DATA LITERACY IN THE REAL WORLD:
Conversations & Case Studies

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J. DataBasic.io: Tools & activities that help introduce newcomers to data storytelling

Presented by Catherine D'Ignazio and Samantha Viotty

There has been a proliferation of tools created to assist novices in gathering, working with, and visualizing data. The problem is that many of these tools prioritize creating flashy pictures without scaffolding a learning process for newcomers to data analysis and storytelling. In this talk, we showcase the motivations behind creating the free, online platform DataBasic.io. We will demo the tools and activities that DataBasic offers as well as discuss the learning goals that they fulfill. We'll kick off the webinar by talking about creative data literacy and the DIY Art project.

Link to video: http://bit.ly/dlitwebinars

Time: Assume this activity will take 90 minutes (46 minutes for the webinar itself and 50 minutes for a selection of activities and/or discussion questions).

Timeline:
Creative data literacy: 2:43
Data mindset: 3:45
Creative data literacy in a library context: 8:38
Beyond Databasic: 11:32
Databasic.io: 18:14
5-minute activity: 20:40
WordCounter: 25:22
Other Databasic tools: 32:11
Sum up for tools: 37:03
Conclusion and questions: 39:58

Discussion questions

1. How do the presenters define "creative data literacy"?

2. What are some datasets that might be conducive to creative data literacy? What are some methods you can use to make these datasets more accessible and meaningful to non-number thinkers?

3. There are many options for entertaining datasets that will interest your students. How can you pull these datasets into meaningful data visualizations that feed into learning and curriculum goals?

4. What types of teaching styles are more conducive to this creative approach to building data literacy skills? How might you market these skills to your education community?

5. Which curriculum areas are conducive to creative data literacy projects?

6. How can you get a community involved in thinking about how to use data creatively? What kinds of community organizations could you involve?

7. How can you tailor creative data literacy activities to meet different learning styles and different working styles?

8. DataBasic is a powerful tool to teach creative data literacy. What are some of the limitations with the website? What can you do as an educator to overcome these limitations?

9. How might you assess students' work when they use the tools at DataBasic?

10. When would you consider exposing students to broader, more powerful tools, such as Excel or even professional tools like R?

Recommended activities

1. **Divide participants up into four groups. Assign a different tool from** http://databasic.io to each. Ask each group to preview a tool and brainstorm possible curriculum connections. After 15-20 minutes, bring the group back together to swap ideas. Appoint a note taker to record everyone's thoughts and email them to the group.

2. **Spend some time looking through** https://itsliteracy.org/diy-data-art-activity-guide/. What activities are suited to your age group or learning goals? What are the cost barriers for these projects? Which educators in your community will be interested in various activities?

3. **Host a one-chapter book club**. Go to http://dataliteracy.si.umich.edu/book and read *Creating Data Literate Students*' Chapter 5, "Manipulating Data in Spreadsheets," by Martha Stuit. How could DataBasic serve as an on-ramp to Excel-based data manipulation?