Loyola University Chicago Center for Science and Math Education

Put the Pro in Professional Learning

Saturday, November 9, 2024



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Who's in the Room?

PollEv.com /sarahstults534





Center for Science and Mathematics Education

Loyola University Chicago

The Center for Science and Math Education (CSME) advances transformative, research-based approaches to STEM education, with the aim of enhancing STEM learning in PK-12 and higher education.



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Goals and Outcomes

You will use a facilitation checklist and planning template to plan, and receive feedback on, a mock professional learning activity for disseminating best practices for NGSS instruction.

What makes an effective Professional Learning session?

Introduce yourselves to your table and reflect on the question.

Considerations for Facilitation

How do I make this an emotionally safe space and show up as a compassionate listener?

How can we elevate teachers' knowledge and insights throughout the learning?

Checklist for Facilitating Professional Learning

Opening

- How will I know who is in the room and what they're bringing in with them—as far as their backgrounds, experiences, and feelings about the session?
 How do I communicate the session's objectives and how they are relevant and applicable to my audience's context?
 How do I communicate expectations for behavior, norms, and engagement?
 How do I make this an emotionally safe space and show up as a compassionate listener?
 How do I communicate what to do with questions, concerns, and requests?
- □ How are participants seated? Random groups or predetermined? Changes throughout?
- Do participants move physically throughout the session?
- Does any segment go for more than 20 minutes without a shift?

Collaboration

Are there structures for participants to get to know each other and learn from one another?
 How often do they talk to each other? How much of that talk is structured and how much is open? Are there opportunities for various types of interactions?
 What is the purpose of dialogue? (Meaning-making, storytelling, reflection, planning, etc)
 Are there opportunities to role-play or practice, if applicable?

Learning

- When do participants have a choice during the session?
- How can they apply their learning throughout the session?
- Are there different ways for participants to experience input (articles, videos, etc)?
- When can a graphic organizer/note-catcher be used?
- Are there opportunities for participants to individually process the learning?

Leveraging Expertise

- How can we elevate teachers' knowledge and insights throughout the learning?
 How are we honoring and using participants' experiences during collaboration?
- Shifting Energies
- □ Are there moments when we might laugh? How can I plan for laughter?
- Could I play music, use a short story, present a quote, or play a video to engage participants in a new way?
- How can I consider participants' human needs (restroom, food, water, breaks, payment/PD hours, etc.)?

Closing

- How will I support participants in continuing their learning and follow-up (housing resources, future meetings, shared documents, etc.)?
- □ How will participants recognize and reflect on their learning during the session?
- How will participants offer me feedback?
- □ How will I close the day and appreciate their participation?

Adapted by Loyola University of Chicago Center for Science and Math Education, 2024, from Elena Aguilar, *The Art of Coaching Teams: Building Resilient Communities* that Transform Schools. Jossey-Bass, 2016.

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Facilitation Checklist

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Pacing and Tone

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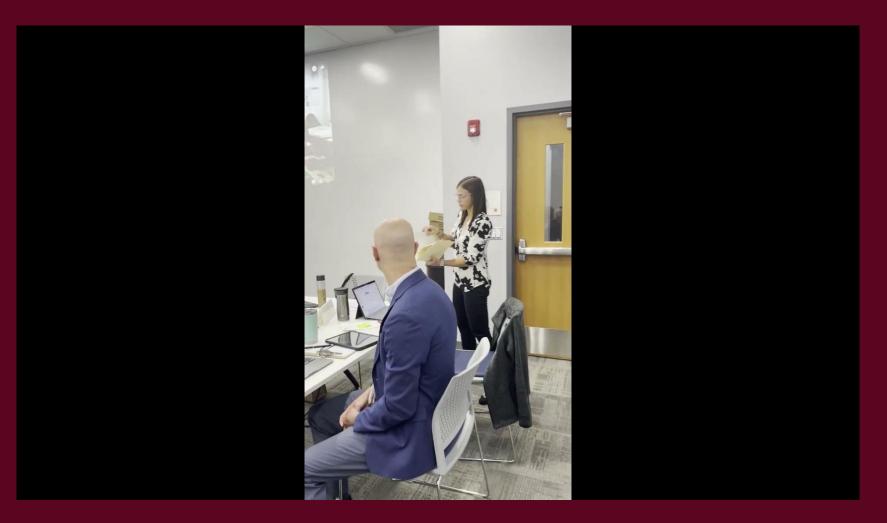
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Components	Notes	Questions	
Opening			
Pacing and Tone			
Collaboration			
Learning			
Leveraging Expertise			
Shifting Energies			



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Professional Learning Session in Action



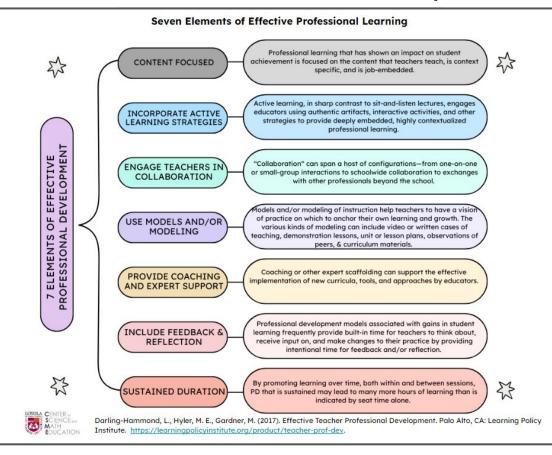
Debriefing the Professional Learning Video

What did you notice?

What wonderings do you have?

Additional PL Planning Tools

Effective Teacher Professional Development



Planning Matrix SCIEN MATH **Professional Learning Title** Date, Time, Location **Facilitator Names & Emails Learning Goals & Outcomes** Audience **Pre-Session Preparation** Time & Activity & Facilitation Notes **Materials** Facilitator

Planning a Mock Mini PL Session

Choose a high leverage instructional practice and begin planning your session. Use your checklist for guidance.





Student-to-Student Discourse



Constructing Evidence Based Explanations

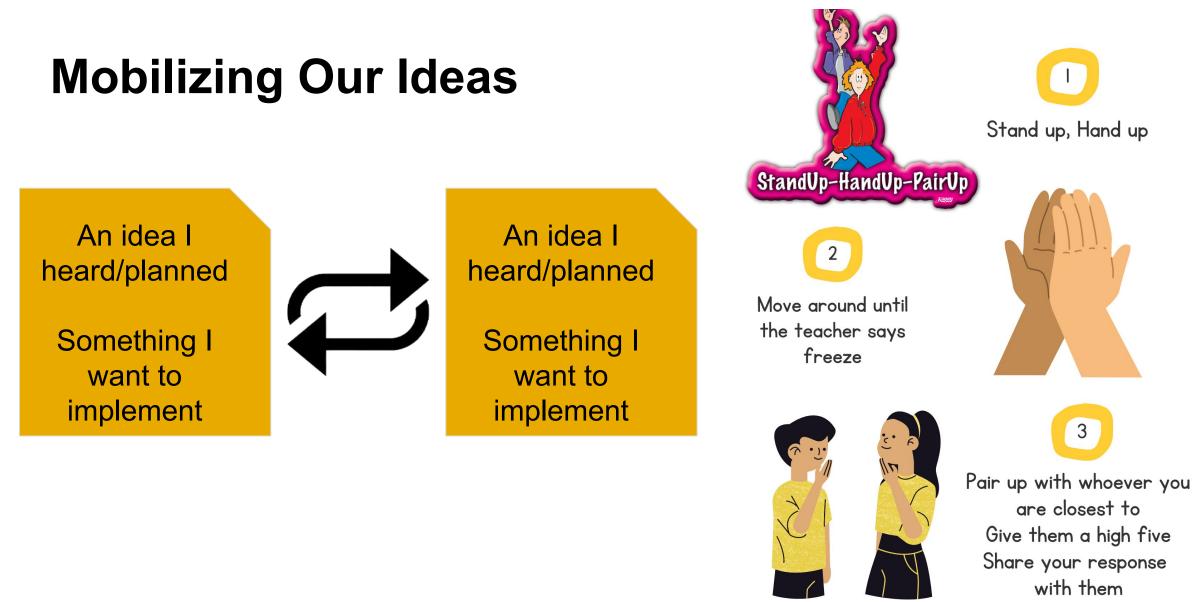




Students have opportunities to share their ideas and lived experiences. These are used as resources to drive instruction. Students regularly engage in discourse and writing to make their thinking visible.

Students synthesize evidence from simulations, texts, careful observation, and data analysis in order to support their claims. Students have opportunities to apply their learning by engineering and critiquing solutions to real world problems. With your group, decide on a topic/ strategy to share with teachers to enhance science teaching and learning.

Modified by Chicago Public School's DoSTEM from a Framework for K-12 Science, Ambitious Science Teaching and STEM Teaching Tools.



Closing & Exit Slip



Thank you!



https://bit.ly/luccsme

Learn more about our work at www.luc.edu/csme/

Contact Us!



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