



Research Data Management Assessment

Why Research Data Needs Assessment?

- Data Management Plan requirements (and high levels of federal grant funding)
- Interest in treating research data as important scholarly work
- Growth area for academic library support



Research Data Needs Assessment at Georgia Tech

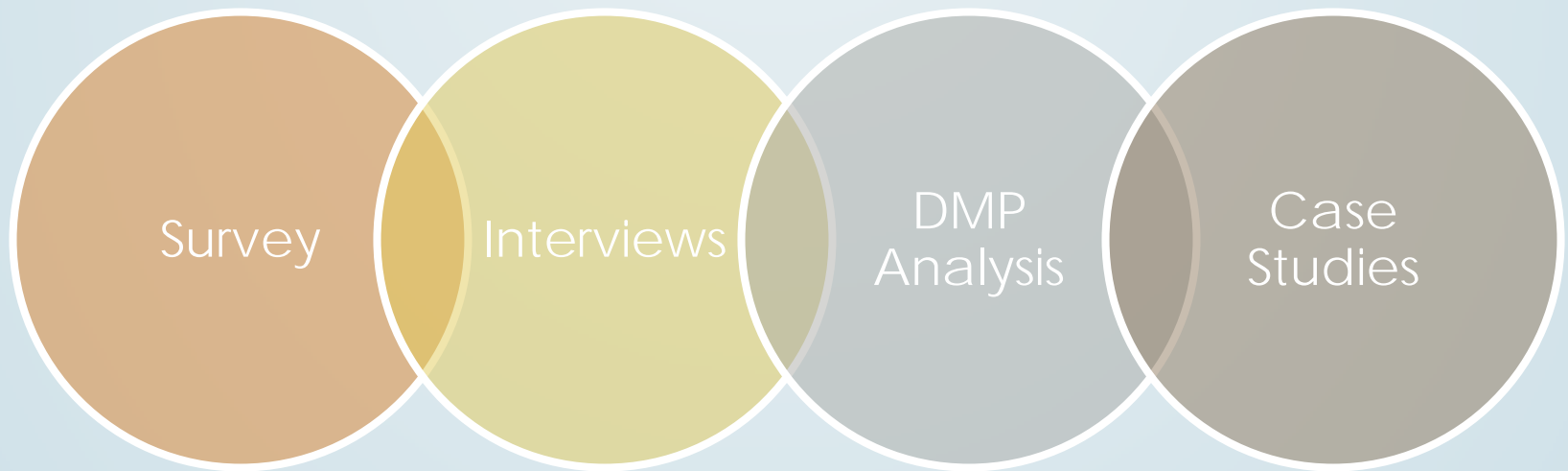
Chris Doty, Susan Wells Parham, Lizzy Rolando,
and Alison Valk

Southeastern Library Assessment Conference
October 21, 2013

Data Asset Framework (DAF)



GT Methodology



Survey Pilot

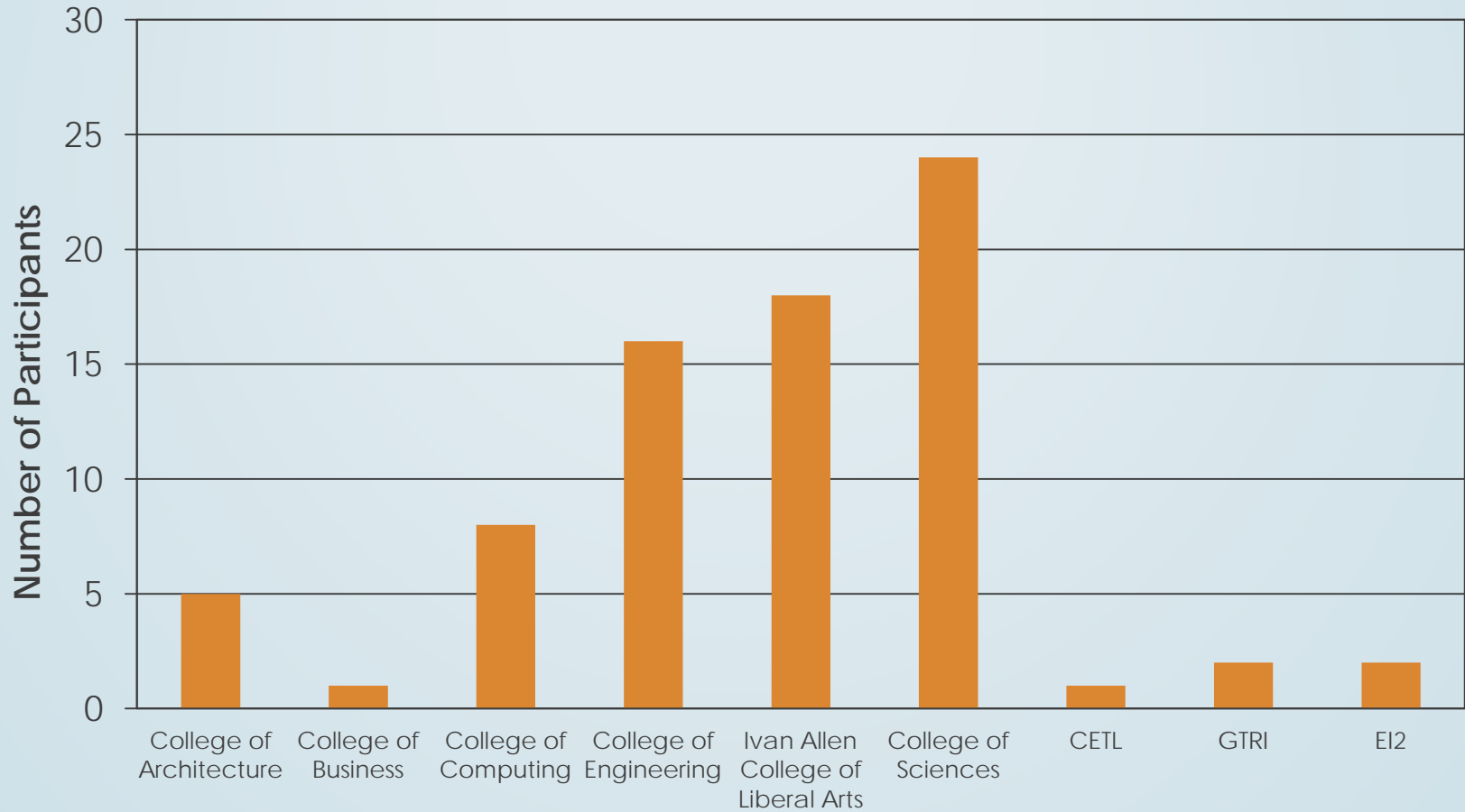
- Based on DAF examples
- Tested by at least one researcher from every College
- Modified based on feedback before wide deployment



Survey

- Live 2010-2013
- Drupal website with required CAS authentication
- Representation from all across the Institute
- Self-selected sample

Survey Sample



Georgia Tech Colleges and Research Centers

Interviews

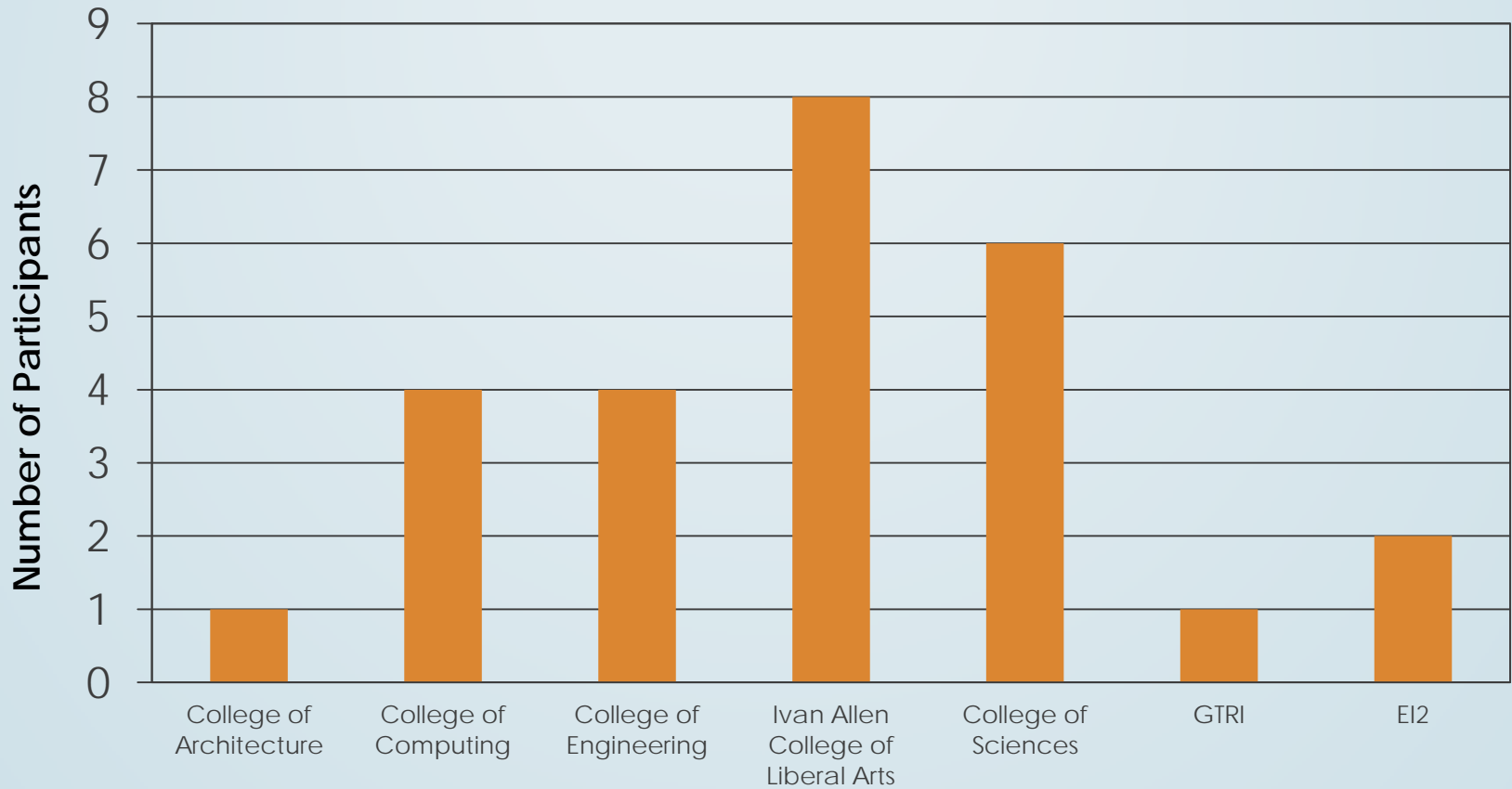
10 Interview questions



"How do you organize the data produced from your research?"

"How important is it for you or others to have access to your data over the long-term?"

Interview Sample



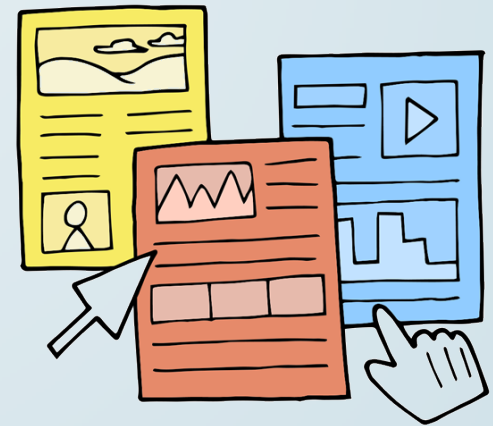
Georgia Tech Colleges and Research Centers

DMP Analysis

- Reviewed DMPs submitted to NSF between Jan. 2011 – Sept. 2011
- Searched for
 - Repository services
 - Inter- and intradepartmental sharing of DMPs,
 - Use of cloud tools
- Not self-selected sample

Case Studies

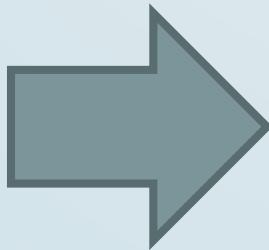
- Aerospace, astrophysics, and computing
- Included preliminary interview
- Assessed both researcher needs and Library capacity



Data Analysis

- Grounded Theory Lite
- Coding and Codebook
 - Checks for inter-coder reliability
- Interviewee Personas

Transcribe
interviews



Web application for Qualitative and
Mixed Methods research

Visualize major discussion points
or code correlations

Coding

The screenshot displays the Dedoose software interface for a document titled "3.27_post". The document text is visible in the main window, with a highlighted section discussing a person's reading habits and family needs. The interface includes a top navigation bar with icons for Home, Analyze, Excerpts, Descriptors, Codes, Documents, Projects, Security, Select Data, and Back. A "Selection Info" panel on the right shows the document's range (310-709) and a list of selected codes: Goals and Values (100/100), Resources, and Stability. A "Codes" panel at the bottom right lists various coding categories such as Parent Education History, Reading by PC, Reading Frequency, Reading Routine, Bedtime Reading Routine, Other reading routine, Morning reading routine, Reading Duration, Goals and Values, and Talking with Child. A "Create Excerpt" button is located at the bottom right of the document text area.

dedoose Emer Lit Dedoose Demo

Home Analyze Excerpts Descriptors Codes Documents Projects Security Select Data Back

Document: 3.27_post

Added: 05/19/2010 Creator: NA Size: 11512 Chars Excerpts: 10 Descriptors: 2

PC is currently working full-time as a hair dresser and part-time with own treading company in a medical office. Aside from PC, husband/mom also resides in home. Husband works full-time as supervisor at farmer-johns. Not changes have occurred with work schedules with PC or husband since first interview.

PC thinks her life is predictable from month to month. Yes, family needs are met through the resources regularly have available. If she needs them, PC d Range: 310-709 y, friends, and church or community to help meet her family's needs. The support would come fi Resources and church. But she has not needed any support recently

Resources

Stability

PC reads to TC before dinner (on her busy day), TC and PC sitting together and TC looks at the book. This happens at least 4 times a week and lasts about 30-45 minutes each time, PC or two or whatever book he wants to choose." Reading is done in English. PC agrees with Fwr PC knows this because TC asks "a lot of questions" about the questions such as "why did this TC gets a clear understanding of different things, "whatever is going on in his book, it may be clear understanding of conversations; what's right and what's wrong." Reading time occurs "every "at least a couple of times in a day," then PC agrees with Fwr that it is daily when Fwr suggests it, different children's books and other books." "Hardly ever" does reading time end because TC loses interest, PC repeatedly states that she has to "cut it off." PC then goes on to say, "but I like it though because he will learn a lot, I did the same thing when I was growing up." TC looks at books by himself about 2 times per week but PC comments that TC does not often pick up different ones, rather it is PC who picks up different ones. TC always picks up his favorite Dora book all the time. When Fwr suggests that TC picks up his favorite book daily, PC agrees. PC takes TC to the library about 2 times a week but they just started going to library 2 months ago. TC has not been in any programs since he started. There are no circumstances that would make it difficult for PC or husband to read to TC as much as they would like, because PC's schedule is whatever she makes it and she made it that way so she would have time to do what is right for him. Since the first interview, PC has been reading to TC "a little more" and PC believes this has something to do with him being in school with other students because he is now more interested. PC agreed with Fwr in that Head Start really helped (cannot hear the rest). Now, PC gets more into the characters she is reading, such as make voices. PC points out familiar words, talk about pictures, and mention the author's names (however, interviewer did not ask PC about the frequency to these answers). PC is led to do these new things because TC prompts PC with questions such as "how did [PC] get the book, who did this book?" when read to. When reading books, TC and PC mostly talk about the book itself and sometimes TC will ask questions like "Did this ever happen to me," whatever is in the book, mostly things that are occurring in the book. At first PC states that she does ask TC questions when reading but when asked what kind of questions, PC changes her mind and states that it is the other way round, for it is TC that asks her questions. PC specifically begins to talk about the question s TC asks referring to the Dora book; "where is her mom? Does she have a dad, Does she have any brothers and sisters? Is boots related to her? Is she alone, or does she have a family?" TC asks about the pictures but interviewer does not ask PC about the frequency of his questions. Most of the time PC asks TC about the first-letter sound of a word in the book. PC never asks TC if two words rhyme. Everyday husband and TC talk about sounds and rhymes, stories passed on from his generations. TC can tell what is coming next in the story because through the videos there is a map that gives TC directions to where Dora's Destination is at. TC likes to read the same book most of the time. PC has introduced TC to books he has not seen before, such as a children's book of bible stories that he likes "a lot" and Chicka Chicka Boom Boom

Create Excerpt

Selection Info

X 3.27_post (310-709)

X Goals and Values 100 / 100

X Resources

X Stability

Code Applications

Codes

- Parent Education History
- Reading by PC
- Reading Frequency
- Reading Routine
- Bedtime Reading Routine
- Other reading routine
- Morning reading routine
- Reading Duration
- Goals and Values
- Talking with Child

The Good. The Not So Good.

Good

- Multiple methods
- Campus engagement
- Learning through doing

Not So Good

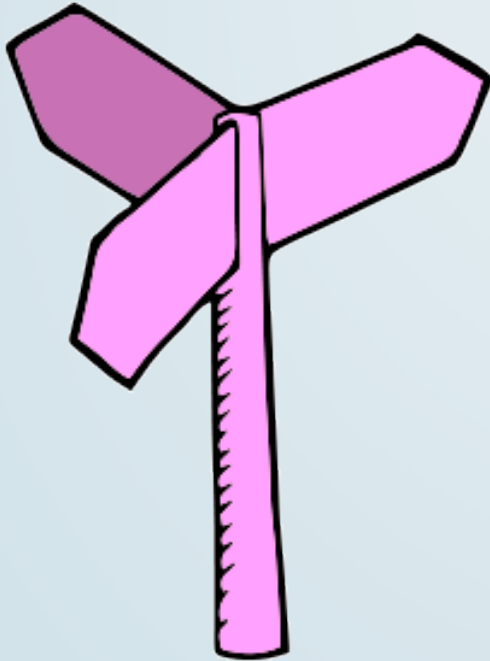
- Codes that are too broad
- Un-representative sample
- Differences between what people say and what people do

Assessment Findings

1. Data management plans are still a frustrating burden for most researchers.
2. Georgia Tech researchers lack the guidelines, resources, standards, and policies to properly care for their research data.
3. A disconnect exists between the expectations of Principal Investigators and Graduate Assistants.
4. Researchers recognize the importance of documentation and metadata, but few capture this information adequately.
5. Sharing data with collaborators outside Georgia Tech is challenging.
6. Researchers are willing to share their data, but the conditions under which they are willing to do so vary widely.
7. Researchers rarely plan for the final disposition of their research data.
8. Very few researchers deposit data into repositories.

Rolando, L., Doty, C., Hagenmaier, W., Valk, A., & Parham, S. W. (2013). *Institutional readiness for data Stewardship: Findings and recommendations from the research data assessment*. <http://hdl.handle.net/1853/48188>.

Next Steps



- Changes to local service
- Proposal to Campus Administration
- Research data repository
- IMLS grant to examine DMP's
- Re-Assess

References

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- Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Piscataway, NJ : AdlineTransaction.
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- Parham, S. W. (2010). Testing the DAF for implementation at Georgia Tech. 6th International Digital Curation Conference, Chicago, Illinois. smartech.gatech.edu/handle/1853/39786.
- Rolando, L., Doty, C., Hagenmaier, W., Valk, A., & Parham, S. W. (2013). Institutional readiness for data Stewardship: Findings and recommendations from the research data assessment. <https://smartech.gatech.edu/handle/1853/48188>.

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