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 D

Teachers thoughtfully integrate and utilize appropriate available technology in their instruction to maximize student learning.

Technology at its best involves students and teachers in meaningful activities.
—R. Routman

Professional practices referenced under each element of the Rubric for Evaluating Colorado Teachers are cumulative. Therefore, for teachers to be proficient in the application of the practices referenced under Element D, teachers must first identify technology that is available and appropriate for instructional use based on content and student skills. This may include software, hardware, and processes that enable students to improve their access to a high-quality education through the use of Internet access devices, easy-to-use digital authoring tools, and the Web to access information and multimedia. A teacher's next steps are the creation of strategies and procedures to ensure students have equitable access to technology and that their use is effectively monitored. For technology to be used as a purposeful instructional resource, it must enhance student learning by developing students' knowledge and skills, both creative and innovative, and engaging and motivating students in learning experiences.

Accomplished and Exemplary rating levels

The impact of a proficient implementation of the professional practices referenced in Element D will be students who are able to appropriately use technology to produce creative and innovative products that accelerate their learning. Through this work, students will develop and apply team-building and networking skills, critical thinking skills, and the skills needed for effective communication and success in the 21st Century.

Click here to go back to the table of contents and view the resource guide in its entirety.

Use available technology to engage in:

- ***Virtual or face-to-face learning activities.***
- ***Real-world applications.***

Use available technology to:

- ***Accelerate their learning.***
- ***Apply team building and networking skills.***
- ***Deepen critical thinking skills.***
- ***Communicate effectively.***

Classroom Examples

Elementary science: Kindergarten students are working on the Colorado Academic Standard 2: Life Science, Grade Level Expectation 1-- Analyze the relationship between structure and function in living systems at a variety of organizational levels, and recognize living systems' dependence on natural selection. ***(Implements lesson plans based on: Colorado Academic Standards)***

Students are studying different types of animals. To help students understand the differences in animals that live on a farm, an ocean, and a zoo, the teacher takes them on virtual field trips of each location through the use of a projector and SMART board. ***(Uses available technology to facilitate classroom instruction and to develop students' knowledge and skills.)*** As students go on the "field trip," the teacher has them identify animals that live in each location and records it on classroom charts. At the conclusion of the "field trip," the teacher guides students in an activity to identify similarities and differences in how the animals live and to provide a rationale for why specific animals live in each of the locations. Students work with partners to make predictions about the animals they will see when they visit a local zoo. Using classroom iPads with paint software, students create pictures of a zoo that includes their predictions. Prior to students creating their pictures, the teacher models how she would create a picture as an exemplar for students to reference. ***(Employs strategies and procedures to ensure that students have equitable access to available technology. Uses available technology to: Provide engaging and motivating learning experiences. Enhance creative and innovative skills.)***

High school geography: Students are studying the Colorado Academic Standard 2: Geography, Grade Level Expectation 2—Explain and interpret geographic variables that influence the interactions of people, places, and environments. ***(Implements lesson plans based on: Colorado Academic Standards)***

Click here to go back to the table of contents and view the resource guide in its entirety.

Students explore the issue of sustainability around the world in a lesson that is designed around the ACOT2 (Apple Classrooms of Tomorrow Today) challenge-based learning framework. The teacher presents information on this issue through the use of digital videos and interviews with farmers and government officials from countries around the world. ***(Uses available technology to facilitate classroom instruction. Uses available technology to enhance student learning, develop students' knowledge and skills, and provide engaging and motivating learning experiences.)*** Students choose to investigate this essential question: What is the role of food in cultures and how is it related to sustainability? They begin their investigation by creating and maintaining a record of their eating habits using Excel spread sheets, marking the source of food on a map, and using the Internet to investigate the production of the food and the environmental and social impact it has on the country of production. They also conduct virtual interviews with farmers and government officials introduced by their teacher to gain knowledge of programs currently in place and their impact on food development. Prior to students engaging in research on the Internet and virtual interviews, the teacher reviews procedures for using the Internet safely and effectively, including Netiquette expectations. ***(Monitors the use of available technology in the classroom. Use available technology to: Engage in virtual or face-to-face learning activities; Accelerate their leaning; Communicate effectively.)*** For their final project, they produce a short video presentation that recommends dietary changes for their peers and promotes sustainable food development. ***(Use available technology to: Enhance creative and innovative skills; Engage in real world applications.)*** (*Eagle County Schools Professional Practices Rubric*, 2012, p. 47. Used with permission).

Refer to this external resource for additional information:

- Article: "Apple Classrooms of Tomorrow Today Learning in the 21st Century"
  http://education.apple.com/acot2/global/files/ACOT2_Background.pdf
  Article describes a collaborative effort to identify the essential design principles for the 21st century high school by focusing on the relationships between students, teachers, and curriculum.

Planning/Coaching Questions

- What technology is available for teacher and student use?
- How can the use of technology enhance student learning and engagement?
- How will I ensure all students have equitable access to technology?
- How will I monitor students' use of technology?
- How will I support students who may need assistance in using the technology available?
- How can I develop projects that require students to utilize technology in creative and innovative ways that will accelerate their learning?

Click here to go back to the table of contents and view the resource guide in its entirety.