EXECUTIVE SUMMARY

It’s about TIME: A rigorous new process for selecting instructional materials for science

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 the Next Generation Science Standards (NGSS) 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 participating public school districts. This document summarizes the content and findings of the eleventh evaluation report in the Initiative series, published in June 2020. Access the complete series and learn more at K12alliance.org.

California counties and school districts are implementing a critically needed change in how they evaluate science instructional materials before investing in local adoption. Past adoptions were often too superficial in nature, focusing on candidate materials’ overall look and feel, use of graphical elements, and availability of ancillary materials while insufficiently attending to the substance of the materials for high-quality teaching and learning. In contrast, the California NGSS Toolkit for Instructional Materials Evaluation (hereafter referred to as TIME) process enables participants to use evidence-based measures to choose materials aligned to the Next Generation Science Standards (NGSS) that meet their district’s needs.

This 11th report in the NGSS Early Implementers Initiative evaluation series is intended for school and district administrators, leaders of science professional learning, and state policymakers. It provides an overview of the full TIME process, including participants’ perceptions, a detailed description of the statewide TIME trainings of 2018–19, and a vignette that illustrates a portion of the TIME process.

The 2018–19 Statewide TIME Rollout

When the California Department of Education released its approved list of 29 K–8 science
Instructional materials, district adoption committees were primed for using a toolkit such as TIME to help them select NGSS-aligned instructional materials to adopt. TIME trainings, which emphasized the labor-intensive Paper Screen step, occurred in three phases: (1) a master class to prepare 23 California science education leaders to lead large, regional TIME trainings; (2) two regional trainings, one in Northern California and one in Southern California, to which all county offices of education were invited to send a small team; and (3) dozens of local trainings facilitated by regional training participants.

All but nine of California’s 58 counties sent participants to a regional training. Local trainings were held in 39 of the 49 participating counties (almost 80 percent) between January and October 2019.

Challenges to Implementing TIME

Participants detailed a variety of challenges associated with using the TIME toolkit as designed, most often citing the amount of time required. Although many local trainings closely followed the three-day training modeled in the master class and the regional trainings, evaluators also saw some modifications, including combining or rushing parts of the process. The report includes cautions from master class facilitators about which variations have the potential to reduce the integrity of a TIME training.

Recommendations

The report recommends that adoption committees:

› Identify the unique needs and priorities of their district that they hope instructional materials will help them address.

› Acknowledge the benefit of rigorously reviewing candidate instructional materials in all content areas.

› Consider taking advantage of TIME, an existing tool developed specifically to guide the review of NGSS-aligned instructional materials.

› Consider the TIME approach as a support for learning about the NGSS.

› Know that even after adopting NGSS instructional materials, teachers and administrators will continue to need professional learning.

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