

Figure 2.7

Strategies for Maintaining Higher-Level-Cognitive-Demand Tasks During Instruction

Strategies for teachers to maintain higher-level cognitive demand include the following.

- Motivate the necessity for task completion and solution pathways by connecting the task to the essential learning standard for the unit. (Label the essential learning standard as an “I can” statement at the top of the task.)
- Monitor students’ initial responses to the tasks or problem. If students can easily find the solution, then the task most likely does not rise to the level of higher-level cognitive demand.
- Ensure the tasks encourage a process of reflection and communication.
- Present mathematical tasks that require students to apply mathematical knowledge and skills and are nonroutine. The goal is for students to translate their mathematical understandings from one context or representation to another as one indicator of mathematical proficiency.
- Rather than focus only on asking students to provide examples of mathematical concepts, request students to also provide counterexamples, and engage students in comparing and contrasting mathematical concepts.
- Engage students in solving problems orally, encouraging the important and proper use of mathematical vocabulary (precision of language) and logical sequencing of processes.