

WELCOME!

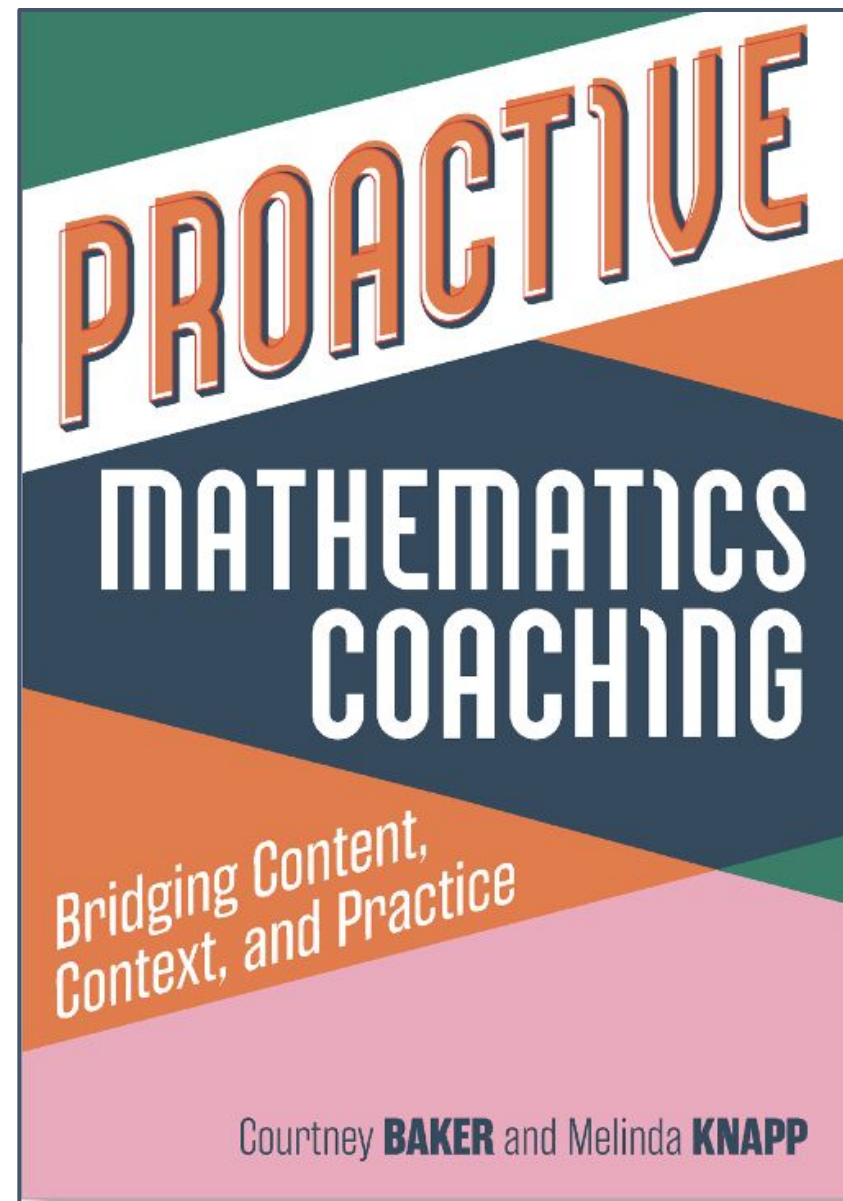
NCTM Book Study

Proactive Mathematics Coaching

Coteaching

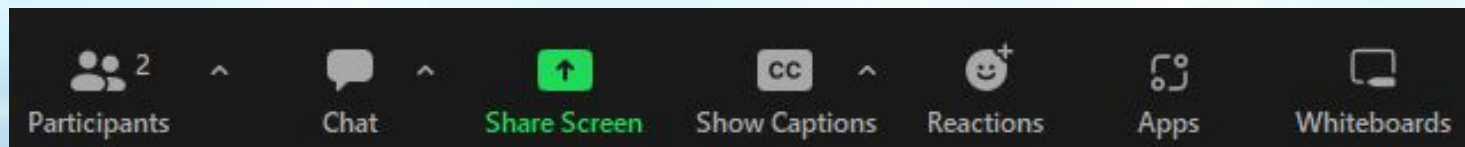
Courtney Baker, PhD

Melinda Knapp, PhD



Welcome!

- **Please keep your microphone muted!**
- **Chat box:** Comment, chat with other participants, and ask questions.
- **Video:** Be mindful that everyone can see your video unless you choose to stop sharing.
- **Show Captions:** Use to hide or view subtitles.



Welcome!

- A recording will be available to registered attendees for 30 days after the session.
- We will provide a certificate of participation within a few days of the session.
- Follow us on Twitter @NCTM and share your thoughts about today's session using the hashtag #NCTMPD.

Code of Conduct

NCTM is dedicated to providing a positive and harassment-free learning experience for everyone. By attending this webinar you agree to adhere to NCTM's Code of Conduct policies - www.nctm.org/policies

NCTM reserves the right to dismiss any participant from events whose conduct is inconsistent with our policies.

Proactive Mathematics Coaching

Today's Agenda

Part I: Welcome & Overview

Part II: Coteaching as a Mathematics Coaching Practice

Part III: Exploring The Case of Michelle

Part I: Welcome & Overview

Introductions

Mathematics Coaches At Heart

Courtney Baker, PhD



cbaker@gmu.edu

Melinda Knapp, PhD



melinda.knapp@osucascades.edu

Introductions

Your Turn

Please Share

- Name
- Position
- School(s)
- Coaching/Leadership Experience

What do you hope to learn from today's session?



Mathematics Leadership

Many Part- & Full-Time Positions

Check
Out the
Preface!
(page v)

Some Possibilities

- Classroom Teacher
- Math Lead
- Department Chair
- Interventionist
- Mathematics Specialist
- Instructional Coach
- District Supervisor

Understanding Our Influence

Questions At The Core of Our Practice

Is what I am doing
actually effective? And
who is it effective for?

Understanding Our Influence

Developing A Proactive Practice



Our Book Study Goals

Connecting Research & Practice

- Explore a specific MCP through example cases that provide broad exposure to instructional practices and leadership approaches.
- Analyze cases that recognize a range of coaching contexts, focus on math content, and empower school communities to surmount obstacles.
- Gain insights into what it takes to plan professional learning and/or coaching interactions that advance leadership agendas for both long- and short-term goals.

Our Book Study Goals

Connecting Research & Practice

- Bring transparency to decision making and illustrate how the use of the PCF advances the vision of teaching and learning mathematics described within the Catalyzing Change series.
- Engage in discussions (network and collaborate) with peers to share common problems of practice, evaluate contexts, define a content focus, establish goals, select practices, and engage in debriefs that can inform future actions.

Maximize Your Experience

Engage in Multiple Formats

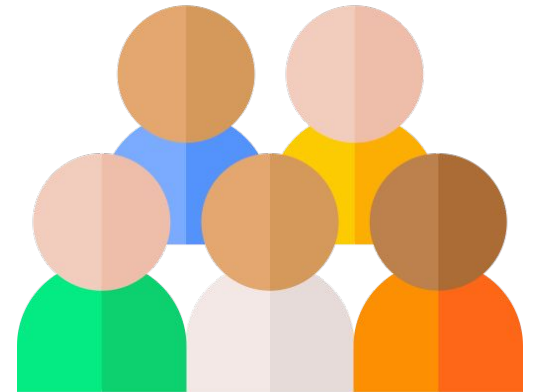
Chat Box



Jamboards



Breakout Rooms



Maximize Your Experience

Workshop Norms to (Re)Frame Leadership

**Assume
Positive
Intent**

“Whatever anybody says or does, assume positive intent. You will be amazed at how your whole approach to a person or problem becomes very different.”

- Indra Nooyi

Maximize Your Experience

Workshop Norms to (Re)Frame Leadership

Learn
From &
With Each
Other



Maximize Your Experience

Workshop Norms to (Re)Frame Leadership

Maintain An
Asset-Based
Approach



Hesitant

vs.



Resistant

Maximize Your Experience

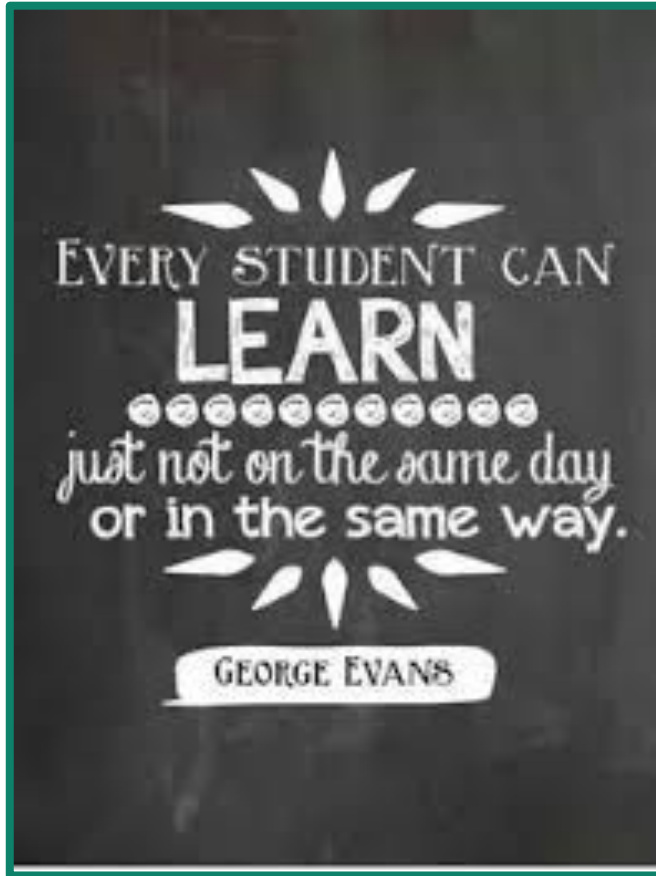
Workshop Norms to (Re)Frame Leadership

Value
Others'
Experiences



Beliefs on Teaching Mathematics

We Teach All Students



Beliefs on Coaching Mathematics

We Coach All School Community Stakeholders

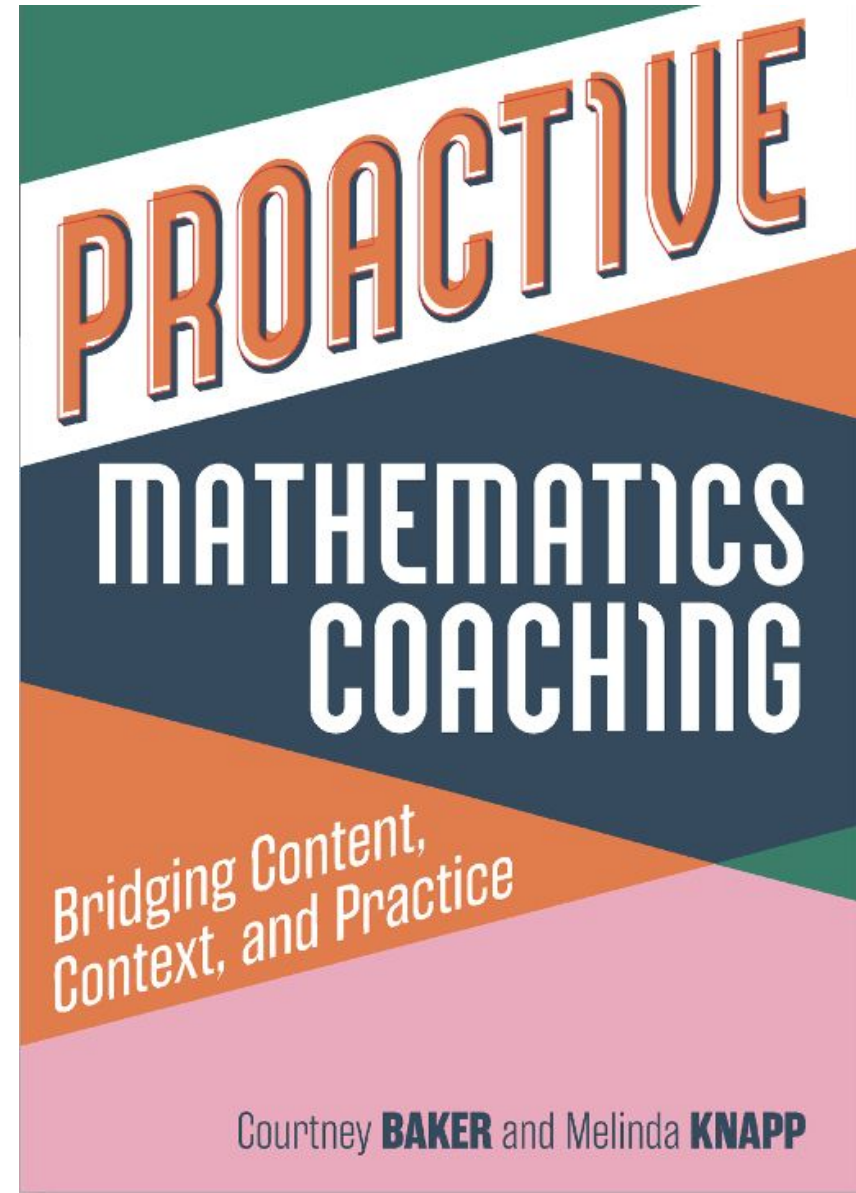
A COACH
TEACHES
MOTIVATES
& INSPIRES
TO ACHIEVE THE
IMPOSSIBLE

US

Book Orientation

A Brief Overview

Grab your
book!



Part II: Coteaching As A Mathematics Coaching Practice (MCP)

Coteaching As A Coaching Practice

Connecting To Your Practice

What is your familiarity with co-teaching?

- I have never heard of coteaching
- I have read about coteaching
- I have tried coteaching a few times
- I regularly use coteaching



Coteaching As A Coaching Practice

Defining the Practice

Mathematics Coaching Practice: Coteach

Effective coaching of mathematics involves supporting teachers with delivery of instruction in the classroom. The coach and teacher work collaboratively to purposefully plan interactions to maximize student learning and enact particular practices to improve instruction.

Coteaching As A Coaching Practice

Connecting to Research

- Coteaching is complimentary of different coaching models
 - ◆ Impact Cycle (Knight, 2018)
 - ◆ Content-Coaching (West & Staub, 2003)
- Coteaching should be grounded in partnership and practice
- Participants should have a choice of focus while engaging in goal-setting and application
- One essential component of coaching is the establishment of trusted relationships (Strieker et al., 2004)

Coteaching As A Coaching Practice

Connecting to Research

Coteaching presents an opportunity for coaches and teacher leaders to learn from and with teachers.

Coteaching As A Coaching Practice

Connecting To Practice



What insights or questions do you have about coteaching?

- From reading Chapter 5?
- From your own experiences?



Co-teaching As A Coaching Practice

Coteaching Variations (Cook & Friend, 1995)

Check
Out
More4U

- One Teach, One Observe
- One Teach, One Assist
- Station Teaching
- Parallel Teaching
- Supplemental Teaching
- Alternative/Differentiated Teaching
- Team Teaching

www.nctm.org/more4u

→ Enter your Access Code on the Title Page

more4U

www.nctm.org/more4u

Access code:

Your Code Here

Coteaching As A Coaching Practice

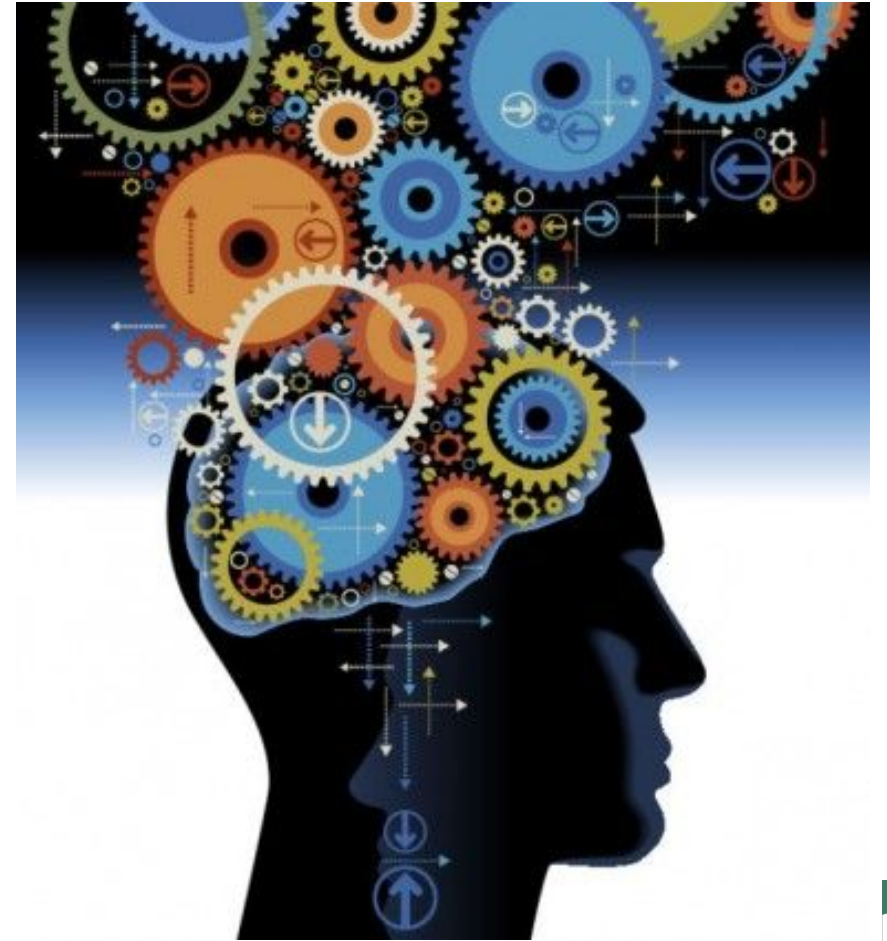
Connecting To Practice



How have you used coteaching in your practice?

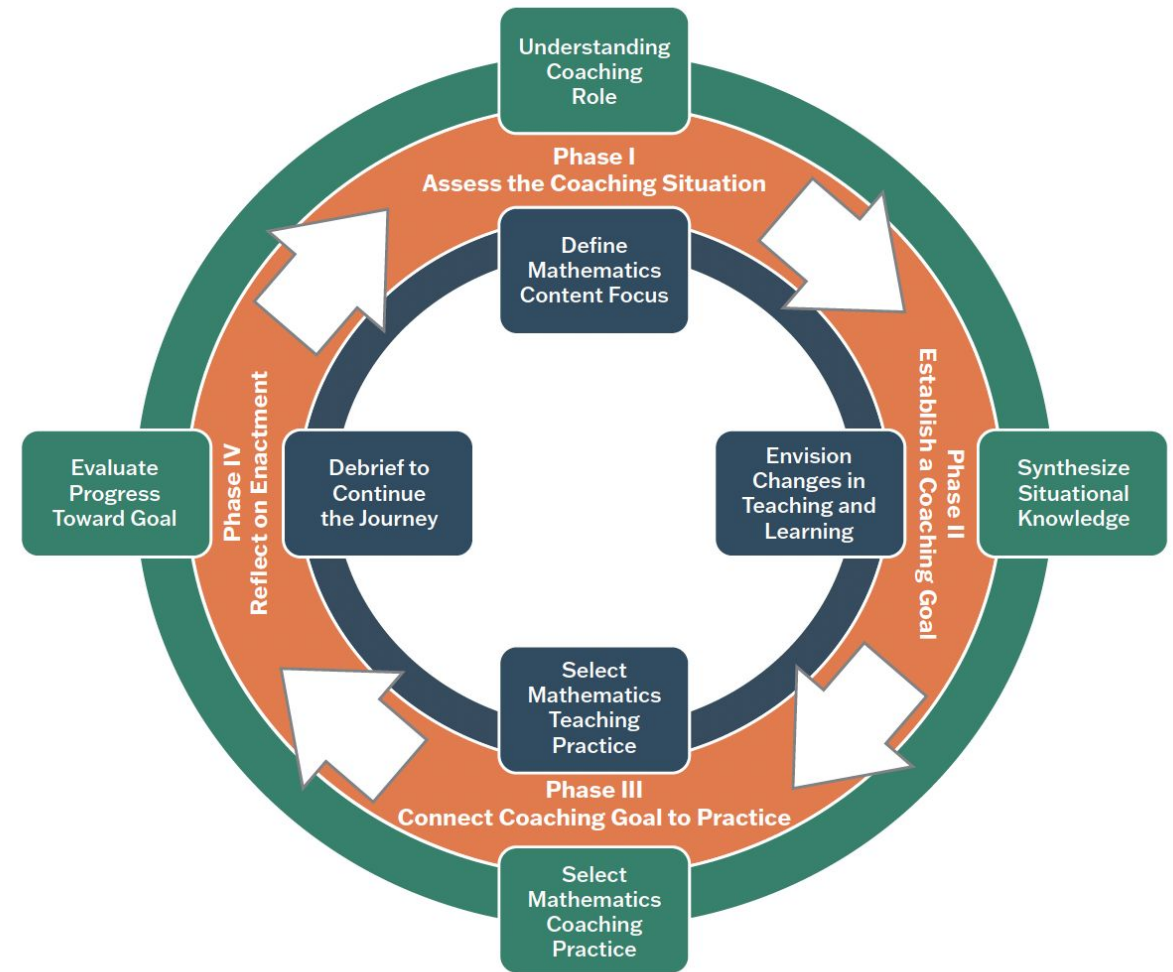
What variations have you used or adapted?

What variations are you thinking about (trying)?



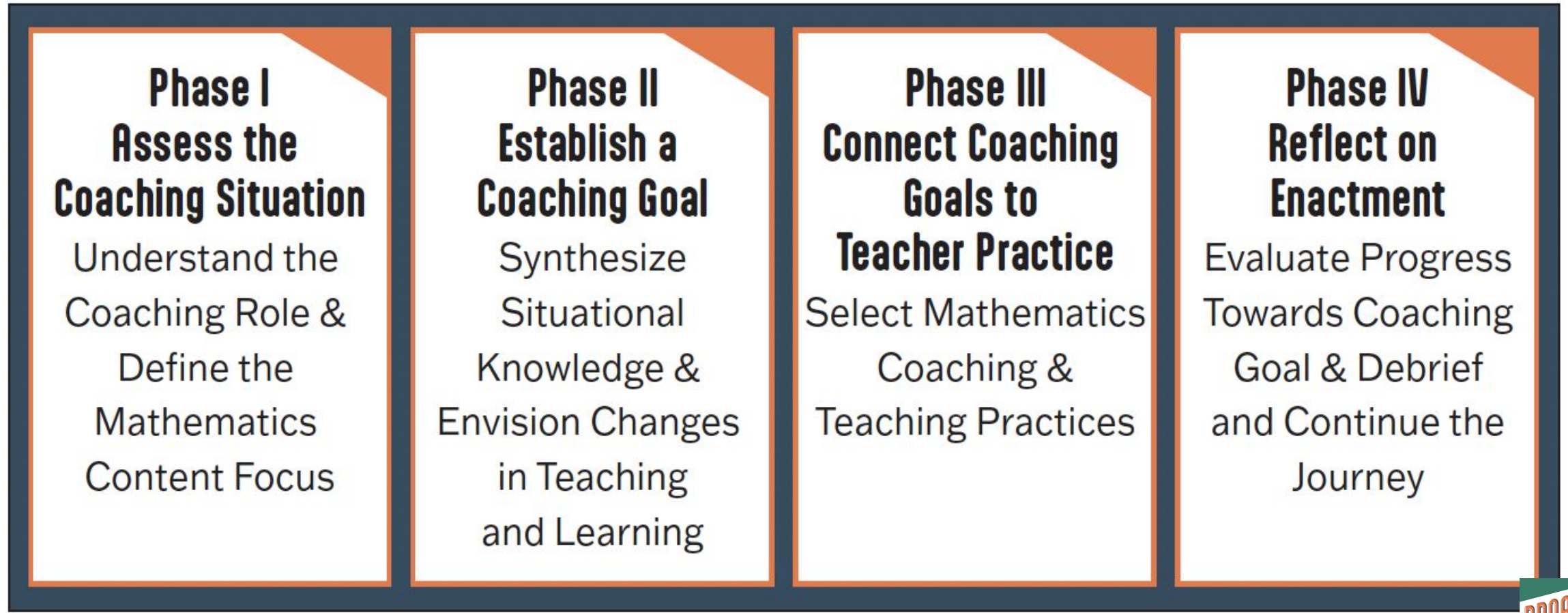
The Proactive Coaching Framework

Intentionally
Balancing Content
and Context to Make
Instructional Shifts



Coteaching As A Coaching Practice

Phases I-IV



Coteaching As A Coaching Practice

Phase I

Phase I
Assess the Coaching Situation
Understand the Coaching Role &
Define the Mathematics Content Focus

Appendix A. Proactive Coaching Framework Guiding Questions

Check Out
Pages
195-196

Phase I Assess the Coaching Situation	Context Understand the Coaching Role	<ul style="list-style-type: none"> • What are the needs of your audience? • Are the stakeholders you are supporting individuals, teams or larger communities (e.g., school, district)? • What is the state of your relationship with each stakeholder? • What aspects of the school culture or strategic vision are essential to your thinking? • What programs or initiatives have been implemented or abandoned recently? • What is the level of receptiveness to coaching?
	Content Define the Mathematics Content Focus	<ul style="list-style-type: none"> • What is the mathematics content? • What is your audience's experience with this content? • What is the current state of your audience's confidence? • What is the current state of student thinking? • What instructional approaches have been tried? • What resources will support growth in teaching and learning? • What representations will support the development of conceptual understanding? • What representations will promote procedural fluency?
Phase II Establish A Coaching Goal	Context Synthesize Situational Knowledge	<ul style="list-style-type: none"> • What connections can you make between the needs of your audience, the mathematics content, and the goals for the team/school/district?
	Content Envision Changes in Teaching and Learning	<ul style="list-style-type: none"> • What are reasonable and realistic expectations for your audience? • How will you measure your audience's progress?

(continued)

Coteaching As Coaching Practice

Necessary Groundwork



Coteaching As A Coaching Practice

Proactive Coaching Framework Questions

Check
Out
Chapter 3



Share Your Thinking!

If you were to implement the **Mathematics Coaching Practice coteaching**, how would you answer these questions?

Phase I: Context

- What aspects of the school culture or strategic vision are essential to your thinking?
- What is the level of receptiveness to coaching [**coteaching**]?

Supporting Intentional Coaching Interactions

Balancing Coaching Context & Math Content



Coteaching As A Coaching Practice

Proactive Coaching Framework Questions

Check
Out
Chapter 3



Share Your Thinking!

If you were to implement the **Mathematics Coaching Practice coteaching**, how would you answer these questions?

Phase I: Content

- What is your audience's experience with this content?
- What is the current state of your audience's confidence?

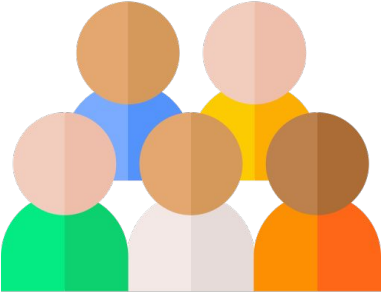
Part III: Exploring the Case of Michelle

Coteaching As A Coaching Practice

Pause & Ponder: Breakout Session



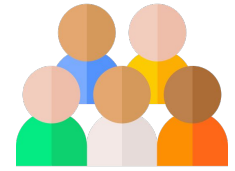
Breakout Rooms



Reflect on the questions on the next slide which you can also find on the Jamboard. If you want to explicitly connect to your own practice, change the name “Michelle” to yours.

Coteaching As A Coaching Practice

Pause & Ponder: Breakout Session



- What obstacles does Michelle face when planning her upcoming coaching interaction with Mrs. Lee? How does intentional reflection with the PCF guiding questions help Michelle to make decisions that will move her coaching practice forward?
- While planning, Michelle draws upon research-informed resources from multiple NCTM publications. What other resources from professional organizations might leaders draw from?
- Michelle faces time constraints when attempting to implement a full coaching cycle like she has in the past. What modifications does Michelle make? In what ways do these modifications honor the teacher's request and still enable her to learn as a result of the coaching cycle?
- Consider the Phase IV context and content questions to anticipate how the after-school meeting between Michelle and Mrs. Lee might go. What might the result of this meeting be? What next steps could Michelle take?
- What considerations does Michelle make when determining which MCP to engage in?

Coteaching As A Coaching Practice

Reflect, Share & Gain Feedback



- What did you notice?
- What did you wonder?
- **What new ideas did you have or hear?**
- How might the PCF support your practice?



Next Time [9/27]

Modeling Instruction--Chapter 6

Check Out
Chapter 6
Pages 57-74

The Case

In this case you will meet Kamala, a high school mathematics teacher working to reframe deficit views of students.

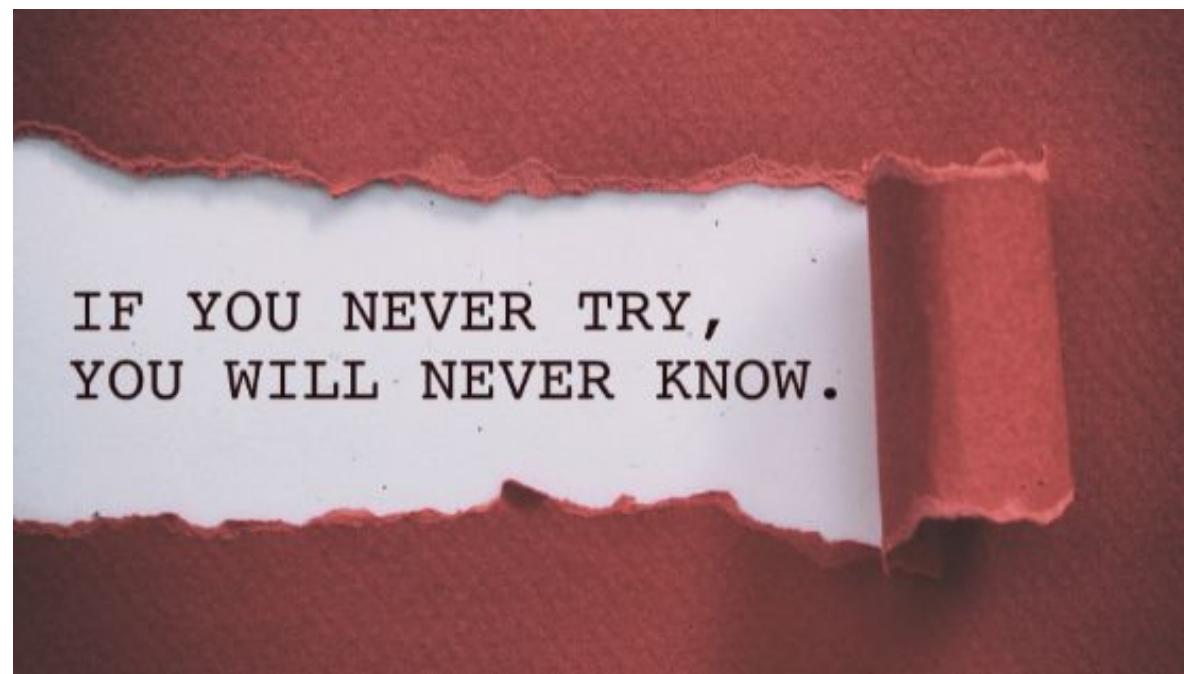
Case Summary			People		Practices		Context In Brief	
Chapter	PCF Phases Emphasized	Big Idea	Mathematics Leader and Role	Involved School Stakeholders	Mathematics Coaching Practice	Mathematics Teaching Practice	Grade-Level and Grade Band	Content Topic
5	Phase II Phase III	Balancing two roles while implementing a modified coaching cycle	<i>Michelle</i> Part-time Grade 8 classroom teacher;	<i>Mrs. Lee</i> Grade 8 teacher	Coteaching	Facilitate meaningful mathematical discourse	Middle school (Grade 8)	Counting cubes task; linear growth model
6	Phase I Phase II Phase III	A high school teacher working to reframe deficit views of students	<i>Kamala</i> High school mathematics teacher	<i>Mr. Singh</i> School-based mathematics coach	Modeling instruction	Support productive struggle in learning mathematics	High school (Grades 9–12)	A mathematics task to promote productive struggle and launch the school year
7	Phase I Phase II Phase III Phase IV	Creating opportunities for students to work with administrators to dismantle ability grouping	<i>Laila</i> School-based mathematics coach	<i>Ms. Martin</i> School principal	Examining student work	Implement tasks that promote mathematical reasoning and problem-solving	Elementary (Grades K–5)	Mathematics concepts and computation

Next Time

Consider Implementing the PCF

What might you try?

- 1-2 questions?
- A specific phase?
- The entire PCF?



There will be space next session to share!



2023
**ANNUAL MEETING
& EXPOSITION**
Oct. 25-28, Washington, DC



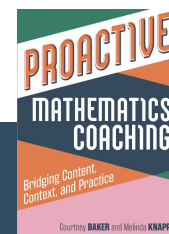
*Creating Spaces
For Change
Through Community:
It Starts With You*

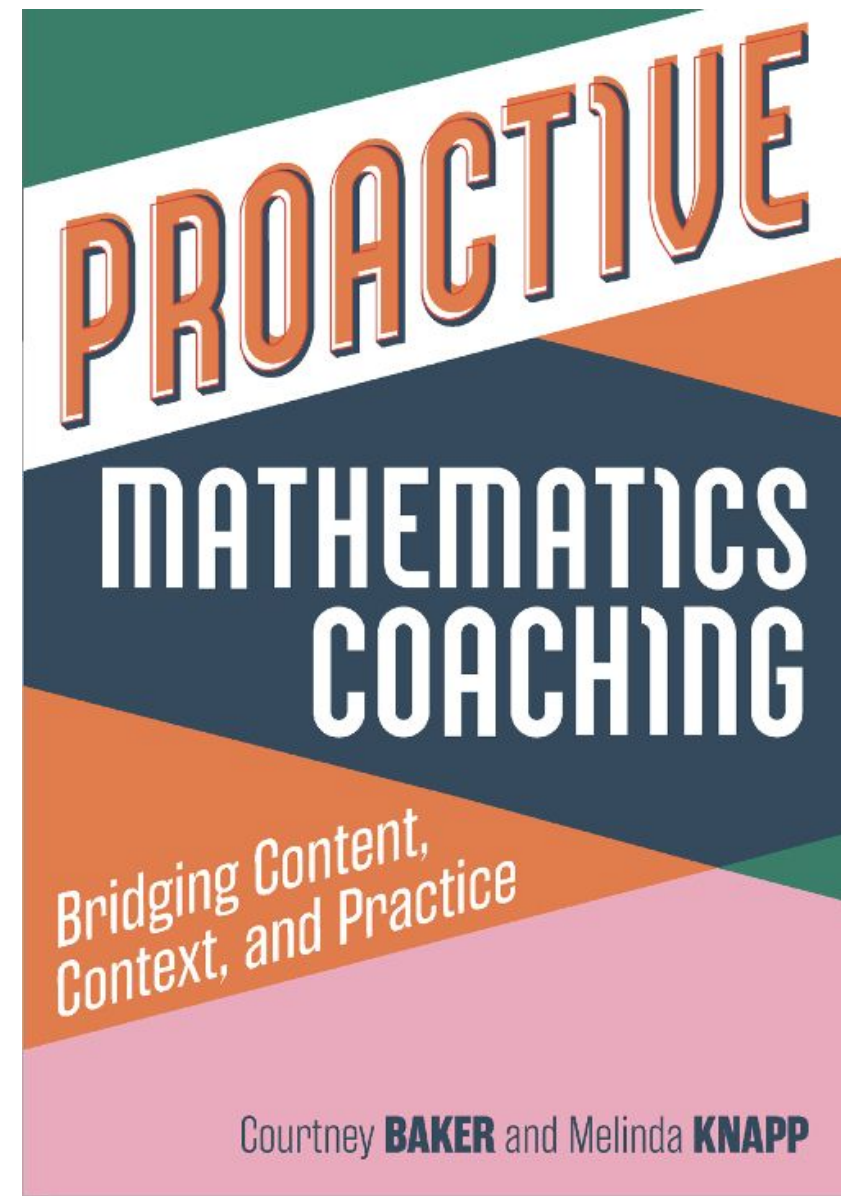
Don't miss out on the premier
mathematics education event of the year

nctm.org/dc2023



The Proactive Coaching Framework: An NCTM Online Workshop Courtney Baker & Melinda Knapp





September 27th