

MODESTO CITY SCHOOLS

TO: Dr. Sara Noguchi, Superintendent

Regular Meeting

SUBJECT: Science Adoption, 9-12

March 30, 2020

BACKGROUND

The Science adoption process occurs every six to eight years. Once the State Board of Education approves the Science Framework, the adoption cycle for materials aligned to the State Standards begins. The Science Framework was adopted Nov. 3, 2016 with instructional materials becoming available for pilot during the 2019-2020 school year.

The AP science adoption process occurs every six to eight years. Once the AP College Board updates and rewrites their course requirements, the adoption cycle for materials aligned to the AP standards begins. The AP College Board updated the course requirements For AP Environmental Science to take effect the fall of 2019.

Modesto City Schools has a 2+2 articulation agreement with Modesto Junior College (MJC) that requires our AP Anatomy & Physiology course to utilize the same textbook as the Junior College.

GOAL ALIGNMENT

- 1.1: Ensure Great Instruction First Time.
- 1.2: Increase students being identified as “prepared” in the college/career indicators.
- 1.3: Increase English Learner growth toward English proficiency.

REPORT

Biology

On May 16, 2019, MCS formed the Biology Adoption Committee. The committee included College Prep (CP) and Pre-AP/Honors Biology teacher representatives from all of the seven comprehensive high schools, a high school district improvement facilitator, an instructional technology trainer and a bilingual language development specialist. The committee was charged with the following:

First, creating and using a criterion rubric to evaluate chemistry curriculum available in order to narrow the selection to two publishers for pilot.

Second, pilot the selected curriculum and make recommendations to the superintendent and the Board of Education for adoption of curriculum aligned to the new science framework for implementation in the 2020-2021 school year.

The committee met four times to meet the first charge. Three of the meetings consisted of utilizing the criterion sheet to evaluate the curriculum along with participating in publisher presentations. The last meeting was to discuss and select two curriculum to pilot. Both the CP and Pre-AP/Honors selecting the same curriculum: Discovery Education, the Living Earth and Pearson, Miller Levine Experience Biology, the Living Earth.

The selected curriculums were piloted for a full quarter with publisher training occurring prior to the beginning of the pilot. Each curriculum consisted of both print and digital materials.

On March 12, 2020, the Biology committee met to review and discuss their feedback from both curriculums. The committee came to a consensus and is recommending the adoption of **Discovery Education, The Living Earth for CP and Pearson, Miller Levine Experience Biology, The Living Earth for Pre-AP/Honors.**

AP Environmental Science

On Oct. 2, 2019 the AP Environmental Science committee consisting of teachers from four for the five high schools offering the course meet afterschool. The group was charged with the following:

Determine the curriculum to pilot, pilot selected curriculum and make recommendations to the superintendent and the Board of Education for adoption of curriculum aligned to the new AP College Board requirements for implementation in the 2020-2021 school year.

The committee agreed to pilot Bedford, Freeman, & Worth, Environmental Science of AP® Course 3e and Biozone Corporation, Environmental Science (3rd Ed) student workbook.

The selected curriculums were piloted for eight weeks with publisher training occurring via self-paced webinars prior to the beginning of the pilot. The Bedford, Freeman & Worth, Environmental Science AP® Course, consisted of both print and digital materials. The Biozone, Environmental Science (3rd Ed) consisted of a consumable print book.

On Feb. 14, 2020, the committee members were asked to submit their feedback about the curriculums. The committee came to a unanimous consensus and is recommending Bedford, Freeman, & Worth, Environmental Science of AP® Course 3e for adoption with class sets of Biozone, Environmental Science (3rd ED) student workbook to be a one-time purchase.

AP Anatomy & Physiology

MJC is currently using Essentials of Human Anatomy & Physiology 12th Edition by Elaine N. Marieb and Suzanne M. Keller. Modesto City Schools is currently using the 2006 8th edition of the same book. The Pearson, Essentials of Human Anatomy & Physiology 12th Edition by Elaine N. Marieb and Suzanne M. Keller was piloted by an anatomy and physiology teacher for one quarter. This curriculum consists of both print and digital materials.

It is recommended that in order to maintain the articulation agreement with MJC, the Essentials of Human Anatomy & Physiology 12th Edition by Elaine N. Marieb and Suzanne M. Keller be adopted for implementation for the 2020-2021 school year.

FISCAL IMPACT

The approximate cost based on projected enrollment numbers of the curriculum will be as follows:

CP Biology Discovery Education, The Living Earth	
Option 1 Curriculum Digital Access and STUDENT SETS	Option 2 Curriculum Digital Access and CLASS SETS
\$ 558,700.00	\$ 501,970.00

Honors Biology Pearson: Miller Levine, Experience Biology, The Living Earth	
Option 1 Curriculum Digital Access and STUDENT SETS	Option 2 Curriculum Digital Access and CLASS SETS
\$ 137,493.47	\$ 125,831.32

AP Environmental Science Bedford, Freeman, & Worth, Environmental Science for the AP Course 3e	
Option 1 Curriculum Digital Access and STUDENT SETS	Option 2 Curriculum Digital Access and CLASS SETS
\$ 57,601.44	\$ 57,161.82

This will be the combined cost for the life of the eight-year adoption. The final cost of the curriculum will be dependent upon actual enrollment rather than projected enrollment numbers and may include curriculum to be purchased for use by resource, special day, and ED classroom teachers.

Supplemental AP Workbook Biozone, Environmental Science (3rd Ed) Student Workbook Curriculum Class Sets
\$7,136.25 (one-time cost)

Human Anatomy & Physiology Pearson, Human Anatomy & Physiology 12th Edition, Maieb	
Option 1 Curriculum Digital Access and STUDENT SETS	Option 1 Curriculum Digital Access and CLASS SETS
\$ 119,309.65	\$ 105,595.92
<p>This will be the combined cost for the life of the six-year adoption. The final cost of the curriculum will be dependent upon actual enrollment rather than projected enrollment numbers and may include curriculum to be purchased for use by resource, special day, and ED classroom teachers.</p>	

SUMMARY

Staff recommends the adoption of the curriculum the following courses:

- CP Biology
- Honors Biology
- AP Environmental Science
- Human Anatomy & Physiology

Originating Department: Curriculum & Instruction, Professional Development