Closing the Digital Curation Gap: A Grounded Framework for Providing Guidance and Education in Digital Curation
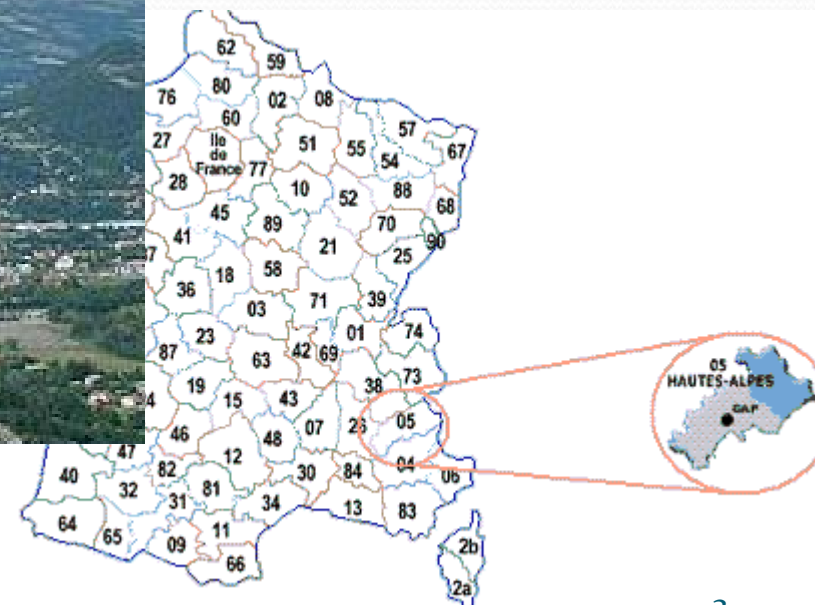
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Digital Preservation 2013, Alexandria, VA

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London's Tube Gap

Ville de Gap in France

Gapping Pants

Digital Curation Gap

- Dramatic progress of research and development on digital curation and professional practices of archivists, librarians, and museum curators in the past decade.

- There are now many viable applications, models, strategies, and standards for long-term care of digital objects.

- However, many institutions are either not aware of the options or do not currently have the ability to evaluate and implement them.

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Closing the Digital Curation Gap

- IMLS-, JISC, and DCC, and SILS-funded project based at the School of Information and Library Services at the University of North Carolina at Chapel Hill.

- 2009-2013.

- Partners: Drs. Helen Tibbo and Christopher Lee and students Heather Bowden and Courtney Bailey at UNC and Neil Grindley (JISC) and Joy Davidson (DCC) in UK.

- Seeks to fill this gap between research and practice by providing guidance resources for professionals in small- to medium-sized repositories.

- Website open to community for comment and additions this fall.

Collaborative

- The CDCG collaboration is serving as a locus of interaction between those doing leading edge digital curation research, development, teaching, and training in academic and practitioner communities; those with a professional interest in applying viable innovations within particular organizational contexts; and organizations charged with disseminating such innovation and best practices.

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Methodologies

- User-centered design
  - Interviews
  - Focus Groups
  - Survey
- We are grounding our advice and guidance in the real experiences of people working in cultural heritage institutions.
- Including video interviews.
- Online Digital Curation Guides, or "Getting Started Guides."

Research Approach

- Drawn from previous studies, esp. those of the Northeast Document Conservation Center (NEDCC) in 2006 and Cornell University Library in 2005.

- Focus groups
  - 4 groups; 25 participants
  - Held at ALA, SAA, MCN

- Participant recruitment was directed toward professionals who were responsible for the care of digital collections and had sufficient background knowledge on digital curation to contribute to the discussion.

Focus Groups

- What kinds of digital curation activities do you currently practice?
- For these activities, what tools and resources have you used?
- Where and how did you find these tools and resources?
- What other types of tools and resources would you find to be helpful?
- We then presented a draft mockup of a "decision tree" tool and elicited the group's feedback on it, including how they might use it, and what they would see as the main opportunities or benefits and challenges of using it.

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Question Matrix for Focus Group Discussions

	1. Planning	2. Create or Receive Content	3. Appraise, Select & Reapprai se Content	4. Ingest Conte nt	5. Creation and Management of Metadata	6. Take actions to preserve content (e.g., migration, emulation)	7. Store Conte nt	8. Manage Access, Use and Reuse of Content	9. Dispos e of Conte nt
A. Curation Activity Currently Practiced	1A	2A	3A	4A	5A	6A	7A	8A	9A
B. Tools & Resources	1B	2B	3B	4B	5B	6B	7B	8B	9B
C. Source of Tools & Resources	1C	2C	3C	4C	5C	6C	7C	8C	9C
D. Desired Activities, Tools & Resources	1D	2D	3D	4D	5D	6D	7D	8D	9D

Focus Group Results

- Identified many commonalities in concerns, priorities and resources consulted across the focus groups.
- Participants expressed interest in resources that were particular to their institution types.
- This was particularly true for resources that serve as examples of professional practice.
- Terminology and workflow often matched better for archivists and least well for museum staff.
- Few participants indicated that their organizations were doing digital curation planning.

Challenges Discovered

- Limited funding and other resources.
- The difficulty of building and maintaining relationships with the IT staff in the participants' institutions.
- Expense of metadata creation and management.
- Digital preservation activities tended to be an area of great concern.
- Many said there were not digital preservation tools or methods to adopt.

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Comments about CDCG Site

- Many of the participants indicated that these should not be static web pages, but should instead be built in a dynamic system that could be continually updated.

- They also indicated that they would like the ability to leave comments or even rate certain resources that were listed in the decision trees.

- Several participants indicated that having information related to institutions of particular sizes or types (libraries, museums or archives) could be helpful.

Original Plan

- Original plan in grant application had been to create chapters for the Digital Curation Centre's online *Digital Curation Manual* and

- Create decision trees similar to the Digital Preservation Coalition's digitization decision trees.

- Our interviews and focus groups told us no one wanted these tools!

Why Decision Trees Would Not Work

- A primary motivation for the CDCG project has been to offer assistance to professionals at the point in their work processes when they experience breakdowns or need for further insight.

- There is thus no obvious starting point for a decision tree that will be appropriate to everyone, and it is often not a particular digital curation function that drives one's search for professional guidance.

- And, when you don't know what decisions exist or what they entail, it is hard to know where to start in a decision tree.

Common Scenarios

- Common Scenarios form the basis of our Getting Started Guides.
  - Acquiring data from storage media,
  - Analyzing costs,
  - Archiving web sites,
  - Building institution repositories,
  - Cloud computing,
  - Curating digital video materials,
  - Digitizing collections, and
  - Managing data (as opposed to text-based materials).

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Getting Started Guides

- Built in an open source Drupal content management system to afford interactivity, adaptability, and sustainability.
  - Lesson learned: Drupal is hard to maintain without an in-house Drupal staff member.
- Guides are linked to the resources that we have already started collecting in the Drupal-based Digital Curation Exchange (DCE) website.
  - http://digitalcurationexchange.org/guides

Digital Curation Exchange

Organization of Guides

- Each guide is organized around seven main verbs, which we have borrowed from the work of the Library of Congress's Digital Preservation Outreach and Education (DPOE) initiative:
  - prepare,
  - identify,
  - select,
  - store,
  - protect,
  - manage and
  - provide.

http://digitalcurationexchange.org/gp

Digital Curation Exchange
A space for all things 'digital curation'

▼ ABOUT ▼ GUIDES ▼ EVENTS ▼ JOBS ▼ RESOURCES ▼ PEOPLE

Home » Groups » CDCG » Structure of the Guides

Search

Structure of the Guides

| View | Edit | Outline | Revisions | Track | Convert |

In order to simplify the process of managing and preserving digital collections, we have broken digital curation activities into a set of high-level functions: Prepare, Identify, Select, Get, Store, Protect, Manage, and Provide.

1. Prepare - Preparing for digital curation activities involves having a firm understanding of associated concepts, terminology, challenges, supporting activities, and available resources (including tools). You'll need to have a clear view of the monetary, human, and technological resources you need and what you have available. It can be beneficial to assess needs and resources and to prepare policies for each part of your digital curation workflow.

2. Identify - An important part of managing your digital collections is identifying what you'll be working with. This includes identifying what digital content you have, what you are already preserving, and what content you may be acquiring. You should also characterize the materials for which you're responsible and assess the risks associated with the materials.

3. Select - Selection is determining what subsets of all possible digital information should be kept, how long they should be kept, and where they should be kept. This will often - though not always - involve determination of what materials warrant transfer to a preservation environment (e.g. from the original creation environment and into an a managed repository). As part of this process, you should assess your institutional and departmental mission statements and determine if the content in question fits within your mission. You will also need to determine if the content has value to your institution, if it's feasible to preserve the content, and if you can provide reliable access of the content to your users. Once you have determined what content you will accept and process, document the selection choices you have made

TIBBO
- My account
- > Administer
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GUIDES
- ✔ Getting Started Guides
  - How to use the guides
  - Structure of the Guides ✔
  - Digital Curation Terms

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Digitizing Collections

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Tue, 05/10/2011 - 11:28 — Ayoung

Over the past two decades researchers and information professionals have established numerous best practices for digitization projects. Experts now view digitization as a holistic process that results in digital assets requiring long-term curation. This guides presents key resources to help you transform analog materials into digital objects, covering essential activities from planning to dissemination.

1. Prepare

- What general information should I know before I begin a digitizing initiative?
- Why should I digitize?
- What project management skills do I need?

2. Identify

- What do I need to identify before I start digitizing?

3. Select

- How should I select materials for digitization?
- How should I deal with issues of trust and authenticity?
- What file formats should I use?
- What standards and best practices should I follow?

4. Get

- What digitization workflow is best for my project?
- How do I select equipment for digitization?
- How do I work with a vendor to digitize my materials if it is not feasible for my institution to do it ourselves?

Search

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GUIDES

- Getting Started Guides
- Digital curation activities
  - Acquiring Data from Storage Media
  - Analyzing Costs
  - Archiving Web Sites
  - Building Institutional Repositories (IRs)
  - Cloud Computing
  - Curating Digital Video
  - Digitizing Collections ✔
    - Digitizing - Prepare

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Guide Content

- Under each verb, we provide one or more questions,
  - e.g. "How should I prepare to archive web sites?" and
  - "What do I need to identify in order to archive web sites?"
  - These questions serve as hyperlinks and titles to more detailed pages that summarize main considerations and pointers to existing resources that the user might find helpful.
  - Adding audio and video interviews with experts.

Digitizing - Prepare

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Wed, 10/19/2011 - 08:22 — admin

Preparing for any digital curation activity involves having a firm understanding of all elements involved. You will need to have a clear view of the monetary, human, and technological resources you will need and what you have available. You will also need to have a clear set of goals and objectives and an evaluation methodology so you can assess if you have been successful. It is always a good idea to do formal needs and resource assessments before you begin and to prepare clearly defined policies for each part of your digital curation workflow.

- How do I prepare for a digitization initiative?
- Why should I digitize?
- What project management skills do I need?

Last updated on 03/03/13, 11:04 pm by tibbo

- Digitizing - Planning
- Digitizing - Reasons
- Digitizing - Project Management

‹ Digitizing Collections   up   Digitizing - Planning ›

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GUIDES

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  - Digitizing Collections
    - Digitizing - Prepare ✔

Q. How do I prepare for a digitizing initiative?

There is much to consider when undertaking digitization work of any size but fortunately many successful projects during the past two decades have established best practices and clear workflows. Additionally, national and international organizations have published several data management standards relevant to digitization and the preservation and dissemination of the digital content you produce.

Examples of successful projects and long-term digitization programs range across libraries, archives, and museums; you may find the most compelling arguments for digitization or the most relevant models within your own type of repository, but you may also find it among use cases at other institutions. The fundamental tasks, workflows, and knowledge-base essential to successful digitization and provision of this material to your audiences is constant across all settings. The format of analog materials, however, does require specific knowledge and techniques to accomplish the basic digitization processes.

It is important to note that digitization projects or long-term programs always build on established practices in libraries, archives, and museums. Digitization does not replace other institutional tasks; rather it adds to them and thus requires new funds or a redistribution of existing funds.

Take action

Please note that there is not a strict order to these actions. Many will take place in parallel. Decisions regarding materials selection, workflow, funding, and equipment are often decided in an iterative fashion until the project planning document is finalized and vetted with administrators.

- **Attend conferences, workshops, and courses to learn about digital curation, digital preservation, and digitization.**

  Conferences

- International Digital Curation Conference (IDCC). Various cities in Europe and the US; generally held in winter.

  IDCC brings together those who create and manage data and information, those who use it and those who research and teach about curation processes. Our view of 'data' is a broad one – video games and virtual worlds are of just as much interest as data from laboratory instruments or field observation. Whether the information originates in the arts, humanities, social or experimental sciences the issues faced are cross-disciplinary.

Sources of Guide Structure & Content

- Interviews with curation experts,
- Existing and Emerging Frameworks for Digital Curation Education,
- Digital Curation Lifecycle Models,
- Digital Curation Curriculum (DigCCurr)
  - Matrix of Digital Curation Knowledge and Competencies,
- Digital Preservation Management (DPM) Workshops,
- Digital Preservation Outreach and Education (DPOE) Program, and
- SAA's Digital Archives Specialist (DAS) Certificate Program

Complexity of Training Landscape

- Everyone wants a map – what to take; where to begin.

- Specialization results in extensive complexity and the need for many training resources and thus much cost and confusion.

- Because digital curation involves work across the entire information continuum and around the DCC Digital Curation Lifecycle Model, training cannot simply be aimed at novice, intermediate, or advanced audiences as one might with teaching algebra or a foreign language.

Implications for Education

- Overviews and awareness needed.
- Specialized courses are also needed - because the tasks are diverse, so too must be the training to support these functions.
- Digital curation practitioners need both knowledge and hands-on skills.
- Need to contextualize teaching within the participants' own organizational contexts.
- Course delivery mechanisms must be appropriate and varied.
- Course length and intensity are question areas.
- Getting Started Guides are meant to support a variety of continuing education efforts.

Conclusions

- The CDCG Guides are designed as a starting point for individuals and organizations that have little experience with digital curation but are faced with developing curation practices and programs.
- While not a training program in and of themselves, we are building them to be a logical precursor to attendance at the various training programs available.
- They presently focus on eight scenarios that individuals are likely to face in the workplace. We envision the guides developing over time and serving as both a starting point and reference tool to complement active training programs.
- I will teach a class this fall wherein the students will add to the guides – one method of sustainability.

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Thank you to IMLS, DPOE, Digital Preservation 2013, and you for your attention!