

Policy 6142.93: Science Instruction

Status: ADOPTED

Original Adopted Date: 10/01/1995 | **Last Revised Date:** 05/01/2017 | **Last Reviewed Date:** 05/01/2017

The Governing Board believes that science education should focus on giving students an understanding of the biological and physical aspects of science, key scientific concepts, and methods of scientific inquiry and investigation. Students should become familiar with the natural world and the interrelationship of science, mathematics, technology, and engineering. As part of science instruction, students should learn how to apply scientific knowledge and reasoning.

Philosophical and religious theories that are based, at least in part, on faith and are not subject to scientific test and refutation shall not be discussed during science instruction.

The district's academic standards for science instruction shall meet or exceed the California Next Generation Science Standards (CA-NGSS). The Superintendent or designee shall ensure that curricula used in district schools are aligned with these standards and the state curriculum framework.

The Superintendent or designee shall ensure that students have access to and are enrolled in a broad course of study including science courses.

The Superintendent or designee shall provide certificated staff with opportunities to participate in professional development activities designed to enhance their knowledge of district-adopted academic standards, instructional strategies for teaching science, and changes in scientific theories.

The Superintendent or designee shall develop and implement appropriate safety measures for science laboratory classes, including, but not limited to, staff and student safety training, use of eye safety devices, hearing protection, first aid procedures, regular equipment maintenance, safe use of heat sources, safe use and disposal of hazardous chemicals, proper ventilation, prevention of exposure to bloodborne pathogens from sharp instruments, fire prevention and control, an emergency response plan, and evacuation procedures. Parents/guardians shall be informed of the types of science laboratory activities that will be conducted and encouraged to sign consent forms for their child's participation.

The Superintendent or designee shall regularly report to the Board regarding the implementation and effectiveness of the science curriculum at each grade level. At a minimum, each report shall address the extent to which the program is aligned with the CA-NGSS, any applicable student assessment results, and feedback from students, parents/guardians, and staff regarding the program.

Policy Reference Disclaimer:

These references are not intended to be part of the policy itself, nor do they indicate the basis or authority for the board to enact this policy. Instead, they are provided as additional resources for those interested in the subject matter of the policy.

State	Description
5 CCR 14030	Preliminary procedure, planning and approval of school facilities
8 CCR 5191	Chemical hygiene plan
Ed. Code 32030-32034	Eye safety
Ed. Code 32255-32255.6	Student's right to refrain from harmful or destructive use of animals
Ed. Code 33475-33475.5	Model curriculum on stem cell science
Ed. Code 49340-49341	Hazardous substances education
Ed. Code 51210	Course of study for grades 1-6
Ed. Code 51210.3	Elementary science coach
Ed. Code 51220	Course of study for grades 7-12
Ed. Code 51225.3	High school graduation requirements
Ed. Code 52060-52077	Local control and accountability plan
Ed. Code 60640-60648.5	California Assessment of Student Performance and Progress
Ed. Code 8774	Residential outdoor science program
Management Resources	Description
California Department of Education Publication	Next Generation Science Standards Systems Implementation Plan for California, 2014
California Department of Education Publication	Science Safety Handbook for California Public Schools, 2014
California Department of Education Publication	California Next Generation Science Standards, 2013
California Department of Education Publication	Science Framework for California Public Schools: Kindergarten Through Grade 12, 2016
CSBA Publication	Supporting Implementation of the California Next Generation Science Standards (CA-NGSS), Governance Brief, November 2016
Website	CSBA District and County Office of Education Legal Services
Website	U.S. Department of Education, STEM Education
Website	California Science Teachers Association
Website	California Alliance for Next Generation Science

Standards

Website	California Department of Education
Website	CSBA

Cross References

Code	Description
0440	District Technology Plan
0440	District Technology Plan
0460	Local Control And Accountability Plan
0460	Local Control And Accountability Plan
0500	Accountability
3511	Energy And Water Management
3511	Energy And Water Management
3511.1	Integrated Waste Management
3511.1	Integrated Waste Management
3514.1	Hazardous Substances
3514.1	Hazardous Substances
4119.42	Exposure Control Plan For Bloodborne Pathogens
4119.42	Exposure Control Plan For Bloodborne Pathogens
4119.42-E(1)	Exposure Control Plan For Bloodborne Pathogens
4131	Staff Development
4157	Employee Safety
4157	Employee Safety
4219.42	Exposure Control Plan For Bloodborne Pathogens
4219.42	Exposure Control Plan For Bloodborne Pathogens
4219.42-E(1)	Exposure Control Plan For Bloodborne Pathogens
4257	Employee Safety
4257	Employee Safety
4319.42	Exposure Control Plan For Bloodborne Pathogens
4319.42	Exposure Control Plan For Bloodborne Pathogens

4319.42-E(1)	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4331	<u>Staff Development</u>
4357	<u>Employee Safety</u>
4357	<u>Employee Safety</u>
5141.22	<u>Infectious Diseases</u>
5141.22	<u>Infectious Diseases</u>
5142	<u>Safety</u>
5142	<u>Safety</u>
5145.8	<u>Refusal To Harm Or Destroy Animals</u>
5148.2	<u>Before/After School Programs</u>
5148.2	<u>Before/After School Programs</u>
6011	<u>Academic Standards</u>
6141	<u>Curriculum Development And Evaluation</u>
6141	<u>Curriculum Development And Evaluation</u>
6141.2	<u>Recognition Of Religious Beliefs And Customs</u>
6141.2	<u>Recognition Of Religious Beliefs And Customs</u>
6141.4	<u>International Baccalaureate Program</u>
6142.1	<u>Sexual Health And HIV/AIDS Prevention Instruction</u>
6142.1	<u>Sexual Health And HIV/AIDS Prevention Instruction</u>
6142.5	<u>Environmental Education</u>
6142.92	<u>Mathematics Instruction</u>
6143	<u>Courses Of Study</u>
6143	<u>Courses Of Study</u>
6146.1	<u>High School Graduation Requirements</u>
6161.1	<u>Selection And Evaluation Of Instructional Materials</u>
6161.1	<u>Selection And Evaluation Of Instructional Materials</u>
6161.1-E(1)	<u>Selection And Evaluation Of Instructional Materials</u>
6161.11	<u>Supplementary Instructional Materials</u>
6162.51	<u>State Academic Achievement Tests</u>
6162.51	<u>State Academic Achievement Tests</u>

6172	<u>Gifted And Talented Student Program</u>
6172	<u>Gifted And Talented Student Program</u>
6179	<u>Supplemental Instruction</u>