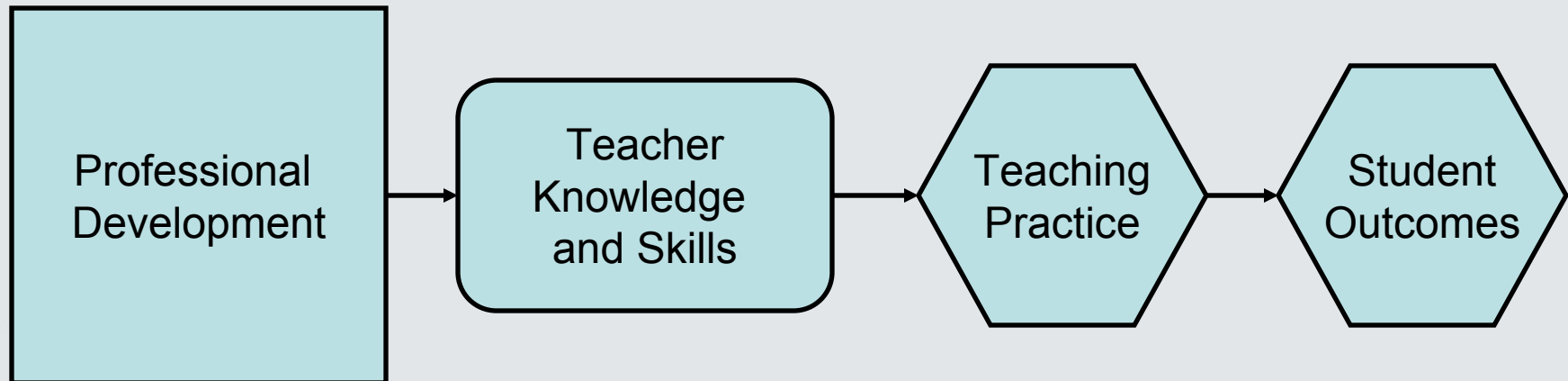


# Simplified Logic Model for Professional Development



# Transfer to the Classroom: How will you know if it is happening?

- Individually, review the scenario in Tab 3 (tan)
- Discuss the questions that follow at your table.

# MSP Example

The Consortium for Achievement in  
Mathematics and Science (CAMS)

Margo Bartiromo

Merck Institute for Science Education

Director of Education Program

# The Consortium for Achievement in Mathematics and Science (CAMS)

## Ensuring Quality Transfer to the Classroom

# The CAMS Professional Development Strategy

- Science teacher workshops focused on student instructional materials (e.g., FOSS, STC)
- Intended to:
  - Deepen teachers' understanding of the content in the materials
  - Develop teachers' ability to teach the materials well (e.g., questioning, addressing misconceptions, use of formative assessment)
- Facilitated by experienced teachers and content specialists

## What we hoped to see

- Instruction helping students focus on why they are doing what they are doing.
- Conceptual connections among lessons being made clear to students.
- Students being guided to see the connection between the activity and the science concept the activity was intended to teach.

## What we often saw

- Going through the steps of the activity.
- Few connections made among lessons/sometimes skipping important lessons.
- Little attention to linking the activity to key science ideas.

# What might be the problem?

- Teachers had lingering questions about the content.
- Instructional materials did not always provide sufficient guidance for teachers:
  - what concepts are intended to be developed in specific activities.
  - how to implement lessons to keep content in the foreground; and
  - how sequences of lessons work together to develop a concept.
- Teachers had difficulty applying what they had learned to the classroom.

# CAMS Approach for Ensuring Quality Transfer

- On-going support:
  - In-class coaching
  - Academic year sessions
  - Developed administrator capacity to support
- Development of “tools” to provide guidance on quality implementation



# On-going Support: CAMS Coaches

- Attended (and often facilitated) teacher workshops
- Coach preparation focused on instructional materials
- Worked with teachers who attended workshops
  - Lesson planning focused on content in the student activities
  - Co-teaching
  - Observed lessons and provided feedback

# On-going Support: CAMS Academic Year Sessions

- Scheduling of academic year sessions coincided with when teachers were using the instructional materials that were the focus of the professional development they attended.
- Sessions reinforced content and concepts introduced at the summer workshops in the context of their own students (e.g., examining student work, assessment data)

# On-going Support: Administrator Capacity

- Aligned professional development experiences for district/school leaders to create a common vision of quality instruction.
- Provided tools for principals to assist in identifying quality instruction.

# CAMS Tools to Support Transfer with Quality

- Content frameworks tool
  - Identifies the concepts intended to be developed in specific activities.
  - Illustrate how sequences of lessons work together to develop a concept

# CAMS Tools to Support Transfer with Quality

- Common assessments for the curriculum materials
  - Identified areas of difficulty for students
  - Provided a focus for teacher study group discussions on content and pedagogy
  - Informed instruction

# Observations continue...

- District administrators
- MISE Staff
- Project Evaluators

# Implications for PD

- As a field, we seem to swing back and forth from one extreme to the other.
- Presenting complete and accurate content in ways that teachers can't access doesn't get us very far.

# Implications for PD

- But neither does lesson study, professional learning communities, or similar approaches if they do not help teachers address mathematics/science content.



# Implications for PD

- If your PD starts from the discipline, you need to make sure teachers can connect what they are learning to their instruction.
- If your PD starts from practice, you need to make sure that the content doesn't get lost.

# Implications for PD

- No matter how carefully you design, you need to go look to see if the PD is having the desired impact.
- If not, you need to try to figure out what is getting in the way.
- And try to fix it.
- Repeat as needed.

# Now it's your turn...

- Your goal in providing PD is not just to enhance teacher knowledge and skills, but to do it in a way that will translate to improved teaching and learning.
- Consider the design work you have done thus far – what learning experiences you will provide teachers as part of the PD you are planning – and what modifications you might make to help ensure transfer to the classroom.

# Team Planning Worksheet #3

- Tab 7 in your binder (pink)
- You will have 15 minutes to get started on this discussion.
- Index cards are on the table for any questions you have (leave your cards on the table—we'll collect them)

- Reception from 6:00 pm to 7:00 pm.
- Windows Over Washington
  - 14<sup>th</sup> floor, North Tower