

# Technology-Infused Organic Chemistry: Course-Redesign with Technology (CSU-CRT)

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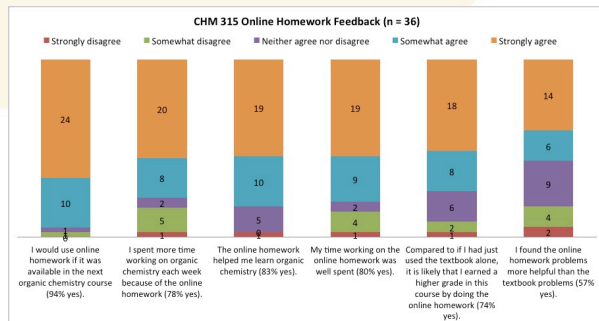
## EdTech for Student Success

Several projects have been undertaken to improve student learning by incorporating technology-based learning supplements. These changes have been implemented across four different Organic Chemistry courses since 2008 (CHM 201, CHM 314, CHM 315, CHM 316), with support from **CPP FCPD, CPP SPICE, CSU-CRT, and CPP eLearning**.

♥ Thank you, eLearning ♥

## Online Homework

The students had the option to purchase a license for the Sapling website (\$30 for one-quarter or \$75/year). Sapling offers exceptional technical support for faculty - I was assigned a "tech TA" who put together a scaffold for my course based on the chapters I was going to cover. I chose Sapling because it is textbook-independent.



## iClicker (CRS)

Clickers have been used in these classes since 2008. Every class meeting begins with a clicker question (review from previous class) and additional multiple-choice questions are incorporated into each lecture, for a typical total of 4-6 clicker questions per week. Students vote, I write the distribution of responses on the board, and then we discuss why the right answer is right and the wrong answers are wrong. This formative assessment is valuable to keep students engaged and on-track and provides an excellent platform to explore common mistakes.

## Virtual OH, Bb Journals, OneDrive Forms/Docs

I utilized Adobe Connect for virtual office hours the night before each exam, Blackboard Journals for students to reflect on their learning and report on their study groups, and OneDrive Forms to gather students' clicker numbers and to help document group members using a sharable document.

## Kahoot! Game/Quiz

Kahoot! provides a fun and engaging way to do clicker-type questions with the feeling of a competitive gameshow. Points are awarded for the correct answer, and the faster you answer, the more points you earn! I have used it for a syllabus "quiz" and a final exam review. <http://getkahoot.com> (students go to <http://kahoot.it> to play, using the PIN that is generated when a game is started)



## Does Technology Improve Student Learning?

