255th ACS National Meeting, New Orleans, LA, March 18-22, 2018 Session: Using Videos in Teaching (Oral) Organizer: Jessica Parr parr@usc.edu

"Creating videos and animations to enhance Organic Chemistry lecture and laboratory instruction"

Laurie S. Starkey

Chemistry & Biochemistry Department California State Polytechnic University, Pomona 3801 W. Temple Avenue, Pomona, CA 91768 Fax: 909-869-4344

Fax: 909-869-4344 lsstarkey@cpp.edu

Abstract

Videos and interactive animations offer many advantages over traditional lectures and textbooks. In addition to 24/7 availability and not being constrained to a fixed time module, multimedia resources can be paused and replayed by the user as often as needed. Opportunities for video creation include presenting lecture topics, worked-through examples, problem-solving strategies, narrated answer keys for homework assignments and exams, and reviewing prerequisite skills. Interactive animations and simulations are especially engaging by providing hands-on opportunities to explore both theory and practice. This talk will present various tools for video creation, including Explain Everything, Doceri, Adobe Presenter, and the exciting new "light board" technology. The discussion will include best practices for planning, creating, editing and sharing videos, how to create closed-captioning for YouTube videos, and how to use videos effectively in your courses (flipped class, pre-lab tutorials, exam review, etc.).