

# California's NGSS "Rollout" Timeline<sup>1</sup>

## 2013-2014 [Zero year]

The *budget* signed by Governor Brown at the end of June 2013 included \$1.25 billion in one-time funding to help districts implement the Common Core State Standards (CCSS). But what you might have missed is that the language of the trailer bill (a legislative vehicle that accompanies the state budget that describes how budget funds are to be spent) includes the NGSS for California. According to the [California Department of Education](#) and per the language of [AB 86, Section 85](#) the funds are to be spent in 2013/2014 and 2014/2015 and can be used for any of three purposes (specific bill language below for reference):

- **Professional development** that is aligned to the CCSS, NGSS for California, and/or ELD Standards. This can be provided for teachers, administrators, paraprofessional educators, or other classified employees directly involved in instruction.
- **Instructional materials** aligned to the CCSS, NGSS for California, and/or ELD Standards.
- **Integrating the CCSS/NGSS through technology-based instruction**, such as expenses relating to support of computer-based assessment (e.g. high-speed internet connection, etc.)

While it is anticipated that most school districts will focus their funding primarily on Common Core implementation rather than NGSS, that does not mean that you as a science teacher need be left out in the cold. Talk to your administrators about including your professional development needs around both Common Core and NGSS in their plans.

On September 4, 2013, State Schools Chief Tom Torlakson announced that the State of California has adopted Next Generation Science Standards (NGSS).

California students will be assessed during the 2013-2014 school year in grades five (for fourth and fifth grade science content), eight (sixth through eighth grade science content), and ten (Life science content) and will remain in place until new assessments are developed or additional legislative action is taken, so teachers at these grade levels should continue with their current instruction. (Current federal regulations, ESEA, require the state to test science at least once in grades 6-9.). These assessments will be based on the 1998 California Science Standards. Test results will not affect a school's AYP (they never have) and most likely will not affect a school's API, which will likely be frozen for two years (until 2017).

November 6, 2013, State Board of Education approved a preferred model for middle grade learning progressions, which integrates science instruction. This preferred integrated learning progression also shares a close alignment the Common Core math sequence. The Board also requested the California Department of Education reconvene the [Science Expert Panel](#) (SEP) to develop an alternative model of science instruction that is specific to each middle grade level. On December 4-5, 2013, the SEP met to develop an alternative discipline specific model for middle grades 6-8. The CDE estimates the alternate learning progression will be available by March 2014 at the soonest, though specifics still need to be determined. At that time districts will have the option to choose what best meets the needs of their students. As with the assessment used with Common Core, the new science assessments developed for the NGSS might be built using an integrated sequence with the various learning progressions in mind in order to inform future instruction, (this decision will have a bearing on the prudence of the course progression model that is ultimately chosen at the district level so we may want to hold off on discussions about which learning progression best suits our school until more is known about assessments. Knowing the direction the assessments will take may help inform that decision).

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<sup>1</sup> For more timely information from the CDE and the NGSS go to [CDE FAQs on NGSS](#)

The following documents provide middle school educators **the rationale** for the middle school configuration of proposed standards. The documents linked below also describe the **learning progressions for each grade level**.<sup>2</sup>

- [Sixth Grade | DOC](#)
- [Seventh Grade | DOC](#)
- [Eighth Grade | DOC](#)

The “Model Course Maps” for three possible course designs models (conceptual/integrated, domain and modified domain) and the specific Disciplinary Core Ideas (DCIs) for each high school (9-12<sup>th</sup> grade) course mapped, for now, as proposed and laid out in “[A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas \(2012\)](#)” and the NGSS (available as an [online e-book](#) & an [interactive web site](#)) can be found at this link for [Appendix K](#) of the NGSS document. Currently, the AAE’s course design resembles a “hybrid” of their “domain” and “modified domain” models, which the NGSS calls the “Revised Modified Science Domains Model”. The description of this model starts on page 31 of [Appendix K](#) (rev. 8/30/13).

The use of these course maps will be helpful tools to ensure all students have access to high quality science education. However, these model maps should not be considered limits. High schools should offer opportunities to all students to further their advanced study in areas of interest to them, including Honors, Advanced Placement (AP) and STEM (Science, Technology, Engineering, and Mathematics).

A *Strategic Leadership Team* will be appointed by Torlakson to develop a plan to implement the NGSS. This includes a timeline for implementation, adopting a science framework, developing student assessments, and strategies for school districts.

Full implementation of NGSS for California is planned to occur over several years and in the context of a continuous learning process.

The CDE’s *Strategic Leadership Team* identified three phases of implementation (though Full implementation of NGSS for California is planned to occur over several years and in the context of a continuous learning process). These phases: *Awareness* (2013-2015), *Transition* (2015-2016), and *Implementation* (2016-2017), are similar phases as described in the [Common Core Systems Implementation Plan for California](#).

- **The Awareness Phase** represents an introduction to the NGSS, the initial planning of systems implementation, and establishment of collaborations.
- **The Transition Phase** is the concentration of building foundational resources, implementing needs assessments, establishing new professional learning opportunities, and expanding collaborations between all stakeholders.
- **The Implementation Phase** expands the new professional learning support, fully aligns curriculum, instruction, and assessments, and effectively integrates these elements across the field.

The *Awareness Phase* (see above, @ the CDE level) begins and extends through 2014-2015

Can I (Should I) start implementing the NGSS in my classroom now? [[link](#)]

“Full implementation of the NGSS **must be a thoughtful and deliberate** process which, in turn, **will take several years**. While **instructional materials and assessments are not yet available for the NGSS**, local education agencies should begin working with their stakeholders (including teachers, parents, students, administrators, district administrators, local school board members, professional organizations, and community and business partners) as they **begin to write their own implementation plans for the NGSS**.”

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<sup>2</sup> At this time (1/11/2014), I am not sure if these documents map the adopted MS course model(s).

Teachers can start evaluating their assessment procedures of how they measure student understanding of not only content, but of the [Crosscutting Concepts and Scientific and Engineering Practices](#). Successful implementation of the NGSS will require students to demonstrate their understanding of how science works in new ways. Future assessments will require students to not only ‘know’ science concepts, but students must use their understanding to investigate the natural world through the practices of science inquiry or solve meaningful problems through the practices of engineering design.

To learn more about the research behind the NGSS, stakeholders are encouraged to review the 2011 NRC report [A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas](#).

## 2014-2015 [one year out]

Implementation of new science standards, pending the State Board of Education’s (SBE) final action on the DCI sequence for Middle School grades and the development of a new NGSS based CA. Framework (required by 1/2016).

**New NGSS Assessments:** The earliest new science assessments might be available is by the end of the 2014-2015 school year. However, due to the short timeline, new science assessments will most likely not be available until the following school year. At this time, it is thought that the new science assessments will likely be developed much like the assessments of SBAC. However, it is still too early to know exactly how and when new science assessments will be administered. At the recommendation of the ADADSIB<sup>3</sup>, the CDE has been encouraged that all new state science assessments be consistent with the newly adopted NGSS for California, that include item types consistent with the SBAC assessments (e.g., short and extended constructed-response items and performance tasks).

## 2015-2016 [two years out]

**The Transition Phase** (@ the CDE level, begins) is the concentration of building foundational resources, implementing needs assessments, establishing new professional learning opportunities, and expanding collaborations between all stakeholders.

**When will the new Frameworks for Science be available?** [Senate Bill 300 \(2013\)](#) requires the SBE to consider the adoption of a revised curriculum framework and evaluation criteria for instructional materials in science on or before January 31, 2016, and would require the revised curriculum framework to be based on the NGSS, and to include English language development strategies, as specified, and strategies to address the needs of pupils with disabilities.

**What are “curriculum frameworks”?** Curriculum frameworks offer guidance for the implementation of content standards (in this case the CA. adopted version of the generic NGSS). Frameworks describe the curriculum and instruction necessary to help students achieve proficiency, and they specify the design of instructional materials and professional development. Further, they provide guidelines and selected research-based approaches for implementing instruction to ensure optimal benefits for all students, including those students with special learning needs (See *California Education Code (EC) 60010(c); 60200-60207*).

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<sup>3</sup> Assessment Development and Administration Division District, School, and Innovation Branch

## 2016-2017 [three years out]

The *Implementation Phase* (@ the CDE level begins) expands the new professional learning support, fully aligns curriculum, instruction, and assessments, and effectively integrates these elements across the field

## 2017-2018 [Four years out]

**When will new textbooks and instructional materials be available?**

After the SBE adopts a new Science Curriculum Framework, the review of publisher submitted Instructional Materials begins. **New instructional materials for science should be available early 2018.**