

Livonia Public Schools Academic Services Department
Rebecca Caldwell, Math and Science Coordinator

DATE: June 5, 2023

TO: Kristen Quesada, Churchill High School
Andrew Pesci, Franklin High School
Pete Mazzoni, Stevenson High School

FROM: Rebecca Caldwell, Secondary Math and Science Coordinator

SUBJECT: Textbook Recommendation for AP Environmental Science

This memo recommends the adoption of *Exploring Environmental Science for AP* digital and physical textbook for high school. The details below provide more information about the adoption process and information to support the recommendation.

Summary of Course(s)

The AP Environmental Science will be a new science course open to any high school student in grades 10-12.

Overview

AP Environmental was the only AP science course not offered at LPS. Franklin High School began the work of investigating the course and the approved list of textbooks. With science teachers meeting in District Teams, Dan Hejka shared what Franklin was considering and both Stevenson and Churchill wanted to add AP Environmental to their list of choices for students.

AP Environmental allows students the opportunity to take an AP science course in 10th grade after successful completion of Biology and while concurrently taking chemistry. The movement of energy, the interactions between Earth's processes, species, and the environment and sustainability are the four big ideas of AP Environmental Science. In this course students explore labs that investigate alternative energy sources, water and soil properties and testing, greenhouse gas and global warming, and landfill decomposition to name a few.

Textbooks Considered

Miller/Spoolman Book: Exploring Environmental Science for AP 1st edition 2019
Withgott/LaPosata Environment: The Science Behind the Stories 7th edition 2021
Friedland/Relyea Environmental Science for the AP Course 3rd edition 2019

Evaluation Process

The College Board provides an approved list of textbook resources and a review of each book for its courses. After attending the AP training, Dan Hejka found that the Miller/Spoolman book, *Exploring Environmental Science for AP*, published by Cengage, came highly recommended by current teachers.

The strengths of the book are as follows:

- Highly readable for students
- Includes practice AP questions at the end of each unit
- Text includes math problems that emphasize algebraic thinking

- Concepts are taught using a case study approach
- Resource has an online component called MindTap which is not a new platform for LPS students

Recommended Materials for Adoption

Exploring Environmental Science for AP, First Edition, 2019 from Cengage Learning.

Cost proposal is attached.

Professional Development Needs

All three schools plan to add AP Environmental in the next three years, which would allow us time to get teachers trained and purchase resources. Dan Hejka at FHS went through the training last summer and opened the course for the 2023-24 school year; but, unfortunately, was not able to get enough students to run the class for the fall of 2023. Stevenson did have enough students and Chris Gord signed up for training this summer, so we are moving forward with one set of materials for next year with a plan to add additional textbooks as students sign up for the course in the upcoming school years.

CC

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