

# Strengthening Science Education and Environmental Literacy in California's New Era Of Local Control: The Toolkit

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## Resource List

### General Information about LCAP Development

- CA Dept. of Education LCFF Overview (<http://www.cde.ca.gov/Fg/aa/lc/>)  
Official state information and guidance on the LCFF and LCAPs.
- LCAPWATCH (<http://lcapwatch.org/>)  
A crowdsourcing collection of Local Control and Accountability Plans from districts throughout the state. A list of resources and tools are also provided for various stakeholders to support LCAP development and communication in their districts.
- WestEd LCFF website (<http://lcff.wested.org/>)  
The California State Board of Education's Local Control Funding Formula resource site. The resources available at this site complement information available at the California Department of Education, including webinars and other guidance to districts and other stakeholders on LCAP development.
- California State PTA LCAP planning information (<http://capta.org/focus-areas/lcflcap/accountability-plans/>)  
Includes Quick Guides on each of the eight state priority areas that must be addressed in every LCAP.

### Connecting with Local and Regional Partners

- BaySci: A Partnership for Bay Area Science Education ([www.baysci.org](http://www.baysci.org))  
A network of districts throughout the state of California dedicated to the implementation of the NGSS and high quality science, K-12. All BaySci districts have made a significant commitment to science, including the allocation of resources and time for district administrators, site leaders, and teacher leaders to plan together to support the implementation of science and NGSS.
- CSLNet Regional Networks (<http://www.cslnet.org/who-we-are/regional-networks/>)  
12 Regional STEM Networks throughout California bring together education, business and community stakeholders to build partnerships to strengthen STEM education locally and regionally. Contact the lead agency for the Regional Network in your area to connect to other STEM leaders in your area.

### Introduction to the Next Generation Science Standards

- California Department of Education – Next Generation Science Standards (<http://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp>)  
Provides official state information and guidance for science educators and district leaders on the California-adopted Next Generation Science Standards. Visit this site to view the entire CA-NGSS as well as information on state implementation timelines and other guidance.

- Next Generation Science Standards national website (<http://www.nextgenscience.org/>)  
Comprehensive information regarding the NGSS, including the standards themselves, a description of the conceptual and instructional shifts required by NGSS, information on making the case for science and NGSS, and resources for implementation of the standards in districts, schools, and classrooms.

### Support for NGSS: Professional Learning, Curriculum and Assessment Resources

- Lawrence Hall of Science ([http://www.lawrencehallofscience.org/services\\_and\\_expertise/ngss](http://www.lawrencehallofscience.org/services_and_expertise/ngss))  
This site is a resource for multiple stakeholders regarding NGSS implementation in districts, schools, and classrooms. It includes Lawrence Hall of Science professional development, curriculum materials, science enrichment programs (e.g, afterschool, etc.), parent education programs, and customized NGSS support for schools and districts in support of NGSS implementation.
- California Science Teachers Association (<http://www.cascience.org/>)  
CSTA represents and provides resources for science educators statewide in every science discipline at every grade level, Kindergarten through University. CSTA also publishes California Classroom Science (<http://www.classroomscience.org/>) and online resources providing legislative updates on the NGSS, state funding, teacher credentialing, and all other aspects of science education policy in California.
- California K-8 NGSS Early Implementation Initiative (<http://www.wested.org/the-california-k-8-ngss-early-implementation-initiative-launches/>)  
This new demonstration project brings together 8 school districts and 2 charter management organizations to collaboratively develop and participate in leadership training, professional development and testing of new curriculum and assessment resources to support early implementation of the NGSS.
- National Science Teachers Association (NSTA) ([www.nsta.org](http://www.nsta.org))  
The NSTA Next Generation Science Standards Hub offers information, resources, news, professional learning opportunities, and expert advice in understanding the NGSS.
- Power of Discovery: STEM<sup>2</sup> (<http://powerofdiscovery.org/>)  
This project supports expanded learning programs to increase their offerings of high-quality STEM learning opportunities and provides links to curriculum, funding and other resources.
- The Science Learning Activation Lab (<http://www.activationlab.org/>)  
The Science Learning Activation Lab is a national research and design effort to dramatically strengthen science learning in the United States and beyond. The lab has developed and tested a variety of assessment tools and instruments to measure scientific sensemaking skills, fascination with science, value of science, competency beliefs in science, engagement in science learning experiences, and choice to participate in science learning experiences, These assessments can be found at: [www.activationlab.org/tools/](http://www.activationlab.org/tools/)

## Environmental Literacy Resources

- California Blueprint for Environmental Literacy (not yet published)  
Provides recommendations to the California Department of Education and other stakeholders (e.g., Local Education Agencies, external partners) about how to ensure that every California student achieves environmental literacy, Kindergarten through 12<sup>th</sup> grade.
- California's Environmental Principles and Concepts (EP&C's) (<http://www.californiaeei.org/abouteei/whatistaught/epc/>)  
The EP&Cs examine the interactions and interdependence of human societies and natural systems. Approved in 2004, these 5 principles and fourteen supporting concepts were developed by more than one hundred scientists and technical experts. By law, the EP&C's must be included in the selection criteria for all future California textbooks and instructional materials.
- California Regional Environmental Education Community (CREEC) (<http://creec.org/>)  
The CREEC Network is a network of local agencies and organizations that have agreed to work together to increase environmental literacy in California. With the help of CDE Environmental Education Grant funds, a part-time regional coordinator is employed in each region to foster collaboration across the state with regards to professional development and resources for educators. Each CREEC region fosters communication among schools and organizations in their region that are interested in supporting environmental literacy. Collectively, the CREEC Network also maintains an online searchable database of standards-based enrichment programs, field trips, on-line resources and professional development opportunities from over 500 informal education providers across the state.
- State Education and Environment Roundtable ([http://www.seer.org/environment\\_based\\_implementation\\_of\\_ngss](http://www.seer.org/environment_based_implementation_of_ngss))  
Offers extensive information about using Environment-based Education (EBE) to help students achieve proficiency with the NGSS, and identifies direct linkages between California's Environmental Principles and Concepts and the NGSS.
- Ten Strands (<http://tenstrands.org/educators/environment-based-implementation-of-ngss>)  
Supports collaborations between state agencies, LEAs and non-formal providers to advance environmental literacy through California's new standards.

## Introduction to the History-Social Science (HSS) Framework

- 2016 History-Social Science Framework <http://www.cde.ca.gov/ci/hs/cf/sbedrafthssfw.asp>
- California Department of Education News Release "Superintendent Torlakson Announces Approval of History-Social Science Framework" <http://www.cde.ca.gov/nr/ne/yr16/yr16rel49.asp>
- California History-Social Science Project (CHSSP) Blog "What You Need to Know about California's New History-Social Science Framework" <http://chssp.ucdavis.edu/blog/what-you-need-to-know-about-california2016s-new-history-social-science-framework>

## Support for the HSS Framework: Professional Learning, Curriculum, and Assessment Resources

- California History-Social Science Project (CHSSP) ([www.chssp.ucdavis.edu](http://www.chssp.ucdavis.edu)) A statewide network of university and K-12 educators dedicated to improving history-social science instruction. CHSSP sites are located on UC and CSU campuses throughout California and partner with local schools, districts, counties, and statewide agencies to implement the newly adopted Framework for history-social science.
- California International Studies Project (CISP) (<https://csmf.ucop.edu/cisp>) A statewide network of university and K-12 educators that promote global education with an emphasis on geography.
- Library of Congress (<https://www.loc.gov/education/>) The Library of Congress offers classroom materials and professional development to help teachers use primary sources from the Library's digital collection.
- Docs Teach (National Archives) (<https://www.docsteach.org/>) An online tool for teaching with documents from the National Archives.
- California Geographic Alliance ([www.calgeography.org](http://www.calgeography.org)) The California Geographic alliance provides lesson plans and resources to support geography education across the grade levels. The lessons focus on the significance of location, including resources and the influence of human behavior on place.