

STEM & Civics Enrichment Program

Exploring careers in criminal justice, law enforcement, and forensic science through hands-on learning designed to ignite an interest in science, technology, engineering, math, and civics.



DENVER POLICE
MUSEUM

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Program Goals

- Incorporate fun, hands-on learning for youth in grades 7-8 to deliver age-appropriate STEM, civics, and health and wellness activities.
- Spark curiosity in science, technology, engineering, math, and civics.
- Create pathways for career exploration in criminal justice, law enforcement, and forensic science.
- Build trust between youth and law enforcement.





Colorado Essential Skills

- Communicator
- Problem Solver
- Community Member
- Empowered Individual

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Modules

1. METRO/SWAT Team
2. Police Tech
3. 911 and Police Communications
4. Law & Order
5. Forensic Science

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Integration of Next Generation Science Standards & STEM

Next Generation Science Standards (NGSS)

3 Dimensions of Science Learning

The Denver Police Museum's STEM & Civics Enrichment Program focuses on integrating the Three Dimensions of Science Learning.

Crosscutting

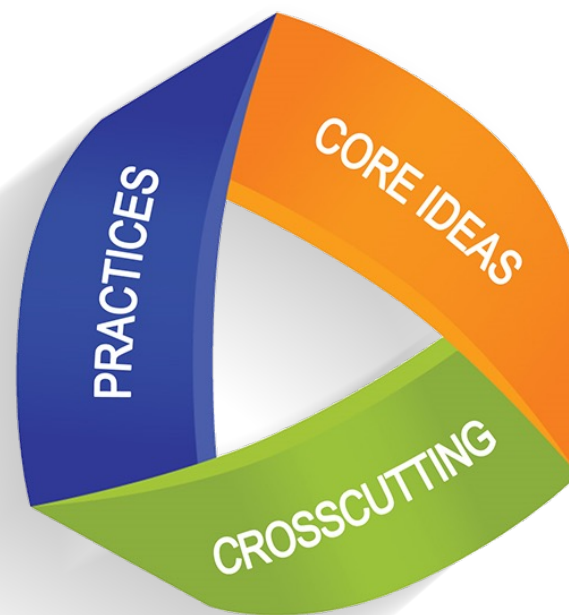
Crosscutting Concepts help students explore connections across the four domains of science, including Physical Science, Life Science, Earth and Space Science, and Engineering Design. When these concepts, such as “cause and effect,” are made explicit for students, they can help students develop a coherent and scientifically-based view of the world around them.

Science and Engineering Practices

Science and Engineering Practices describe what scientists do to investigate the natural world and what engineers do to design and build systems. The practices better explain and extend what is meant by “inquiry” in science and the range of cognitive, social, and physical practices that it requires. Students engage in practices to build, deepen, and apply their knowledge of core ideas and crosscutting concepts.

Disciplinary Core Ideas

Disciplinary Core Ideas (DCIs) are the key ideas in science that have broad importance within or across multiple science or engineering disciplines. These core ideas build on each other as students progress through grade levels and are grouped into the following four domains: Physical Science, Life Science, Earth and Space Science, and Engineering.



A Focus on Civics

Civics as a foundational component

Active Citizenship

Thomas Jefferson and other founders of the republic emphasized that the vitality of a democracy depends upon the education and participation of its citizens. The need for an informed citizenry was the very impetus for the creation of free public education in the United States. If the nation is to develop fully the readiness of its citizenry to carry forward its democratic traditions, it must support progress toward attainment of the vision of powerful social studies teaching and learning.*

Preparing students for the 21st century cannot be accomplished without a strong and sustaining emphasis on social studies. Social studies provides the cornerstone skills key to opening doors for a more diverse, competitive workforce and responsible citizenry.

Civics is a foundational component of the educational experience and critical to the continued success of our society.

The Denver Police Museum's STEM & Civics Enrichment Program introduces students to key concepts regarding the roles of law enforcement, criminal justice, and forensic science, including the complexity of the origins, structure, and functions of law enforcement; the rights, roles, and responsibilities of citizenship; the importance of law; and the skills necessary to participate in active citizenship.

**NCSS Position Statement, Social Education 80(3), pp 180–182, ©2016 National Council for the Social Studies*



Career Aspirations Begin in Middle School

Exposing students to professional work environments

Preparing Students for the 21st Century Workforce

The Denver Police Museum's STEM & Civics Enrichment Program seeks to prepare students for the 21st century workforce and for active citizenship upon receiving a high school diploma.

Exposure to STEM career awareness programs during this time prompts students to seriously consider jobs in engineering, technology, manufacturing, biology, and other STEM-related fields. Students' aspirations during this formative time period inform critical future choices, such as choosing STEM classes in high school or applying to STEM-centered magnet schools.

Early Exposure to STEM Improves Problem Solving Skills

While not every student will pursue a STEM-related career, the skills they gain from participating in a STEM program in middle school can be applied to any field.

According to research from the [Association of American Colleges and Universities](#), today's employers value problem solving and critical thinking abilities over college majors. As STEM-related programs emphasize analytical reasoning and problem solving, students will benefit from learning these valuable skills.

Younger Employers Seek Civic-Related Outcomes

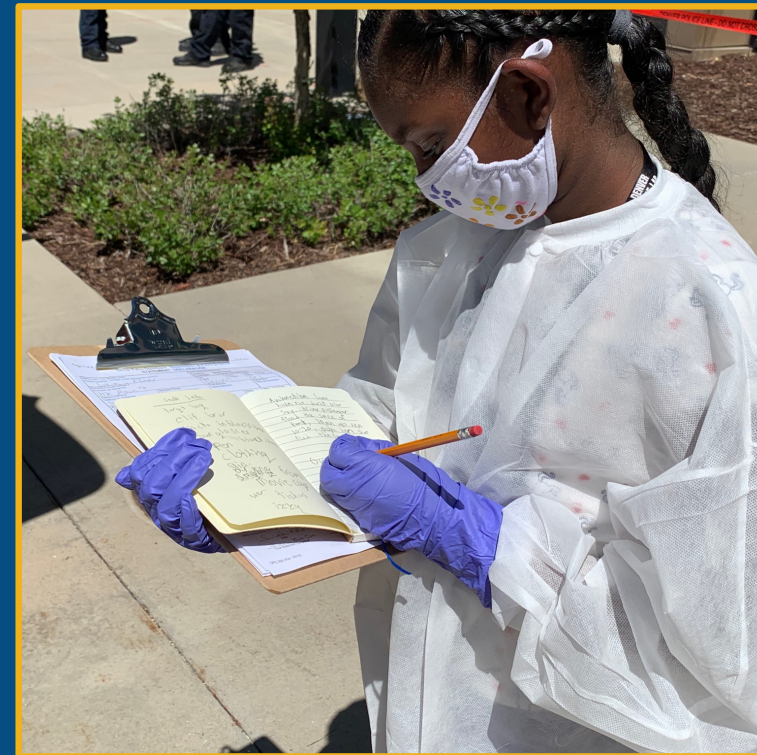
Research has found evidence of greater recognition of the value of civic skill building and community engagement among younger and more highly educated employers.



Career Exploration

Encouraging middle school students to explore a variety of careers related to related to

- Law enforcement
- Science, technology, engineering, and math (STEM)
- Criminal justice and law
- Civilian careers in law enforcement
- Nutrition, health, and physical fitness



Comprehensive Health & Wellness

Strengthen physical, social, and emotional wellness

Comprehensive Health

The Denver Police Museum's STEM & Civics Enrichment Program helps students to understand the 4 Dimensions of Resiliency and Wellness.

Led by Sergeant Bobby Waidler, the Denver Police Department's Resiliency and Wellness/Peer Support/Chaplain Program/Physical Therapy Program leader, students learn the relationship between sleep, exercise, nutrition, and emotional connection, including how:

- Sleep is vital for optimal mental and emotional health.
- Healthy lifestyle habits begin with nutrition.
- Health is a precious asset that often goes unrecognized or unappreciated until it is depleted.
- Social connection is the antidote to depression.

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