

Teacher Quality Standard III

Teachers plan and deliver effective instruction and create an environment that facilitates learning for their students.

Study after study shows the single most important factor determining the quality of the education a child receives is the quality of the teacher. Quality teachers have knowledge of content, curriculum, and standards. They are able to plan and implement instructional strategies in an effective and purposeful manner that enhances student learning and independence. Research shows that when implemented effectively and purposefully, the professional practices referenced in Standard III can result in an environment in which all students can learn and succeed.

Element E

Teachers establish and communicate high expectations for all students and plan instruction that helps students develop critical-thinking and problem solving skills.

Whether you think you can or think you can't — you are right.

—Henry Ford

Professional practices referenced under each element of the Rubric for Evaluating Colorado Teachers are cumulative. Therefore, for teachers to be proficient in application of the practices referenced under Element E, they must establish and communicate high expectations for all students that challenge students to learn to their greatest ability. Teachers must plan instruction that ensures students have opportunities to learn and apply critical-thinking and problem-solving skills which support them in meeting or exceeding performance expectations.

PARTIALLY PROFICIENT RATING LEVEL

PROFESSIONAL PRACTICES: THE TEACHER:

- ***Sets student expectations at a level that challenges students.***

For work to be challenging for students, skills taught should be slightly in advance of a student's current level of mastery. Psychologists tell us that a student learns only when a task is slightly too hard. When a student can do work with little effort, and virtually independently, that student is not learning, but rather rehearsing the known. When a student finds a task beyond his or her reach, frustration—not learning—is the result. Only when a task is slightly beyond the student's comfort level, and the student finds a support system to bridge the gap, does learning occur. This theory is grounded in the work of Lev Vygotsky (1978) and the zone of proximal development (ZPD), the range at which learning takes place. The classroom research by Fisher, et al. (1980) strongly supports the ZPD concept. Researchers found that, in classrooms where individuals were performing at a level of about 80% accuracy, students learned more and felt better about themselves and the subject area (Tomlinson, 2000).



[Click here to go back to the table of contents and view the resource guide in its entirety.](#)

When teachers implement the Professional Practice, *Incorporates critical thinking and problem-solving skills*, they are increasing levels of expectations that challenge students.

See also Proficient Professional Practice, Challenges all students to learn to their greatest ability.

○ ***Incorporates critical thinking and problem-solving skills.***

Critical thinking differs from mere acquisition of knowledge or skills in that it involves the application of skills in order to evaluate, analyze, and/or synthesize information gathered from, or generated by, observation, experience, reflection, reasoning, or communication.

Reference YouTube video, <http://www.youtube.com/watch?v=ZLyUhbexz04>, for additional explanations of critical thinking.

Problem-solving skills involve the ability to critically analyze a problem, identify and organize relevant information, and then prepare a workable solution.

“Some research suggests that problem solving is to the brain what aerobic exercise is to the body. It creates a virtual explosion of activity, causing synapses to form, neurotransmitters to activate, and blood flow to increase.” (Jensen, 2008, p. 142)

Characteristics of a critical thinker:

- Asks questions that are clear, on topic, and enhance learning.
- Is open-minded and aware of different perspectives and alternatives.
- Evaluates credibility and relevancy of information.
- Interprets information and uses to develop well-reasoned conclusions and solutions.
- Is able to develop an evidence-based opinion and reasonably defend it.
- Communicates effectively with others in figuring out solutions to complex problems.

Ways to incorporate critical thinking and problem-solving skills in the classroom:

- Have students apply content they are learning to previous knowledge, real-world situations, and/or other disciplines.
- Focus on fundamental and powerful concepts with high generalizability as tools for learning and application.
- Provide opportunities for students to select learning strategies that best fit the skill required as well as their own learning preferences.

See also Standard III, Element A.

Refer to these internal resources for additional information:

- Common Core State Standards and Critical Thinking
Document explains the connections between the Common Core State Standards and critical thinking skills.



[Click here to go back to the table of contents and view the resource guide in its entirety.](#)

- Types of Problem-Solving Skills with Definitions and Examples
Document provides definitions and examples of seven types of problem-solving skills examples of problem-solving tasks.

Refer to this external resource for additional information:

- Article: “The Challenge of Challenging Text by Timothy Shanahan” by Douglas Fisher and Nancy Frey
<http://www.ascd.org/publications/educational-leadership/mar12/vol69/num06/The-Challenge-of-Challenging-Text.aspx>
Article provides an explanation for what makes a text challenging with references to Common Core expectations.



[Click here to go back to the table of contents and view the resource guide in its entirety.](#)