

Grades Six Through Eight



The CA NGSS define two possible progressions for middle school: the preferred Integrated Model, which interweaves science disciplines in a developmentally appropriate progression; and the Discipline-Specific Model, which provides in-depth focus on a different science discipline at each grade level.

The two models differ only in the sequence; every student is expected to meet each middle grade performance expectation by the end of the grade. In this context, *sequence* refers to the course (sixth, seventh, or eighth grade) in which a particular Performance Expectation (PE) is mastered.

Historical Background

The CA NGSS are aligned with the nationally developed NGSS. This nationwide effort specified PEs for each year in kindergarten through grade five. However, in the middle grades, the PEs were presented for the entire span of grade six through grade eight. Because California adopts instructional materials for kindergarten through grade eight on a statewide basis, standards had to be placed at specific grade levels—sixth, seventh, and eighth. Therefore, the SSPI recommended that the SBE adopt specific placement of the standards for the middle grades at each grade level.

The SSPI convened a Science Expert Panel which consisted of K-12 teachers, scientists, educators, business and industry representatives, and informal science educators. This panel evaluated a range of options for the appropriate organization and sequence of the PEs. Members of the public provided feedback to the Science Expert Panel via three open forums and a Webinar. The Science Expert Panel concluded that an integrated model for grades six through eight would be the most effective model for optimizing student learning of the NGSS; the panel subsequently reviewed the national model developed by Achieve (2010), adapted it to better align with California's needs, and recommended

only the Preferred Integrated Model to the SBE. In December 2014, the Science Expert Panel reconvened to develop a Discipline-Specific Model of the NGSS.

The SBE's intent in its November 2013 action was to establish one Integrated Model in California for grades six through eight that was preferred by both the SSPI and the SBE, and one Discipline-Specific Model as an alternative.

As districts consider the progression that works best for their resources and local context, they should be aware of the historical context, rationale, and potential limitations of each model. For more information on the Preferred Integrated Course Model and the Discipline-Specific Course Model, please see chapters 5 and 6 of the *2016 Science Framework for California Public Schools, Kindergarten Through Grade Twelve*.