

Chat Transcript

Science in the Wild: How to make the most of Citizen Science Projects at your School

Debbie Abilock, Susan Smith, Harker School, and Connie Williams

4T Data Literacy Conference – July 21, 2017

This is an edited, abridged version of the chat transcript (we've removed things like tech support requests, hellos, and conversation that was solely related to the live webinar). Last names have been removed.

Kristin (Staff): Hi, folks — Now that my mic is off, feel free to post your questions. @Amy and I are monitoring the chat — we'll answer what we can and make notes about those we can't and feed them to the presenters at the end.

Jole: everything old is new again

Kathy: Here Here!! Think, propose and research!!!

Angie (Staff): I love how Debbie is contextualizing citizen science into what regular science education -- This is so important

Kristin (Staff): <http://zooniverse.org>

Angie (Staff): Justin Schell mentioned Zooniverse yesterday

Kristin (Staff): I have looked for giraffes in Kenya for Wildwatch Kenya on Zooniverse.org. I had no idea they were walking around in the dark!

Kristin (Staff): <http://fold.it>

Kristin (Staff): Medical researchers believe that if they can figure out more about how proteins fold, they can combat Alzheimer's Parkinson's, etc.

Alicia: along with the recordings will we be given access to the slides so we have all these resources in the same place or in a google doc?

Kristin (Staff): I love Decoding the Civil War from Zooniverse.org —> you get to transcribe Civil War telegrams

Amy (Staff): Yes Alicia 2016 is here and 2017 will be there soon:
<http://dataliteracy.si.umich.edu/conference/schedule>

Alicia: great thank you

Peggy: I just learned about Zooniverse yesterday and love it! Incredible!!!

Kristin (Moderator): Yeah, Peggy — Kelly on our team is working on a forthcoming case study for our second book in which she explores the psychological effects that can make citizen science so addictive (like video games!)

Peggy: fantastic Kristin!!!

Karen: Looking forward to looking into Zooniverse and foldit

Kristin (Moderator): I work at a research university, and my colleague says that even giving five minutes to her citizen science project (Michigan Zoomin on Zooniverse). Hey, Michiganders, your students could help establish baseline data about mammals — and even see a bobcat occasionally!

Alicia: let us know when you're ready to publish your case study I'd be interested in reading it!

Kristin (Moderator): Hey, @Alicia, we hope to get it off for layout next week. Stay tuned — we'll email you guys when it's ready.

Alicia: great!

Kristin (Moderator): 3 levels of expertise: basic, advanced, professional

Kristin (Moderator): Big Data and the Future of Ecology Article:
<http://onlinelibrary.wiley.com/doi/10.1890/120103/abstract> (Click PDF to find the entire article)

Kristin (Moderator): <http://scistarter.com>

Kristin (Moderator): I just got a SciStarter email last night to promote projects related to SHARK WEEK!
<http://campaign.r20.constantcontact.com/render?m=1102690018283&ca=f9ba568c-1bc7-4863-a5d0-b671ba4d1dc3>

Alicia: neat! thanks for sharing

Michelle: Oh cool!

Peggy: thanks for those links Kristin!

Kristin (Moderator): @Peggy - I learned to moderate from the best — Liz Kolb!

Peggy: Yes!!! Liz is the BEST!!

Alicia: Liz is great! very lucky to have had her as a Prof at UMich

Amanda: That shark week project sounds cool. Cant wait to check out! I have a reef shark at home and love when I can tie him into lessons, the kids love it too. I take videos to share with class of him and they love it

Peggy: I use the 4T virtual conferences as an example of “how to do it” all the time!!! Such a good model!

Amy (Staff): rightquestion.org

Kristin (Moderator): @Amanda, how large is a reef shark that you can keep it at home???

Amber: @Amanda that's awesome!!

Kristin (Moderator): @Amanda, all of us in HQ are amazed!

Alicia: @Amanda, does he have a friend for company?

Shelley: The QFT changed my life and my pedagogy for the better. Thumbs up to Amy's recommendation of rightquestion.org!

Kristin (Moderator): Did you know that you can do transcription of historical documents from the Smithsonian Collection? <http://transcription.si.edu>

Angie (Staff): Connie talks more about assessing infographics in the our book Creating Data Literate Students http://datalit.sites.uofmhosting.net/wp-content/uploads/2016/01/Chapter_9_Williams.pdf

Peggy: the training and preparation of presenters and moderators makes such a huge difference in the sessions! It allows the focus of each session to be on the content and not the technology issues!

Amy (Staff): Shelley, the credit goes to the presenters--it was on the slide

Kristin (Moderator): @Peggy - we try. Sometimes, we are like the Wizard of Oz, sweating behind the scenes :)

Angie (Staff): Connie's book chapter is about infographics in general. It's great!

Kristin (Moderator): <https://www.oldweather.org/>

Kristin (Moderator): <https://www.operationwardiary.org/>

Alicia: was the operation old weather from the zooniverse site too?

Amanda: He gets to be about 3 feet. He is in a 300 gallon tank that is about 8 feet long. He will go back to fish store and in their huge 1500 gallon tank for breeding and we will get another baby. He had a girlfriend but sadly she was digging and the rocks fell on her. He does have dory and many other fish friends tho :)

Kristin (Moderator): (Operation War Diary is hosted on the Zooniverse platform)

Peggy: It is so great to have the PDF of your book! I have it saved in my Evernote so I can always find it easily!

Kristin (Moderator): @Alicia - I don't believe Zooniverse hosts Old Weather

Alicia: I was too busy listening and reading the slide so I missed the source :)

Peggy: I may have missed it—did she mention what tool they use for the student portfolios?

Alicia: i don't think she mentioned a tool

Kristin (Moderator): @Amanda - 3 feet ... wow! I think citizen science projects help me inquire and ask authentic questions

Shelley: I am listening and not paying enough attention to slides, apparently - glad the presenters repped Right Question, though - thanks for the correction, Amy.

Kristin (Moderator): @Peggy - i'll put that on our list for questions. As you know from the parent 4T conference, Seesaw is super-popular right now

Peggy: thanks!

Amy (Staff): just wanted to give credit where due ;-)

Michelle: @Amanda - that is awesome! Is he a blacktip reef shark or something else (they're my favourite, the wild ones used to cruise around where I went fishing as a teen)

Kristin (Moderator): Challenges: Time, Location, Process, Assessment

Karen: Thank you for addressing assessment. The ideas are very helpful.

Kristin (Moderator): [SciStarter.com](https://www.scistarter.com)

Alicia: oh sorry got it thanks

Peggy: the skills are so far-reaching and develop an attitude and awareness of contributing as a citizen in their communities far beyond the project!

Angie (Staff): Way to bring it back to the basics, Sue!

Kristin (Moderator): @Peggy and the online portals mean that low-income or poorly-funded school kids don't lose out because the portals are free!

Peggy: exactly!!! very important point!

Renee: Love those questions to ask!

Alicia: is the content on these sites appropriate for students? Is this something I can allow students to explore on their own in other words or do I need to only share pre-vetted sites

Kristin (Moderator): @Alicia - what grade level do you teach?

Alicia: 4th but I help with work up through 12th

Kristin (Moderator): Source of the science & engineering practices:
<https://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts>

Angie (Staff): great question Alicia

Kristin (Moderator): NGSS on those science & engineering practices:
<https://www.nap.edu/catalog/13165/a-framework-for-k-12-science-education-practices-crosscutting-concepts>

Shelley: Though I am the education librarian at our university, your presentation has provided me more sites that I can add to my libguide for the master students

Kristin (Moderator): @Alicia - I'll ask the presenters to address that. In general, I have not seen inappropriate content for those age groups. I imagine that literature transcribing projects could be riskiest?

Kristin (Moderator): @Shelley, great!

Alicia: yes I would imagine so

Kristin (Moderator): SciStarter

Connie (Presenter): I didn't mention any tools for portfolios since it would depend on the project and goals - google docs would work. it's mostly collecting images of work completed and put it together in a visual way - perhaps in a 'science project' style presentation

Kristin (Moderator): I've seen behind the scenes of our campus's citizen science project. Though there are volunteers working 24/7, I can tell you this: the researchers really delight in watching chat between participants unfold!

Shelley: I taught high school English back in the 80s and I am so impressed with how far the school programs have come.

Kristin (Moderator): Tx, Connie

Connie (Presenter): "old weather" is a Zooniverse project but it is often promoted on other sites.

Alicia: great thank you

Kristin (Moderator): I do that because Michigan Zoomin's team always says how much value 5 minutes' worth of contribution can make.

Kristin (Moderator): Zooniverse just sent out a trial project asking people to identify the graffiti inside the cupola at George Washington's Mount Vernon. You'll be surprised!

Peggy: great point! hadn't heard it described as "sub-contracting the teaching" :-)

Amanda: That is such a great point and advice! Always have some background so that you can answer those basic, beginning questions

Alicia: doing a quick 'chalk/marker' talk with kids about their prior knowledge/thoughts is a nice kickstart as well

Kristin (Moderator): @Alicia - good idea!

Peggy: thanks for your response re portfolios, Connie!

Connie (Presenter): love that idea Alicia! Thanks!

Kristin (Moderator): Chat (or asynchronous discussion forums where people post interesting images/documents that they've seen) is a common feature in Zooniverse, FYI

Kathy: Good idea to connect where they 'play' Social platforms

Kathy: @KristinFyes!

Connie (Presenter): many have Facebook pages also - like you say Kristen.. “get ‘em where they are” .. instagram, etc!

Kristin (Moderator): Next Gen Science Standards: <https://www.nextgenscience.org/>

Kristin (Moderator): C3 social studies framework: <https://www.socialstudies.org/c3>

Kristin (Moderator): <http://robdunnlab.com>

Peggy: they have to be more than data collection minions to remain engaged and feel that their work has value!

Kristin (Moderator): Lab behind this project —> <http://robdunnlab.com>

Connie (Presenter): c-science hopefully jump-starts a way for students to see how they can join in such things even when they graduate - no matter what they're interested in, there's a project somewhere! Developing the 'norm' of participation is a strength of this kind of work

Peggy: every one of those project titles sound so interesting!!!!

Karen: Great resource - I teach science.

Dawn: These sound like interesting projects students would like to participate in.

Connie (Presenter): mites... microbes.. creepy things ... interesting!!

Kristin (Moderator): BOOK: The Rightful Place of Science: Citizen Science by Darlene Cavalier (also creator of SciStarter.com!): —> <https://www.amazon.com/Rightful-Place-Science-Citizen/dp/0692694838/> (Our team recommends this book, too!)

Kristin (Moderator): We've also used this book → <https://www.amazon.com/Citizen-Science-Ordinary-Changing-Discovery/dp/146830867X/> (*Citizen Science* by Caren Cooper)

Amy (Staff): I love the age-range possibilities for C-science, from young to old, loads of entry points given topics and interests

Kristin (Moderator): Yes, @Amy! In the four-part free online cit sci series The Crowd in the Cloud, (<http://crowdandcloud.org>), Alzheimer's researchers go to a retirement community to recruit senior volunteers to identify cells online and contribute to their research. Talk about real-world impact for both contributor and those affected by Alz!

Connie (Presenter): AND a variety of 'levels' for amount of time needed to be an active participant.. so good for the needed classroom flexibility.

Kristin (Moderator): Right - sometimes, when a project starts, the activity as simple as, "Are there sea lions here? Yes or no." Later, they'll only serve up those photos with sea lions but ask more challenging questions.

Shelley: Thanks for the learning service component.

Kristin (Moderator): chwms@mac.com

Kristin (Moderator): susans@harker.org

Kristin (Moderator): debbie@abilock.com

Kathy: @Kristin F No too much data for one; let's involve more!!

Amy (Staff): Does someone have the link to the sources?

Kristin (Moderator): Archival materials will be on our site in the next 48ish hours:
<http://dataliteracy.si.umich.edu/conference/schedule>

Michael: This question is geared more toward outside the classroom primarily in the context of upper level academic research projects, but is there a current conversation on ethics in labor related to citizen science projects? At what point does one's contribution to such a project become the justification for a paid position, and what rights does a participant have to pursue such a grievance? I have seen and experienced projects in which the time spent on labor for data collection became incommensurately larger than the data analysis, but the project funding was not distributed to reflect that. At what point do such situations cross the line from cooperation to exploitation? Are there initiatives in the classroom at earlier levels to help students to gauge and justify the value of their contribution and know when a project is crossing such a line?

(Kelly from the U-M team comes on to talk a bit about psychological impacts of citizen science projects online. She begins by asking if anyone plays Tetris or Candy Crush)

Danica: yes

Layla: YESSSS

Shelley: yes

Alicia: yes

Amanda: Yes I have

Kristin (Moderator): Tetris yes! Bejeweled, too!

Denise: tetris

Nika: Tetris!!

Brandon: Yes Tetris. Good one

Michelle: Tetris, which is great for organising things IRL

Amanda: Very addictive! :)

Stephen: Tetris

Karen: no

Alicia: not for about 15 years but yes

Jennifer: How do we “sell” this idea to other teachers at our school? Thinking about the “we don’t have any time” issue that we need to help our teachers understand how CS can be easily integrated into any content area?

Rebekah: Thank you for all of this information!

Debbie (Presenter): Here's the short link to our references and resources:

<https://my.noodletools.com/public/170707174001371644975672>

Connie (Presenter): that is always the conundrum -especially for librarians who work with many teachers. find an ally to try it out ..or you try it in the library as a lunch time activity perhaps - and see if you can build buy-in

Alicia: is there a good case study to use during a PD or a talk with admin and fellow teachers to help sell this idea?

Kristin (Moderator): @Alicia - yes - stay tuned - coming in a few months!

Debbie (Presenter): Look at what the teacher really cares about

Debbie (Presenter): Don't start with YOUR agenda

Debbie (Presenter): Listen carefully for pain points

Jennifer: A genius hour!

Debbie (Presenter): Capitalize on places where teachers need or ask for help

Kristin (Moderator): "Listen carefully for pain points" is great advice — my mentor says, "Identify their pain points and say how your proposal will solve their pain points!"

Alicia: pain points?

Kristin (Moderator): Problems teachers are struggling to solve = pain points :)

Karen: Anxious to integrate a more real world focus in my science classes.

Debbie (Presenter): Look for something CENTRAL to a curriculum unit - rather than feeling like an addendum or another extra

Kristin (Moderator): Evaluation Link: *<no longer active>*

Alicia: Thank you all so much this was a really thoughtful and insightful session

Alicia: thanks!

Peggy: This has been an awesome presentation!!! So much valuable information about Citizen Science projects and tips! Thank you to our presenters and moderators!

Michael: Thank you for the presentation. It was good to hear your insights.

Kathy: Thank you all. Very informative

Debbie: Jole is amazing!!

Alicia: thank you to all three presenters and to Kristin for your help monitoring

Amber: Thank you - it was very interesting!

Lisa: Thank you for hosting such a spectacular group of presenters!

Michelle: Thank you, this has been such a good session

Brandon: Thanks

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