

AFTERNOON SESSION:

Instructions for TPL Facilitator to guide teachers through the use of the BLOS-SOMS Coaching Template and lesson creation process.

The afternoon session is dedicated to providing TPL participants with an understanding of how they could use the Coaching Template to adapt their own lessons to a three-dimensional lesson.

Intended Audiences

This guide was developed with the intention to be used with grade 6-12 science teachers (in-service and preservice), coaches, and administrators with a goal to support professional learning of three-dimensional instruction.

Materials (Per Group)

- BLOSSOMS TPL Coaching Template (PDF format, Word format))
- Exemplar Coaching Template Hanging By A Thread
- <u>Using Crosscutting Concepts to Prompt Student Responses</u>
- Resources for Science Phenomenon
- Secondary Science and Engineering Practices Matrix (PDF format)
- Secondary Crosscutting Concepts Matrix (PDF format)

Grouping - Groups of four - (NOTE: In adapting a lesson it is important to work as a team. Four people would be the maximum in a grouping but it is not productive to work individually).

Facilitator Notes



Review of Morning Session - 15 Minutes

Initiate a discussion of the morning session with the TPL participants. Have the TPL participants respond to questions such as:

- "What were their "A-Ha" moments during the morning session?"
- "What were your big takeaways from the morning session?"
- "How was what you experienced in the morning session different from the way that science was taught before the new standards?"

NOTE - The goal here is to make connections to how the *Hanging By A Thread* lesson was constructed. Inform the TPL participants that *Hanging By A Thread* was an adaptation of a traditional cookbook-style lesson.

Facilitate the discussion in a similar manner as was done in the morning session...don't be the answer person. Deflect questions and comments back to the TPL participants using "Talk Moves" such as:

- a. What do you think of what said?
- b. Can you tell me more?
- c. What did you notice happening here?



Overview of BLOSSOMS Coaching Template - 30 Minutes

Share the BLOSSOMS TPL Coaching Template electronically so that the TPL participants have access to the embedded URLs for resources. As a group, the TPL participants should explore the template and ask clarifying questions pertaining to the template.

Distribute the additional resources and explain how they are used within the template:

- Secondary Science and Engineering Practices Matrix
- Secondary Crosscutting Concepts Matrix

Let the participants explore the template and solicit any questions they may have.

One of the components for a 3D lesson is to select a phenomenon that reflects the topic used in the traditional lesson. This is a particular challenge for teachers as using phenomena is still very new and difficult to find examples to investigate. Coach the participants by saying that "Phenomena do not have to be phenomenal". Refer participants to the Resources for Science Phenomenon.

Share with the participants that the BLOSSOMS TPL Coaching Template is designed to help teachers adapt their lessons by clearly defining what the students are doing and what the teacher is doing.

Go over the features of the BLOSSOMS TPL Coaching Template. Demonstrate how the various hyperlinks embedded within the document provides information for the participant as they are working on their lesson. Point out the The Gather, Reason, and Communicate Performance Sequence (Page 3) and the Science and Engineering Practices Using the GRC Instructional Sequence graphic (Page 4) of the BLOSSOMS Template. Emphasize that the Performance Sequence describes each phase and the graphic details how the science and engineering practices can be used within the various phases.

Have the groups come to consensus on which lesson they will work on. (Each participant should have brought a lesson with them to adapt for this workshop) Just as was done in the morning session, your job is to emulate a teacher in a 3D classroom where the teacher serves as a facilitator...providing ample opportunities for the students to use the science and engineering practices to explain the phenomenon that is the focus of the lesson. In the same manner encourage the participants to discuss how the students will be

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Groups Work on Their Lessons - 120 minutes

Allow the groups to begin their work in building their lesson.

Walk around and observe the work-in-progress. Ask questions of the participants to help them get on track if they seem stuck. Refer them to the many resources they have at their disposal and encourage them to discuss with their group partners. Emphasize that lesson creation should not be a solo operation. Collaboration is the key.

Remember, the goal for the afternoon session is NOT a completed lesson. Instead TPL participants should be able to leave the workshop with a working understanding of how to use the resources to complete the lesson after they return to their school or home. Encourage the TPL participants to exchange email and cell phone information so that they can continue working on their lesson.

Groups Share Out - 15 minutes

As the workshop winds down to a close lead the groups in a discussion of their work so far. Solicit any questions and comments that they may have about the lesson-writing process and the workshop as a whole. Celebrate their professionalism and their contributions throughout the day and thank them for their participation.