APS Science Update k-12

Sam Hoyo Science Director

District Goals

Goal 1: Student Achievement

Goal Objective 1.1: Students will engage in curricula that are designed in response to the district's vision of student as learner with an emphasis on transferable skills such as remain in alignment with state standards, and coherent within each discipline.

Goal 2: Staff Excellence and Professional Development

Goal Objective 2.1: Professional learning for educators will reinforce targeted components of the academic curriculum, social emotional competencies and pedagogy, and will emphasize culturally responsive and data-informed instructional practices that support student learning and growth.

Kindergarten

Goal 1:

During the 2019-2020 school year, kindergarten teachers will use the "Tools of the Mind" Science Manual for science instruction.

Evidence

Goal 2:

Starting in the fall of 2019, teachers will receive professional development with using the new Tools of the Mind resource manual for science instruction. Kindergarten teachers will report progress in developing the science practices with K students to the Director of Science. who will help determine next steps in improving K science teaching for the 2020-2021 school year.

Grades 1-5

Goal 1:

During the 2019-2020 school year, students will be assessed using new draft common assessments at the end of each unit and data will be entered into the Data Bank and shared with the Science Curriculum Director.

Evidence

Goal 2:

During the 2019-2020 school year, teachers will receive professional development from the Science Teacher Leaders on implementing the new common assessments. The Science Director will oversee the process and finalize the common assessments for the following year.

Grades 6-8

Goal 1:

During the 2019-2020 school year, students in grades 6 and 7 will use the new iScience textbook and electronic resources. This program contains resources for student use, as well as tools and strategies to enhance instruction for teachers. Project Based Learning (PBL) activities will be piloted in several units from the new iScience resources.

Goal 2:

During the 2019-2020 school year, science teachers will receive professional development on strategies for incorporating Project Based Learning (PBL) units into the curriculum and instruction.

Evidence

Grades 9-12

Goal 1:

During the 2019-2020 school year, students in several courses will pilot Project Based Learning (PBL) activities related to the course discipline. Piloted activities will be reviewed and adjusted for continued use in future years.

Evidence

Goal 2:

Science teachers in selected courses will receive professional development on how to incorporate PBL in the curriculum.