

Intentional Instructional Moves

Strategic Steps to
Accelerate Student
Learning

Companion Guide

Chapter 4: Cognitive Engagement
Introduction



Chapter 4

Cognitive Engagement

Cognitive engagement, which focuses on what students are thinking, is sometimes confused with rigor. While there is certainly overlap between the two, cognitive engagement doesn't cover all of the dimensions of academic rigor. We can distinguish the two by stating that cognitive engagement is concerned with whether or not students are actively thinking about course content. In this regard, students' level of engagement with the material can affect the complexity and depth of their learning (rigor).

This type of engagement is typically measured through summative and formative assessments, but it's usually beneficial for teachers to perform regular daily check-ins. These check-ins can include written and oral questions and responses, small group work, and formative assessments. Teachers should also think about the rigor and relevance of a task. They can look for evidence of higher-order thinking in student work and responses and design relevant tasks that incorporate primary sources and real-world tools. Students should be able to connect their learning and thinking to real situations and share that learning and thinking with their teacher, peers, and/or a broader audience.

To raise levels of cognitive engagement in the classroom, teachers should create intentional tasks and ask purposeful questions that demand deeper levels of thinking. On Bloom's Revised Taxonomy, these levels include Applying, Analyzing, Evaluating, and Creating. How students respond to these tasks will tell us a great deal about their engagement. By performing basic assessments, teachers can detect whether students understand the content and are staying connected to it. It's also beneficial to understand how student cognition develops.

Teachers should provide scaffolding and relevant tools to develop future-ready skills such as critical thinking, problem-solving, meaning-making, and metacognition.

Learning tasks should be interesting and accessible. When students can connect new information to what they already know, it opens the door for deeper thinking and engagement. Building on background knowledge helps "reduce cognitive load and free the mind's attention for higher order thinking and problem-solving" (Darling-Hammond et al., 2020, para. 114). This process is valid for many subjects, especially reading comprehension. Studies have shown that students with prior knowledge about a text are typically more successful at understanding and analyzing it. Other successful strategies for elevating cognitive engagement include: facilitating and observing academic discussions, providing relevant resources and real-world tools, and incorporating technologies that enhance learning and utilize future-ready skills.