Colorado's Environmental Education Plan

Advancing Environmental Literacy in Colorado

CEEP

COLORADO Department of Education

caee

COLORADO Department of Natural Resources

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Executive Summary

Meaningful environmental and outdoor learning experiences bring us together to learn about our world, including how to best care for and sustain it for future generations.

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Colorado's environment, economy, and communities depend on informed citizens who can make decisions about air and water quality; the health of farms, ranches, forests, and wildlife; how to meet energy and other resource needs; how to create and sustain healthy communities; and how to provide opportunities for people to enjoy the state's natural beauty while protecting it for future generations.

The Colorado Environmental Education Plan outlines strategies for building a sustainable infrastructure to nurture a range of skills and interests and help realize every student's potential to care for the people, places, and planet we all depend on.

Colorado's Environmental Education Plan was first adopted by the Colorado State Board of Education in 2012 as a result of the Colorado Kids Outdoors Grant Program Legislation, HB10-1131, signed into law in May 2010.

Developing and implementing a statewide environmental education plan depends on the Colorado Department of Education (CDE) and Department of Natural Resources (DNR) leveraging an extensive circuitry of learning sites and partners to ensure that the knowledge and skills students gain in one place can easily flow to new contexts, powering further exploration and boosting ongoing learning.

Just as a root system supplies nourishment to a plant to help it flourish, the Colorado Environmental Education Plan supports implementation of the Colorado Academic Standards while developing students' environmental knowledge and skills and encouraging students to spend more time outside. The strategies outlined in this plan support teachers by encouraging the integration of high quality environmental education opportunities and use of the outdoors in ways that are relevant, connected, and meaningful for their students.

The Colorado Environmental Education Plan Articulates Four Main Goals:

1 Strengthen collaboration across the state among key stakeholders such as state agencies, formal and informal educators, business and industry partners, school districts, community organizations, researchers, families, and communities.

2 Provide professional development that increases high-quality, culturally-relevant, and inclusive learning experiences for students and develops a greater understanding of complex ecosystems.

3 Improve statewide access to formal and informal environmental education experiences for all students.

4 Create formal and informal pathways to explore career opportunities in the environmental field and understand how environmental literacy can benefit any career field.

What is environmental literacy and why is it important to Colorado?

Colorado is a state rich in natural resources and beauty. Our wellbeing is interconnected with the wellbeing of our natural systems. Over 92% of Coloradans participate in some form of outdoor recreation (Colorado's Tourism and Outdoor Recreation Manufacturing Companies, 2016) that improves their overall health and quality of life. At the same time, we face increasingly complex challenges—from climate change and loss of species to decreasing access to nature, and other threats to our health, security, and future survival. Understanding the importance of keeping our state healthy is imperative to its future.

Meaningful environmental and outdoor learning experiences bring us together to learn about our world, including how to best care for and sustain it for future generations.

Environmental and outdoor learning is a process that helps students learn about the natural systems we all depend on and understand what we must do to interact responsibly with our environment to safeguard natural resources for future generations.

Environmental and outdoor learning improves students' academic performance, builds critical thinking and problem-solving skills, and sparks engagement and enthusiasm for learning. It also builds civic and community engagement, empathy, and improves mental and physical wellness, which are the roots of growing into productive members of Colorado's community.

Most importantly, environmental and outdoor learning results in environmental literacy. Environmental Literacy is defined as a student's knowledge, understanding, skills, and motivation to take informed environmental action as individuals and as members of their community. Students will use these skills both today and in the future to make decisions about air and water quality; the health of farms, ranches, forests and wildlife; how to meet energy and other resource needs; how to create and sustain healthy communities; and how to recreate responsibly while protecting our state's natural resources for future generations.
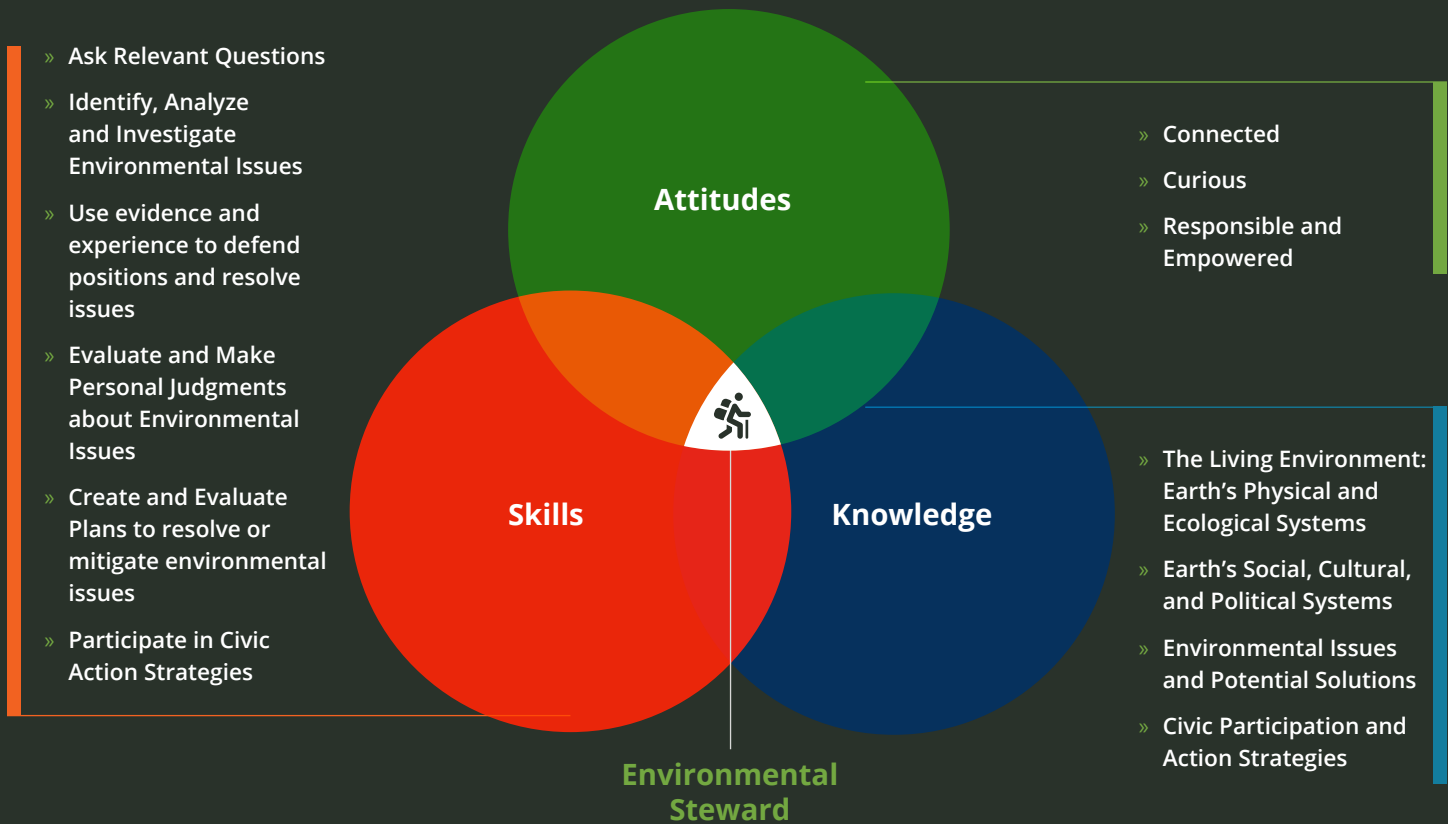
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Colorado's tourism and outdoor recreation manufacturing companies. (2016, June 21). Colorado Office of Economic Development & International Trade. https://choosecolorado.com/key-industries/outdoor-recreation

Colorado's Environmental Literacy Learning Framework

- » **Ask Relevant Questions**
- » **Identify, Analyze and Investigate Environmental Issues**
- » **Use evidence and experience to defend positions and resolve issues**
- » **Evaluate and Make Personal Judgments about Environmental Issues**
- » **Create and Evaluate Plans to resolve or mitigate environmental issues**
- » **Participate in Civic Action Strategies**

Attitudes

- » **Connected**
- » **Curious**
- » **Responsible and Empowered**

Skills

Knowledge

- » **The Living Environment: Earth's Physical and Ecological Systems**
- » **Earth's Social, Cultural, and Political Systems**
- » **Environmental Issues and Potential Solutions**
- » **Civic Participation and Action Strategies**

Environmental Steward

Colorado's Environmental Literacy Learning Framework lays out what children and youth should learn from their experiences with environmental and outdoor learning. These attitudes, knowledge, and skills are reflected and infused throughout Colorado's 2020 Academic Standards (See Appendix A).

Attitudes

Young people should demonstrate key attitudes which encompass the mindset of an environmental steward. Colorado's environmental stewards are:

- » Connected- demonstrates caring, empathy, awe and belonging towards cultural resources and the natural world.

- » Curious-shows curiosity about how the world works and seeks out new and challenging learning experiences throughout their lives.

- » Responsible and Empowered-show concern for the welfare of people, cultural resources, and the natural world. They are respectful, consider multiple perspectives; honor others regardless of differences; and take informed action to solve environmental problems.

Knowledge

Young people need to understand how our ever-changing and interconnected world works in order to function effectively and act responsibly. Colorado's environmental stewards understand:

- » The Living Environment which includes Earth's Physical and Ecological Systems: How living things function and interact with one another and their environment and how Earth is a complex system of interacting physical, chemical and biological processes.

- » Earth's Social, Cultural and Political Systems: How the various social, cultural, and political systems develop and interact, as well as the historical and geographic contexts in which they have developed and now function.

- » Environmental issues and Potential Solutions—How environmental issues arise from biophysical impacts as well as human conflicts; and understanding how solutions need citizen action involving planning and evaluation of results.

- » Civic participation and action strategies--How the methods of civic engagement, action, and community service preserves or improves the environment. Individuals and communities solve environmental problems as a means to improve their communities.

Skills

Young people need to be able to apply their creativity and innovation to evaluate and make personal judgements about environmental issues in order to function effectively and act responsibly. Colorado's environmental stewards are able to:

» Ask relevant questions – about environmental problems as well as human dimensions and historical or geographical features of an issue. This includes the ability to ask higher-order questions aimed at discovering conditions that have implications for an issue;

» Identify, Investigate and Analyze environmental issues – including the ability to describe and provide evidence for the dimensions of the issue, human disagreements central to it, and factors that cause or contribute to it; the interpretation and use of knowledge regarding physical, ecological and sociopolitical systems, and of information about stakeholders, their positions, beliefs and value perspectives.

» Use evidence and experience to defend positions and resolve issues – constructing and defending a sound evidence-based argument about what it will take to resolve or help resolve an issue;

» Evaluate and make personal judgments about environmental issues – constructing evaluations and explanations based on available information and considering the beliefs and values of diverse stakeholders, as well as, articulating views about actions that may be warranted.

» Create and evaluate plans to resolve or mitigate environmental issues – by assuming the responsibility for acting and engaging in planning based on the environmental conditions, incorporating beliefs and values of diverse stakeholders, available resources, and sociopolitical contexts to resolve or help resolve issues.

» Participate in civic action strategies--forms of citizen participation, action, and community service intended to preserve or improve the environment. Action strategies include restoration projects; consumer and economic action; effective communication strategies; political action; and collaborative solution seeking.

Environmental and outdoor learning works best when it happens in an extensive network of different places and spaces, because this lets students build concepts and make connections over time. Some environmental and outdoor learning happens at home, others in formal learning settings, like schools and universities, or settings designed for environmental education, like outdoor classrooms, schools, or as part of outdoor recreation activities. Some occur in places where people encounter nature such as parks, zoos, aquariums, or nature centers. Some happen in places that support hands-on, practical experience like laboratories, summer camps, after school programs and museums. And, as we learned during the COVID-19 pandemic, environmental education can be delivered effectively virtually. Environmental education provides essential opportunities for all kids, whether their best learning happens inside or outside the classroom.

Similarly, environmental and outdoor learning are based on a systems approach and employ a whole ecosystem of strategies. So, environmental and outdoor learning can take place in virtually any discipline from anthropology to zoology. Environmental educators are the faces of many types of organizations: from afterschool programs to state and federal agencies. Some environmental educators are what we all tend to picture as "teachers," but they also might be naturalists, scientists, park rangers, and many others. Engaging students in rich and varied learning environments has the potential to make learning relevant, interactive, and foster connections to the places we live, work, learn, and play.

History of the Colorado Environmental Education Plan

The Colorado Environmental Education Plan was first adopted by the Colorado State Board of Education in 2012 as required by HB10-1131, The Colorado Kids Outdoors Grant Program Act. The plan outlined strategies for developing a coordinated and visible statewide environmental education infrastructure. This structure was intended to facilitate students' access to and time spent outdoors; and aimed to link teachers with environmental education opportunities, professional development, and resources that engage students in mastering the Colorado Academic Standards.

In 2013, four Regional Environmental Education Leadership Councils were established to build and support a network of communities and individuals capable of implementing and advocating for the highest quality environmental and outdoor learning in correlation with the Colorado Environmental Education Plan. **The Colorado Alliance for Environmental Education** supports the Regional Councils and the network of environmental outdoor learning providers across the state.

Environmental Education and ESSA

The Every Student Succeeds Act, which reauthorizes the Elementary and Secondary Education Act, is the comprehensive federal legislation that governs preK-12 education in the United States. In 2015, the bill included language making environmental education and environmental literacy programs explicitly eligible for federal education funds for the first time. The key language is found in two formula grant programs described in Title IV of the bill:

» Environmental education is called out as eligible for funding under a "well-rounded education" grants program.

» Environmental literacy programs are eligible for funding as part of the 21st Century Community Learning Centers program.

» The prioritization of STEM (Science, Technology, Engineering, and Math) activities in ESSA including "hands-on learning" and "field-based or service learning" to enhance understanding of STEM subjects may provide additional opportunities for environmental science education programs.

In 2015, Regional Councils conducted an informal survey of environmental and outdoor learning providers to learn more about the status of environmental and outdoor learning in Colorado.

Over 220 environmental and outdoor learning providers responded. Although the data collected was not comprehensive of all environmental and outdoor learning providers in the state, several trends were noted including:

» Smaller School Districts (fewer than 2000 students) had the least access to outdoor and environmental learning providers;

» Environmental and outdoor learning partners are least accessible to teachers and schools in the eastern plains of Colorado;

» Only 60% of environmental and outdoor learning providers correlated their programming to state academic standards.

As a local control state, the 178 Colorado school districts and their school boards make public education decisions such as setting local curriculum and local graduation requirements. This results in significant variations in the integration of environmental and outdoor learning into educational experiences for students. To best meet the diverse needs of local districts, since 2017, council members have been working to identify and develop local environmental and outdoor learning champions in school districts. By 2019, councils had reached teachers in over 30 districts inviting them to make a commitment towards implementing environmental education experiences in their classrooms or attending professional development in outdoor and environmental learning.

The Colorado Environmental Education Plan is being updated to reflect the progress and growing interest in environmental and outdoor learning as well as to reflect changes in Colorado's Academic Standards, which now include more references to human and environment interactions, climate change, and more.

Councils have reached teachers in over

30 districts

inviting them to make a commitment towards implementing environmental education

Guiding Principles

The development of the Colorado Environmental Education Plan was shaped by a set of guiding principles that frame all of the strategies and recommended actions contained in this document:

Equity of Access for All Students (All means All)

We must support ALL Colorado's students in becoming environmentally literate, not just a few, because all students play a critical role in stewardship of our state's natural resources and civic engagement now and in the future.

Collaborative Solutions and Unified Approach

Collaboration among the many stakeholders and community partners involved in environmental literacy is critical to implementing the recommendations contained in this document. Developing and utilizing shared language and goals across formal and informal and formal settings will be key to success.

Sustainability and Scalability of Systems

We must identify and commit to securing dedicated and sustained funding and resources for environmental literacy and work within the current context of Colorado's education and workforce transformation to harness momentum and create long-term impact.

Commitment to Quality

Students must have access to high-quality learning experiences and materials inside and outside of the classroom that cultivate environmental literacy. Formal and informal educators must have access to high-quality professional learning opportunities.

Variety of Learning Experiences

Students can best develop environmental literacy through a combination of learning experiences both in and out of the classroom, including but not limited to, outdoor and informal education, place and community based education, experiences in green school buildings and grounds, and experiences in career pathways.

Cultural Relevance and Competence

All students benefit from culturally responsive learning experiences. Environmental literacy efforts in Colorado will hinge upon culturally competent educators utilizing educational resources and approaches that are responsive to the communities they serve.

Implementation of the Colorado Environmental Education Plan

The Colorado Environmental Education Plan (CEEP) is primarily the responsibility of the Colorado Department of Education (CDE). However, this plan's success is dependent on strong partnerships with the Colorado Department of Natural Resources (DNR) and other environmental and outdoor learning partners, such as the Colorado Alliance for Environmental Education (CAEE). CAEE is a network of environmental and outdoor learning providers across Colorado that works collectively to drive excellence, foster collaboration, and mobilize support for environmental and outdoor learning. CAEE was selected by CDE and DNR in 2013 to coordinate the Regional Colorado Environmental Education Leadership Councils.

Preparing students as critical thinkers and informed decision-makers about the environment involves a collaborative effort as environmental education is woven through the work of educators, administrators, families, community members, business owners, and governmental leaders. Opportunities exist in rural, urban and suburban locales, and within many cultural contexts. In addition, learning experiences at state and regional historic sites, local museums, and on local school grounds, also provide invaluable opportunities to engage students in interacting with the environment. Success of this plan relies on collaboration of many groups and organizations. Listed below is a brief description of the role that key partners will play in supporting this plan. Successful implementation of the CEEP will require all stakeholders to bring forward their existing resources and expertise to ensure all students have access to high quality environmental education experiences.

The Colorado Department of Education will:

- » Provide a staff liaison to the Colorado Regional Environmental Education Leadership Councils
- » Raise awareness of the Colorado Environmental Education Plan
- » House the Colorado Environmental Education Plan on the CDE website
- » Look for ways to integrate the Colorado Environmental Education Plan into other Colorado Department of Education initiatives
- » Provide ongoing technical support to the Colorado Regional Environmental Education Leadership Councils

The Colorado Department of Natural Resources will:

- » Provide a staff liaison to the Colorado Regional Environmental Education Leadership Councils
- » Raise awareness of the Colorado Environmental Education Plan
- » Link to the Colorado Department of Education's Environmental Education Plan webpage from the Department of Natural Resources and Colorado Parks and Wildlife websites
- » Look for ways to integrate the Colorado Environmental Education Plan into other Department of Natural Resources initiatives
- » Provide ongoing technical support to the Colorado Regional Environmental Education Leadership Councils

Colorado Alliance for Environmental Education will:

- » Facilitate and coordinate 1-2 annual summits of the Colorado Environmental Education Leadership Councils to develop collective implementation strategies
- » Raise awareness of the Colorado Environmental Education Plan
- » Provide educators with environmental and outdoor learning resources and professional development

» Coordinate the network of environmental and outdoor learning providers and teachers in Colorado

» Disseminate the Colorado Environmental Education Plan to education networks

» Provide ongoing technical support to the Colorado Environmental Education Leadership Councils

» Support and assist in fundraising efforts for the Colorado Environmental Education Leadership Councils

Colorado Environmental Education Leadership Councils:

Colorado's four Regional Environmental Education Leadership Councils are responsible for carrying out the mission, goals and strategies of the Colorado Environmental Education Plan. The Councils have members from within the field of environmental education, representatives from school districts, natural resource agencies, recreation industries, and various others who have a vested interest in environmental and outdoor learning. They work to:

» Connect state and local agencies, districts, and schools to promote environmental education and create resources and professional development opportunities for Colorado's teachers and students.

» Propose revisions and updates to the Colorado Environmental Education Plan.

» Build awareness of the Colorado Environmental Education Plan.

» Identify and partner with local and regional leaders in outdoor education who can provide EE resources.

» Develop funding for environmental education.

» Identify and support initiatives that sustain environmental education programs in Colorado.

» Monitor annual progress toward meeting the goals of the plan.

» Work with the Colorado Department of Natural Resources and Colorado Department of Education to meet shared goals.

» Recruit and engage council members who represent the diversity of identities, needs, and communities in Colorado.

The Colorado Environmental Education Plan Goals

Vision

As environmentally literate Coloradans, all PreK-12 students develop an appreciation for their environment and engage in understanding, analyzing, and taking informed action for Colorado, the United States, and the world.

Mission

Educational institutions, organizations, and communities collaborate to ensure that all students in the state of Colorado have access to and are engaged in high-quality environmental and outdoor learning experiences to develop a strong ecological identity, connection to the natural world, and sense of place.

Goals/Strategies

1 *Strengthen collaboration across the state among key stakeholders such as state agencies, formal and informal educators, business and industry partners, school districts, community organizations, researchers, families, and communities.*

    a.   Convene annual statewide EE conferences, regional meetings, and participate in associated conferences to build awareness, share best practices, and engage diverse stakeholders in action planning for culturally relevant EE;

    b.   Cultivate statewide and local environmental education networks that foster collaborative, cross-sector, and intergenerational relationships in order to sustain this work at the local level;

    c.   Support schools and districts in developing an EE implementation plan;

    d.   Utilize common measurements/tools to evaluate regional impact and support coherence and collaborative planning;

    e.   Develop a strategy for capacity building including permanent funding for sustained environmental literacy across the state, with particular attention to regions or communities that are historically underserved;

    f.   Bring together stakeholders to design formal and informal education pathways that reflect the range of opportunities and experiences for all young people to pursue and deepen their environmental interest and knowledge over time.

How can you participate?	
State Agencies	Participate and present at statewide and regional EE convenings. Develop aligned programming, policies (i.e teacher licensure and endorsement), and funding to support coherent implementation of the EE Plan. Identify overlap and opportunities for collaboration through other statewide planning processes and implementation (i.e Water Education Plan, etc.)
School Districts	Create an EE implementation team consisting of cross-sector stakeholder groups (e.g. community partners, regional EE coordinators, parents, students, etc.) to support EE implementation planning at the district level. Support the development of aligned programming/curriculum. Align policies and funding to support district implementation efforts, including providing support for professional learning.
Schools	Create an EE implementation team consisting of cross-sector stakeholder groups (e.g. community partners, regional EE coordinators, parents, students, etc.) to support EE implementation planning at the school level. Develop aligned programming/curriculum, professional learning experiences, partnerships, policies, and funding to support school implementation efforts.
Teachers	Collaborate with colleagues and community partners, including parents and caregivers, to develop EE learning experiences for students. Explore opportunities for interdisciplinary learning and professional development experiences with colleagues. Incorporate field-based and place-based learning experiences into the curriculum.
Students	Collaborate with peers, teachers, and community members to encourage field-based and place-based learning experiences at the classroom, school, district, or community level. Connect with local, national, or global youth efforts in support of environmental literacy.
EE Providers	Participate and present at statewide and regional EE convenings. Develop aligned programming, policy, and funding to support coherent, equitable implementation. Partner with local schools, districts, and community organizations, including parents, caregivers, and students, to support local EE implementation efforts. Explore opportunities for interdisciplinary learning and professional development experiences with colleagues. Use evaluation data from environmental education programs to monitor success.
Parents and Caregivers	Collaborate with peers, teachers, and community members to support implementation of the EE Plan at the classroom, school, district, or community level. Connect with local, national, or global efforts in support of environmental literacy.
Community-based Organizations	Join an EE implementation team consisting of cross-sector stakeholder groups (e.g. community partners, regional EE coordinators, parents, students, etc.) to support EE implementation planning at the district level. Develop aligned programming, policies, and funding to support district/school implementation efforts. Participate and present at statewide and regional EE convenings.
Business and Industry Partners	Join an EE implementation team to support EE implementation planning at the district or school level. Develop aligned programming, policy, and funding to support coherent, equitable implementation. Participate and present at statewide and regional EE convenings. Identify opportunities for community support, outreach, and engagement.

2 *Provide professional development that increases high-quality, culturally-relevant, and inclusive learning experiences for students and develops a greater understanding of complex ecosystems.*

    a.   Identify current EE professional development and pre-service opportunities available statewide; identify gaps and interests; and develop actions and response;

    b.   Increase formal (in-service and pre-service) and informal educators' content knowledge, pedagogical content knowledge, and instructional skills through:

        i.   Interdisciplinary, place-based and research-based instructional strategies;

        ii.   Innovative technologies as an integral element of environmental education;

        iii.   Best practices that underpin environmental education principles; and

        iv.   Culturally responsive teaching practices and program design that includes connections to socio-emotional learning.

    c.   Provide professional development opportunities for pre-service, in-service, and informal educators around place-based learning focusing on leveraging local knowledge, local practices, and cultural ways of knowing central to environmental and outdoor learning experiences.

    d.   Provide professional development opportunities for pre-service, in-service, and informal educators to disrupt ableism and create inclusive environmental education experiences.

How can you participate?	
State Agencies	Participate in the coordination and development of resources and implementation of professional development.
	Become familiar with district and school needs in order to effectively align professional development opportunities.
	Review the Colorado Academic Standards in order to effectively align professional development opportunities with standards.
	Develop and support environmental and outdoor learning professional development opportunities for pre-service teachers in collaboration with institutions of higher education.
School Districts	Provide culturally relevant environmental education experiences for educators in district professional development activities.
	Apply for grant funding from the ESSA federal funds to support teacher professional development.
	Consider ways to engage teachers and students in "greening" school and district facilities.
	Support the construction and development of outdoor classrooms.
Schools	Provide culturally relevant environmental education experiences for educators in district professional development activities.
	Support interdisciplinary EE professional development (e.g. professional learning communities) for practicing and engaging in environmental and outdoor learning with students.
	Consider ways to engage teachers and students in "greening" school and district facilities.
	Support the construction and development of outdoor classrooms.

Teachers	Participate in high-quality, standards-based professional development opportunities to increase content and pedagogical knowledge and skills.
	Participate in culturally relevant and ability-accessible environmental education experiences and professional development for educators.
	Engage in professional learning opportunities such as the annual Advancing EE Conference to network with the greater EE community.
	Observe or shadow teachers who are already integrating environmental education into their classrooms.
	Participate in interdisciplinary EE professional development (e.g., professional learning communities) for practicing and engaging in environmental and outdoor learning with students.
Students	Engage in conferences, youth summits or other learning opportunities to learn more about how to share outdoor and environmental learning opportunities with peers.
EE Providers	Participate in the coordination of partnerships, development of resources and implementation of professional development.
	Contact the Regional EE Councils to find high-quality professional development or professional learning communities to increase knowledge and skills in environmental education.
	Share professional development opportunities on-line at www.caee.org.
	Become familiar with the Colorado Academic Standards in order to effectively align educational programming to school and teacher needs.
Parents and Caregivers	Engage in conferences, community summits or other learning opportunities to learn more about how to share outdoor and environmental learning opportunities with peers.
	Encourage and engage in environmental and outdoor learning as a family.
Community-based Organizations	Become familiar with the Colorado Academic Standards in order to effectively align educational programming to school and teacher needs.
	Participate in the coordination and development of resources, and implementation of professional development.
	Develop and host EE professional development for educators.
	Coordinate with youth serving organizations to support youth engagement efforts.
	Reach out to members of the school community to increase awareness of available resources, field experts, and possible training opportunities.
Business and Industry Partners	Coordinate with community-based organizations to support and fund professional development and community engagement efforts.
	Collaborate with local partners to provide EE professional development (e.g. teacher externships, career awareness, guest speakers, curriculum planning).

3 *Improve statewide access to formal and informal environmental education experiences for all students.*

    a.   Convene diverse stakeholder groups on a regular basis to identify barriers and gaps at the state and regional level to opportunities and funding for teachers to provide environmental learning experiences for students.

    b.   Develop relationships to increase awareness within communities and among all families and caregivers for the needs and benefits of outdoor and environmental learning experiences to:

        i.   Improve access to lifelong health and wellness benefits;

ii. Enhance civic-minded behaviors and environmental stewardship skills such as the responsible use and protection of the natural environment through culturally relevant conservation and sustainable practices;

iii. Support Colorado's statewide economies including recreation, tourism, ranching, agriculture, mining, and energy.

c. Improve access to equitable and culturally relevant EE learning experiences including those aligned to the Colorado Academic Standards and supporting socio-emotional learning.

d. Improve access to inclusive and accessible practices that disrupt ableism to create relevant EE learning experiences including those aligned to the Colorado Academic Standards.

e. Improve access to environmental and outdoor learning experiences that foreground the diverse ways that Black, Indigenous, and People of Color's lived experiences, community practices, adaptive resilience, and environmental justice connect with current environmental topics.

How can you participate?	
State Agencies	Partner with members of the school community to increase awareness of available resources, content experts, and training opportunities.
	Work with the regional councils to create a regional blueprint for implementing and supporting environmental education
	Provide assistance to schools and districts in developing and coordinating a plan to ensure students have environmental education experiences every year.
	Ensure all available programming for pre-K-12 students in Colorado is standards-based and aligns with the Colorado Academic Standards.
	Create recommendations and actions based on identified gaps and barriers at the state level to providing environmental learning opportunities for students.
School Districts	Become familiar with the Colorado Environmental Education Plan and determine possible connections to district planning efforts.
	Review regional recommendations and gap analysis to inform district level planning. Example actions:
	» Developing and maintaining a district EE plan;
	» Examining district policies to determine potential barriers to utilizing the school building, school grounds or community for outdoor and environmental learning opportunities;
	» Considering ways to "green" school and district facilities;
	» Encouraging schools to work with the Colorado Department of Transportation's Safe Routes to School program to develop safe and feasible ways to transport students from school to local green spaces (parks, gardens, business parks) or community resources for outdoor learning;
	» Encouraging collaboration between facilities/energy management staff and educators to develop aligned learning experiences;
	» Explore opportunities to align federal funds in support of more environmental education programming. For example: Allocating funding from the ESSA Title IV well rounded education grant program to support student outdoor and environmental learning opportunities.
	» Working with non-formal partners to apply for funding through the ESSA Title IV 21st Century Community Learning Centers grant program.

Schools	Become familiar with the Colorado Environmental Education Plan and determine possible connections to school planning efforts.
	Review regional and district recommendations and gap analysis to inform school programming and policies. Example actions:
	» Developing and maintaining a school EE plan;
	» Considering ways to "green" school facilities;
	» Identifying local community and online environmental education resources;
	» Inviting local environmental education experts to participate in planning for the inclusion of environmental education in the schools;
	» Developing partnerships with the local environmental education community and business organizations to assist efforts;
	» Examining school policies to determine potential barriers to utilizing the school building, school grounds or community as a learning tool for teaching environmental education;
	» Working with the Colorado Department of Transportation's Safe Routes to School program to develop safe and feasible ways to transport students from school to local green spaces (parks, gardens, business parks) or community resources for outdoor learning.
Teachers	Integrate environmental and outdoor learning education into existing standards-aligned curriculum.
	Use the school grounds and/or community open space as part of a quality learning experience.
	Seek out high-quality field-trip opportunities.
	Encourage students to participate in projects or service learning opportunities that use the environment as a context for learning.
Students	Start or participate in school green teams and/or environmental clubs.
	Incorporate environmental and outdoor learning into service projects.
EE Providers	Review regional and state recommendations and gap analysis to inform organizational programming and policies. Example actions:
	» Designing programming and aligning resources to the Colorado Academic Standards;
	» Align with the district and/or school curriculum and resources to provide students with opportunities for addressing, analyzing and making decisions about environmental issues on a local-to-global level;
	» Use evaluation data from environmental education programs to monitor success.
Parents and Caregivers	Volunteer at your school or district to chaperone field trips or help care for outdoor learning environments.
	Support the development of funds for outdoor and environmental learning experiences.
	Talk with your children about outdoor and environmental learning opportunities (visiting nature centers, weekend hikes, summer camps, and more) to connect with what students learn about in school.

Community-based Organizations	Reach out to members of the school community to increase awareness of available resources, content experts, and possible training opportunities.
	Encourage the use of outdoor locations as an educational environment.
	Work with districts, schools and teachers to assist in creating and facilitating outdoor and environmental learning opportunities.
	Support the use of the school grounds for outdoor learning experiences.
	Work with teachers to integrate environmental education experiences into the curriculum that extend learning experiences.
	Ensure all applicable programming for pre-K-12 students in Colorado is standards-based and aligns with the Colorado Academic Standards.
Business and Industry Partners	Partner with members of the school community to increase awareness of available resources, content experts, and possible training opportunities.
	Support the use of the school grounds for outdoor learning experiences.
	Work with teachers to integrate environmental education experiences into the curriculum that extend learning experiences.
	Help provide funding for outdoor and environmental learning opportunities.

4 *Create formal and informal pathways to explore career opportunities in the environmental field and to understand how environmental literacy can benefit any career field.*

a. Identify barriers and develop strategies to support young people from under-represented populations in pursuing careers in environmental and natural resource fields;

b. Make environmental literacy connections with Colorado's Career and Technical Education pathways to develop aligned learning experiences from early childhood through higher education;

c. Educate career-influencers about the range of opportunities available and how to help youth and families navigate pathways and access resources from PreK through high school;

d. Increase awareness of career pathways in environmental fields, or the integration of environmental literacy in any career, through a variety of learning experiences;

e. Create a work-based learning toolkit to support partner organizations in connecting with students and schools;

f. Develop guidelines to support a local environmental literacy diploma endorsement.

How can you participate?

State Agencies	Identify environmental and natural resource career pathways within your agency and opportunities to engage underrepresented communities.
	Create and share multilingual resources about state agency environmental careers and the technical and educational requirements for those careers.
	Develop or expand career pathways through internships, apprenticeships, and work-based learning that lead to employment.
	Partner with schools, EE providers, and youth-serving organizations to engage their audiences in learning about careers.
	Participate in career fairs, job shadowing days, and other opportunities for youth and young adults to learn about careers.

School Districts	Include culturally relevant environmental education and sustainable practices in the development and implementation of CTE pathways.
	Develop an environmental literacy diploma endorsement.
	Increase the number of schools offering advanced courses in the environmental sciences (e.g. AP Environmental Science, IB Environmental Science, etc.)
	Create partnerships with industry to ensure opportunities provided align with industry needs and practices.
Schools	Create or expand opportunities for students to learn about and experience environmental careers.
	Share environmental career resources with students.
	Support educators in pursuing professional development to build knowledge of career pathways in environmental fields..
	Provide advanced courses in environmental science (e.g. AP Environmental Science, IB Environmental Science, etc.)
Teachers	Partner with state and local agencies, EE providers, and private industries to share information about environmental careers with students.
	Share environmental career resources with students.
	Attend professional development opportunities to build knowledge of career pathways in environmental fields.
Students	Attend career fairs, job shadowing days, and other opportunities to learn about careers.
	Explore the technical and educational requirements for careers in the environmental field.
	Participate in a work-based learning experience in an environmental field.
	Enroll in coursework in environmental sciences and related fields.
EE Providers	Create or expand internship opportunities and entry-level positions for young adults.
	Partner with schools and youth-serving organizations to engage their audiences in learning about careers.
	Participate in career fairs, job shadowing days, and other opportunities for youth and young adults to learn about careers.
	Incorporate career messaging into current environmental education programs and develop new career-centered programs when possible.
Parents and Caregivers	Talk to children about environmental careers and encourage them to seek out information and experiences.
Community-based Organizations	Partner with EE providers, private industries, and state agencies to connect youth and young adults with job information and opportunities.
Business and Industry Partners	Create and share multilingual resources about environmental careers and the technical and educational requirements for those careers.
	Create or expand internship opportunities and entry-level positions for young adults to enter the field.
	Partner with schools, EE providers and youth-serving organizations to engage their audiences in learning about careers.
	Represent your business/industry at career fairs; provide job shadowing days, and other opportunities for youth to learn about careers.

Conclusion

The Colorado Environmental Education Plan seeks to ensure that all Colorado students receive high-quality, standards-based environmental education and are ready for the jobs, challenges, and opportunities of the 21st century.

Environmental education provides students with the knowledge and skills necessary to be active and productive citizens in a global community. Many of the challenges and opportunities society currently faces focus on the environment. To overcome these challenges and take advantage of emerging opportunities, students need to have the knowledge and skills to understand complex problems, weigh different options, and look for solutions. In high-quality environmental and outdoor learning, students integrate and apply knowledge and skills to real-life problems and issues facing society in order to form well informed opinions and take action.

Students who spend more time being physically active and learning outdoors receive benefits that go beyond academics. Outdoor education fosters students' development of healthy habits and connection to the place in which they live. Outdoor learning experiences increase student engagement and enthusiasm for learning while promoting an active and healthy lifestyle.

Supporting students in developing a sense of place by experiencing Colorado's varied environments connects them to the land and allows them to take ownership of a shared natural heritage.

Ultimately, through environmental and outdoor learning:

» Students will understand how their decisions affect the environment so they can act on that understanding in a responsible and effective manner;

» Students will have an understanding of human dependency on a healthy environment;

» Students will participate in standards-based, relevant, outdoor learning experiences in environmental education that lead to postsecondary workforce readiness;

» Teachers will effectively and creatively utilize best practices and approaches to teaching about the environment;

» Schools and districts will access a network of educators, volunteers and community partners to increase environmental education opportunities for pre-K-12 students.

Appendix A: Exploring Environmental Education Connections in the Colorado Academic Standards

The revised 2020 Colorado Academic Standards (CAS) emphasize a multi-dimensional approach which aligns well with the attitudes, knowledge, and skills identified in the Colorado Environmental Literacy Framework. The CAS connects the core disciplinary ideas, with the real-world practices that professionals and everyday citizens might use on a regular basis. Connections flow across the content areas of science, social studies, math, health and PE, and reading, writing, and communicating in ways that invite all students to embrace curiosity and make sense of the world around them. We can leverage many of these to make connections to various industries that play a central role in our local, national, and global economies.

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
Kindergarten	Science	Physical Science	Sunlight affects the Earth's surface.	How does the sun affect Earth's surface? What regulates weather and climate on Earth?	SC-GR.K-S.1-GLE.2
		Life Science	To live and grow, animals obtain food they need from plants or other animals, and plants need water and light.	How do the structures of organisms enable life's functions?	SC-GR.K-S.2-GLE.1
		Earth and Space Science	Patterns are observed when measuring the local weather, including how humans and other organisms impact their environment.	What regulates weather and climate on Earth? How do Earth's surface processes and human activities affect each other?	SC-GR.K-S.3-GLE.1 SC-GR.K-S.3-GLE.2
	Social Studies	Geography	People live in different places around the world.	What makes a place special to the people who live there?	SS-GR.K-S.2-GLE.2
		Civics	Understand that civic participation takes place in multiple groups and in various forms.	Why is it important to participate in taking care of the environment?	SS-GR.K-S.4-GLE.1
	Reading, Writing, and Communicating	Oral Expression and Listening	Develop oral communication skills through a language-rich environment.	How do we describe how objects belong together?	RWC-GR.K-S.1-GLE.2
		Writing and Composition	Write opinions using labels, dictation, and drawing.	How do we express our opinions in writing?	RWC-GR.K-S.3-GLE.1
		Research Inquiry and Design	Explore the purposes for research and inquiry by accessing resources in collaborative settings	Why do researchers ask questions? How do researchers use resources to help find the answers to their questions?	RWC-GR.K-S.4-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
1st Grade	Science	Life Science	All organisms have external parts that they use to perform daily functions.	Organisms have external parts that they use to perform daily functions. How do the structures of organisms enable life's functions?	SC-GR.1-S.2-GLE.1
		Earth and Space Science	Patterns of movement of the sun, moon and stars as seen from Earth can be observed, described and predicted.	What is the universe, and what goes on in stars? What are the predictable patterns caused by Earth's movement in the solar system?	SC-GR.1-S.3-GLE.1
	Social Studies	Geography	Locate places and spaces using geographic tools	Spatial thinkers use geographic tools to study and represent places.	SS-GR.1-S.2.GLE.1
			Describe the characteristics of a community and how they are influenced by the environment	How do people use resources in the local community? How do individuals in the community use the environment?	SS-GR.1-S.2.GLE.2
	Reading, Writing, and Communicating	Oral Expression and Listening	Communicate using verbal and nonverbal language to express and receive information	How do we effectively communicate in conversations?	RWC-GR.1-S.1.GLE.1
		Writing and Composition	Write an opinion supported by reasons.	How do we support our opinions in writing?	RWC-GR.1-S.3.GLE.1
		Research Inquiry and Design	Participate in shared research and inquiry projects, writing, recalling, or gathering information to answer questions	Why must we be clear about our purpose for research and inquiry? Why is it important for us to use several resources to find the answers to our questions? Why is it critical for us to use accurate and supported data?	RWC-GR.1-S.4.GLE.1
	Comprehensive Health	Physical and Personal Wellness	Demonstrate health-enhancing behaviors to prevent injury or illness.	Describe ways to prevent harmful effects of overexposure to the sun and loud noise. Demonstrate ways to prevent the spread of germs that cause common, infectious diseases. Describe steps to treat a wound, insect bite or sting to reduce chances of infection.	CH-GR.1-S.1-GLE.2

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
2nd Grade	Science	Physical Science	Matter exists as different substances that have observable different properties.	How do particles combine to form the variety of matter one observes?	SC-GR.2-S.1-GLE.1
		Life Science	Plants depend on water and light to grow and on animals for pollination or to move their seeds around. A range of different organisms lives in different places.	How do organisms interact with the living and nonliving environments to obtain matter and energy? What evidence shows that different species are related?	SC-GR.2-S.2-GLE.1 SC-GR.2-S.2-GLE.2
		Earth and Space Science	Some events on Earth occur quickly; others can occur very slowly. Wind and water can change the shape of the land; models can show the shape and these changes to the land.	How do people reconstruct and date events in the Earth's planetary history? How and why is Earth constantly changing?	SC-GR.2-S.3-GLE.1 SC-GR.2-S.3-GLE.2
	Social Studies	History	People of various cultures influence neighborhoods and communities over time	How have events and ideas from the past shaped the identity of communities and neighborhoods today?	SS-GR.2-S.1-GLE.2
		Geography	Use geographic terms and tools to describe places and spaces	Spatial thinkers use visual representations of the environment.	SS-GR.2-S.2-GLE.1
			People in communities manage, modify, and depend on their environment	How do available resources and their uses create change in a community? Are renewable and nonrenewable resources managed well? How do you know?	SS-GR.2-S.2-GLE.1
		Economics	Resources are scarce, so individuals may not have access to the goods and services they want	How are resources used in various communities?	SS-GR.2-S.3-GLE.1
		Civics	Advocate for ideas to improve communities	What are responsible ways to advocate ideas in a community?	SS-GR.2-S.4-GLE.1
			Identify and compare multiple ways that people understand and resolve conflicts and differences	Why is it important to understand and resolve conflicts or differences of opinion about the environment?	SS-GR.2-S.4-GLE.2
	Reading, Writing, and Communicating	Oral Expression and Listening	Engage in dialogue and learn new information through active listening.	How do we work with others to present information? How do we participate in collaborative conversations?	RWC-GR.2-S.1-GLE.1
		Writing and Composition	Write pieces on a topic or book that state opinions and give supporting reasons	Why is it important for us to know who will be reading our work? What words do we use to convince others of our opinions?	RWC-GR.2-S.3-GLE.1
		Research Inquiry and Design	Participate in shared research and inquiry, gathering information from a variety of resources to answer questions	How do we ensure our research is relevant and accurate? Why is it important for us to include others' points of view in our research?	RWC-GR.2-S.4-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
2nd Grade	Health and PE	Prevention and Risk Management	Identify ways to prevent injuries at home, in school, and in the community.	Is it important to pre-plan for safety? How do pedestrians stay safe from motor vehicles and bicycles? What would be important to put in a safety plan?	
3rd Grade	Science	Physical Science	Patterns of motion can be used to predict future motion	How can one predict an object's continued motion, changes in motion or stability? What underlying forces explain the variety of interactions observed?	SC-GR.3-S.1-GLE.1
		Life Science	Organisms have unique and diverse life cycles.	How do the structures of organisms enable life's functions?	SC-GR.3-S.2-GLE.1
			Being part of a group helps animals obtain food, defend themselves and cope with changes.	How do organisms interact with the living and nonliving environments to obtain matter and energy?	SC-GR.3-S.2-GLE.2
			Different organisms vary in how they look and function because they have different inherited information; the environment also affects the traits that an organism develops.	How are the characteristics of one generation related to the previous generation? Why do individuals of the same species vary in how they look, function and behave?	SC-GR.3-S.2-GLE.3
			Some living organisms resemble organisms that once lived on Earth.	What evidence shows that different species are related? How does genetic variation among organisms affect survival and reproduction?	SC-GR.3-S.2-GLE.4
			Sometimes differences in characteristics between individuals of the same species provide advantages in survival and reproduction.	How does the environment influence populations of organisms over multiple generations? What is biodiversity, how do humans affect it, and how does it affect humans?	SC-GR.3-S.2-GLE.5
		Earth and Space Science	Climate describes patterns of typical weather conditions over different scales and variations; historical weather patterns can be analyzed.	What regulates weather and climate?	SC-GR.3-S.3-GLE.1
			A variety of weather hazards result from natural process; humans cannot eliminate weather-related hazards but can reduce their impacts.	How do natural hazards affect individuals and societies?	SC-GR.3-S.3-GLE.2

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
3rd Grade	Social Studies	History	People in the past influence the development and interaction of different communities or regions	How has the region changed and yet remained the same over time?	SS-GR.3.S.1.GLE.2
		Geography	Use geographic tools to develop spatial thinking	How have the cultural experiences of groups in different regions influenced practices regarding the local environment?	SS-GR.3.S.2.GLE.1
			The concept of region is developed through an examination of similarities and differences in places and communities.	Geographic thinkers can explain how natural and human-made catastrophic events in one place affect people living in other places.	SS-GR.3.S.2.GLE.2
		Civics	Respect the views and rights of others	What are the essential elements of compromise that enable conflict to be transformed into agreement?	SS-GR.3.S.4.GLE.1
	Reading, Writing, and Communicating	Oral Expression and Listening	Participate cooperatively in group activities.	What are the different kinds of roles people have when working in a group? What characteristics do effective group members have? How do we have a collaborative conversation?	RWC-GR.3-S.1-GLE.1
		Writing and Composition	Write opinion pieces on topics or texts, supporting a point of view with reasons.	How do we connect ideas when writing? How do we structure writing effectively? How do we support our opinions?	RWC-GR.3-S.3-GLE.1
		Research Inquiry and Design	Gather, interpret, and communicate information discovered during short research projects	Why do we use more than one resource when researching? How do visuals support information presented in research?	RWC-GR.3-S.4-GLE.1
	Comprehensive Health	Physical and Personal Wellness	Identify healthy habits for personal wellness.	How do you face challenges, overcome failures, and celebrate successes in physical activity? Why is water essential for the body?	PE-GR.3.S.2.GLE.1
		Social and Emotional Wellness	Demonstrate positive and helpful behavior and words toward other students.	Why is it important to have good behavior, especially when in a group setting? Is it easier or harder to work with peers to complete a task? Explain. How can you encourage someone who is shy to participate in a physical activity?	PE-GR.3.S.3.GLE.1
		Social and Emotional Wellness	Utilize knowledge and skills to develop a positive self-concept.	What does self-respect look like? What if no one respected your space, property, or feelings? What would you do to treat yourself with care and respect?	CH-GR-3-S.3-GLE.1
			Utilize knowledge and skills to develop an awareness of others and maintain healthy relationships.	Do my actions always affect others? How do we know how other people are feeling?	CH-GR.3-S.3-GLE.2

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
3rd Grade	Comprehensive Health	Prevention and Risk Management	Demonstrate interpersonal communication skills to prevent injury or to ask for help in an emergency or unsafe situation	Why is it important to be careful around water?	CH-GR.3.S.4.GLE.4
4th Grade	Science	Physical Science	The faster an object moves the more energy it has.	What is energy?	SC-GR.4-S.1-GLE.1
			Energy can be moved from place to place.	What is meant by conservation of energy? How is energy transferred between objects or systems?	SC-GR.4-S.1-GLE.2
			Energy can be produced, used or released by converting stored energy.	How do food and fuel provide energy? If energy is conserved, why do people say it is produced or used?	SC-GR.4-S.1-GLE.4
		Life Science	Organisms have both internal and external structures that serve various functions.	How do internal and external structures support the survival, growth, behavior and reproduction of plants and animals?	SC-GR.4-S.2-GLE.1
		Earth and Space Science	Earth has changed over time.	How can water, ice, wind and vegetation change the land?	SC-GR.4-S.3-GLE.1
			Four major earth systems interact.	What patterns of Earth's features can be determined with the use of maps? How do living organisms alter Earth's processes and structures?	SC-GR.4-S.3-GLE.2
			Earth's physical features occur in patterns.	Why do the continents move, and what causes earthquakes and volcanoes?	SC-GR.4-S.3-GLE.3
			Energy and fuels that humans use are derived from natural sources and their use affects the environment in multiple ways.	How do humans depend on Earth's resources?	SC-GR.4-S.3-GLE.4
			A variety of hazards result from natural process; humans cannot eliminate natural hazards but can reduce their impacts' effect.	How do natural hazards affect individuals and societies?	SC-GR.4-S.3-GLE.5

Grade Level	Content Area	Standard	Grade Level Expectations & Outcomes	Relevant Questions and Concepts	Standards Code
4th Grade	Social Studies	Geography	Connections are developed within and across human and physical systems	How did Colorado settlers alter their environment to facilitate communication and transportation? How does the physical environment affect human activity? How does human activity affect the environment?	SS-GR.4-S.2-GLE.2
		Civics	Identify, investigate, and analyze multiple perspectives on civic issues	How can government answer questions about issues in a state in various ways?	SS-GR.4-S.4-GLE.1
	Reading, Writing, and Communicating	Oral Expression and Listening	Pose thoughtful questions after actively listening to others.	How do we have collaborative conversations? Why do we paraphrase someone else's thinking before sharing our opinions?	RWC-GR.4-S.1-GLE.1
			Create a plan to effectively present information both informally and formally.	What are some important practices when presenting ideas?	RWC-GR.4-S.1-GLE.2
		Writing and Composition	Write opinion pieces on topics or texts supporting a point of view with reasons and information.	How does audience and purpose affect an author's word choice? How are writers persuasive without being biased?	RWC-GR.4-S.3-GLE.1
		Research Inquiry and Design	Write informative/explanatory texts using text structures appropriate for the purpose and developed through facts, definitions, concrete details, precise language, and domain-specific vocabulary.	How do we research effectively? Why is it important to research multiple aspects of a topic?	RWC-GR.4-S.4-GLE.1
	Comprehensive Health	Social and Emotional Wellness	Assess and take responsibility for personal behavior and stress management.	Identify positive and negative ways of dealing with stress. How does setting goals for physical activities help one to take on personal responsibilities in school work? Why is it important to set personal goals?	PE-GR.4-S.3.GLE.1
		Prevention and Risk Management	Demonstrate knowledge of safe practices in a physical activity setting.	How would you explain why the behavior was unsafe? How would your unsafe behavior affect your friends? Why do some sports and games have similar safety practices? Why do some sports and games have different safety practices?	PE-GR.4-S.4-GLE.1
		Physical and Personal Wellness	Explain how the dimensions of wellness are interrelated and impact personal health.	What is wellness? What are the benefits and consequences of our choices in terms of wellness? Why does wellness sometimes require that we make changes to our current behaviors, relationships, or actions?	CH-GR.4-S.1-GLE.3

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
4th Grade	Comprehensive Health	Social and Emotional Wellness	Comprehend concepts related to stress and stress management.	What would school be like if there was no stress? Can stress be positive? Does being stressed out affect the way you think?	CH-GR.4-S.3-GLE.2
		Prevention and Risk Management	Demonstrate the ability to use interpersonal communication skills to refuse or avoid using drugs (marijuana, illegal drugs, prescription drugs, alcohol, and tobacco).	Examine the factors that influence a person's decision to use or not to use marijuana, illegal drugs, prescription drugs, alcohol, and tobacco.	CH-GR.4-S.4-GLE.2
5th Grade	Science	Physical Science	The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.	What underlying forces explain the variety of interactions observed?	SC-GR.5-S.1-GLE.3
			The energy released from food was once energy from the sun.	How do food and fuel provide energy? If energy is conserved, why do people say it is produced or used?	SC-GR.5-S.1-GLE.4
		Life Science	Plants acquire their material from growth chiefly from air and water.	How do organisms obtain and use the matter and energy they need to live and grow?	SC-GR.5-S.2-GLE.1
			Matter cycles between air and soil and among plants, animals and microbes as these organisms live and die.	How do organisms interact with the living and nonliving environments to obtain matter and energy?	SC-GR.5-S.2-GLE.1
		Earth and Space Science	Earth's major systems interact in multiple ways to affect Earth's surface materials and processes.	How do Earth's major systems interact? How do the properties and movements of water shape Earth's surface and affect its systems?	SC-GR.5-S.3-GLE.3
			Most of Earth's water is in the ocean and much of Earth's freshwater in glaciers or underground.	How do the properties and movements of water shape Earth's surface and affect its systems?	SC-GR.5-S.3-GLE.4
			Societal activities have had major effects on land, ocean, atmosphere and even outer space	How do humans change the planet?	SC-GR.5-S.3-GLE.5
	Social Studies	Geography	Use geographic tools and sources to research and answer questions about United States geography	How have places and regions in the United States been influenced by the physical geography of North America over time?	SS-GR.5-S.2-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
5th Grade	Social Studies	Geography	Connections are developed within and across human and physical systems	How did Colorado settlers alter their environment to facilitate communication and transportation? How does the physical environment affect human activity? How does human activity affect the environment?	SS-GR.4-S.2-GLE.2
		Civics	Identify, investigate, and analyze multiple perspectives on civic issues	How can government answer questions about issues in a state in various ways?	SS-GR.4-S.4-GLE.1
	Reading, Writing, and Communicating	Oral Expression and Listening	Collaborate in discussions that serve various purposes and address various situations.	How can we actively listen when working in a group? Why is it difficult to accept someone else's point of view?	RWC-GR.5-S.1-GLE.1
			Present to express an opinion, persuade, or explain/ provide information	Why is it difficult to accept someone else's point of view? What can speakers do to make people want to listen to what they have to say? How does body language tell a speaker that he/she is having the desired effect on the audience?	RWC-GR.5-S.1-GLE.2
		Writing and Composition	Write opinion pieces on topics or texts, supporting a point of view with reasons and information, for a variety of purposes and audiences	What is the purpose of writing for different audiences? How do we select evidence to best support our claims?	RWC-GR.5-S.3-GLE.1
		Research Inquiry and Design	Research to locate, summarize, synthesize and document information from print and digital sources, and communicate findings appropriately.	How do we create visuals based on research? How do we cite our research?	RWC-GR.5-S.4-GLE.1
	Comprehensive Health	Social and Emotional Wellness	Analyze internal and external factors that influence mental and emotional health.	How can you control what you are feeling? In what ways can others affect how you feel? How does the media show us both appropriate and inappropriate models for feelings and emotions? What is mental health?	CH-GR.5-S.3-GLE.1
		Prevention and Risk Management	Identify personal activity interests and abilities and take responsibility for individual and team performance.	Accept responsibility for one's own performance without blaming others. Develop confidence in self and others in a physical activity setting. Try new activities and connect hard work and practice to success.	PE-GR.5-S.3-GLE.1
	Physical Education	Physical and Personal Wellness	Implement safety procedures in the utilization of space and equipment.	Review components of safe participation and what constitutes a safe environment. Follow the rules of activities to maintain safe playing conditions. Describe safe and unsafe practices for a variety of physical activities.	PE-GR.5-S.4-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
6th Grade					
	See page 35-36 for 6th-8th grade Science standards				
	Social Studies	Geography	Use geographic tools and resources to research and make geographic inferences and predictions about the Western Hemisphere.	How do populations, physical features, resources, and perceptions of places and regions change over time? How have geographic factors influenced human settlement, economic activity, and land acquisition?	SS-GR.6-S.2-GLE.1
			Regional differences and perspectives in the Western Hemisphere impact human and environmental interactions.	How have people interacted with the environment over time in a positive or negative way? How has globalization affected people and places?	SS-GR.6-S.2-GLE.2
	Reading, Writing, and Communicating	Writing and Composition	Write arguments that support claim(s) using clear reasons, relevant evidence, credible sources, and a formal style.	How do writers determine a point of view? How do writers know if they have convinced others that their opinions are valid? How do writers select evidence to best support their claims?	RWC-GR.6-S.3-GLE.1
		Research Inquiry and Design	Pose research question(s), gather, synthesize, and credit relevant and credible resources, and present findings	How do we research effectively? How do biases interfere with critical thinking? How do we cite our research?	RWC-GR.6-S.4-GLE.1
	Comprehensive Health	Physical and Personal Wellness	Analyze how positive health behaviors can benefit people throughout their lifespan.	What positive behaviors can benefit a person's health? Why are there so many health problems in the U.S. caused by poor nutrition and inactivity in spite of available information? Summarize personal strategies for reducing environmental dangers to health (e.g., sun damage to skin, hearing loss, vision damage).	CH-GR.6-S.2-GLE.3
		Social and Emotional Wellness	Understand how to be mentally and emotionally healthy.	Why do feelings affect behavior? How can a person control their feelings? How can the expression of feelings or emotions help or hurt you and others? Are mental health problems as real/valid as other health problems? How might the ability to identify your emotions be beneficial?	CH-GR.6-S.3-GLE.1
		Prevention and Risk Management	Demonstrate ways to advocate for a positive, respectful school and community environment that supports pro-social behavior.	What does pro-social behavior look like in our community?	CH-GR.6-S.4-GLE.3
			Demonstrate ways to promote safety, and prevent unintentional injuries.	Is it possible to create safe schools and communities? Why might it be desirable to create these safe communities? What are potential safety issues in our community?	CH-GR.6-S.4-GLE.4

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
6th Grade	Physical Education	Movement Competence and Understanding	Participate in activities that require problem-solving, cooperation, and team-building.	What activities require problem-solving, cooperation, and team-building? Is cooperation or competition more important? Why? Is it more important to learn to compete first, or learn to cooperate first? Can one aid the other? Why is team-building important?	PE-GR.6-S.1-GLE.2
		Physical and Personal Wellness	Identify opportunities in school and in the community for regular participation in physical activity to enhance physical fitness.	How does an individual demonstrate taking responsibility for his or her own physical fitness? What muscular strength and endurance invention has made the most impact on people's fitness? What five muscular strength and endurance activities would you do to become physically fit? Would your choices stay the same in order to maintain your fitness level?	PE-GR.6-S.2-GLE.3
		Social Emotional Wellness	Choose to participate cooperatively and productively in group and individual physical activities.	How might one interact with a friend who dominates the discussion in a cooperative problem-solving activity? What are ways to include others who are physically unable to participate due to an injury? Why is resolving conflicts more important than winning a game?	PE-GR.6-S.3-GLE.2
		Prevention and Risk Management	Apply personal safety knowledge and skills to prevent and treat intentional or unintentional injury.	What is a possible risk of not following rules? When and for which activities should helmets be mandatory, and when should they be optional? How should people lift heavy objects? What would be your number-one safety rule? Why?	PE-GR.6-S.4-GLE.1
7th Grade	See page 35-36 for 6th-8th grade Science standards				
	Social Studies	Geography	Use geographic tools to research and analyze patterns in human and physical systems in the United States.	How can geographic tools help explore patterns in human and physical systems? How have people and the environment interacted to produce changes over time? How is human activity limited by the environment? How has the environment influenced human activity?	SS-GR.7-S.2-GLE.1
	Reading, Writing, and Communicating	Writing and Composition	Write well-organized arguments using logical reasoning, relevant and credible evidence, acknowledgment of opposing claims, clear language, and formal style.	How do we use evidence to support our claims? How do we use counterclaims to support our arguments?	RWC-GR.7-S.3-GLE.1
		Research Inquiry and Design	Engage in effective collaborative discussions and analyze information presented.	How do writers summarize information in their own words? What makes content credible or non-credible? How might different audiences understand a message differently? How do we cite our research?	RWC-GR.7-S.4-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
7th Grade	Comprehensive Health	Social and Emotional Wellness	Develop healthy self-management skills to prevent and manage stress.	Why is it important to have a variety of healthy ways to manage stress effectively? Describe circumstances where positive stressors are useful. Develop healthy strategies to deal with stressors. Practice strategies such as physical activity, relaxation techniques, journaling, and talking with someone to prevent, manage, and/or reduce stress.	CH-GR.7-S.2-GLE.2
		Prevention and Risk Management	Analyze the consequences of using marijuana, illegal drugs, prescription drugs, alcohol, and tobacco.	Would drug abuse be such a prevalent issue if it did not have an addictive quality? What are the social, economic, cosmetic, and familial consequences of drug abuse? Why does someone become addicted? Why is the advertising of alcohol and tobacco so highly regulated, especially when it comes to youth? Examine the social and economic consequences of marijuana, illegal drugs, abuse of prescription drugs, alcohol, and tobacco.	CH-GR.7-S.4-GLE.1
			Demonstrate safety procedures for a variety of situations.	Describe actions to take during severe weather or trauma-related emergencies. Describe actions to take during severe weather or trauma-related emergencies.	CH-GR.7-S.4-GLE.3
		Social and Emotional Wellness	Demonstrate inclusiveness in and out of classroom settings.	Participate in group cooperation games and adventure activities to encourage team-building and fun. Recognize the role of physical activity in getting to know and understand others of similar and different backgrounds.	PE-GR.7-S.3-GLE.1
8th Grade	See page 35-36 for 6th-8th grade Science standards				
	Social Studies	Geography	Use geographic tools to research and analyze patterns in human and physical systems in the United States.	How has human settlement including migration influenced and been influenced by changes in physical systems and culture? How can geographic tools help explore patterns in human and physical systems? How have people and the environment interacted to produce changes over time? How is human activity limited by the environment? How has the environment influenced human activity?	SS-GR.8-S.2-GLE.1
			Competition for control of space and resources in early American history.	How will the location of resources lead to cooperation or conflict in the future? How has conflict over space and resources influenced human migration? How have differing perspectives regarding resource and land use, occupancy, and ownership led to cooperative policies or conflict? How would human settlement patterns be different if people did not trade resources with others?	SS-GR.8-S.2-GLE.2

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
8th Grade	Reading, Writing, and Communicating	Oral Expression and Listening	Design organized presentations incorporating key details and claims while tailored for purpose and audience	How do delivery techniques change in relation to audience purpose or content? How does language help or hurt the message being communicated? How do presenters determine what information is relevant when preparing a report or presentation? What are the structural elements of a speech and what strategies can be used to enhance each part?	RWC-GR.8-S.1-GLE.2
		Writing and Composition	Write well-organized and cohesive arguments, distinguishing claim(s) from opposing claims and using language to clarify connections among claims, reasons, and evidence.	What techniques do authors use to persuade readers? How do writers select evidence to best support their claim(s)?	RWC-GR.8-S.3-GLE.1
		Research Inquiry and Design	Pose important questions; identify, locate, and evaluate sources; extract and synthesize relevant information, and communicate findings appropriately.	How do we know what resources meet our needs? What do we do when our immediate resources are not adequate? How do we know our information is reliable? What organizational strategy best suits this research? How do we determine the most appropriate format for presenting our research? How do we cite our research?	RWC-GR.8-S.4-GLE.1
	Comprehensive Health	Prevention and Risk Management	Analyze influences that impact individuals' use or non-use of marijuana, illegal drugs, prescription drugs, alcohol, and tobacco.	How can depression, anxiety, and other mental problems influence a person's decisions related to marijuana, illegal drugs, prescription drugs, alcohol, and tobacco? Analyze potential risks and protective factors (e.g., personal, family, and peer) that could impact drug use (marijuana, illegal drugs, prescription drugs, alcohol, and tobacco).	CH-GR.8-S.4-GLE.1
			Demonstrate ways to advocate for a positive, respectful school and community environment that supports pro-social behavior.	What does pro-social behavior look like in our community?	CH-GR.8-S.4-GLE.5
	Physical Education	Physical and Personal Wellness	Identify preferences for lifetime physical activity.	What recreational activities do you and your family participate in weekly, and where do you go to participate? What is your favorite adventure sport?	PE-GR.8-S.2-GLE.2
		Prevention and Risk Management	Apply rules, procedures, and safe practices to create a safe school environment with no reinforcement.	Why don't you want to be outdoors when lightning is in the area? Why is it important to check the integrity of equipment on a regular basis? How does quality equipment effect a safe school environment?	PE-GR.8-S.4-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
6th-8th Grade	Science	Life Science	All living things are made up of cells, which is the smallest unit that can be said to be alive.	How do the structures of organisms enable life's functions?	SC-GR.MS-S.2-GLE.1
			Organisms reproduce, either sexually or asexually, and transfer their genetic information to their offspring.	How do organisms grow and develop?	SC-GR.MS-S.2-GLE.2
			Sustaining life requires substantial energy and matter inputs.	How do organisms detect, process, and use information about the environment?	SC-GR.MS-S.2-GLE.3
			Each sense receptor responds to different inputs (electromagnetic, mechanical, chemical), transmitting them as signals that travel along nerve cells to the brain.	How do organisms detect, process, and use information about the environment?	SC-GR.MS-S.2-GLE.4
			Organisms and populations of organisms are dependent on their environmental interactions both with other living things and with nonliving factors.	How do organisms interact with the living and nonliving environments to obtain matter and energy?	SC-GR.MS-S.2-GLE.5
			Ecosystems are sustained by the continuous flow of energy, originating primarily from the sun, and the recycling of matter and nutrients within the system.	How do matter and energy move through an ecosystem?	SC-GR.MS-S.2-GLE.6
			Ecosystems are dynamic in nature; their characteristics can vary over time. Disruptions to any physical or biological component of an ecosystem can lead to shifts in all of its populations.	What happens to ecosystems when the environment changes?	SC-GR.MS-S.2-GLE.7
			Fossils are mineral replacements, preserved remains, or traces of organisms that lived in the past.	What evidence shows that different species are related?	SC-GR.MS-S.2-GLE.9
			Genetic variations among individuals in a population give some individuals an advantage in surviving and reproducing in their environment.	What evidence shows that different species are related?	SC-GR.MS-S.2-GLE.10
			Adaptation by natural selection acting over generations is one important process by which species change over time in response to changes in environmental conditions.	How does genetic variation among organisms affect survival and reproduction?	SC-GR.MS-S.2-GLE.11
			Biodiversity is the wide range of existing life forms that have adapted to the variety of conditions on Earth, from terrestrial to marine ecosystems.	How does the environment influence populations of organisms over multiple generations?	SC-GR.MS-S.2-GLE.12

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
6th-8th Grade	Science	Earth and Space Science	Motion is predictable in both solar systems and galaxies.	What is the universe, and what goes on in stars?	SC-GR.MS-S.3-GLE.1
			The solar system contains many varied objects held together by gravity. Solar system models explain and predict eclipses, lunar phases, and seasons.	What are the predictable patterns caused by Earth's movement in the solar system?	SC-GR.MS-S.3-GLE.2
			Rock strata and the fossil record can be used as evidence to organize the relative occurrence of major historical events in Earth's history.	How do people reconstruct and date events in Earth's planetary history?	SC-GR.MS-S.3-GLE.3
			Energy flows and matter cycles within and among Earth's systems, including the sun and Earth's interior as primary energy sources. Plate tectonics is one result of these processes.	How do Earth's major systems interact?	SC-GR.MS-S.3-GLE.4
			Plate tectonics is the unifying theory that explains movements of rocks at Earth's surface and geological history.	Why do the continents move, and what causes earthquakes and volcanoes?	SC-GR.MS-S.3-GLE.5
			Water cycles among land, ocean, and atmosphere, and is propelled by sunlight and gravity. Density variations of sea water drive interconnected ocean currents. Water movement causes weathering and erosion, changing landscape features.	How do the properties and movements of water shape Earth's surface and affect its systems?	SC-GR.MS-S.3-GLE.6
			Complex interactions determine local weather patterns and influence climate, including the role of the ocean.	What regulates weather and climate?	SC-GR.MS-S.3-GLE.7
			Humans depend on Earth's land, ocean, atmosphere, and biosphere for different resources, many of which are limited or not renewable. Resources are distributed unevenly around the planet as a result of past geologic processes.	How do humans depend on Earth's resources?	SC-GR.MS-S.3-GLE.8
			Mapping the history of natural hazards in a region and understanding related geological forces.	How do natural hazards affect individuals and societies?	SC-GR.MS-S.3-GLE.9
			Human activities have altered the biosphere, sometimes damaging it, although changes to environments can have different impacts for different living things.	How do humans change the planet?	SC-GR.MS-S.3-GLE.10
			Human activities affect global warming. Decisions to reduce the impact of global warming depend on understanding climate science, engineering capabilities, and social dynamics.	How do people model and predict the effects of human activities on Earth's climate?	SC-GR.MS-S.3-GLE.11

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
9th-10th Grade	Reading, Writing, and Communicating	Oral Expression and Listening	Organize and develop credible presentations tailored to purpose and audience	How does a speaker's personal history affect point of view? What is productive feedback? Why is being able to effectively function in a collaborative group helpful? What criteria could be used to measure the effectiveness of a group? What are effective ways to monitor group skills and individual contributions? How can individuals monitor their own group's progress and effectiveness?	RWC-GR.HS-S.1-GLE.2
		Research Inquiry and Design	Synthesize multiple, authoritative literary and/or informational sources, creating cohesive research projects that show an understanding of the subject.	How do researchers decide when information is relevant to their inquiry? How do researchers determine fairness and accuracy of sources? How do researchers form questions that frame useful inquiries? How do we avoid plagiarism?	RWC-GR.HS-S.4-GLE.1
11th-12th Grade	Reading, Writing, and Communicating	Oral Expression and Listening	Follow collaborative guidelines to ensure a hearing of a full range of positions on a topic or issue, and evaluate responses	How do people benefit from listening to the perspectives of others? Why is it important to cite valid and reliable sources? Why is being able to function effectively in a collaborative group a helpful skill? How do effective groups balance individual responsibility with group interdependence? What criteria could be used to measure the effectiveness of a group?	RWC-GR.HS-S.1-GLE.1
		Research Inquiry and Design	Synthesize multiple, authoritative literary and/or informational sources to answer questions or solve problems, producing well-organized and developed research projects that defend information, conclusions, and solutions	How do researchers identify a significant issue to study? How do researchers ensure the relevance, accuracy, and authority of source material? How do researchers reformulate the direction of their research when they run into obstacles? How do researchers monitor the quality of their reasoning throughout the process? How do researchers avoid plagiarism?	RWC-GR.HS-S.4-GLE.1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
High School	Science	Physical Science	Energy is a quantitative property of a system that depends on the motion and interactions of matter and radiation within that system.	What is energy?	SC-GR.HS-S.1-GLE.6
			Energy cannot be created or destroyed, but it can be transported from one place to another and transferred between systems.	What is meant by conservation of energy? How is energy transferred between objects or systems?	SC-GR.HS-S.1-GLE.7
			Although energy cannot be destroyed, it can be converted to less useful forms as it is captured, stored and transferred.	How do food and fuel provide energy? If energy is conserved, why do people say it is produced or used?	SC-GR.HS-S.1-GLE.9
		Life Science	Organisms use matter and energy to live and grow.	How do organisms obtain and use the matter and energy they need to live and grow?	SC-GR.HS-S.2-GLE.3
			Organisms interact with the living and nonliving components of the environment to obtain matter and energy.	How do organisms interact with the living and nonliving environments to obtain matter and energy?	SC-GR.HS-S.2-GLE.4
			Matter and energy necessary for life are conserved as they move through ecosystems.	How do matter and energy move through an ecosystem?	SC-GR.HS-S.2-GLE.5
			A complex set of interactions determine how ecosystems respond to disturbances.	What happens to ecosystems when the environment changes?	SC-GR.HS-S.2-GLE.6
			Organisms interact in groups to benefit the species.	How do organisms interact in groups so as to benefit individuals?	SC-GR.HS-S.2-GLE.7
			The characteristics of one generation are dependent upon the genetic information inherited from previous generations.	How are the characteristics of one generation related to the previous generation? Why do individuals of the same species vary in how they look, function, and behave?	SC-GR.HS-S.2-GLE.8
			Variation between individuals results from genetic and environmental factors.	Why do individuals of the same species vary in how they look, function, and behave?	SC-GR.HS-S.2-GLE.9
			Evidence of common ancestry and diversity between species can be determined by examining variations including genetic, anatomical and physiological differences.	Why do individuals of the same species vary in how they look, function, and behave?	SC-GR.HS-S.2-GLE.10
			Genetic variation among organisms affects survival and reproduction.	How does genetic variation among organisms affect survival and reproduction?	SC-GR.HS-S.2-GLE.11
			The environment influences survival and reproduction of organisms over multiple generations.	How does the environment influence populations of organisms over multiple generations?	SC-GR.HS-S.2-GLE.12
			Humans have complex interactions with ecosystems and have the ability to influence biodiversity on the planet.	What is biodiversity, how do humans affect it, and how does it affect humans?	SC-GR.HS-S.2-GLE.13

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
High School	Science	Earth and Space Science	The rock record resulting from tectonic and other geoscience processes as well as objects from the solar system can provide evidence of Earth's early history and the relative ages of major geologic formations.	How do people reconstruct and date events in Earth's planetary history?	SC-GR.HS-S.3-GLE.3
			Earth's systems, being dynamic and interacting, cause feedback effects that can increase or decrease the original changes, and these effects occur on different time scales, from sudden (e.g., volcanic ash clouds) to intermediate (ice ages) to very long-term tectonic cycles	How do Earth's major systems interact?	SC-GR.HS-S.3-GLE.4
			Plate tectonics can be viewed as the surface expression of mantle convection, which is driven by heat from radioactive decay within Earth's crust and mantle.	Why do the continents move, and what causes earthquakes and volcanoes?	SC-GR.HS-S.3-GLE.5
			The planet's dynamics are greatly influenced by water's unique chemical and physical properties.	How do the properties and movements of water shape Earth's surface and affects its systems?	SC-GR.HS-S.3-GLE.6
			The role of radiation from the sun and its interactions with the atmosphere, ocean, and land are the foundation for the global climate system. Global climate models are used to predict future changes, including changes influenced by human behavior and natural factors.	What regulates weather and climate?	SC-GR.HS-S.3-GLE.7
			The biosphere and Earth's other systems have many interconnections that cause a continual co-evolution of Earth's surface and life on it.	How do living organisms alter Earth's processes and structures?	SC-GR.HS-S.3-GLE.8
			Resource availability has guided the development of human society and use of natural resources has associated costs, risks, and benefits.	How do humans depend on Earth's resources?	SC-GR.HS-S.3-GLE.9
			Natural hazards and other geological events have shaped the course of human history at local, regional, and global scales.	How do natural hazards affect individuals and societies?	SC-GR.HS-S.3-GLE.10
			Sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources, including the development of technologies.	How do humans change the planet?	SC-GR.HS-S.3-GLE.11
			Global climate models used to predict future climate change continue to improve our understanding of the impact of human activities on the global climate system.	How do people model and predict the effects of human activities on Earth's climate?	SC-GR.HS-S.3-GLE.12

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
High School	Social Studies	Geography	Use geographic tools and resources to analyze Earth's human systems and physical features to investigate and address geographic issues.	Geographic reasoning brings societies and nature under the lens of spatial analysis, and aids in personal and societal decision making and problem solving. Spatial thinkers predict how human activities will help shape Earth's surface and ways that people might cooperate and compete for use of Earth's resources.	SS-GR.HS-S.2-GLE. 1
			Geographic variables influence interactions of people, places, and environments.	How might people and societies respond to changes in the physical environment? What are the maximum limits of human activity the environment can withstand without deterioration?	SS-GR.HS-S.2-GLE. 2
			The interconnected nature of the world, its people, and places.	How do cooperation and conflict influence the division and control of the social, economic, and political spaces on Earth? What predictions can be made about human migration patterns?	SS-GR.HS-S.2-GLE. 3
		Economics	Productive resources (natural, human, capital) are scarce; therefore, choices are made about how individuals, businesses, governments, and nonprofits allocate these resources.	Economic thinkers realize that, due to scarcity, we must make choices which involve the prioritization of alternatives. Economic thinkers understand that, using the economic way of thinking, individuals analyze how the benefit of using productive resources for a particular purpose compares with the opportunity cost of this resource use.	SS-GR.HS-S.3-GLE. 1
		Civics	Research and formulate positions on local, state, and national issues or policies to participate in a civil society.	What strategies can citizens use most effectively to influence public policy? Civic-minded individuals can verbally express their position on issues involving their community and/or nation in meaningful and thoughtful ways.	SS-GR.HS-S.4-GLE. 1

Grade Level	Content Area	Standard	Grade Level Expectations & Evidence Outcomes	Relevant Questions and Concepts	Standards Code
High School	Comprehensive Health	Physical and Personal Wellness	Develop and maintain ongoing evaluation of factors that impact health, and modify lifestyle accordingly.	Analyze the role of personal responsibility in maintaining and enhancing personal, family, and community wellness.	CH-GR.8-S.4-GLE.1
		Prevention and Risk Management	Advocate for changes in the home, school, or community that would increase safety.	Evaluate situations and environments that could lead to unsafe risks that cause injuries. Identify strategies to reduce the risk of injuries in situation and environments. Determine and utilize the correct steps in reporting unsafe or suspicious behavior. Advocate for changes at home, in school, or in the community that would increase safety.	CH-GR.8-S.4-GLE.5
	Physical Education	Movement Competence and Understanding	Engage in a variety of lifelong physical activities at a competent level.	Before participating in a physical activity, what safety concerns should one be aware of? Why is risk a positive aspect of physical activity?	PE-GR.HS-S1-GLE.1
		Prevention and Risk Management	Understand the risks and safety factors that may affect participation in physical activity.	Before participating in a physical activity, what safety concerns should one be aware of? Why is risk a positive aspect of physical activity?	PE-GR.HS-S4-GLE.1
			Demonstrate knowledge of safety and emergency response procedures.	If you are not trained in first aid or CPR, how can you be of help in an emergency situation? When did you want to help with an emergency situation, but couldn't? Why or why not? Why is it important to be trained in first aid, CPR, lifeguarding, water safety, and AEDs?	PE-GR.HS-S.4-GLE.2

Appendix B: Criteria for Quality Professional Development

The National Project for Excellence is a collection of best practices in establishing guidelines for the development of balanced, scientifically accurate, and comprehensive environmental education programs and materials. These guidelines, taken from the Guidelines for Excellence: Professional Development of Environmental Educators, published by the North American Association for Environmental Education should be considered when creating professional development experiences for pre-K-12 teachers and community based educators. These guidelines outline the experiences and learning that will help educators deliver instruction that effectively fosters environmental literacy. The complete set of guidelines is available at: www.naaee.org

Theme One: Environmental Literacy

Educators must be competent in the skills and understandings outlined in K-12 Environmental Education: Guidelines for Excellence.

» 1.1 Questioning, analysis, and interpretation skills

» 1.2 Environmental processes and systems

» 1.3 Skills for understanding and addressing environmental issues

» 1.4 Personal and civic responsibility

Theme Two: Foundations of Environmental Education

Educators must have a basic understanding of the goals, theory, practice, and history of the field of environmental education.

» 2.1 Fundamental characteristics and goals of environmental education

» 2.2 How environmental education is implemented

» 2.3 The evolution of the field

Theme Three: Professional Responsibilities of the Environmental Educator

Educators must understand and accept the responsibilities associated with practicing environmental education.

» 3.1 Exemplary environmental education practice

» 3.2 Emphasis on education, not advocacy

» 3.3 Ongoing learning and professional development

Theme Four: Planning and Implementing Environmental Education

Educators must combine the fundamentals of high-quality education with the unique features of environmental education to design and implement effective instruction.

» 4.1 Knowledge of learners

» 4.2 Knowledge of instructional methodologies

» 4.3 Planning for instruction

» 4.4 Knowledge of environmental education materials and resources

» 4.5 Technologies that assist learning

» 4.6 Settings for instruction

» 4.7 Curriculum planning

Theme Five: Fostering Learning and Promoting Inclusivity

Educators enable all learners to engage in culturally relevant open inquiry and investigation, especially when considering environmental issues that are controversial and require learners to seriously reflect on their own and others' perspectives.

» 5.1 A climate for learning about and exploring the environment

» 5.2 An inclusive and collaborative learning environment

» 5.3 Flexible and responsive instruction

Theme Six: Assessment and Evaluation

Environmental educators must possess the knowledge, abilities, and commitment to make assessment and evaluation integral to instruction and programs.

» 6.1 Learner outcomes

» 6.2 Assessment that is part of instruction

» 6.3 Improving instruction

» 6.4 Evaluating programs

Appendix C:
Ensuring Quality
in Environmental
Education Materials

The National Project for Excellence is a collection of best practices in establishing guidelines for the development of balanced, scientifically accurate, and comprehensive environmental education programs and materials. The following guidelines, taken from the Environmental Education Materials: Guidelines for Excellence by the North American Association for Environmental Education should be used when selecting or creating materials or programs for use by pre-K-12 schools to ensure the highest quality. These guidelines offer a way of judging the relative merit of different materials, a standard to aim for in developing new materials, and a set of ideas about what a well-rounded environmental education curriculum might be like. The complete set of guidelines is available at: www.naaee.org

Key Characteristic #1: Accurate and Inclusive

Environmental education instructional materials are accurate and inclusive in describing environmental conditions, concepts, attitudes, processes, challenges, and decisions, and in reflecting the diversity of perspectives on them.

- » 1.1 Accurate
- » 1.2 Centers on equity and inclusion
- » 1.3 Balanced presentation of differing perspectives and theories

Key Characteristic #2 Emphasis on Skills Building

Environmental education instructional materials build lifelong skills that enable all learners to arrive at their own conclusions and make reasoned decisions about environmental challenges and opportunities.

- » 2.1 Thinking and process skills
- » 2.2 Skills for asking questions and exploring different perspectives
- » 2.3 Skills for decision-making
- » 2.4 Skills for addressing environmental challenges and opportunities

Key Characteristic #3 Depth of Understanding

Environmental education instructional materials aim to foster the development of the personal awareness and deep conceptual understandings necessary for environmental literacy.

- » 3.1 Awareness
- » 3.2 Focus on concepts
- » 3.3 Concepts in context
- » 3.4 Attention to different scales

Key Characteristic #4 Personal and Civic Responsibility

Environmental education instructional materials promote personal and civic responsibility, encouraging learners to use their knowledge, skills, and assessments of environmental, social, political, cultural, and economic systems as a basis for environmental decision-making and action.

- » 4.1 Sense of personal stake and responsibility
- » 4.2 Self-efficacy and personal agency

Key Characteristic #5 Instructional Effectiveness

Environmental education materials rely on instructional principles and techniques that create effective, culturally responsive, and inclusive learning environments for all learners.

- » 5.1 Learner-centered instruction
- » 5.2 Different ways of learning
- » 5.3 Connection to learners' everyday lives
- » 5.4 Expanded learning environment
- » 5.5 Equitable and inclusive learning environments
- » 5.6 Interdisciplinary
- » 5.7 Goals and objectives
- » 5.8 Appropriateness for specific learning settings
- » 5.9 Assessment

Key Characteristic #6 Usability

Environmental education materials are well-designed and easy to use.

- » 6.1 Clarity and logic
- » 6.2 Easy to use
- » 6.3 Long-lived
- » 6.4 Adaptable
- » 6.5 Accompanied by instruction and support
- » 6.6 Make substantiated claims
- » 6.7 Support accepted recommendations and requirements

Appendix D: Justice, Equity, Diversity and Inclusion in Environmental Education

According to the Bell Policy Center, "racial and ethnic minorities are predicted to comprise about 46 percent of Colorado's population in 2050, compared to about 30 percent in 2015." (Colorado's Demographics: What to Know, How to Prepare 2018)

Unfortunately, "[p]ioneering conservation and environmental policies, from the creation of national parks starting in the 1870s to the historic regulation of air, water, and solid waste in the 1970s, typically brought both the fewest benefits and the greatest environmental burdens to communities of color and the poor. Those disparities persist today, as the legacy of a lack of inclusion in policy-making throughout these years." (Carey, Bonta, DeFalco, Taylor Smith, & Braus, 2015).These demographic shifts and historical underrepresentation make it critically important that we embrace opportunities to bring justice, equity, diversity and inclusion to environmental education. We know that culturally-relevant and ability-adaptive practices benefit all students, not just those who are in underrepresented populations.

Ensuring that students have access to culturally-relevant, culturally and ability responsive environmental and outdoor learning experiences requires work at a variety of levels. In *Diversity and the Conservation Movement* (Carey, Bonta, DeFalco, Taylor Smith, & Braus, 2015), authors suggest first focusing internally on yourself and on your team and then focusing externally on your constituents. Actions to increase inclusion and equity excerpted from *Diversity and the Conservation Movement* include:

» Improving cultural competency to enable you to work with people who have different backgrounds, approaches, and worldviews than you do. By acknowledging, appreciating, and learning from others, you can work together on creative solutions that integrate multiple perspectives. You can also work with your partners to marry traditional knowledge with scientific findings.

» Building a bigger, more powerful constituency. Engaging diverse audiences makes sense for the simple reason that it increases the number of participants in the conservation movement. Business as usual means continuing to reach a narrow slice of the American public. Working with new audiences can create new supporters, leaders, and problem-solvers, and boost overall energy.

» Becoming more effective and gaining competitive advantages as an organization. The skills you will develop through increased cultural competency are invaluable, and can attract diverse public and political audiences who can greatly benefit your mission.

» Developing a stronger fundraising base by widening the number and types of grants for which you are eligible. You will also be able to solicit support from a more diverse base of individual donors.

» Becoming preferred employers in the field by increasing your capacity to recruit and retain staff from all backgrounds.

» Developing resilience. Greater biodiversity in a natural system makes that system more resilient and adaptable to change; in an organization, it can provide resilience and adaptability in the face of crises.

» Connecting with a broader network of partners. A commitment to diversity can enable connections to new individuals and organizations that can provide leverage, new sources of funding, and new pathways to conservation.

» Nurturing creativity and innovation. Diversity provides a pool of creativity and energy that a less diverse organization often lacks when it comes to problem solving.

A Dictionary of Diversity

Excerpted from Diversity and the Conservation Movement (Carey, Bonta, DeFalco, Taylor Smith, & Braus, 2015).

Discussions of diversity typically include a myriad of jargon-laden terms. As you work to diversify your project or organization, it is critical that you clarify your terms, ensure you're comfortable with the language you've chosen, and practice being as specific as possible. Each organization needs to establish its own key terms and definitions based on its unique needs, but the definitions used by the Society for Human Resource Management (SHRM), the world's largest membership organization devoted to human resource management, may provide a useful starting point.

Diversity is defined as "the collective mixture of differences and similarities that includes, for example, individual and organizational characteristics, values, beliefs, experiences, backgrounds, preferences, and behaviors", according to the Society for Human Resource Management.

Note that this definition of diversity is focused on the system level—a group of people, a region, an organization, and so on. Diversity is not an individual attribute; there is no such thing as a "diverse" person. Whether or not an individual adds to the diversity of a group depends on the specific demographics being measured within that group.

Inclusion means welcoming and including a diverse range of people, and having their input and perspectives valued and considered within the context of a collective endeavor. While diversity can be measured in demographic data, inclusion is about process and culture. In general, the more diverse a group, the more challenging inclusion becomes. Organizations that do attract individuals who reflect the country's demographics but ignore the need to create an inclusive culture often find low retention rates.

Environmental Racism refers to those institutional rules, regulations, policies, or government or corporate decisions that deliberately target certain communities for least desirable land uses and higher adverse environmental impacts. Environmental racism includes the unequal exposure to toxic and hazardous waste and the systematic exclusion of people of color from environmental decisions affecting their communities.

Environmental Equity refers to equal protection under environmental laws and equal enforcement of those laws. Examples include non-discriminatory zoning and cleanup of hazardous wastes in all communities, and the effective regulation of industrial pollution, regardless of the racial and economic composition of the community.

Environmental Justice is broader in scope than environmental equity and refers to cultural norms and values, rules, regulations, behaviors, policies, and decisions to support sustainable communities, where all people can interact with confidence that their environment is safe, nurturing, and productive.

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Colorado's Demographics: What to Know, How to Prepare. (2018, July 02). Retrieved December 23, 2020, from https://www.bellpolicy.org/2018/01/12/colorados-demographics/

Bonta, M., DeFalco, T., Taylor Smith, C., & Braus, J. (2015). Diversity and the Conservation Movement (1141260073 859300194 J. Carey, Ed.). Retrieved from https://cdn.naaee.org/sites/default/files/eepro/resource/files/diversity_module.9.22.15.pdf

Appendix E: Creating your own Plan for Environmental Education

Achieving the vision of the Colorado Environmental Education Plan requires time, resources, and ongoing communication across schools and their communities.

The following six guiding principles are recommended for use during school or district level implementation planning:

1. Equity of access for ALL students

2. Collaborative Solutions and Unified Approach

3. Sustainability and Scalability of Systems

4. Commitment to Quality

5. Variety of Learning Experiences

6. Cultural Relevance and Competence

The following activities are designed to support schools, districts, and partners as they strive to implement the Colorado EE Plan. It identifies five activities to support implementation efforts.

Activity 1: Identify an eeImplementation Team

1. Identify the members of the eeImplementation team. Include representation from school administration, interdisciplinary instructional teams, teacher leaders, and make sure to include parents and families and relevant community partners.

2. Establish a timeline for implementation planning and set-up a meeting schedule.

3. Discuss existing initiatives that can be used to execute, monitor, and reinforce the implementation efforts.

	Potential Member	Expertise (Content knowledge, policy expertise, stakeholder engagement, etc.)	Specific Role
1.			
2.			
3.			
4.			
5.			

First meeting date	
Time	
Location	
Method of ongoing communication with team (e.g., email, Google group, Webinar, etc.)	

Activity 2: Create a Vision for eeImplementation

Directions

Consider the five key questions and any reference materials or evidence associated with each of them. Discuss each of the five questions with the eeImplementation Team. Discuss and agree on a concise answer to each question and record the answers on a flipchart:

1. What are we trying to accomplish for our students with regard to environmental and outdoor learning, and why?

2. How will we know that we have done it?

3. What is holding us back from getting there?

4. How does environmental and outdoor learning fit into our school's mission and more broadly, how will it prepare our students for college and career readiness?

Use the answers to the questions above to craft your 2-3 sentence vision statement and record the statement below.

Activity 3: Complete eeImplementation Rubric

The Colorado Environmental Education has four primary goals. As a team, identify how well your team, school or organization is already working towards the goal. Review the list of recommended actions associated with each goal to help spark your thinking.

Activity 3: Complete eeImplementation Self-Assessment

0 = No Implimentation   1 = Developing   2 = Progressing   3 = Leading

eeImplementation					
	0	1	2	3	Strategies in Progress
Strengthen collaboration across the state among key stakeholders such as state agencies, formal and informal educators, business and industry partners, school districts, community organizations, researchers, families, and communities.	0	1	2	3	
Provide professional development that increases high-quality, culturally-relevant, and inclusive learning experiences for students and develops a greater understanding of complex ecosystems.	0	1	2	3	
Improve statewide access to formal and informal environmental education experiences for all students.	0	1	2	3	
Create formal and informal pathways to explore career opportunities in the environmental field and understand how environmental literacy can benefit any career field.	0	1	2	3	
Other					

Activity 4: Brainstorm Potential Strategies

Directions

After completing the assessment and identifying ways you are already working towards the goals in the plan, record your ratings and identify any potential new strategies you could engage in to support environmental and outdoor learning.

Goal	Overall Rating	Potential New Strategies to Engage in to Support Environmental and Outdoor Learning
Strengthen collaboration across the state among key stakeholders such as state agencies, formal and informal educators, business and industry partners, school districts, community organizations, researchers, families, and communities.		
Provide professional development that increases high-quality, culturally-relevant, and inclusive learning experiences for students and develops a greater understanding of complex ecosystems.		
Improve statewide access to formal and informal environmental education experiences for all students.		
Create formal and informal pathways to explore career opportunities in the environmental field and understand how environmental literacy can benefit any career field.		
Other		

Activity 4: Summarize Results

Directions

» Review the results from each goal

» Discuss the answers to the following questions with the team and record the answers:

1. Identify the current state of environmental and outdoor learning at your school/district/ classroom using the ratings from the rubric above. Discuss the desired state of what you would like environmental and outdoor learning to look like:

   a. How can we center equity in our desired state?

   b. Who else needs to be engaged in defining our desired state?

   c. How do we start working towards our desired state? How can we build so that our work is sustainable?

   d. How does our defined desired state lead to quality and variety of learning experiences?

   e. How does our desired state match community/student interest and needs?

2. Discuss and come to consensus on which potential strategies represent the heaviest lift and which priority area represents the lightest lift.

3. Discuss and record reflections on the Priority Areas that are the heaviest lift:

   a. Why are these areas the heaviest lift and what are potential leverage points to intervene?

   b. What would happen if we successfully made these shifts?

   c. How can we use these strategies to plan for wide implementation?

4. Discuss and record reflections on the areas that are the lightest lift for your school:

   a. Why are they the lightest lift?

   b. How can we use these areas of relative strength to build momentum for implementation?

School Implementation Notes

Directions

After completing Activity 4, the eeImplementation team should identify **three to five strategies** to prioritize for the school year and use an Action Planning Template to create a plan for the year. The team should identify opportunities to revisit the document during their established meeting times to monitor progress and modify plans.

Goal Addressed:	Strategies	Resources Needed (Internal/External)	Action Steps	Timeline
Strengthen collaboration across the state among key stakeholders such as state agencies, formal and informal educators, business and industry partners, school districts, community organizations, researchers, families, and communities.				
Provide professional development that increases high-quality, culturally-relevant , and inclusive learning experiences for students and develops a greater understanding of complex ecosystems.				
Improve statewide access to formal and informal environmental education experiences for all students.				
Create formal and informal pathways to explore career opportunities in the environmental field and understand how environmental literacy can benefit any career field.				
Other				