

New Standards for 2021: Overview and Planning

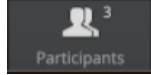


April 21, 2021
MT ASCD

Putting Montana Students First **A+**

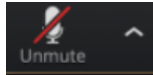
Zoom Information

Rename Yourself



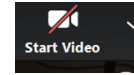
1. Open “Participants”
2. Hover over your name
3. Click “Rename”
 - a. Type your name, your school, and grade band:
K-5, 6-8, & HS

Audio



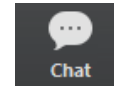
1. Please remain muted unless speaking to avoid background noise. You can unmute yourself by clicking “Unmute” in the lower left-hand corner of the Zoom call.
1. You do not have to use audio if you do not have a microphone.

Video



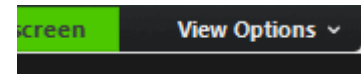
We love seeing your smiling faces! But if you would like you can turn the video off by clicking “Stop Video” in the lower left-hand corner of the Zoom call.

Chat



To view or type in chat, click the “Chat” icon.

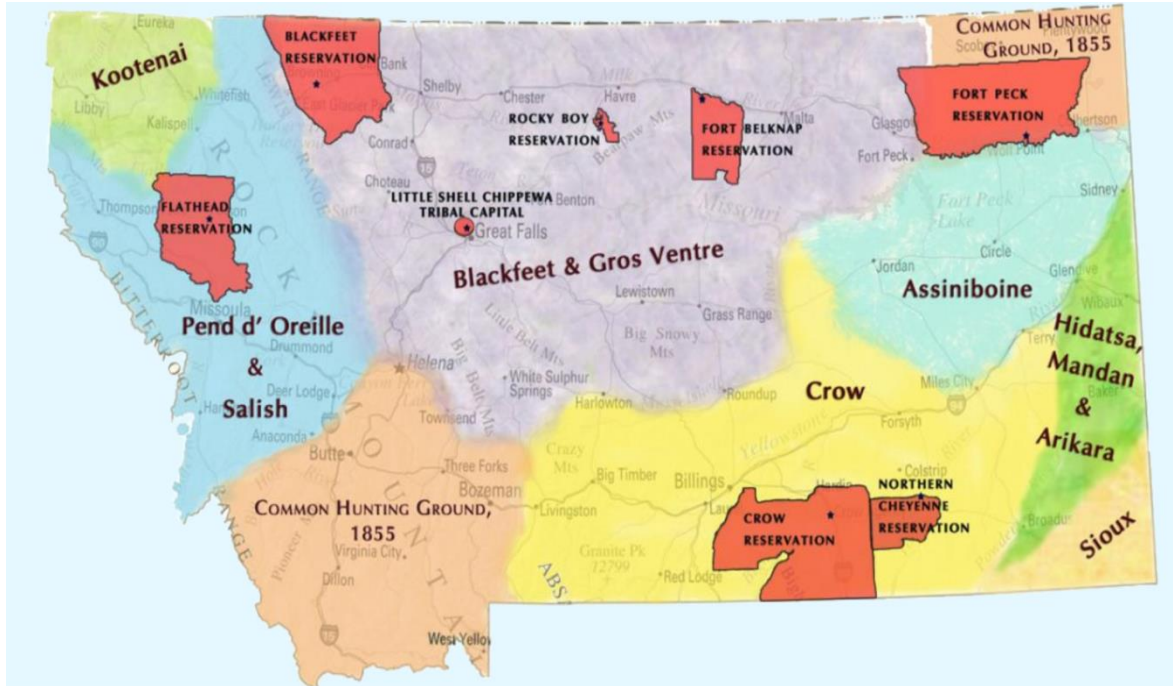
View Options



To adjust the size of content on presentations or shared screens, select View Options, Zoom Ratio at the top of your screen. Select the best setting for your screen.

Opening Land Acknowledgement

1. Find your location on the [map](#) below:



2. In the chat type:

The name of the city/town you are
Zooming in from and the name of
the tribe on whose traditional
territory you are located.

Ex: Helena, MT: Blackfeet and Gros
Ventre

Ex: Missoula, MT: Salish and Pend
d'Oreille



Introductions



Colet Bartow

Senior Manager,
Teaching and Learning Department



Zach Hawkins

Director of Indian
Education for All



Shannon Boswell

Director, Career Technical and
Adult Education Unit



Carli Cockrell

Professional Learning Coordinator



Stephanie Swigart

English Language Arts and
Literacy Coordinator



Marisa Graybill

Mathematics Instructional
Coordinator



Michelle McCarthy

Science Instructional Coordinator



Michael Houghton

Industrial Technology Education
Specialist

Guiding Questions

- What are the standards and where can I find them?
- What is the standards implementation timeline?
- What is different about the new standards?
- How is Indian Education for All incorporated?

Montana's
Standards – Curriculum – Assessment
Model





Standards

A standard is:

What students should know and be able to do

- Written by Montana educators, Proposed by the OPI, Adopted by the Montana Board of Public Education (BPE)
- Administrative Rules of Montana (ARM)
- 11 content areas have standards

COURSE OF STUDY
FOR THE
COMMON SCHOOLS
OF MONTANA.

PREPARED UNDER THE SUPERVISION OF THE
State Superintendent of Public Instruction.

PUBLISHED BY AUTHORITY.

1899.


INDEPENDENT PUBLISHING COMPANY,
HELENA, MONTANA.

The first uniform course of study for the "common schools" of Montana was adopted in 1899. The course was "arranged to cover a period of eight years, of eight months each, and...to give a thorough, common school education as well as to prepare pupils for admission to any of the high schools of the state." The course content included "reading, language, numbers and arithmetic, geography, writing, spelling, U. S. history, physiology and hygiene, civics, culture studies, literature and nature studies."

By 1908, the course of study was revised and extended to include materials for the accredited high schools of Montana. Since that time, course of study revisions have been made periodically to accommodate the expanding body of available knowledge.

Background and Context for Rule Change

The Board of Public Education sets forth the following guidelines for content standards revision:

- Standards will define what all students should know and be able to do;
- Standards will be challenging and rigorous;
- Standards will be clear, understandable, and free of jargon;
- Standards will be measurable;
- Standards will address diversity, specifically fulfilling the commitment to implementing Indian Education for All;
- Standards will be consistent with the grade level and grade band structures in ARM Chapter 53; and
- Content standards will be consistent with the program delivery standards described in ARM Chapter 55.



Where to Find our State Standards

OFFICE OF PUBLIC INSTRUCTION
ELISE ABITZEN, STATE SUPERINTENDENT

PUTTING MONTANA STUDENTS FIRST

Search...

Families & Students Educators Leadership Contact Re-opening Schools

K-12 Content Standards & Revision

For General Questions: opicsi@mt.gov

Content Standards & Resources

ARTS	CAREER & TECHNICAL EDUCATION	COMPUTER SCIENCE	ENGLISH LANGUAGE ARTS & LITERACY
HEALTH ENHANCEMENT	LIBRARY MEDIA	MATHEMATICS	SCIENCE
SOCIAL STUDIES	TECHNOLOGY INTEGRATION	WORLD LANGUAGES	

<http://opi.mt.gov/Educators/Teaching-Learning/K-12-Content-Standards-Revision>



Implementation Timeline

By July 1, 2021

July 1, 2021

June 2026

Update district curriculum review schedule to include new standards

Plan professional development

Plan curriculum review

Plan instructional materials review

Standards published in the Administrative Register

All 2021 standards have been implemented.



2021 Content Standards

- Career and Technical Education
- Computer Science **NEW**
- Library Media and Information Literacy
- Social Studies
- Technology Integration



What is Different

- Current standards adopted in early 2000s
- Reflect updated information for each content area
- Grade level standards for K-5 clarify learning expectations for elementary teachers who teach in all content areas
- Grade band standards for grades 6-8 and high school clarify expectations and allow flexibility of staffing and program delivery
- New standards integrate Montana's Indian Education for All



IEFA In Content Standards

- Ensures that teaching to content standards also addresses IEFA requirement.
- Provides opportunities to weave IEFA into ALL subject areas.
- E.g., 6-8 Computer Science standard: 4: Impacts of computing standards....each student will: (a) compare tradeoffs associated with computing technologies that affect people's everyday activities and career options in Montana and the world, urban, rural, and reservation communities;
- Included in all 2021 BPE adopted standards. (Library Media Arts, Career & Technical Ed., Social Studies, Computer Science, Technology Integrations)

IEFA Integration Process

- Be sure you are familiar with the [Essential Understandings Regarding Montana Indians](#) (EUs)
- Find content area standards that specifically mention IEFA or could include an IEFA connection.
- Consider existing or new curricular areas where standard might be addressed.
- Identify and connect the appropriate EU(s).
- Select and identify any new curricular resources needed for solid IEFA integration



Identifying and selecting IEFA curricular resources

- Check with your librarian to see what IEFA resources might be available. You can also review the [list of IEFA resources](#) that should be in your library.
- Visit the MT OPI [Indian Education for All website](#) for possible resources and ideas
- Be sure that resources are culturally authentic and tribally specific
- Utilize MT OPI IEFA Publication: [Evaluating American Indian Materials and Resources for the Classroom](#) when necessary
- Reach out to MT OPI IEFA unit with any with any questions, ideas, or PD requests: 406-444-3694 or jfranke@mt.gov
- Consider attending the OPI [Indian Education for All virtual Best Practices Conference](#) May 15th & 16th 2021



What Students Do Example

- [Jamboard](#) Example and Directions
- Questions?



What Students Know Example

- [Google Sheet](#)
- Questions?

Computer Science Decisions

*Marisa Graybill on **NEW** Computer Science Standards*

- CSTA K-12 Framework/ MT Tech Guidelines (2016)
- K, 1, 2, 3, 4, 5, 6-8, 9-12
- Essential Understandings Regarding Montana Indians
- ARM Chapter 55 Program Delivery Standards



The Concepts and Practices of the K–12 Computer Science Framework

Core Concepts

1. Computing Systems
2. Networks and the Internet
3. Data and Analysis
4. Algorithms and Programming
5. Impacts of Computing

Core Practices

1. Fostering an Inclusive Computing Culture
2. Collaborating Around Computing
3. Recognizing and Defining Computational Problems
4. Developing and Using Abstractions
5. Creating Computational Artifacts
6. Testing and Refining Computational Artifacts
7. Communicating About Computing



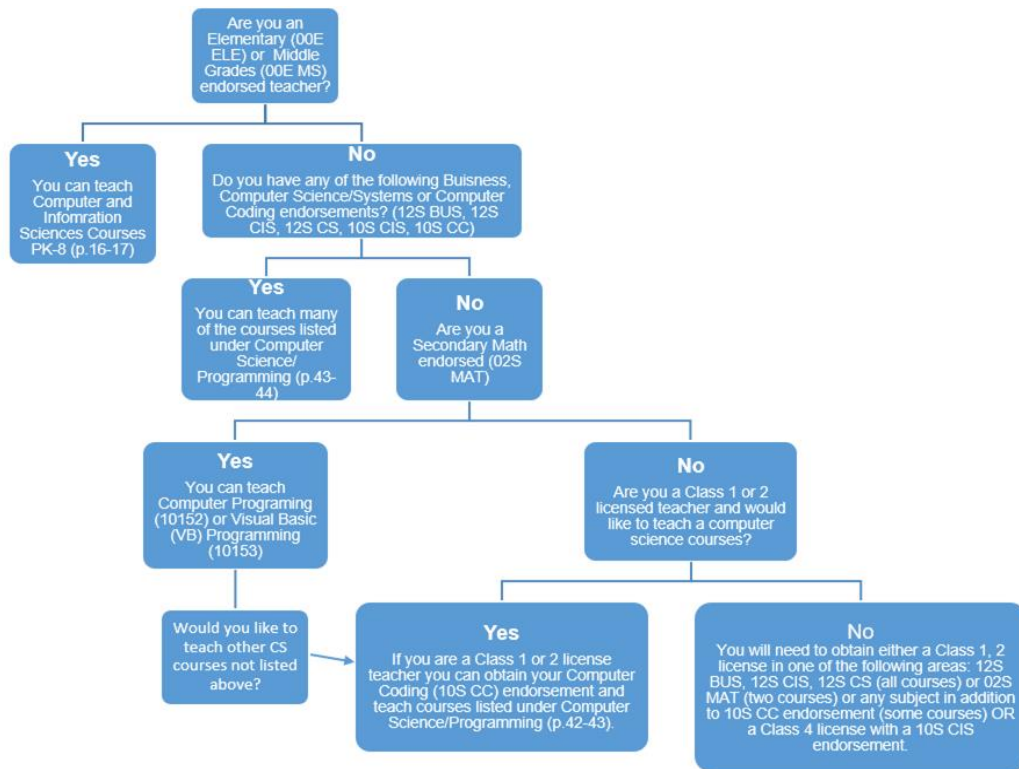
Grade Level Standards



Who Can Teach Computer Science?

- All Elementary and Middle School Certified Teachers
- [Secondary Licensure Requirements](#)- a few pathways to becoming certified to teach computer science and what courses you are able to then teach.

Can I Teach a Computer Science Course?

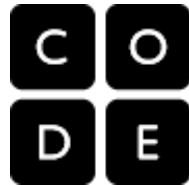




Computer Science Professional Development

- Elementary and Secondary Professional Development Opportunities are listed on the [Computer Science Webpage](#) also are posted on the [OPI Professional learning Opportunities Portal](#)
- Teacher Learning Hub Course: [Diving into CS: Tools for every grade](#) (4 RU)

And MORE!





ARM Chapter 55 Program Delivery Standards: Computer Science

In general, a basic program in computer science education shall:

- meet the following **conditions**:
 - provide a well-articulated integrated curriculum that challenges students to learn increasingly more sophisticated computer science concepts across all grade levels and content areas wherever appropriate
 - foster a collaborative environment that embraces creativity, communication, and problem solving
- include the following **practices**:
 - ensure students become informed citizens who can critically engage in public discussion on computer science related topics
 - ensure students develop as learners, users, and creators of computer science knowledge and artifacts
 - ensure students understand the role and impact of computing in the world around them, leveraging computer technology to create solutions
 - increase career and college readiness

CTE: Changes to Content & Standards



BUT I AM NOT A CTE TEACHER!

You are already teaching the skills; all you need to do is rethink ...

When teaching mathematics, consider adding a personal finance emphasis.

Career Exploration takes many forms, including: Field Trips, Guest Speakers, Independent Research and more.



Career and Technical Education

2000 - Students will . . .	2021 - Students will . . .	
experience various career opportunities and assess personal career pathways.	act as a responsible and contributing citizen and employee	employ valid and reliable research strategies
demonstrate an understanding and apply principles of Resource Management (i.e., financial, time, personal management)	apply appropriate academic and technical skills	utilize critical thinking to make sense of problems and persevere in solving them
acquire and utilize personal and leadership skills to become successful, productive citizens	attend to personal health and financial well-being	model integrity, ethical leadership, and effective management
acquire and demonstrate current technical skills leading to an occupation	communicate clearly, effectively, and with reason	plan education and career path aligned to personal goals
know and demonstrate the requirements of the workplace through authentic application	consider the environmental, social and economic impacts of decisions	use technology to enhance productivity
	demonstrate creativity and innovation	work productively in teams while using cultural/global competence



ARM Chapter 55 Program Delivery Standards: Library Media

[10.55.1801](#) In general, a basic program in library media shall

*meet the following **conditions:***

- establish scheduling to ensure that libraries respond to information needs, foster intellectual curiosity, and support learning;
- ensure collaboration with classroom teachers of all disciplines to implement content area standards and to assist students in engaging in the inquiry/research process;
- model and support the ethical use of information, adherence to copyright laws, and respect for intellectual property; and
- advise the board of trustees on policy and rule pertaining to:
 - develop and maintain a physical and digital library collection that is current, balanced, and reflects authentic historical and cultural contributions of Montana's American Indians and other minority and ethnic groups;
 - engage in comprehensive long range planning to administer and manage, in a secure area, the human, financial, digital, and physical resources of the library to locate, access, and use resources that are organized and cataloged; and
 - implement a viable collection development policy which includes the following components:
 - materials selection and de-selection;
 - challenged materials procedure;
 - intellectual/academic freedom statement;
 - confidentiality assurance;
 - copyright guidelines; and
 - gifts and donations.

include the following **practices:**

- collaborate with classroom teachers of all disciplines to highlight and reinforce the commonalities and links between and among the curricular areas;
- cooperate and join with other libraries, information agencies, and community resources in the sharing of materials;
- encourage partnerships with information centers that use providers of digital electronic content and information systems; and
- participate in school-wide technology and telecommunications digital service and content planning and promote its integration into all instructional programs.

Library Media and Information Literacy

2008 Students will . . .	2021 Students will . . .
identify the task and determine the resources needed.	build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems;
locate sources, use information and present findings.	demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community, including the distinct and unique cultural heritage of American Indians;
evaluate the product and learning process.	work effectively with others to broaden perspectives and work toward common goals;
use information safely, ethically and legally.	make meaning by collecting, organizing, and sharing resources of personal relevance;
pursue personal interests through literature and other creative expressions.	exercise freedom to read and demonstrate the ability to pursue personal interests; and
	demonstrate safe, legal, and ethical creating and sharing of knowledge products.



Technology Integration Decisions

Carli Cockrell on Technology Integration

- K, 1, 2, 3, 4, 5, 6-8, 9-12 standards
- ISTE Standards for Students (2017) and 2010 Essential Learning Expectations
- Essential Understandings Regarding Montana Indians
- ARM Chapter 55 Program Delivery Standards



ARM Chapter 55 Program Delivery Standards: Technology Integration

In general, a basic program in technology integration education shall meet the following **conditions**:

- development of skills that lead to lifelong pursuits;
- provide opportunities for authentic application, work experience, and/or articulation with postsecondary education;
- integrate and transfer technology skills across grade levels, content areas, and programs; and
- provide access to emerging technology across grade levels, content areas, and programs.

Include the following **practices**:

- progression of skills and knowledge from basic to advanced;
- integration of technology competencies with academic knowledge in a contextual setting; and
- incorporate a range of instructional strategies, including personalized learning.

Technology Integration

2008 - Students will . . .	2021 - Students will be . . . (skills)
use digital tools and resources for problem solving and decision making.	empowered learners
collaborate and communicate globally in a digital environment.	digital citizens
apply digital tools and skills with creativity and innovation to express him/herself, construct knowledge, and develop products and processes.	knowledge constructors
possess a functional understanding of technology concepts and operations.	innovative designers
	computational thinkers
	creative communicators
	global collaborators
	reflective users



ARM Chapter 55 Program Delivery Standards: Social Studies

[10.55.1601](#) In general, a basic program in social studies shall:

meet the following **conditions**:

- use strategies and methods that incorporate multiple perspectives as a basic component of social studies instruction;
- support the democratic process and teach the skills necessary to promote a learning environment to foster individual civic competence; and
- integrate knowledge, skills, beliefs, values, and attitudes within and across the four content areas listed in [NEW RULE I] to promote active citizenship.

include the following **practices**:

- incorporate inquiry skills and strategies using a variety of both primary and secondary resources;
- promote socialization and social criticism through civil discourse and critical thinking as a commitment to civic responsibility;
- analyze ethical dimensions and social policy implications of issues to provide an arena for reflective development of concern for individual needs and the common good;
- promote decision-making and critical thinking skills and civic responsibilities through active participation across the four content areas listed in [NEW RULE I]; and
- nurture an understanding of the contemporary and historical traditions and values of American Indian cultures and other cultural groups of significance to Montana and to society.

Social Studies

2000 Students will . . .	2021 - Students will . . . (in Civics and Government, Economics, Geography, and History)
access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations	develop questions
analyze how people create and change structures of power, authority, and governance to understand the operation of government and to demonstrate civic responsibility	plan inquiries
apply geographic knowledge and skills (e.g., location, place, human/environment interactions, movement, and regions)	compare and evaluate sources for relevance, perspective, and accuracy
demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships	use sources to gather evidence to develop and refine claims
make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption	communicate conclusions
demonstrate an understanding of the impact of human interaction and cultural diversity on societies	take informed action



QUESTIONS?

| opicsi@mt.gov

Putting Montana Students First **A+**