

Standard III **Element D**

LEVEL 3 PRACTICES

THE TEACHER:

5 *Models critical-thinking and problem-solving skills.*

For teachers to explicitly teach critical-thinking and problem-solving skills, they must be implementing instruction and modeling their thinking in a manner that is sequenced across Bloom’s Taxonomy of intellectual thinking and behavior important to learning in the 21st Century. Teachers must show students what thinking sounds like by sharing their thinking aloud. Teachers can tell students the importance of being curious or of reflecting, or even explicitly teach lessons focusing on thinking skills, but unless they share their thinking with students and make their thinking visible in authentic ways across the day and over time, it’s unlikely students will become cognitively engaged and be able to “think about their thinking.” Teachers who put their thinking on display are teachers who are present. When they are present, they are tuned into their thinking and responsive to what is going on in the classroom and their own expectations for student learning. They make their thinking visible to show students how to think and how to learn.

Teachers who teach critical-thinking and problem-solving skills also teach students how to generate questions that are clear, on topic, and enhance learning — a characteristic of a critical thinker. An indicator of a student’s level of mastery is evident in the types of questions asked. Teachers who model how to ask critical-thinking questions stimulate student reflection and the need to know more.

Although students ask questions throughout the school day, research shows that the majority of questions are to seek clarification on procedural matters and not questions that further their learning. What teachers need to teach students is how to generate questions that prompt their thinking, provide purpose for their learning, and support them in thinking about their own meta-cognitive processes.

Teachers of younger students may find it necessary to teach question words as a prerequisite to students generating their own questions. The “I Wonder” strategy is a self-monitoring strategy to support students in understanding what they are thinking as they read and learn. It can be an effective tool to support younger students in stopping and thinking about questions they have while reading or learning new content.

Refer to this internal resource for additional information:

- [Teaching Students to Ask Questions](#)
Document explains how teachers can engage students in asking questions.
- [Using Question Words with Younger Students](#)
Document provides definitions of question words for use with younger students that may also be used as visuals.
- [I Wonder Worksheet](#)
Document can be used for students to record their questions.
- [I Wonder Bookmark](#)
Document is a bookmark students may use to record their questions while reading.

Refer to this external resource for additional information:

- http://www.highscope.org/file/EducationalPrograms/EarlyChildhood/el200802_epstein.pdf
Article: “An Early Start on Thinking,” by Ann S. Epstein explains how to create an environment that encourages young children to think critically.

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Planning/Coaching Questions

- How do you establish expectations at a level that challenges all students?
- How do you model critical-thinking and problem-solving skills to students?
- How do you provide opportunities for students to apply critical-thinking and problem-solving skills?
- How do you ensure the questions I ask are challenging for all students?
- How do you plan for the scaffolding of questions?
- How do you ensure all students are provided appropriate wait time?

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