

# We're Meeting to Coach About Math, Why Aren't We Making Progress?

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# Background

- Qualitative study
- Elementary mathematics coaches
  - Large urban district
  - Extensive training on mathematical content knowledge and mathematical pedagogical knowledge
  - Extensive training on instructional and content focused coaching
  - Targeted placements in elementary schools requesting coaching supports
  - In years 1-3 of coaching roles

Why is it some coaching  
conversations feel really productive,  
and others do not?



<https://putnam-consulting.com/wp-content/uploads/photodune-7213088-baby-scratch-her-head-m.jpg>

What do we  
coach about?

Mathematical Goals

Mathematical Problem Design

Students' Mathematical Thinking

Other?



# What We Want Teachers To Do:

## Set Clear Mathematical Goals

- Find examples to make a mathematical point
- Link representations to underlying ideas
- Appraise/adapt content of textbooks

## Use Intentional Mathematical Problem Design

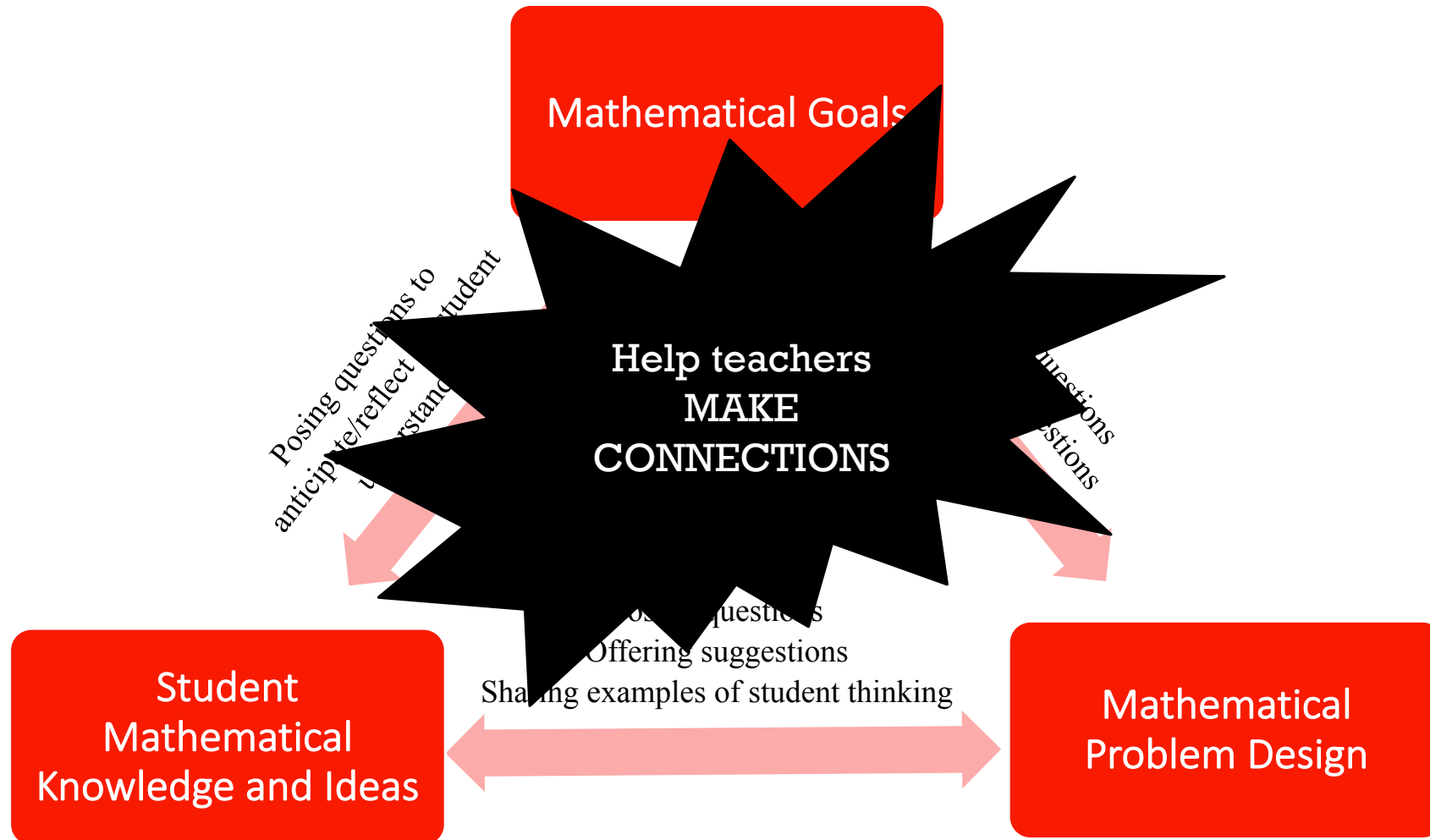
- Present mathematical ideas
- Pose productive questions
- Modify tasks

## Assess and Analyze Students' Mathematical Thinking

- Recognize what is involved in using a representation
- Evaluate plausibility of student claims
- Give/Evaluate mathematical explanations

( *Adapted from* Ball, Thames, Phelps, 2008)

# What Coaches Do To Help Them Get There: Coaching “Moves”



(Jakopovic, 2017)

# Professional Learning Focus Areas

What Coaches Do To  
Help Get Them There:  
Coaching Cycle Focus

Content  
Knowledge &  
Worthwhile  
Tasks

Engaging  
Students

Questioning &  
Discourse

Formative  
Assessment

Student Work  
Analysis

Differentiation

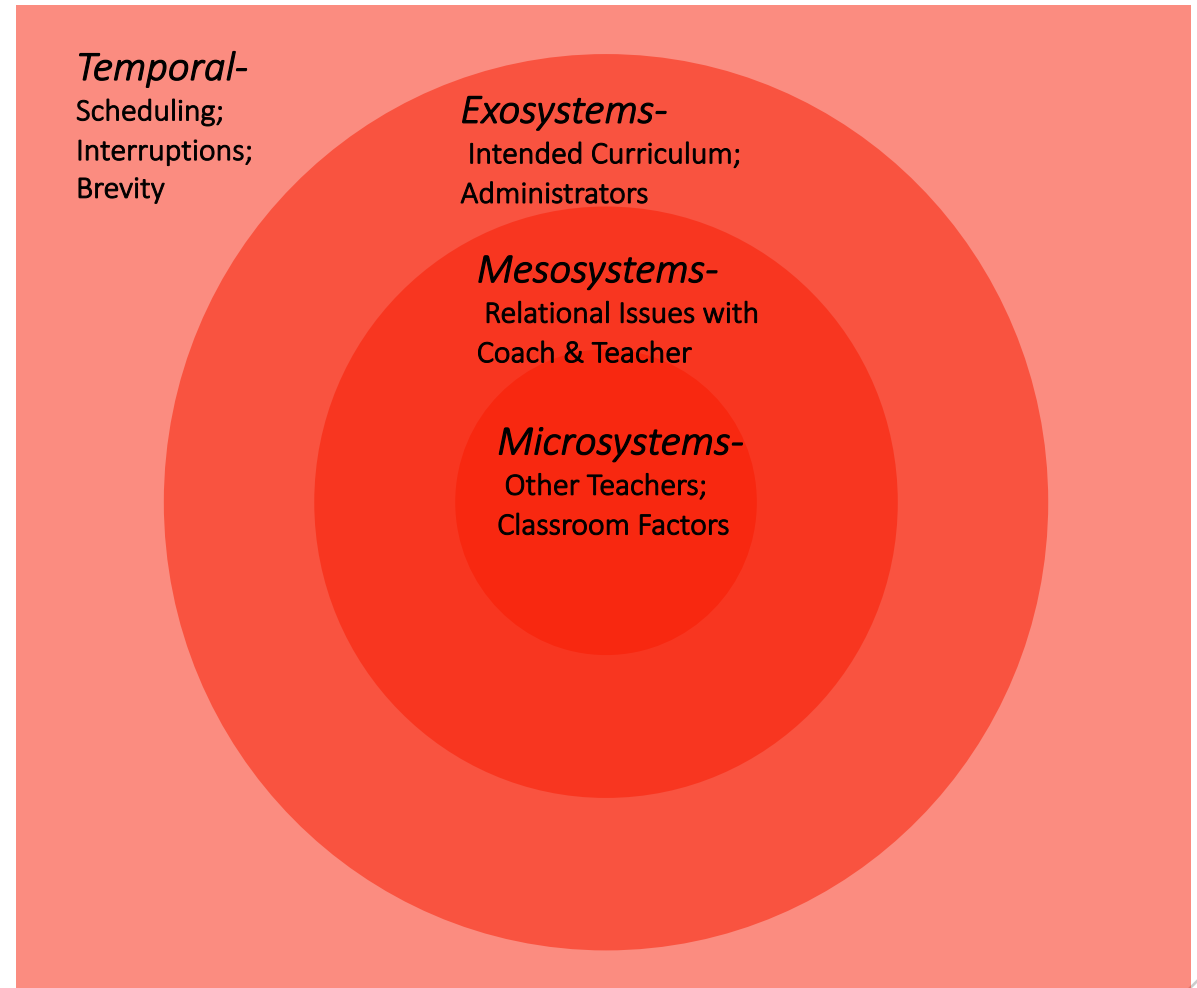
(McGatha, Bay-Williams, McCord Kobett, & Wray, 2018)

We know what the goal is, why is it that sometimes we can't seem to reach the destination?



Photo credit: pixabay.com

## Potential Contextual Factors That Can Influence Coaching Conversations with Teachers



(Jakopovic, 2017; *Adapted from* Smith, Hayes, & Lyons, 2016)



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So how do we mitigate factors and keep the conversation moving forward?

## Scenario 1:

The way we say it matters, so say what you mean and mean what you say.

## Read & Discuss:

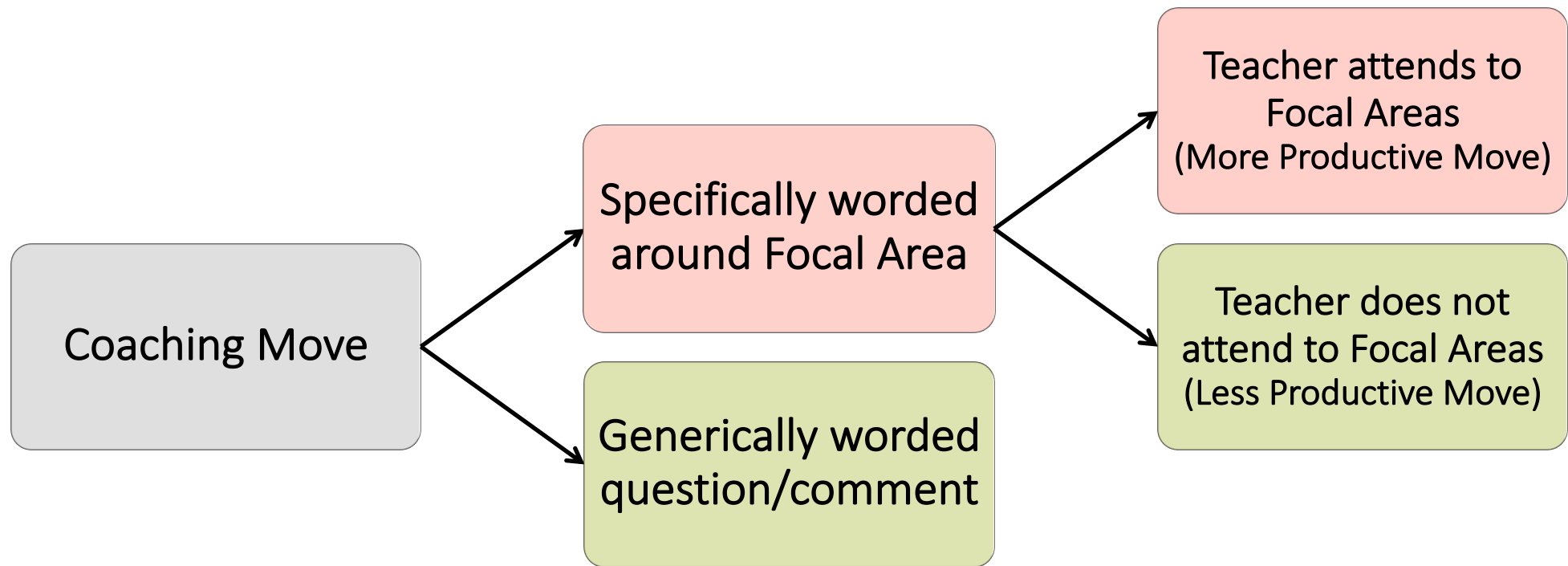
- What were the potential coaching pitfalls in this scenario?
- What focal area(s) might be worth diving into with the classroom teacher in this scenario?
- What could the coach say/do to better focus the conversation?



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Tip #1:

Enter the conversation with focus



## Scenario 2:

Tipping the conversational  
balance...

## Read & Discuss:

- What were the potential coaching pitfalls in this scenario?
- How might you restructure this conversation to engage the teacher?
- What focal area(s) might be accessible to this teacher as a starting point?

### Scenario 3:

Sticking to the script too tightly can  
derail the conversation.

## Read & Discuss:

- What were the potential coaching pitfalls in this scenario?
- How might you restructure this conversation to engage the teacher?
- What focal area(s) might help the teacher dig into the lesson more deeply?

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Tip #2:  
Be responsive

Talk Moves Aren't  
Just for the  
Classroom...Our  
Patterns of  
Conversation Matter

- **Active Listening**

- No interruptions, seeking to understand

- **Paraphrasing**

- Let the teacher talk more, restate the “big ideas”
- Keep it focused on the teacher, not you

- **Posing Questions**

- Pose questions using plurals
- Embed tentative language
- Use open ended questions to express your thinking
- Embed positive presuppositions

(McGatha, Bay-Williams, McCord Kobett, & Wray, 2018)

## Scenario 4:

"I only have ten minutes to talk today..."

## Read & Discuss:

- What does the coach do to engage the teacher productively in a limited amount of time?
- Which focal areas are addressed?
- What would you say/do differently if you were the coach?



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## Tip #3:

Be intentional in developing the teacher's ability to “notice”  
the focal areas on their own

There's no magic  
bullet, but the way  
we craft coaching  
conversations  
matters...



Photo credit: [pixabay.com](https://pixabay.com)

## The Take Aways

- Coaching moves are neither inherently productive or unproductive, it's how we use them.
  - How do we encourage two-way participation from reluctant teachers?
  - How can we develop “professional noticing” around mathematics focal areas in our teachers?
  - How do we maximize the time we have?

Thank you



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