Life Science Change Agent Teachers (LSCAT)

AceraEI (Education Innovation) exists to support public school teachers to grow their practice, to engage teachers as change agents, and to catalyze education innovation within public school districts. AceraEI is the nonprofit public school outreach program of Acera: The Massachusetts School of Science, Creativity and Leadership.

FREE Multi-District Professional Development Series
August 15-19, 2022 | 9:00AM to 3:00PM | Medford High School
Register online at aceraei.org

Science teachers nationwide are challenged to engage *all* learners in inquiry-based approaches. Join AceraEI's Life Science Change Agent Teacher program this summer for a week of complimentary sessions focused on a) integrating hands-on labs to support student understanding of "doing science" and b) transitioning to storyline curricula to foster conceptual understanding of NGSS's core ideas, crosscutting concepts, and science practices.

This FREE five-day professional development series is targeted towards 9th grade biology and middle school science teachers. Teachers have the option to attend part of the week; a minimum of two days is recommended. Teachers are eligible to **earn 10-35 professional development points** for Science and Technology/Engineering.

Teacher feedback from the August 2021 LSCAT Series

- *"I really liked the discussion on how to read primary sources, and I plan to implement most of this in my classroom."*
- *"I am already teaching Photosynthesis, and it was exciting to learn more ideas to incorporate in the curriculum."*
- *"I thought the modeling of science writing was helpful to use with students in class."*
- *"The Microbiome session will be attention-grabbing for students, as it was for me! It's a great topic to get students curious and to ask more questions even after it's done."*

LSCAT SERIES SCHEDULE

Monday, August 15: The Human Microbiome, Part 1

Focus on students authentically **planning and carrying out investigations** and **analyzing and interpreting data**. Learn how to tie emergent science on microbiomics to natural selection and body systems, using students' own skin microbiomes as sources of evidence! Boost your skills in microbiology techniques and how to facilitate these novel lab activities in your classroom.

Tuesday, August 16: The Secret Life of Plants

Develop students' efficacy **developing and using models**. Learn two low-cost labs - the floating leaf disc and light reactions experiment - to aid student understanding of photosynthesis. Stretch students to design solutions to climate change.

Wednesday, August 17: What Should We Eat?

Fine tune your approaches to **asking questions to drive student inquiry**. Support students in **engaging in argument from evidence** using curated data sources. Practice a macromolecule identification lab that is truly inquiry-driven, along with a yeast lab to drive home concepts of cellular respiration. In this workshop, teachers will collaborate with our team of curriculum writers to unpack how best practices in anti-racist education have been applied and how we drafted this storyline curriculum.

Thursday, August 18: Curriculum Workshop, Part 1

By Thursday, you'll have learned about three pilot-tested AceraEI curricular units, including five implementable labs. Today, you'll identify a unit in your own curriculum that could use a boost. Perhaps the storyline curriculum you piloted last year could use more hands-on labs for your Honors students. Perhaps you want to extend our *What Should We Eat?* unit on biochemistry and nutrition to link to metabolic disease. Maybe the narrative arc of a unit needs clarification or more coherence. Our facilitators - and your peers! - will support groups in this collaborative process.

Friday, August 19: The Human Microbiome, Part 2 & Curriculum Workshop, Part 2

Expand your toolkit to support students' close reading of scientific texts. Record results on colony morphologies and interpret your microbiome data. Continue developing your curriculum boost - so that you are prepared for the 2022-2023 school year!

REGISTER ONLINE AT ACERAEI.ORG

For more information on upcoming opportunities, please email aceraei@aceraschool.org