Teacher Quality Standard I

Teachers demonstrate mastery of and pedagogical expertise in the content they teach. The elementary teacher is an expert in literacy and mathematics and is knowledgeable in all other content that he or she teaches (e.g., science, social studies, arts, physical education, or world languages). The secondary teacher has knowledge of literacy and mathematics and is an expert in his or her content endorsement area(s).

The key to distinguishing the knowledge base of teaching rests at the intersection of content and pedagogy.

—L. S. Shulman

> To teach all students according to today's standards, teachers need to understand subject matter deeply and flexibly so they can help students create useful cognitive maps, relate one idea to another, and address misconceptions. Teachers need to see how ideas connect across fields and to everyday life. This kind of understanding provides a foundation for pedagogical content knowledge that enables teachers to make ideas accessible to others. (Shulman, 1987)

Although Shulman's work dates back to the late 1980s, the importance of teacher content knowledge and pedagogical expertise has never been more important than it is now as teachers ensure students are college and career ready for the demands of the 21st century.

Element B: Elementary and Secondary Teachers

Teachers demonstrate knowledge of student literacy development in reading, writing, speaking and listening.

This section describes professional practices that should be demonstrated by ELEMENTARY TEACHERS responsible for teaching language arts and/or reading and SECONDARY TEACHERS responsible for teaching English, language arts and/or reading.

Professional practices appearing under each element of the Rubric for Evaluating Colorado Teachers are cumulative. Therefore, for teachers to be proficient in demonstrating knowledge of student literacy development, they must integrate literacy skills into instruction that is purposeful, explicit, and systematic. Literacy instruction also must be based on student needs, intensive, and of sufficient duration to accelerate student learning. The elementary teacher also will emphasize literacy connections to other subject areas, and the secondary teacher will provide opportunities for students to apply literacy skills.

NOTE: For Element B: Elementary Teachers and Secondary Teachers, the professional practices are referenced together. When a practice or content refers to only one level, it is appropriately designated.

The power of literacy lies not only in the ability to read and write, but rather in an individual's capacity to put those skills to work in shaping the course of his or her own life.

—Paulo Freire

PROFESSIONAL PRACTICES: THE TEACHER:

- ○ ***Integrates literacy connections into lessons, regardless of content being taught.* (ELEMENTARY TEACHERS)**

Content-area readings are the texts associated with a particular subject area and give students access to the content and language of that subject area. The reading associated with content areas other than language arts or reading courses reflects not only the concepts, ideas, and vocabulary important to these subjects, but also the features and structures used in the texts.

To become literate in the content areas, students also need to become effective oral communicators and develop the skills necessary to comprehend a variety of representations, including graphics and electronic media.

An important aspect of literacy instruction, especially in social studies, science, and math, is the ability to comprehend graphics, such as diagrams, graphs, timelines, maps, and tables. They can make abstract activities, such as comparing and contrasting, concrete for students. Students also need to be able to create graphics to communicate their thinking.

Tips for integrating literacy connections:
- Balance fiction with non-fiction reading materials. Early childhood and elementary teachers may use informational text or historical fiction for read-aloud lessons.
  - ○ Books for teaching elementary math skills: http://www.the-best-childrens-books.org/math-for-kids.html
  - ○ Books for teaching math in early childhood: http://www.naeyc.org/files/tyc/file/MathbookslistSchickedanzexcerpt.pdf
- Use learning logs or reflection journals in content area subjects.
- Provide opportunities for students to write informational texts, such as reports, procedures (instructions), arguments (persuasion) and explanations, and/or respond to questions in writing by providing text-based evidence.
- Incorporate vocabulary activities that support students in communicating like a mathematician, historian, scientist, musician, artist, etc. This includes having vocabulary displays or visuals available for students to reference.
- Use organizers that support students in identifying main ideas, making inferences, comparing/contrasting, or summarizing what they read.

Concept mapping helps readers gain a greater understanding of the content by helping them formulate mental plans of comprehending and composing as they read and write. By teaching students to understand text organization plans, content-area teachers enable students to cover meaningful content topics in greater depth and to connect new knowledge with prior knowledge (Sinatra, 2000).

Refer to this external resource for additional information:
- Article: "Teaching Science Literacy" by Maria Grant and Diane Lapp http://www.ascd.org/publications/educational-leadership/mar11/vol68/num06/Teaching-Science-Literacy.aspx

    Article describes ways to promote literacy in the science classroom.

- ○ ***Teaches and provides opportunities for students to apply literacy skills.* (SECONDARY TEACHERS)**

Once a literacy skill has been taught, students must have opportunities to apply the skills to a variety of texts and types of communication in order to transfer these skills to new or unfamiliar material. By continually providing opportunities for students to apply skills both recently and previously taught, students can gain a deeper understanding of the mind of a reader and writer and how the skills learned support their literacy development. They can also begin to develop an awareness of those skills that best support their understanding of complex materials and communication skills so they can independently use them.

Examples of application of literacy skills:
- Vocabulary development: Student use of morphology along with concept maps such as the Frayer model (http://www.readingeducator.com/strategies/frayer.htm) when they encounter new vocabulary orally or in texts. Students may also maintain personal dictionaries or vocabulary cards they can reference when reading and writing.
- Annotating text: The skill of annotating a text supports students in comprehending a text in order to gain content information. Purposes for annotating a text:
    - ○ Locate evidence to support a claim.
    - ○ Identify main idea and supporting details.
    - ○ Analyze the validity of an argument or counter-argument.
    - ○ Determine author's purpose.
    - ○ Identify character traits/motivations.
    - ○ Summarize and synthesize.
    - ○ Define key vocabulary.
    - ○ Identify patterns and repetitions.
- Answering questions: Applying strategies that support students in responding to text-dependent questions and constructed-response questions. One of the key shifts in the Colorado Academic Standards is the expectation for students to cite text-based evidence when responding to questions. Students need multiple opportunities to apply this skill across a variety of genres to be successful with this shift.

Visuals that capture the steps or key concepts of literacy skills taught can be an effective way to provide continual support for student application of these skills. As the secondary teacher provides instruction on new skills, referring to these visuals can help students make connections to previously taught skills and communicate the expectation for students to apply these to new materials and situations.