Professional Learning Module: Modeling the enactment of the Formative Assessment Lesson, Evaluating Statements About Enlargements (2D and 3D)

Introduction

In this Professional Learning Module the facilitator enacts, with fidelity, the Shell Center’s Formative Assessment Lesson, Evaluating Statements About Enlargements (2D and 3D). Each section details a component of the module, its core idea, and the resources that are available.


Framing the lesson: 10 minutes

Create the opportunity for participants to learn what it means to frame the lesson Evaluating Statements About Enlargements (2D and 3D), why it is important, and what might go wrong if framing is neglected.

Handout: Framing Evaluating Statements About Enlargements (2D and 3D)

A Fair Price: The pre-lesson assessment: 10 minutes

It is critical that the participants realize that the assessment is especially designed to surface the common issues that impede student learning, and to understand how coaching students to the right answers can keep the common issues hidden and hinder student success. The assessment is not graded, but is analyzed to identify student error. These data are used to modify instruction.

Lesson Guide: notes T-2, S-1 & S-2; Facilitator Notes: Administering the Pre-Lesson Assessment

Video: ESÆÆ01-Pre-Lesson Assessment

Whole-class introduction: 10 minutes

Create the chance for participants to learn how important individual work is for successful enactment. Encourage participants to follow the Lesson Guide’s suggestions for introducing this piece thoroughly.

Lesson Guide: notes T-5 & T-6, Enlarging Rectangles slide P-1

Video: ESÆÆ02-Introduction to the Lesson-Enlarging Rectangles-Statement 1

Introducing the collaborative activity: 10 minutes

Create the chance for participants to learn about the importance of doing exactly what the Lesson Guide suggests—including making student instructions visible for the duration of the lesson.

Lesson Guide: notes T-6, 3D Shapes slide P-2

Engaging in the collaborative activity: 30 minutes

Create the chance for participants to experience the collaborative activity as an opportunity to learn. As participants work on the activity, model giving them feedback, and allow participants to struggle productively in homogeneous pairs and mini-conference so as to scaffold participant learning.

Lesson Guide: notes T-6, T-7 & T-8, S-3, S-4 & S-5, True or False? slide P-3

Video: The Power of Students Analyzing Sample Student Work

Whole-class discussion: 10 minutes

Model wrapping the lesson up, because this is the most difficult part of the activity. Teachers tell us that this is the part of the lesson where they feel the most vulnerable, and the part where they find the Lesson Guide’s specific advice on what they might say to their students most useful.

Lesson Guide: notes T-8 & T-9, Is it correct? slide P-4

A Fair Price: The post-lesson assessment: 10 minutes

It is critical that the participants realize that the post-lesson assessment gives students the chance to demonstrate growth across the pre-and post-lesson assessments. Stress having students complete it individually in class, without help from other students or their teacher.

Lesson Guide: notes T-9, S-1 & S-2; Facilitator Notes: Administering the Post-Lesson Assessment
Professional Learning Module: Follow-up on the enactment of the Formative Assessment Lesson, Evaluating Statements About Enlargements (2D and 3D)

Introduction
In this Professional Learning Module participants follow-up on aspects of the lesson Evaluating Statements About Enlargements (2D and 3D).

Resource: Facilitator Notes

Descriptions of Evaluating Statements About Enlargements (2D and 3D) videos
Video: ESAE-Evaluating Statements About Enlargements A Teacher Listens

The mathematics of Evaluating Statements About Enlargements (2D and 3D): 20 minutes
Participants reflect on their participation in the lesson in order to determine the mathematics of the lesson.

Handout: The Mathematics of Evaluating Statements About Enlargements (2D and 3D)

Analyze student responses to the pre-lesson assessment: 20 minutes
Participants analyze a small set of student responses to the pre-lesson assessment to identify and name the 3 to 5 most important common issues that are revealed. Participants will record the data for these common issues in a spreadsheet.

Lesson Guide: notes T-4; Student work: A Fair Price; Spreadsheet: Growth Analysis Spreadsheet

Writing feedback questions and comments that will move the learner forward: 20 minutes
Using the criteria for feedback handout, participants practice developing 3 to 5 feedback questions that are designed to encourage students to think more deeply about the common issues.

Lesson Guide: notes T-4; Handout: Criteria for feedback

Analyzing post-lesson assessments: 20 minutes
Participants analyze a small set of student responses to the post-lesson assessment to identify student growth across the pre-and post-lesson assessments. Participants will add the post-lesson assessment data to the spreadsheet, and generate a picture of student growth.

Lesson Guide: notes T-4; Student Work: A Fair Price

Modifying subsequent instruction: 15 minutes
What does the Formative Assessment Lesson, Evaluating Statements About Enlargements (2D and 3D), tell us about how to modify instruction in the final third of the unit and with future students?

Video: ESAE03-Collaborative Activity

When to enact Evaluating Statements About Enlargements (2D and 3D) in your classroom: 15 minutes
What are the issues involved in choosing to enact Evaluating Statements About Enlargements (2D and 3D) in your classroom?

Resource: A Course Outline for Geometry

Link the structure of Evaluating Statements About Enlargements (2D and 3D) to the theory of formative assessment: 15 minutes
Participants will have studied the Big Idea and the Five Strategies earlier. Here they will identify how these relate to Evaluating Statements About Enlargements (2D and 3D).

Handout: Big Idea of Formative Assessment; Handout: Five Strategies of Formative Assessment