SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
BOARD OF EDUCATION

Agenda Item 10.1

Meeting Date: June 6, 2019

Subject: **Approve Middle School (6-8th) and High School (9-12th) Science Pathways**

- ☐ Information Item Only
- ☐ Approval on Consent Agenda
- ☐ Conference (for discussion only)
- ☐ Conference/First Reading (Action Anticipated: _____)
- ☒ Conference/Action
- ☐ Action
- ☐ Public Hearing

Division: Academic Office / Curriculum and Instruction

Board of Education Executive Summary

Academic Office / Curriculum and Instruction

Approve Middle School (6-8th) and High School (9-12th) Science Pathways

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I. Overview/History of Department or Program

In 2013, the California State Board of Education joined other states in adopting the Next Generation Science Standards, an internationally benchmarked and research-based set of curriculum standards. The standards were developed by broad-based teams from 26 states including educators, academics and other experts in the fields of science and science education. The standards outline rigorous learning expectations for science content and a core set of engineering practices. This integration of rigorous content and application reflects how science and engineering is practiced in the real world.

In 2016, the State Board of Education approved the new California Science Framework which outlined the ways and means in which local education agencies (LEAs) and classrooms can transition to the NGSS. In middle school (6-8th) and high school (9-12th), the state did not dictate to LEAs how the standards should be organized into courses. The state allows LEAs to practitioners. The general consensus of science by proposing viable integrat science model, students receive instru earth) each year. This compares to a instruction primarily from one disciplin instruction was largely based on data f engineers. The SEP noted that the Un minds in the fields of science and engi international educational system that pro experience integrated science instruct SEP and, in an attempt to reconcile th integrated instruction should not be the designed a domain or discipline specif SEP felt strongly that integrated instru

th discipline specific (4 course) model, an e

Board of Education Executive Summary

Chemistry, Physics, Earth Science) gets its own year long course. The committee, however, could not come to consensus on either model for a clear recommendation to the board. The middle school pathways committee met in March 2019. At the conclusion of the meetings, the committee had discussed the merits of the two instructional models posed in the framework: The CA Preferred Integrated (every science, every year) Model and the Discipline Specific Model. Like the high school committee, the group could not come to consensus on either model for a clear recommendation to the board.

Science Pathways Voting

As a result of the committees not coming to consensus on any one instructional model, the decision was made to census all impacted teachers in the form of an online, anonymous vote. At the high school level, this was facilitated by science department heads during collaborative time. Department heads were asked to lead conversation around the pros/cons discussed by the high school science pathways committee and then vote at the end of the meeting once all voices had been solicited for comments and questions. Voting for high school closed on March 31st, 2019. At the middle school level, this was facilitated via an online form

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would be included in the rubric as part of the initial review. For SCUSD, our district lens included considerations for: English Language Development, Universal Design for Learning, and Equity/Access and Social Justice including cultural relevance and responsiveness. Programs that rank high enough in the prescreen process are considered when moving forward with a deeper, unit-level screening. Programs that aren't ranked high enough or programs that do not have enough evidence to indicate alignment to the rubric are eliminated from the adoption process. For SCUSD, this process will conclude in June 2019 for both high and middle school instructional materials.

Phase 2: Paper Screen of Instructional Materials

The paper screen of instructional materials involves a deeper look at the materials that made it through the prescreen. The committee examines a full instructional unit within a set of materials across 5 individual rubrics: Foundations, Student Work, Monitoring Student Progress, Teacher Support, Program Evaluation (optional). At the end of each rubric, consensus on scores is recorded and the program is either pushed forward to the next rubric or eliminated. After all materials are reviewed, the committee decides on two instructional materials to move forward to final pilot phase. For SCUSD, this process will conclude on August 2nd, 2019 for high and middle school instructional materials.

Phase 3: Piloting of Instructional Materials

The piloting of instructional materials involves an 8-week classroom trial run of both sets of instructional materials. Prior to piloting, piloting teachers and school sites are engaged in publisher training to use the materials effectively. During the piloting phase, teachers collect data systematically via digital journals and student work analysis in ongoing regular meetings. During this process, parent/community feedback and input will be garnered (Ed. Code 8[illegible]; 5 CCR §§ 9214(a)(4)

Board of Education Executive Summary

Academic Office / Curriculum and Instruction

Approve Middle School (6th) and High School (9