

Standard III **Element C**

LEVEL 4 AND LEVEL 5 PRACTICES

The impact of successful implementation of the professional practices referenced in Element C will be students who are able to appropriately use and self-select technology to demonstrate responsible and ethical digital citizenship, apply team-building and networking skills, and create artifacts or tools to solve authentic problems.

STUDENTS:

9 *Demonstrate responsible and ethical digital citizenship.*

“Self-Image and Identity

These lessons are designed to help students explore their own digital lives, focusing on their online versus their offline identity. Students learn the benefits and risks of presenting themselves through different personas and the effects on their sense of self, their reputation, and their relationships.”

https://www.common sense media.org/sites/default/files/uploads/classroom_curriculum/cs_digitalcitizenshipcurric_2016_release.pdf

“Promoting Responsible and Ethical Digital Citizens”

http://www.educationworld.com/a_tech/responsible-student-technology-use.shtml

10 *Use available technology to apply team-building skills.*

How Technology Can Encourage Student Collaboration

<https://www.common sense.org/education/blog/how-technology-can-encourage-student-collaboration>

11 *Self-select appropriate technology tools based on lesson outcomes.*

“This page helps you choose among various technologies (not just LMSs) using two approaches:

- examples of learning outcomes, the kinds of learning activities that could achieve those outcomes, and how those activities could be supported by various learning technologies
- examples of the tools you may be interested in using and the types of activities and learning outcomes that are likely to be relevant.”

<https://teaching.unsw.edu.au/selecting-technologies>

“This section focuses on selecting and applying appropriate technology, science tools, and measurement units for students’ use in data collection and the pursuit of science.”

<http://www.fl-pda.org/independent/courses/elementary/science/section5/5f.htm>

12 *Create artifacts and design tools to solve authentic problems.*

“Science 2.0: Help Students Become Innovative Designers”

<http://nstacomunities.org/blog/2017/01/23/science-2-0-help-students-become-innovative-designers/>

“What are some examples of appropriate technology?”

<https://www.quora.com/What-are-some-examples-of-appropriate-technology>

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Classroom Examples

Elementary science: Kindergarten students are working on the Colorado Academic Standard 2: Life Science, Grade Level Expectation 1—To live and grow, animals obtain food they need from plants or other animals, and plants need water and light.

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 Develop students' knowledge and skills based on lesson outcomes.)* 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. *(Models responsible and ethical use of technology and applications. Integrates available technology to enhance: Creativity.)*

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.

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 and Develop students' knowledge and skills based on lesson outcomes.)* 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 models procedures for using the Internet safely and effectively, including [Netiquette](#) expectations. *(Models responsible and ethical use of technology and applications.)* For their final project, students work in groups to produce a short video presentation that recommends dietary changes for their peers and promotes sustainable food development. *(Integrates available technology to enhance: Creativity, Use of Information, and Collaboration.)* (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.

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Planning/Coaching Questions

- What technology is available for teacher and student use? How can I incorporate available technology into instruction?
- How can the use of technology enhance student learning and engagement?
- How will I model responsible and ethical 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 collaborative ways that will enhance their use of information?

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