

Figure 4.2: Team Discussion Tool—Choosing Mathematical Tasks for Lesson Design During the Unit

Directions: As a team, use the following questions to discuss how you currently select and use higher- and lower-level-cognitive-demand tasks within your lesson-design process.

1. Describe some of your favorite mathematics problems to use during this unit and how you use them to teach the corresponding essential learning standard.
2. How do you define and differentiate between higher-level-cognitive-demand and lower-level-cognitive-demand tasks for each essential learning standard of the unit?
3. What percentage of your current mathematics tasks you use during instruction fall into the lower-level-cognitive-demand category, and what percentage fall into the higher-level-cognitive-demand category? (Provide an average.)

4. How do you work as a team to select specific common higher-level-cognitive-demand and lower-level-cognitive-demand mathematics tasks that all students of the grade level or course will experience for each essential standard of the unit?
5. Does your team have a proper balance of mathematics tasks you present to students throughout the unit of instruction in terms of the complexity of student reasoning the tasks require? Please explain.
6. How might what you learn about your students' understanding of the essential learning standard differ depending on the cognitive demand of the mathematical tasks you use during instruction?
7. How do you use higher-level tasks to provide feedback to individual students and groups of students during the lesson?