

EXECUTIVE SUMMARY

Developing District Plans for NGSS Implementation

Preventing Detours and Finding Express Lanes on the Journey to Implement the New Science Standards



NGSS Early Implementers Initiative: Bringing science to life as a core subject in K–8 classrooms

A diverse group of eight California school districts and two charter management organizations is actively implementing Next Generation Science Standards in grades K–8. These NGSS Early Implementers are supported by the K–12 Alliance at WestEd, and work in partnership with the California Department of Education, the California State Board of Education, and Achieve. The S. D. Bechtel, Jr. Foundation commissions WestEd’s STEM Evaluation Unit independently of the K–12 Alliance to evaluate the initiative in the eight public school districts. This document summarizes the content and findings of the fourth evaluation report in the initiative series, published in February 2018. Access the complete series and learn more at K12alliance.org.

Focus on Next Generation Science Standards

Many California districts are ramping up their efforts to enhance science teaching, in part because of the new California Science Test (CAST) coming online. The CAST is aligned with the revised California Science Framework, which mirrors the Next Generation Science Standards (NGSS). The NGSS call for substantial changes in science teaching and learning. Given this context, how are districts escalating their attention to NGSS implementation?

The K–8 Early Implementers Initiative has found that careful planning is critical. With thin planning, unexpected detours or dead ends are likely. However, with solid planning, districts are more likely to achieve their implementation goals and may discover some express lanes for their implementation journey!

In this evaluation report, we document lessons learned by the Early Implementer districts through their development and use of master district plans for NGSS implementation. Intended for district-level administrators and state education policymakers, this report is the fourth in a series of evaluation releases. The report is based primarily on inspection of districts’ thorough NGSS implementation plans and extensive interviews with district project directors and the regional directors from WestEd’s K–12 Alliance.

The report’s main topics are:

- › Benefits of developing an NGSS implementation plan
- › Processes used to develop plan components, including overcoming challenges
- › Recommendations for developing plans
- › Sample components of districts’ NGSS implementation plans

We hope that readers will not be put off by the report’s seemingly large size. While the main narrative is relatively brief, the report also provides over 40 pages of practical samples in the appendix to give readers a clear idea of what goes into a thorough NGSS implementation plan. As readers will have different interests and needs, we included a wide variety of examples.

Benefits of Developing an NGSS Implementation Plan

Soliciting input from a wide variety of stakeholders — including teachers and administrators at both school and district levels — was critical for gaining multiple perspectives and achieving buy-in for executing the plan. The substantial planning process enhanced participating teachers' understanding of the workings of the district, empowering them to become systemic change agents for the district's NGSS implementation. For example, teachers became more knowledgeable about avenues for being included in districts' annual LCAP decisions. In addition, by beginning the process with a needs assessment that typically involved collecting data from teachers and others, the plans addressed local concerns and conveyed authenticity to stakeholders as the plans were being rolled out.

Developing the Plan Components: Process and Challenges

The report describes how districts established teams to help plan and implement the NGSS, and how these teams developed five main components for their plans. The process involved:

- › Conducting a needs assessment
- › Creating clear goals through vision and mission statements
- › Systematically addressing a full range of plan elements (i.e., instruction/teaching, professional learning, curriculum/resources, assessment, community/parent engagement, policies/practices, and equity)
- › Creating an action plan
- › Identifying ways of monitoring and evaluating progress on implementing the plan

The report also discusses challenges faced by district planning teams, including recognizing that adequate planning takes substantial work and time; thinking of everything important to include in the plan, while also not getting distracted by issues at too small of a grain size; and seriously addressing equity issues.

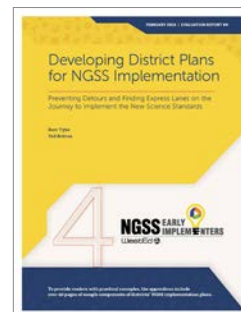
Recommendations for Districts Putting Together NGSS Implementation Plans

The main narrative of the report concludes by summarizing the following recommendations that Project Directors had for other districts endeavoring to draft their own NGSS implementation plans:

- › Engage a wide range of stakeholders, including central office staff
- › Gather and attend to needs-assessment data
- › Do what works for your local context
- › Share the plan widely
- › Go slow to go fast
- › Maintain a living document
- › Keep in mind the larger purpose of effectively engaging all students in science

Appendices

The report's appendix contains over 40 pages of examples of each of the five major components of the district plans (i.e., needs assessment, vision and mission statements, core values and operating principles, program elements matrix, and a monitoring and evaluation plan). The appendix also lists other seminal reports on making district NGSS plans.



Read the full report, access other evaluation reports and resources, and learn from NGSS Early Implementers at K12alliance.org.