

Collaborative Outreach and Education for Research Data Management and Use

Kristin Partlo, Carleton College
Jason Paul, St. Olaf College
Heather Tompkins, Carleton College

Upper Midwest Digital Collections Conference
August 19, 2014



Broadening the Bridge: A Collaboration Grant

**\$1.4 million Mellon grant
to support innovative
collaboration between
Carleton and St. Olaf Colleges**



Image courtesy of the Theater Department, St. Olaf College

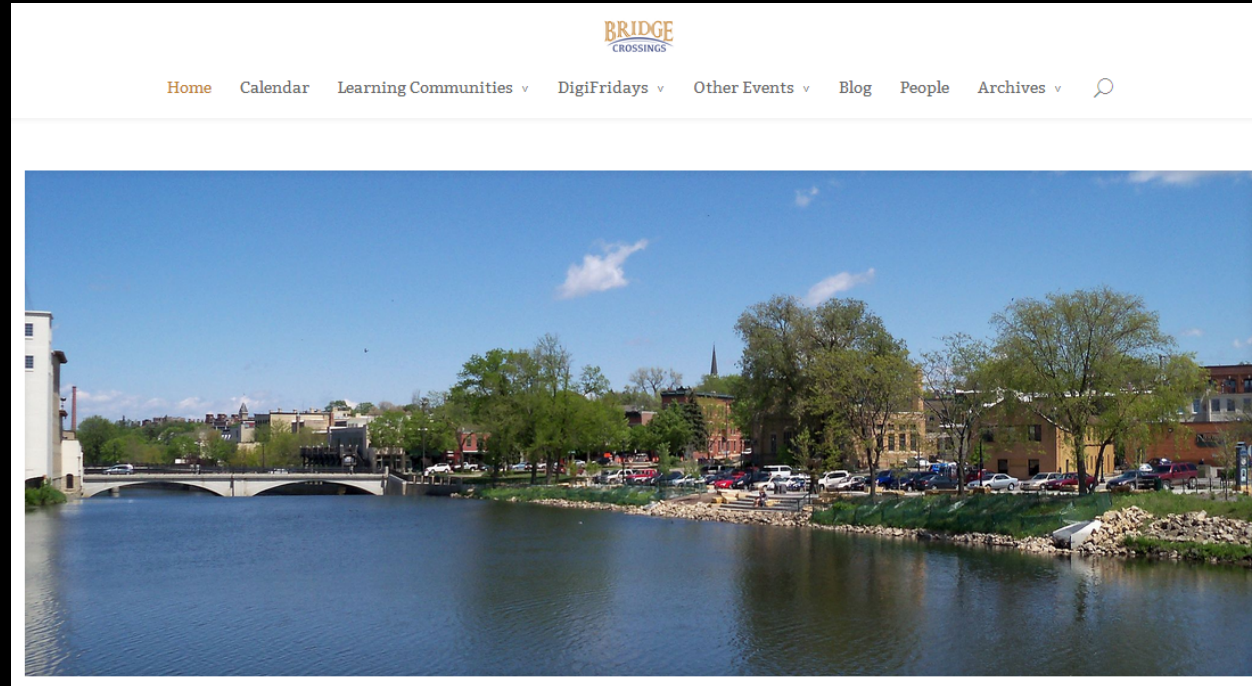
Broadening the Bridge: IT/Library Programs

Learning Communities

Digital Research & Teaching
across the Curriculum

Community of Practice
aka DigiFriday!

Teaching & Technology
Showcases

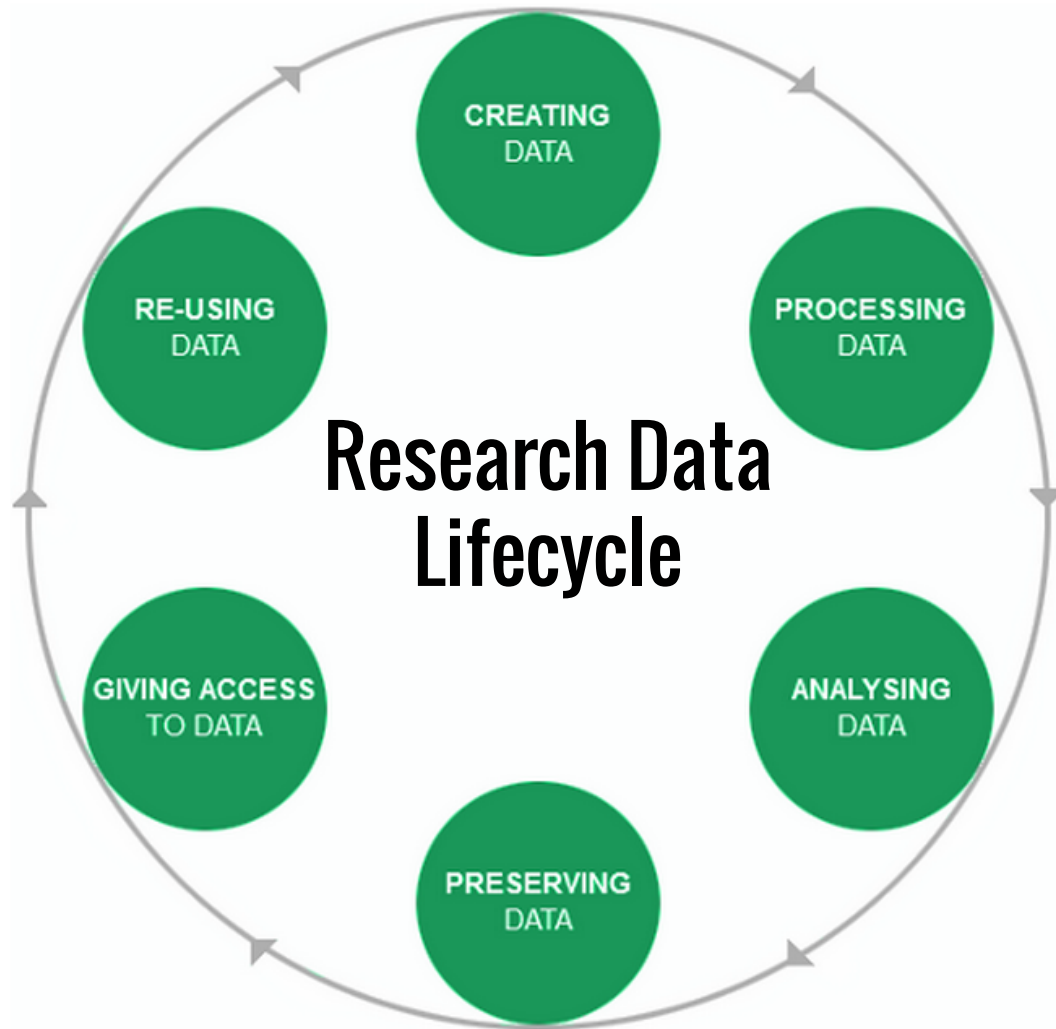


Bridge Crossings Website

Creating a Culture of Data Management



“window to a secret place” by Grant MacDonald via [Flickr](#), under [CC BY-NC-2.0](#)



CICLO DE VIDA

APAREAMIENTO



HUEVECILLOS



LARVA U ORUGA



PUPAS O CRISALIDAS



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Creating a Culture of Data Management

Strategies

Counter the perception that “data management doesn’t apply to me.”

Establish information management as an essential personal, professional, and scholarly skill set.

Start with practices for everyday situations that can then be “scaled up” to research projects and systemic workflows.

Creating a Culture of Data Management

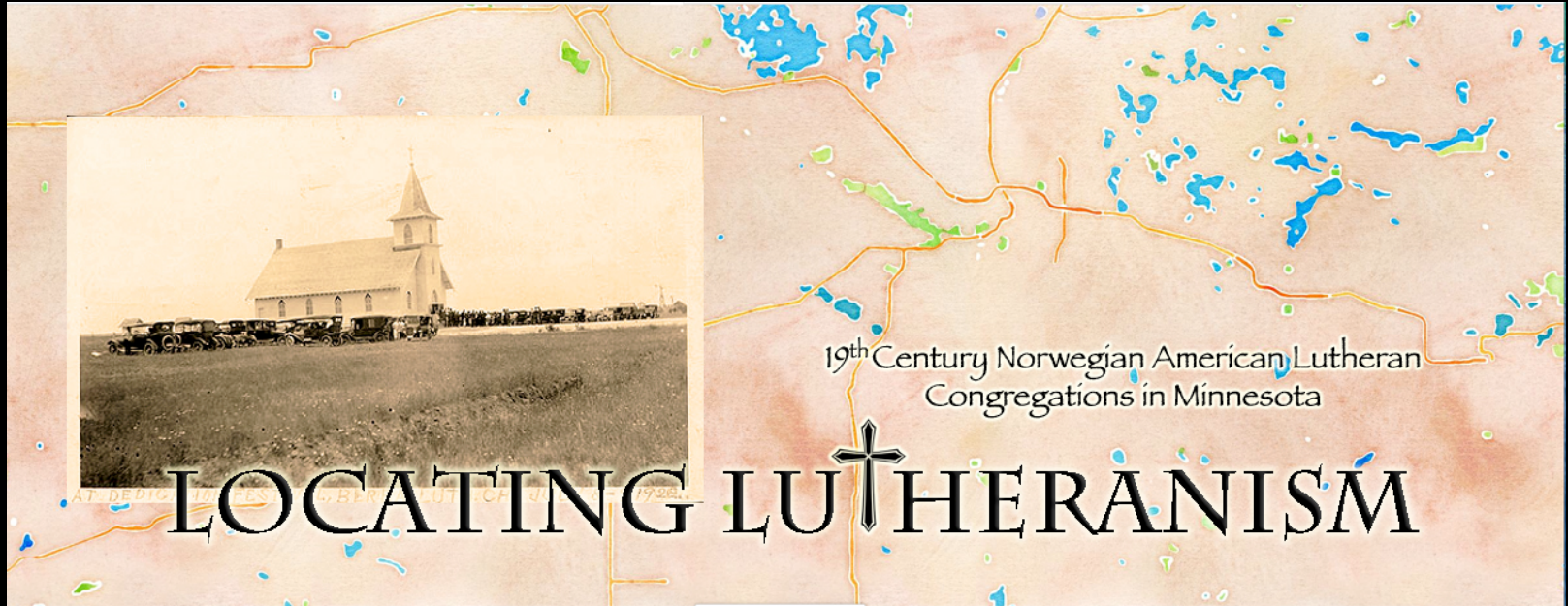
Tactics

Integrate data literacy and data management education into our information literacy curriculum.

Provide R&I librarians with the tools to teach their students and faculty basic data management concepts.

Balance the systematic with the serendipitous.

Case Study: Locating Lutheranism



<http://pages.stolaf.edu/locluth>

Case Study: Locating Lutheranism

Black Hammer norsk evangelisk lutherske menighet.

Spring Grove (5 mil nord), Houston Co., Minn.

Norske synode, 1858—.

Organisert 1ste januar 1858. 380 sjæle i 1883, 512 i 1914. Prester: F. C. Clausen, 1859-70; St. S. Reque, 1871-95; R. Larsen, 1876-78; E. P. Jensen, 1880-05; G. C. Jensen, 1904-05; K. A. Kasberg, 1905-12; H. H. Frost, 1912—. Embedsmænd i 1915: b. H. K. Ike; c. P. C. Onstad; e. Gunder Treangen, L. E. Veum, Joe Hermanson. Kvindefor., 1885. Ungdomsfor., 1895. Sangfor. Kirke 1, 1868. Kirke 2, 1898, \$4.400. Prestehus. Gravplads, 2 acres, \$500. Presteløn: \$335 (1914).—H. H. Frost. (834-1548)

Congregation Data (Phase 1)

Congregation name

Location

Founding date

Event dates (split, divided, ceased, reorganized)

Synodical affiliations

Page number

Image

O.M. Norlie, Norske lutherske menigheter i Amerika, 1843-1916

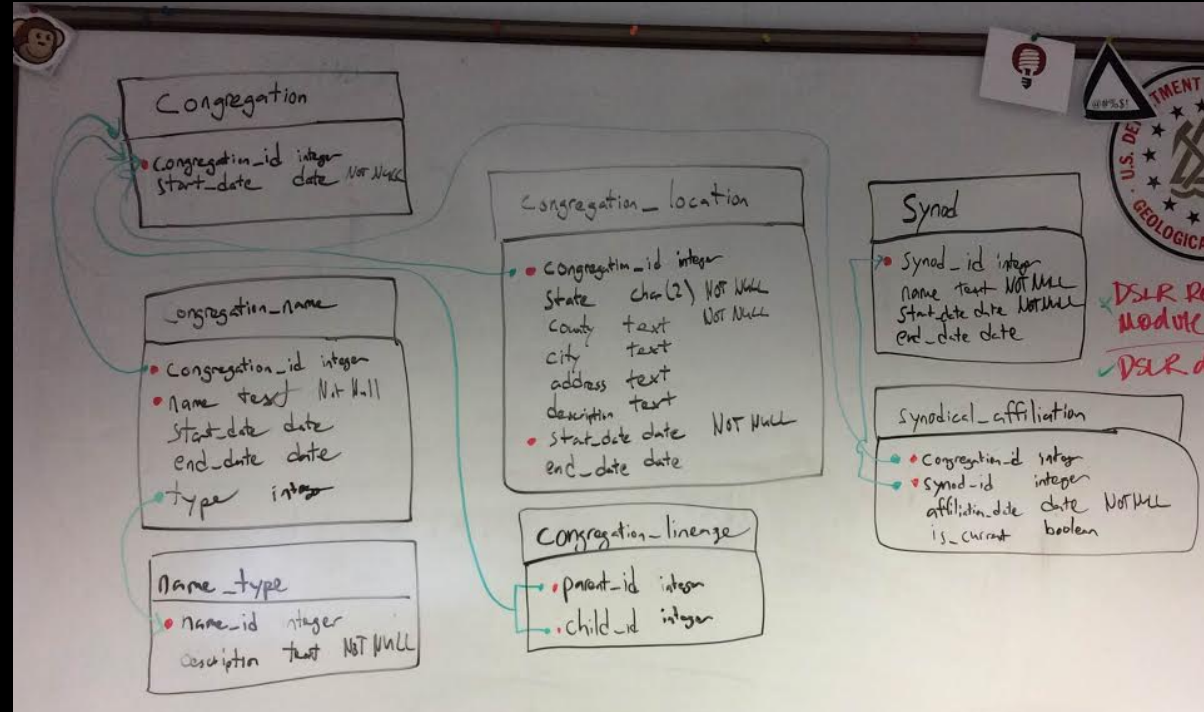
456	MINNESOTA	457
<p>Black Hammer norsk evangelisk lutherske menighet. Spring Grove (5 mil nord), Houston Co., Minn. Norske synode, 1858—. Organisert 1ste januar 1858. 380 sjæle i 1883, 512 i 1914. Prester: F. C. Clausen, 1859-70; St. S. Reque, 1871-95; R. Larsen, 1876-78; E. P. Jensen, 1880-05; G. C. Jensen, 1904-05; K. A. Kasberg, 1905-12; H. H. Frost, 1912—. Embedsmænd i 1915: b. H. K. Ike; c. P. C. Onstad; e. Gunder Treangen, L. E. Veum, Joe Hermanson. Kvindefor., 1885. Ungdomsfor., 1895. Sangfor. Kirke 1, 1868. Kirke 2, 1898, \$4.400. Prestehus. Gravplads, 2 acres, \$500. Presteløn: \$335 (1914).—H. H. Frost. (834-1548)</p>	<p>Black Hammer norsk evangelisk lutherske menighet. Spring Grove (5 mil nord), Houston Co., Minn. Norske synode, 1858—. Organisert 1ste januar 1858. 380 sjæle i 1883, 512 i 1914. Prester: F. C. Clausen, 1859-70; St. S. Reque, 1871-95; R. Larsen, 1876-78; E. P. Jensen, 1880-05; G. C. Jensen, 1904-05; K. A. Kasberg, 1905-12; H. H. Frost, 1912—. Embedsmænd i 1915: b. H. K. Ike; c. P. C. Onstad; e. Gunder Treangen, L. E. Veum, Joe Hermanson. Kvindefor., 1885. Ungdomsfor., 1895. Sangfor. Kirke 1, 1868. Kirke 2, 1898, \$4.400. Prestehus. Gravplads, 2 acres, \$500. Presteløn: \$335 (1914).—H. H. Frost. (834-1548)</p>	<p>Houston Co.</p> <p>Ole Loe; b. Gunder Traasen; c. Gunder Traasen; e. Christopher Erlison, Martin Jemundsen, Peder Onsgaard, Halgrim Rasik. I 1915: b. N. S. Halstrensd; c. Nils H. Wiiger; e. Ole G. Hansen, Nave Larson, Enos Kroegstad, J. N. Le. Halstrensd, Kvindfor., 1888. Ungdomsfor. Kirke, 1877, \$2,500. Prestehus, 1880. Gravplads, 4 letter, \$40. Land, 67 acres, \$3,000. Presteløn: \$100 (1875), \$235 (1914).—H. H. Frost. (835-1554)</p>
<p>Root River praekeplads. Spring Grove (10 mil nord), Houston Co., Minn. Utrom (No.), 1866 (?)—29 (?) Begyndt 1866 (?). Slutet 1869 (?). Prest: F. C. Clausen, 1866-69. (7032-1549)</p>	<p>Root River praekeplads. Spring Grove (10 mil nord), Houston Co., Minn. Utrom (No.), 1866 (?)—29 (?) Begyndt 1866 (?). Slutet 1869 (?). Prest: F. C. Clausen, 1866-69. (7032-1549)</p>	<p>Galedonia menighet. Galedonia, Houston Co., Minn. Norske synode, 1877-86 (?). Organisert 1877. Opplst 1908 (?). 60 sjæle i 1902, 39 i 1908. Prester: St. S. Reque, 1877-86; E. P. Jensen, 1880-82. Embedsmænd i 1908: b. E. K. Roverud.—M. C. H. (5481-1555)</p>
<p>Brownville praekeplads. Brownville, Houston Co., Minn. Norske synode, 1871 (?)—74 (?) Begyndt 1871 (?). Slutet 1874 (?). Prester: St. S. Reque, 1871-78; R. Larsen, 1877-78.—M. C. H. (5488-1550)</p>	<p>Brownville praekeplads. Brownville, Houston Co., Minn. Norske synode, 1871 (?)—74 (?) Begyndt 1871 (?). Slutet 1874 (?). Prester: St. S. Reque, 1871-78; R. Larsen, 1877-78.—M. C. H. (5488-1550)</p>	<p>Hokah praekeplads. Hokah, Houston Co., Minn. Norske synode, 1877-78. Begyndt 1877. Slutet 1878. Prester: R. Larsen, 1877-78; St. S. Reque, 1877-78.—M. C. H. (5483-1556)</p>
<p>Union Township praekeplads (Union). Spring Grove (18 mil øst), Houston Co., Minn. Norske synode, 1871 (?)—74 (?) Begyndt 1871 (?). Slutet 1878 (?). Prest: St. S. Reque, 1871-78.—M. C. H. (5489-1551)</p>	<p>Union Township praekeplads (Union). Spring Grove (18 mil øst), Houston Co., Minn. Norske synode, 1871 (?)—74 (?) Begyndt 1871 (?). Slutet 1878 (?). Prest: St. S. Reque, 1871-78.—M. C. H. (5489-1551)</p>	<p>Hokah menighet. Hokah, Houston Co., Minn. Konferansen, 1870-80 Organisert 1878. Opplst 1880. 24 sjæle i 1878, 21 i 1879. Prest: J. A. Bergh, 1878-80.—M. C. H. (5482-1557)</p>
<p>Looney Valley norsk evangelisk lutherske menighet. (Loony Valley norsk evangelisk lutherske Loony Valley.) Houston (5½ mil nord), Houston Co., Minn. Konferansen, 1871-99. Forenede kirke, 1899— Organisert 1871. 58 sjæle i 1872, 60 i 1884. Prester: P. L. Asbjørnsen, 1871-74; E. H. Midboe, J. E. Nordby, P. G. Ørby, 1875-76; O. C. Schomvaag, 1877-81; Peter Nielsen, 1881-87; C. K. Yrekus, 1888-90; A. Wright, 1891-91; M. N. Kammen, 1901-04; T. T. Haverstad, 1905-09; L. S. Marvick, 1910-12; B. B. Østrem, 1912—. Embedsmænd i 1915: b. J. A. Sæter; c. B. Flatten; d. P. Wager, Oliver Olson, S. Johnson; e. C. A. Johnson, Otto Wager, L. Sæter; f. J. A. Sæter; h. mrs. Oliver Olson. Kirke, \$3,000. Presteløn: \$150 (1914).—B. B. Østrem. (2220-1552)</p>	<p>Looney Valley norsk evangelisk lutherske menighet. (Loony Valley norsk evangelisk lutherske Loony Valley.) Houston (5½ mil nord), Houston Co., Minn. Konferansen, 1871-99. Forenede kirke, 1899— Organisert 1871. 58 sjæle i 1872, 60 i 1884. Prester: P. L. Asbjørnsen, 1871-74; E. H. Midboe, J. E. Nordby, P. G. Ørby, 1875-76; O. C. Schomvaag, 1877-81; Peter Nielsen, 1881-87; C. K. Yrekus, 1888-90; A. Wright, 1891-91; M. N. Kammen, 1901-04; T. T. Haverstad, 1905-09; L. S. Marvick, 1910-12; B. B. Østrem, 1912—. Embedsmænd i 1915: b. J. A. Sæter; c. B. Flatten; d. P. Wager, Oliver Olson, S. Johnson; e. C. A. Johnson, Otto Wager, L. Sæter; f. J. A. Sæter; h. mrs. Oliver Olson. Kirke, \$3,000. Presteløn: \$150 (1914).—B. B. Østrem. (2220-1552)</p>	<p>The Emmanuel Norwegian Evangelical Lutheran Church. Galedonia, Houston Co., Minn. Utrom (No.), 1866 (?)—29 (?) Organisert 17de februar 1893. 40 sjæle i 1893, 129 i 1914 (4 tyskere). Prester: S. S. Reque og E. P. Jensen, 1893-03; H. J. Wein, 1903—. Embedsmænd i 1903: b. E. K. Roverud; c. J. P. Lommen; e. Knud Johnson, S. J. Sollberg, Peter Stenstrup; f. E. K. Roverud; g. E. K. Roverud; h. E. K. Roverud; i. J. P. Lommen; j. O. E. Birt-h. E. K. Roverud; i 1915: b. E. K. Roverud; c. J. P. Lommen; e. O. E. Birt-h. E. K. Roverud; f. E. K. Roverud; g. E. K. Roverud; h. E. K. Roverud; i. E. K. Roverud; j. E. K. Roverud; k. E. K. Roverud; l. E. K. Roverud; m. E. K. Roverud; n. E. K. Roverud; o. E. K. Roverud; p. E. K. Roverud; q. E. K. Roverud; r. E. K. Roverud; s. E. K. Roverud; t. E. K. Roverud; u. E. K. Roverud; v. E. K. Roverud; w. E. K. Roverud; x. E. K. Roverud; y. E. K. Roverud; z. E. K. Roverud. Kirke, 1894, \$1,664. Prestehus, 1913, \$3,660. Land, 67 acres, \$3,000.</p>
<p>Jefferson (Jefferson Township). Freeburg (5 mil syd), Houston Co., Minn. Norske synode, 1872—. Organisert 1874. 55 sjæle i 1902, 34 i 1914. Prester: St. S. Reque, 1872-68; R. Larsen, 1876-78; O. J. Hjort, 1877-78; E. P. Jensen, 1880-85; H. J. Wein, 1903—. Embedsmænd i 1913: b. E. K. Roverud. Kirke.—M. C. H. (5482-1553)</p>	<p>Jefferson (Jefferson Township). Freeburg (5 mil syd), Houston Co., Minn. Norske synode, 1872—. Organisert 1874. 55 sjæle i 1902, 34 i 1914. Prester: St. S. Reque, 1872-68; R. Larsen, 1876-78; O. J. Hjort, 1877-78; E. P. Jensen, 1880-85; H. J. Wein, 1903—. Embedsmænd i 1913: b. E. K. Roverud. Kirke.—M. C. H. (5482-1553)</p>	<p>The Emmanuel Norwegian Evangelical Lutheran Church. Galedonia, Houston Co., Minn. Utrom (No.), 1866 (?)—29 (?) Organisert 17de februar 1893. 40 sjæle i 1893, 129 i 1914 (4 tyskere). Prester: S. S. Reque og E. P. Jensen, 1893-03; H. J. Wein, 1903—. Embedsmænd i 1903: b. E. K. Roverud; c. J. P. Lommen; e. Knud Johnson, S. J. Sollberg, Peter Stenstrup; f. E. K. Roverud; g. E. K. Roverud; h. E. K. Roverud; i. J. P. Lommen; j. O. E. Birt-h. E. K. Roverud; i 1915: b. E. K. Roverud; c. J. P. Lommen; e. O. E. Birt-h. E. K. Roverud; f. E. K. Roverud; g. E. K. Roverud; h. E. K. Roverud; i. E. K. Roverud; j. E. K. Roverud; k. E. K. Roverud; l. E. K. Roverud; m. E. K. Roverud; n. E. K. Roverud; o. E. K. Roverud; p. E. K. Roverud; q. E. K. Roverud; r. E. K. Roverud; s. E. K. Roverud; t. E. K. Roverud; u. E. K. Roverud; v. E. K. Roverud; w. E. K. Roverud; x. E. K. Roverud; y. E. K. Roverud; z. E. K. Roverud. Kirke, 1894, \$1,664. Prestehus, 1913, \$3,660. Land, 67 acres, \$3,000.</p>
<p>Riceford norsk evangelisk lutherske menighet. Riceford, Houston Co., Minn. Norske synode, 1875—. Organisert 3de mars 1875. 134 sjæle i 1883, 155 i 1914. Prester: St. S. Reque, 1875-80; E. P. Jensen, 1876-78; E. P. Jensen, 1880-85; C. C. Ulen, 1904-05; K. A. Kasberg, 1905-12; H. H. Frost, 1912—. Embedsmænd i 1875: a.</p>	<p>Riceford norsk evangelisk lutherske menighet. Riceford, Houston Co., Minn. Norske synode, 1875—. Organisert 3de mars 1875. 134 sjæle i 1883, 155 i 1914. Prester: St. S. Reque, 1875-80; E. P. Jensen, 1876-78; E. P. Jensen, 1880-85; C. C. Ulen, 1904-05; K. A. Kasberg, 1905-12; H. H. Frost, 1912—. Embedsmænd i 1875: a.</p>	<p>The Emmanuel Norwegian Evangelical Lutheran Church. Galedonia, Houston Co., Minn. Utrom (No.), 1866 (?)—29 (?) Organisert 17de februar 1893. 40 sjæle i 1893, 129 i 1914 (4 tyskere). Prester: S. S. Reque og E. P. Jensen, 1893-03; H. J. Wein, 1903—. Embedsmænd i 1903: b. E. K. Roverud; c. J. P. Lommen; e. Knud Johnson, S. J. Sollberg, Peter Stenstrup; f. E. K. Roverud; g. E. K. Roverud; h. E. K. Roverud; i. J. P. Lommen; j. O. E. Birt-h. E. K. Roverud; i 1915: b. E. K. Roverud; c. J. P. Lommen; e. O. E. Birt-h. E. K. Roverud; f. E. K. Roverud; g. E. K. Roverud; h. E. K. Roverud; i. E. K. Roverud; j. E. K. Roverud; k. E. K. Roverud; l. E. K. Roverud; m. E. K. Roverud; n. E. K. Roverud; o. E. K. Roverud; p. E. K. Roverud; q. E. K. Roverud; r. E. K. Roverud; s. E. K. Roverud; t. E. K. Roverud; u. E. K. Roverud; v. E. K. Roverud; w. E. K. Roverud; x. E. K. Roverud; y. E. K. Roverud; z. E. K. Roverud. Kirke, 1894, \$1,664. Prestehus, 1913, \$3,660. Land, 67 acres, \$3,000.</p>

Case Study: Locating Lutheranism

MINNESOTA CONGREGATIONS

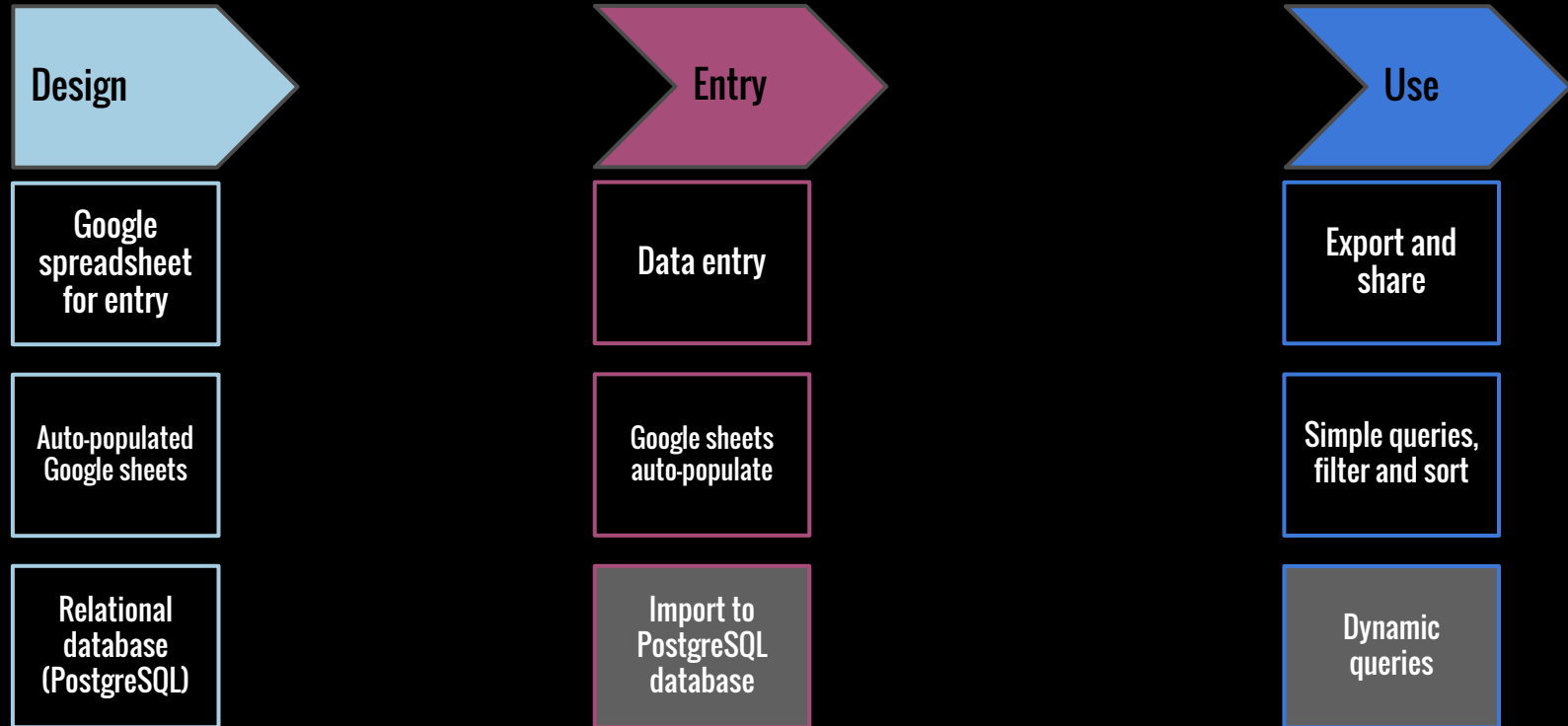
1,536
congregation entries

348
images



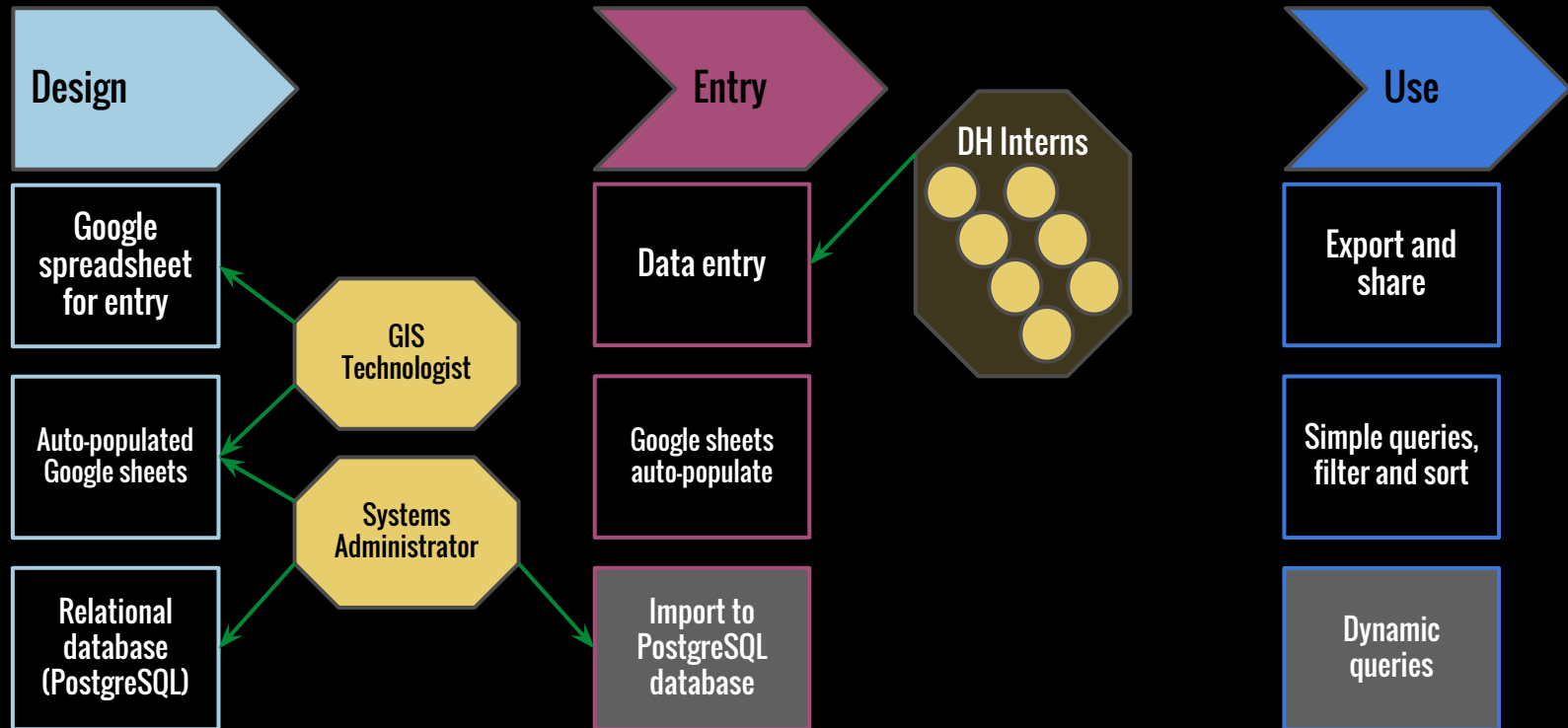
Case Study: Locating Lutheranism

Managing Congregation Data



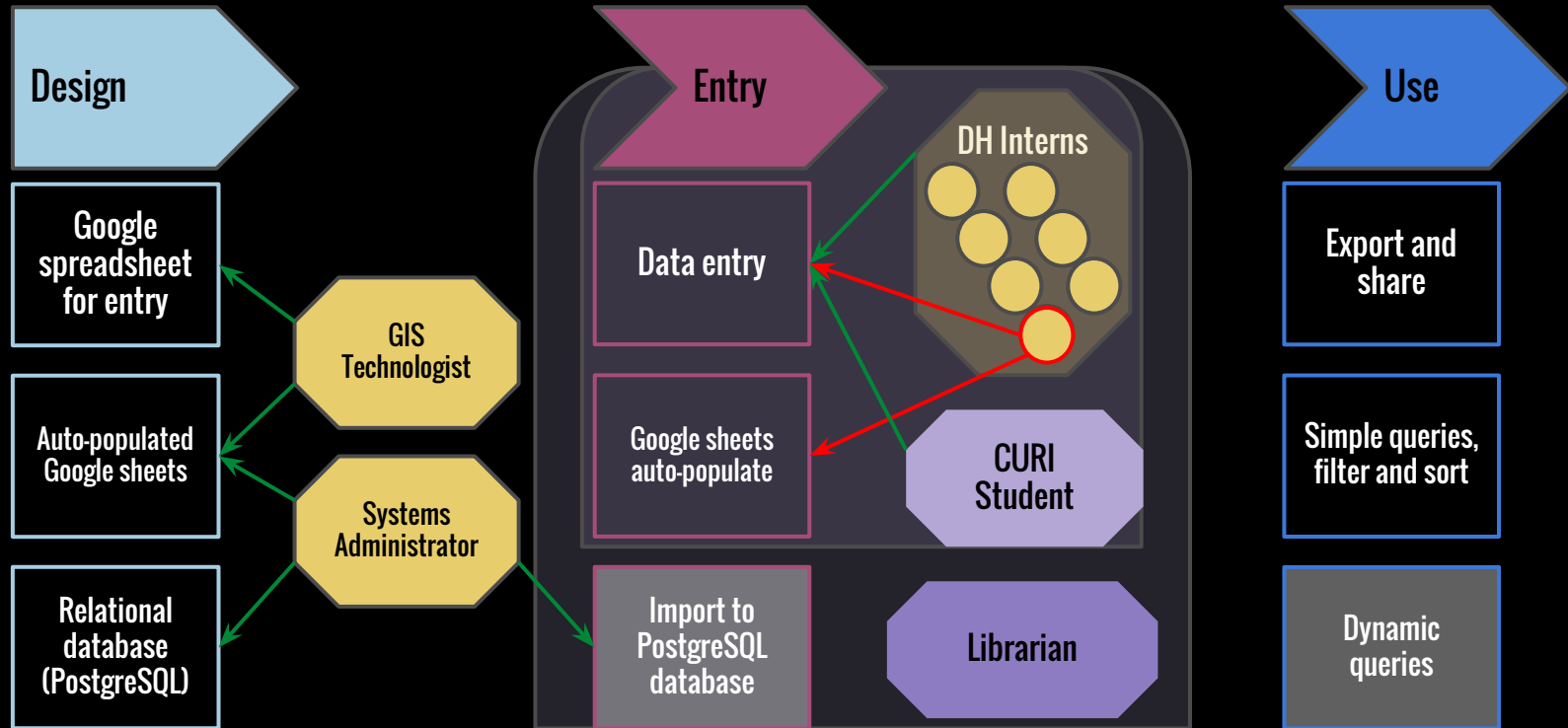
Case Study: Locating Lutheranism

Managing Congregation Data



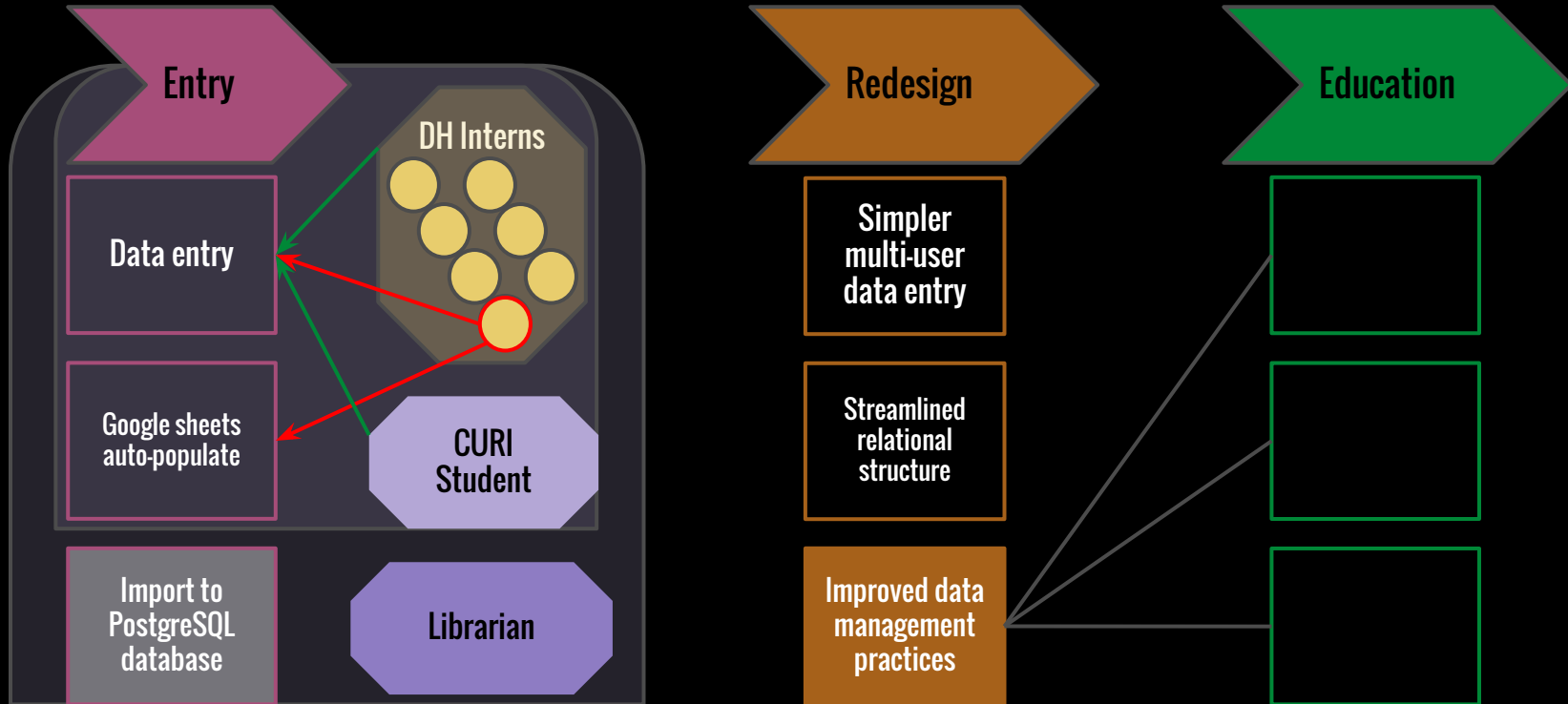
Case Study: Locating Lutheranism

Managing Congregation Data



Case Study: Locating Lutheranism

Managing Congregation Data



Case Study: Digital Humanities Students

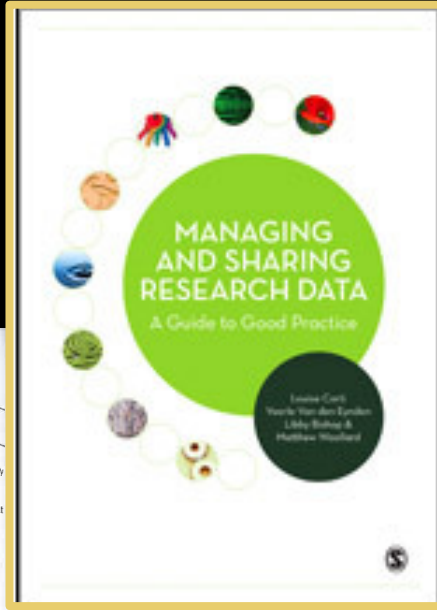
FIVE Formatting and Organizing Data

Data form the basis of, and are the result of, empirical research. Research data exist in many different forms: textual data, numerical data, databases, geospatial data, images, audio-visual recordings, and data generated by machines or instruments. All digital data exist in specific file formats; the form in which information is coded so that a software programme can read and interpret those data. A particular file format is used to be read by a different software programme. Quality control is vital to ensure quality. High quality, authentic copies or versions of information that is

60 MANAGING AND SHARING RESEARCH DATA

Table 5.2 Considerations in file format choice for storing text documents

Text format	Representation and encoding	Readability and constraints	Information on formats/encoding	Preservation and storage
Plain Text (.txt)	<ul style="list-style-type: none"> Individual characters (letters, punctuation, new lines) each encoded into bytes using ASCII encoding, or another character encoding such as UTF8 or ISO 8859-1 Stored in a simple sequence. Only the text is stored with no information about formatting, fonts, page size, etc. 	<ul style="list-style-type: none"> Portable across all computer systems Can be read and modified by a huge range of software applications 	<ul style="list-style-type: none"> Freely available and standardized 	<ul style="list-style-type: none"> If storage media are damaged, early undamaged sections can be recovered without problems
Microsoft Word document (.doc, .docx)	<ul style="list-style-type: none"> Text plus formatting, page size, fonts and so on are stored in a complex encoding 	<ul style="list-style-type: none"> Only runs on Windows and Macintosh, not on Linux Other software applications have been written that can read and edit, but not fully reliable 	<ul style="list-style-type: none"> Owned by Microsoft and not freely available 	<ul style="list-style-type: none"> Only Microsoft Word software can recover and edit the contents with complete fidelity No guarantee that Microsoft will always ensure that new versions of the software can open documents stored in older versions
PDF (Portable Document Format) (.pdf)	<ul style="list-style-type: none"> Text plus formatting, page size and similar information are stored in a 	<ul style="list-style-type: none"> Viewed and printed on all major platforms, using free 	<ul style="list-style-type: none"> Freely available but owned by Adobe and can be changed by 	



Category	Basic/Intro Questions	Advanced/Later Questions
Description	Which of your works/What kinds of works would you like to include a repository?	What formats is your work/content in? What is its size?
Storage/Preservation	Where is your work/content currently stored? What happens if you lose it?	Does your work/content require preservation as opposed to storage?
Sharing/Accessibility	Would you like to see your work/content shared with the campuses, with the world, or not shared at all?	Have you ever considered making your work/content openly accessible? Would your contracts with publishers allow you to do this?
Organization / Discoverability (Metadata)	Do you have descriptions of your work/content?	Has your work/content been abstracted, indexed, or given subject headings by a publisher, content aggregator, or cataloging service? What format is that information in?
Intellectual Property	Do you have permission to contribute your work/content? If not, does your use of someone else's work/content constitute fair use?	Do your publishing contracts allow you to self-archive your work/content in an educational, non-commercial digital repository? Do you have agreements with collaborators or contributors to your work/content that may prevent you from including that work/content in a repository?
Linked data		Is it important that your work/content link to other resources, both within and outside the repository?

Case study: Digital Humanities Students

Students identified a number of challenges for DM in DH.

“Content growing”

How are pilots and experimental projects categorized?

Multiple storage locations

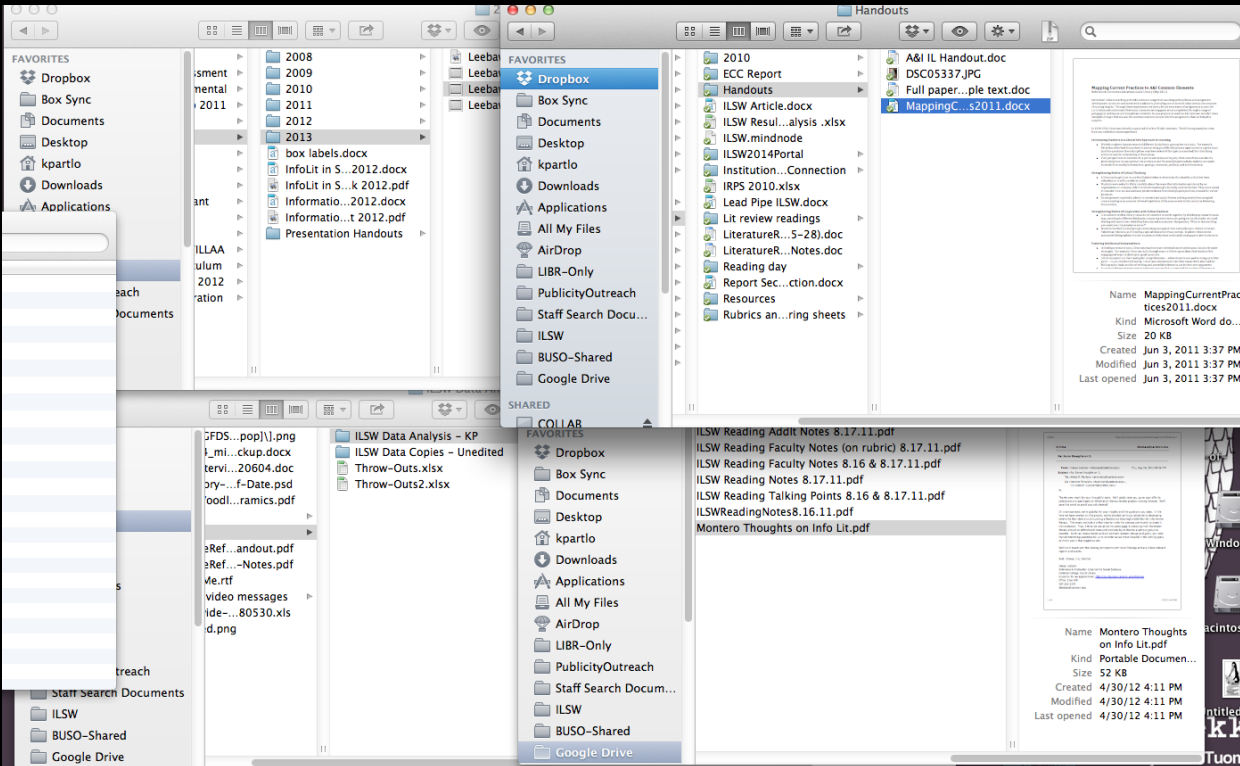
How to handle files used and/or contributed by students in courses?

Case Study: ILSW



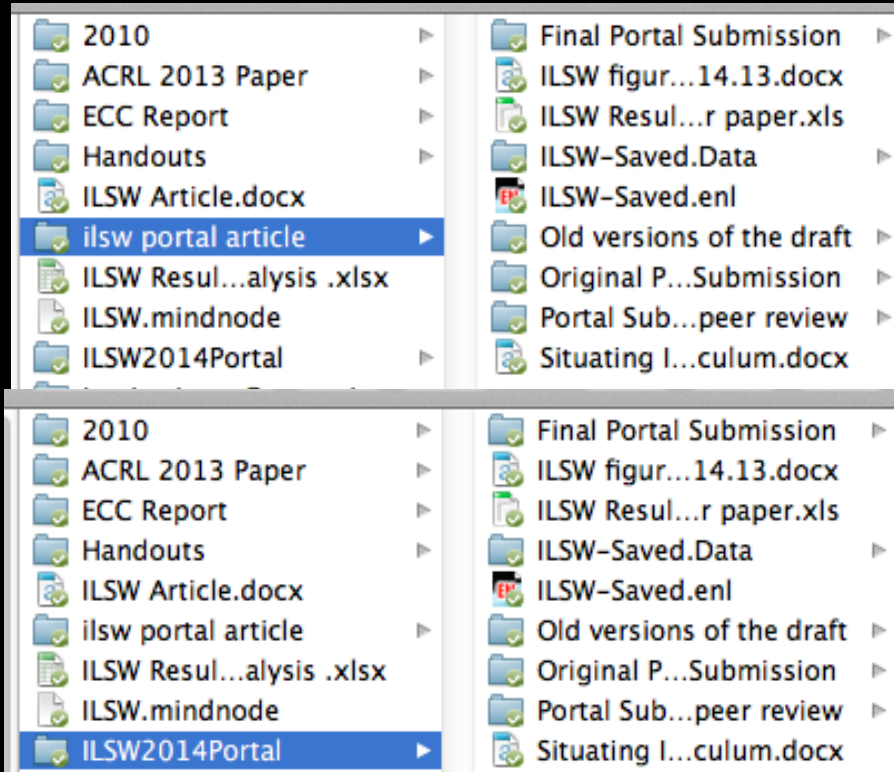
"Happy Sixth Birthday" Flickr User [Aris Sánchez](#) [CC BY-NC-SA 2.0](#)

Case Study: ILSW



Dropbox
Shared Network Drive
Google Docs
Local Files

Case Study: ILSW



Good Intentions

Case Study: ILSW

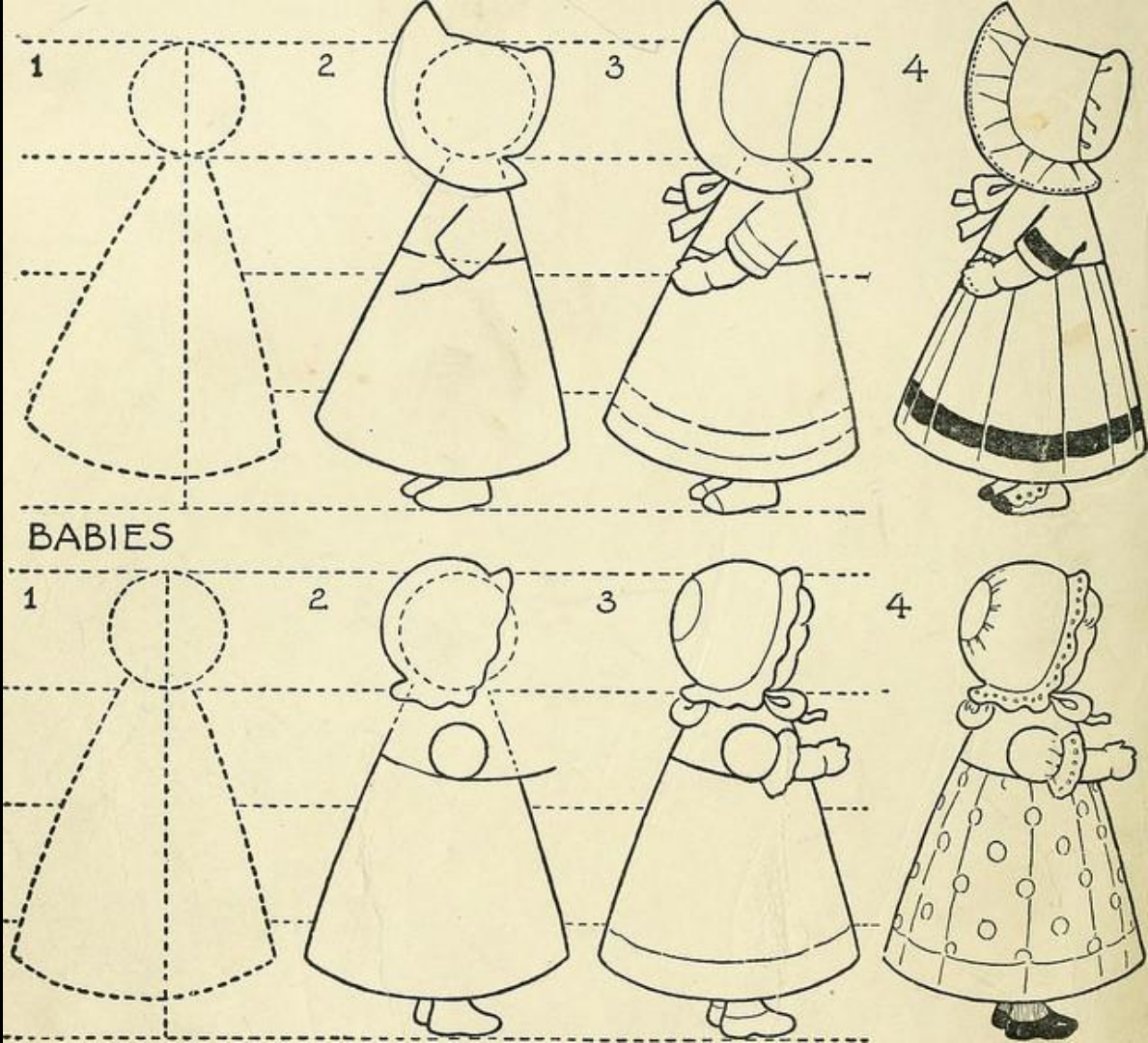
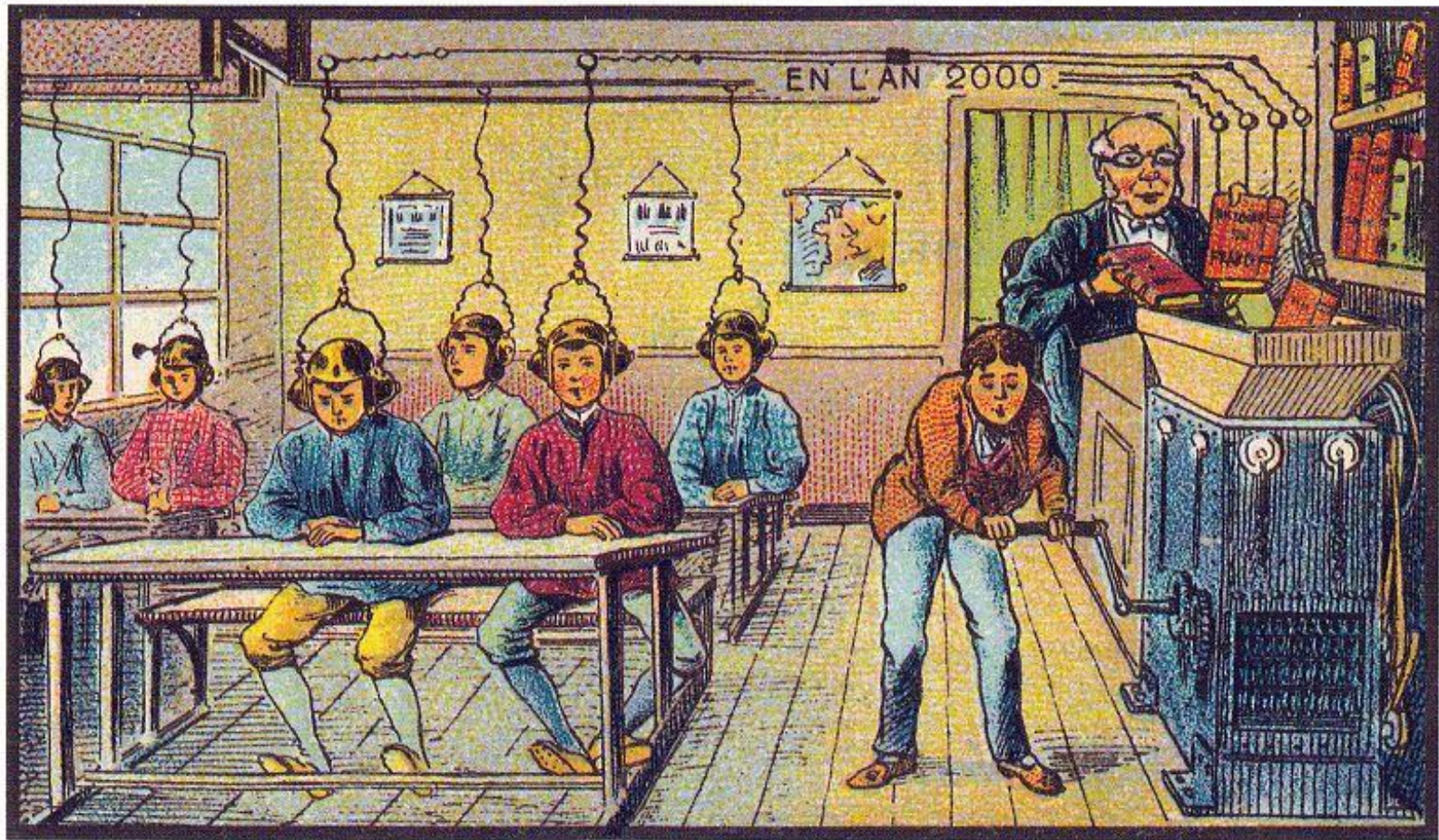


Image from page 70 of "Drawing made easy : a helpful book for young artists; the way to begin and finish your sketches, clearly shown step by step" (1921), via [Internet Archive](#).



At School

Next Steps

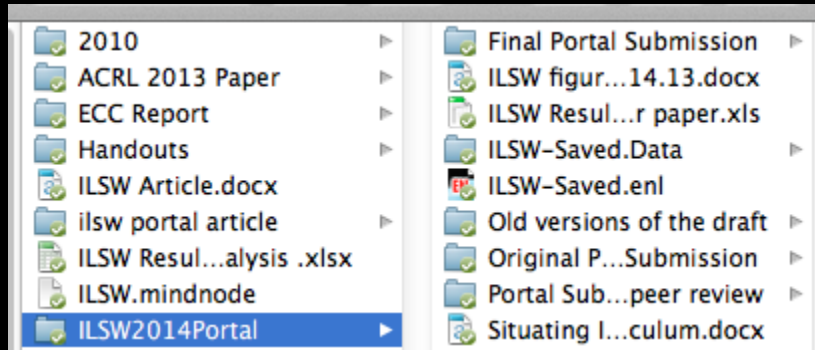
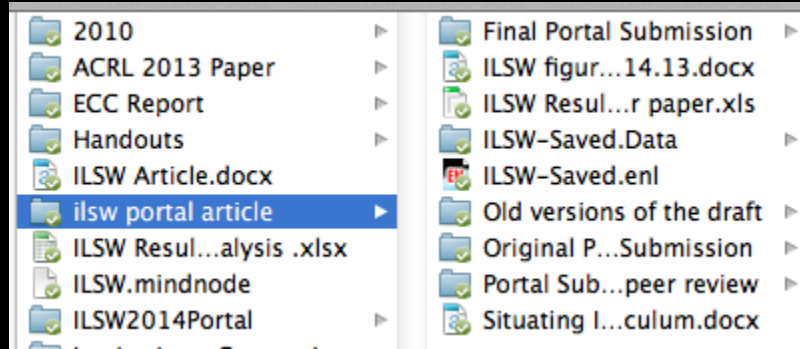
Data management teaching modules for research & instruction librarians

Collaborative training for DH Associates/Interns to recognize data management issues

Data repository, with its own educational resources on data sharing, open data licensing, and so forth



Teaching Modules



Sets of at-the-ready examples, visuals, and prompts for the instruction librarians and others who work directly with faculty to illustrate basic, generalizable data management principles.

Applicable across disciplines and constituencies.

Collaboration

Doing together what you
could never do alone.

“Turner Twins, Acrobats, 1937” by Sam Hood, via State Library of New South Wales on [Flickr](#).

