

Boy Bands

Professional Learning Module: Modeling the enactment of the Formative Assessment Lesson, *Mean, Median, Mode, and Range*



Ann Shannon & Associates, LLC

Introduction

In this Professional Learning Module the facilitator enacts, with fidelity, the Shell Center's Formative Assessment Lesson, *Mean, Median, Mode, and Range*. Each section details a component of the module, its core idea, and the resources that are available.

***Shell Center's Lesson Guide:** <http://map.mathshell.org/materials/lessons.php?taskid=486&subpage=concept>

Framing the lesson: 10 minutes

Create the opportunity for participants to learn what it means to *frame* the lesson *Mean, Median, Mode, and Range*, why it is important, and what might go wrong if *framing* is neglected.

Handout: [Framing Mean, Median, Mode, and Range](#)

Penalty Shoot-Out: 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 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](#)

Whole-class introduction: 10 minutes

Create the chance for participants to learn how important the introduction is for successful enactment—replacing it with a mini-lesson will quickly sabotage the entire lesson. Encourage participants to follow the *Lesson Guide's* suggestions exactly.

Lesson Guide: notes T-4 & T-5, slides P-1 & P-2

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-5 & T-6, Matching Cards slide P-3

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, card sets S-3, S-4, S-5 & S-6, Sharing Work slide P-4

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

Boy Bands: 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-8, S-7 & S-8; **Facilitator Notes:** [Administering the Post-Lesson Assessment](#)

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Professional Learning Module: Follow-up on the enactment of the Formative Assessment Lesson, *Mean, Median, Mode, and Range*



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Introduction

In this Professional Learning Module participants follow-up on aspects of the lesson *Mean, Median, Mode, and Range*.

Resource: [Facilitator Notes](#)

Shell Center's Lesson Guide: <http://map.mathshell.org/materials/lessons.php?taskid=486&subpage=concept>

The mathematics of *Mean, Median, Mode, and Range*: 20 minutes

Participants reflect on their participation in the lesson in order to determine the mathematics of the lesson.

Handout: [The Mathematics of Mean, Median, Mode, and Range](#)

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-3; **Student work:** [Penalty Shoot-Out](#); **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-3; **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-3; **Student work:** [Boy Bands](#)

Modifying subsequent instruction: 15 minutes

What does the Formative Assessment Lesson, *Mean, Median, Mode, and Range*, tell us about how to modify instruction in the final third of the unit and with future students?

When to enact *Mean, Median, Mode, and Range* in your classroom: 15 minutes

What are the issues involved in choosing to enact *Mean, Median, Mode, and Range* in your classroom?

Resource: [A Course Outline for Grade 6](#)

Link the structure of *Mean, Median, Mode, and Range* 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 *Mean, Median, Mode, and Range*.

Handout: [Big Idea of Formative Assessment](#); **Handout:** [Five Strategies of Formative Assessment](#)