

NGSS NOW

6 things to know about quality K-12 science education in January 2019

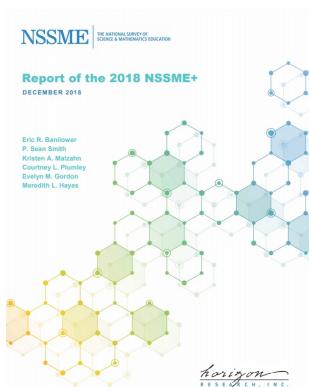


1 Realizing the Vision: NGSS District Implementation Meeting

Achieve and the Board on Science Education (BOSE) of the National Academies of Sciences, Engineering, and Medicine (NASEM) convened educators, state leaders, and experts in science education on January 9 to discuss explore the needs of districts implementing the NGSS and three-dimensional science standards. This meeting surfaced lessons learned, productive collaborations across districts, and future challenges of implementing these standards, and identified the ways that Achieve, BOSE, and other organizations can work together to build districts' capacity to improve science instruction for all students.

Thank you to all participants that joined this discussion in person and virtually, and to all presenters that shared their insights on science standards implementation and improving science instruction. Be sure to follow [our Twitter feed](#) where we'll soon post a recording of the meeting webcast. [Click here](#) to read the live discussion and comments on Twitter using the #RealizeNGSS hashtag, and [here](#) to access materials from the meeting sessions.

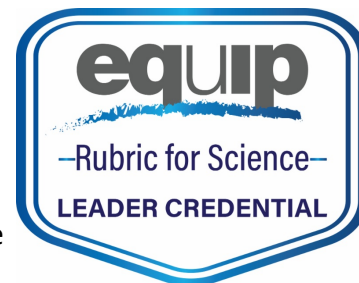
2 Teacher Survey Released on Science Instruction Across the U.S.



Horizon Research, Inc. released the results of the [2018 National Survey of Science and Mathematics Education](#) (NSSME+), a survey of 7,600 science, mathematics, and computer science teachers in schools across the U.S. The findings include that the typical elementary school class spends about 20 minutes a day on science instruction, compared to 60 minutes on mathematics and almost 90 minutes on language arts. Also, students in high-poverty schools are more likely to have inexperienced science and mathematics teachers. Few science teachers, at any grade level, said they feel well prepared to teach engineering, a key element of the NGSS. These sobering results point to the need for improved and more equitable science instruction for all K-12 students, regardless of their zip code or background.

3 More Professional Learning Opportunities Available with EQUIP Leadership Credential Earners

Achieve, and the science education field broadly, now has increased capacity to provide professional learning on the EQUIP suite of tools for science. Recently, the first group of 15 educators earned the EQUIP Leadership Credential. This credential is offered jointly by Achieve and the National Science Teachers Association (NSTA), and is designed to certify individuals to deliver high-quality EQUIP Rubric for Science Professional Learning sessions on behalf of Achieve and NSTA. To learn more about the professional learning opportunities offered by Achieve, that the expert facilitators that have earned this credential can now provide, [click here](#).



4 Study: Meeting the NGSS Requires an Emphasis on Teacher Practice



A [recently released study](#) in the American Education Research Journal shows the relationship between teaching practice and student learning in teaching students the NGSS. The study tests the influence of an analysis-of-practice professional learning problem on teachers' science content knowledge, pedagogical content knowledge, and teaching practice and on their students' achievement. The study found that 4th and 5th grade students whose teachers participated in an analysis-of-practice professional learning program outperformed students whose teachers participated in a

in a content-deepening program. In other words, simply providing professional learning on content is not enough for NGSS implementation and to improve student outcomes; professional learning also needs to focus on teaching practice.

5 Apply to Join the Tennessee District Science Network

Achieve is excited to announce the creation of the Tennessee District Science Network, designed to bring together districts to leverage and build capacity across the state and solve common challenges together. **Interested districts should fill out an application [here](#) by January 15.**

The goal of this state-wide network is to connect and support Tennessee districts to leverage and build capacity together to address common challenges. Achieve will support district leaders and science educators in identifying key steps that the district can pursue to improve science outcomes; provide professional learning to science educators across the district that is tied directly to student work; develop and share common, high-quality resources that teachers can directly use in their classrooms; and build sustainable cross-district communities of practice that can be used to support implementation over time. More information on this opportunity and the application process is available [here](#).

We've Reached Over 20,000 Followers on Twitter!

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In addition to reading updates on NGSS resources and implementation month-to-month, why not also check out our Twitter feed for updates daily? We recently reached over 20,000 followers. Thank you to everyone that already follows our updates on Twitter. Here, we engage with educators and experts from around the world as we work to improve K-12 science education together, and share the latest resources to support NGSS implementation. Head to [@OfficialNGSS](#) on Twitter and click "Follow!"

