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Data Literacy: Something for Everyone

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Whipple, Heather, "Data Literacy: Something for Everyone" (2014). *Library Instruction West 2014*. 27.
https://pdxscholar.library.pdx.edu/liw_portland/Presentations/Material/27

data literacy: something for everyone

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data literacy

data literacy

- Many definitions depending on discipline, context, goal

- Relevant to all disciplines: not just for quantitative researchers anymore

data literacy

- Entirely comparable to basic information literacy: understanding what you're looking for, where to look for it, and how to understand what you find when you find it

data literacy

- Why should we bother?

  - Necessary real-world, post-graduation skill for students
  (they need to understand what they're combining in those sexy mashups)

data literacy

- Why should we bother?

  - Professional practice: administration ~~demands~~ requests for empirical evidence that describes and justifies what we do

data literacy

- Why should we bother?

  - Scholarly activity: growth of evidence-based empirical research expectations/opportunities in LIS scholarship

data literacy

- Why should we bother?

  - Bad data makes bad decisions: crucial to be able to identify good or bad conclusions made from good or bad applications of data

data literacy

- Where to start

  - 5-part framework for data literacy competencies (Prado & Marzal, 2013)

  - 1-3 easiest to incorporate in existing IL curricula

data literacy

- One: Understanding Data

  - What is it? (hint: not just numbers)

  - What role(s) does it play in society? In scholarly communication?

data literacy

- Two: Finding/Obtaining Data

  - Sources: who produces it (and why)?

  - Sources: where can you get it (and what if it doesn't exist)?

data literacy

- Three: Reading, Interpreting & Evaluating Data

  - Presentation, Format, Citation Style, Context

  - Authority, Methodology, Comparability, Relevance

data literacy

- Three: Reading, Interpreting & Evaluating Data

  - Why was the data collected/created, and are any conclusions drawn from it sufficiently explained/justified?

data literacy

- Three: Reading, Interpreting & Evaluating Data

  - We're not (usually) statisticians, and we don't need to be.

data literacy

- Three: Reading, Interpreting & Evaluating Data

  - For example, looking at a table of data in an article: what are the units? Data source? Observed or calculated data? Description of table in article text?

  - Slow down: spend at least as much time reading the table as you would spend reading a block of text taking up the same space on the page.

data literacy

- Four: Managing Data

  - Understanding/creating metadata and codebooks

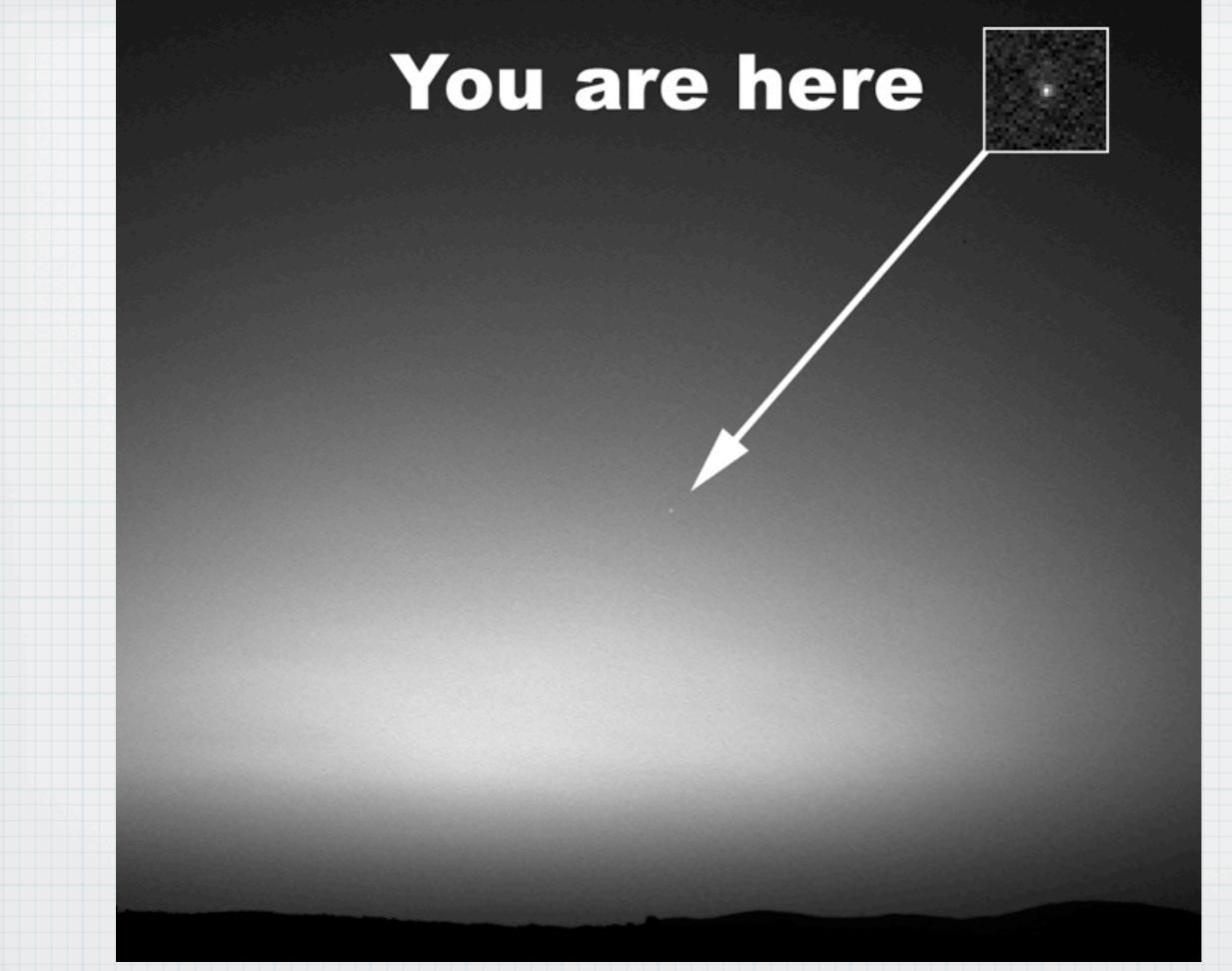 - Importance of long-term preservation for access, replication, sharing (research data management)

data literacy

- Five: Data Handling

  - Specifics generally outside the scope of basic one-shot IL session (YMMV)

  - Ethical uses

    - Who benefits from these data

  - Citing data

data literacy

Prado, J. C., and Miguel Angel Marzal. 2013. "Incorporating Data Literacy into Information Literacy Programs: Core Competencies and Contents."
Libri 63 (2): 123-134.

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and to put things into perspective...

Earth from the surface of Mars, 8 March 2004; Credit: NASA/JPL/Cornell/Texas A&M
http://www.flickr.com/photos/gsfc/4542423536