Undergraduate Social Science Tools: An Upgrade

Jim Greenberg, SUNY Oneonta
Steve Gallo, CCR University at Buffalo

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Why Take This On?

• Back in the 1970s, in response to the rising awareness that computers could be used for quantitative analysis, SPSS (or similar) was installed across Higher Ed. in undergraduate social science programs.

• Today, social media, and other big data sources, along with qualitative computing software (Modeler, R, etc.) require Higher Ed. to again deploy the modern tools of the social scientist.
The Problem

- Need data (Trackur, Discovertext, GNIP, ContentSeer, Home Grown Code)
- Need IT environment to support large datasets
- Need software to analyze data
Background

• HUBzero was developed by a community grounded at Perdue University.

• Open Source

• Best thought of as a platform for scientific collaboration.

• SUNY Oneonta and CCR at UB supported by IITG monies building an undergraduate “big data” sandbox.
What I Like Most About HUBZero

• Combines collaborative tools around data files and applications.
• Web based
• Academic communities can easily collaborate.

• Think – Yammer, Dropbox, and VDI all in one.
SUNY Collaboration

- CCR at UB
- IITG Grant Supported
- SUNY Oneonta undergraduate courses
  (Sociology, Political Science, Philosophy so far)
HPC2 Portal

• Tools, computation, simulation all hosted at CCR.
• HUBzero software developed at Perdue powers this environment
• Helps science and industry communities share resources and collaborate
• Helps undergraduate programs give students access to computing tools (analysis, visualization, and more)
User Perspective: A Browser and a Dream

• All you need is a browser and a dream.
• Very familiar interface (Facebook, Yammer like)
• Applications and Files are easily accessed and organized by project, group, etc.
• Mechanism for uploading files and other resources – super simple
Current Users of this Technology

- RPI, Stony Brook, Brookhaven Lab, CCR at UB, NYSERNet, Kinex Pharmaceuticals, IBC Digital, Sentient Science, and other academic collaborators worldwide.
- SUNY Oneonta using CCR’s instance.
Why Use it in Teaching?

• Unified platform for coursework
• Easy on admins: obviates software installs and workstation setups
• Ubiquitous access anytime, anywhere
• Resources can be selectively secured
• Students retain access after course ends
DEMO
More info:

• HUBzero: https://hubzero.org
• CCR: http://ccr.buffalo.edu/
• SUNY Oneonta’s Undergraduate Big Data Initiative: http://www.oneonta.edu/bigdata
• Contact Steve Gallo at CCR smgallo@buffalo.edu or Jim Greenberg at SUNY Oneonta jim.greenberg@oneonta.edu