



## January 21, 2022: Figuring Stuff Out

Dear CDS Community,

In 1998, in collaboration with two women I had met in educational technology circles, I was the founder of [Virtual Explorers](#) (note: this website was built in 1998), a nonprofit focused on bringing real science to students by highlighting the work of field biologists (mostly women) working on conservation efforts around the world. Looking back now, what we did then seems ridiculously simple because as technology has rapidly progressed, what were incredible challenges at the time are now solved by the device we carry in our pocket.

Back in the day, for each project, we spent months collaborating with the researcher to distill their project into language accessible to students. Some of this collaboration was facilitated through international mail as they shipped us binders of data in handwritten format. Prior to our trips, we built web pages of content that gave the necessary background information and a rationale for the actual research. Then we showed up in the field. Three women with a lot of gear: a satellite phone, solar panels, and a few computers. Our work was inspired by a project called MayaQuest that was operated by two brothers in Minnesota, Nick and Dan Buettner. Some of you more “experienced” educators might know of their project.

Once in country, we would work with the local community and the chief researcher to do the actual research. We counted blades of seagrass as we explored manatee habitat in Belize; plotted the exact location of river dolphin sightings on river transects in the Amazon tributaries; conducted vegetation plot analysis of the habitat where we found evidence of Roloway monkeys in Ghana (we never did see any Roloways in the field); and flew in tiny airplanes to track grizzlies in northern Idaho. THEN, each evening we would build web pages to share the story of the day in a diary with the actual data along with a few photos. The idea was that students in classrooms all over the world would have the chance to do REAL science with a glimpse into the world of these inspiring biologists.

As we finished dinner and made final edits on the text, my work would really begin. I was the technologist of the group responsible for making it all work. And by all, I mean solar power, transmission, pixels on the website – all of the back end. Each night I faced different challenges and had to figure things out with what I had. Ever since I was a little girl, I have loved solving complex problems and I was in my element as I restarted, reprogrammed, rewired, and just figured stuff out each night to get our pages and data live. I LOVED IT.

Each project had intentional connections to the community, all in support of conservation. We distributed coloring books and colored pencils to children living in the Pacaya-Samiria Reserve in Peru. We also worked with the hunters, elders, and chiefs in what is now the Ankasa Conservation Reserve in Ghana to help the community create an ecotourism center to help preserve the land and the way of life for their grandchildren.

In so many ways, the work of the past few weeks has reminded me of these moments in the field with the elements of immersion and problem solving. COVID is a big complex problem and if I were younger, I would be back in school studying the science of it. Instead, I am doing work I love – navigating and collaborating with so many smart people in support of our community. And as silly as it sounds to say it, I LOVE IT. Each day offers opportunities to create systems and sense out of uncertainty. There is no perfect answer, but there are pathways; there is no short solution, but there are daily opportunities to do deep and complex problem solving and so much data. I love data.

Last week, getting the Kyla testing up and running (although there are more “positives” than I would have hoped) has brought me back to 20 years ago and the work I did on the river or in the field. There are systems to be created, there are partners to collaborate with and there are new ways we are pushing existing systems to meet our needs. Am I a little bit tired, yes, but in so many ways this is work I love doing and it makes a difference. A difference to our community and safety of our families and a difference to a larger system that is struggling to meet the community needs and there is SO MUCH LEARNING for everyone.

I often say to young people, especially middle and high school students, “Be patient, your goal is not to peak yet. You have so much living and learning ahead of you.” As I reflect on my 52 years, I see hills and valleys and I sure hope I am not yet at my peak and continue to embrace challenges and opportunities to learn all around me. Hopefully sometime soon, the challenges will not be all about COVID.

I said it above: *More positives than I would have hoped*. Let me give a bit of an overview of the data. Since we started PCR testing on 1/11 we have had 29 total positive cases. To my knowledge, all of these cases were mild – similar to a regular flu or cold. Additionally, we are aware of a number of families and employees who tested positive for COVID while school was closed over the break.

There are isolated cases and a few cases where one individual tested positive and then another one five days later. These chains of infection make sense and mean that generally, our systems are working; we are not seeing any real spread in school.

One place where we did see actual spread was in the preschool. An individual tested negative and quickly became sick, which led to an exposure and further spread. Preschools are under different guidelines than the TK-12 schools, so we have to close the classroom for any exposures. Additionally, preschool children are mandated to have a rest time if they are on-site for a certain number of hours and they cannot wear masks during that rest time. These factors plus the fact that none of our preschool students are able to be vaccinated yet made us really rethink how we could best keep our students safe. We have switched things up and are working to have shortened days without rest time or outdoor rest for families who need longer days while we are in the midst of the surge.

[Some great news](#) has come from the city and we really are seeing overall rates coming down. For perspective, if we count up ALL the known positive cases since December out of 580 people (students and employees) we are at a 11% positivity rate total. [San Francisco's overall positivity rate](#) per day over the last few weeks has been between 1.5% in early December to 21.5% on January 8 and 9. Our positivity rate through Kyla's PCR testing is 6% over the past two weeks. I hope this data snapshot is helpful.

Wishing you all continued good health in the days to come!

Warmly,  
Shelly