SIGCSE Special Project Grant Report: Creating a Polished CS Education Zoo to Share CS Educators' Ideas

Steven Wolfman, Ph.D.
Prof. of Teaching, UBC CS
wolf@cs.ubc.ca

July 1, 2015

In January of 2015, the CS Education Zoo received a $2700 SIGCSE Special Project Grant to improve the polish and accessibility of the Zoo. The Zoo is an ongoing series of hour-long video blogs led by Will Byrd and Steven Wolfman in which we (the hosts) discuss CS Education with guests from various positions and backgrounds. Guests include university CS educators in various positions, Computer Scientists in industry positions with particular insight on CS education, CS education researchers, and non-traditional CS educators.

Using the grant, we hired Piam Kiarostami—an alum of one of our institutions, the University of British Columbia—who has: contributed to both the "normal course" of interviews for the zoo, spearheaded a new format ("Creature Features") that creates excitement about the Zoo on social media and identifies potential future guests, indexed and tagged "highlights" from our existing Zoo interviews, commenced a collaboration with Colleen Lewis and csteachingtips.org to publicize these highlights, and prototyped improvements to the Zoo's web presence.

Through this process, our audience for the Zoo has steadily grown. Although some of our episodes still have around 200 views, our most popular episodes have many hundred or thousands of views, with Mark Guzdial's episode being the most popular at over 3,000 views, compared to 225 views when we submitted the grant.

Our new "Creature Features" were a series of extremely brief interviews of professionals interested in CS Education, filmed at SIGCSE 2015. Piam worked with us to solicit, record, edit, and publicize via Twitter roughly

20 short interviews. Of these, 11 are now edited and linked as a "Special Episode" from the CS Education Zoo site and include particularly interesting interviews like Gerald Weiss on the end of the CS polymath, Brian Dorn on K-12 CS teaching, and Tony Luckett on diversity in CS education. We still have 3 usable interviews left in editing; one of these, Ben Shapiro, is a good example of someone that we identified from the Creature Features as an excellent guest for the show. We're currently negotiating with him for a time to join us this summer. We've posted the full set of Creature Feature videos online.

Springboarding off the Creature Features, Piam has established a two pronged social media strategy for the Zoo:

1. Tweet highlights of interviews to increase awareness (and garner retweets).

2. Increase our social media presence at events like SIGCSE by tweeting links to quick 1 minute interviews with Hashtags to interested parties. This in turn builds momentum through retweets from the interviewees, their institutions, and their social network.

Piam's knowledge of social media has led to particularly important (but small) details including institution names in the tweets to create more social networking momentum from the second piece of this strategy.

Piam has also worked through all of the Zoo episodes to date to pull out show "highlights". The highlights are brief cuts from the longer interviews, each tagged with its topic. There are 62 of these ranging in length from 1–6 minutes. Some particularly compelling examples include: Mark Guzdial discussing what we called teaching "worst" practices, mistakes that CS educators make; Colleen Lewis talking about (and enthusiastically demonstrating) teaching arrays with Dixie cups; and Rebecca Bates explains from the student, teacher, and industry perspectives what makes a good project course. We're working with Colleen Lewis in the hopes of adding these to the stream of teaching tips at csteachingtips.org and tweeted to their 1000+ followers. We've posted the full set of highlight videos online.

Although our website remains fairly primitive, Piam has added the creature features and highlights to the existing page. Furthermore, he has prototyped for us an alternate system for managing the site directly via GitHub. (Presently, the site sits in a repository but is separately pushed to the web.) The site has only placeholder content, but is linked at http://piam.github.io/zoo/, and we have instructions on how to transition to this setup if we decide it's superior to our existing arrangement.

Piam also centralized our video management and editing into a CS Education Zoo Google account. He explored several other video editing tools—including both free and trials of expensive paid options—but concluded that the cloud-based Google tools were sufficiently powerful to justify taking advantage of their much greater accessibility than other dedicated video editing tools.

Our timeline on the project continues for two more months; furthermore, Steve's teaching commitment to an early-summer intense course interfered with our summer interview schedule. So, we hope to accomplish more still—including recording and highlighting more episodes of the zoo—and of course to continue the Zoo into the future.