

EDUCATIONAL LEADERS

SESSION 5:

Feedback and Support: Helping Teachers Implement 3D Teaching & Learning with Confidence



Anji Garza (10 min)



1. Start Up: Introductions, Desired Outcomes, Participant Guidelines
2. Key Look Fors During Classroom Walkthroughs
3. Feedback & Conversation Frameworks
4. Breakout #1: Practice
5. Breakout #2: Practice
6. Breakout #3: Action Planning
7. Close: Resources, +/- Δ



INTRODUCTIONS

October – June 2026 Professional

Synchronous virtual sessions, Asynchronous virtual sessions (spring 2026), Face to Face Session (June 2026). All professional learning supported by funds through the Illinois State Board of Education.

IL SCIENCE STEERING COMMITTEE

Meagan Budke, ISBE

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Misty Richmond, Middle School Science Teacher, CPS

Richard Stokes, University of Illinois – Springfield

Nicole Vick

You! Breakout Participant, Speaker



Purpose & Desired Outcomes

Purpose

To deepen your understanding of the Illinois Science Standards, build your capacity to teach science, and support greater student success.

Desired Outcome



By the end of this meeting we will have:

- A list of key look-fors during classroom walkthroughs
- A plan to engage teachers in growth-oriented, supportive conversations that highlight strengths and identify next steps.
- Successful practice in applying coaching tools and feedback frameworks.

Participant Guidelines

Cameras on if possible

Participate though chat, hands up feature, and breakout sessions

Resist the temptation to multitask

Take care of your own needs

Anji Garza (10 min)



Key Look Fors



Students

- **Explain** a real-world phenomenon or solve a problem.
- **Identify** patterns, cause-and-effect relationships, or systems.
- **Investigate, model, analyze** data, or design solutions.
- **Use** science ideas during the activity to explain their thinking.
- **Define** problems, test solutions, and improve designs.
- **Use** evidence to support claims and revise ideas.
- **Engage** in productive peer discussion.
- **Document** questions, models, evidence, and revised thinking in notebooks.

Teachers

- **Anchor** the lesson in a meaningful phenomenon and revisits it.
- **Prompt** students to look for relationships and connections.
- **Structure** opportunities for hands-on inquiry and problem-solving.
- **Connect** content directly to the investigation or task.
- **Guide** students to consider criteria, constraints, and revisions.
- **Ask** for evidence and presses for reasoning.
- **Facilitate** discourse and encourages students to respond to one another.
- **Provide** structures and time for reflection and revision.



Students

- Sensemaking
- Consensus circle
- Using sentence stems
- Connecting concepts (from prior concepts learned to this one)
- Connecting to other phenomena

Teachers

- Using Driving Question Board
- Talk moves
- Provided phenomena
- Questioning
- Assessing student learning (formative, summative
- show understanding, learning over time, 3D)
- Planning for intentional student
discussion/dialogue



Sarah Meador (20 min)



Feedback Conversations & Frameworks



Feedback Framework for:

- Post-observation conferences
- Walkthroughs
- Informal Observations
- Quick validation



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- Post-observation conferences
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Key Ideas for Coaching:

- **Approach feedback as a partnership.** Treat teachers as professional partners in improving instruction. The goal is learning together, not evaluating performance.
- **Honor teacher choice.** Coaching works best when teachers have voice in identifying focus areas and possible next steps.
- **Use dialogue, not monologue.** Ask questions and listen carefully so teachers can reflect on their practice and student learning. Ask questions of curiosity.
- **Focus on student impact.** Anchor conversations in how instructional decisions affect student thinking, engagement, and learning.
- **Be specific and transparent.** Share clear evidence from the classroom and explain your thinking so feedback feels credible and helpful.
- **Support reflection and small improvements.** Encourage teachers to identify one manageable change that could strengthen student learning.

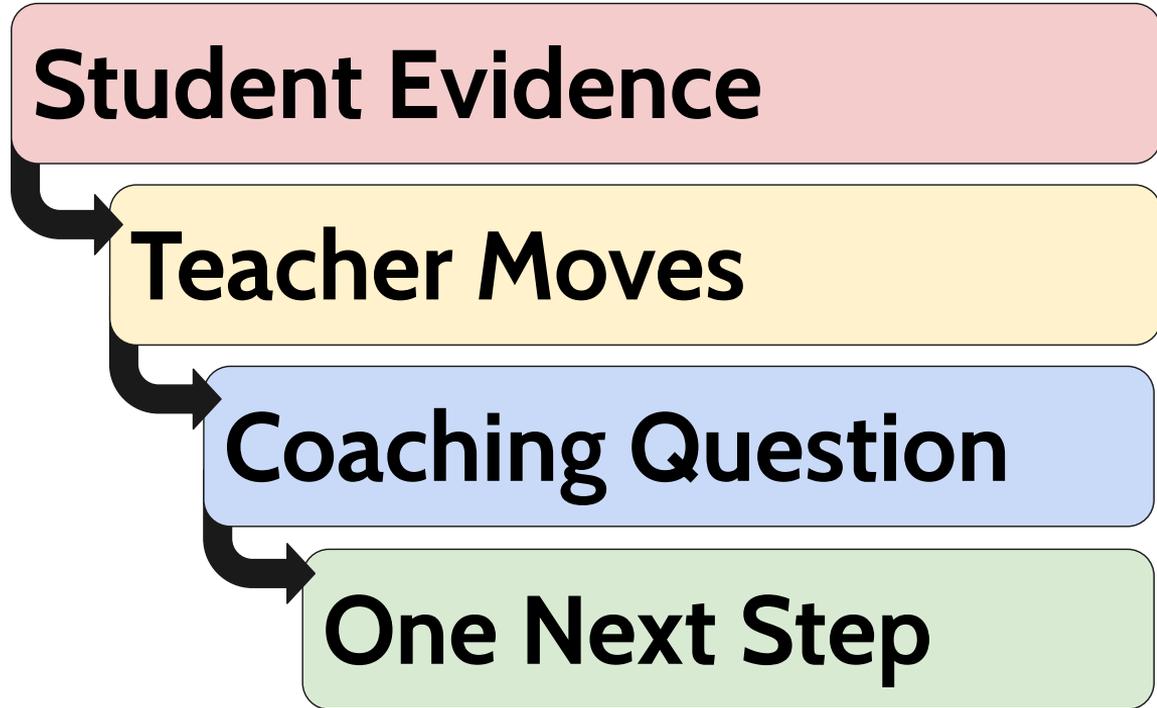


Feedback Framework for:

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Student Evidence

Share specific evidence of what students were doing, using NGSS look-fors, to support teacher's reflection.

“Students were analyzing their data to explain the temperature change.”

“Several groups were identifying patterns in their results.”

“Students were debating which model best explained the system.”

Focus on evidence that students were:

- explaining a phenomenon
- identifying patterns or cause/effect
- modeling or analyzing data
- using evidence to support claims
- revising ideas
- engaging in peer discussion with evidence

Purpose:

Reinforces that student thinking is the central measure of effective science instruction.



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Teacher Moves

Acknowledge the teacher actions that enabled student thinking.

“You anchored the activity in the phenomenon and kept bringing students back to it.”

“Your questions pushed students to explain their reasoning with evidence.”

“You created time for students to compare ideas with their peers.”

Teachers...

- anchor lessons in phenomena
- press for evidence and reasoning
- connect data to science ideas
- facilitate discourse
- provide structures for investigation

Purpose:

Helps teachers recognize which instructional decisions are working.



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Coaching Question

Encourage the teacher to reflect on student thinking.

“What did you notice about how students used evidence today?”

“Where did students struggle to connect their investigation to the science idea?”

“How did students revise their thinking during the discussion?”

Purpose:

Encourages teacher ownership of improvement.



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One Next Step

Focus on one small improvement that could deepen student sensemaking. Ask!

"What is one next step you could take in a lesson next week to allow students to compare ideas with peers?"

"One next step might be giving students more time to compare explanations so they can challenge each other's reasoning with evidence."

**Purpose:
Keeps improvement
targeted and actionable.**



Student Evidence

What were students doing during the lesson to focus on engage in argument from evidence?

Teacher Moves

What instructional practices did you use to help student with that?

Coaching Question

What do students need to do to better engage in argument from evidence?

One Next Step

What is one next step you could take to help students do that?

**Example 1:
Low admin
confidence in
NGSS best
practices**



Student Evidence

Students were analyzing their data to explain the temperature change.

Teacher Moves

Your questions pushed students to look for connections and patterns in the data.

Coaching Question

What did you notice about how students revised their thinking throughout the lesson?

One Next Step

What is one next step you could take to build more safety in students revising their thinking?

**Example 2:
Moderate/High
admin
confidence in
NGSS best
practices**



Student Evidence

Students were drawing models of molecules.

Teacher Moves

Your structure of having students draw then compare with a partner encouraged reflection and revision.

Coaching Question

What did you notice about the the students' motivation to revise their models after that discussion with a peer?

One Next Step

One next step is to increase students' ability to engage in argument from evidence is to provide sentence stems. What is one next step you can take to use those in future lessons?

**Example 3:
Stronger need
for teacher
guidance**

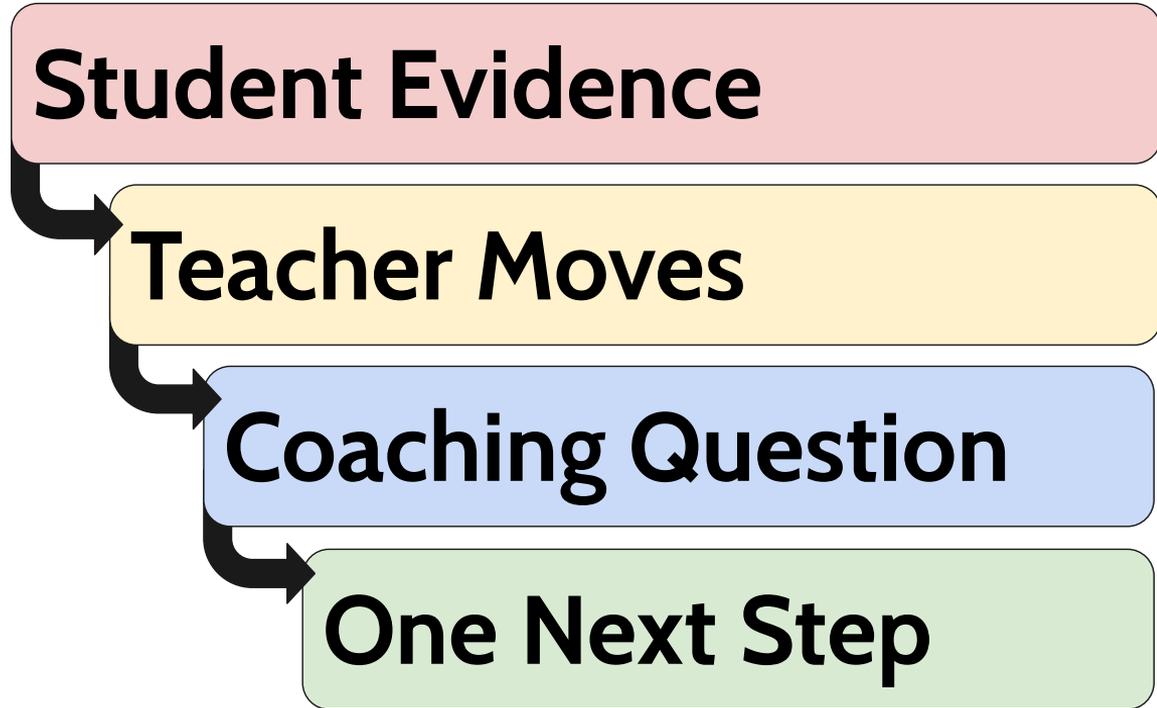


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Kristin Rademaker (20 min)



Let's Practice: Video & Break Out #1



Guidelines for Watching Videos of Teaching

- These are real classrooms, which means there are also students who did not give consent.
- Ground Rules:
 - Teaching and the classrooms we will see are complex. There is much we don't know about the students and teacher and their history together.
 - Assume expertise on the part of the teacher.
 - Assume what the kids are saying makes sense to them.
 - Focus on how what the teacher and students are doing is serving the learning goals of the lesson and providing access for diverse learners.



Video Context

- Students have been introduced to the phenomena: Mt. Everest is moving and getting taller.
- Student have read an article and are now pulling evidence from the article and recording things they notice and wonder.





"It did not change height due to the massive 7.8 magnitude earthquake."

Compare your Findings

In your breakout rooms discuss

- Your key takeaways
- What you noticed the teacher doing
- What you noticed the students doing

Be prepared to share a brief summary of what you talked about.



Kristin Rademaker (15 min)

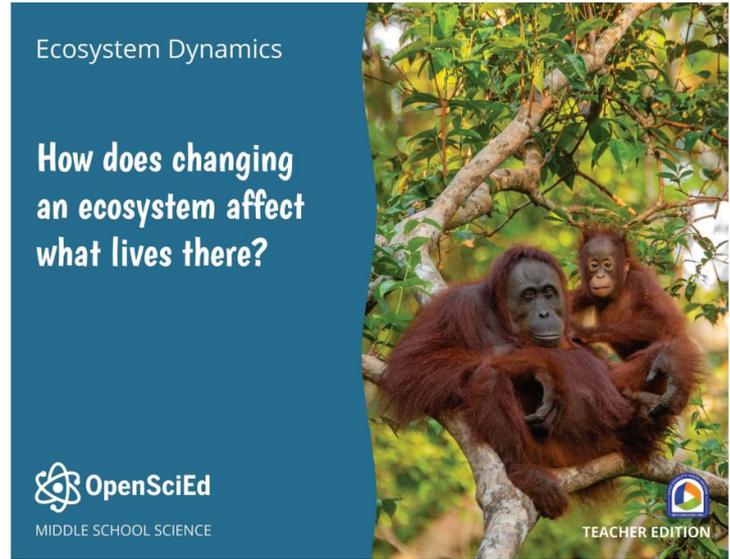


Let's Practice: Video & Break Out #2



Video Context

- This is the first lesson of the unit and students are introduced to the phenomena through a news headline. **The Independent: “Orangutans Could Face Complete Extinction Within 10 Years, Animal Charity Warns.”**
- Students are shown where orangutans live and read a short article about them.





Compare your Findings

In your breakout rooms discuss

- Your key takeaways
- What you noticed the teacher doing
- What you noticed the students doing

Be prepared to share a brief summary of what you talked about.



Sarah Meador (10 min)



Action Planning



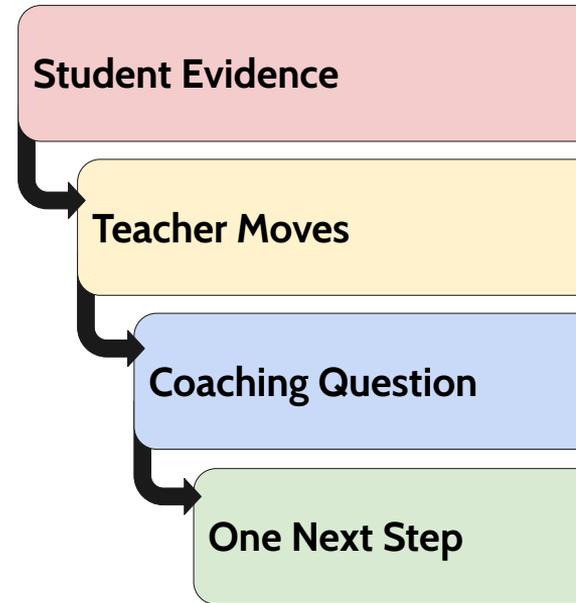
What are your next steps?

Think about independently...

- What are teachers currently doing to show that they are ready to engage in science coaching and feedback?
- How do these four steps fit into your current practice of feedback conversations?
- What is one area that you can focus on to improve your feedback?

In you breakout room, share...

- What is one next step you can do to move in that direction?



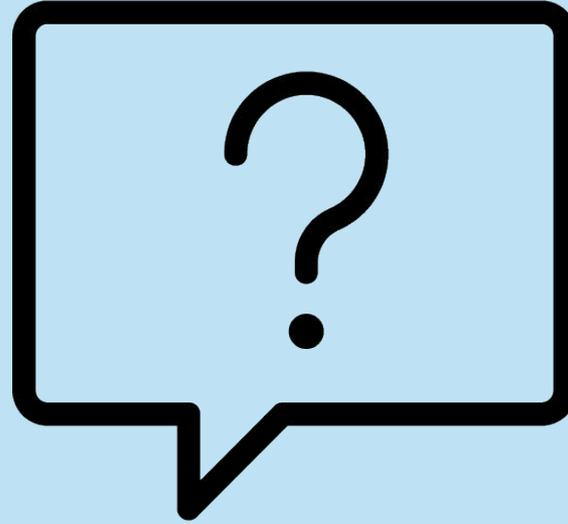
Sarah Meador (5 min)



Close



Q&A



Meeting Evaluation



PLUS

- The videos were very helpful to show how to engage in the NGSS 3D alignment.
- The session videos and discussions were helpful
- The classroom videos were very rich and modeled a variety of best practices.
- It's always nice to have set-aside time with like-position people to know we aren't alone and to be able to process through things together.
- I enjoy the breakout rooms as it helps meet people from different schools and positions. Helps give new perspectives!
- The session videos and discussions were helpful,

DELTA



- A little more about high school settings. We have a unique balance of wanting more inquiry while still getting through content. Plus there are many electives that don't have good resources.
- now have questions how to implement phenomena
- More info for teaching science in early childhood classes where the attention spans are so short but I want them to love science!



THANK YOU!