

Engagement and Achievement through Computational Thinking (ENACT) Coaching Session 4

Goals for this session

- Share reflections on computational thinking (CT)-integrated lessons and collaboratively brainstorm solutions to challenges.
- Identify opportunities to connect lessons to students' lives.
- Practice using the ENACT observation tool to reflect on lesson videos and begin choosing areas for feedback.

Agenda for today

- Group reflection on CT-integrated lessons
- Reflect on students' backgrounds
- Explore the ENACT observation tool
- Close and next steps

Group reflection on CT-integrated lessons

Reflect on your CT-integrated lessons

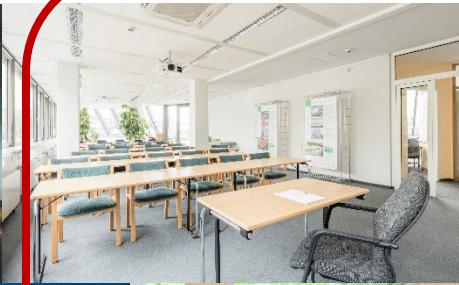
- What has gone well when integrating CT strategies and student-focused practices into your math teaching?
- What challenges have you faced when teaching a CT-integrated lesson, and what solutions have you attempted to address these challenges?
- What is one teaching practice or CT strategy that you want to try in a future math lesson?



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Reflect on students' backgrounds

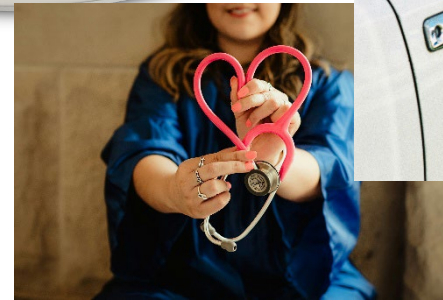
In addition to a student's background, environment, and family, the larger social context can play a role in engagement, accessing texts, and learning in the classroom.



- Relationship with teachers, peers, and other adults in school
- Classroom environment
- School environment



- Home
- Family
- Neighborhood



- Broader social structures
- School district
- Legal system
- Health care system
- Others?

Reflect on your practice so far



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- Which specific student-focused practices did you identify in Group Session 1 to connect with students of different profiles?
- Share how your students responded.

Reflect on your practice: Brainstorm



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- Share two new ideas for making your lessons student-focused to try between now and the next coaching session.

Explore the ENACT observation tool

The ENACT observation tool

Our goal with the ENACT project was to support teachers in integrating **student-focused practices** and **CT** into their mathematics teaching.

We developed the ENACT observation tool to support reflection on how teachers use CT strategies and student-focused practices as they watch classroom videos or receive feedback from coaches.

It is a tool for *reflection*, not evaluation!



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Student-focused practice dimensions

Connecting to student experiences

“Can anyone share an example of when they have had to share something with a group of friends?”



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Sharing multiple representations and approaches

“I like how you approached that problem. Did anyone else use a different strategy?”

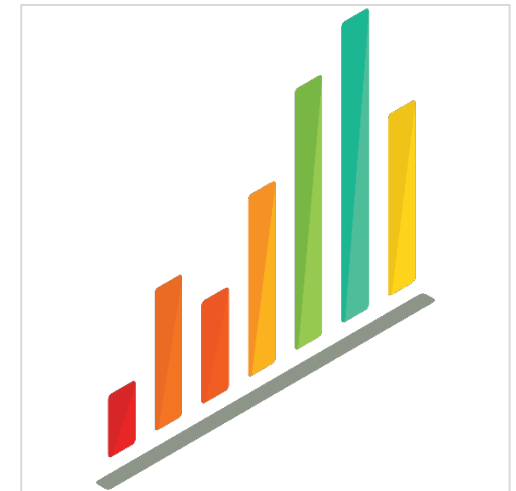


Illustration by [Round Icons](#) on [Unsplash](#)

Student-focused practice dimensions

Acknowledging and valuing student thinking and voice

“Tamara said that Who agrees with Tamara? Can you add on to what she said?”

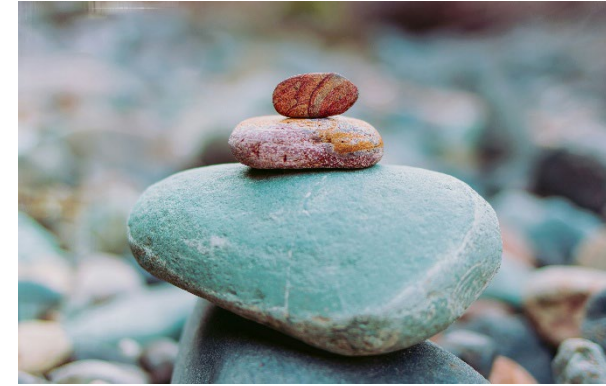


Photo by [Hannah Busing](#) on [Unsplash](#)

Promoting collaboration and community

“Make sure you’re talking to your table partners about the problem. See if you can come up with a solution together.”



Photo by [Hannah Busing](#) on [Unsplash](#)

CT dimensions

Framing the lesson around CT

“We’re going to be working on a complex problem today, so we’ll use decomposition to break it into parts.”

Prompting students to use CT

“Did you try looking for patterns to help you solve this problem?”

Highlighting when students use CT

“I like how you made a drawing to show the important information in the problem.”



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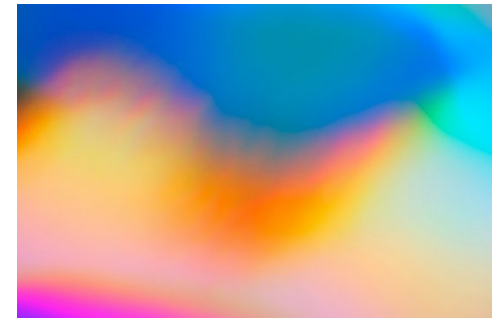


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Using the ENACT observation tool to reflect on your video

After you choose your dimensions, your coach will send the observation tool to use as you reflect on your video. (This is a sample for one dimension.)

The first step is to watch your video and take notes about how you see the dimension in the space provided.

Domain A: Student-Focused Practices			
Dimension	A1. Connects to student experiences and identities		
Definition	The teacher provides opportunities for students to make connections between the problems they are solving and a different context or content that the students might be more familiar with.		
Quality Rating	<input type="checkbox"/> Low (1 point)	<input type="checkbox"/> Medium (2 point)	<input type="checkbox"/> High (3 points)
<input type="checkbox"/> Not applicable (0 points)	<ul style="list-style-type: none"> Makes an explicit connection between the lesson and something students' may have experienced in their lives outside of class. <i>"Some of you may have used unit rates when buying things at the grocery store."</i> 	<ul style="list-style-type: none"> Prompts one student to share an experience that they see as connected to the lesson. AND Makes an explicit connection between the lesson and an experience shared by one student. <i>"Can someone give me an example where they have used a unit rate in their everyday life?"</i> 	<ul style="list-style-type: none"> Prompts more than one student to share experiences that they see as connected to the lesson. AND Makes an explicit connection between the lesson and experiences shared by more than one student. <i>"Does anyone else have a different example of how unit rate is used in your everyday life?"</i>
Frequency Rating	<input type="checkbox"/> Once (1 point)	<input type="checkbox"/> Limited (2 points)	<input type="checkbox"/> Consistently (3 point)
<input type="checkbox"/> Did not occur (0 points)	<ul style="list-style-type: none"> Occurs exactly one time during the lesson. 	<ul style="list-style-type: none"> Occurs exactly two to three times during the <u>lesson</u>. OR Occurs more than three times but is clustered only during one part of the lesson and not revisited. 	<ul style="list-style-type: none"> Occurs more than three times throughout the course of the lesson.
Notes/Evidence (provide at least one note for each observed behavior)			

Using the ENACT observation tool to reflect on your video

The next step is to use your notes to decide how often you saw yourself using the dimension.

For example, how many times did you connect the math lesson to students' experiences outside the classroom? Mark the appropriate box.

Domain A: Student-Focused Practices			
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Notes/Evidence (provide at least one note for each observed behavior)			

Using the ENACT observation tool to reflect on your video

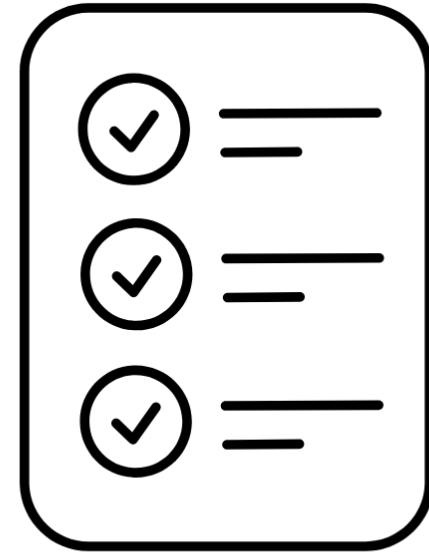
The last step is to use your notes and the reference sheet to decide the level of quality you saw in your video.

Once you choose your level of quality, mark the appropriate box.

Domain A: Student-Focused Practices			
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Notes/Evidence (provide at least one note for each observed behavior)			

Plan for Coaching Session 5

- You will choose **two dimensions** from the observation tool that you'd like to focus on.
- You will record a math lesson and share it with your coach.
- You and your coach will each use the observation tool to rate the video on your two chosen dimensions. (We'll practice this a little today!)
- You'll compare notes and identify new things to try.
- Your coach will visit, observe a lesson, and provide further feedback.



Created by wira wianda
from Noun Project

Let's practice using the ENACT observation tool!

Choosing two focus dimensions

Domain A: Student-Focused Practices				
Dimension	A1. Connect to student experiences	A2. Support students by allowing multiple representations and approaches	A3. Value student thinking and voice	A4. Promote collaboration and community
Definition	The teacher provides opportunities for students to make connections between the problems they are solving and a different context or content that the students might be more familiar with.	The teacher shares how problems within a lesson can be represented or solved in multiple ways.	The teacher provides opportunities for students to share their work and voice their thinking, and incorporates these into their teaching of the lesson.	The teacher provides students with the opportunity to work together and build on one another's knowledge and experiences, and to share their work with the class.

Choosing two focus dimensions

Domain B: CT			
Dimension	B1. Frame the lesson around CT	B2. Prompt students to use CT	B3. Highlight when students use CT
Definition	The teacher sets up the activity in a way that provides students with an opportunity to engage in CT.	The teacher encourages students as they work on a problem (verbally or through resources) to use an approach that incorporates CT.	The teacher points out when and how students were using CT problem-solving strategies to complete their work.

Let's practice!



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- We'll watch a brief segment of [one of the ENACT coaching videos](#).
- As you watch, take notes about where you see the coach *connect to student experiences*.
- Afterward, we'll share out what we noticed and how we would rate this lesson in terms of frequency and quality.

Group discussion

What questions do you have about using the observation tool?



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Close and next steps

Next steps

Before your coach's next in-person visit:

- **Now:** Share which two dimensions you'd like feedback on with your coach.
- **If you haven't already, before you meet with your coach in person:** Record a CT-integrated lesson and share the video with your coach.
- **Before your next in-person session:** Watch the video with attention to your chosen feedback areas, and use the observation tool to rate the lesson; your coach will do the same.
- **During your in-person visit:** Meet with your coach to compare notes and decide what to try next.

Questions

What lingering questions do you have?



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