



Teaching and Learning

To: OUSD Board of Education
From: Devin Dillon, PhD
Subject: David Chambliss, Executive Director of Teaching and Learning
Date: The State of **OUSD Science**
February 8, 2017

OVERVIEW & OBJECTIVE

- Ensure high quality science education for all Oakland students.
- Provide curriculum support and professional learning for teachers, teacher leaders, principals and district staff.
- Address issues of equity in science education.

SUMMARY

Access to high quality science education is of critical concern from an equity standpoint. Science education enables access to college and career, skill development, and increased engagement in learning. Nationally, the Next Generation Science Standards are being adopted by many states to address the major shifts needed in science pedagogy.

The OUSD Science department is on the forefront of leadership across California as an early implementer of NGSS. The work of the department in 2016-17 is focused on three major areas:

1. High quality science curriculum (FOSS-SIRA and NGSS-aligned sixth through ninth grade curriculum)
2. Development of science teacher leaders for science education advocacy, facilitating collaboration, providing resources, and modeling effective instruction.
3. Identification of high quality learning indicators for science classrooms

This three pronged approach allows the team of seven specialists and three coordinators to enable shifts toward NGSS-aligned instruction in many classrooms around OUSD.

Beginning this year, the Department of Education will begin piloting the new standardized assessments. The interim between standardized assessments allows for deep teacher learning, gauged by observations, feedback and surveys. During the transition from the previous California science standards to the Next Generation Science Standards, the science department is capturing several sources of information on NGSS implementation at the teacher and student levels. At elementary, the SIRA addition to the FOSS curriculum has embedded assessment for teachers to collect information on students. In grades 6-9, teachers have assessments embedded into the district NGSS pilot curriculum.

While diligently working to bring engaging science to all students, the department continues to involve community members, parents, and science partners in several exciting events. Many students from around Oakland participate in Dinner with a Scientist, Science Fair, and Engineering Extravaganzas.

Our efforts would not be possible without the continued support of the OUSD Board of Education. You have enabled our state leadership by mandating hands-on science instructional time at the middle school level. We humbly ask that you continue to advocate for high quality science education in all classrooms and inquire about the state of science education in your districts and OUSD as a whole. High quality science presents an opportunity for students to develop critical thinking, language, literacy, mathematics, and college preparatory skills in a relevant and engaging setting.