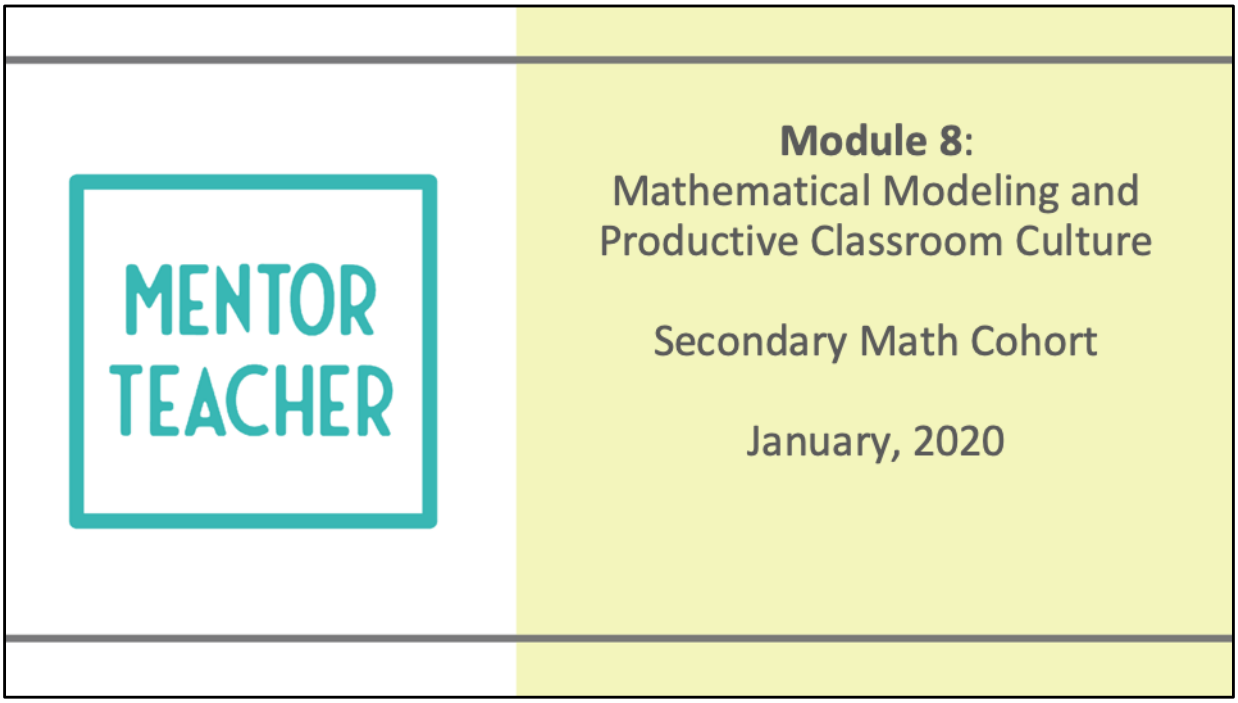


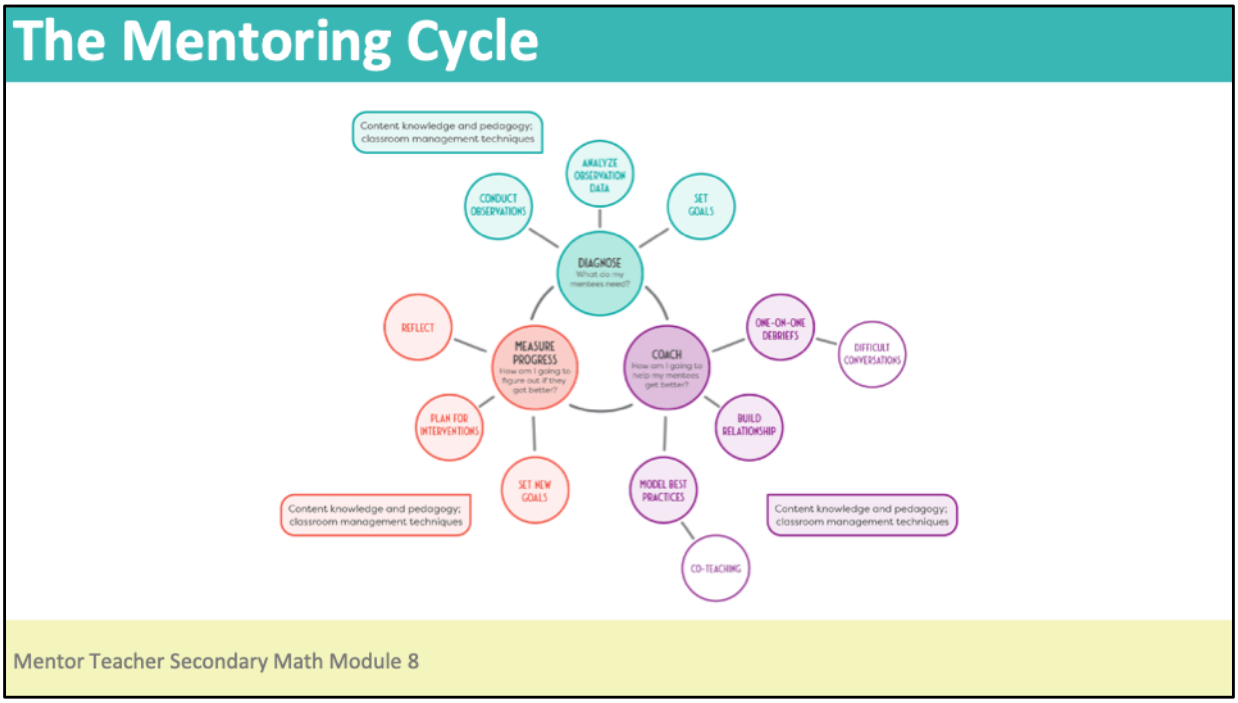
8:30 a.m

Duration: 1 minute
Facilitator says: Welcome. It is good to see you again. Please be sure to sign in . You will need a packet of materials for this session. Please sit with your learning team if you are not doing so now.

Take a moment in your learning team to do a 10 second check in. How are you at this moment? Just a few words.

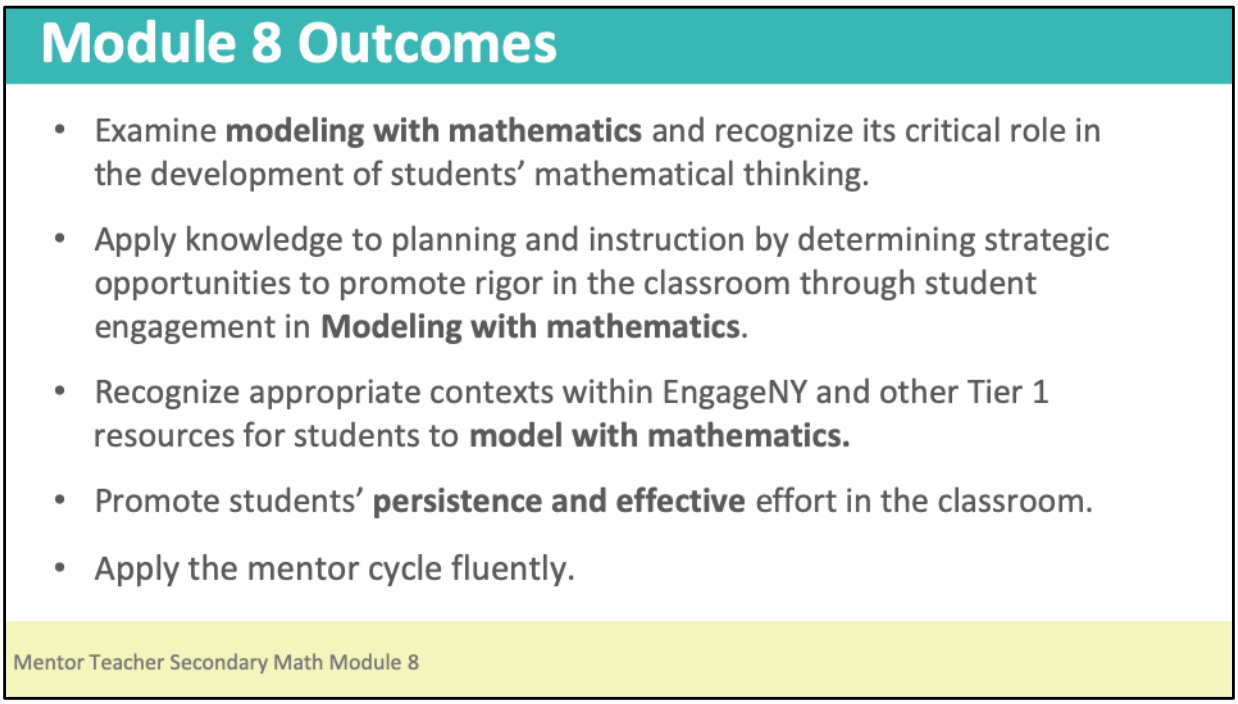
- **Duration: <** 1 minute

- **Facilitator says:** Let's just take a moment to remind ourselves about the overarching goals of the Mentor Training Course and what we have addressed so far. These can be found on page 4 of your handout. In past modules we have focused on classroom management, growth mindset, and communication skills for building strong relationships, which aligns to our first and third goals. We've also focused on deepening our understanding of the instructional shifts in mathematics as well as engaging students in mathematical discourse which aligns to our fourth goal. In modules 2 and 3 we learned how to conduct an observation, analyze observation data and set SMART goals based on the data which addressed goal 2. Today we will continue to deepen mentor content knowledge and content-specific pedagogy (goal 4). We will also practice using the tools in the mentor cycle will address goal three.



- **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.



Duration: 1 minute

Facilitator says: During this module, we will once again focus on both coaching and measuring progress.

First, we will explore the important features of *Standard for Mathematical Practice (SMP) 4: Model with mathematics*, and the high school conceptual category of the same name. Specifically, we'll study the idea that modeling is fundamental to how mathematics is used and applied in everyday life.

Second, we'll focus on the question, "How do we encourage students to value struggle, failure, and perseverance in our classrooms?" The session is grounded by the Agile Mind article, "Persistence and effective effort'. You will be able to reflect on your own experiences with struggle—and to connect these experiences to support students in productive ways.

Third, we'll finish the day examining a dual commitment to growth mindset and setting new goals and determining future plans for intervention based on data.

Finally, you will have the opportunity to work through the entire mentor cycle utilizing a case-based scenario in our content area.

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

Module 8 Key Points

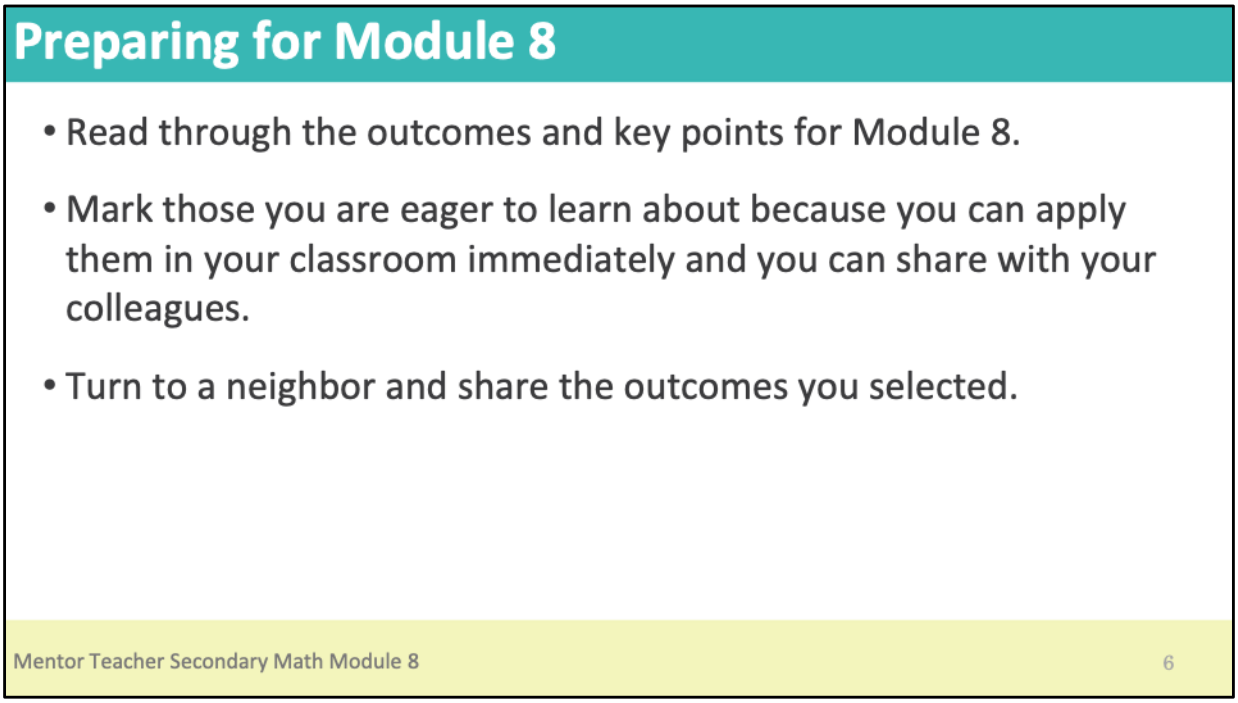
- Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, understand the situations better, and to improve precision and processes for decision--making.
- The key shifts in the standards of focus, coherence, and rigor are evident in an EngageNY lesson and are supported by the content and practice standards.
- Mentors recognize and describe strategic opportunities for students to apply persistence and effective effort strategies in the EngageNY lessons.
- Mentors can most effectively support mentees through ongoing, repeated mentoring cycles that base goals and success on observable data.

Mentor Teacher Secondary Math Module 8 5

Duration: 3 minutes

Facilitator says: These are our key points for the day.

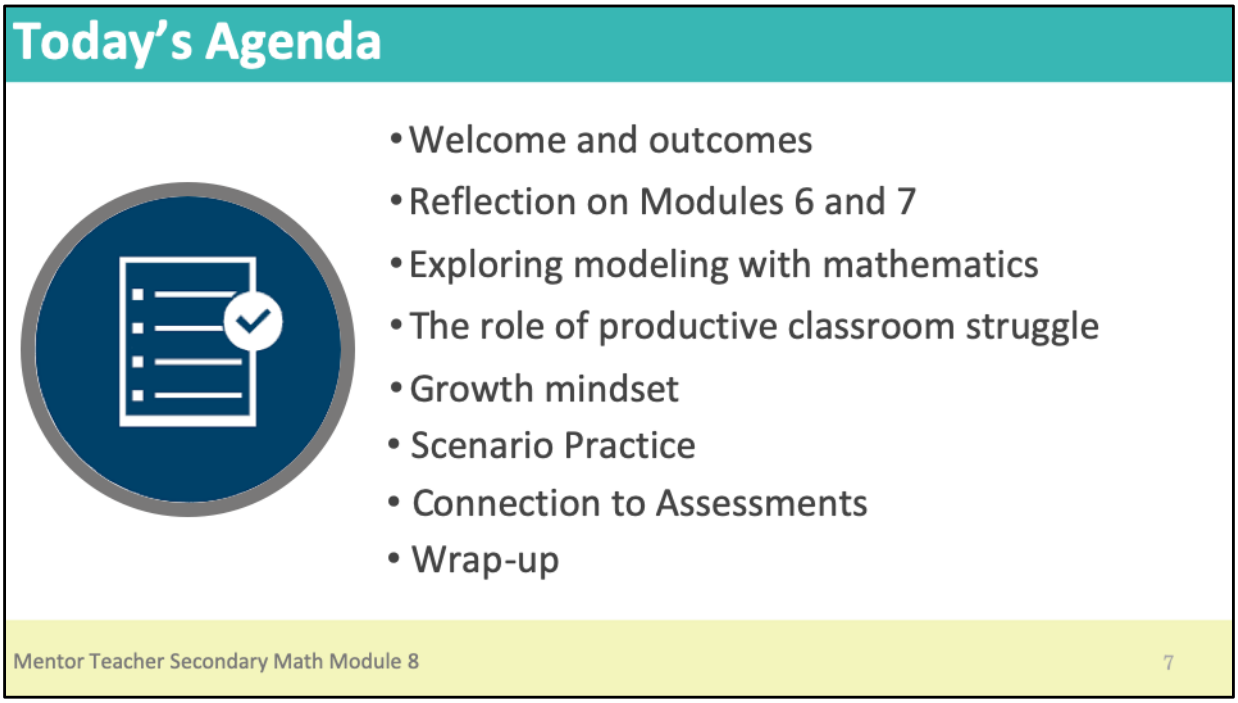
Facilitator does: Projects slides with key points and provides time for participants to read through each.



Duration: 3 minutes (with previous slide)

Facilitator says: Mark the outcomes and key points that you look forward to apply immediately in your classroom and whose learning you are eager to share with colleagues. Turn to a neighbor and share the outcomes you chose.

Facilitator does: Projects slides with outcomes and provides time for participants to read through each outcome.



- **Duration:** 1 min.

- **Facilitator says:** Here's the sequence of our agenda today.

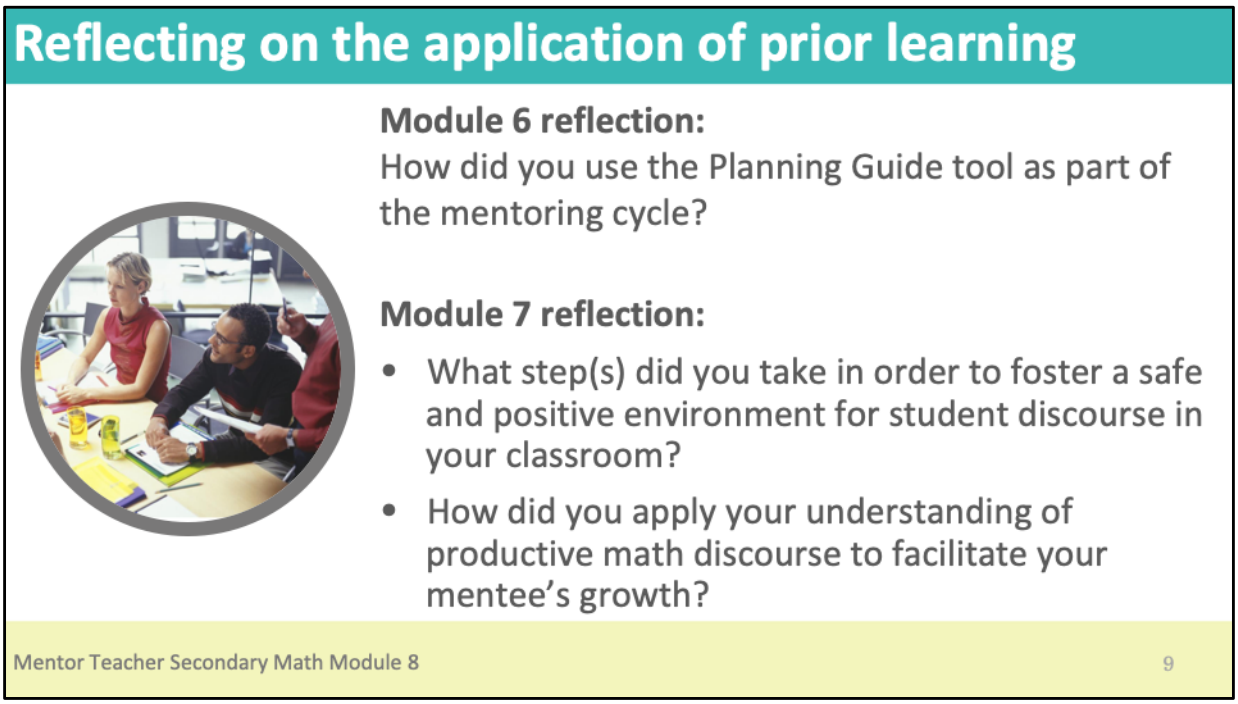
Our Agreements

M	ake the learning meaningful
E	ngage mentally and physically
N	otice opportunities to support the learning of others
T	ake responsibility for your own learning
O	wn the outcomes
R	espect the learning environment, including use of technology

Duration: 4 minute

- **Facilitator says:** Our agreements as a team are reflected here. Give your team a score from 1 (low) to 5 (high) on how well you adhere to the agreements.

- **Facilitator does:** Facilitator asks each team to report its score.



Duration: 15 minutes
Critical idea: Mentors are accountable for applying their learning to deepen understanding and skillfulness.

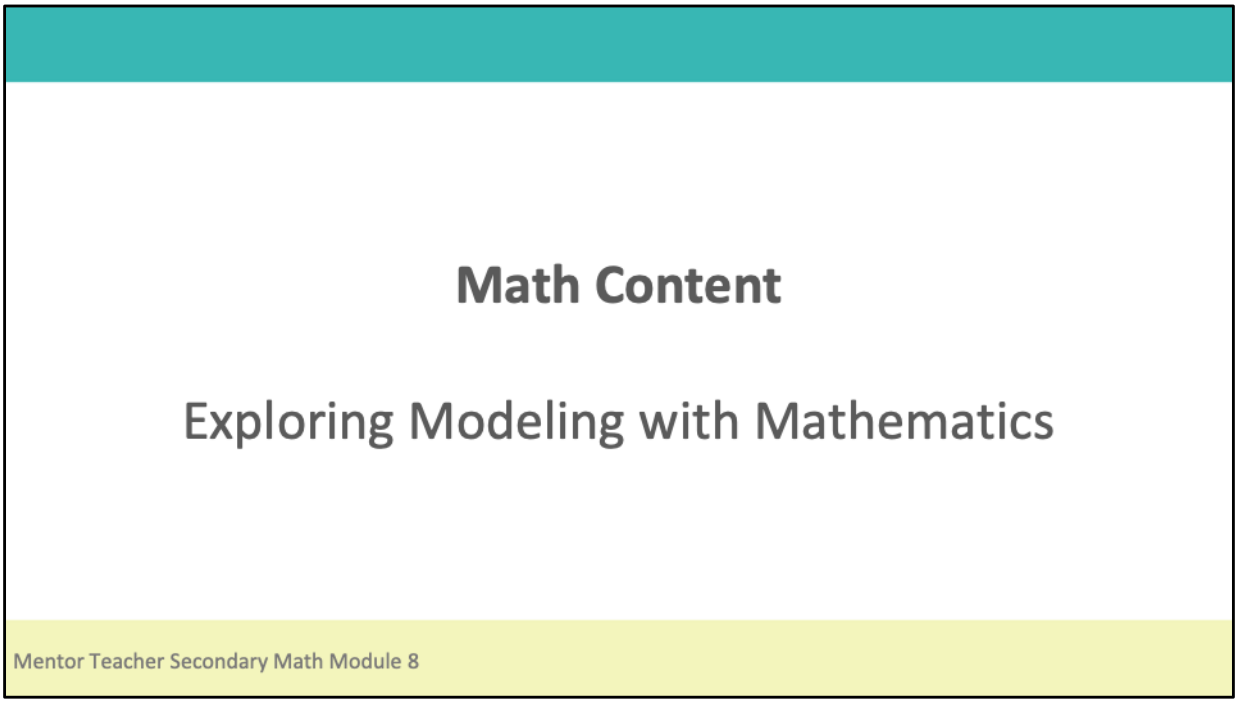
Participants will engage in reflection on applying learning from Modules 6 and 7.

- 4-5 minutes - Module 6 reflection
- 4-5 minutes - Module 7 reflection
- 3-4 minutes - whole group

●**Facilitator says:** We will devote the next 10-12 minutes to reflecting on your application of learning form Modules 6 and 7 in two parts. Begin with a partner conversation and use the Module 6 prompt to discuss purposeful planning and the Module 7 prompt to reflect on productive discourse.

●**Facilitator does:** After 4-5 minutes, signal a move to reflect on the application of learning in Module 7. Circulate and listen to conversations, identifying points to reinforce the learning and monitor process.

●**Facilitator does:** After an additional 3 minutes, invite questions or comments from the teams (2 min)



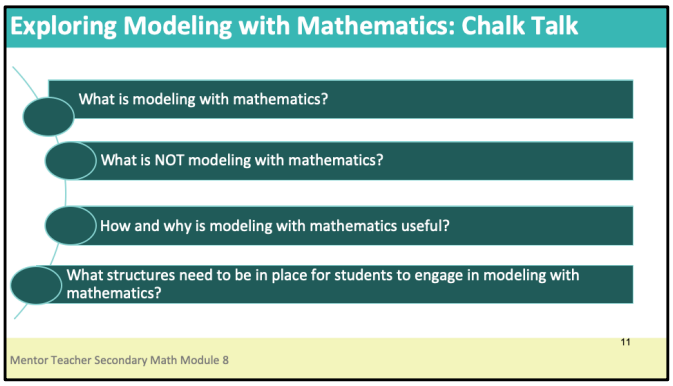
9:00 a.m.
Duration: 90 minutes

From Content Leaders --> Module 2
Session 4: Instructional Strategies to Improve Curriculum Implementation

Facilitator says: We will now explore modeling with mathematics

Words of Wisdom
Organize participants in new mixed--grade level groups. This is important to get different perspectives in a conversation when participants compare SMP 4 Model with Mathematics and the high school conceptual category.

11



10 minutes

Critical Idea
Develop an initial understanding of the purpose for modeling with mathematics in the classroom.
The LSSM for both middle school and high school identifies SMP 4 as modeling with mathematics. In addition, the high school standards identify modeling standards within each course (indicated with a star).

Facilitator says: "In previous modules, you experienced model lessons. You saw how engaging in the mathematics can develop conceptual understanding and procedural skill and fluency. Now, we will take a closer look at *Standard Math Practice 4 Model with Mathematics.*

Facilitator does: Ensure all participants have a marker. Each person is expected to add responses to the questions during the chalk talk activity.
Explain the following directions.

Facilitator says:,
We will begin our study of Standard Math Practice 4 with an activity called a Chalk Talk. The purpose of this activity is to share our current knowledge and perspectives on what modeling with mathematics is and what it looks like in the classroom.

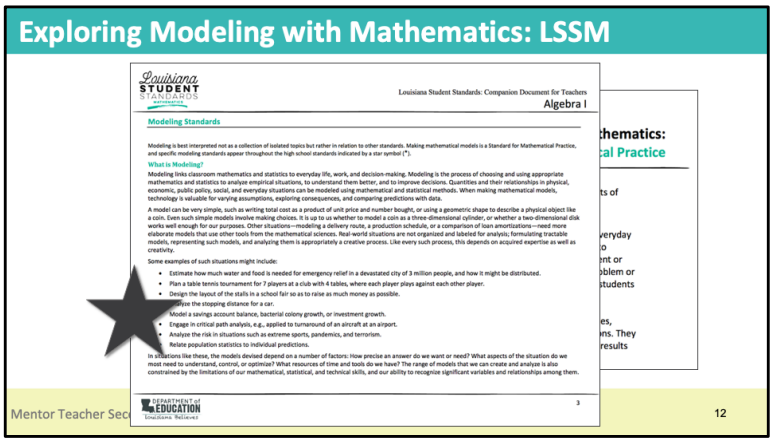
For this activity, you will have time to respond to each of the four questions listed on the posters hanging around the room. Each of the questions is related to modeling with mathematics. This is a silent activity. No one may talk at all. Anyone may add to the chalk talk as they please. You can comment on other people's ideas simply by drawing a connecting line to the comment. Write as you feel moved.

Set the timer for 6 minutes. Direct participants to move independently around the room from poster to poster. Participants should write their individual thoughts in response to each question on the posters.

Circle or highlight some of the interesting ideas shared and invite comments to broaden the discussion, or pose questions about a participant's comment.

(**NOTE:** The ideas listed on handout **Modeling Chalk Talk—Possible Responses** may not surface in this initial conversation. It is not necessary for these ideas to surface now. When you return to these posters after the reflection piece at the end of this session, share some of these ideas with participants if they have not yet been highlighted in conversation).

Words of Wisdom
At first glance, it might be tempting to connect modeling with the application component of rigor. It's not necessarily true that these two are synonymous, although they are related. In this session, we will dig into the connections between the two and clarify the differences.



15 minutes

Critical Idea

Develop an initial understanding of the purpose for modeling with mathematics in the classroom. To grasp the full meaning and intent of SMP 4, multiple conversations and collaborative study are needed.

Facilitator says: "We will use the text to explore the four ("Chalk Talk") questions and come to a shared understanding of how modeling with mathematics manifests with both students and teachers in the classroom."

Direct Middle School Participants to find **LSSM_SMP 4 (p. 7)** and High School Participants to find **HS Modeling Conceptual Category (p. 7-9).**

Facilitator says:
- "Initially, you will only be reading the document that pertains to your grade band."
- "As you read the document for your grade band, you should take notes and highlight important text in the document."
- "Your goal is to come to a detailed understanding of modeling with mathematics for your grade band."

Facilitator does:
- Give participants 3 to 5 minutes to read their grade band document thoroughly and take notes.
- After quiet reading and study time, direct participants to form groups of 2–4 so that each group is comprised of teachers who read the *same* document.

Facilitator says:
- "In your groups, discuss what each member recorded as he/she studied. As you hear important pieces of the conversation, you should add to your own notes."
- Indicate meeting areas for each of the middle school and high school groups

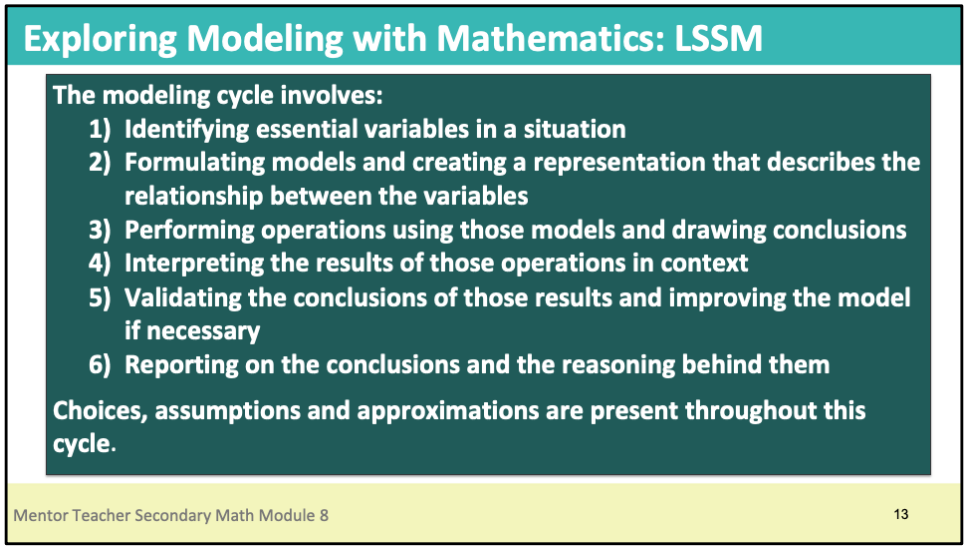
Facilitator does:
- Give participants 1 minute to get into groups and 5 minutes to have their discussion. Circulate around the room looking for interesting beliefs to bring to the forefront in the whole group share out.
- Reconfigure participants into new groups. This time, combine a middle school group with a high school group. Allow each grade band 2 minutes to summarize their reading first.
- Once they have finished sharing their readings, focus the groups on finding similarities and differences between the 2 documents. (See below for sample responses)
- After the mixed grade--level groups have finished their table discussion, debrief the conversation as a whole group. Ask 3--4 participants to share the similarities and differences between SMP 4 and the high school conceptual category.

Sample responses:

6--8 SMP 4: Students are able to:
- **Reflect** on the reasonableness of results and whether it makes sense for the context.
- **Make initial assumptions** about the problem situation **based on prior knowledge**, understanding that these assumptions may need revision later.
- **Identify important quantities** and map relationships **using multiple representations** such as diagrams, tables, graphs, flowcharts and formulas.
- **Analyze** relationships to draw conclusions.
- **Improve** models to help with intended purpose.

High School Modeling:
- Modeling involves a different way of thinking about a problem and requires a cyclical process.
- Modeling provides students with experience in approaching problems that do not necessarily have a single "correct" answer.
- Modeling can have differing goals depending on the situation (quantitative prediction for weather; qualitative aspect to understand a system such as predator–prey populations).
- Critical variables must be identified, including essential features of the situation.
- Interpreted situation must be represented by diagrams, graphs, equations, or tables.
- Moving from interpretation to the representation involves reasoning
- (algebraic, proportional, quantitative, geometric, or statistical).
- Quantitative information must be analyzed or synthesized to make or evaluate assumptions based upon the original situation.

Words of Wisdom
Be sure to revisit what modeling IS as well as what it is NOT to clarify that modeling with mathematics goes beyond showing different representations of a problem.



5 minutes

Critical Idea

Although these six student actions are specifically called out in the high school standards, middle school teachers should be able to make connections to similar student actions with modeling with mathematics at the middle school level.

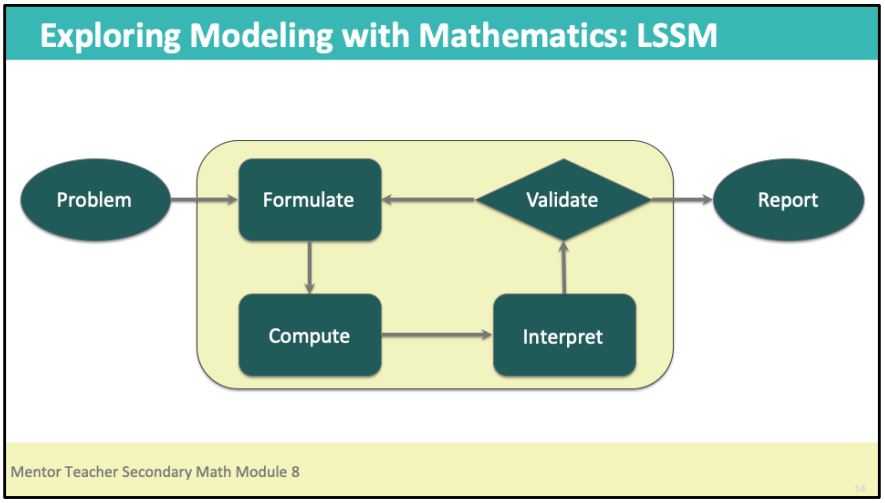
Facilitator does:

Review the six actions students take over the course of a complete modeling task as stated in the high school LSSM and noted in the high school **conceptual** category handout, **High School Modeling Conceptual Category: Louisiana Student Standards: Companion Document for Teachers Algebra I: Modeling Standards**

- Highlight connections between these actions and those in middle school:
    - Making assumptions that may need revisions
    - Identifying important quantities
    - Representing relationships (tables, graphs, formulas, flowcharts)
    - Analyzing relationships to draw conclusions
    - Improving models to help with intended purpose

Words of Wisdom

This slide is a “tell” to help teachers connect the different documents they have been studying and make connections between modeling in middle school and in high school.



15 minutes

Critical Idea
It is important for teachers to provide opportunities for students to engage in these six modeling actions and to implement tasks that require all six in conjunction.

Facilitator says:
"This diagram is the representation of the six actions that students take over the course of a complete modeling task from the standards." (Also located in **High School Modeling Conceptual Category: Louisiana Student Standards: Companion Document for Teachers Algebra I: Modeling Standards)**

Facilitator does: Animate: A box will appear around the middle part.

Facilitator says: "Why is this highlighted portion so important?
Clarify this cyclical portion shows how often students will need to rework their initial hypothesis and try again based on what was learned the first time they engaged in the modeling cycle.

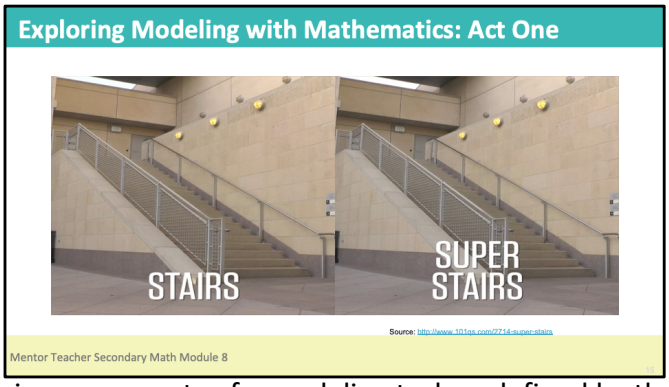
Facilitator says: "As a teacher, what is your role in each stage of this cycle?

Facilitator does:
- Give participants 2 minutes to use the diagram on handout **Module 2 presentation slides** to insert teacher moves, probing questions, etc.
- After the 2 minutes, direct participants to turn to their elbow partner and share.
- Participants should continue to add to their notes as they discuss with their partner.

- Finally, engage the group in a large discussion. Important points to surface -- These are the teacher moves
    - Selecting a task (or developing one): consider whether the task requires students to make decisions about how to approach the problem mathematically.
    - Determine assumptions students might have.
    - Uncover common misconceptions or errors that might occur and monitor during the cycle.
    - Analyze what strategies could be used to intervene without taking over and use the strategies while the students work through the cycle.
    - Monitor work (take notes on strategies used, assumptions made and math opportunities).
    - Encourage analysis of their solutions to make sense of their solutions in context.
    - Summarize mathematical ideas that the students have.

Words of Wisdom
More important than memorizing the steps in the cycle is for both teachers and students to understand the iterative nature of the modeling cycle. Just as in the real world, modeling real life situations is not cut and dried. There are many ways to solve problems, many stumbling blocks involved, and students must be supported to understand that stumbling

blocks require time to reflect and revise their thinking.



20 min. for next 2 slides

Critical Idea

This part of the activity allows participants to engage in components of a modeling task as defined by the LSSM.

Facilitator says and does:

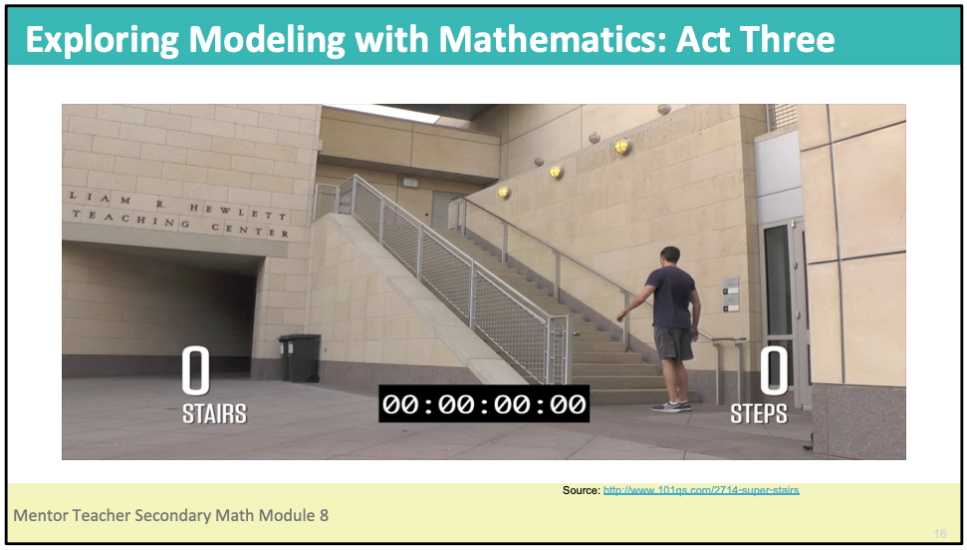
- Introduce the video to participants. Say, "Now that you have a deeper understanding of SMP 4 Modeling with Mathematics,
- and the HS conceptual category of modeling, you will experience a modeling activity. We are going to watch a video clip. Do not take notes—just observe what is happening in the video."
- **Play the video clip.**
- Ask, "Do you have any questions?" Select two or three participants to share out their questions.
- Acknowledge the questions and then pose the following (if it hasn't been stated already): "How many steps will he run on the super stairs? How long will it take him to run them?"
- Direct participants to handout **Super Stairs Worksheet (p. 13).**
- Say, "I want you to **make an educated guess on handout** in response to the question. Before you do, I will give you one more look at the video clip so you can begin to gather any information that may inform your prediction. You should not spend too much time making your prediction. I will ask for you to share your prediction at your table within 1 minute after I play the clip, so be prepared to share."
- **Play the video clip once more.** Give participants 1 minute after to make their predictions and share it with their table. Then take a poll. Find the highest prediction in the room; find the lowest prediction in the room.
- Next, ask participants, "What information is important here?"
    - Note: The language is very important. Participants might use the words *steps* and *stairs* interchangeably. To minimize confusion, clarify that
        - ***stairs*** are physical and concrete, while
        - ***steps*** are actions the person took.
- Write everything down that participants share out on a piece of chart paper.
    - If participants ask how many stairs there are, ask them to write down and share a guess. **Then, tell them that there are 21 stairs.**
    - For questions about speed, rate or times, tell participants to pull out a watch or a cellphone timer. Then play the "Act One" video for the group as many times as they need.
    - Some participants will want to time the "turnarounds." Some will get different rates for going up the stairs and down the stairs. Some will time the regular stairs. Some will time the super stairs.
- Feel free to tell them at some point, "We will all have different answers and we will all be wrong. That's the nature of modeling. We're making assumptions. The question is whose assumptions were best."
    - If some participants are struggling with information to collect, encourage them to create a table and track "stairs" and "steps on that trip" and "total steps after those trips." Their goal will be to find a number rule that turns "stairs" into "total steps." (stairs)*(stairs+1).

Words of Wisdom

- This activity enables participants to experience the task from a learner perspective and begins to set the stage for incorporating modeling tasks in the classroom. In order for the teachers to truly

understand the roles of teachers and students, they must experience the activity from a learner perspective.

- Consider mentioning the Box and Draper quote, “All models are wrong, but some are useful” in discussion to show the real--world connection to the nature of modeling with mathematics.



Facilitator does:

- Have participants revisit their guess (optional: share with their table).
- No wie will watch this clip and see exactly how many steps he takes.
- Play the video clip.
- Afterwards, ask participants if their predictions were correct and to explain why or why not.
- Also, ask participants to consider how they might have changed their process now that they've seen the final result. Ask, "Is there anything that you would've done differently? How would this have changed your guess? If you changed your process, would it have produced a more accurate prediction?"

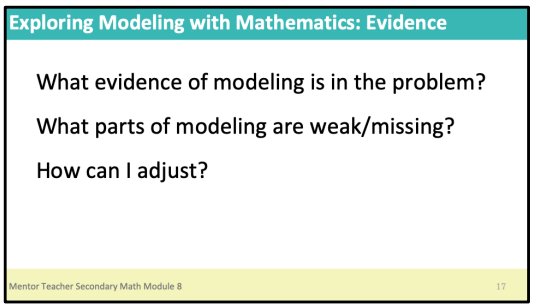
Facilitator says: In your handout on page 14, you have an two options for extending the SuperStairs. We will not take time to do this today.

●***Critical Point***

- This part of the activity allows participants to engage in two of the six actions that students take over the course of a complete modeling task, including:
    - 5. Validating the conclusions of results
    - 6. Reporting on the conclusions and reasoning behind them

●***Words of Wisdom***

- This activity allows participants to experience the task from a learner perspective and begins to set the stage for incorporating modeling tasks in the classroom. In order for the teachers to truly understand the roles of teachers and students, they must experience the activity from a learner perspective.
- It is important to highlight that not every math task can or should engage students in all six modeling actions.



10 min.

Critical Idea

By experiencing the modeling cycle in context, teachers can use the experience to inform critical decisions when planning with LSSM and ENY materials.

Facilitator does:

Direct participants to locate the math tasks from Module 6 – **Ratio and Rate Problem set.**

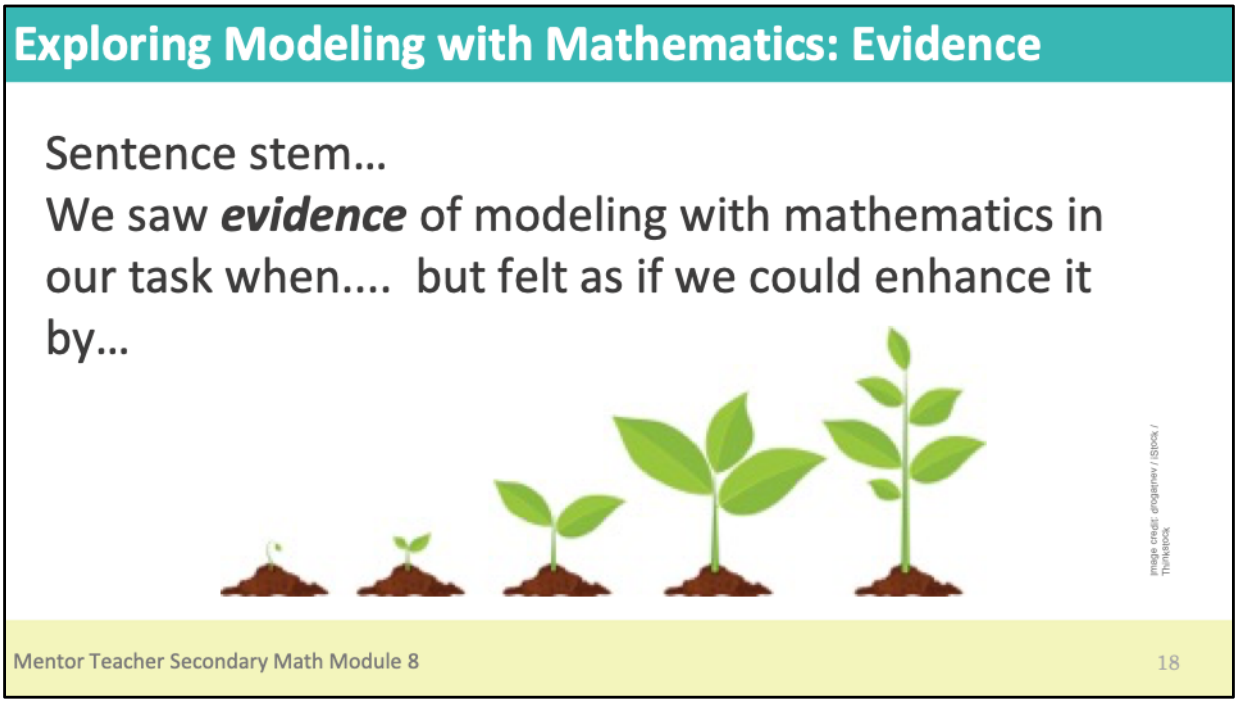
Facilitator says:

- "These tasks were chosen from Engage NY because in each task modeling is specifically mentioned on the teacher page or in the standard itself. "
- "With a partner from your grade--band who did the same task as you did, look at the 3 questions on the screen. Find specific evidence in the problem (if present) of using modeling, determine weaknesses in the cycle and determine appropriate adjustments to ensure students have opportunities to engage in the modeling cycle. "

Facilitator does: Give the participants 7 minutes to work together before transitioning to the next slide .

Words of Wisdom

 Not applicable



7 min.

Critical Idea

- By experiencing the modeling cycle in context, teachers can use the experience to inform critical decisions when planning with LSSM and ENY materials.

Step--By--Step Instructions

- Give participants 2 minutes to gather their thoughts and form a statement using the sentence stem on the slide.
- During the remaining 5 minutes, allow each table to read their completed sentence.
- Use a document camera (if available) so others can see the evidence in the lesson.

Words of Wisdom

Not applicable

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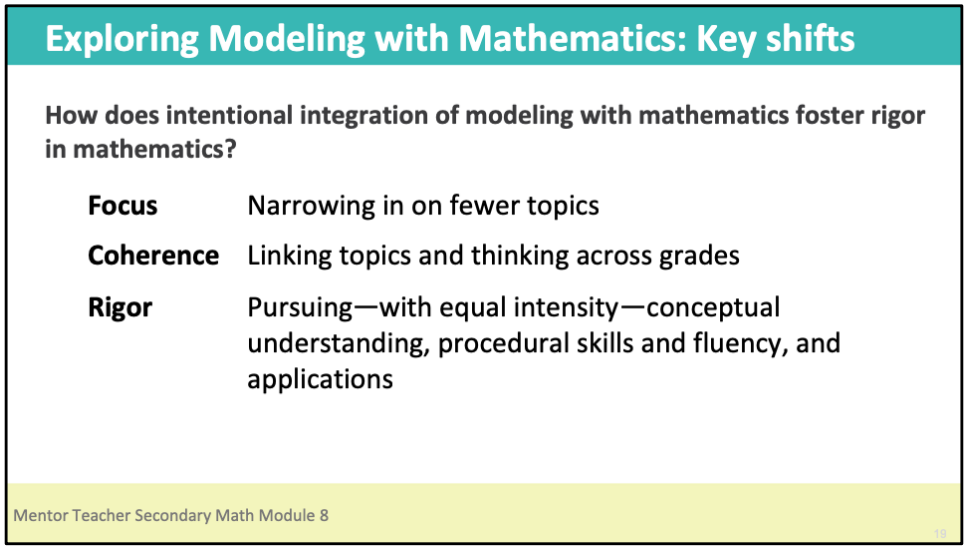
Item number:825195676 , Collection: iStock
Release info: No release required



5 min.

Critical Idea

- The key shifts are what makes this set of standards different from previous standards and should guide decisions about teaching and learning.

Step--By--Step Instructions

- To bring focus to the learning, ask participants to reflect on the key shifts (Focus, Coherence, and Rigor) and to cite evidence of the shifts that surfaced during the Modeling section.
- Record their responses on separate Post--It notes to be placed on three separate sheets of chart paper:
    - Focus
    - Coherence
    - Rigor
- If time permits, ask participants to share with an elbow partner.

Words of Wisdom

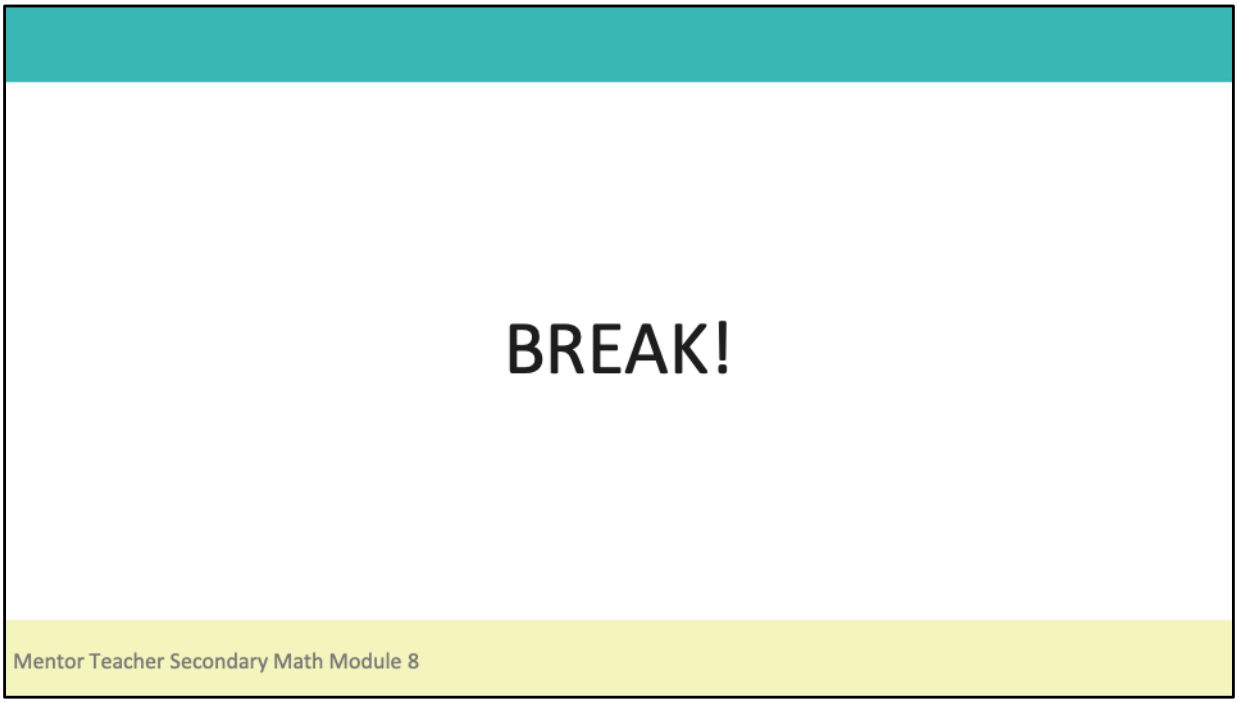
Not applicable

Modeling with Mathematics: Key Takeaways

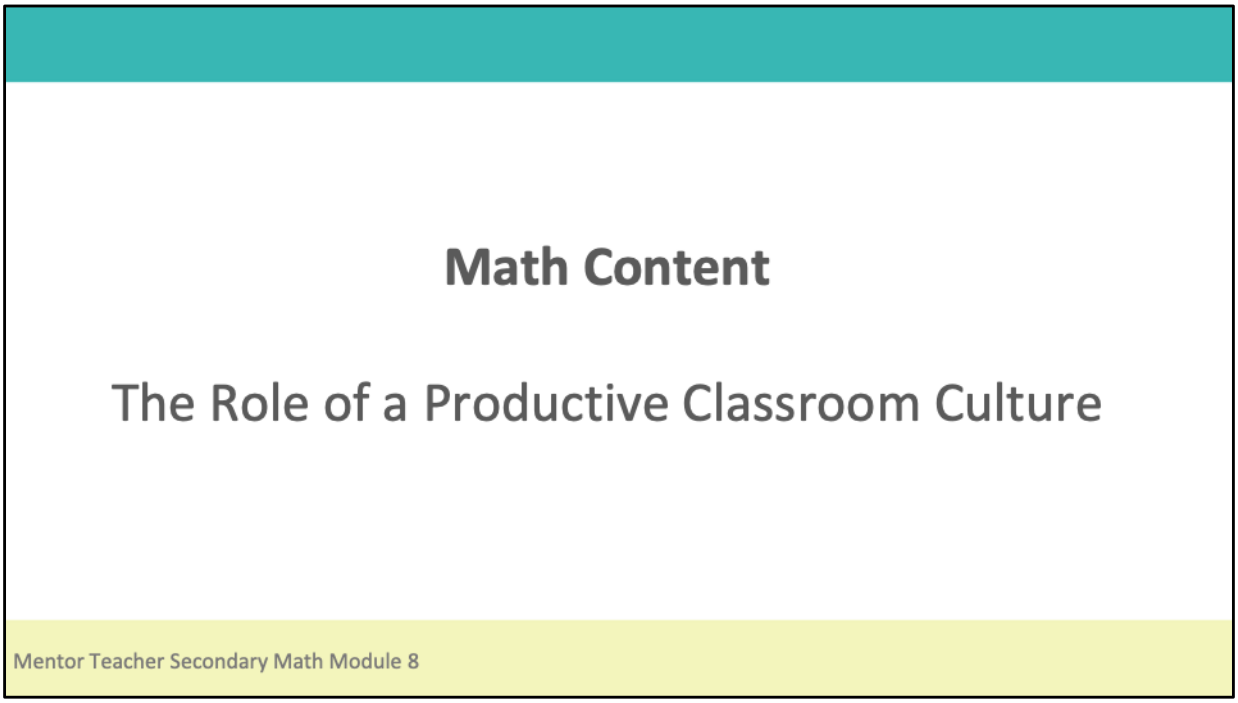
Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, understand the situations better, and to improve precision and processes for decision--making.

The key shifts in the standards of focus, coherence, and rigor are evident in an EngageNY lesson and are supported by the content and practice standards.

- **Duration**: 1 minute
- **Facilitator says**: So we've now experienced and learned that...
- **Facilitator does:** Read slide



10:30 a.m.
Duration: 15 minutes



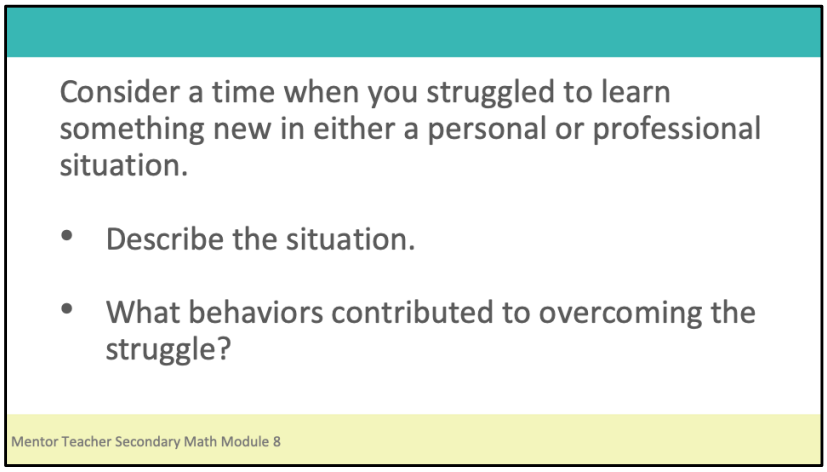
10:45 a.m.

Duration: *60 minutes*

From Content Leaders --> Module 2

Facilitator says: "We will turn our attention to the role of productive classroom culture."

Words of Wisdom
For this section the facilitator may want to organize participants in new mixed---grade--level groups to encourage conversation between different teachers.



5 min.

Critical Idea

- The purpose of this activity is to surface each person's ability to overcome struggle successfully and acknowledge that challenging and worthwhile learning is meaningful.
- A growth mindset is necessary for learners to have, but it is not sufficient. Students also need critical academic skills – their effort needs to be effective.

Facilitator says

- This session emphasizes the need for students' critical academic skills – their effort needs to be effective."
- Individually answer the questions on the slide in your handout.

Facilitator does:

- Allow 1 minute of independent think time.
- Set the timer for 5 minutes. Direct each person to share his/her example of overcoming struggle at the table. Circulate as participants talk, and listen for commonalities in the behaviors described.

Facilitator says / does:

- "Now, we will surface the common thoughts or behaviors you discussed and think about which might be important for successful change with students."
- Highlight 2--3 common thoughts or behaviors heard from circulating around the room.
- Connect the behaviors discussed at each table to the research about academic youth development.

Facilitator says:

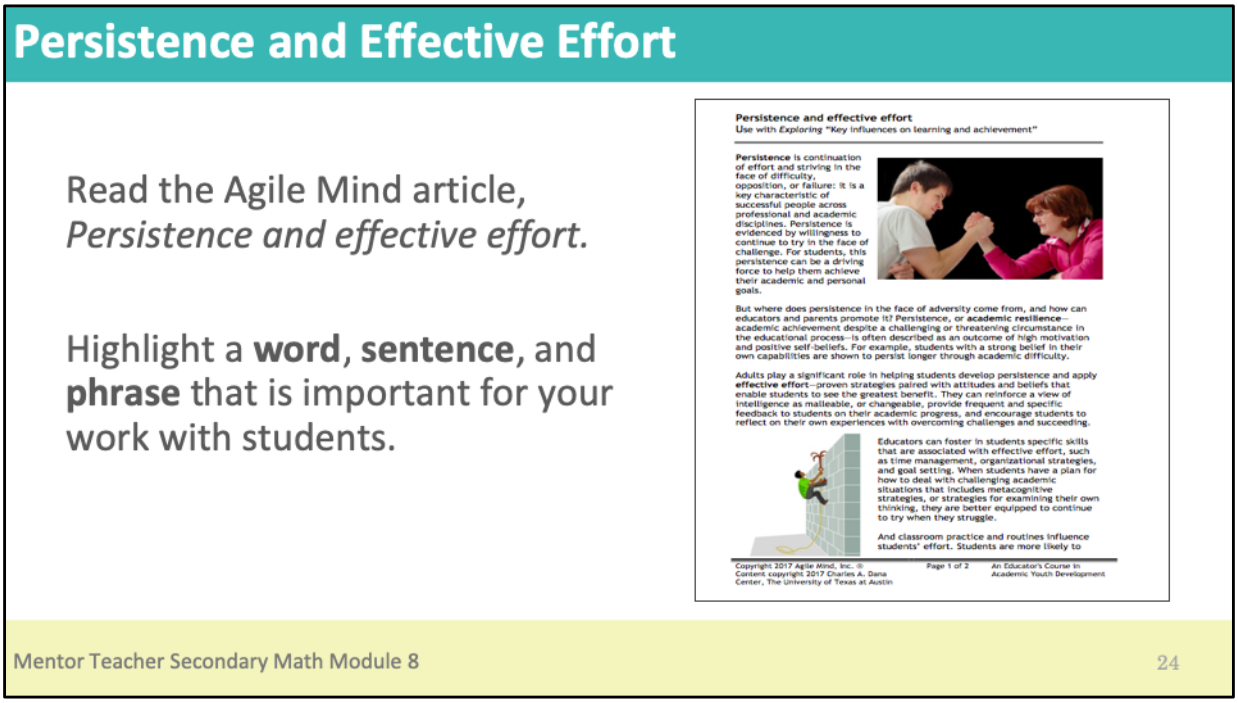
- Research emerging over the past decade tells us that students' attitudes, beliefs, and behaviors can dramatically affect their learning and their success in school. As educators, we strive to build the capabilities and desire of middle and high school students to **engage**, to **succeed**, and to **persist** in school. An important component of this work, and the focus of this session, is empowering you with research findings about how students learn and achieve, and with strategies to translate that research into daily practice.

- In this session, you will learn about key ideas that, when effectively and consistently applied, have the power to dramatically reshape outcomes of teaching, learning, and instructional systems.

- As you investigate these ideas, you will consider strategies that enable you to **apply** findings from research in the classroom and **enact** changes in the culture of your school systems.

Words of Wisdom

Allow enough time for each person in the group to share.



15 min.

Critical Idea

• Adults play a significant role in helping students develop persistence and apply **effective effort**—proven strategies paired with attitudes and beliefs that enable students to see the greatest benefit.

• The growth mindset is not just about effort. Getting smarter is about effective effort that leads to learning.

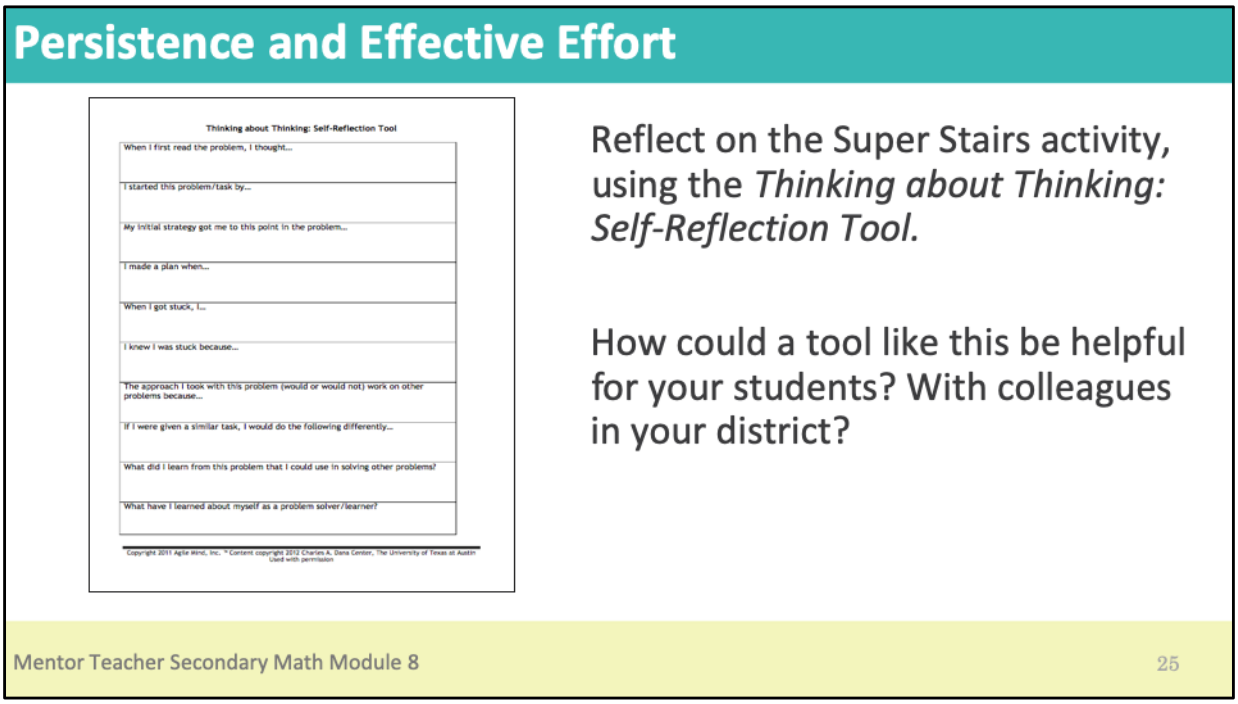
Step--By--Step Instructions

• Direct participants to handout **p. 16.** Set a timer for 5 minutes. Direct participants to silently read the article and highlight a word, sentence, and phrase that is particularly important for their work with students.

• Once participants are done reading, set the timer for 8 minutes. Direct participants to protocol on **p. 17** -- work in groups of four. Groups should choose a reporter to be prepared to share one important piece of the discussion. When time is up, call on the reporter for each group to share.

Words of Wisdom

• If participants finish the reading text analysis before the 5 minutes has passed, encourage them to connect what they read to the previous discussion about their own experience with struggling to learn something.



10 min.

Critical Idea

- Metacognitive strategies provide students with ways to examine their thinking and their work and can help them direct effort in effective ways.

Facilitator does: Direct participants to handout: **Thinking about Thinking: Self--Reflection Tool, on p. 18.**

Facilitator says:

- Proven strategies help redirect effort in productive ways and support future success. Use **Thinking about Thinking: Self-- Reflection Tool** to summarize your individual experience with the Super Stairs task we just completed. Then discuss these questions with your colleagues:
    - How can a tool like this be helpful for your students?
    - How can a tool like this be helpful with colleagues in your district?

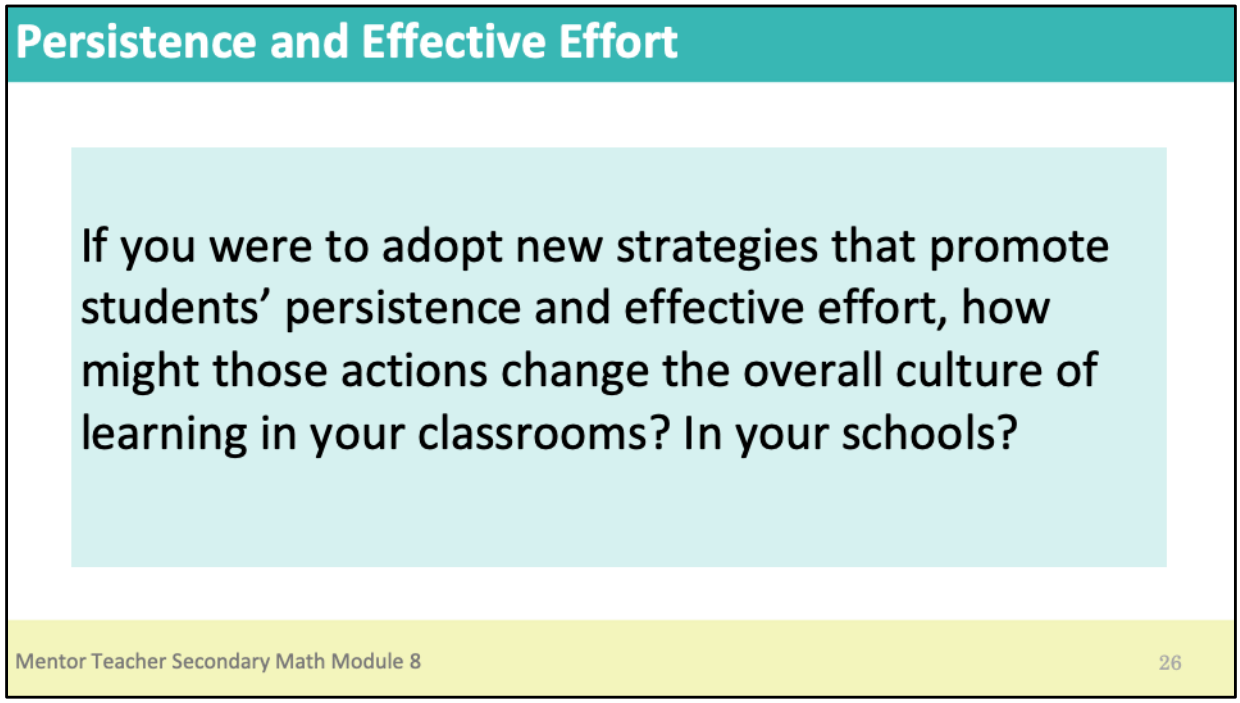
Facilitator does: Clarify that it is not suggested to use all of the questions on the **Thinking about thinking tool**.

Facilitator says:

The Self--Reflection Tool is used after challenging tasks. It is suggested that you select 2 or 3 questions for students to write about or discuss, or students can select a few questions to consider based on a particular problem--solving experience.

Words of Wisdom

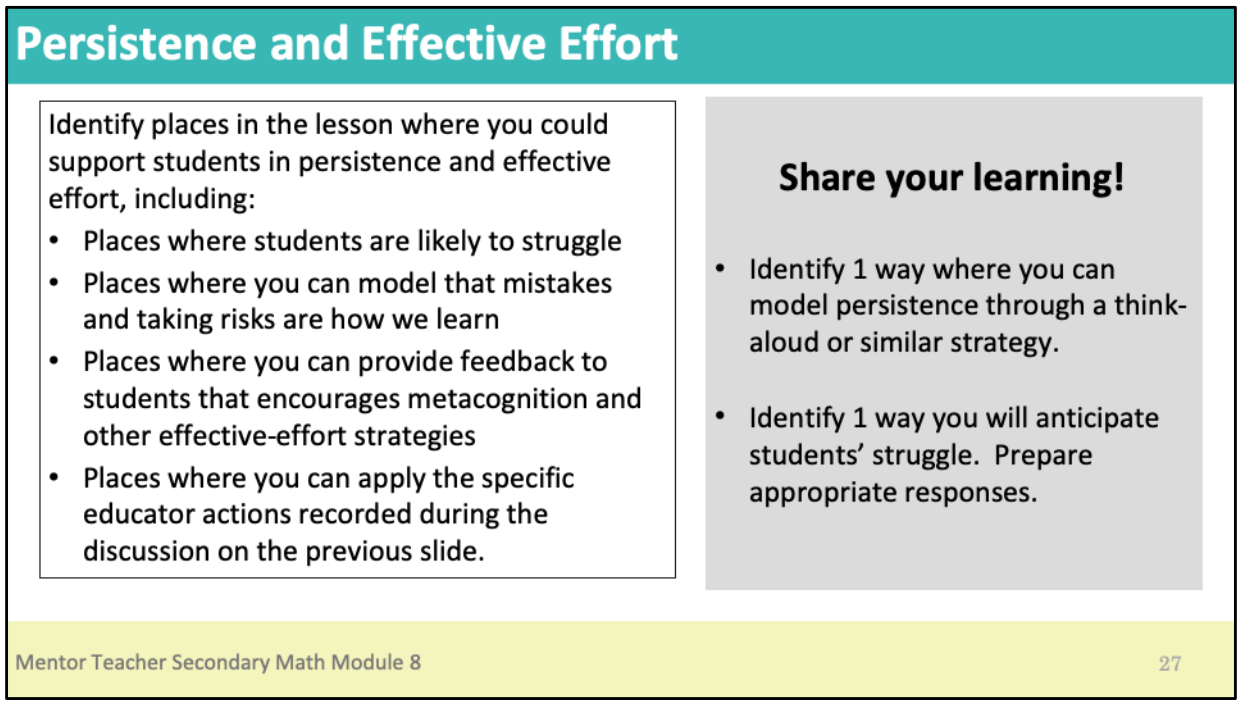
A self--reflection tool can help uncover insights into learning.



4 min.

Facilitator does: Initiate whole group conversation

Facilitator says:
If you were to adopt new strategies that promote students' persistence and effective effort, how might those actions change the overall culture of learning in your classrooms?
In your schools?



15 min.

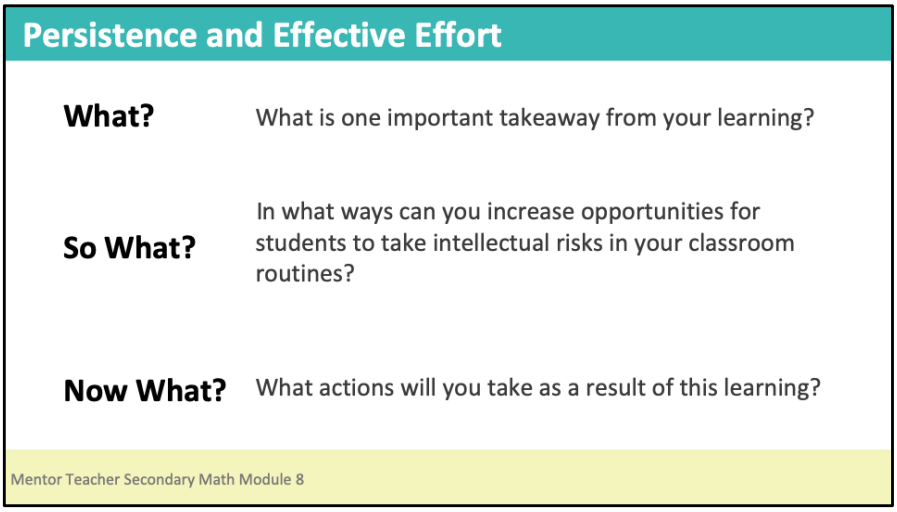
Critical Idea
• Incorporating opportunities in the curriculum that promote students' persistence and effective effort can change the overall culture of learning in classrooms.

Facilitator says:
- "Now we will connect the research to your EngageNY curriculum."
- "Revisit the EngageNY lesson, **Math 7, M1, TA, L6 Teacher (Supplementary handout)** and identify the places that support students in persistence and effective effort. As you look through the lesson, look for the following:
    - Places where students are likely to struggle
    - Places where they can model that mistakes and taking risks are how we learn
    - Places where they can provide feedback to students that encourage metacognition and other effective effort strategies.
    - Places where they can apply the specific educator actions they recorded during the discussion on the previous slide.

Facilitator does / says:
- Animate the slide.
- "In addition, be prepared to share your learning.
    - Identify at least 2 ways to increase opportunities for students to persist in the lesson.
    - More specifically, identify a place where you might model persistence through a think--aloud or similar strategy, and another way you might anticipate students' struggle and prepare appropriate responses."

Facilitator does:
- Set the timer for 7 minutes.
- Circulate around the room while teachers are analyzing the lesson.
- Once time is up, direct participants to find a partner they have not worked with in this session.
- Participants should share the 2 ways they will support persistence and effective effort in the EngageNY lesson.

Words of Wisdom
The last activity of the slide is very powerful. Teachers are able to share strategies of how to use an EngageNY lesson to support growth mindsets and effective effort with students.



5 min.

Critical Idea
Reflecting on our learning is important to solidifying understanding and making progress toward accomplishing the goals of the initiative.

Facilitator says:
"This slide reflects the ideas you have explored related to persistence and effective effort. As you and your colleagues work toward changing students' attitudes, beliefs, and behaviors, and the culture of learning in your classrooms, schools, and school systems, you will add your own practices to this list."

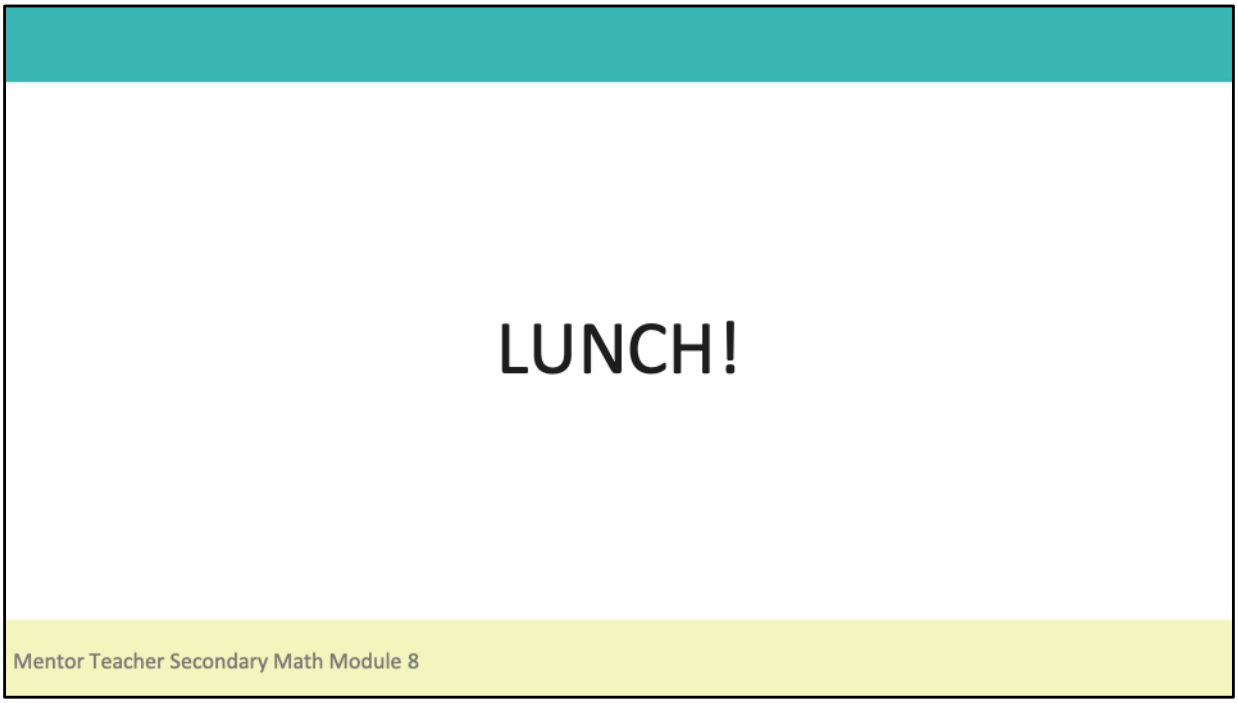
Facilitator does:
Animate the slide. Ask participants to respond to the three questions.

Words of Wisdom
It is important to acknowledge where faculty might struggle in providing opportunities for students to persist.

Persistence and Effective Effort: Key Takeaway

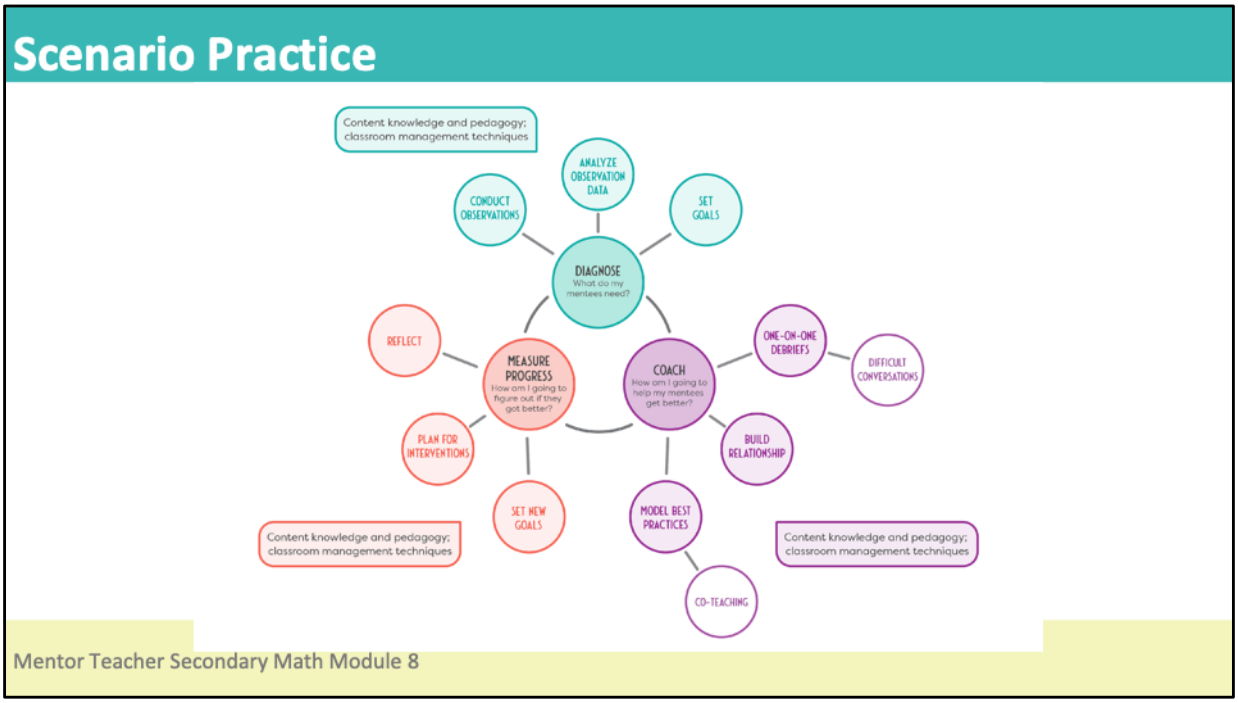
Mentors recognize and describe strategic opportunities for students to apply persistence and effective effort strategies in the EngageNY lessons.

- **Duration**: 1 minute
- **Facilitator says**: So we've now experienced and learned that...
- **Facilitator does:** Read slide



11:45 a.m.

Duration: 45 min.



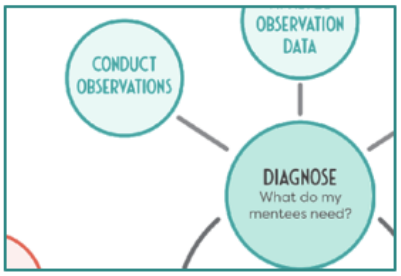
SECTION START: 12:30

Duration: 30 seconds

Facilitator says: We have learned about each part of the mentor cycle. This afternoon is meant to give you practice with all components using two different scenarios. We will do a brief review of each part of the cycle, have some share time about your experiences thus far, and then practice the various skills. We will be looking at two different scenarios for the remainder of the afternoon. Scenario A will serve as our model and example for the work/practice that you'll be doing with Scenario B.

Conduct Observations: 3 Key Components

- Confirm observation details
- Observe students and teacher in action
- Record notes using "look-fors"



Mentor Teacher Secondary Math Module 8

Duration: 1 minute

Facilitator says: The 3 key components of conduct observations are confirm observation details, observe students and teach in action, and record notes using look-fors. Remember that before an initial or follow-up observation you want to meet to confirm the observation details which include items such as when/where the observation will take place, the focus of the observation, etc. We also talked about when observing students and the teacher in action some of those Dos and Don'ts. We talked about scripting and we gave you a pretty generic observation tool. We discussed that you should complete the "look-fors" column prior to the observation and keep your notes focused on those look-fors as to not get distracted by other needs you observe during the observation. During this module we also talked about sticking to the facts in your script, not making inferences, and being as specific as possible.

Stories from the Field

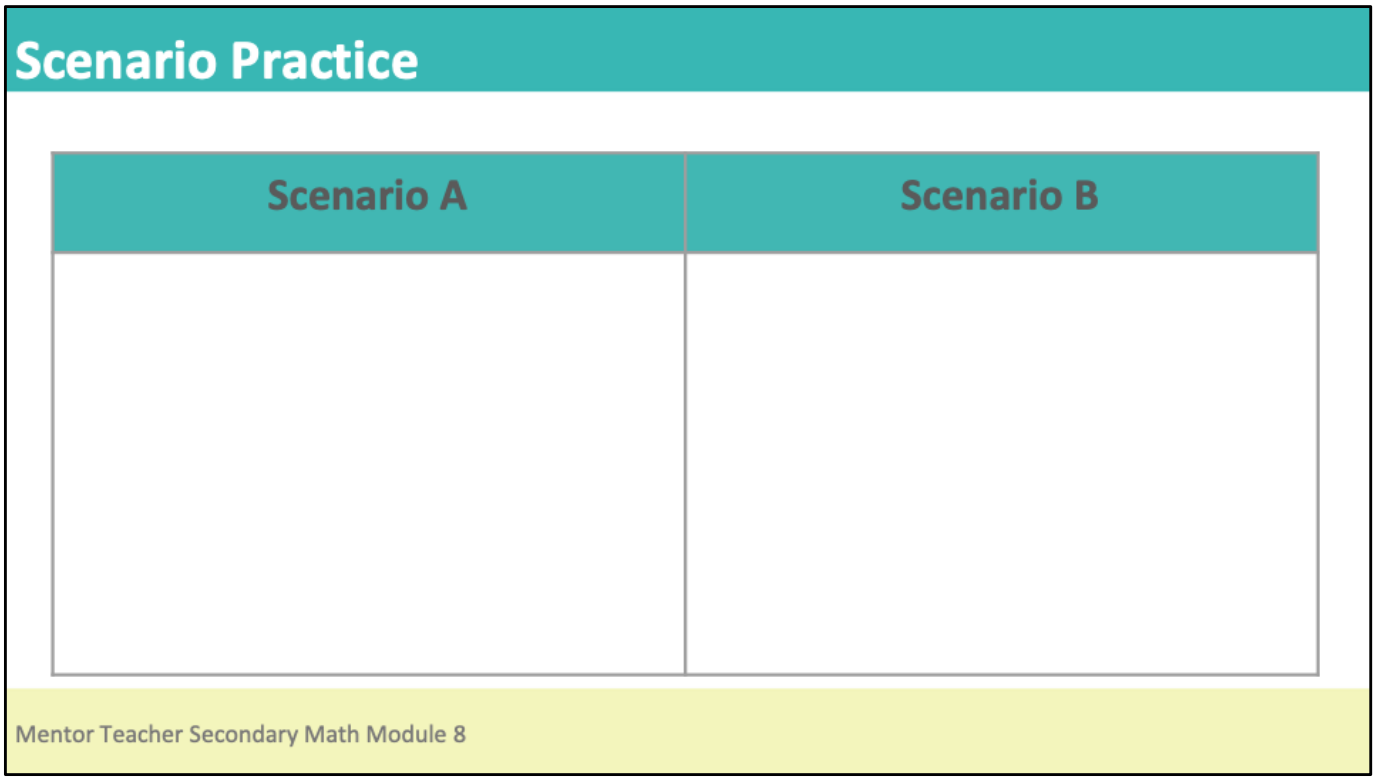
- What has worked well for you during observations?
- What is something you had to change?
- Any big "aha's" when it comes to conducting an observation?
- What advice would you give to someone who has never conducted an observation?

Mentor Teacher Secondary Math Module 8

Duration: 15 minutes

Facilitator says: We want to capitalize on the expertise in the room and give you all an opportunity to share your experiences with this part of the mentor cycle. With your table group your going to do a quick whip-around. This means that each person at the table will have an opportunity to share their response to just one of the questions on the screen. Pick one question that you will share your thoughts with the group. If there is time before we come back together and all of your group members have shared, start another round and this time answer a different question of your choice.

Facilitator does: Circulate and listen in on conversations picking out key things participants are saying to share with the whole group. After 10 minutes, bring the group back together and highlight a few question participant responses.



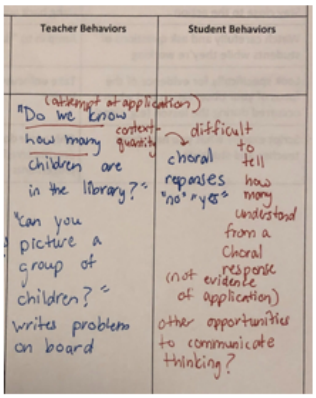
Duration: 8 minutes

Facilitator says: You have each been given two data sets, one for Scenario A and one for Scenario B. You will not be actually conducting an observation today due to time constraints. So for our "practice" for this part of the mentor cycle, you will simply look over the observation notes that were taken during the observation in Scenario A and in Scenario B. This should not take very long. You will have about 6 minutes to just look over both scripts. Make sure to focus in on what the focus of the two observations were and the look-fors the mentor wrote in the template prior to the observation taking place.

Facilitator does: Give participants about 6 minutes to just read through the two scripts. Move on when ready.

Analyze Observation Data: 3 Key Components

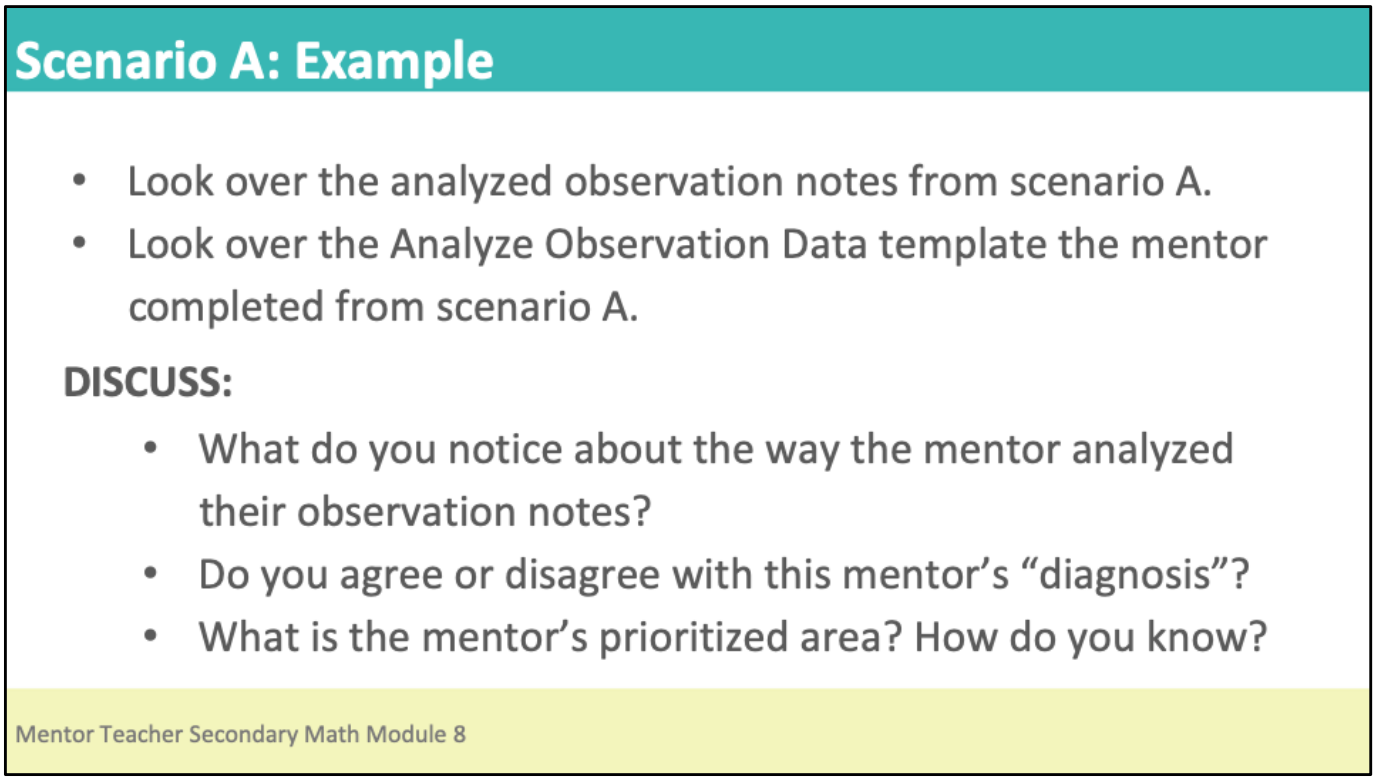
- Analyze observation notes
- Recognize strengths and areas for growth
- Prioritize



Mentor Teacher Secondary Math Module 8

Duration: 2 minutes

Facilitator says: The 3 key components of analyze observation data are analyze the observation notes, recognize strengths and areas for growth, and prioritize. During analyze observation notes, we talked about **(animate the slide)** highlighting and making additional notes on your observation data preferably in another color to help you begin to determine the strengths and areas for growth specifically in regards to the focus of your observation. Remember that you might have seen other issues that you would want to address, but it is important to stick to the focus of your observation. Jumping to something else that is different from what you and your mentee agreed upon will erode the trusting relationship you're building together. You can always make a note to return to the other areas of need that you observed at another time. **Animate the slide** Next, we used this template to help us think through and recognize strengths and areas for growth with regard to the area of focus. And finally out of all the areas for growth or need, we worked to prioritize one area that could potentially serve as a SMART goal for the mentee and completed the final column of the template.



Duration: 10 minutes

Facilitator says: We are going to give you about 3-5 minutes to look over the observation notes that the mentor in scenario A analyzed and also to look over the analyze observation data template the mentor completed. After 3-5 minutes of independent analysis time - we will prompt you with some discussion questions.

Facilitator does: After 3-5 minutes, animate the slide to reveal the discussion questions. Have participants discuss with a shoulder partner the questions on the screen regarding scenario A. Share out with the whole group any key findings.

Scenario B: Practice

- Analyze the observation data
- Complete the Analyze Observation Data template
- Share with a partner at your table


Analyze Observation Data

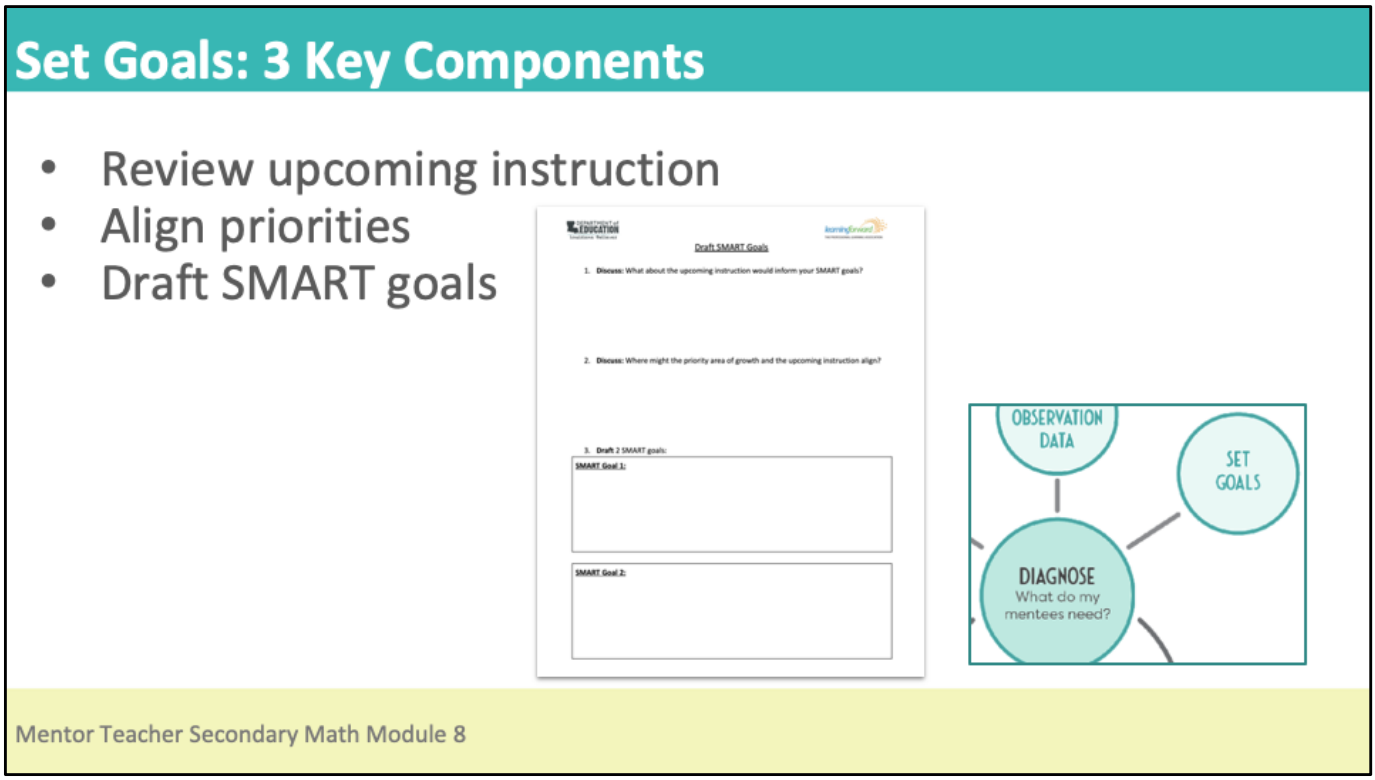
Strengths: What was effective about the lesson in regards to the focus area? In which "look fors" did the observee excel? What specific actions did the observee take that enabled them to be successful in the focus area? What specifically were the students able to do as a result of those actions?	Areas for Growth: What was ineffective about the lesson in regards to the focus area? Which "look fors" is the observee trying and on the verge of doing? Which "look fors" is the observee ready to try next? Where are there areas of missed opportunity?	Prioritize One Area for Growth: In your opinion, which area for growth could have the biggest impact on the observee and their students? What might you recommend the observee change or modify in their focus area based on your observation? What big takeaway do you hope the observee gains as a result of the debrief conversation?
1.	1.	
2.	2.	
3.	3.	

Mentor Teacher Secondary Math Module 8

Duration: 20 minutes

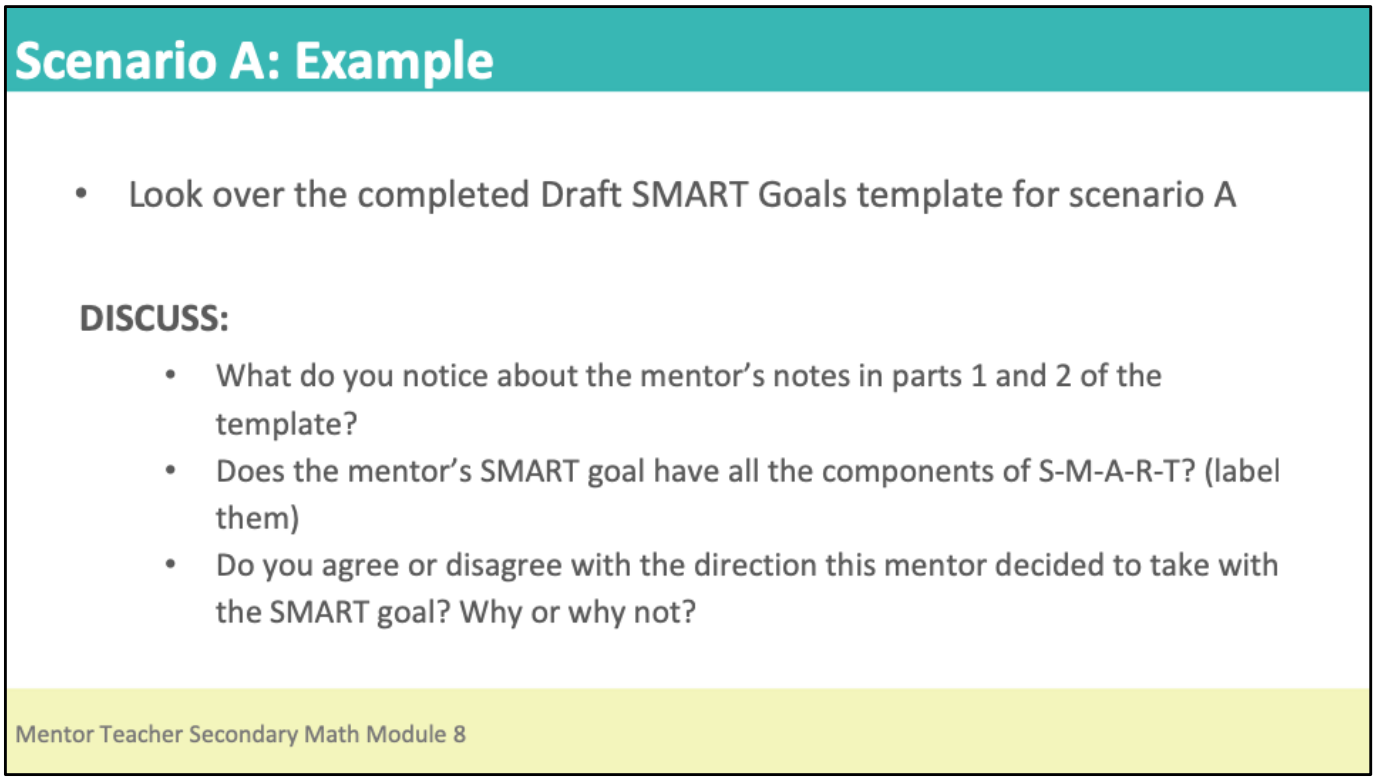
Facilitator says: Now it is your turn to practice on your own. Using the observation notes from scenario B - use highlighters and a different colored pen to analyze the observation notes. After analyzing the notes, complete the blank template on page 20 of your handout. We will give you about 10-15 minutes to work on these two steps independently. We will let you know when it is time to get with a partner and share.

Facilitator does: Monitor the time as participants work on the assignment. After about 10-15 minutes, signal to the group to partner up with someone at their table and share their analyzed notes and complete template. They may add any additional ideas from their partners to their own templates. Call on a few participants to share what they believe is the prioritized need for this mentee with the whole group.



Duration: 1 minute

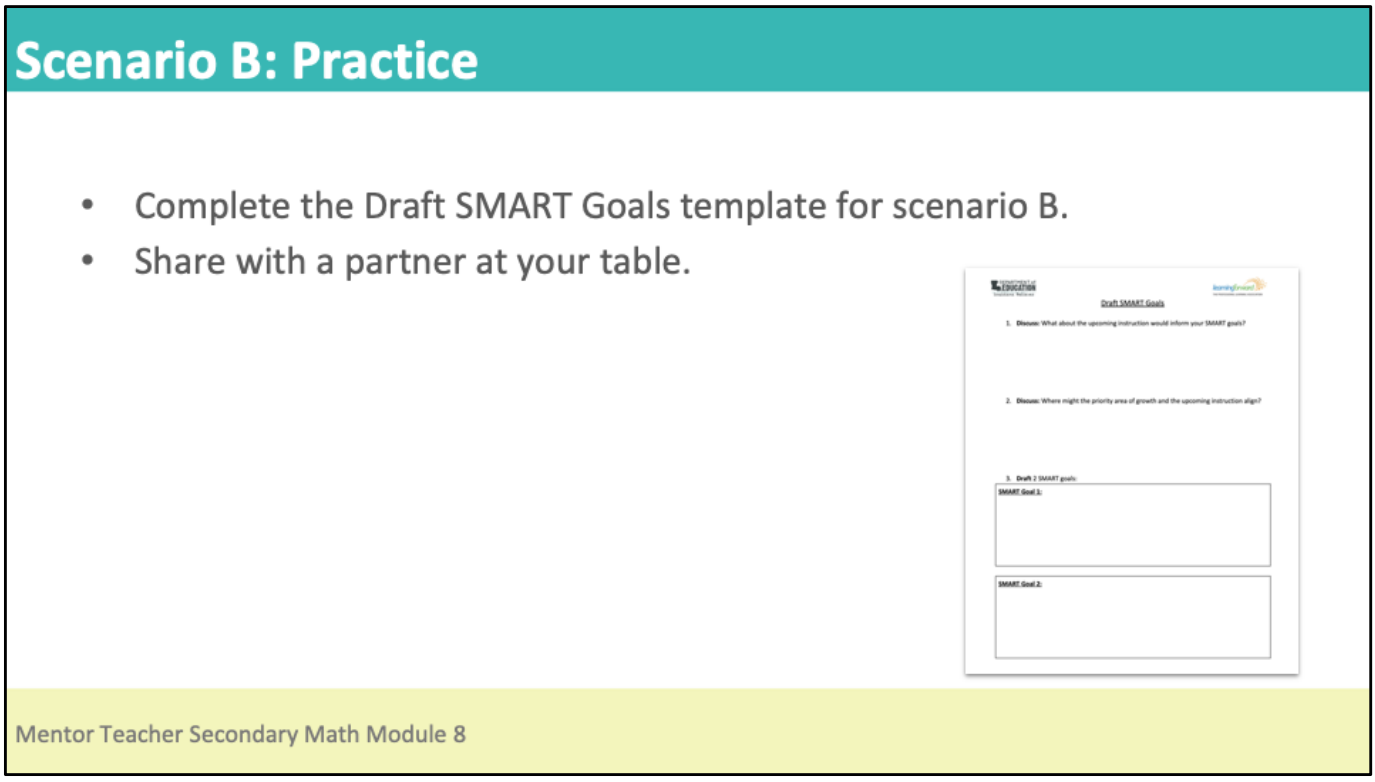
Facilitator says: The 3 key components of setting goals is review upcoming instruction, align priorities, and draft SMART goals. In review upcoming instruction, we talked about how it is important to review what your mentee has upcoming in their curriculum/scope and sequence to make sure that you are not setting a goal that runs contrary to the curriculum or that would not be possible to achieve given what the mentee is planning to teach next. In align priorities we talked about after having prioritized an area of growth for your mentee, you want to make sure it is aligned to the upcoming instruction and ask yourself the question, where do you see opportunities for your mentee to practice what you see as their area of growth in upcoming instruction? Finding those opportunities will set you up to draft some potential SMART goals for your mentee that are informed by your priorities from your observation as well as what's coming up in their curriculum and will help you ensure that you aren't setting goals that will be impossible for your mentee to try out and practice. And then finally we learned how to write SMART goals using the SMART framework. **(animate the slide)** We used this template to think through this process and draft 1-2 SMART goals in preparation for the one-on-one debrief. Remember that having goals in mind beforehand will help you guide and coach your mentee to setting strong goals that you can support them striving towards in their upcoming instruction.



Duration: 10 minutes

Facilitator says: We are going to give you about 3-5 minutes to look over the sample, completed Draft SMART Goals template from scenario A. After 3-5 minutes of independent analysis time - we will prompt you with some discussion questions.

Facilitator does: After 3-5 minutes, **animate the slide** to reveal the discussion questions. Have participants discuss with a shoulder partner the questions on the screen regarding scenario A. Share out with the whole group any key findings.



Duration: 10 minutes

Facilitator says: Now it is your turn to practice on your own. Complete the Draft SMART Goals template based on the information that's been provided so far with the mentee in scenario B. The blank template can be found on page 21 of your handout.. We will give you about 5 minutes to work on this independently. We will let you know when it is time to get with a partner and share.

Facilitator does: Monitor the time as participants work on the assignment. After about 5 minutes, signal to the group to partner up with someone at their table and share their completed template. They may add any additional ideas from their partners to their own templates. Call on a few participants to share their drafted SMART goals with the whole group.

Stories from the Field: Setting Goals

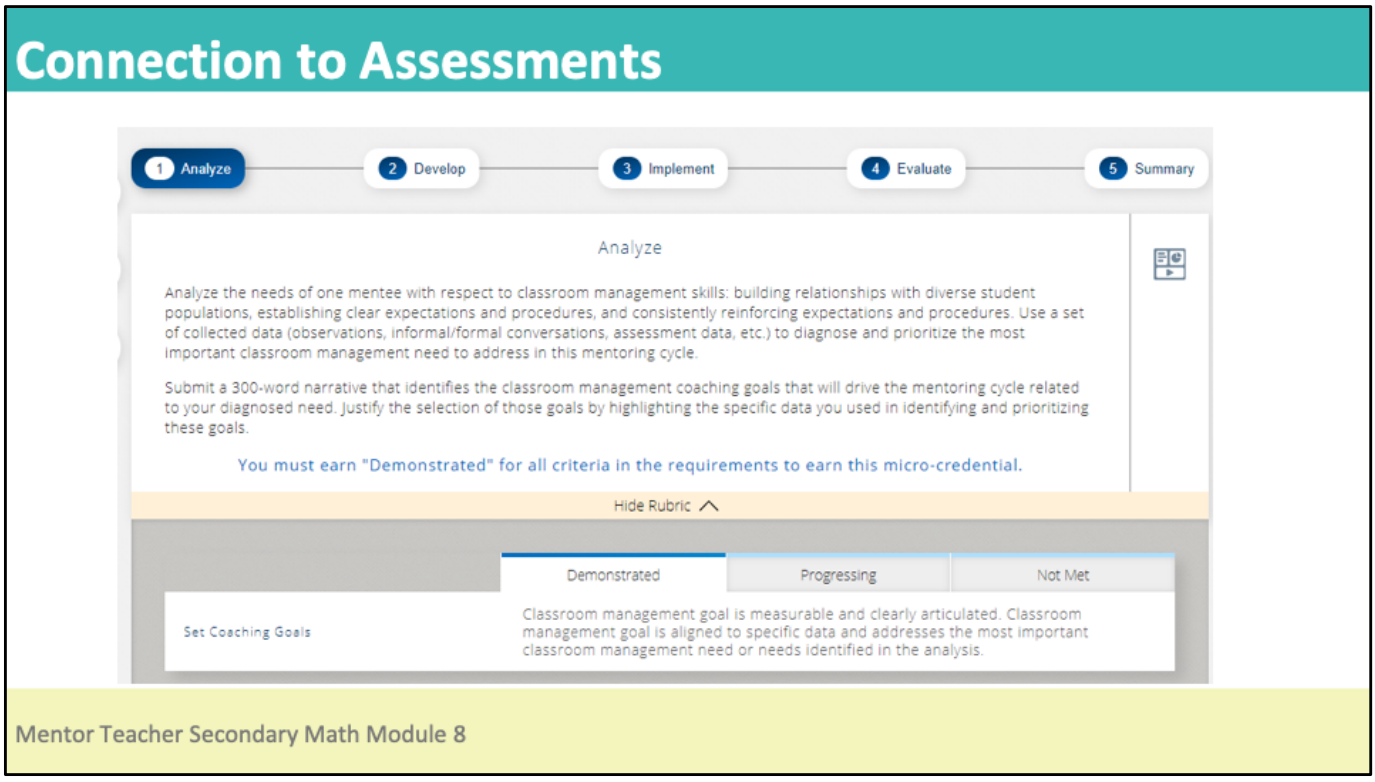
- What has worked well?
- What has not worked well?
- What types of goals are you currently focusing on with your mentees?

Mentor Teacher Secondary Math Module 8

Duration: 5 minutes

Facilitator says: Let's step out from the scenario practice for a minute and connect to your own experiences with setting goals so far this school year. We would like to just have a whole group discussion regarding the questions seen here on the screen. What has worked well with setting goals with your mentees? What hasn't? Would anyone be willing to share a goal that they are currently focusing on with their mentee and the process of how that became the focus?

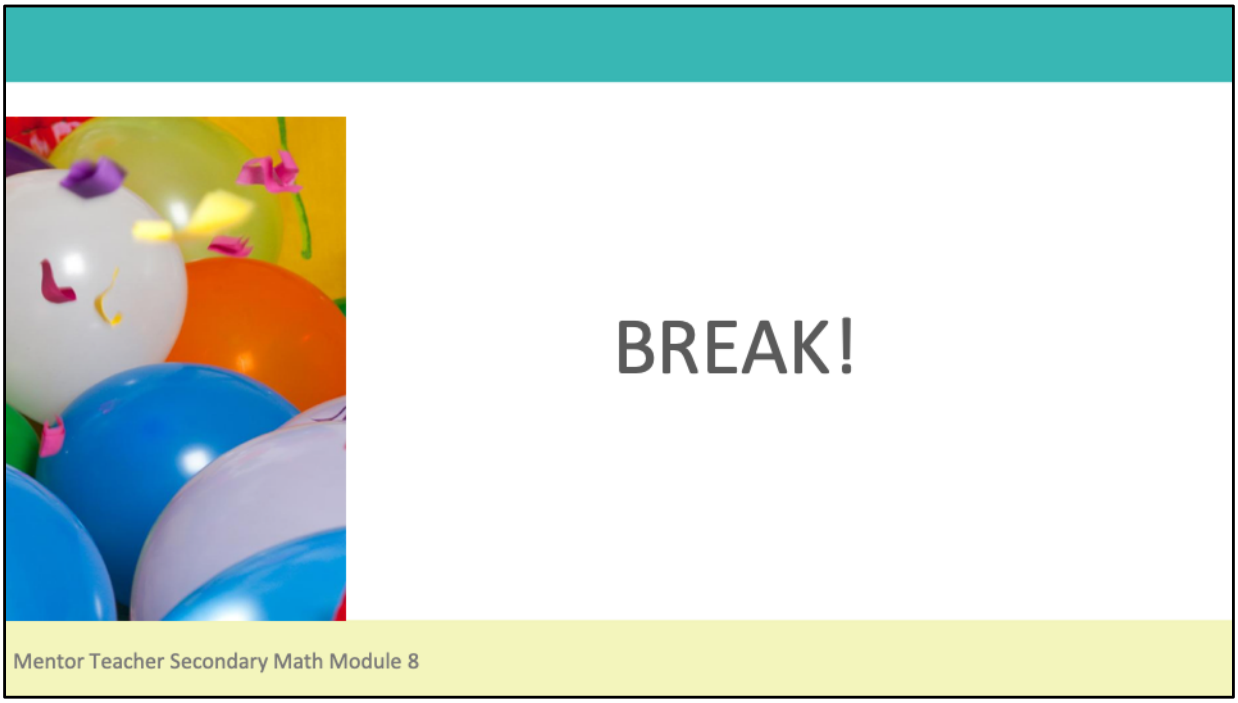
Facilitator does: Facilitate a whole group discussion and sharing of real-world experiences regarding setting goals. Make sure to keep the conversation focused on the setting goals part of the mentor cycle. After about 5 minutes bring the discussion to a close and move on to the next part.



Duration: 3 minutes

Facilitator says: Let's take a moment to connect what we've reviewed so far to the mentoring assessments. In the analyze section of the mentoring assessments it talks about submitting a 300-word narrative to identify the goals that will drive the mentoring cycle related to your diagnosed need. In order to write that narrative you will have had to go through the conducting observation, analyze observation data, and set goals steps of the cycle. If you use the SMART goal format for goal writing you will hit the necessary criteria in the "demonstrated" rubric as goals should be measurable and clearly articulated. And although it doesn't say you have to attach any artifacts for this portion of the assessment - you could include your analysis template and setting goals template as additional support for how the goal is aligned to data and the need identified.

Facilitator does: Ask if there are any questions about this part of the assessment and answer any questions to the best of your ability.

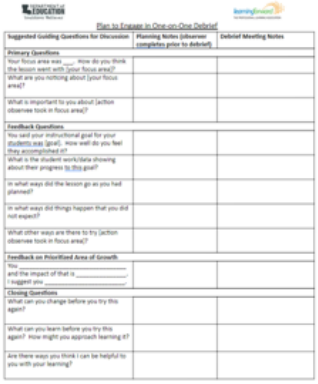


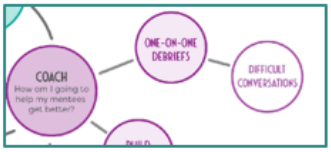
SECTION START: 2:00

Duration: 15 minutes

One-on-One Debriefs: 3 Key Components

- Plan for debrief
- Engage in debrief
- Practice difficult conversations

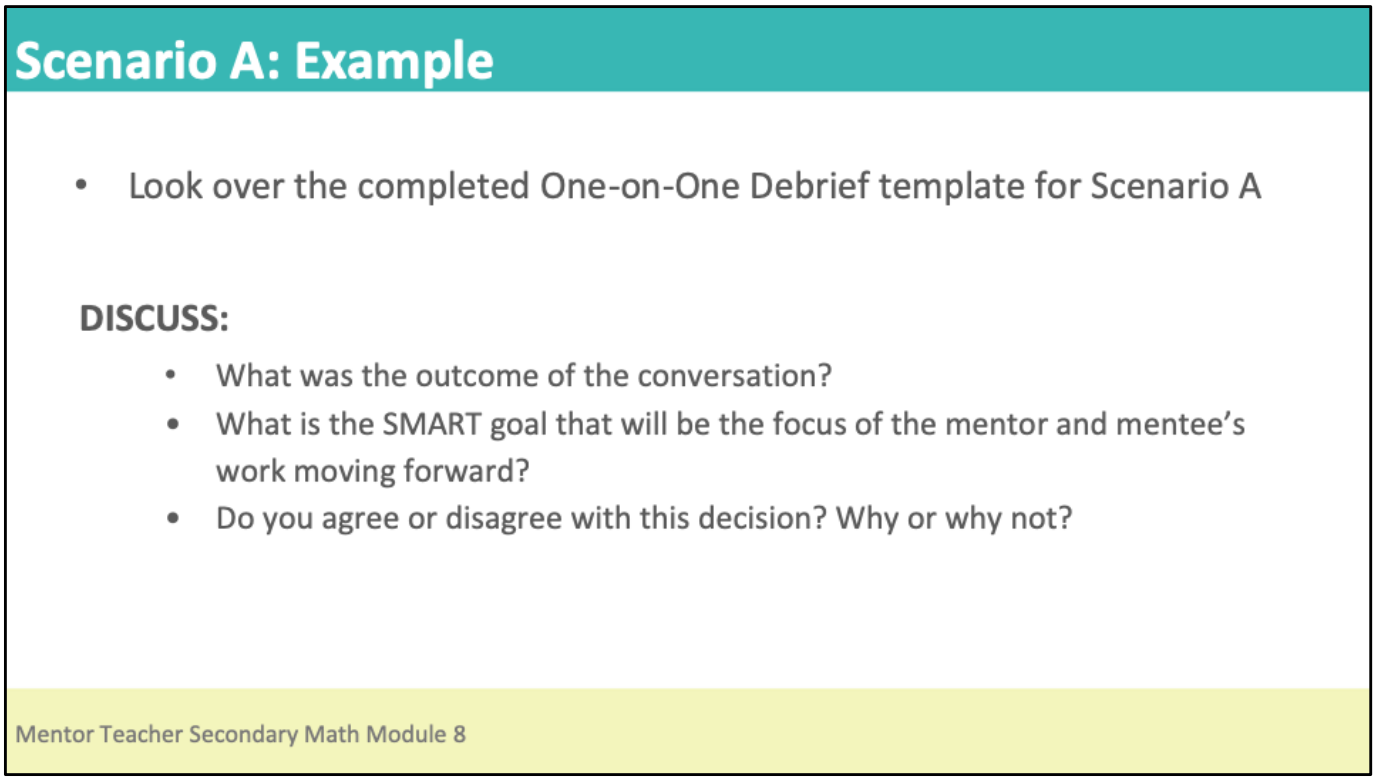




Mentor Teacher Secondary Math Module 8

SECTION START: 2:15
Duration: 1 minute

Facilitator says: The 3 key components of one-on-one debrief are plan for the debrief, engage in the debrief, and practice difficult conversations. We discussed difficult conversations during module 7, and practice various protocols to support you when having to engage in a difficult conversation with a mentee. Today we are focusing on just the debrief conversation, which requires some pre-planning on the mentor's side and then facilitating and engaging in that conversation to ultimately solidify the goal the mentee will be working on eventually writing a coaching plan for that goal. **(animate the slide)** We provided you all with a helpful template called, Plan to Engage in One-on-One Debrief, that you can use to plan for the debrief, which was that middle column, and then take notes on as you engage in the debrief, which was the third column. Let's look at an example of this with regards to scenario A.



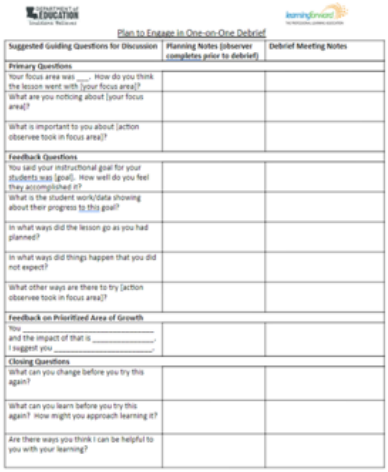
Duration: 10 minutes

Facilitator says: We are going to give you about 3-5 minutes to look over the sample, completed one-on-one debrief template from scenario A. After 3-5 minutes of independent analysis time - we will prompt you with some discussion questions.

Facilitator does: After 3-5 minutes, **animate the slide** to reveal the discussion questions. Have participants discuss with a shoulder partner the questions on the screen regarding scenario A. Share out with the whole group any key findings. Point out that this mentor did not ask every single question on the template and that, that is okay and how the template was meant to be used.

Scenario B: Practice

- Complete the One-on-One Debrief template for scenario B.



Plan to Engage in One-on-One Debrief

Suggested Guiding Questions for Discussion	Planning Notes (observer completes prior to debrief)	Debrief Meeting Notes
Primary Questions		
Your focus area was ____. How do you think the lesson went with [your focus area]?		
What are you noticing about [your focus area]?		
What is important to you about [action observee took in focus area]?		
Feedback Questions		
You said your instructional goal for your students was [goal]. How well do you feel they accomplished it?		
What is the student work/data showing about their progress to this goal?		
In what ways did the lesson go as you had planned?		
In what ways did things happen that you did not expect?		
What other ways are there to try [action observee took in focus area]?		
Feedback on Prioritized Area of Growth		
You _____ and the impact of that is _____. I suggest you _____.		
Closing Questions		
What can you change before you try this again?		
What can you learn before you try this again? How might you approach learning it?		
Are there ways you think I can be helpful to you with your learning?		

Mentor Teacher Secondary Math Module 8

Duration: 10 minutes

Facilitator says: Now it is your turn to practice on your own. Remember you are pretending you are the mentor for this mentee in scenario B. Your next assignment is to plan for a one-on-one debrief with this mentee. Using the template on page 22 of your handout, plan for which questions you would ask this mentee during the conversation. Remember you do not have to ask every single question on the template. The conversation should flow based on the questions you ask and the direction you are hoping the conversation goes. Jot down notes next to the questions you plan on asking in the debrief to help guide your conversation. After about 8 minutes of planning time. We are going to role-play and engage in a practice debrief conversation, so you'll want to be prepared to play the role of both the mentor and the mentee.

Facilitator does: Monitor the time as participants work on the assignment. After about 8 minutes, bring the group back together to give them the next set of instructions.

Scenario B: Engage in the One-on-One Debrief

Round 1:
A: Mentor
B: Mentee

Round 2:
A: Mentee
B: Mentor

Mentor Teacher Secondary Math Module 8

Duration: 10 minutes

Facilitator says: Next, you are going to partner up with someone at your table group and designate who will be person A and who will be person B. In round 1, person A will play the role of the mentor in scenario B and person B will play the role of the mentee. You will have 5 minutes to practice facilitating this conversation using what you planned on your template. As the mentee, play along accordingly to give the mentor some authentic practice. After 5 minutes we will move to round 2- person A will not be the mentee and person B the mentor. You will have another 5 minutes to practice in your new roles. Any questions?

Connection to Experiences: One-on-One Debrief

- What has worked well?
- What has been difficult?
- Has the template been helpful?
- Any examples of difficult conversations and how you addressed it?

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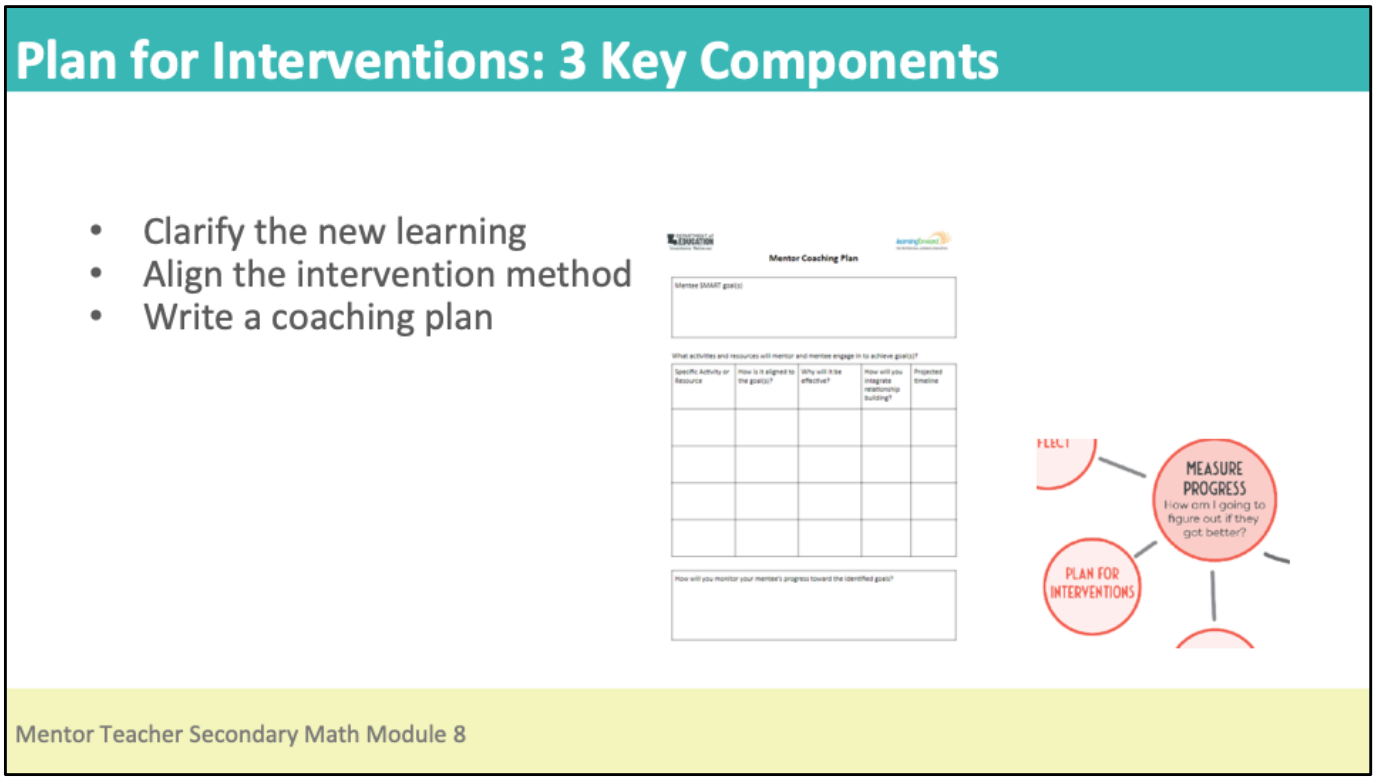
Duration: 10 minutes

Facilitator says: Let's step out from the scenario practice for a minute and connect to your own experiences with debriefing so far this school year. We would like to just have a whole group discussion once again regarding the questions seen here on the screen. What has worked well with one-on-one debriefs? What has been difficult? How have you used the template and has it been helpful or not? Does anyone have any specific examples they'd be willing to share regarding difficult conversations and how they went??

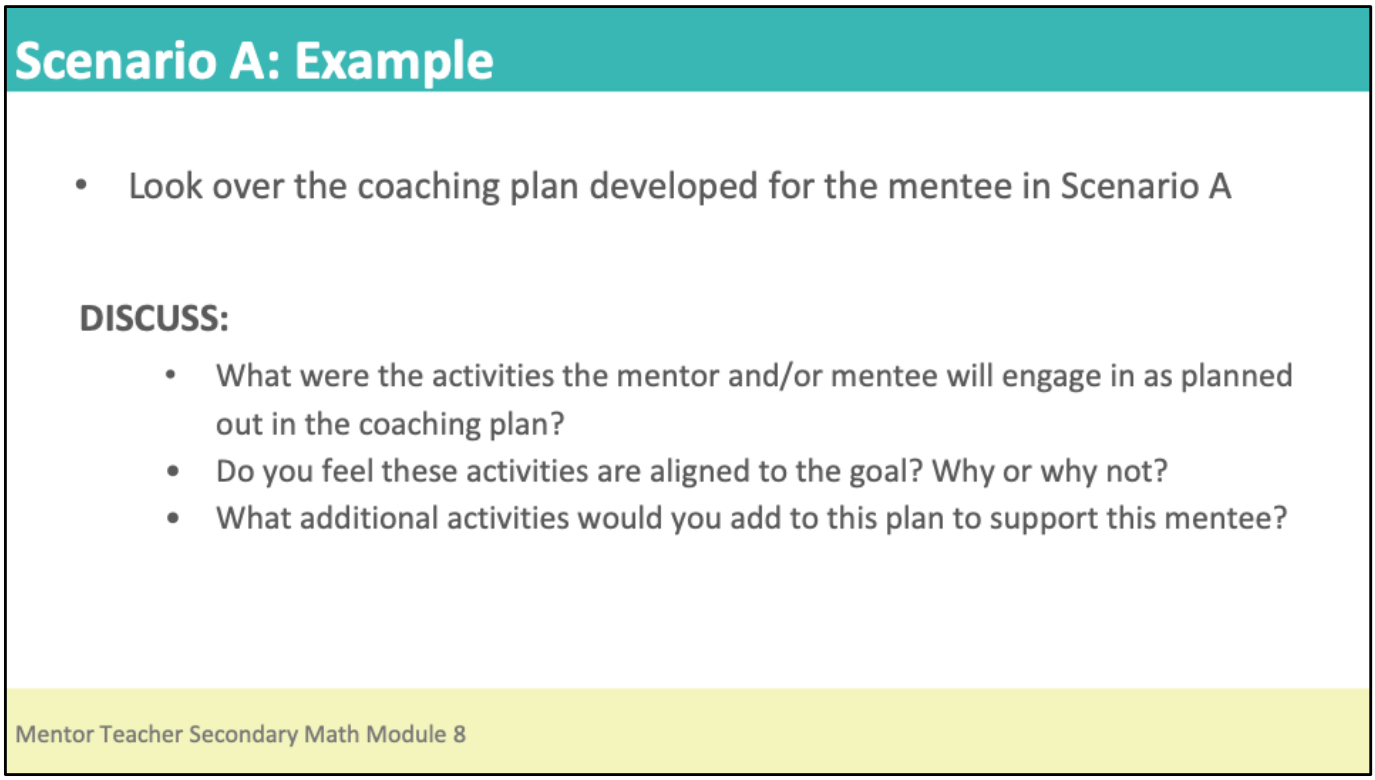
Facilitator does: Facilitate a whole group discussion and sharing of real-world experiences regarding one-on-one debriefs. Make sure to keep the conversation focused on the one-on-one debrief part of the mentor cycle. After about 10 minutes bring the discussion to a close and move on to the next part.



Duration: 2 minutes

Facilitator says: The 3 key components of plan for interventions are clarify the new learning, align the intervention method, and write a coaching plan. With clarify the new learning we talked about discussing and thinking about what essential learning is needed in order to help the mentee meet their SMART goal. To consider what is involved in mastering the SMART goal, we think about both content and process to determine what are the prioritized learning needs that you will eventually include in your coaching plan. We also discussed that sometimes the mentor may need to learning something prior to the mentee in order to be able to support them. Next is align the intervention method. In the LDOE's mentor cycle, there are two specific interventions, modeling and co-teaching. So we talked a lot in modules 4 and 5 about aligning the intervention method to the needs of the mentee and when might it be appropriate to model vs. co-teach a lesson for a mentee. **(animate the slide)** Once you have clarified the new learning the mentee needs to engage in and have aligned the intervention method to their needs, you'll write a coaching plan that details how exactly you'll address the learning priorities through the intervention to the mentee. We explained that you can think of a coaching plan as an extension of the Partnership Agreements. Writing a coaching plan is something you do without your mentee, although it is based on your observation and debrief and other conversations with him or her. It's recommended that once you've created your

coaching plan you share it your mentee to make sure he agrees that the interventions are well aligned with the SMART goals. Writing down the interventions in a plan and both agreeing to the plan continues to strengthen the relationship and build trust.



Duration: 10 minutes

Facilitator says: We are going to give you about 3-5 minutes to look over the sample, completed coaching plan from scenario A. After 3-5 minutes of independent analysis time - we will prompt you with some discussion questions.

Facilitator does: After 3-5 minutes, **animate the slide** to reveal the discussion questions. Have participants discuss with a shoulder partner the questions on the screen regarding scenario A. Share out with the whole group any key findings.

Scenario B: Practice

- Complete the Coaching Plan template for scenario B.
- Share with a partner at your table.

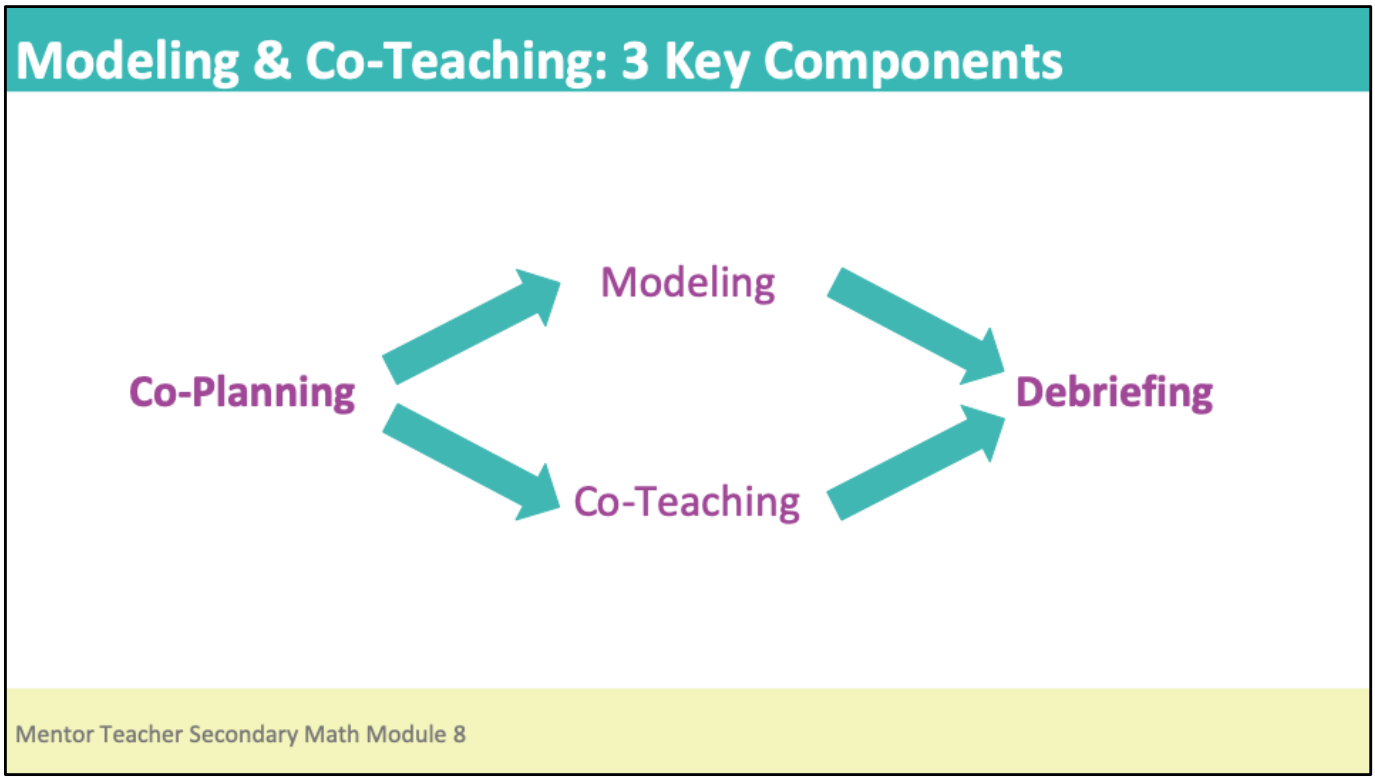
Mentor Teacher Secondary Math Module 8

Duration: 10 minutes

Facilitator says: Now it is your turn to practice on your own. Complete the Coaching Plan template based on the information that's been provided so far with the mentee in scenario B. The blank template can be found on page 23 of your handout. We will give you about 10 minutes to work on this independently. We will let you know when it is time to get with a partner and share.

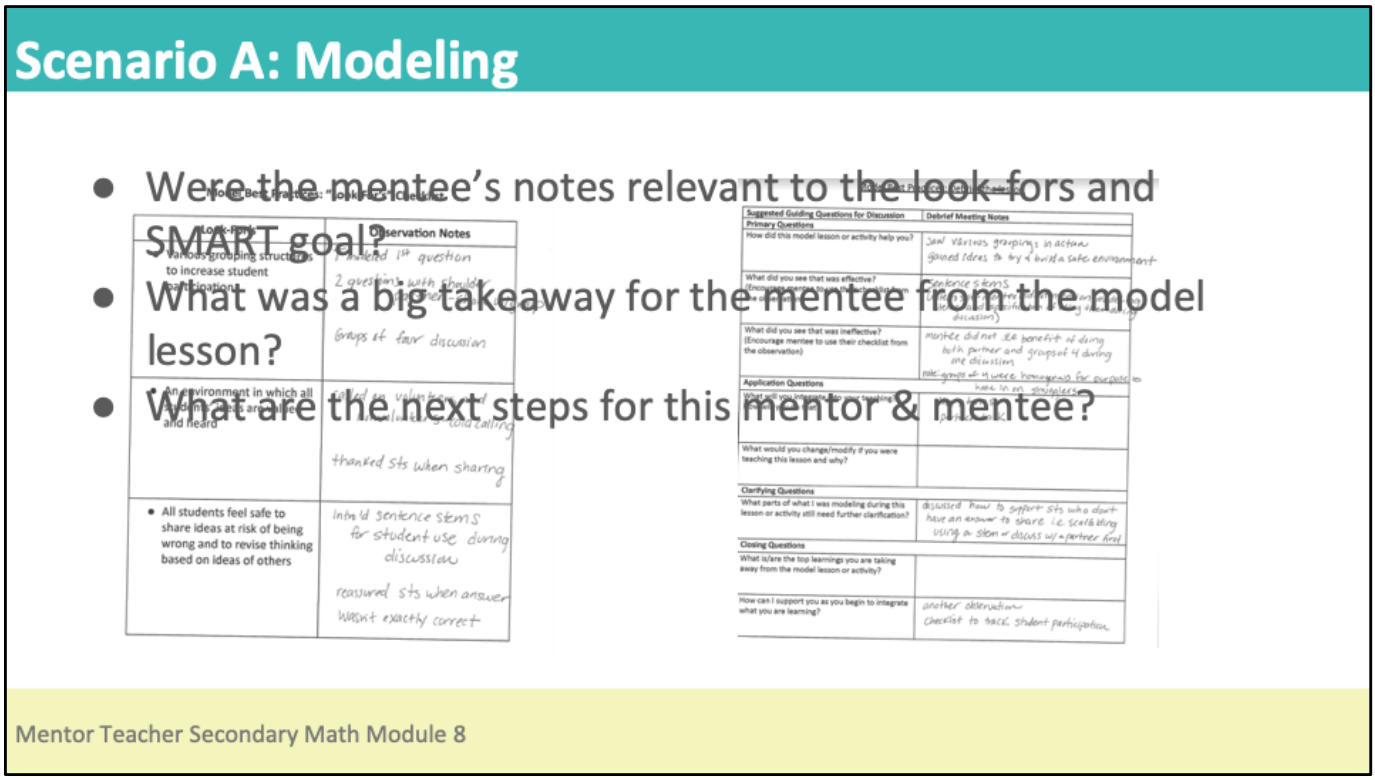
Facilitator does: Monitor the time as participants work on the assignment. After about 5 minutes, signal to the group to partner up with someone at their table and share their completed template. They may add any additional ideas from their partners to their own templates. Call on a few participants to share one row of information from their coaching plan with the whole group.

Facilitator says: If you would like to see an example of a coaching plan that goes along with Scenario B - this can be found on page 37 of your handout as an additional resource for you.



Duration: 1 minute

Facilitator says: The 3 key components for modeling and co-teaching are very similar. The first for both intervention methods is to co-plan the lesson, then either engage in the model lesson or co-teach lesson, and finally debrief either the model or co-teach lesson. Let's see examples of these with regards to our two scenarios.



NOTE: THE SLIDE IS NOT MESSED UP - THERE ARE ANIMATIONS.

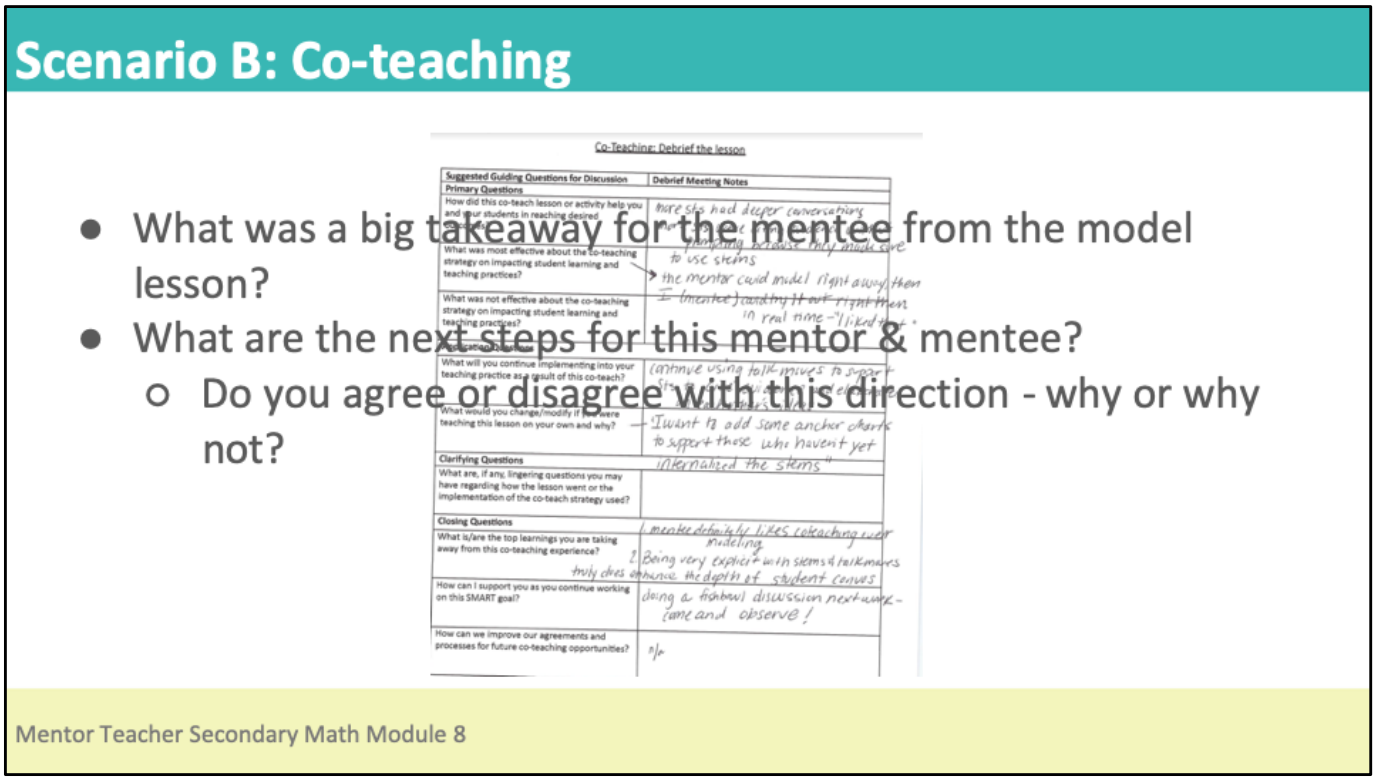
Duration: 10 minutes

Facilitator says: In your scenario A handout you'll find these two completed templates. Remember in scenario A's coaching plan, it was said that the mentor would model a classroom discussion and the mentee will observe utilizing a "look-fors" checklist as you see here. The following page shows the debriefing conversation notes that the mentor took during the debrief conversation that took place following that model lesson. Take a few minutes to look over these two documents and then we will discuss.

Facilitator does: allow 2-3 minutes for participants to look over these completed examples, then **animate the slide** to put up the discussion questions.

Facilitator says: Now take about 5 minutes to discuss the questions on the screen with a shoulder partner.

Facilitator does: Circulate and listen in on conversations, picking out key takeaways to share with the whole group.



NOTE: THE SLIDE IS NOT MESSED UP - THERE ARE ANIMATIONS.

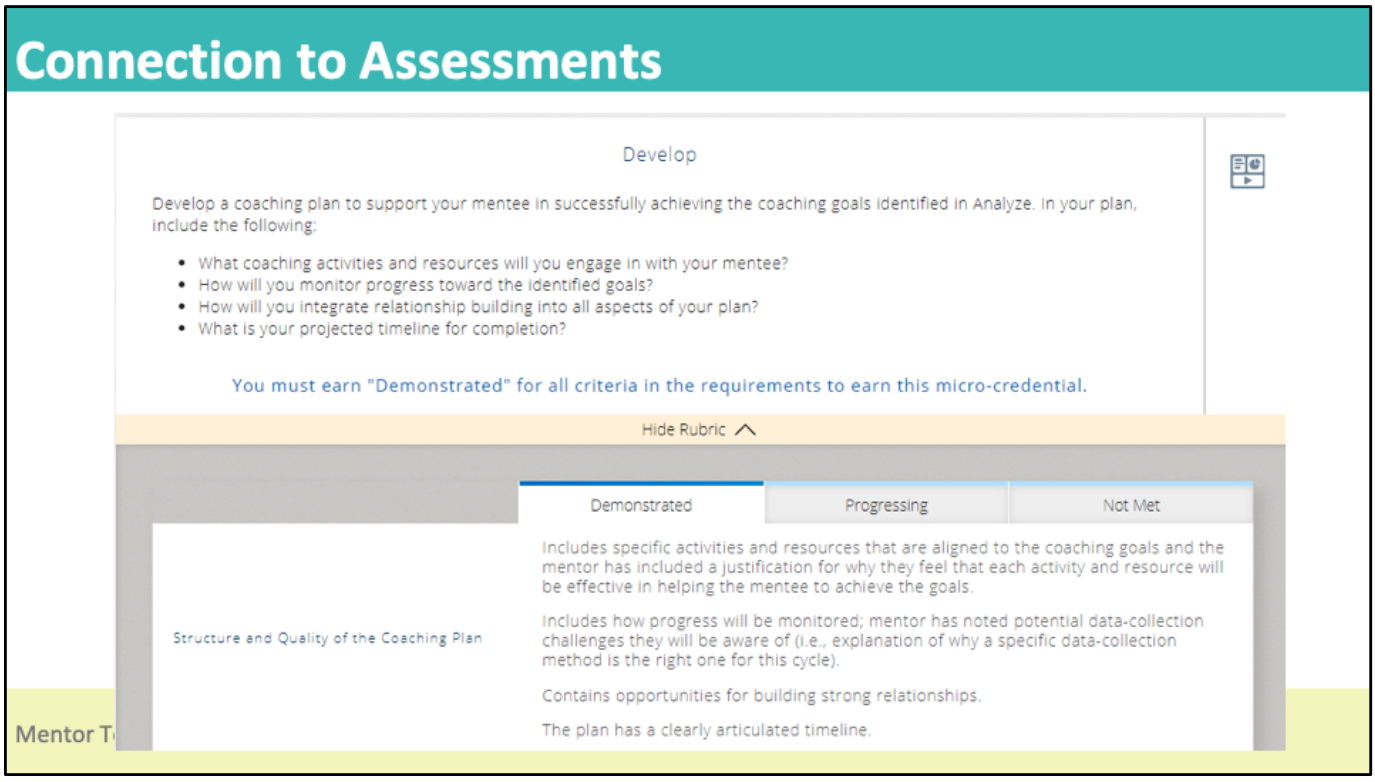
Duration: 10 minutes

Facilitator says: In your scenario B handout, you'll find a completed co-teaching debrief template. We are going to pretend that one of the activities you included on the coaching plan for the mentee in scenario B was to co-teach a lesson together. These notes then serve as an example of what may have occurred in a debrief conversation following the co-teaching of a lesson. Take a few minutes to look over this document and then we will discuss.

Facilitator does: allow 2-3 minutes for participants to look over this example, then **animate the slide** to put up the discussion questions.

Facilitator says: Now take about 5 minutes to discuss the questions on the screen with a shoulder partner.

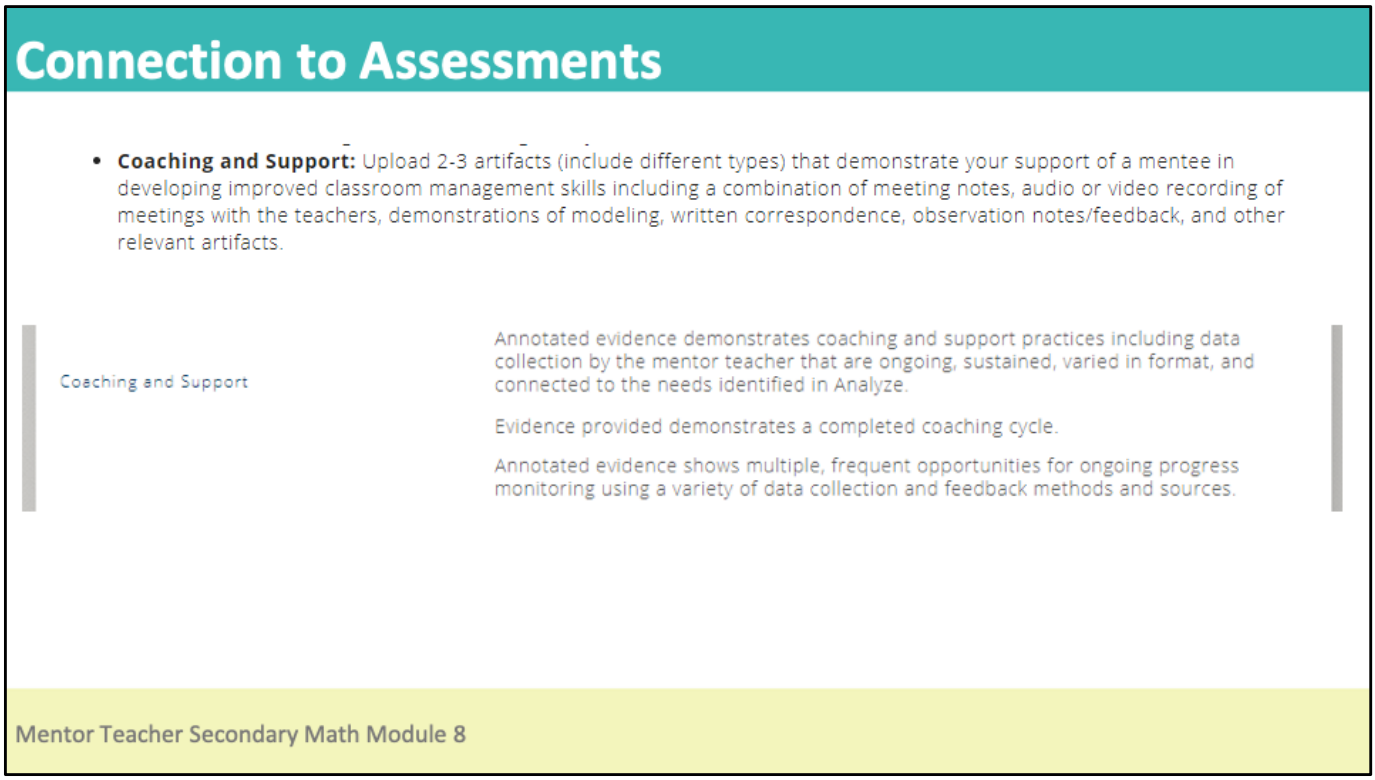
Facilitator does: Circulate and listen in on conversations, picking out key takeaways to share with the whole group.



Duration: 3 minutes

Facilitator says: Let's take a moment to connect what we've reviewed in this past section to the mentoring assessments. In the develop part of the mentoring assessments, this is where your coaching plan falls. If you utilize the template we've provided for you, you will hit all elements included in the rubric. Here you would simply upload your coaching plan document - there is no essay that needs to accompany it.

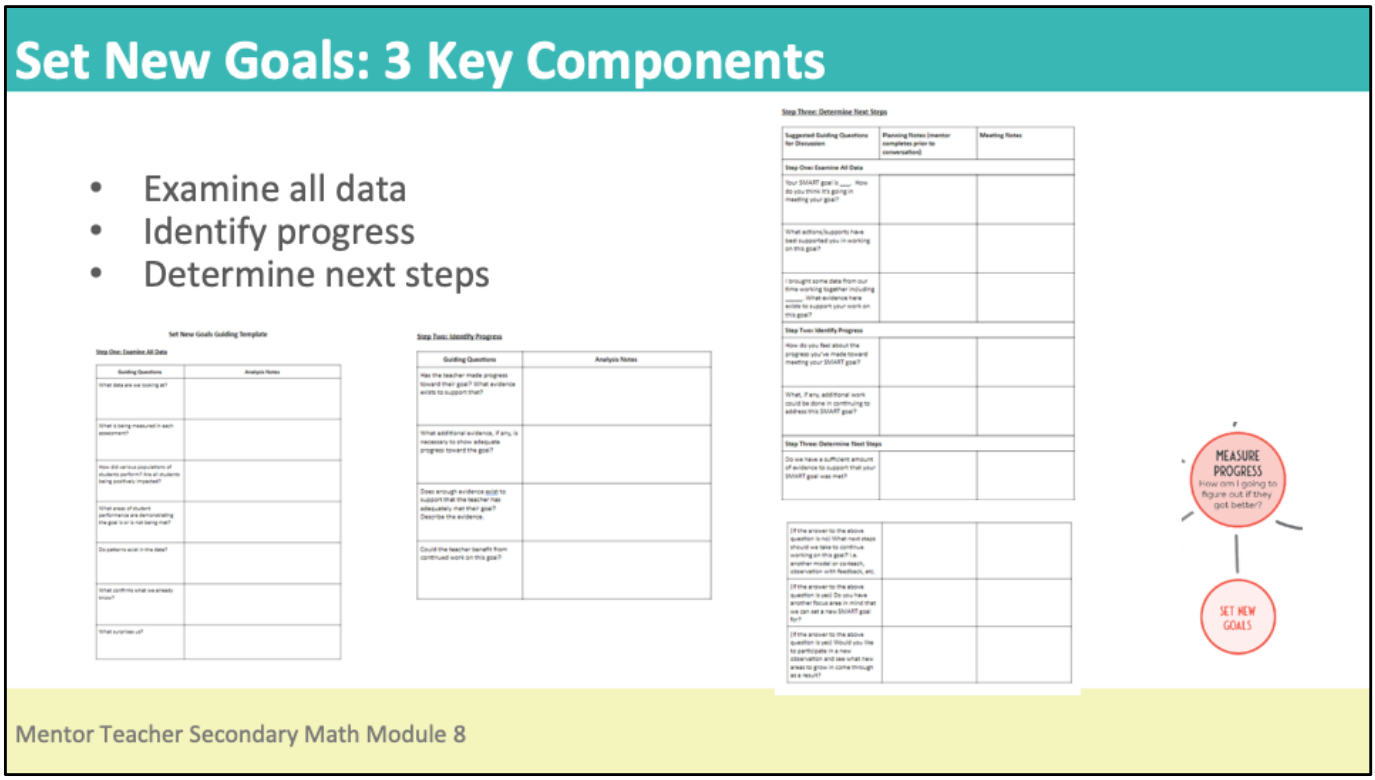
Facilitator does: Ask if there are any questions about this part of the assessment and answer any questions to the best of your ability.



Duration: 3 minutes

Facilitator says: Under the implement section of the mentoring assessments, it asks you to upload 2-3 artifacts (different types) that demonstrate your support of a mentee. This is where the modeling, co-teaching, and any additional observation an debrief notes would align. This is also includes any data collected that shows progress.

Facilitator does: Ask if there are any questions about this part of the assessment and answer any questions to the best of your ability.



Duration: 2 minutes

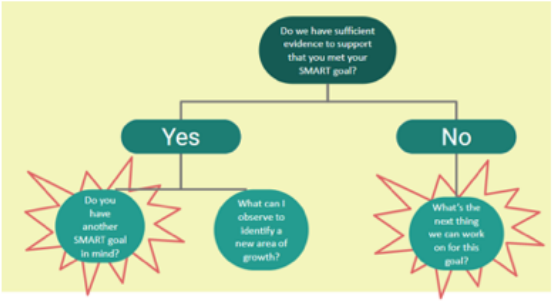
Facilitator says: The 3 key components of set new goals are examine all data, identify progress, and determine next steps. **(animate the slide)** In examine all data you are looking at all data collected during your work together during this particular cycle this could include the initial observation data and one-on-one debrief, model or co-teaching checklists and debrief notes, student work or data collected, additional observations and feedback, etc. The template shown here includes guiding questions for you to think through and jot down some notes as you examine all the data and begin to determine whether you think the mentee has made progress toward their goal. **(animate the slide)** The next part of the template were some additional guiding questions for you to think through after you've examined all data as you begin to determine whether the mentee has mastered the goal and is ready to move on to something else or if additional support is needed. **(animate the slide)** The last step is planning for and engaging in a check in conversation with your mentee that touches on all 3 key components. The middle column of the template was to plan for that conversation and then the third column to take notes in during the conversation.

Scenario A: Example

- Look over additional observation data
- Look over completed Set New Goals template

DISCUSS:

- What was the outcome of this mentor & mentee's work together?
- Do you agree or disagree? Why or why not?

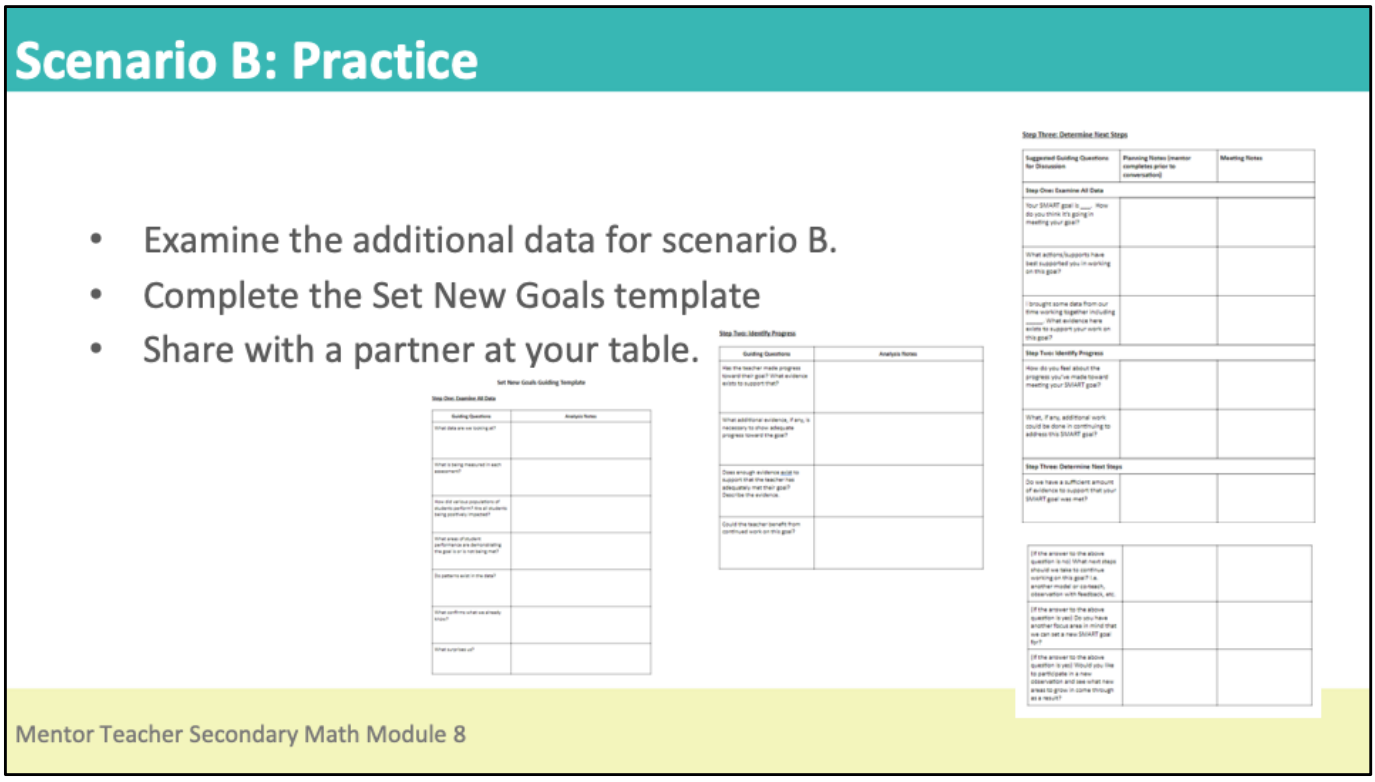


Mentor Teacher Secondary Math Module 8

Duration: 10 minutes

Facilitator says: We are going to give you about 3-5 minutes to look over the additional observation data and sample, completed set new goals template from scenario A. After 3-5 minutes of independent analysis time - we will prompt you with some discussion questions.

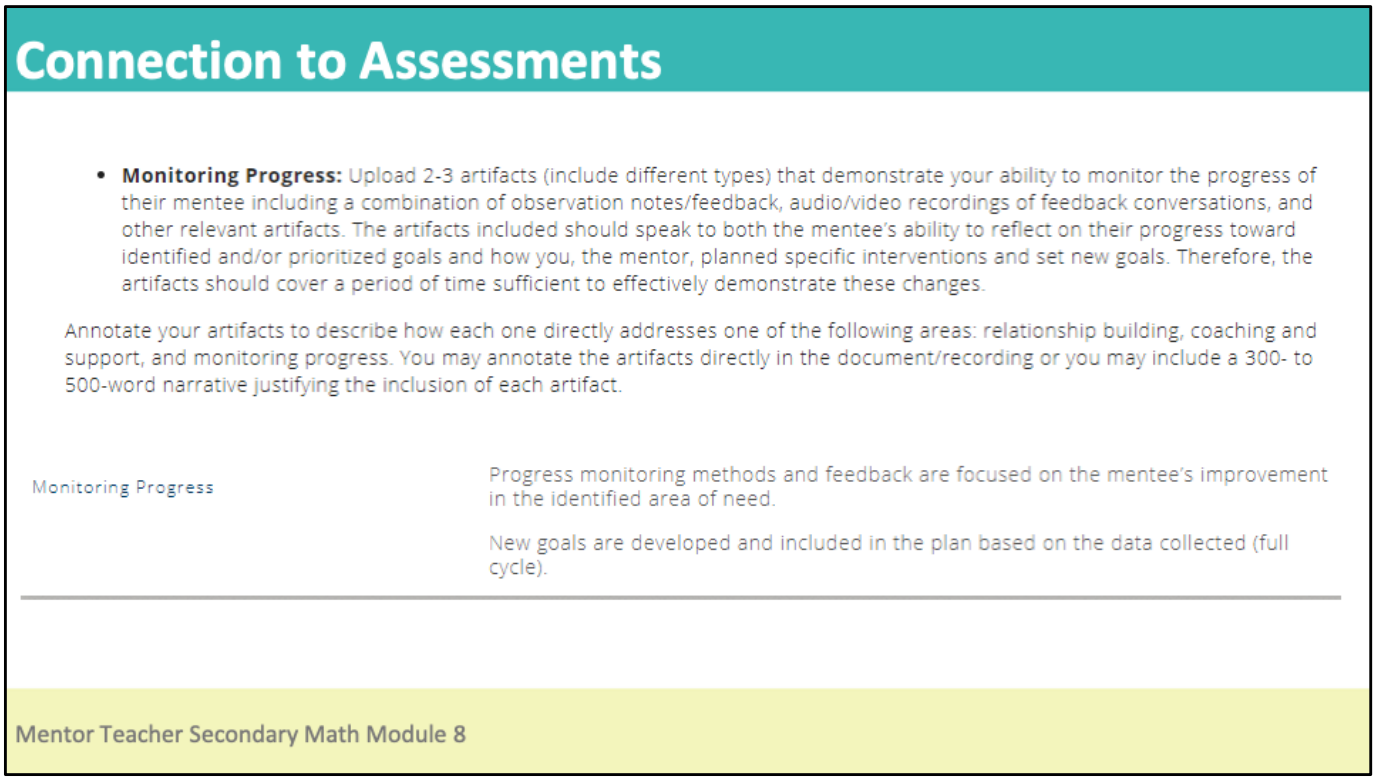
Facilitator does: After 3-5 minutes, **animate the slide** to reveal the discussion questions. Have participants discuss with a shoulder partner the questions on the screen regarding scenario A. Share out with the whole group any key findings. **Animate the slide.** So in this scenario the mentor and mentee determined that they needed to continue working on the same goal, which means the mentor would begin working on a new coaching plan and starting the cycle over again.



Duration: 15 minutes

Facilitator says: Now it is your turn to practice on your own. Examine the additional data as well as any of the previous data we've already looked in regards to scenario B. Complete the Set New Goals template. The blank template can be found on pages 24-27 of your handout. We will give you about 10-12 minutes to work on this independently. We will let you know when it is time to get with a partner and share.

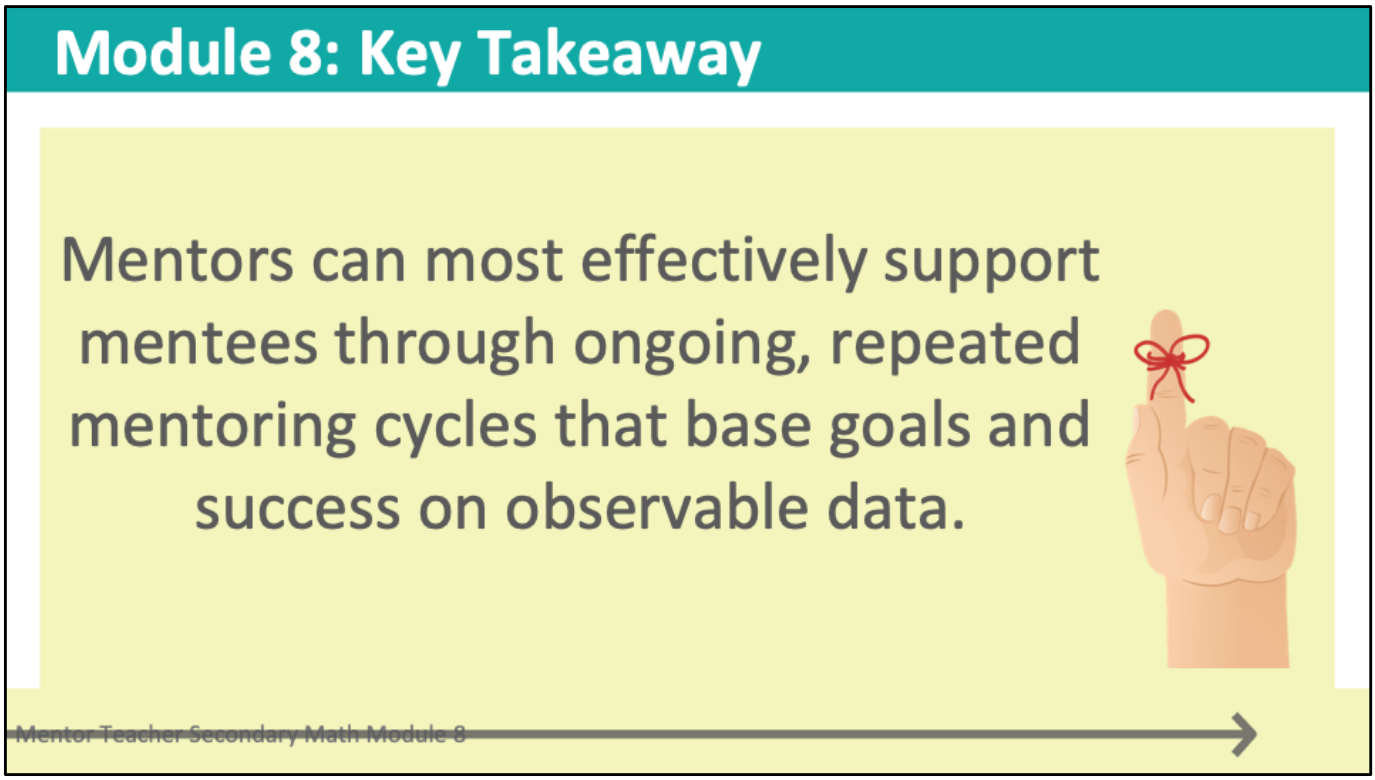
Facilitator does: Monitor the time as participants work on the assignment. After about 5 minutes, signal to the group to partner up with someone at their table and share their completed template. They may add any additional ideas from their partners to their own templates. Call on a few participants to share what their next steps would be with this mentee and why. Does their decision result in writing another coaching plan or what are the next steps?



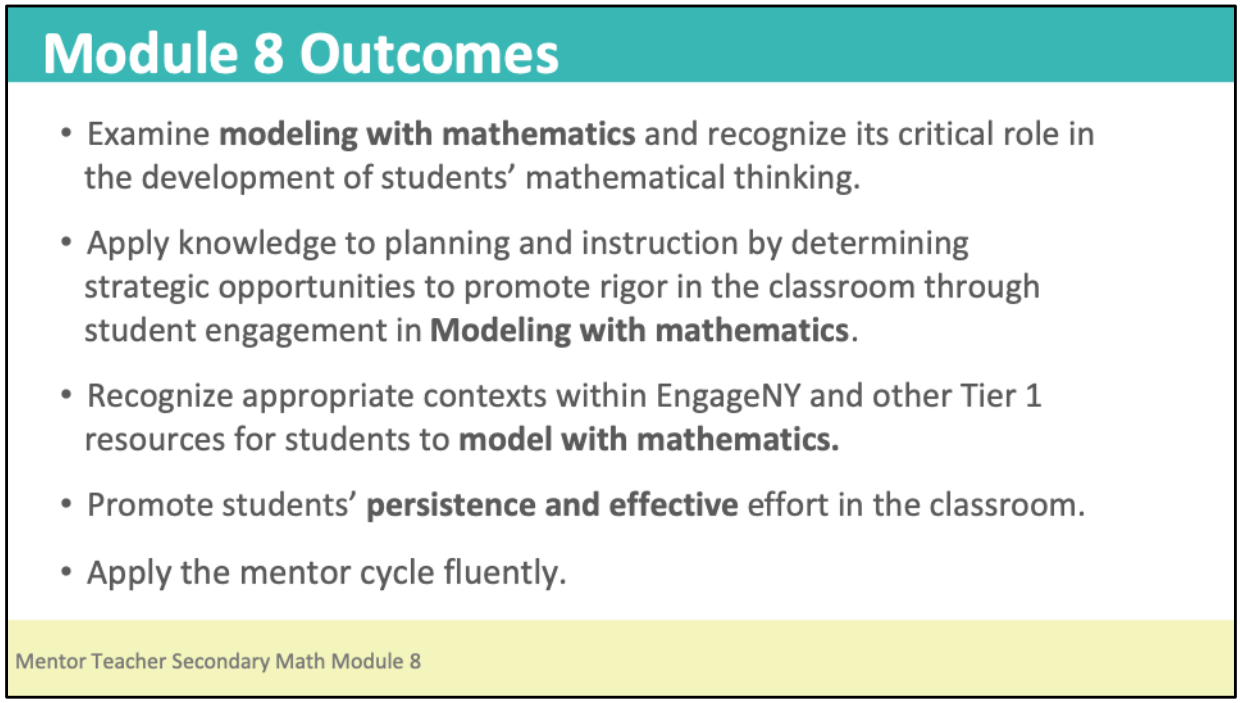
Duration: 3 minutes

Facilitator says: Under the implement section of the mentoring assessments, it asks you to upload 2-3 artifacts (different types) that demonstrate your ability to monitor the progress of your mentee. This could include additional observations/feedback notes, video of your check in conversation where you are determining next steps, student data that shows the growth or lack of toward the goal. The Set New Goals template could also serve as an artifact.

Facilitator does: Ask if there are any questions about this part of the assessment and answer any questions to the best of your ability.

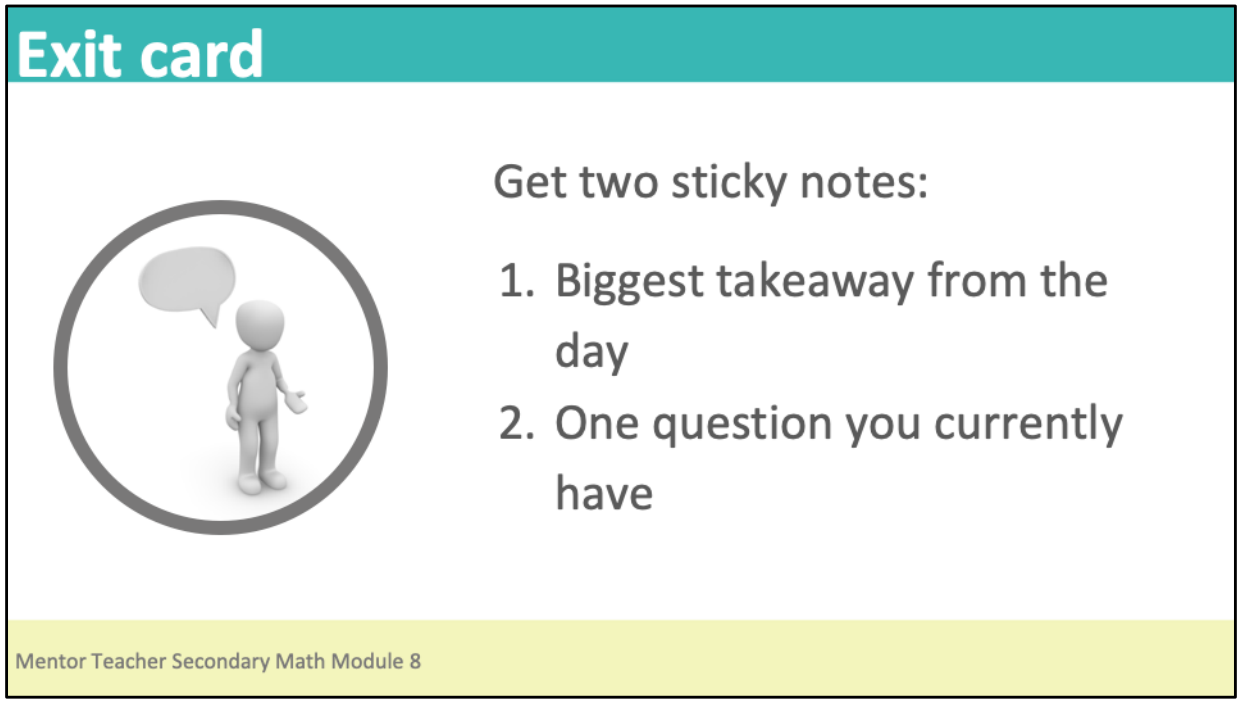


- **Duration**: 1 minute
- **Facilitator says**: As we wrap up our day together, remember...
- **Facilitator does:** Read slide



- **Duration:** 1 minute

- **Facilitator says:** Congratulations - today we accomplished these outcomes!



- **Duration**: 4 minutes

- **Facilitator says**: Before we head out for the day, everyone please take out two sticky notes. Label your first sticky note #1 and write down 1 big takeaway you have from today's learning. Label your second sticky note #2 and write down 1 question you currently have as we head out for the day. Please bring your sticky notes up to the facilitators before you head out.
- When you arrive tomorrow for module 9, please sit with your learning teams again. Every day, please bring all of your mentor teacher course materials with you, especially because we will be giving you time every day to work on your assessments.

- **Note to facilitators:** After participants leave for the day, work together as a facilitator pair to review the takeaways and questions on the sticky notes.
- Prioritize which takeaways to share: which takeaways did many people say? Which takeaways are particularly insightful and will move mentor thinking forward?
- Prioritize which questions to share and answer: which questions will NOT be

answered tomorrow and are necessary for the mentors to understand their role, the mentor cycle, and the mentor program of modules and assessments?

- If there are questions you don't know the answer to, email Tom Manning to see if you can get an answer that you can share.