The Leap from Lecture: Using a Case-Based Approach in a Large Intro Bio Course

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In this session, I will introduce a case-based approach to Introductory Biology and discuss how it parallels and differs from traditional lecture-based formats. We have run this curriculum for two semesters so far, with promising results. Students work in cohorts of 24 through 6 biological cases that cumulatively cover core concepts in Evolution, Ecology, and Plant Physiology. Students compose individually written solutions to each case and receive formative feedback on their writing and their conceptual understanding. Faculty meet with groups of about 8 students each, once per case to promote higher level thinking and more detailed research. Participants will learn how we organized this approach to accommodate 216 students, review example cases & student responses, and discuss how we developed the cases we use in this course. We view this format as an immersion approach to Introductory Biology. Somewhat like a language course’s semester abroad, students are placed in the midst of complex biological systems and must learn the vocabulary and grammar required to analyze them through a self-directed learning process. I am excited to share our experiences with the ABLE community!

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