Citizen Science and Students, Sandra Porter (digitalbio), Tara Richerson (Science_goddess), Antony Williams (ChemSpider)

Bio-link.org: effort to promote biology education in community college

What is Citizen Science? Study or project that involves the public. Collaboration with university or non-profit organization, public involved in data collection.

Issues for Scientists: data quality, consistent data collection, record keeping, data entry

How to link students to projects? Cornell db of cs projects, see wiki for link

WolframAlpha needs volunteers. Amazon's Mechanical Turk (links little jobs with volunteers).

SeaGrant: kids discovering species in the Outer Banks. Phytoplankton measurements.

Project BarkCode: DNA barcoding british tree flora with british schoolkids. Error rates in data collections. Natural history museum in London.

Projects are appropriate for different students, college, high school, etc. Trinity School barcoding streetvendor food.

What are teachers looking for from Citizen Scientist: state standards must be met. Project must correlate with standards. Child predator laws may prevent some data collection. Students need to see outcome of the data they collect. What is the big picture? Where is this all going? Projects run years long, but a student graduates in 3 to 4, they don't get to see the outcome.

Putting Citizen Science on a CV: claiming Wikipedia articles, getting named credit to put on a CV, being able to search and find your name (like my mediawiki pics).

How do Blogs Position Themselves with State Standards? National Science Education Standards, Find existing products in line with standards

SETI, PS3 for Protein Folding – FoldingAtHome (graph of data when PS3's joined project in TFLOPS), NVIDIA graphics cards for biomolecular simulations, Protein Folding fold.it,

Arstides Poehlman, a 13-year-old child beat a 43-year-old man at folding. A child prodigy in protein folding.

ChemSpider: need to clean up dirty data, students reviewing peer-reviewed literature on chemical structures,

Comment: How to convince the public to contribute? How to convince people to turn on folding at home? What motivation? With SETI, you will be immortalized if your computer finds it, but no similar incentives with foldit.

Technical Challenges: teachers trying to get programs on their computers, get computer time. Students need to push teachers. Bloggers need to push students.

Merlot database: lesson plans and virtual labs,

SpectralGame.com: spectrometry gaming site.

PubChem on Android.

Difference between being engaging and being useful.

Youtube: Water Marbles

Scienceforcitizens – website launched today

NSTA – clearing house for science education standards

What kind of CS projects can DIF do?

Bioblitzes? Audubon Xmas Bird Count? iNaturalist?