

## Project report

Digital storytelling, science communication, and copyright in BIOL 261: Animal Behavior

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with

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**Implementation:** Fall semester 2020

**Project description:** In Fall 2019, I developed a science communication project in BIOL 261: *Animal Behavior* in my first year teaching the course at Kenyon. This project has four major learning objectives 1) practice reading recent primary literature related to animal behavior and effectively communicate the science to a general public audience, 2) learn about copyright, fair use, and proper attribution order to 3) produce an original or derivative figure that accompanies the writing to enhance the science communication, and 4) practice digital literacy skills by putting the work on a class website, Animal Tales. This is a long-term project that *Animal Behavior* students will continue to contribute to. This project is an example of how I aim to design assignments that have real world application and, if possible, a product that can be easily shared with a student's potential employer or a graduate school admissions committee. In my experience, students invest heavily in projects that develop obviously transferrable skills. With support from Kenyon's Digital Storytelling award, we migrated the existing content (2019 class) from Omeka to WordPress and made the in-class copyright session more in-depth and interactive. Fall 2020 students contributed two written pieces accompanied by figures to the new website.

**Project website:** <https://animaltales.kenyoncip.org/wp/>

**Students:** 15 Kenyon students enrolled in BIOL 261: Animal Behavior in Fall 2020. Twenty-four students in Fall 2019 contributed prior to receiving this funding to improve the project. Hopefully many more will get to contribute in the future!

**Outcomes:** The *content migration* from Omeka to WordPress went smoothly. The reason for the switch was that Omeka is not particularly design oriented, and the few themes that exist are very restrictive. Given that the main objectives of the project are to organize and showcase written and visual communication, the pages should be easy to read and the figures should be legible and large. Unfortunately, Omeka required several clicks to get to a point where the reader could clearly see the visual(s) accompanying the writing, and the overall appearance of the site was not particularly inspiring. WordPress does have a learning curve, but many ready-made themes exist that produce a visually attractive and functional website. Funding supported a subscription to Divi (a WordPress theme), and I was able to efficiently produce a website

containing the 2019 student work that looked good and worked well for our purposes. Uploading new content to the WordPress site was easy for all.

*The retooled and expanded activities and the development of accompanying resources* went very well and assessment (in the form of scores on the copyright part of this project) indicated that students did a better job with copyright and attribution in 2020 than in 2019. Roughly half of 2019 students did not have proper attribution and I did not require that they license their original work (figure). In 2020, nearly all figures were licensed with an appropriate Creative Commons license and their attributions were done correctly (text in a figure legend). Here are brief descriptions of the activities related to this project and associated outcomes (underlined).

1. Students are introduced to the topic of copyright and (some of the) legal implications through a *This American Life* podcast, 'Monkey in the Middle', which reports the story of the "monkey selfie" copyright dispute. In brief, the photographer David Slater had used a remote shutter trigger to photograph endangered Celebes crested macaques. A photo of his showed up on the web unattributed, and Slater argued he was losing revenue from the image that he deserved. PETA argued that the monkey took the photo and thus owned the rights. This podcast, which students listen to prior to McKee's visit to my class to discuss copyright, serves as the perfect bridge between the disciplinary topic of animal behavior and the gnarly issues of copyright, fair use, and attribution. This went well in 2020 as it did in 2019. It serves as a great hook for the importance of copyright.

2. Copyright and attribution guest lecture (McKee). Students are introduced to basic copyright law and shown how to understand various usage rights for images, how provide the proper attribution, and how to license their own original or derivative work with Creative Commons. We extended the resources and support for students licensing their own work in Fall 2020 and required that they actually follow through here. Additionally, we expanded McKee's time my classroom to include an entire 80-minute class session. McKee continued to offer one-on-one consultations with students as they put together their figures.

3. After receiving support for this project, I became aware of Geetha Iyer, Kenyon's Mellon Science and Nature Writing Fellow. I reached out to Iyer and invited her to speak to my students about her experiences doing science communication. Iyer "visited" my class virtually in 2020, where I led a Q&A session with her, followed by questions from students. This session took half of one 80-minute class, and we hope to do this again in Fall 2021 (and maybe beyond, depending on Iyer's availability). This was a wonderful and unexpected addition to this project!

4. Students write the first of two science communication pieces and create (or commission!) an original or derivative figure that helps illustrate the science they are reporting. The class day immediately after that deadline usually involves a visit from Nolt (this year, Joe Murphy did this part), who talks generally about Kenyon's digital initiatives and the importance of digital literacy and scholarship to help build buy-in for this project, and Murphy, who will help students upload their work to the site. Many of these students already have their work archived in Digital Kenyon from their BIOL 110 independent projects, so they have some familiarity with the

importance of building and showcasing Kenyon's digital archive. Students bring laptops to class (and Levin supplements as needed with Biology Department machines), and Nolt and Murphy walk students through uploading their work to the class website, Animal Tales. This year, with the switch from Omeka to Wordpress, the instructions - both written and verbal - needed to be redone to fit the new platform. Nolt and Murphy "test drove" the instructions and this in-class upload session went smoothly.

5. Students contribute a second figure and piece to the website directly without any in-class support. In Fall 2019, it was clear that nearly all the students produced improved work after seeing the work their classmates made for the first assignment. I anticipate that this bar will keep rising, given that subsequent classes will see the work of previous students on the site. I intend to highlight some of the best work, making sure not to just select the most artistic figures, but also the most effective ones, which sometimes are made using simple PowerPoint or Paint tools or a well-constructed derivative figure with all the proper permission and attribution. 2020 students really raised the bar here! Their figures were wonderful and showcased in a far more compelling way on WordPress. It was clear from students that they enjoyed seeing the work done by their peers. Many found inspiration in the diverse set of writing and illustration and used that for their second piece.

**Notes for the future:** I am always a bit surprised by the level of student interest in copyright, which I see as a necessary aspect of this sort of project with a public-facing product. McKee does a brilliant job of introducing the topic in a compelling way, and her re-tooled classroom activities, which involved active learning, made this 80-minute session even more compelling in 2020. In the future, I need to think about how to manage this site when it gets big (>6 classes contributing). By next year, I'll want to highlight some of the best work so that students have a variety of examples (not just the most artistic figures, but the most effective ones), which I think I can do in Divi. I also hope to strategize with Nolt about how to keep the information connected and cohesive, through the expanded use of categories and tags. That way, students can participate in thinking through some of the design elements of the website and picture how a user might browse the site. Iyer was very helpful in providing examples of other blogs on science communication that included writing and illustration, and one even might accept work from my students. I intend to encourage my students to also submit their work there. My guess is that the site is very low traffic (me, students, perhaps the odd friend or parent), so I also want to think about how to utilize it beyond my class. Perhaps there's a way to share it with local high school biology teachers to enrich their classes related to animal behavior?