

BEYOND THE LESSON: DISCUSSION GUIDE

MATHEMATICS

INTRODUCTION

The Beyond the Lesson Discussion Guide is designed for the post-observation conversation using the Instructional Practice Guide Coaching Tool (achievethecore.org/coaching-tool) or any other observation rubric. The questions put the content of the lesson in the context of the broader instructional plan for the unit or year. The conversation should first reflect on the evidence collected during the observation to consider what worked, what could improve, and what resources are available to support improvement. If any parts of the Lesson Planning Tool (achievethecore.org/lesson-planning-tool) were used in preparing for the lesson, refer to that information during the discussion. After discussing the observed lesson, use the “Beyond the Lesson” questions to help clearly delineate what practices are in place, what has already occurred, and what opportunities might exist in another lesson, further in the unit, or over the course of the year to incorporate the Shifts into the classroom.

- 1. Is this unit targeting the major work of the grade? Does the prior unit target major work? Does the next unit target major work? How much time would you estimate will be spent on the major work in this class this year? (K-8)** Focus means significantly narrowing the scope of content in each grade so that students achieve at higher levels and experience more deeply that which remains. For more information on major work of the grade see achievethecore.org/focus
- 2. Does this unit target the supporting work of the grade? If so, will this unit highlight the connection to the major work of the grade? Explain how. (K-8)** Supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade. For example, materials for K–5 generally treat data displays as an occasion for solving grade-level word problems using the four operations (see 3.MD.3); materials for grade 7 take advantage of opportunities to use probability to support ratios, proportions, and percents.
- 3. Summarize how this lesson fits within the unit. Describe how the other lessons and tasks in this unit are intentionally sequenced to help students develop increasingly sophisticated understanding, skills, and practices.** For more information on coherent connections across and within grades see <http://ime.math.arizona.edu/progressions/>
- 4. Which of the three aspects of rigor (conceptual understanding, procedural skill and fluency, and application) are attended to within this unit? If more than one aspect is attended to, when in the unit are they attended to individually, and when are students using them together?** Rigor is defined as pursuing conceptual understanding, procedural skill and fluency, and application with equal intensity. The Standards are written using language that informs the reader as to which aspect of rigor certain standards address. Some clusters or standards specifically require one aspect of rigor; some require multiple aspects. All aspects of rigor need not be addressed in every lesson.
- 5. How will you meet all students’ needs while working on grade/course-level content in this unit? (e.g., How will you provide scaffolding for students below grade/course level so they can reach the grade/course-level expectations? How will you create opportunities for students who are advanced to go deeper into the grade/course-level content?)** For more information, see Adapting The Lesson under Problems & Exercises in the Lesson Planning Tool achievethecore.org/lesson-planning-tool
- 6. What off-grade/course-level standards have you taught this year and why?** There may be reasons for addressing topics in a strategic way before or after the grade in which the topic is central in the Standards. However, any such purposeful discrepancies should enhance the required learning, not unduly interfere with or displace grade/course-level content, and be clearly aimed at helping students meet the Standards as written.
- 7. In what ways have you seen your students increase their independence in applying the Standards for Mathematical Practice in learning content this year? Which practice standards do students still need to develop and how can you support them in doing so?** For more information on the Standards for Mathematical Practice see corestandards.org/Math/Practice
- 8. In what ways have your students made progress towards mastering the grade/course-level content standards? How are you monitoring and tracking their achievement of the standards? What work still needs to be done to ensure all students achieve mastery of each standard by the end of the year?** For more information on the Standards for Mathematical Content see corestandards.org/Math

CLASSROOM ENVIRONMENT: CREATING A MATHEMATICALLY RICH ENVIRONMENT

In addition to the discussion between observer and teacher, be aware that the following environmental factors may also provide useful information.

- Are a variety of tools available for students to independently access (graph paper, manipulatives, rules, etc.)?
- Are all displays in the classroom free from mathematical errors (posters and bulletin boards, etc.)?