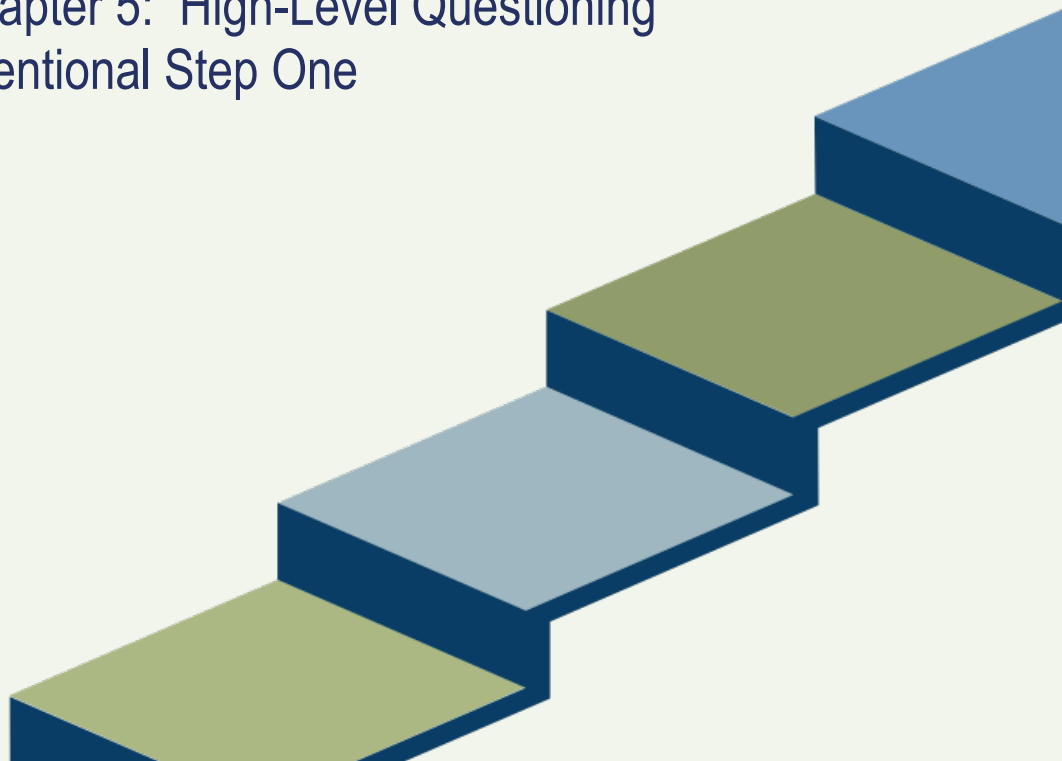


Intentional Instructional Moves

Strategic Steps to
Accelerate Student
Learning

Companion Guide

Chapter 5: High-Level Questioning
Intentional Step One



Chapter 5

Intentional Step One: Increase the Rigor of Oral and Written Questions

Teachers must think about and plan for high-level, rigorous questions that they ask students in both written and oral format. Many of us take the time to prepare for rigorous written questions, but when it comes to asking students questions aloud in class, we often revert to lower-level questions because they're typically easier to come up with on the spot and students might have more success with them.

Let's say a teacher is doing a read-aloud in class. That teacher needs to plan for the high-level rigor questions students will be asked as they discuss the text. Likewise, if a teacher gives a PowerPoint lecture or has students watch a film, that teacher should consider which high-level questions will be integrated into the discussion. Gradually increasing the cognitive level allows students to practice higher-order thinking while still feeling supported by less demanding questions. Teachers should aim to include a higher percentage of open-ended questions that get students thinking about their thinking (Lombardi, 2017).

It takes more time to develop high-level rigor questions, much like it takes students more time to digest and respond to them. This fact is due in part to a process in the brain called *synaptic pruning*. As we move from early childhood into adulthood, our brain gets rid of extra connections that are no longer needed, increasing efficiency. This also leads to the brain forming specific patterns and routines to help limit the amount of information it has to process. However, the brain is still quite malleable, so to work around this "pruning," teachers need to challenge themselves to plan for more complex and rigorous questions. And likewise, students should be challenged to respond to them. This exchange helps create new neural branches that allow the

brain to tackle more complex thinking (Sakai, 2020). Preplanning allows teachers (and students) to flow as needed between high- and low-level questions.

Strategy 1: Bloom's Taxonomy Questions

To increase the level of rigor for written and oral questions, teachers can use Bloom's Taxonomy Questions. These questions cover every level of Bloom's taxonomy, providing a framework for teachers as they target key skills. Let's say the teacher wishes to focus on Application skills. In this case, the goal is for students to take an abstract idea from the lesson and use it to solve a problem or connect it to their previous experience. The teacher might begin by asking students how they would modify an idea to solve a new problem. As a reminder, teachers should assess students' preparedness for the questions and adjust the level of rigor up or down as needed. When increasing the rigor of the questions, do so gradually (Anderson & Krathwohl, 2001). For a list of Bloom's Taxonomy Questions, see the corresponding handout.

Bloom's Taxonomy Questions model the types of questions teachers can ask at each level of Bloom's Taxonomy. With these flexible guidelines, teachers can more easily prepare high- and low-level questions that fit the needs of their content and students. As students work through the questions, teachers can assess whether students are practicing the targeted skills (Remembering, Understanding, Applying, Analyzing, Evaluating, Creating), and offer support or redirection when needed. Questioning has a .48 effect size and can help promote active learning and curiosity.