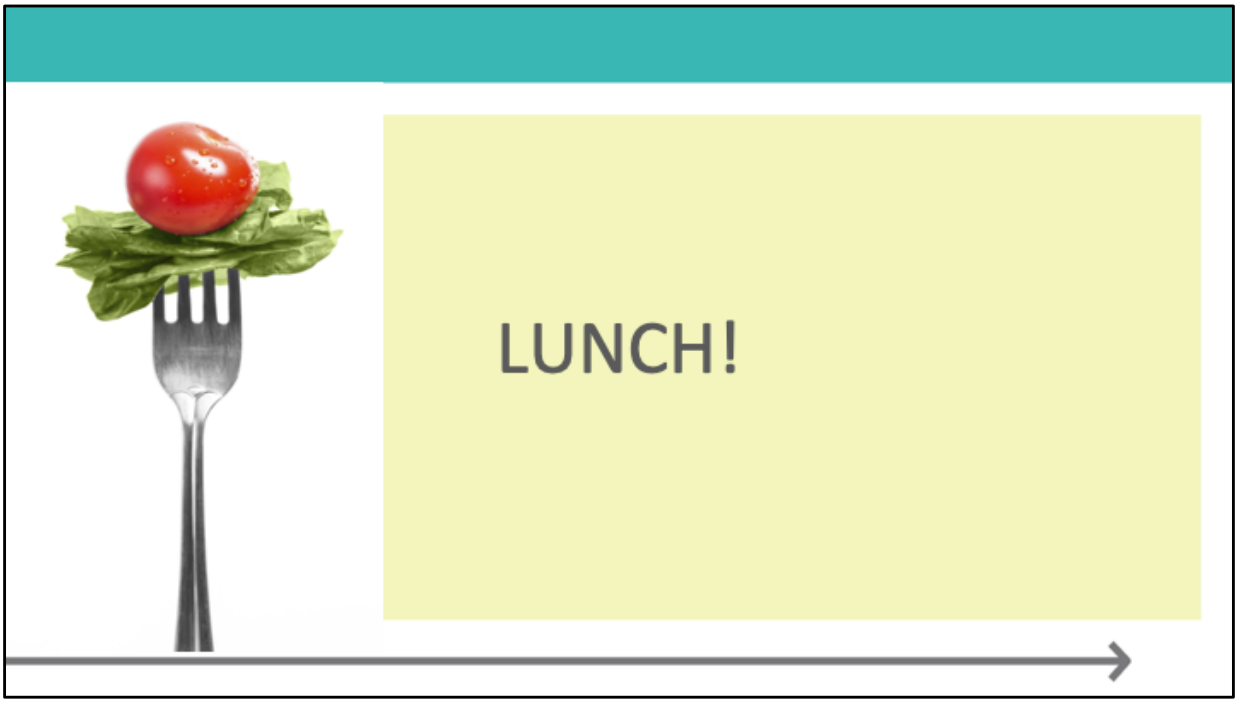


Duration: 8 minutes
Critical Idea

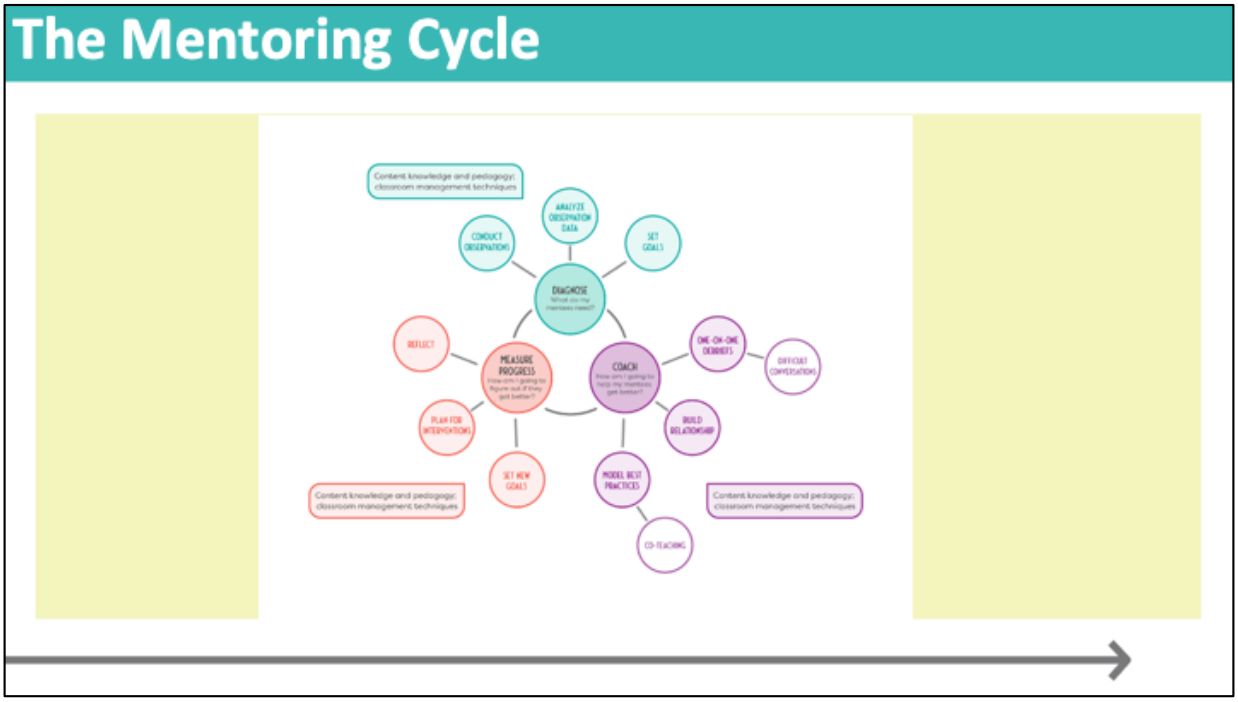
- **Facilitator says:** Think back to your grade-level standards and the **Vertical Alignment Charts** you created**.** As a table group discuss the following questions:
  - What tasks or activities would you do in grade 6, grade 8, and grade 9 that either supports or extends the work done in this grade 7 lesson?
  - How did the process of studying the vertical alignment of the standards enrich your discussion of this 7th grade lesson and connections to other grade levels?

- **Facilitator animates the slides and says (to the whole group):**
  - How does unpacking the lesson, support your capability and capacity as a mentor?

Words of Wisdom
Teachers should see the value in studying the standards across multiple grade levels to enrich their understanding of their own instruction at their grade level.

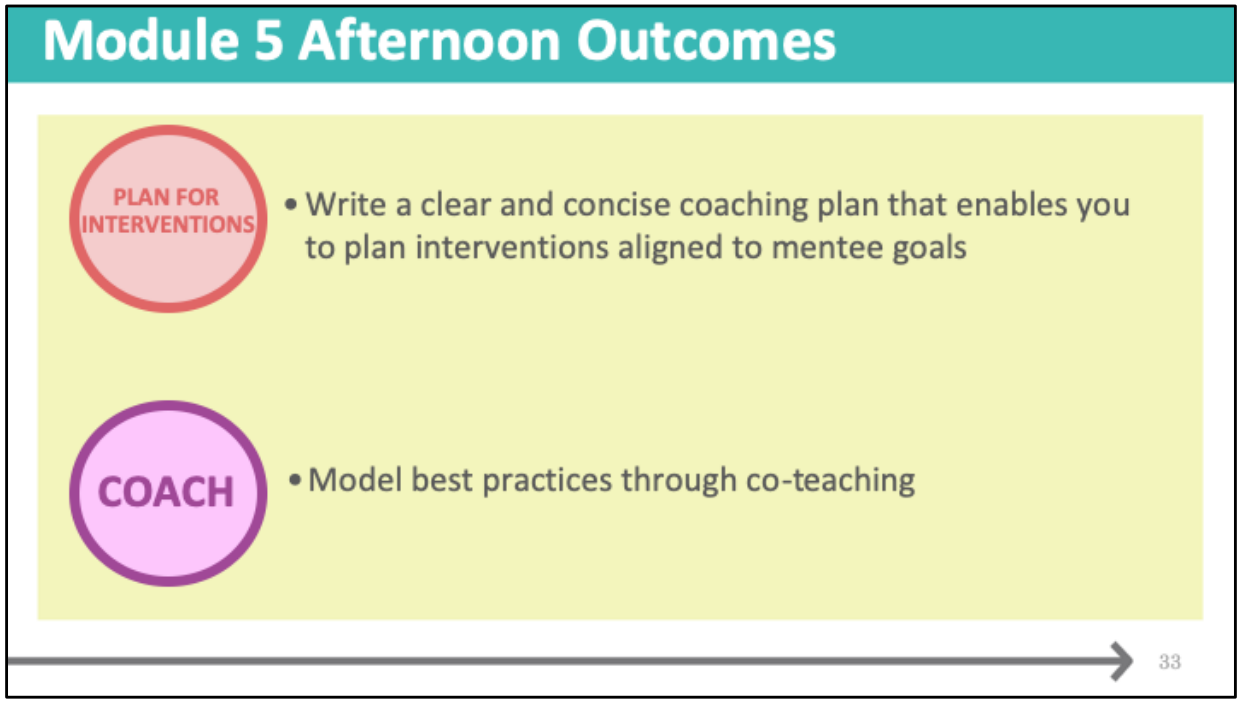


- **Duration:** 45 minutes



- **Duration**: 30 seconds

- **Facilitator says**: Remember, all of our work is grounded in the mentoring cycle.

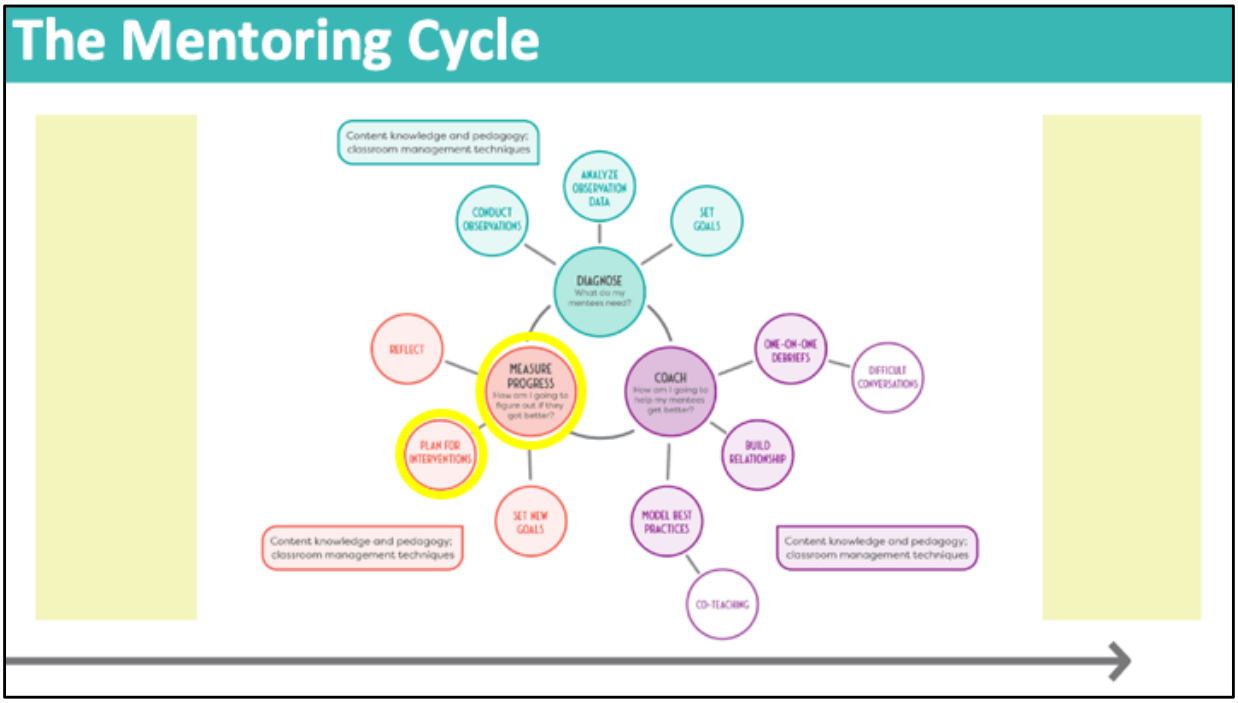


- **Duration:** 2 minutes

- **Facilitator says:** During this afternoon, we will focus on two mentoring outcomes. [read slide]

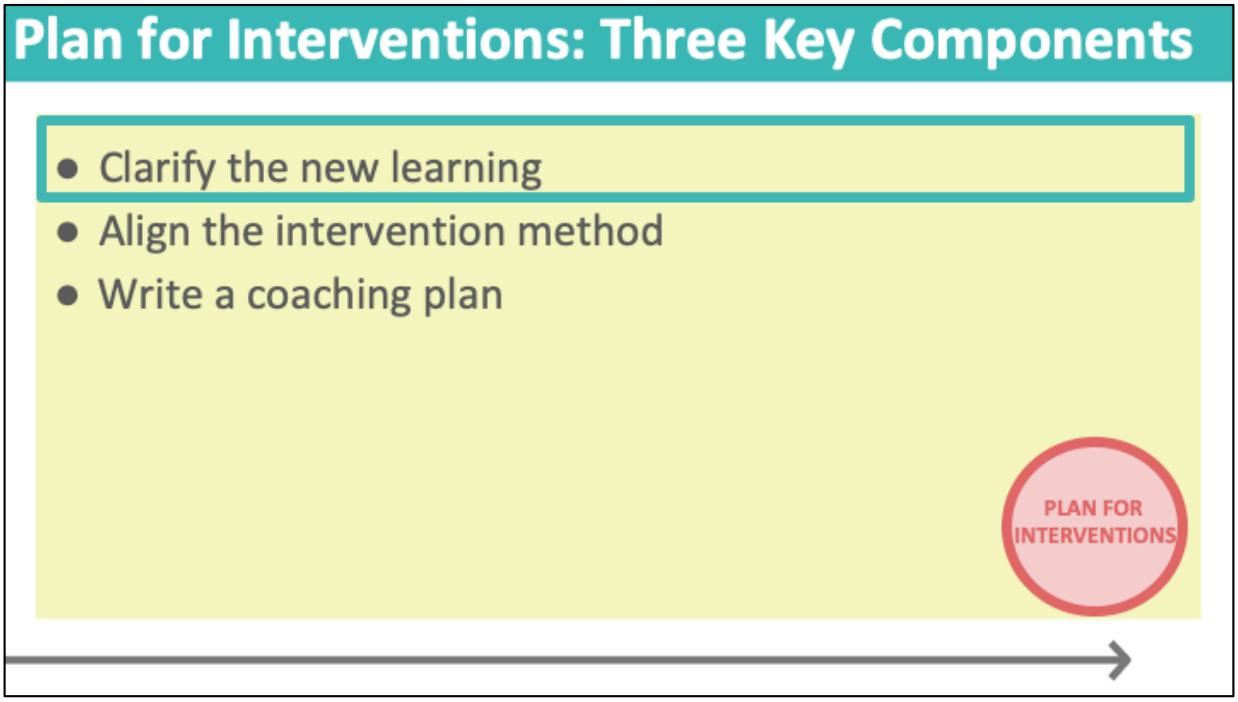
- **Duration:** 30 seconds

- **Facilitator says:** In Module 4, we learned how to plan for interventions. We practiced writing a coaching plan in which the intervention was modeling. Today, we'll first practice writing a coaching plan for a co-teaching intervention. Keep in mind that in the real world, a coaching plan will likely include both modeling and co-teaching. Often, when your mentee is learning a new skill, you'll start by modeling it for them and then move to co-teaching. But for practice sake, and since this is the first time you're learning about modeling, co-teaching, and writing coaching plans, we're focusing on them separately.

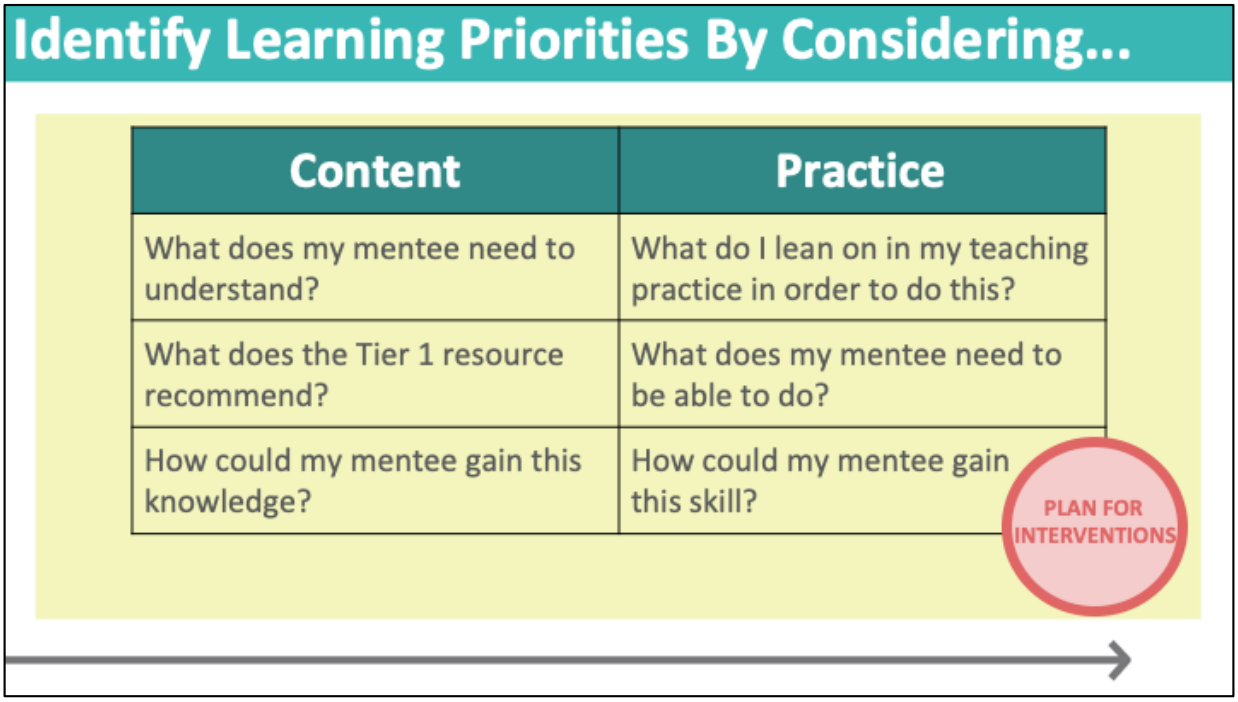


- **Duration:** 30 seconds

- **Facilitator says:** Remember what we discussed yesterday about the term “intervention” - please understand that “intervention” is not corrective or evaluative, but is meant for furthering adult learning. This is about having a growth mindset and engaging in interventions to grow and learn and improve teaching practice.

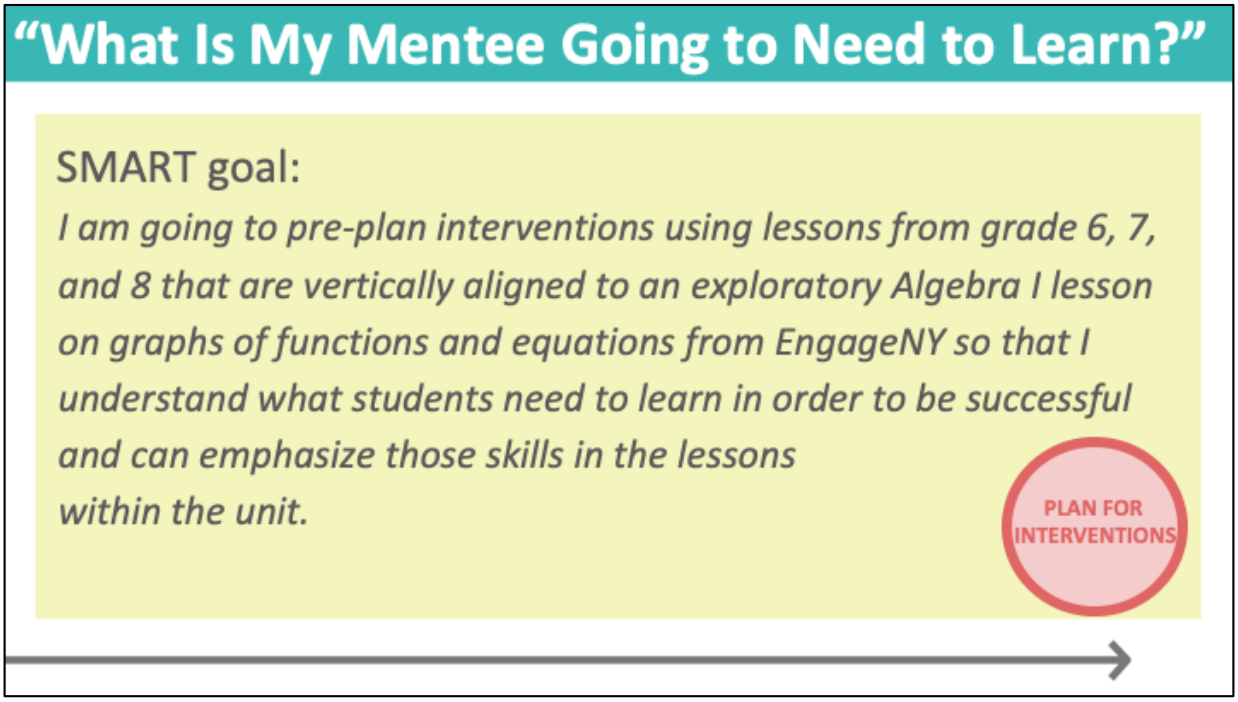


- **Duration**: 30 seconds
- **Facilitator says**: So we'll start by quickly reviewing the first component, clarifying the new learning.



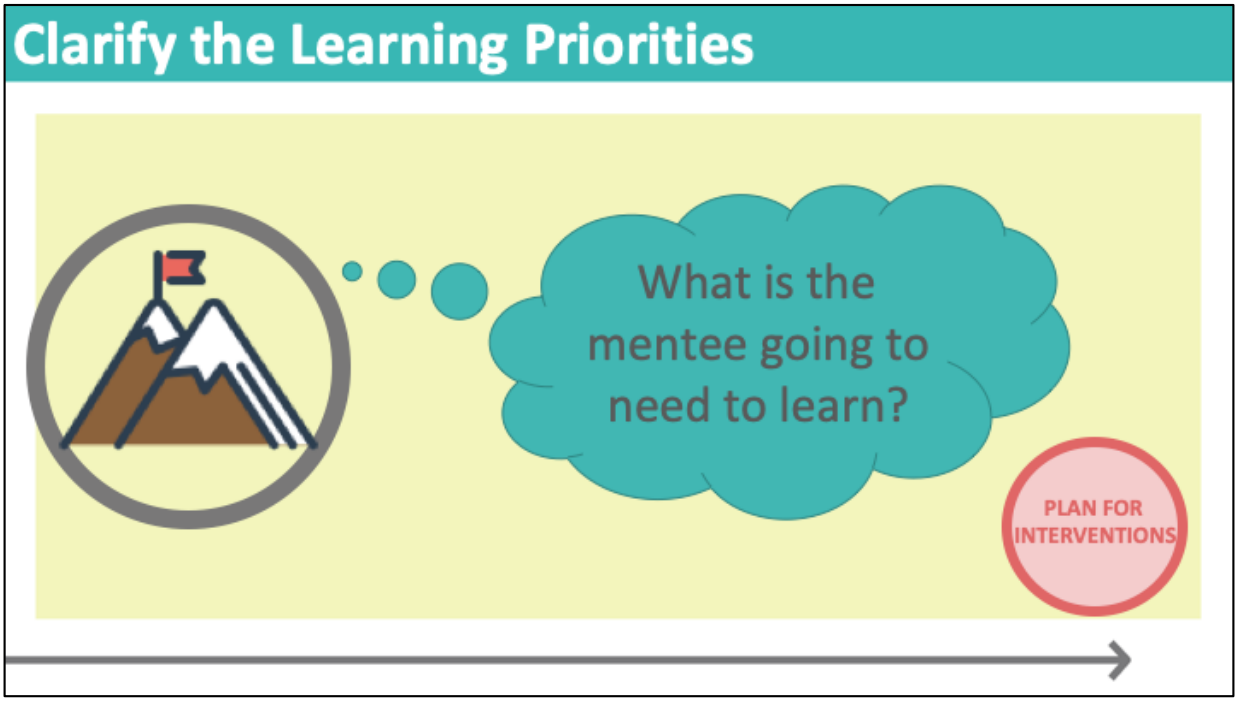
Duration: 1 minutes

Facilitator Says: Remember, when I am taking a few minutes to really consider what is involved in mastering a SMART goal, I can consider questions in the areas of Content and Practice. By reflecting on these questions, I can clarify for myself what my mentee needs to learn, which will then prepare me to write out, and then engage in, a coaching plan that will support them in doing this learning. This chart is also on pg. 23 of your handout.



- ●**Duration:** 3 minutes
- ●**Facilitator says:** Let's take a look at a sample mentee SMART goal that could be made with a mentee based on diagnosing needs from analyzing observation data. I'm going to re-read the goal and think, "what is this mentee going to need to learn in order to meet this SMART goal?"
- ●**Facilitator does:** Read goal
- ●**Facilitator says:** This is where I'm going to need to use my knowledge and understanding as a more experienced teacher to support my mentee - What do I lean on in my teaching practice in order to do this? What is my mentee going to need to learn in order to meet this SMART goal? I'll think aloud about one thing, and then you'll have a chance to think about it.
- ●I think for this mentee, they need to know the backwards design principal of the Guidebooks. I think based on this SMART goal, it's key that this mentee gets that backwards design.
- ●So that is something that I think, based on my experience, a mentee would need to learn in order to meet this SMART goal.
- **SMART goal:**

- *I am going to pre-plan interventions using lessons from grade 6, 7, and 8 that are vertically aligned** to exploratory Algebra I lesson on graphs of functions and equations from EngageNY so that I understand what students need to learn in order to be successful and can emphasize those skills in the lessons within the unit.*
    -



- **Duration:** 5 minutes

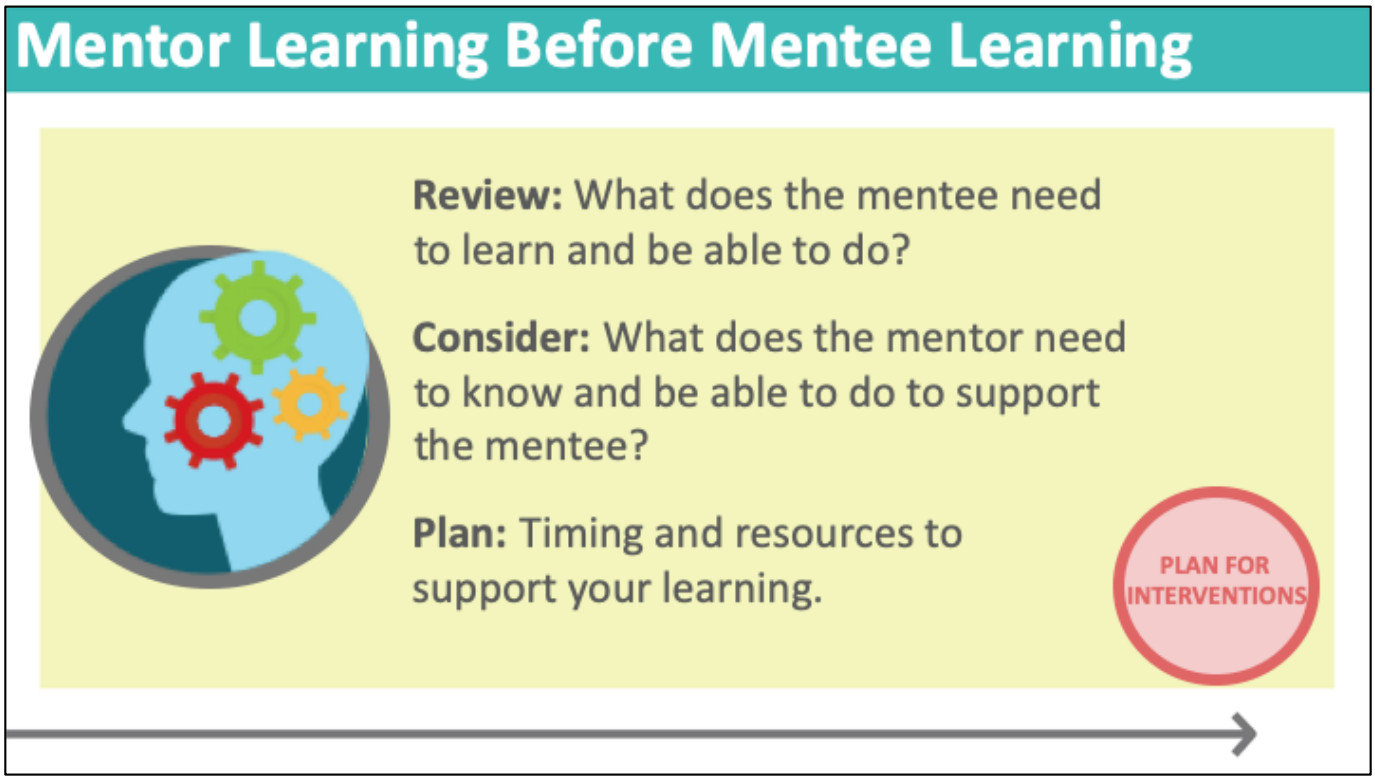
- **Facilitator says:** So now it's your turn to try this. On pg. 23 in your handouts you'll see the SMART goal I just thought about. With your table, take 2 minutes to discuss what else you think the mentee would need to learn in order to meet the goal. You can take notes in the box below the goal. You can also refer to our materials from this morning to support you.

- **Facilitator does:** Circulate and support as needed. After 2 minutes, ask tables to share out other examples of learning the mentee would need to engage in for the example SMART goal, in the areas of content and practice.

- **Note:** Some expected responses for this SMART goal that you should share if they are not shared:
  - Content:
    - Study the coherence map for pre-requisite understanding students should bring to solving the task
    - Study what approaches the Tier 1 curriculum includes

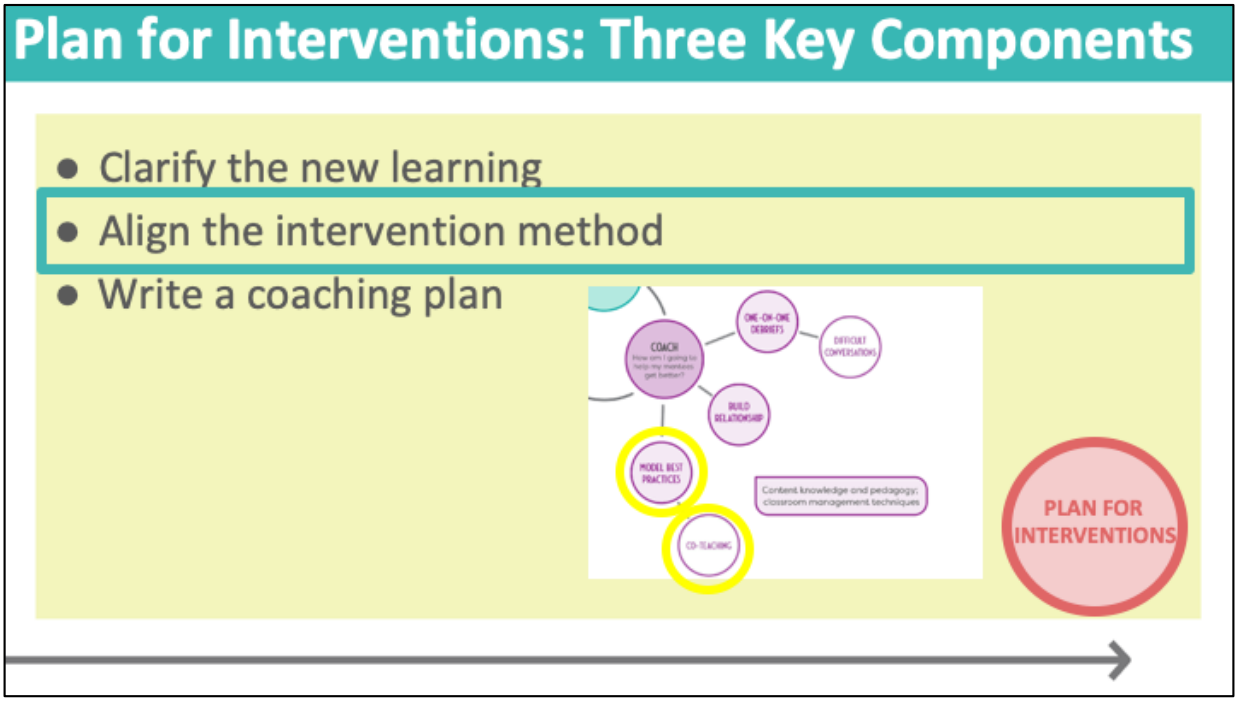
        - Understand the distinct strategies in each approach and which strategies are most useful in addressing the mathematics of each task
    - Practice:
        - Learn methods they can use to find as many ways as possible to approach a task, such as solving the task with other adults, looking in resources, or asking more experienced teachers how their students have solved the task in the past
        - Build an understanding and acceptance of why there is more than one valid way to approach a conceptual understanding task
        - **Learn how to look for those anticipated student responses while facilitating a task**
        - **Learn how to respond to what students produce while they are working on the task**
        - Note: These last two points are very important to bring up as they directly relate to the activities that would happen while the mentor and mentee are co-teaching the lesson together

- **Facilitator Says:** So as you can see, there are several things in there that I, if I'm the mentor, could support them with. While all of the things we mentioned are needed in order to meet that goal, it is okay to zero in on one rather than trying to weave all of them into the coaching plan - it's better to be focused and make progress than to try to do everything and not accomplish anything because it's too much to tackle.

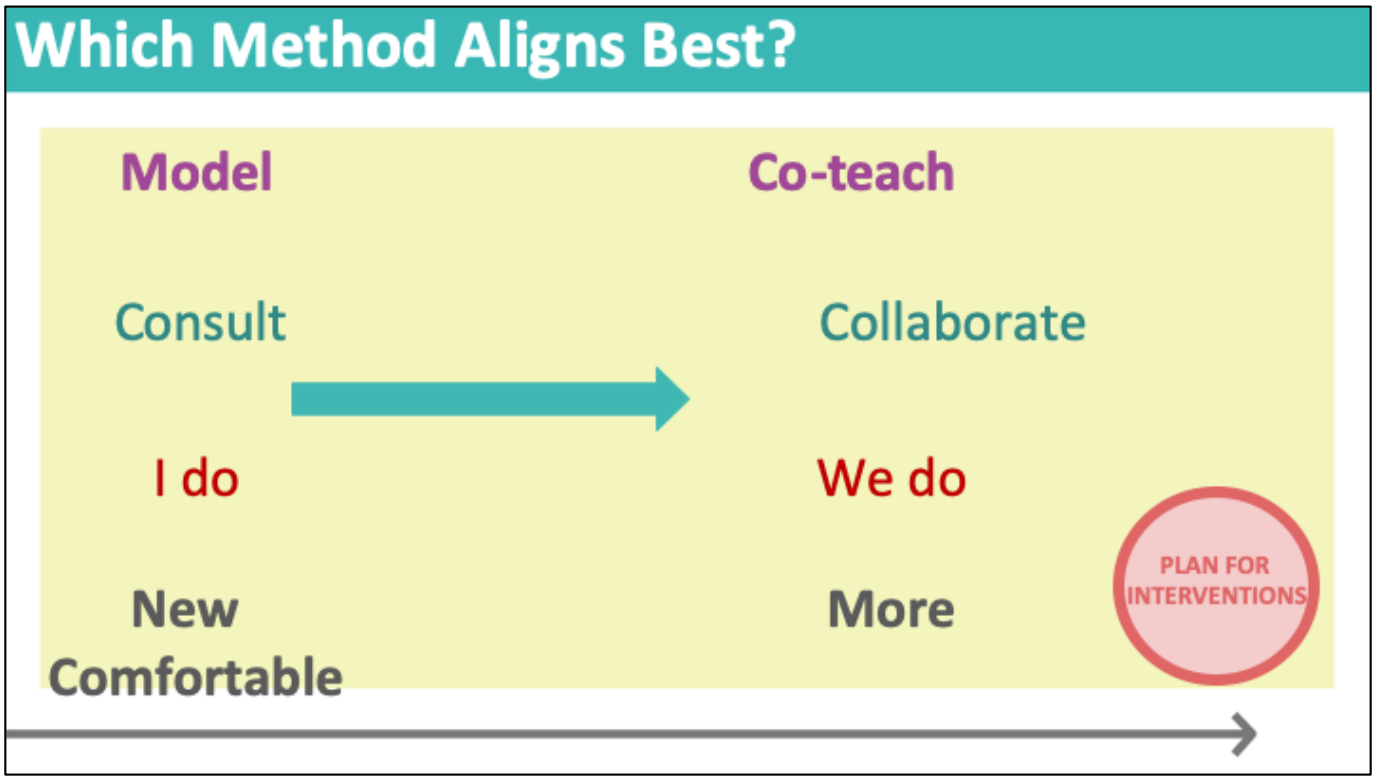


- **Duration**: 2 minutes

- **Facilitator says**: Remember, mentor learning precedes mentee learning just as mentee learning precedes student learning. It is all part of the continuous learning and improvement process.
- **Facilitator says:** Remember, if the mentor learning priorities are significant then you will want to record them in your coaching plan to ensure you have adequate time to prepare before you begin working with your mentee on his goal. Sharing your learning goal with your mentee will demonstrate how everyone continues to learn throughout their career.



- **Duration**: 1 minute
- **Facilitator says**: Remember, next we align the intervention method - modeling or co-teaching.

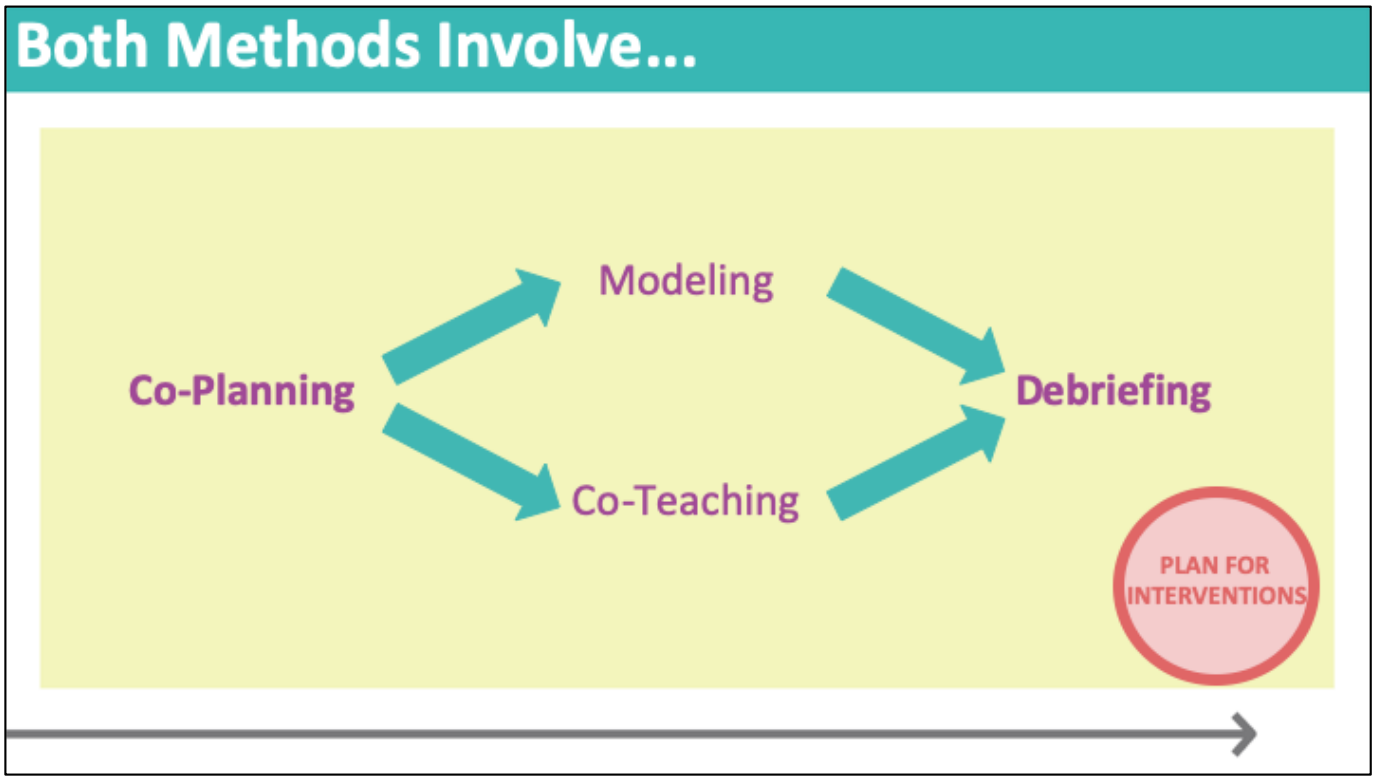


- **Duration**: 2 minutes

- **Facilitator says**: As we introduced yesterday, the two methods in your mentoring cycle are modeling and co-teaching. Modeling is about the consultant mentor stance. It's an "I do" for the mentor and is used sparingly, only when the mentee is new to something. Co-teaching is about the collaborate mentor stance. It's a "we do" for the mentor and mentee and is used as soon as the mentee is comfortable to try something out. Although I do think it is important to note that while the modeling is solely done by the Mentor, there is a co-planning component that comes before the model lesson during which the mentor and mentee work together to plan the model lesson. However, the mentor still really is guiding this process and taking the lead in teaching it. Co-teaching is something the mentor and mentee do together, so a "we do". And then during that co-planning piece that occurs with co-teaching as well it becomes more of a conversation between mentor and mentee with less "taking the reins" by the mentor since the mentee is possibly more comfortable with the content at this point.

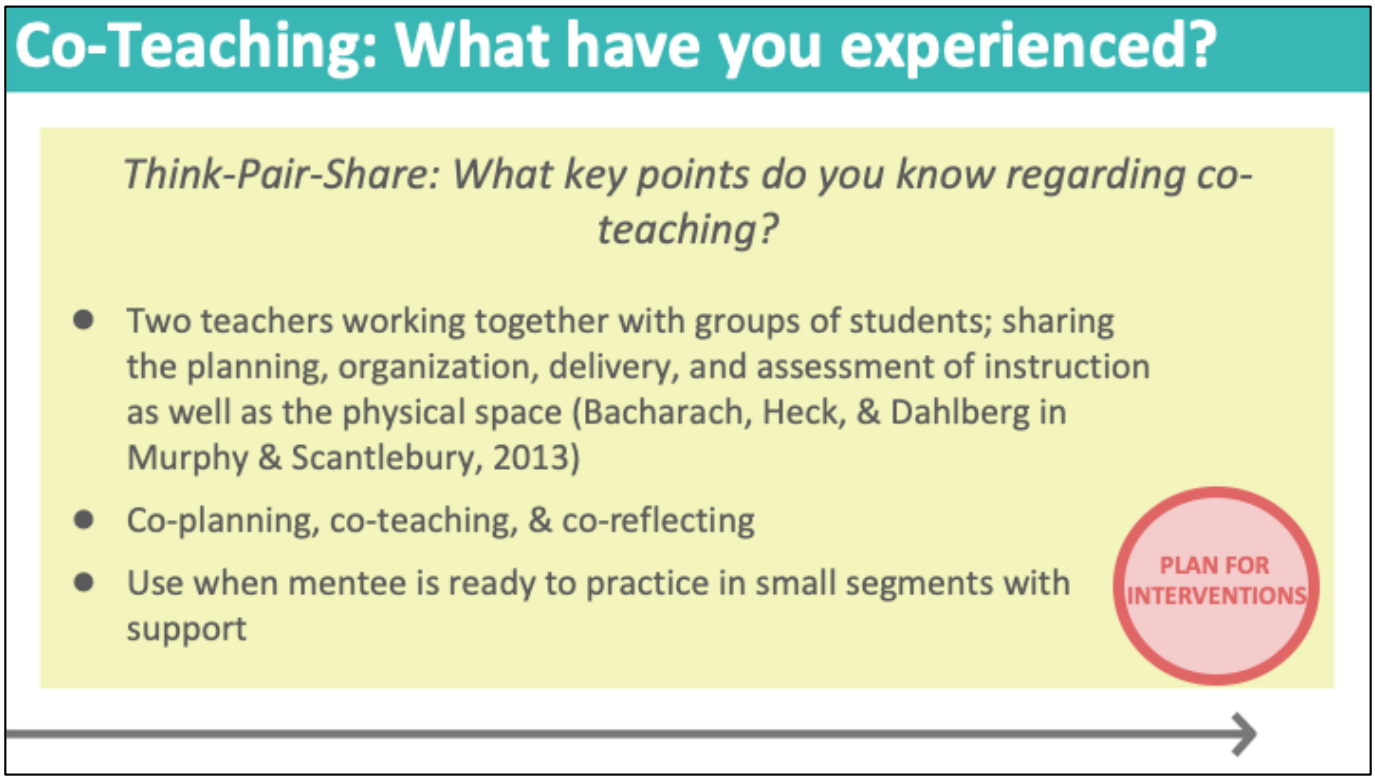
- **Facilitator says:** Mentors use co-teaching to demonstrate growing confidence in mentees and support achievement of their SMART goals.

- **Facilitator says:** For the purpose of today, we are assuming the mentee is ready for co-teaching.



Duration: 1 minute

Facilitator Says: And of course both methods involve co-planning and debriefing.



- **Duration**: 10 minutes

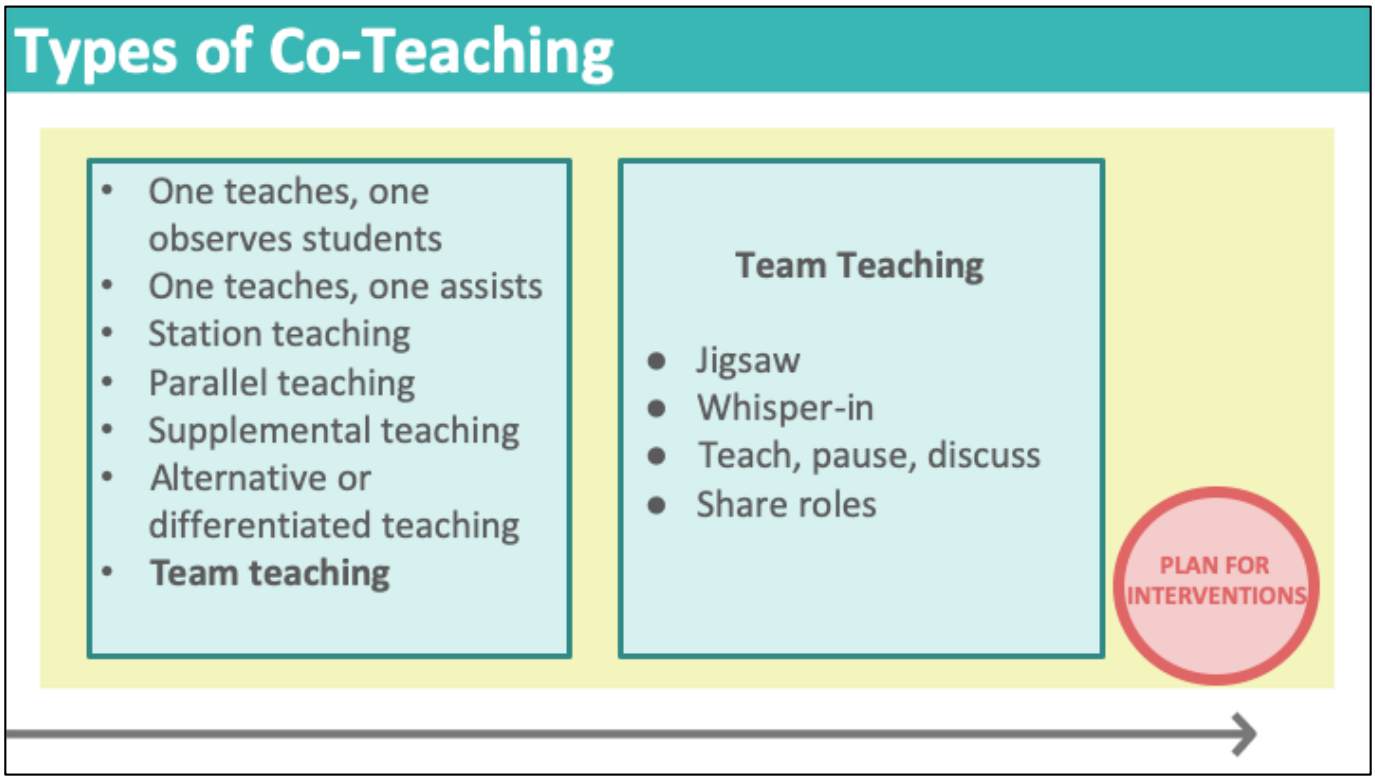
●**Facilitator says**: Take 1 minute to jot down some ideas or key things you know regarding co-teaching. After 1 minute you'll pair up with a shoulder partner to share and add to your notes.

●**Facilitator does:** gives 1 minute of quiet work time followed by 2 minutes of shoulder partner share time. Invite a few participants to share out with the whole group encouraging those who have ever done a co-teach to share their experiences with the group.

●**Facilitator says: (animate the slide to reveal key points - elaborating more on those that did not come up during the whole group share).**

- We define co-teaching as two teachers, like a mentor and mentee, working together with groups of students - sharing the planning, organization, delivery, and assessment of instruction as well as the physical space.
- Also, much like model teaching, the three main steps include planning, teaching and debriefing or reflection, but all are done collaboratively - whereas when we talked about modeling in the previous module the mentor takes on a more direct, consultant type role.

- We want to use co-teaching when the mentee is ready to practice in small segments with support. An advantage is that the mentee will have your immediate support should he or she need it and student learning is not likely to be negatively impacted. A disadvantage might be that the mentee remains too dependent and unwilling to take equal responsibility for decisions and teaching.



- **Duration**: 8 minutes

- **Facilitator says**: There are a variety of types of co-teaching. When using co-teaching as a mentor strategy, it's hard to tell who the mentee is and who the mentor is, because both are engaged and involved partners in the delivery of the lesson. Co-teaching is a really exciting mentoring practice because there are so many different variations that you can use based on your mentee's needs.

- **Facilitator does**: Read left box.

- **Facilitator says:** Today, we're going to specifically discuss Team Teaching as a method for intervention for supporting your mentee. (Participants may take notes on page 24 of their handout)

- **Facilitator does:** Animate right box.

- **Facilitator says:** So team teaching is an excellent mentoring method because both of you are right there together, trying things out together and learning together. This allows you to be right there supporting when your mentee

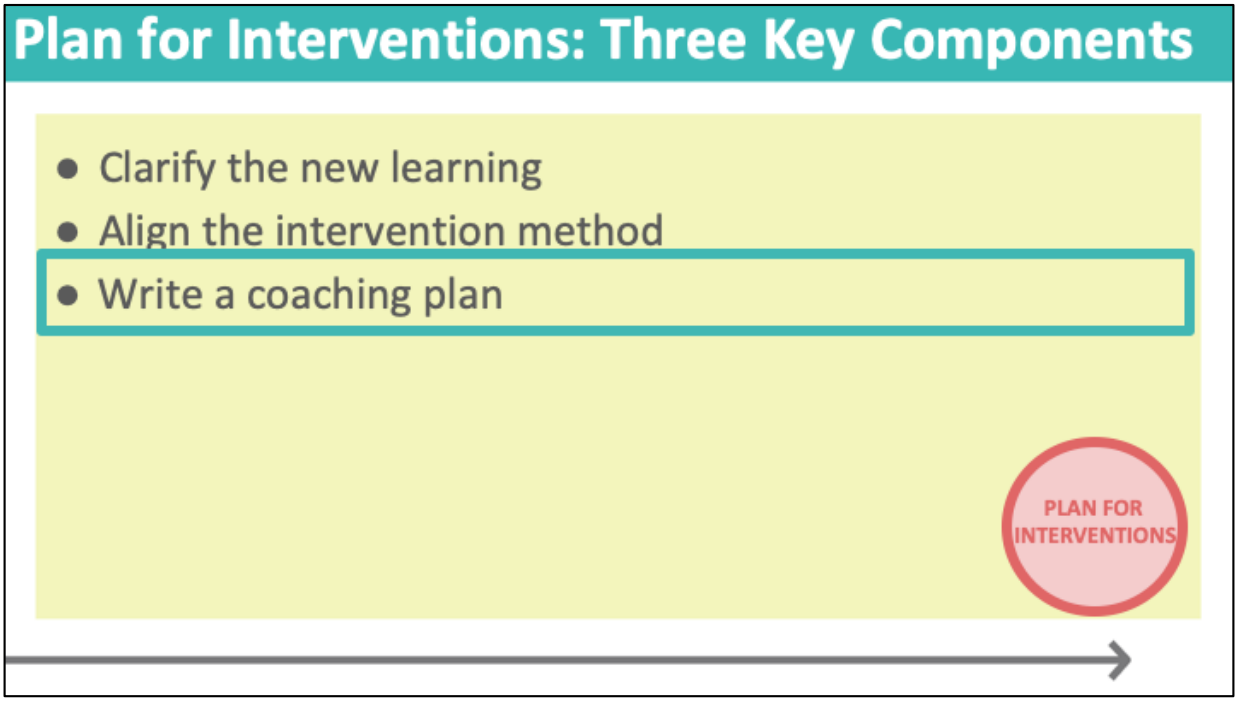
tries something out, and allows them to see you up close and be involved when you try something out.

- The first type we're going to discuss is the "jigsaw" type of co-teaching. When you "jigsaw," you and the mentee will break up the lesson into parts and each of you will take the lead on some of the parts. When you are not the lead, you are sitting right there supporting the lead. If a mentee isn't brand new to something but still isn't very comfortable, you can take the more "meaty" parts of the lesson that require more heavy lifting, while the mentee takes the parts they are comfortable with. Or, if the mentee is ready for a challenge, you can take the other parts of the lesson off of their plate, allowing them to focus on the part they really want to push themself with. You'll ask your mentee, "what would you like to do, and what would you like me to do?"

- The second is the "whisper-in." When you do this, you'll be sitting right next to your mentee while they're teaching, ready to give them some tips on the spot. You may have suggestions with real-time problem-solving, clarifying vocabulary, supporting student engagement, or adjusting the pacing of the lesson to better align with the needs of the students.

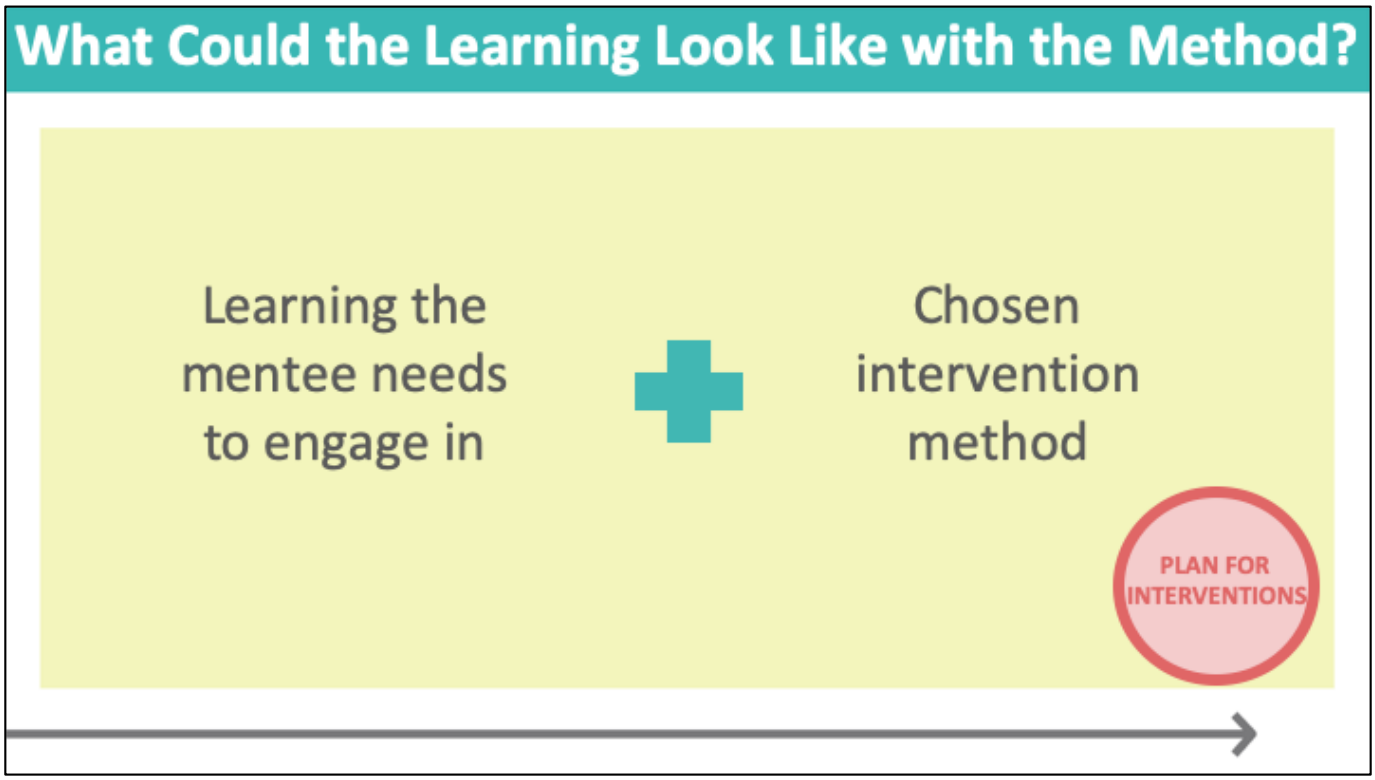
- The third is "teach, pause, discuss." In this type, you or the mentee will be taking the lead with teaching. At predetermined spots OR in the moment based on need, you or the mentee can "pause" the lesson, giving the two of you time to discuss what's happening, before resuming the lesson. This is most effective when one of you notices something and you want to pause and address in the moment.

- The last is "share roles." As you know, there are a many different roles a teacher has to take in any one lesson - all at the same time. You can be side-by-side with the teacher, with both of you taking on different roles in the lesson. For example, one of you may be leading a discussion while the other creates a chart of student responses. This is a nice one because you can be right there ready to support the mentee while they're teaching!

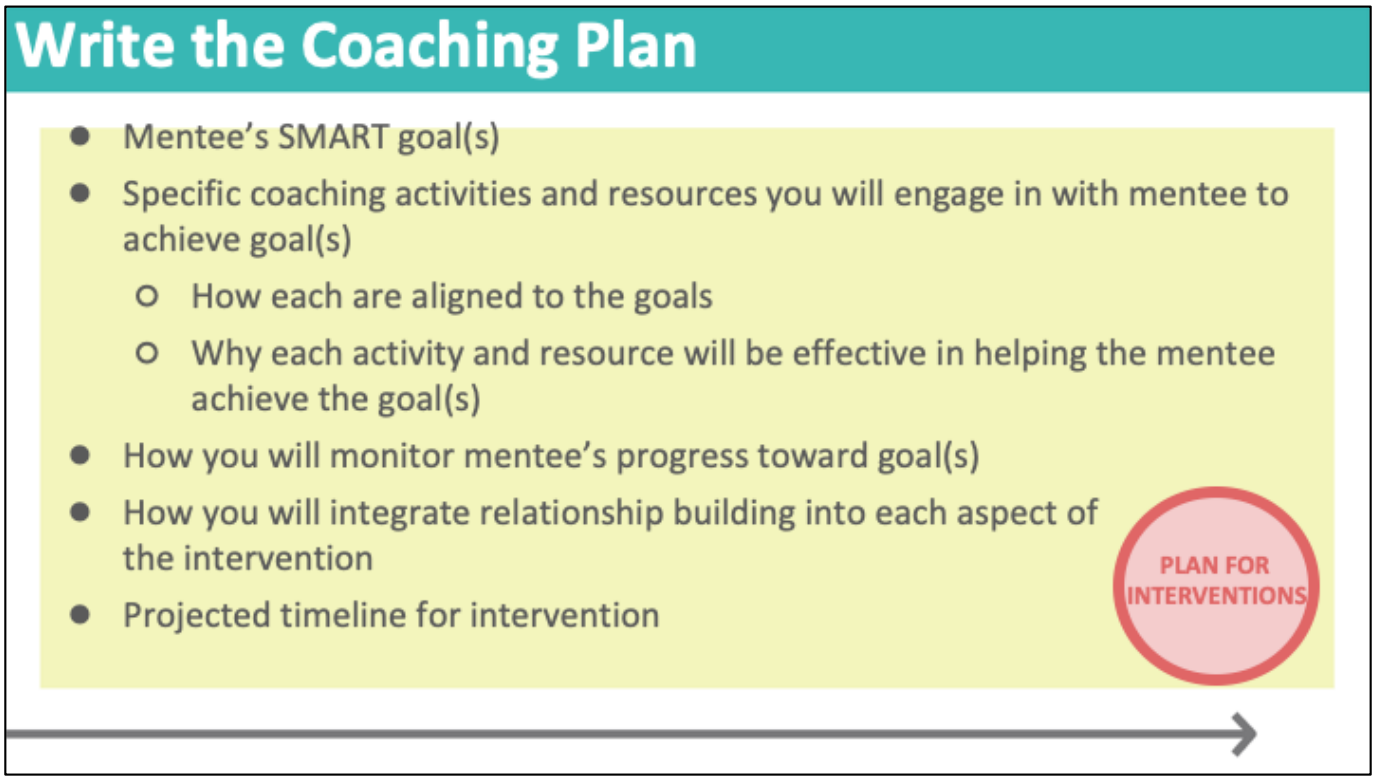


- **Duration**: 1 minute

- **Facilitator Says:** And then, once we've clarified the new learning and aligned the intervention method, we write the coaching plan.



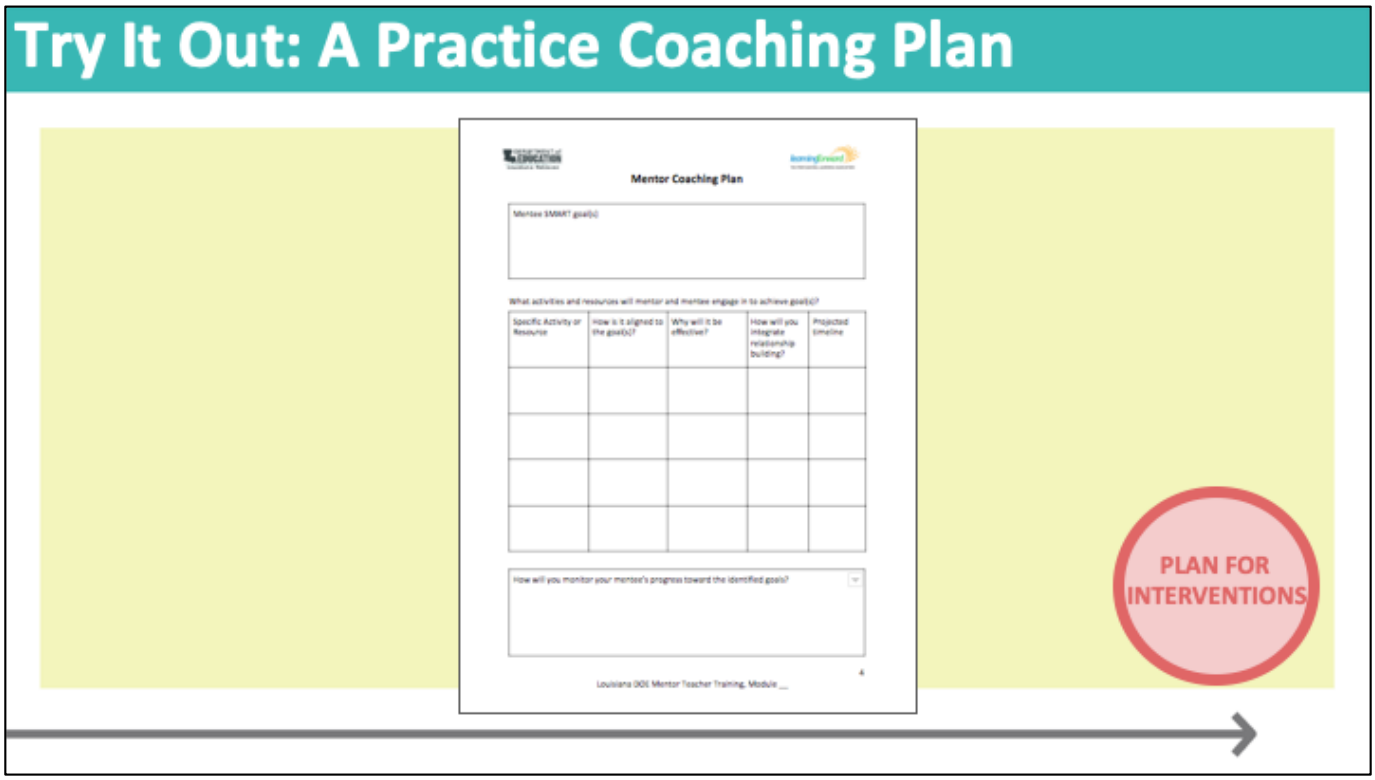
- **Duration**: 1 minute
- **Facilitator says**: Remember, this means planning what the learning could look like with the chosen method.



Duration: 2 minutes

Facilitator Says: Then, you'll turn those ideas into a clear and concise coaching plan. The plan should simply state what intervention you'll use to support your mentee, and when. The most useful mentee coaching plans have the components you see on this slide. Because you are full-time teachers taking on mentoring as a leadership role, our mentee coaching plans err on the side of being more simple than a coaching plan a full time coach might put together. You can see several mentor coaching plan templates on pg. 25-27 of your handouts. One has our SMART goal at the top - we'll use that one today during the session. The others are blank - those are for you to bring back to your school to copy and use with your mentee - or, if you find yourself being ambitious during our practice today, you might use up a couple of the blanks as well as you practice writing your practice coaching plan.

Facilitator Does: Read slide



Duration: 10 minutes

Facilitator Says: So let's try it out. We're going to return to our example scenario - our mentee who is ready to learn how to anticipate student responses prior to teaching a math lesson.

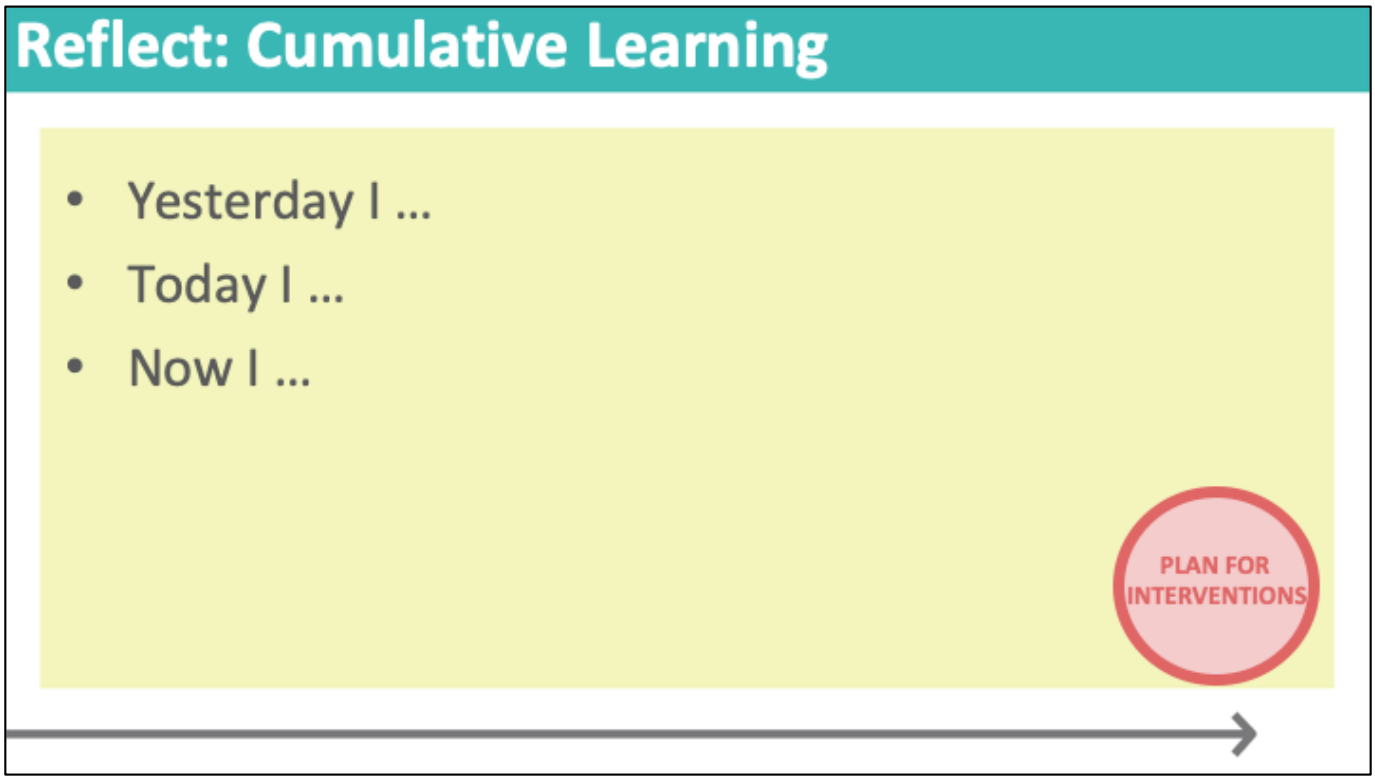
Using the coaching plan template on pg. 25, you are going to meet up with your 6:00 partner to try out writing out a coaching intervention plan.

Because this is practice, just like yesterday, you'll have the freedom and flexibility to discuss and try out some different formats in your plan in the areas we discussed yesterday of location, time, "bite size," and size of group. Remember, we're staying focused on anticipating student responses and co-teaching, but the other variables are things that you can vary. Also remember to always include co-planning and debriefing before and after every time you would be in the classroom.

You'll have 8 minutes to try writing a coaching plan out. Go ahead and find your partner, find a comfortable spot for the two of you to work and get started. You should bring your handouts and any other materials you may need with you as you work. When you first sit down, take a minute to read through the example that has been completed for you. Then, discuss together - what would you write to continue

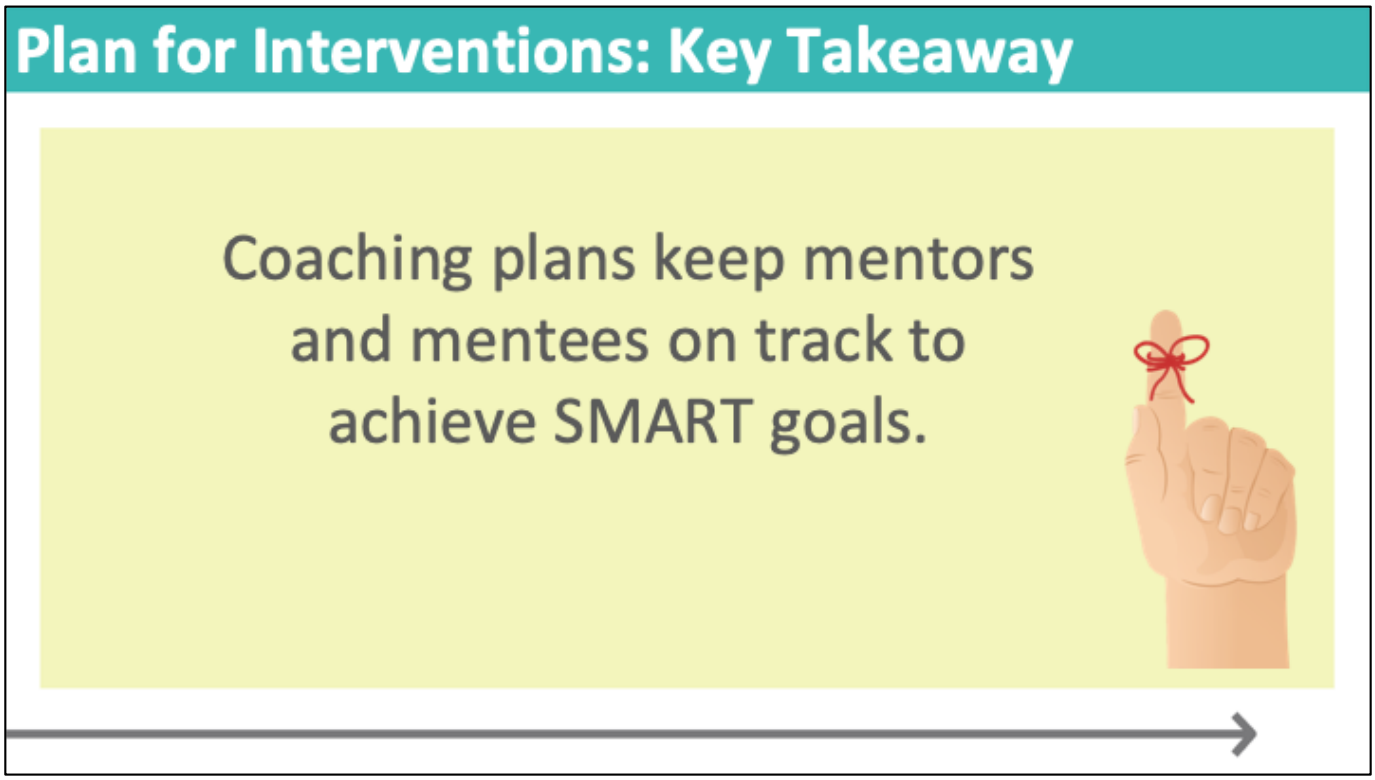
this plan, focusing on co-teaching?

Facilitator does: Circulate and support as partners are working. Make note of any insightful things that people include in their practice plans, especially if they are trying out things that they plan to use when they return to their schools. Use the last 2 minutes of this section to share out any of these noticings you make. **For the purposes of this SMART goal, you should see that the mentors have planned to engage in anticipating student responses while co-planning, while co-teaching, AND while debriefing the co-taught lesson**. Since this is their second time practicing writing a coaching plan, you will hopefully see participants who have used some of the blank sheets as well and planned out several cycles of co-planning, co-teaching, and debriefing. If so, share those. This is what we would hope to see in reality, as it usually takes several times before a mentee starts to become comfortable with a teaching practice. Emphasize to participants that they can modify the coaching templates back at their schools to make them as long as they need them to be! In the real world, they may even start out with a few ideas and then add onto it once the plan is underway!

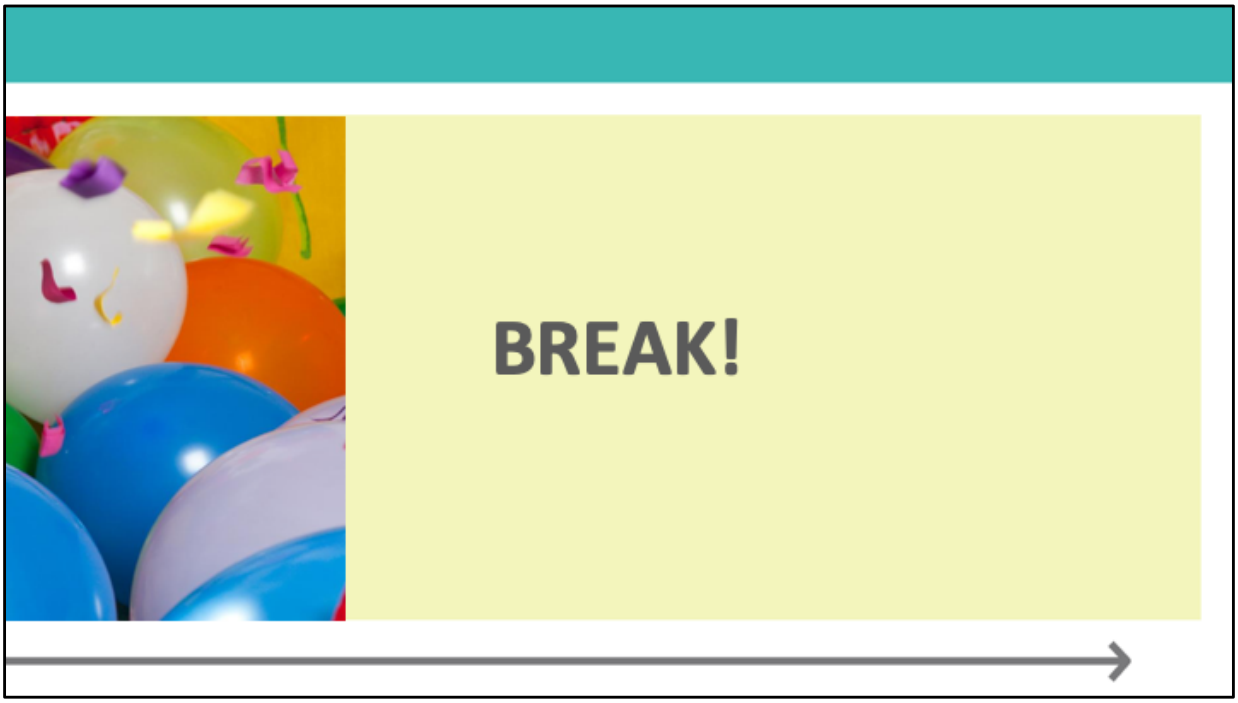


- **Duration**: 3 minutes

- **Facilitator says**: Yesterday was your first time writing a coaching plan. You walked away from that experience with new understandings and knowledge. Today, you got a second chance to practice writing a coaching plan. Take 2 minutes to jot on pg. 28 in your handouts: what did you understand about planning for interventions after yesterday? What new understandings did you add on today? Then put it all together - what is your cumulative understanding of planning for interventions?

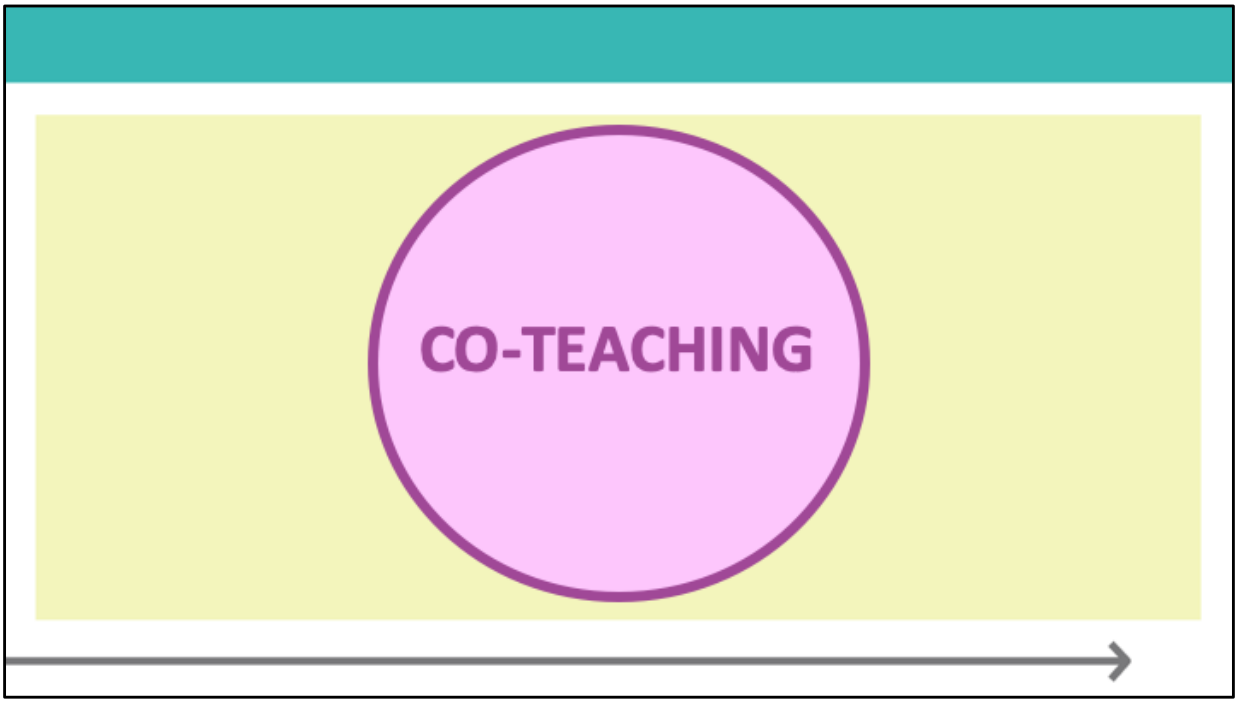


- **Duration**: 30 seconds
- **Facilitator says**: As we learned yesterday, [read slide].



SECTION START: 1:30

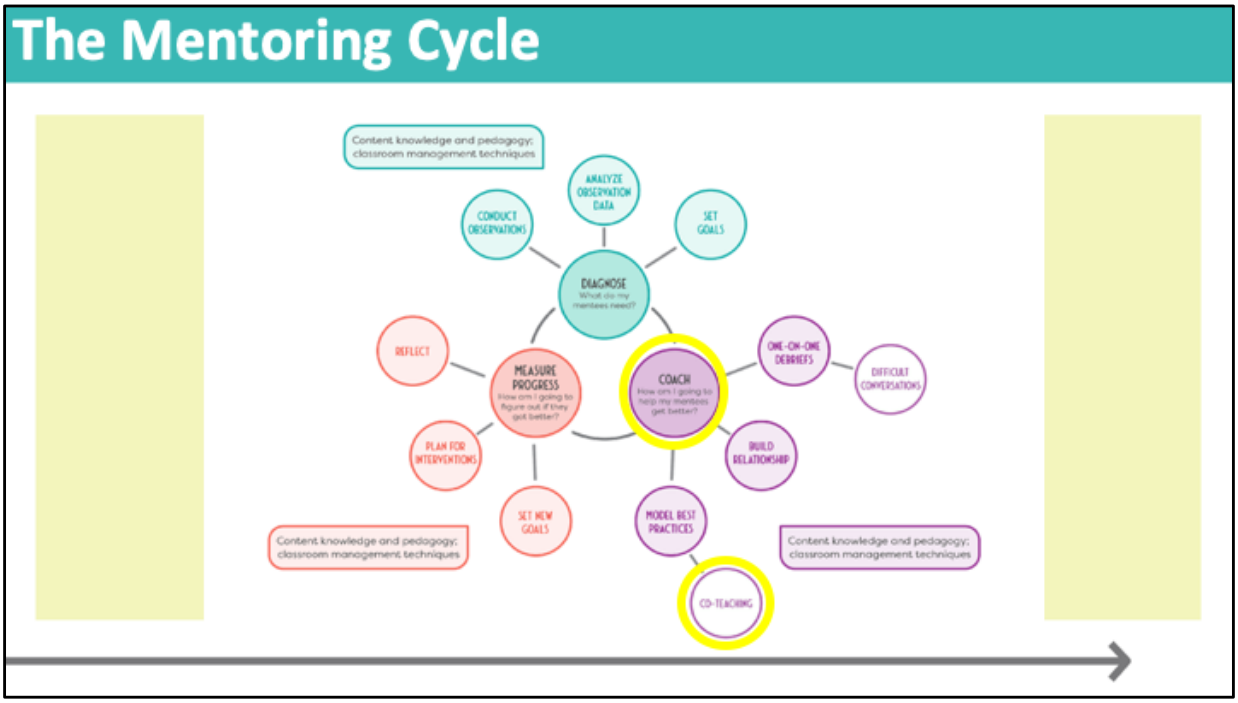
- **Duration**:15 minutes



SECTION START: 1:45

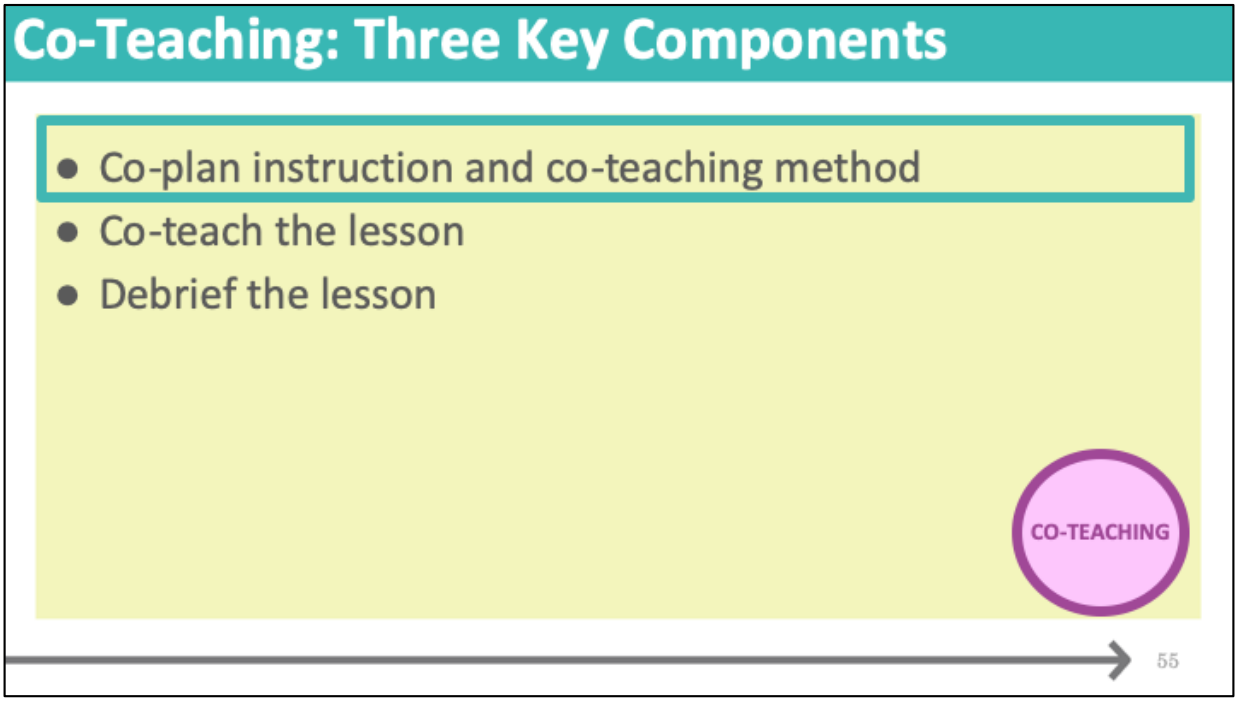
- **Duration:** 30 seconds

- **Facilitator says:** So now that we've practiced writing a coaching plan for co-teaching, let's practice co-teaching to help you feel ready to use this mentoring practice with your mentee.

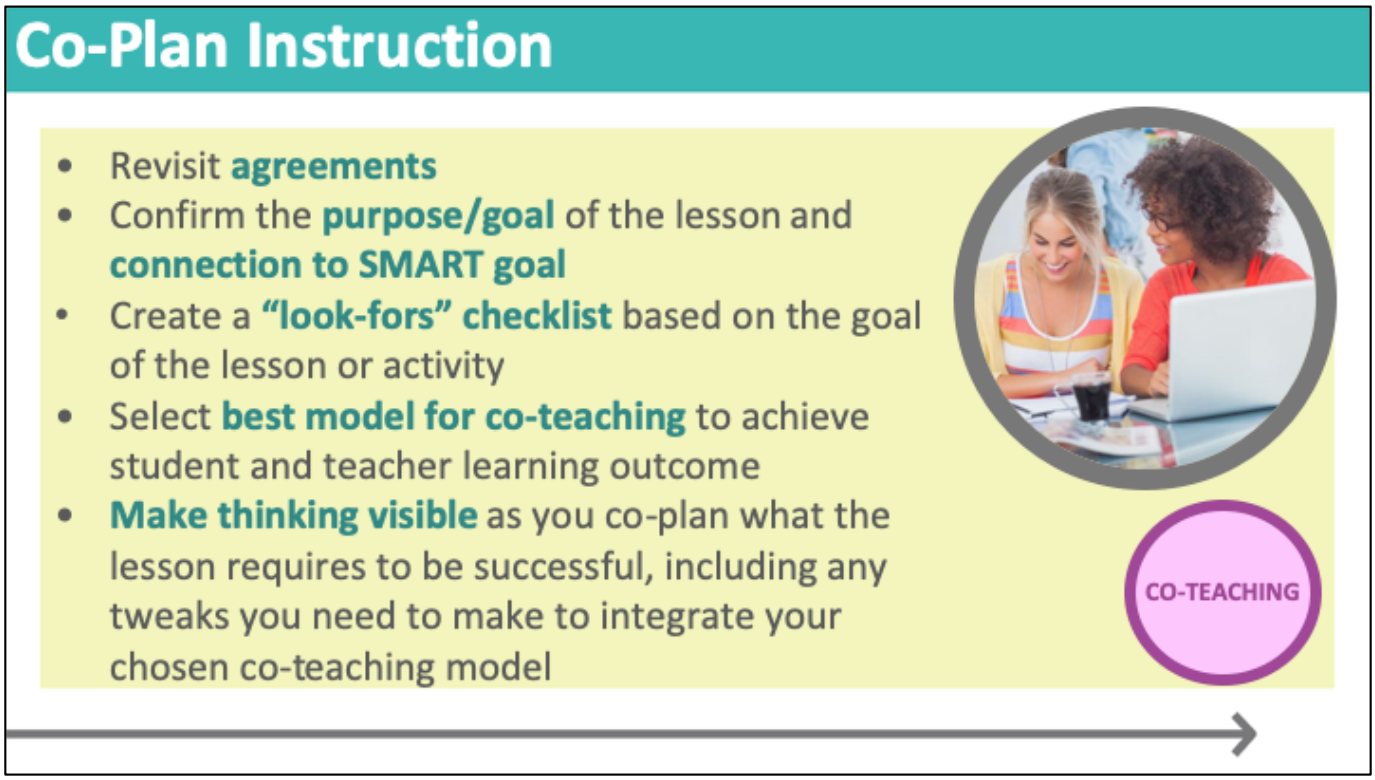


- **Duration:** 30 seconds

- **Facilitator says:** Remember, co-teaching is a way, along with modeling a lesson or activity, to model best practices for your mentee. We'll be focusing on how to engage your mentee in co-teaching to help them achieve their learning goals. So for our purposes, we're going to zoom in on one part of the coaching plans we just practiced writing - one co-teaching lesson with your mentee (and it's co-planning and debriefing, of course!)



- **Duration**: 30 seconds
- **Facilitator says**: We are going to revisit the 3 key components for co-teaching by diving into each component a little more deeply. Let's start off with co-planning the instruction and co-teaching method.



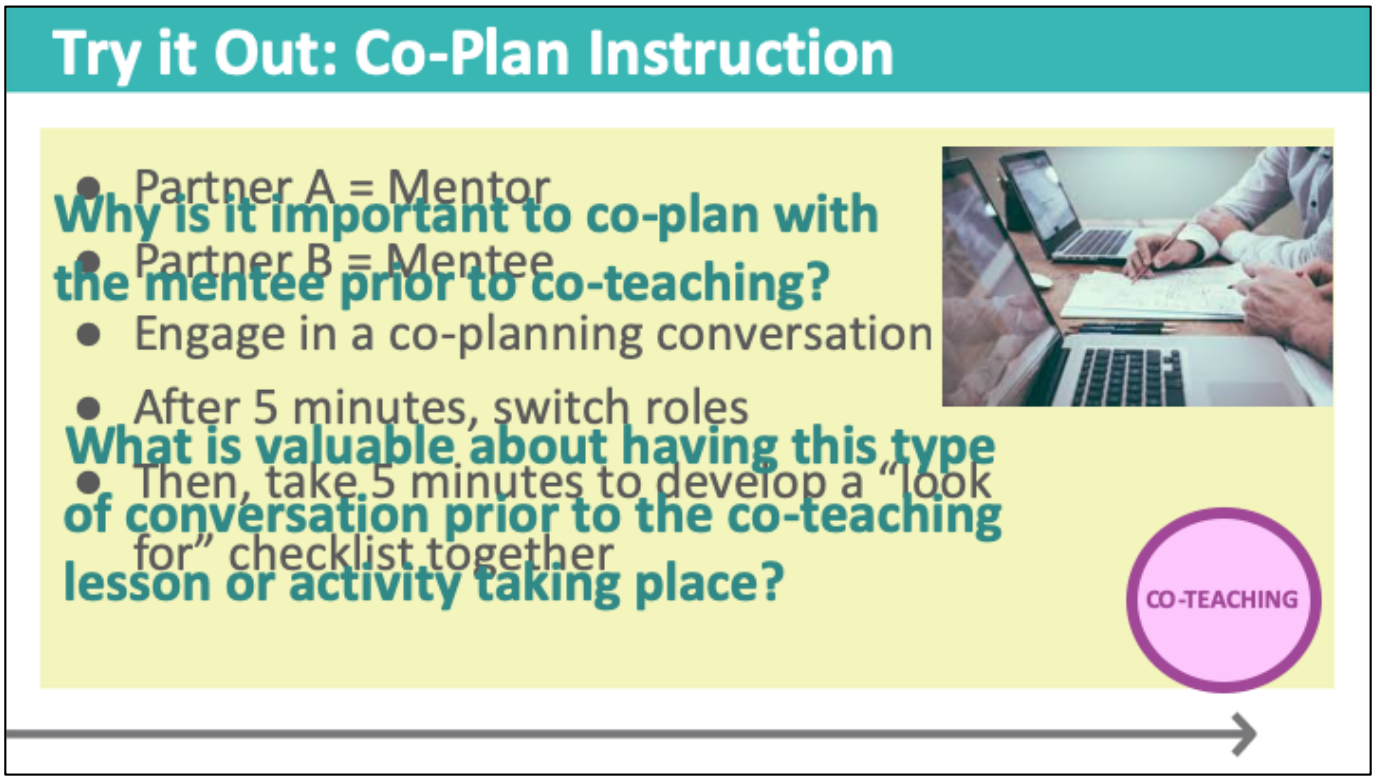
- **Duration**: 10 minutes

- **Note: The bullets included on the slide are listed on page 29 of the handout.**

- **Facilitator says**: When you co-plan instruction that will utilize the co-teaching method, many of the things you discuss will be the same as when you co-plan instruction that will utilize modeling - such as revisiting your partnership agreements, confirming the purpose of the lesson and how the work you'll do connects to the smart goal, and creating a look-fors checklist. When modeling, the look-fors checklist is used by the mentee; when co-teaching, the look-fors checklist will be used by both mentor and mentee.
- Some of the things you'll co-plan will be slightly different. For example, you'll need to select the model of co-teaching that best meets the needs of the students and your mentee. Also, when you make your thinking visible as you co-plan whatever is needed for the lesson to be successful, you might need to tweak the lesson slightly to make it work for the co-teaching method you choose, such as clearly delineating different parts if you're going to jigsaw it.
- Turn to page 30 in your packet. There, you will see a transcript of a short segment of a co-planning conversation between the mentor and mentee who are working on helping the mentee learn how to anticipate student responses

You are going to read this to give you a better sense of what co-planning for co-teaching looks like in action.

- **Facilitator does:** Give 5 minutes for participants to read transcript.
- **Facilitator says**: One thing you should have noticed in this co-planning transcript is that the mentor and mentee actually engaged in doing math together as they were co-planning. This is a great example of doing whatever co-planning the lesson needed to be successful, and also a great example of how co-planning can be a great time to make progress towards achieving the SMART goal! Another thing you should have noticed is that this mentor is using several different team teaching structures. They're jigsawing the parts of the lesson, there's one part when they are sharing the role of selecting student work, and they're using "teach, pause, discuss" while the mentee is teaching.



NOTE: the wording on the slide is NOT messed up, it will be animated when it's in presentation mode.

- **Duration**: 20 minutes

- **Facilitator says:** Now we want to give you a little time to practice your own co-planning conversation. To engage in this role-play we are going to ask you to get together with your 9:00 partner.
  - The lesson starting on p. 32 can support your role play with a fictional mentee's anticipating student responses SMART goal. The SMART goal is one that we discussed earlier during plan for interventions and can be found on page 23 of your handout. The lesson is called Graphs of Functions and Equations. You may also reference the transcript you just read on page 30. (Provide 5 minutes to review the lesson and materials)
- Okay, with your 9:00 partner, decide which one of you will be partner A and which will be partner B. Partner A will start off playing the role of the mentor and Partner B will be the mentee. You will have 5 minutes to engage in a practice co-planning conversation using the SMART goal and the lesson plan provided. After 5 minutes we will have you switch roles and Partner A will become the mentee and Partner B the mentor and they will have the chance to practice this type of conversation as well. We know this may feel awkward

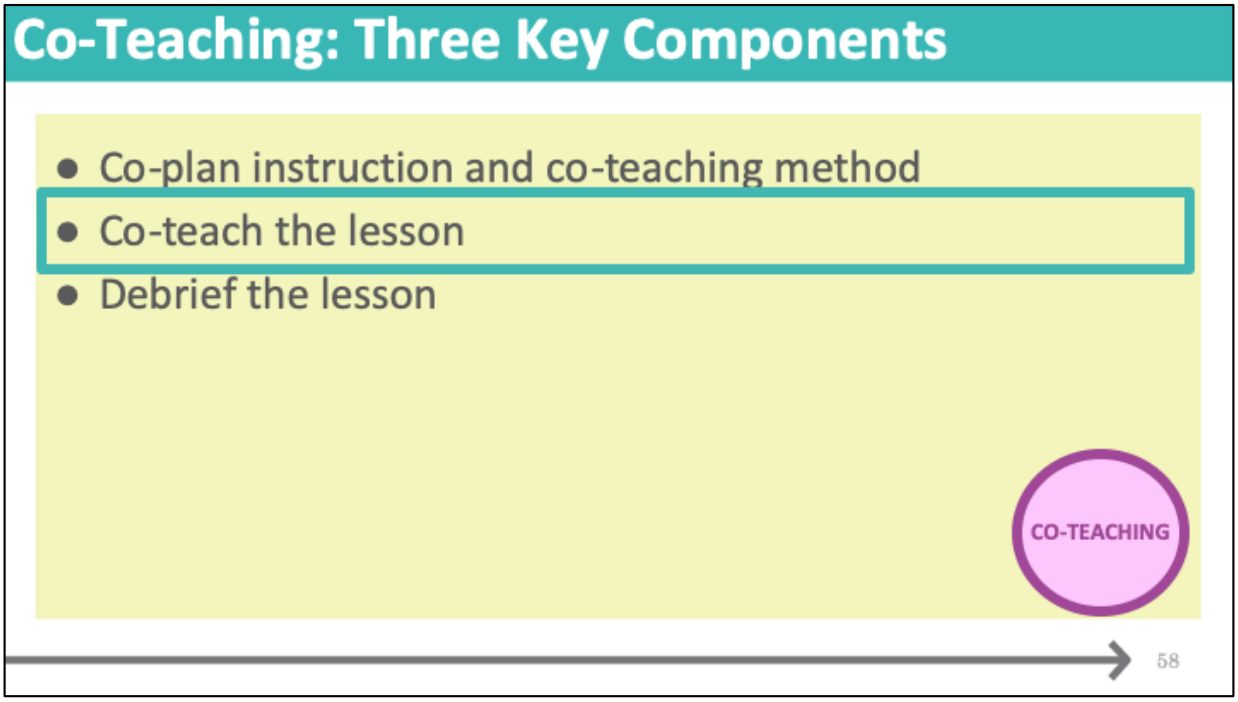
at first, but engaging in this practice is important so you will feel better prepared in engaging in this type of conversation in real life with your mentees. Please feel free to make these conversations as realistic as you like! Think about what you might actually say in a co-planning conversation. Try your hand at a different part than in the sample, or with having the conversation go in a different direction!

- **Facilitator does:** Circulate as participants are practicing their co-planning conversations, providing feedback and support where necessary. After 5 minutes, indicate to the group to switch roles to allow both partners to have the opportunity of playing the role of the mentor and mentee.

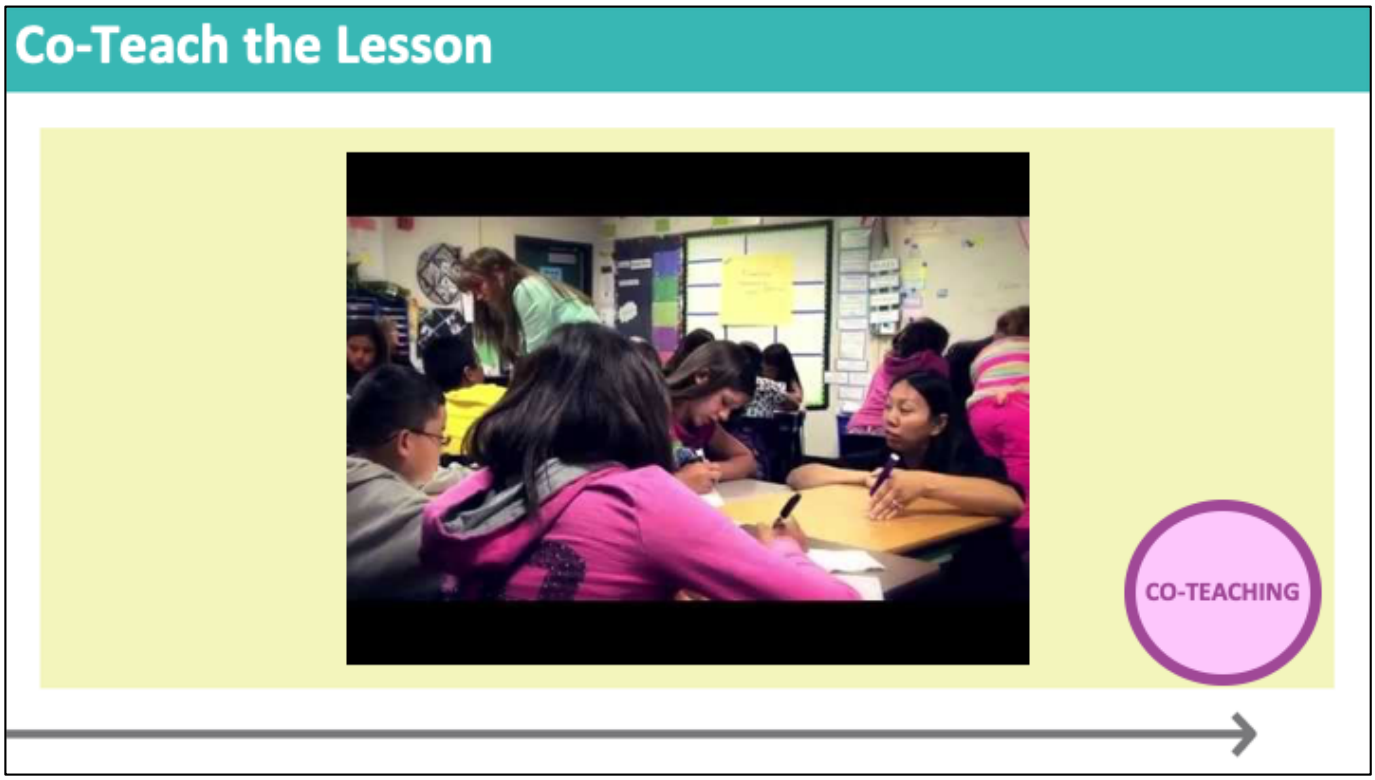
- **Facilitator says:** Now we want to give you the opportunity to create a "look-fors" checklist for the skill you were just practicing a co-planning conversation for. If your mentee was working on anticipating student responses, and you decided the best intervention to support them in improving in this area was to co-teach, what would you want them to look out for as you teach? What would you want to look for while they teach? Take 5 minutes to continue working with your 9:00 partner and develop some "look-fors" you think would be good for the mentee to have on a checklist for this particular skill. You will see that we've provided the first bullet of the "look-fors" checklist on page 49 of your handout to get you started.

- **Facilitator does:** Circulate to provide support as participants work on their checklists. After 5 minutes, invite a few participants to share out their ideas with the whole group.

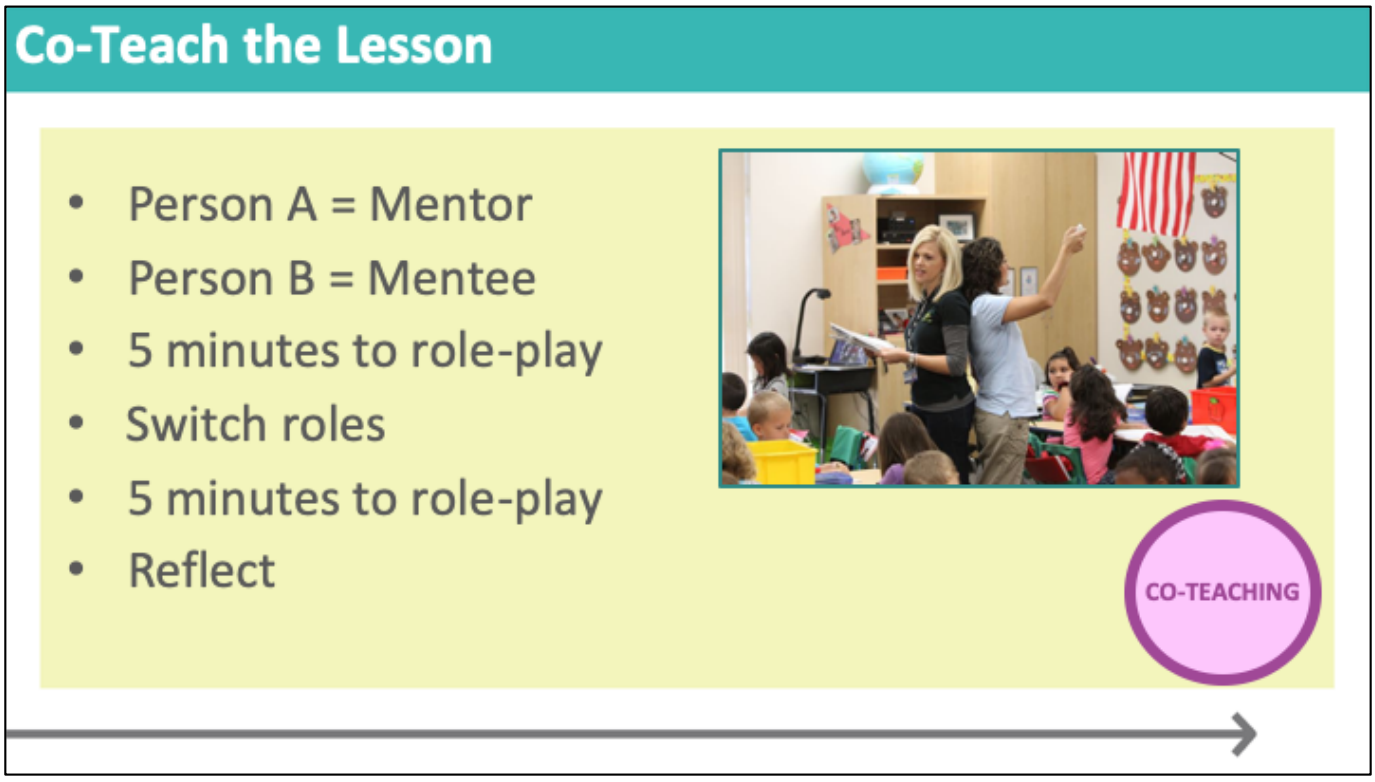
- **Facilitator says:** (Pose the questions to the group & **animate the slide**) So why is it important to co-plan with the mentee prior to co-teaching? **Animate the slide.** What is valuable about having this type of conversation prior to the co-teaching lesson or activity taking place? (invite a few participants to answer each question) As we move into the next piece, co-teach the lesson, we would like for you to stick with your 9:00 partner a little longer because you will work with them during the next two activities as well. So hang tight.



- **Duration**: 30 seconds
- **Facilitator says**: After you've co-planned the instruction and co-teaching method, it is now actually time to engage in the co-teaching of the lesson, our second key component.



- **Duration**: 8 minutes
- **Facilitator says**: This video is a great example of team teaching in action, one of our co-teaching models we've been discussing. The video also interviews the mentor and mentee teachers so they can share the benefits of team teaching and why they both see it being a powerful and impactful learning experience for them and their students. As you watch the video, take note on the benefits of team teaching that they share.
- **Facilitator does:** Play the video. It is about 4 minutes long. Participants can take notes on page 51 of the handout if they'd like.
- **Facilitator says:** With your 9:00 partner, take 2 minutes to share what you heard about some of the benefits of the team teaching model.
- **Facilitator does:** Circulate to listen in on conversations. After 2 minutes, have a few participants share out some of the benefits they heard in the video with the whole group.

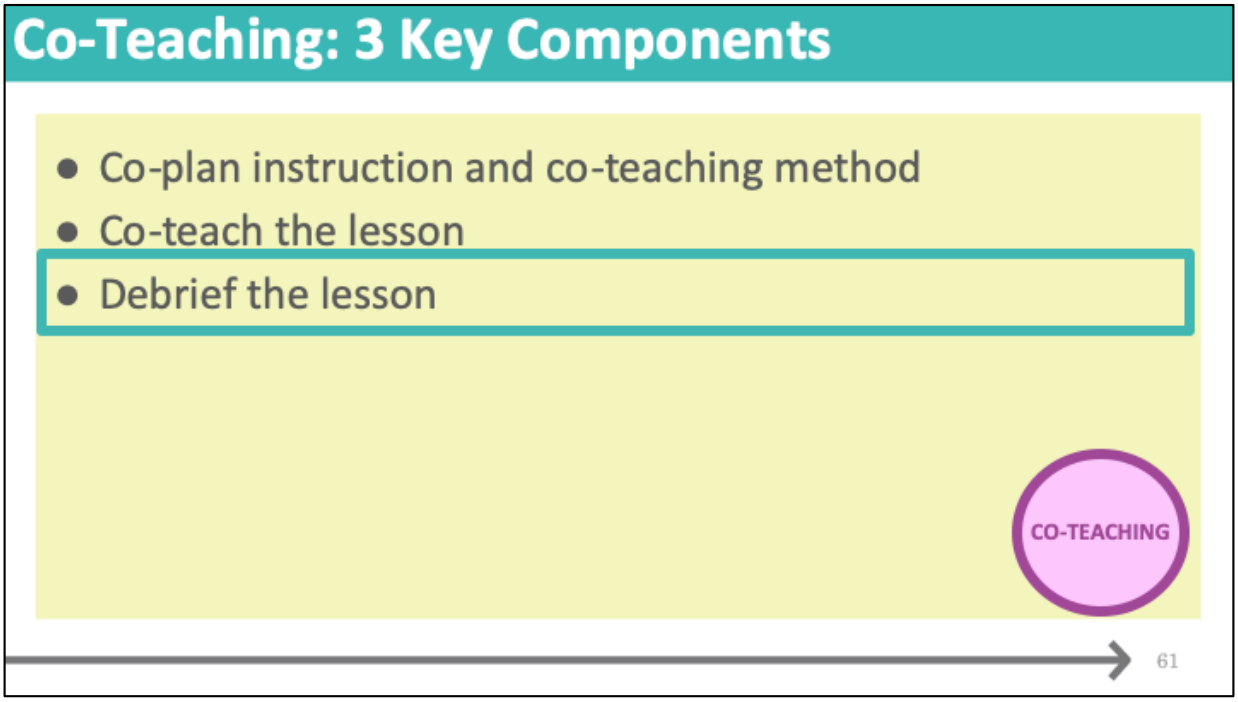


- **Duration**: 15 minutes

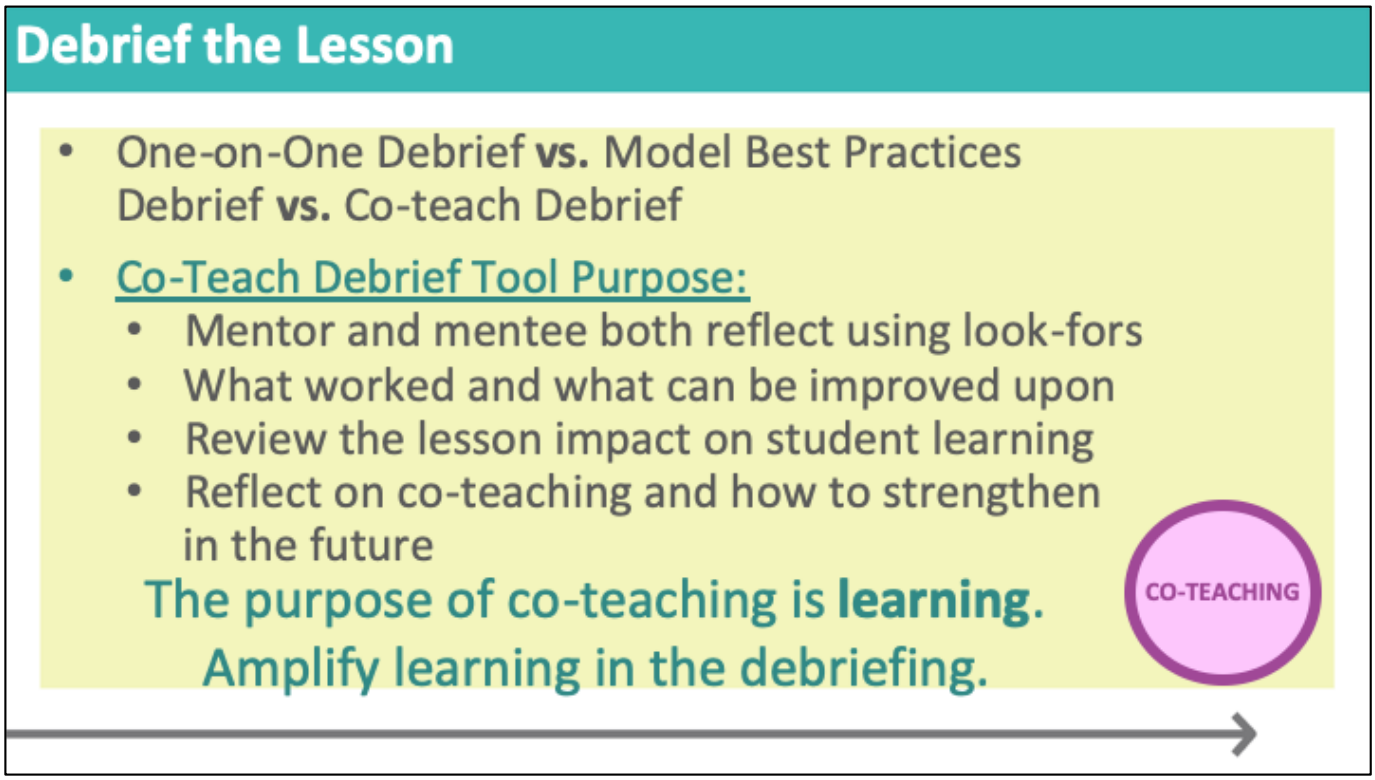
- **Facilitator says**: Now that you've practiced co-planning a co-teaching lesson, and you've seen some great examples in the video we just watched, we want to give you some time to role-play just a short segment of a co-teaching lesson with a partner. We are going to stick with our same scenario from earlier that you've already "co-planned" with your 9:00 partner. Remember the lesson plan is in your handouts starting on page 32. Decide which partner will be person A and which will be person B. Person A will play the role of the mentor and person B will be the mentee for this first round. You will only have 5 minutes to role-play so try not to overthink it. Remember, you want to work off of the plan you already created during the co-planning conversation role-playing. Do your best to envision you both in a classroom, with students in front of you. After 5 minutes, I'll let you know it is time to switch roles - partner B becomes the mentor and partner A the mentee. Feel free to continue on from where you left off but just in the switched roles, or start over from the beginning in your new roles. I'll leave that decision up to you and your partner.

- **Facilitator does:** Start the 5 minute timer. Circulate to listen in on the role-playing jotting down some feedback notes to share with the whole group later. After 5 minutes, inform participants they should switch roles and restart your timer. Afterwards, share some of the positive things you observed as you circulated during the role-playing with the whole group. Then pose the following reflection question to the group and have a few participants reflect and share out.

- **Facilitator says:** What are you most looking forward to when it comes to co-teaching with your mentee?

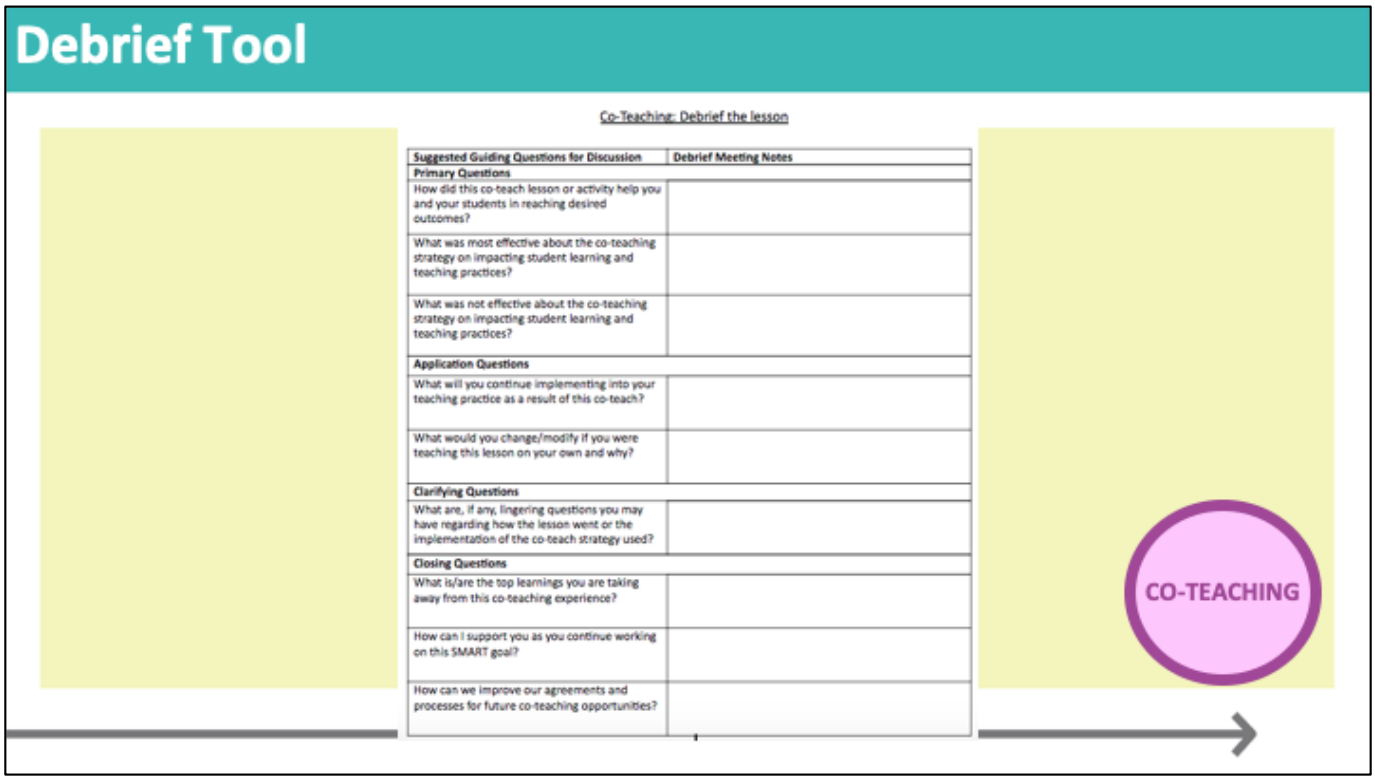


- **Duration**: 30 seconds
- **Facilitator says**: The final key component of co-teaching is to debrief the lesson following the co-teach lesson. This process is very similar to debriefing the lesson after the modeling of a lesson or activity, which we discussed and practiced yesterday so hopefully this next part sounds and feels familiar.



- **Duration**: 2 minutes

- **Facilitator says:** So far we've talked about two different kinds of debrief conversations. We've learned about the one-on-one debrief, where the purpose is to identify and finalize the 1-2 SMART goals with your mentee as a result of what you saw during the classroom observation. Then yesterday we learned about and practiced using a model best practices debrief template to engage in reflection with your mentee following a model lesson or activity. Today's debrief for a co-teach will be very similar to the debrief for modeling. This type of conversation happens a little more organically. It only has space for some pre-planned questions and a spot to take notes during the conversation. Like the other types of debriefs though, you don't want more than 48-72 hours to pass between the lesson and the debrief because you want the lesson to be fresh in your and your mentee's memory.
- The purpose of the co-teach debriefing tool is to:
    - Reflect on the lesson using the look-fors
    - Discuss what worked well during the lesson and what could be improved upon next time you co-teach a lesson or activity
    - Review the lesson impact on student learning - this may include examining some student work that resulted from the co-teach
    - Reflect on the actual co-teaching experience and discuss ways to strengthen it in the future.
- **Facilitator says:** Remember that the purpose of co-teaching is learning. We want to make this very clear during the debrief conversation.



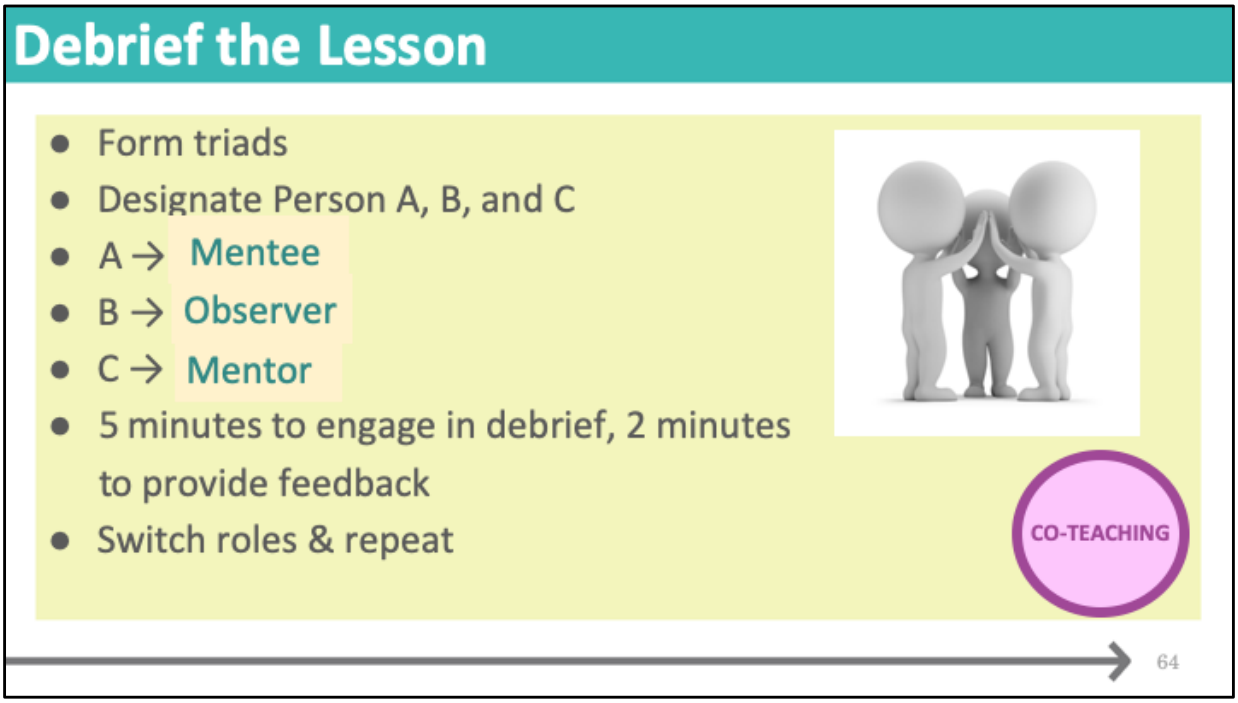
- **Duration**: 8 minutes

- **Facilitator says**: In your handouts on page 52-53, you will find two copies of a debrief tool that can be used following a co-teaching lesson or activity. Take two minutes to look it over.

- **Facilitator does**: Allow 2 minutes for participants to read over the co-teaching debrief tool.

- **Facilitator says:** On page 54, you will see a transcript of a short segment of a debrief conversation, continuing with the example we've been using throughout this section of the training. This mentor and mentee have co-planned, co-taught, and now they are debriefing how the lesson went.

- **Facilitator does:** Provide 5 minutes for participants to read transcript.

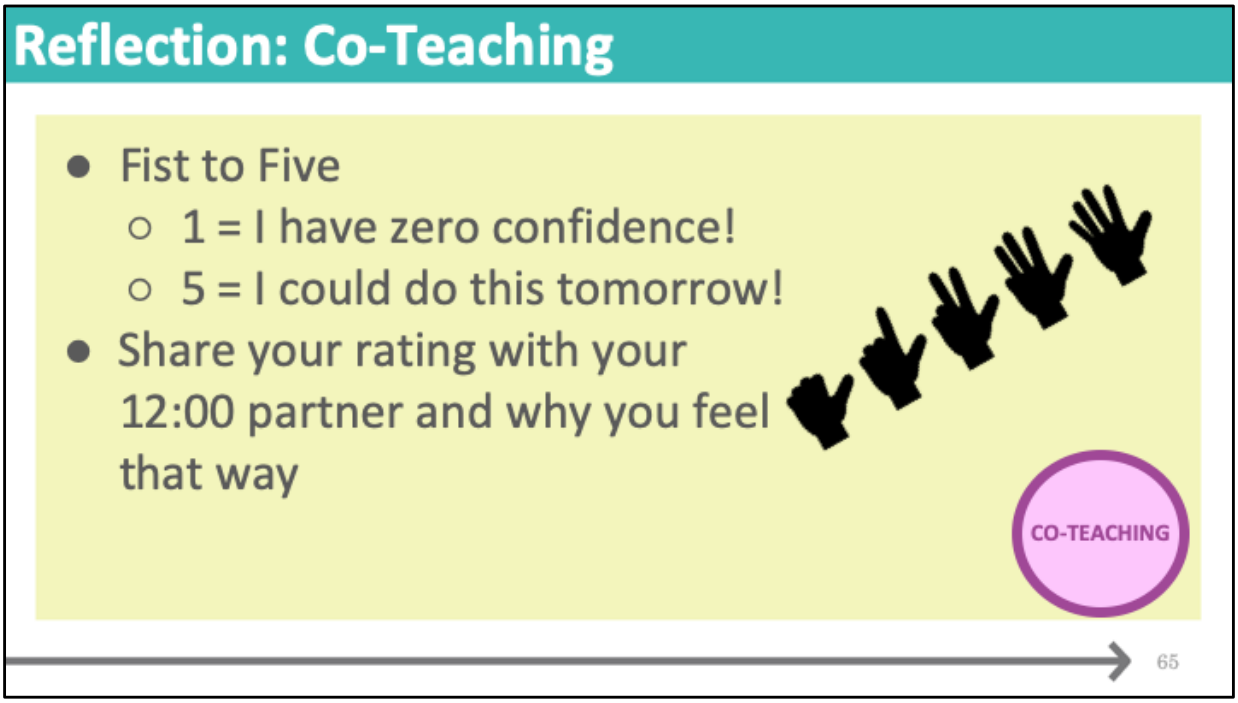


NOTE: THE SLIDE INCLUDES ANIMATIONS - THE TEXT IS NOT MESSED UP ON THE SLIDE!

- **Duration**: 20 minutes

- **Facilitator says:** Now we want to give you all the opportunity to role play a short segment of a debrief conversation. For this role play, we are going to pretend that yesterday you engaged in the co-teach lesson we've been referring to all afternoon. So your debrief conversations will be in reference to that particular goal with that lesson. To engage in this role-play, you will work in triads with two other people from your learning team. In your triads, decide who will be person A, B, and C. For the first rotation, person A will act as the mentor, person B will act as the mentee, and person C will be an outside observer providing feedback on how the mentor does during the role play practice. The person playing the mentor will facilitate the debrief conversation using the debrief tool on page 52-53 of your handout. The person playing the role of the mentee should do their best to be a thoughtful, reflective classroom teacher to make this experience more authentic. The person playing the observer should make notes on how the mentor facilitates

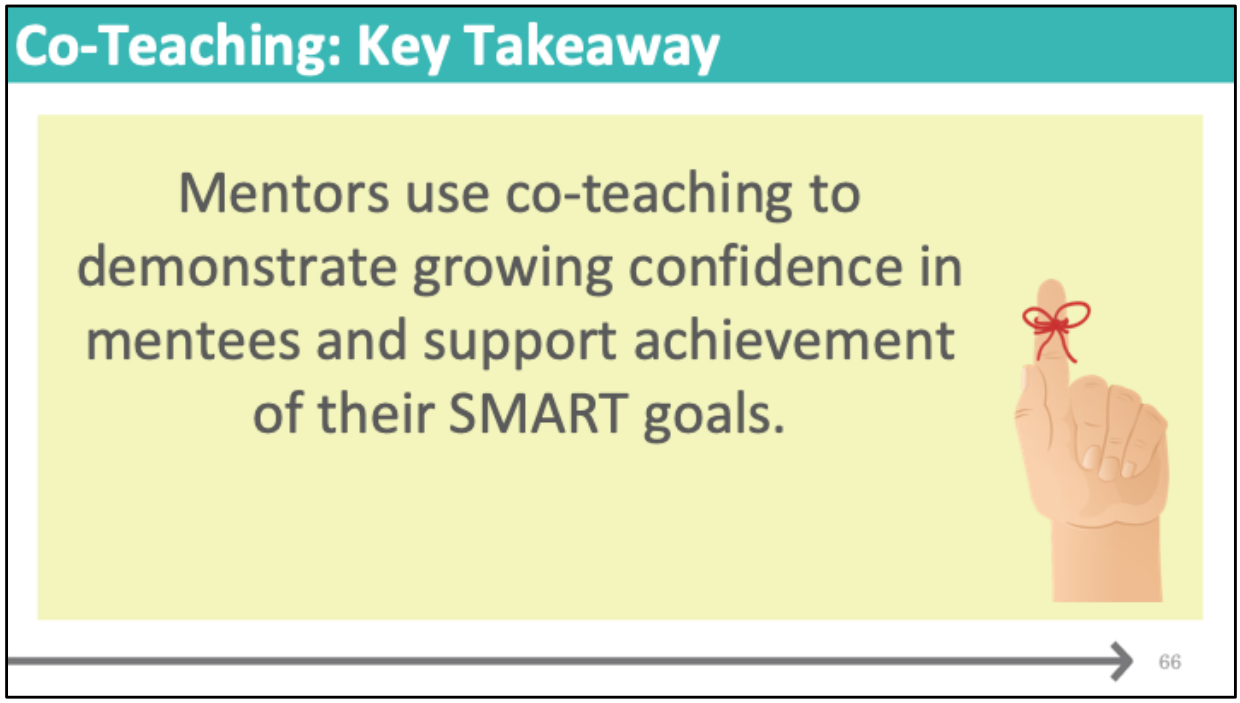
the conversation that supported the mentee's thoughtful responses to the questions. Feel free to jot notes to provide specific examples to the mentor about how the behaviors, questioning, paraphrasing, etc. supported the mentee's success. Everyone will have 4 minutes to engage in the debrief conversation, followed by 2 minutes for the observer to provide feedback on how it went. We will then switch roles twice, so everyone can have an opportunity to be in each role. What questions do you have? (answer any clarifying questions needed). Go ahead and form your triads, and set up 3 chairs together for you all to sit with one another. Once I see everyone is set up and ready I will start a 4 minute timer.



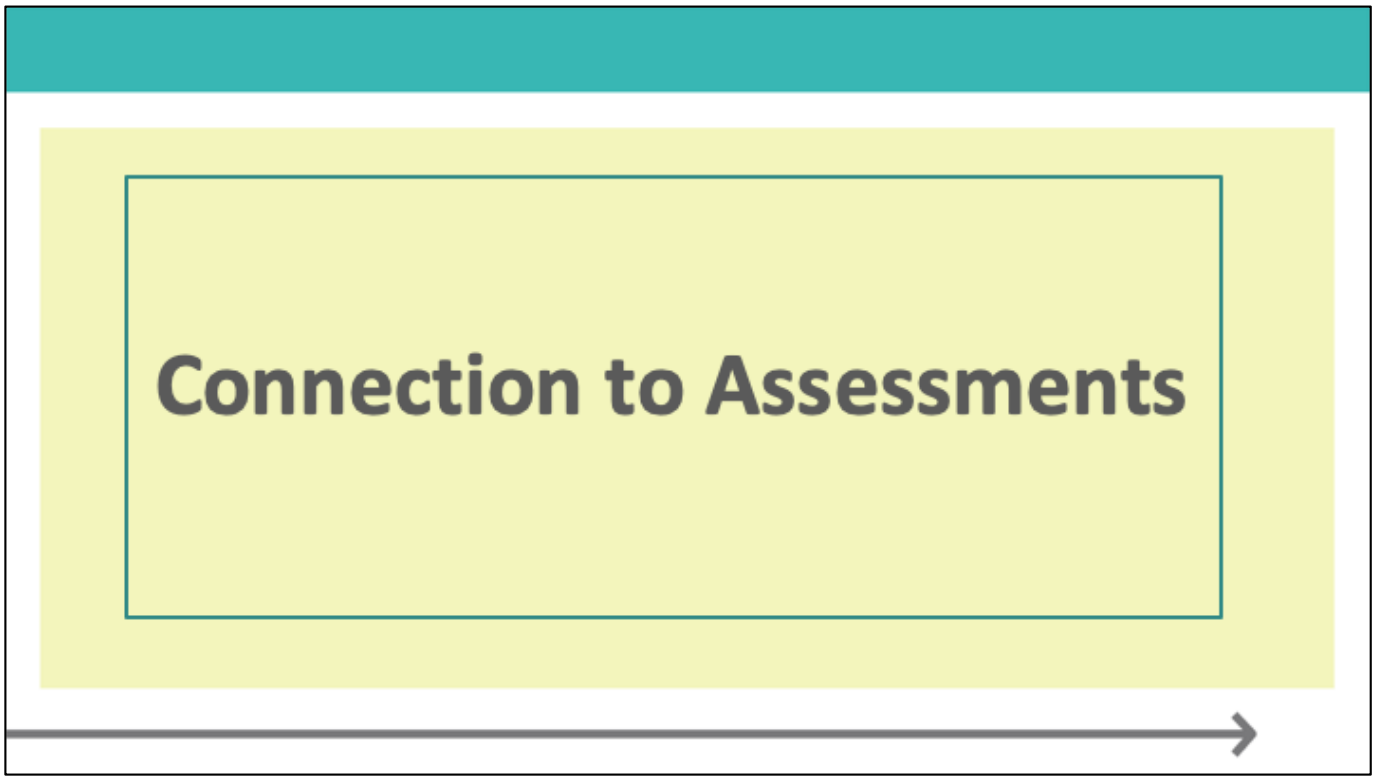
- **Duration**: 5 minutes

- **Facilitator says:** Now that we've gone through all 3 key components of co-teaching, I want you to give yourself a rating using a fist to five rating on how prepared you are feeling to engage in a co-teach lesson or activity with your mentee - if you give yourself a 1 this means you have zero confidence, all the way up to 5 being you could implement this tomorrow. **Pause for a few seconds for participants to rate themselves.** Now I would like for you to meet back up with your 12:00 partner from yesterday. Once you find your partner you will have 2 minutes to share your rating and why you feel this way.

- **Facilitator does:** Circulate and listen in on conversations. After 2 minutes invite a few different participants to share out with the whole group - try to call on participants with varied rating levels. Ask everyone to return to their seats.



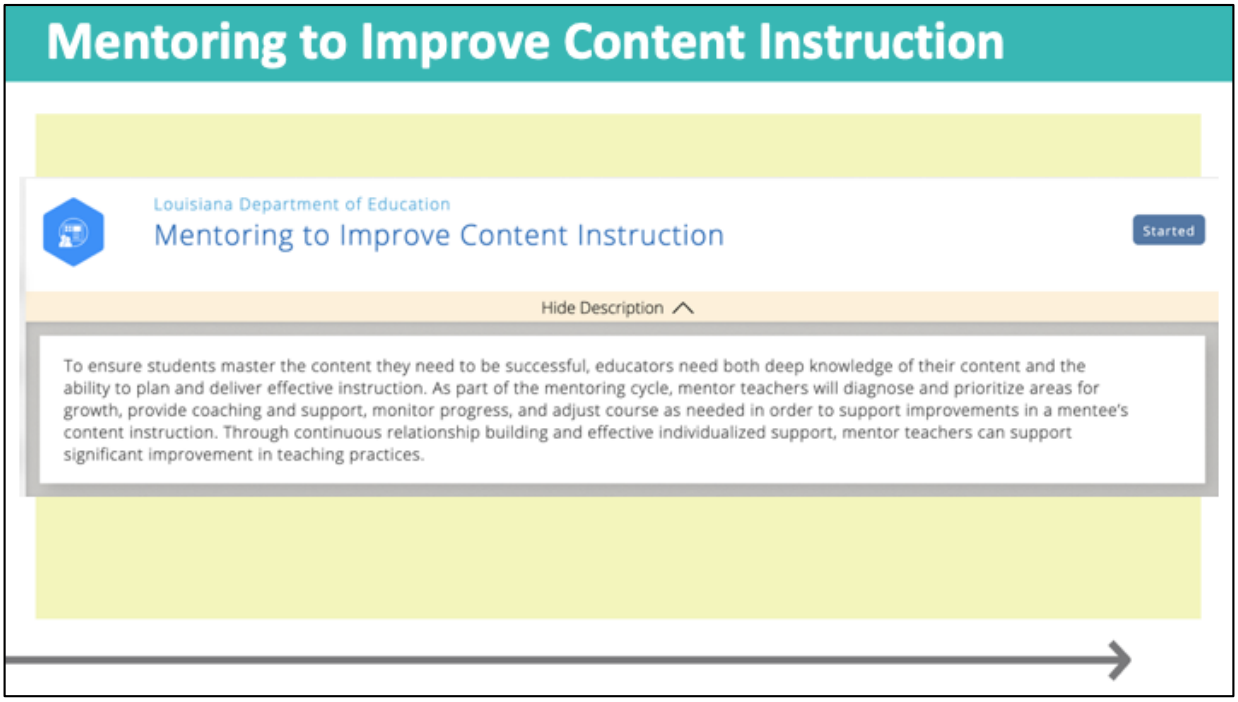
- **Duration**: 30 seconds
- **Facilitator says**: As we bring this section of our training to a close, here is the key takeaway: Co-teaching is an effective method for modeling best practices for a mentee.



SECTION START: 3:15

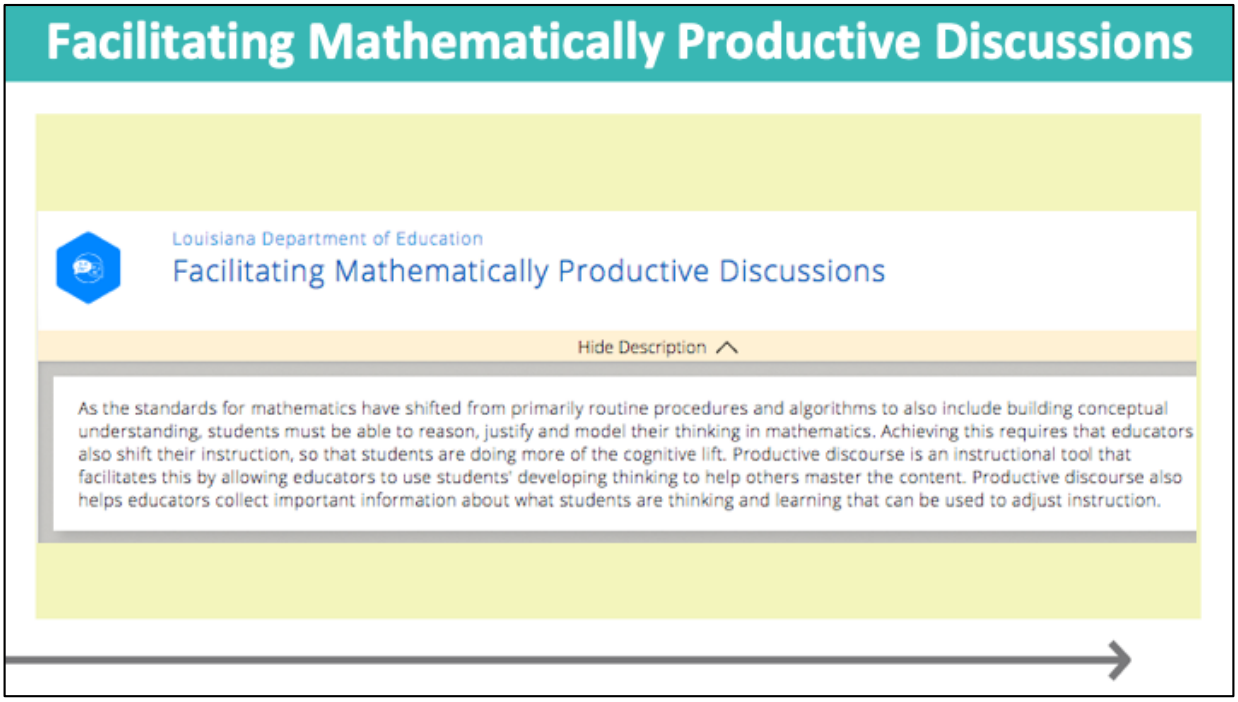
- **Duration:** 30 seconds

- **Facilitator says:** So let's take a look at where conducting observations and analyzing observation data appear in the assessments of your mentoring practice. We will also look at which assessment the morning content aligns with.

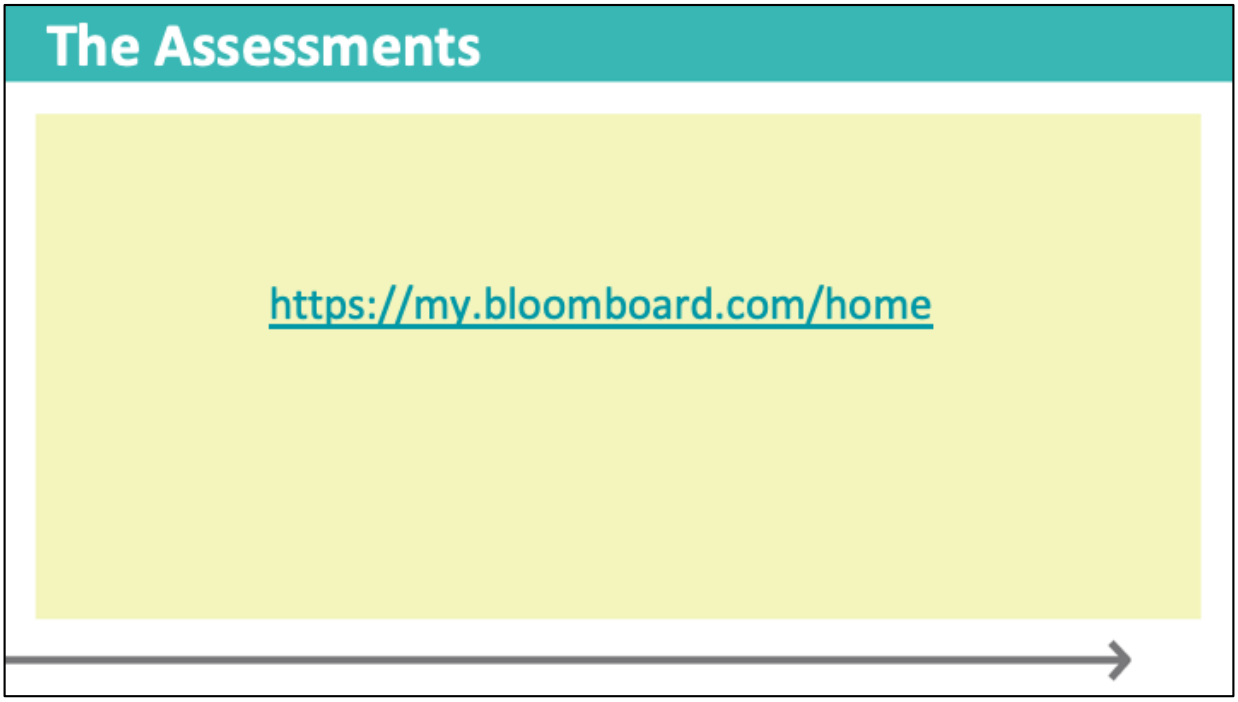


- **Duration:** 2 minutes

- **Facilitator says:** Take 1 minute and read through the description of this assessment. (After 1 minute, ask) Where do you see the connection in this assessment with what we've learned so far? (invite a few answers from participants)
- NOTE: Answers should include the following:
    - "...educators need both deep knowledge of their content and the ability to plan and deliver effective instruction" - connects to AM math content as an option to use for this assessment
    - "...mentor teachers will….provide coaching and support…" taught today and yesterday



- **Duration:** 2 minutes
- **Facilitator says:** Take 1 minute and read through the description of this assessment. (After 1 minute, ask) Where do you see the connection in this assessment with what we've learned so far? (invite a few answers from participants)

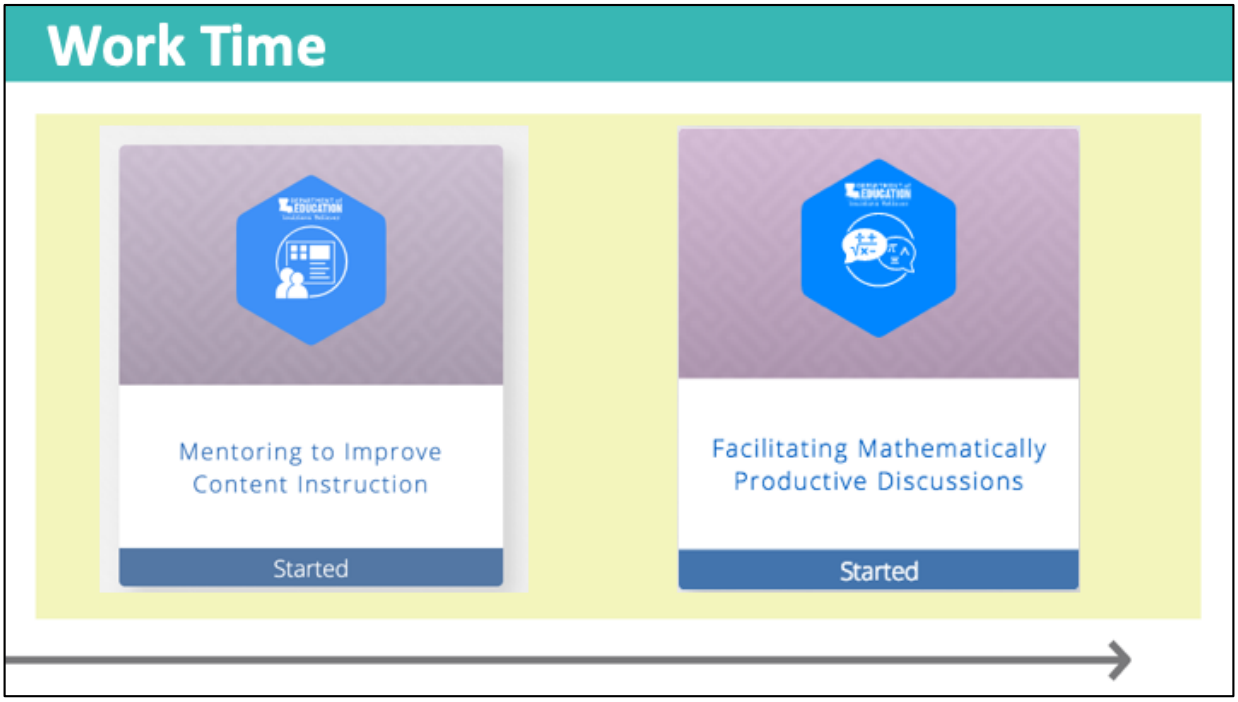


- **Duration:** 5 minutes

- **Facilitator says:** I'm going to log on to the platform and give just a high-level overview of each of these two assessments so you can continue to make connections between what we've learned so far and the expectations of these two assessments.
- **Facilitator does:** Log on using the generic username and password below.
- Review the following highlights live on the platform for participants:
    - Mentoring to Improve Content Instruction
        - Analyze - If participants want to use math for this module, they are technically ready to accomplish this part of the assessment. They know what to "look-for" when it comes to strong math instruction and they know how to conduct an observation, analyze that data to prioritize a need, and set goals. Once they start working with their mentee, they are ready to tackle this part.
        - Develop - If they want to use math, they are also technically ready for this part of the assessment as they know how to develop a coaching plan. Once the school year starts they can tackle this.

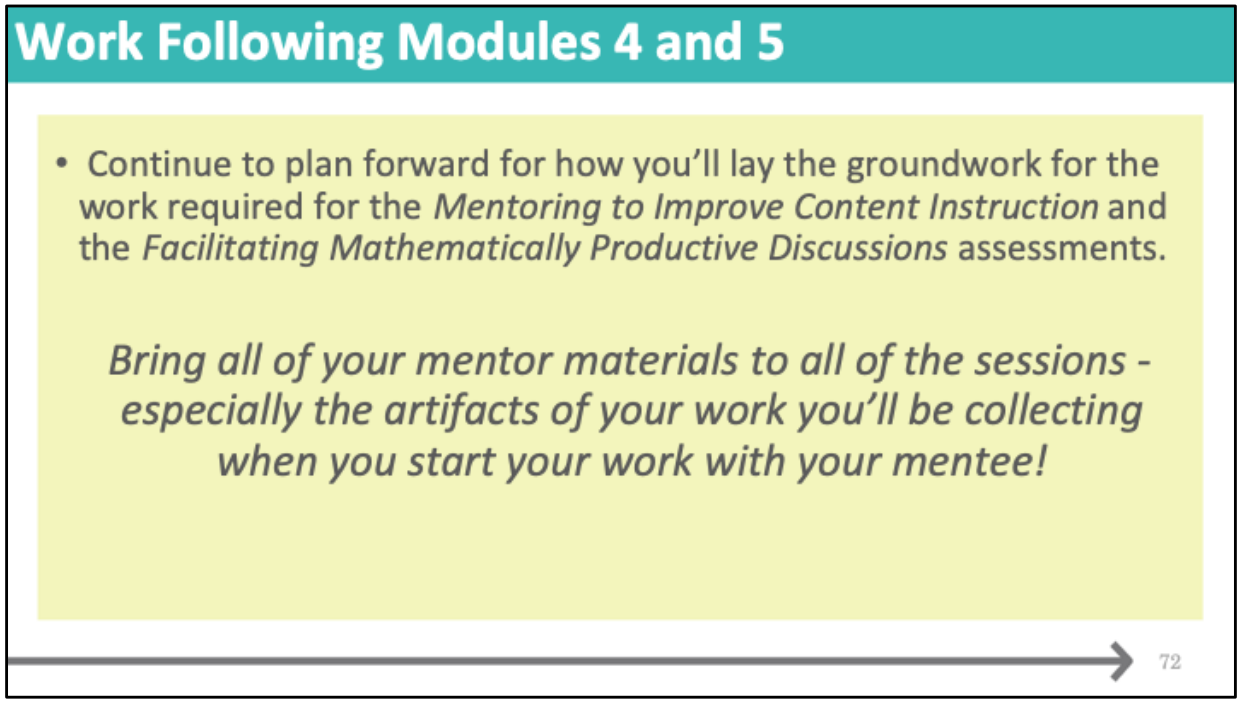
        - Implement - Relationship Building - They are ready to build the relationship with their mentee and can do so and save the artifacts from doing so once the school year starts.
        - Implement - Coaching and Support - They are ready to use both modeling and co-teaching to coach and support their mentee once the school year starts.
    - Facilitating Mathematically Productive Discussions
        - Analyze - participants are ready for this part of the assessment as they learned this this morning.
        - Develop - they are ready to do this as they learned this this morning
        - Implement - now they will facilitate the discussion they planned in the first two steps making sure to capture the discussion in a video
        - Evaluate - they will write a reflection on the discussion by answering the questions listed.
        - *****They could complete this assessment as quickly as they'd like since they will be readily equipped come the start of the school year*****

https://my.bloomboard.com/
Username: learningforwarddemo@bloomboard.com
Password: BBLearning4ward



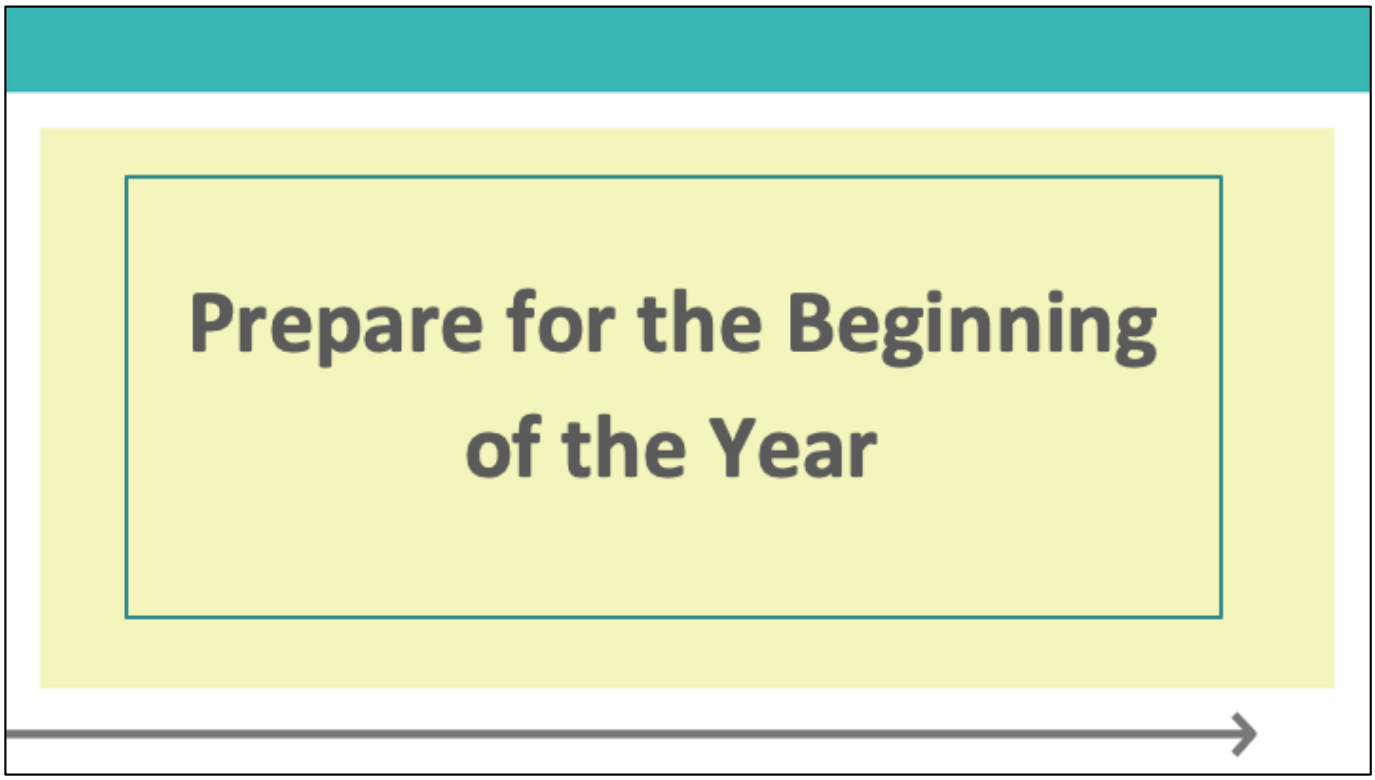
- **Duration:** 15 minutes

- **Facilitator says:** Now take some time to log on yourself and explore these two assessments and see what additional work you see needing in order to accomplish the tasks. Think about what you already feel prepared to complete come the start of the school year. Start to make a plan for completing these assessments. You know your school year, curriculum scope and sequence, etc. When do you see the best time will be to complete these assessments during the school year? We will circulate around as you do this to support and answer any questions.



Duration: 1 minute

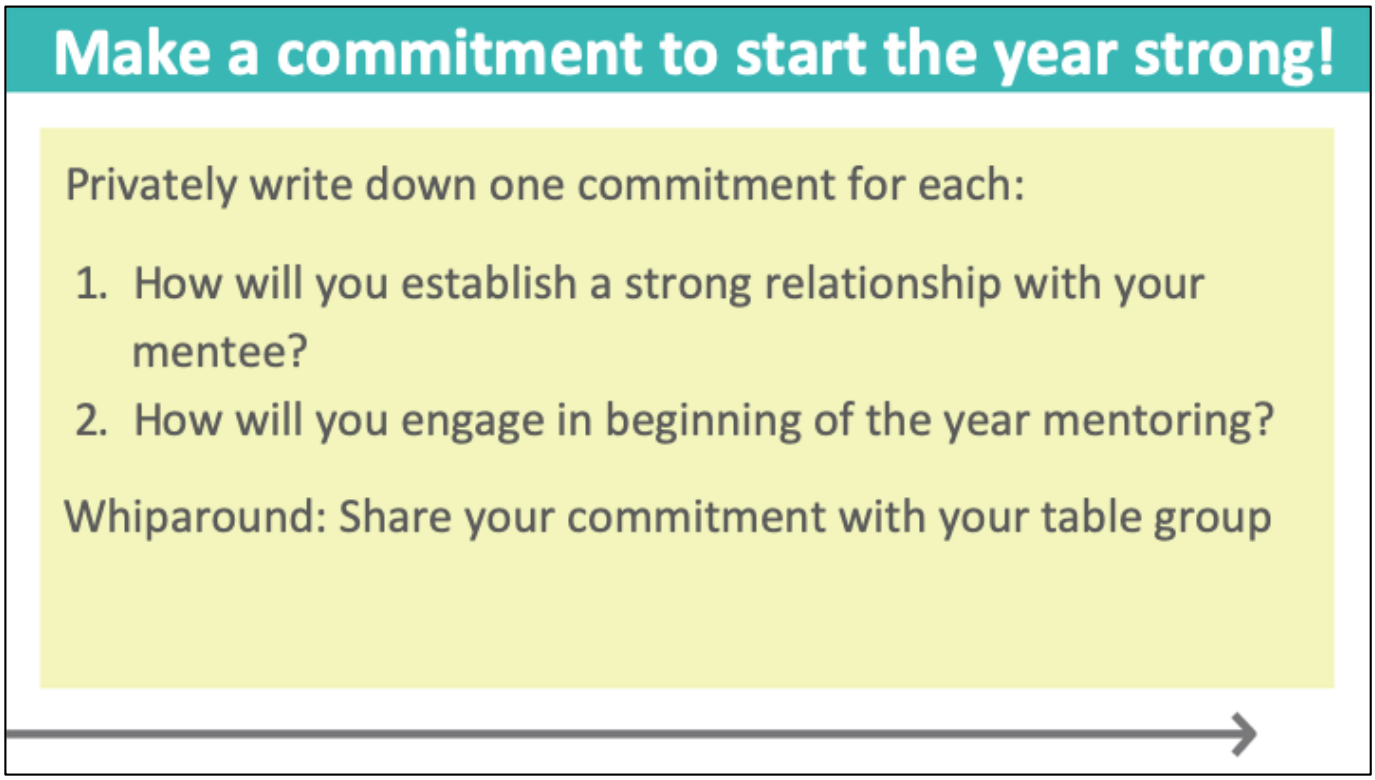
●**Facilitator says:** At the end of every module, we'll let you know what makes the most sense for you to focus on back at your school. Because you are not yet matched with your mentee and actually engaging in mentoring work yet, following this module we recommend that you continue to plan forward for how you'll engage in the work we practiced today. One additional recommendation - since we'll have time to connect to the assessments during every module, your best bet will be to create a binder for yourself for all of your mentor materials - the materials from the modules as well as your mentoring artifacts from your actual work with your mentee. Having those materials all in one place will make it easier for you to complete the assessments and prove your mentoring competence.



SECTION START: 3:45

- **Duration:** 30 seconds

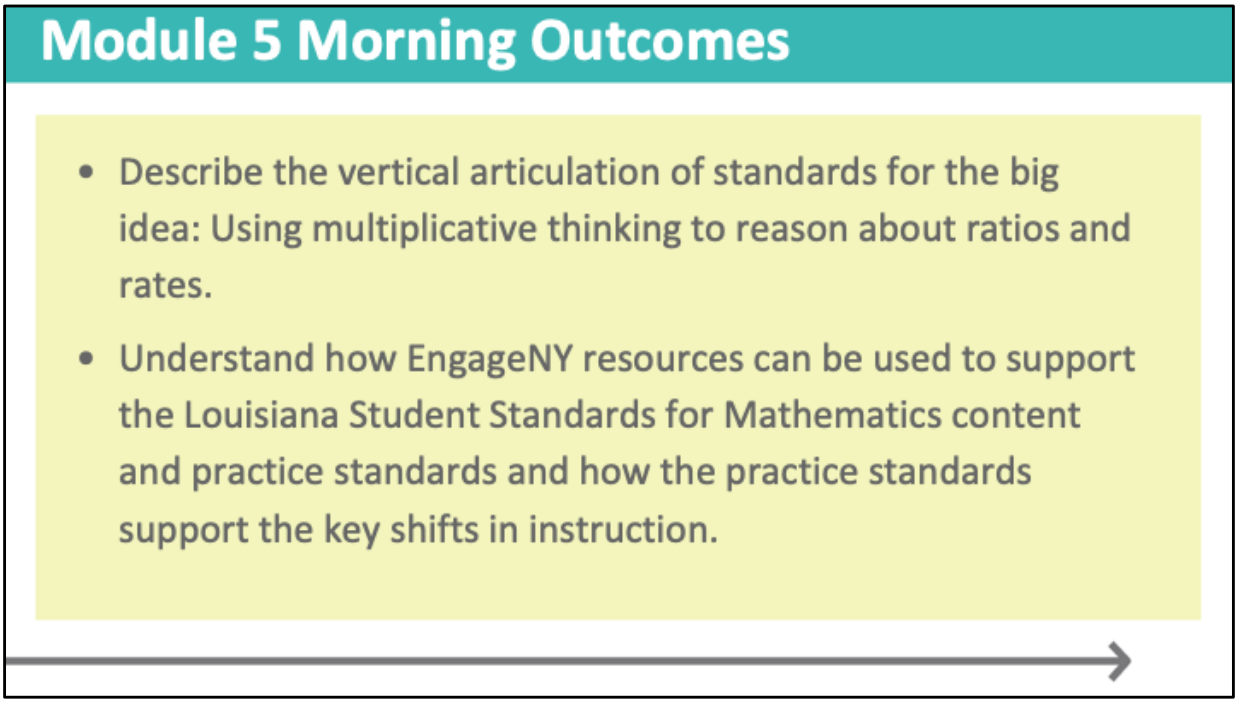
- **Facilitator says:** This is our final day together before the school year starts. So let's take a few minutes to work with your learning team to prepare for the beginning of the year with your mentee. You are welcome to refer back to any of your mentoring materials from any of the first 5 modules at this time.



- **Duration:** 10 minutes

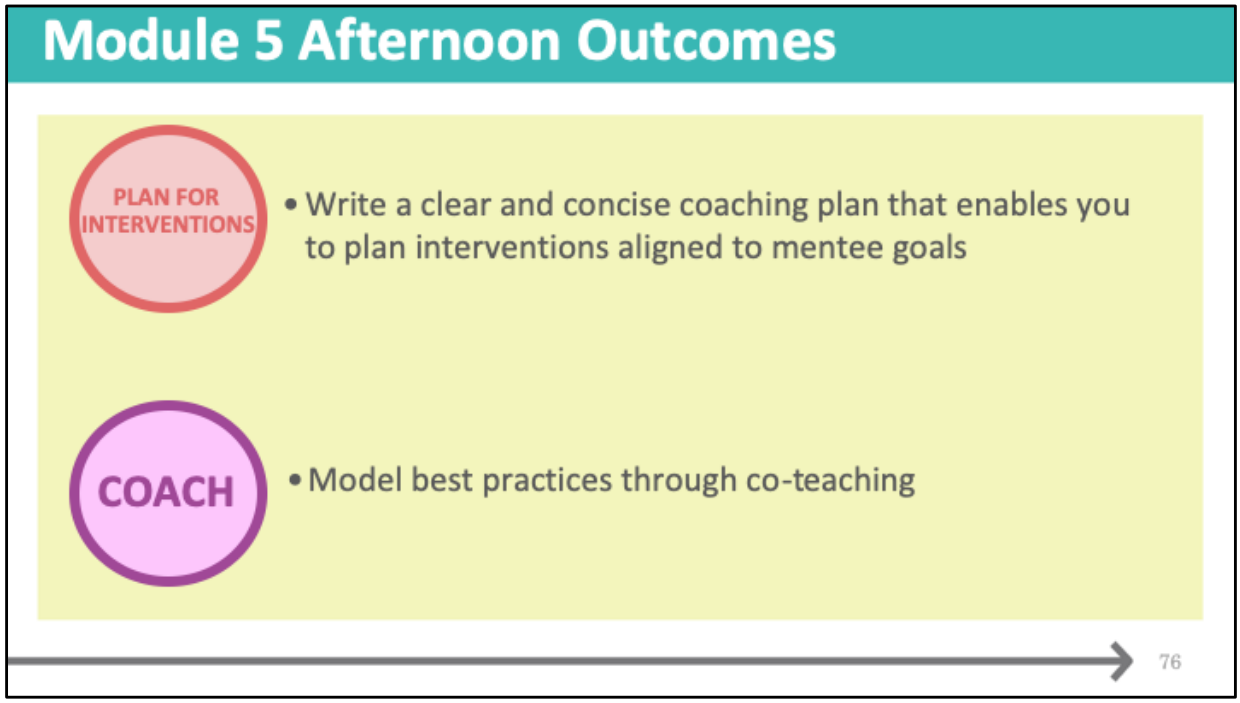
- **Facilitator says:** Research shows that you are most likely to follow through on something if you make a commitment to do it and then share that commitment. A commitment is one specific thing you are promising you will do. So first, we are going to give you 4 minutes to privately write down two commitments on page 56 of your handouts. You can see the questions you'll be making the commitments about on that page and also up on the screen [read questions]. We will let you know when 4 minutes are up. Then, in your learning team you will do two whiparounds. First, you will go around the table and each share your first commitment - one thing you promise to do to establish a strong relationship with your mentee. Then, you will go around the table a second time and each share your second commitment - one thing you promist to do to engage in mentoring right at the beginning of the school year. You will probably get some good ideas of additional things you can do from your fellow team members so have your pens ready during the whiparound.

- **Facilitator does:** Time 4 minutes for private writing. Listen in to whiparounds and share anything you think would benefit the whole group.

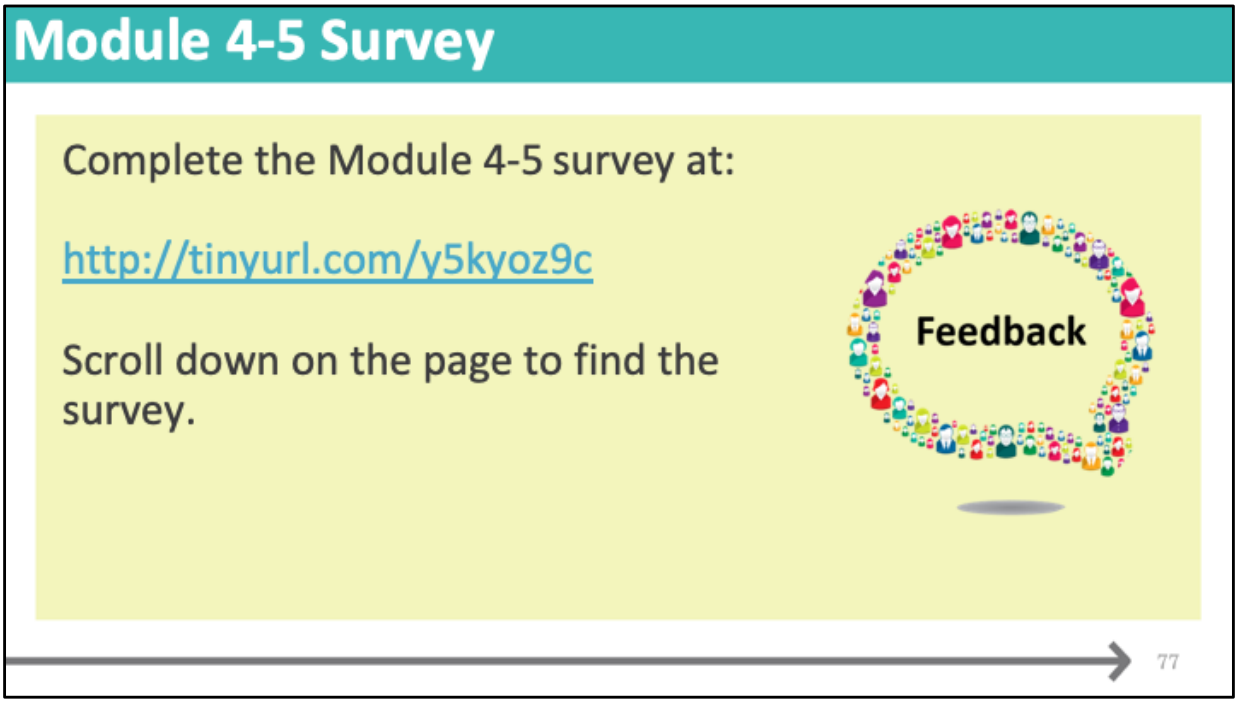


●**Duration:** 30 seconds

●**Facilitator says:** We did it! We're at the end of another jam-packed two days together. This morning, we [read slide].



- **Duration:** 30 seconds
- **Facilitator says:** And this afternoon we [read slide]



- **Duration**: 5 minutes
- **Facilitator says**: Please complete the survey before you leave. Your input helps us be better in our work to support your learning. Remember to scroll to the bottom of the page to find the survey.