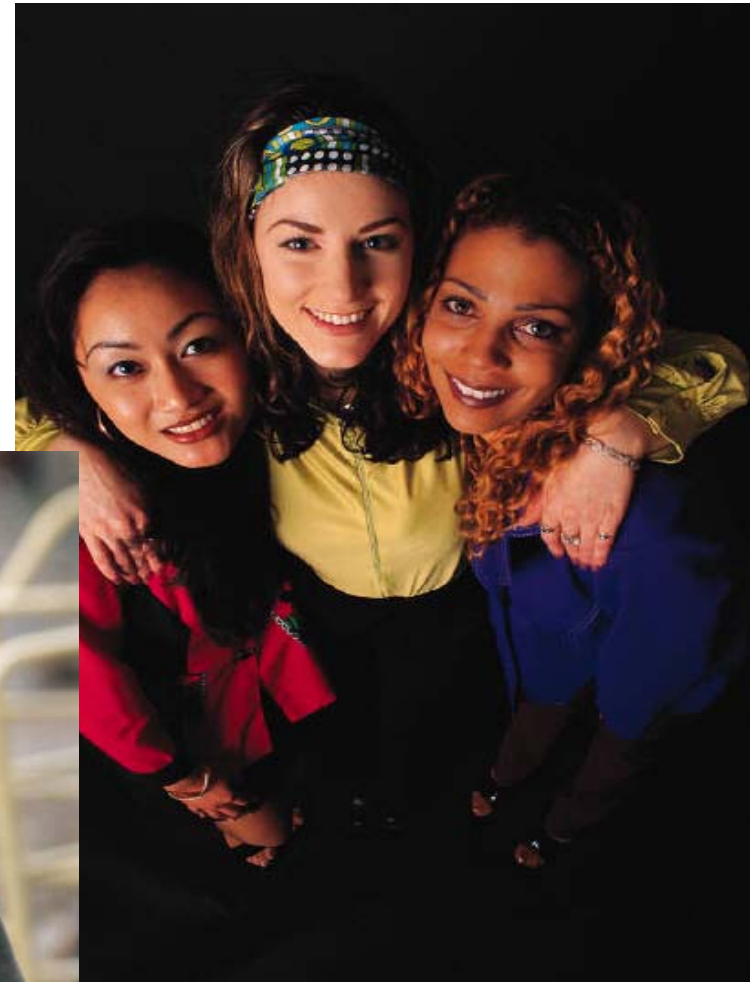


Transformation to 21st Century Schools

Intentional design
to implement the

Colorado Academic Standards

Welcome and Introductions



Prior Knowledge

Fist

No information

1

They were revised?

2

I know a little

3

I know enough to ask questions

4

I feel comfortable answering
questions

5

I can lead a workshop

- **Things are Different...**
a brief overview
- **Foundational Components...**
the conceptual framework
- **AASL standards and Colorado
Academic Standards**
how they work together



Then

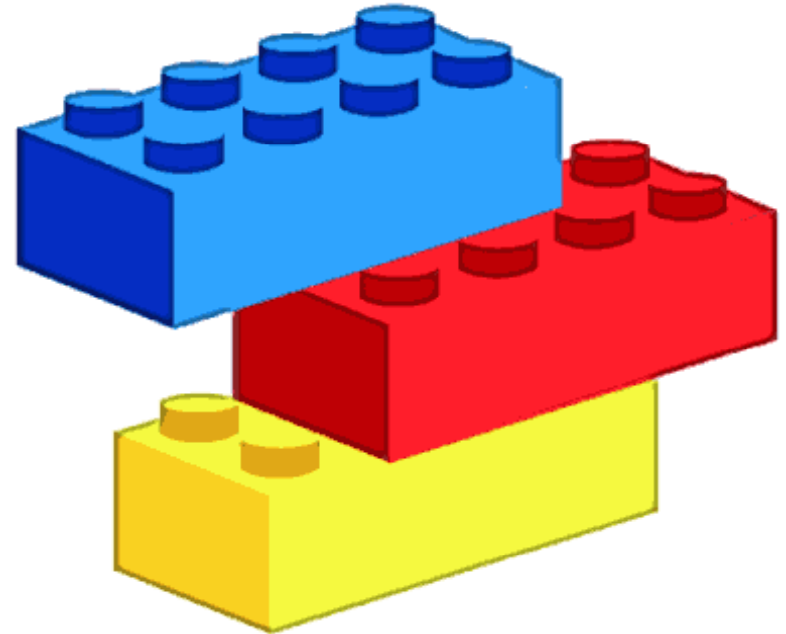
Differences between “old” & “new” Colorado Standards

Now

- Identify “power” standards
- Checklist of skills & content
- Unpacking standards
- Content isolation
- Various content areas taught
literacy and numeracy
connections

- All Standards, All Students
- “Master” standards
- Include global connections
- Standards are “unpacked”
by grades & evidence
outcomes
- Concept connections within
& across content areas
- Foundations: 21st Century
Skills & Post-secondary &
Workforce Readiness

Foundation and Components of the Colorado Academic Standards (CAS)



“In revising its preschool through elementary and secondary education standards, each local education provider shall ensure that it adopts standards, **at a minimum, in those subject matter areas that are included in the state preschool through elementary and secondary standards**, including but not limited to English language competency and visual arts and performing arts education.” SB212

December 15, 2011

Content Area

Standard:

Prepared Graduates:

High School and Grade Level Expectations

Concepts and skills students master:

Evidence Outcomes

21st Century Skills and Readiness Competencies

Students can:

Inquiry Questions:

Relevance and Application:

Nature of the Discipline

Directions:

1. Remove arrows from envelope.
2. Place the correct arrow (definition) pointing at the correct area on the template

Content Area

Standard:

Prepared Graduates:

High School and Grade Level Expectations

Concepts and skills students master:

Evidence Outcomes

Students can:

21st Century Skills and Readiness Competencies

Inquiry Questions:

Relevance and Application:

Nature of the Discipline

Content Area

Name of Content Area

Standard:

Topical Organization

Prepared Graduates:

P-12 Concept and Skill thread students must master

High School and Grade Level Expectations

Concepts and skills students master:

Concepts & skills indicating progress to PGC mastery

Evidence Outcomes

21st Century Skills and Readiness Competencies

Students can:

Indicators of student mastery

Inquiry Questions:

Promote critical thinking

Relevance and Application:

Relevant societal context

Nature of the Discipline:

Characteristics of Discipline

New Areas

Prepared Graduates:

High School and Grade Level Expectations

master:

21st Century Skills and Readiness
Competencies

Inquiry Questions:

Relevance and Application:

Nature of the Discipline

Content Area: Social Studies

Standard: 2. Geography

Prepared Graduates:

- Develop spatial understanding, perspectives, and personal connections to the world

Grade Level Expectation: High School

Concepts and skills students master:

2. Explain and interpret geographic variables that influence the interactions of people, places and environments

Evidence Outcomes

Students can:

- a. Apply geography skills to help investigate issues and justify possible resolutions involving people, places, and environments. Topics to include but not limited to how people prepare for and respond to natural hazards
- b. Identify, evaluate, and communicate strategies to respond to constraints placed on human systems by the physical environment
- c. Explain how altering the environment has brought prosperity to some places and created environmental dilemmas for others
- d. Research and interpret multiple viewpoints on issues that shaped the current policies and programs for resource use
- e. Explain how information and changing perceptions and values of places and environment influence personal actions
- f. Define sustainability and explain how an individual's actions may influence sustainability

21st Century Skills and Readiness Competencies

Inquiry Questions:

1. What will happen if farm land degrades around the world?
2. How might the physical geography of Earth change in the future?
3. Why do countries and cultures struggle to maintain spatial cohesiveness and national identity?
4. What might happen if we thought locally and acted globally?
5. What are the maximum limits of human activity the environment can withstand without deterioration?

Relevance and Application:

1. Individual actions affect the local environment and global community such as the impact of recycling and consumption of resources.
2. Technology can support invention and influence how humans modify the environment in both positive and negative ways such as renovation of existing buildings to "green" technologies, prevention and prediction of natural hazards and disasters, and satellite imagery used to track water availability in the Middle East.

Nature of Geography:

1. Spatial thinkers study how the physical environment is modified by human activities, including how human societies value and use natural resources.
2. Spatial thinkers evaluate major areas of environmental and societal interaction.

Content Area: Mathematics
Standard: 3. Data Analysis, Statistics, and Probability

Prepared Graduates:
➤Solve problems and make decisions that depend on understanding, explaining, and quantifying the variability in data

Grade Level Expectation: Second Grade

Concepts and skills students master:
1. Visual displays of data can be constructed in a variety of formats to solve problems

Evidence Outcomes	21 st Century Skills and Readiness Competencies
<p>Students can:</p> <ul style="list-style-type: none"> a. Represent and interpret data. (CCSS: 2.MD) i. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. (CCSS: 2.MD.9) ii. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. (CCSS: 2.MD.10) iii. Solve simple put together, take-apart, and compare problems using information presented in picture and bar graphs. (CCSS: 2.MD.10) 	<p>Inquiry Questions:</p> <ul style="list-style-type: none"> 1. What are the ways data can be displayed? 2. What can data tell you about the people you survey? 3. What makes a good survey question? <p>Relevance and Application:</p> <ul style="list-style-type: none"> 1. People use data to describe the world and answer questions such as how many classmates are buying lunch today, how much it rained yesterday, or in which month are the most birthdays. <p>Nature of Mathematics:</p> <ul style="list-style-type: none"> 1. Mathematics can be displayed as symbols. 2. Mathematicians make sense of problems and persevere in solving them. (MP) 3. Mathematicians model with mathematics. (MP) 4. Mathematicians attend to precision. (MP)

Content Area: Reading, Writing, and Communicating
Standard: 1. Oral Expression and Listening

Prepared Graduates:

- Collaborate effectively as group members or leaders who listen actively and respectfully pose thoughtful questions, acknowledge the ideas of others, and contribute ideas to further the group’s attainment of an objective

Grade Level Expectation: Seventh Grade

Concepts and skills students master:

- 2. Small and large group discussions rely on active listening and the effective contributions of all participants

Evidence Outcomes

Students can:

- a. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly. (CCSS: SL.7.1)
 - i. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. (CCSS: SL.7.1a)
 - ii. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. (CCSS: SL.7.1b)
 - iii. Pose questions that elicit elaboration and respond to others’ questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. (CCSS: SL.7.1c)
 - iv. Acknowledge new information expressed by others and, when warranted, modify their own views. (CCSS: SL.7.1d)
- b. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. (CCSS: SL.7.2)
- c. Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. (CCSS: SL.7.3)

21st Century Skills and Readiness Competencies

Inquiry Questions:

- 1. What makes an effective discussion?
- 2. How can everyone contribute without a few people dominating the discussion?
- 3. What strategies do effective communicators use to involve other people in the discussion?

Relevance and Application:

- 1. Journalists summarize complex issues for the general public.
- 2. Political representatives integrate the needs and wants of a community into new policy recommendations.
- 3. Real-time feedback technologies rely on the active participation of all members to have a successful discussion.
- 4. Musical ensembles require the cooperation of all players to produce the desired sound.

Nature of Reading, Writing, and Communicating:

- 1. Skilled communicators demonstrate a balance between listening and sharing.
- 2. Skilled listeners recognize that others have important ideas.

Taking a Look . . .



What elements of the new Colorado Academic Standards “jump out” at you?

<http://www.cde.state.co.us/cdeassess/UAS/CoAcademicStandards.html>

Organization of the ELP Standards

	Example Topics	Level 1 Entering	Level 2 Beginning	Level 3 Developing	Level 4 Expanding	Level 5 Bridging	Level 6 - Reaching
LISTENING	Resources & supplies	Identify needed resources or supplies for activities from pictures and oral statements (e.g., "pencils," "paper," "computers")	Match needed resources or supplies with types of activities from pictures and oral statements (e.g., calculators & math books)	Categorize needed resources or supplies with types of activities from pictures and oral descriptions	Analyze tasks or projects by activities and match with needed resources based on pictures and oral discourse	Evaluate and select needed resources for tasks or projects based on oral discourse	
SPEAKING	Instructions/ Assignments	Respond to WH-questions or commands based on oral instructions or visually supported assignments	Paraphrase or retell oral instructions or visually supported assignments (e.g., recap of homework)	Recount steps for following oral instructions or visually supported assignments (e.g., through think-alouds)	Summarize oral instructions or visually supported assignments	Explain, with details, reasons for instructions or assignments appropriate for grade level	
READING	Use of information	Locate words or phrases on socially-related topics (e.g., school dances) from visually supported information (e.g., on posters)	Identify sentence level information on socially-related topics from illustrated text (e.g., in advertisements or instructions)	Summarize information on socially-related topics from illustrated paragraphs	Interpret information on socially-related topics from illustrated text (e.g., directions for board or video games)	Infer information on socially-related topics from text	
WRITING	School life	Make lists associated with school life from visuals and word/phrase banks (e.g., subjects, classes, activities)	Outline or complete graphic organizers about school life (e.g., weekly schedule with times and subjects)	Discuss different aspects of school life using graphic organizers (e.g., likes and dislikes, favorite subjects on T chart)	Suggest ideas for making changes to school life (e.g., rearranging schedules or adding clubs) using graphic organizers	Propose changes to school life and give reasons for choices (e.g., policies or procedures)	

Key elements for Transformation in the Standards

- Prepared Graduates Competencies & Post Secondary Workforce Readiness: common end in mind
- 21st Century skills
- Focus on “All students, All standards”
- Depth, relevant, clearly articulated
- Mastery-application and transferability
- Concepts & Skills

Key Elements:

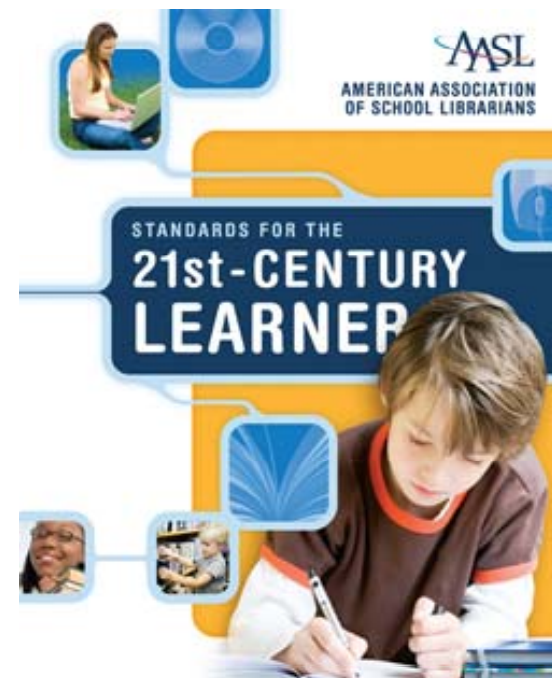
The End in Mind

A clear vision for Colorado's
early childhood through college system

PWR (*college, career, citizens*) =
PCG's + 21st Century Skills

AASL Standards for the 21st-Century Learner

- Embedded in the new CO Academic Standards
- An unprecedented opportunity to be leaders and/or instructional leaders in our buildings

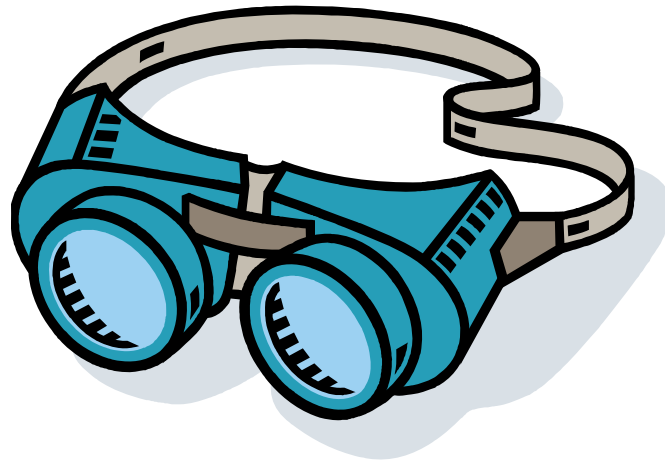


Taking a Look . . .

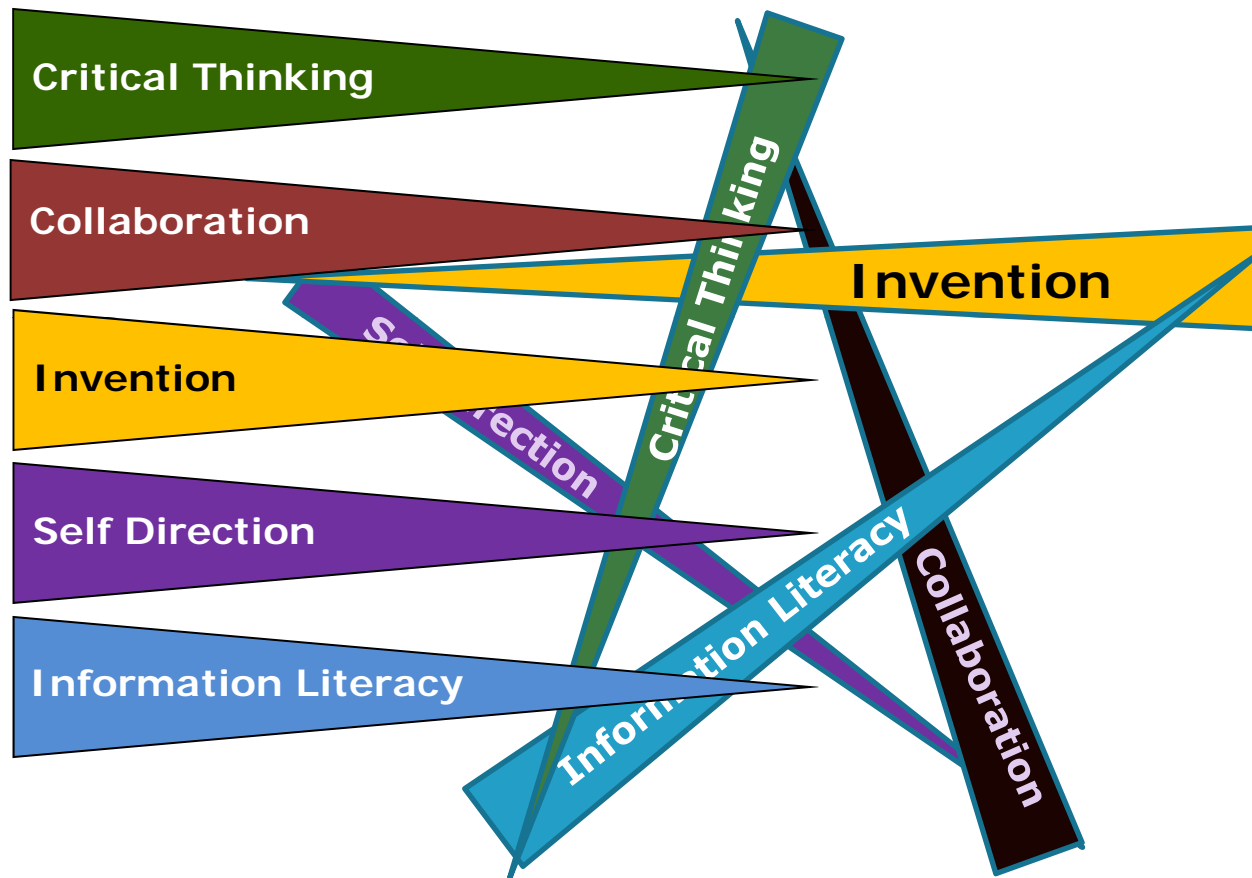


What are some common elements between the Colorado Academic Standards and AASL Standards?

A Focus on 21st Century Skills



21st Century Skills



Critical Thinking and Reasoning

Cause and effect, analysis, logic

Information Literacy

Knowledge acquisition, source discernment, system management

Collaboration

Synergy, team resourcing, leadership for new knowledge

Self-direction





Persistence, adaptability, work ethic, initiative

Invention

Creativity, innovation

Finding the 21st century skills

Directions

1. Underline critical thinking aspects
2.  Circle areas that involve invention
3.  Square areas that involve collaboration
4.  Star areas that show self direction
5.  Highlight areas that show information literacy

Librarians as Teacher Leaders

Charlotte Danielson defines teacher leadership
as:

“Skills demonstrated by teachers who continue to
teach but who influence practices of other
teachers and activities in other classrooms.”

Reflection Activity



- What do you see your role as in working with teachers on standards implementation?
- What can the State Library do to help you in this role?