

FACULTY SUCCESS STORY: Carla Zembal-Saul and Scott McDonald

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Carla Zembal-Saul and Scott McDonald in the College of Education teach courses on methods of science teaching. As one activity, students record videos of themselves teaching lessons to their classmates or in school settings. They are then asked to analyze the videos to reflect on their teaching practice. Now these future science teachers are able to reflect in a deeper, more meaningful way, using a video tagging and analysis application called Studiocode.

In the past, said McDonald, students would watch a video, then use iMovie to compile a clip of highlights with commentary. McDonald would then watch the clip and provide feedback. “But it was just a one-on-one interaction between the instructor and the student,” he said. Studiocode has opened up that interaction to allow dialogue with the entire class, say the two faculty.

Studiocode lets you create “codes,” or labels, to mark events of interest within a video. For example, McDonald asks students to code points in a recorded lesson when they believe inquiry science has occurred. Studiocode then marks a portion of the video from two minutes before that point until two minutes after. Once the video has been coded, they can then instantly create a short movie consisting of all the “inquiry science” portions.

While a student teaches a lesson during class, McDonald codes video as it is being recorded. During the same class, he can then show a clip of the coded portions and generate discussion around it. Zembal-Saul noted that this is “a very different, more spontaneous approach to being able to call up examples for students who are asking questions versus saying, ‘OK, for next week, I’ll pull that together and bring it to class.’”

She said, “A gain you’ll see with Studiocode is the dialogue that can happen around the video through the coding process across time. That’s very

powerful. It moves the entire community forward.” McDonald reiterated, “It’s moved from this individual artifact to a community artifact.”

Studiocode can be used in many fields. Medical school faculty who teach eye surgery can call up video examples of procedures. Anesthesiology students are recorded intubating patients, then instructors code and comment on the video. It has been used for meteorology, animal behavior, and sports. McDonald said, “A faculty member in engineering is using it for analyzing how groups interact around projects. It can be used for anything you can videotape, literally.”

He added, “It doesn’t even have to be videotape; it just has to be rendered in video form. For example, science uses a lot of very sophisticated visualization tools. Anything you can render into video you can bring in Studiocode and code it. When you consider broadly the applications, anything that’s a moving image you can analyze. The possibilities are really endless.”