Overview of DigCCurr Matrix of Digital Curation Knowledge and Competencies

IDEA Network Meeting
December 1, 2009
London, UK

Cal Lee, University of North Carolina, Chapel Hill
Big Question:

What knowledge & competencies do professionals need in order to do digital curation work?
Sub-Questions for Educators

• What should they learn in the classroom?
• What should they learn from field experiences while students?
• What should they know before engaging in professional education (pre-requisite knowledge)?
Sources of Data (DigCCurr & DigCCurr II Projects)

• Ongoing review of literature
• Materials from existing courses & workshops (& participating in several)
• Interviews with expert Advisory Board
• Surveys
• Experience in implementing curriculum & structured feedback from students
• Job postings
Question:

So what does I need to know to “do” digital curation?
Answer:

That Depends
“It Depends”

• The most responsible & informed answer to many broad professional questions
• This is the **beginning** & not the end of the professional deliberation process
• Upon **what** specifically does it depend?
What does it depend upon?
Matrix of Digital Curation Knowledge & Competencies

• Iteratively developed, based on data sources just identified

• Tool for thinking about, planning for, identifying & organizing curriculum

• Each unit of curriculum can address one or more dimensions

• Helping to address issue of core vs. specialized (optional) educational elements
Dimensions often Associated with the Way Professionals Identify Themselves

• I’m in acquisitions
• I’m a film archivist
• I’m a corporate librarian
• I’m a social science data librarian
DigCCurr Guiding Principles
Principle 1:

Build on an installed base (development attentive to other initiatives & our existing offerings at UNC)
Principle 2:

Digital curation activities span the entire lifecycle of digital resources (e.g. active engagement with creators & users often even more important than internal repository activities)
Principle 3:

Keep lifecycle stages simple, and move complexity into the functions
Principle 4: Build from modules, rather than entire courses
Principle 5:

Emphasize core, generalizable modules
Principles 5 and 6 support flexibility and reuse (e.g. between SILS graduate curriculum and this 5-day workshop; between DigCCurr and other initiatives)
Matrix Dimensions

For all the grubby details:

http://ils.unc.edu/digccurr/digccurr-matrix.html
1. Mandates, Values & Principles

- First & most fundamental of DigCCurr Matrix dimensions
- Core reasons why the digital curation functions & skills should be carried out
- Should serve as the basis for criteria to evaluate whether digital curation activities have been carried out responsibly & appropriately
- Often made explicit through professional codes of ethics; industry & professional standards; laws & policies; design principles
2. Functions & Skills (More on this Later)
3. Professional, Disciplinary or Institutional/Organizational Context

• Professional Context – e.g. archivist, librarian
• Disciplinary Context – e.g. history, physics
• Institutional/Organizational Context – e.g. state government, academic, corporate
• Cultural Context - "The distinctive ideas, customs, social behaviour, products, or way of life of a particular society, people, or period."
  (OED)
4. Type of Resource

- Level of Aggregation
- Level of Abstraction
- Medium
- Format
- Genre
5. Prerequisite Knowledge

- Instrumentally necessary in order to get other things done – e.g. may not need to build an XML parser, but probably need to know what XML & parsing are
  - Terminology
  - Characteristics of Technologies
6. Transition Point in Life of Digital Object

Diagram:
- Primary Use Environment (Active Use)
- Transfer to Archives (Preservation Environment)
- Archives (Preservation Environment)
- Transfer to Secondary Use Environment
- Secondary Use Environment
- System Design and Planning
- Creation

Arrows indicate transitions and interactions between the stages.
Back to those Digital Curation Functions

• “Know how” rather than “know that”
• Essential (but quite challenging) for educators to address
• 24 high-level functions & 4 meta-functions, most of which are then composed of dozens of sub-functions
High-Level Functions

• Administration
• Advocacy & Outreach
• Analysis & Characterization of Digital Objects/Packages
• Analysis & Evaluation of Producer Information Environment
• Archival Storage
• Common Services
• Collaboration, Coordination, Contracting with External Actors
• Data Management
• Description, Organization & Intellectual Control
• Destruction & Removal
• Identifying, Locating & Harvesting

• Ingest
• Management
• Preservation Planning & Implementation
• Production
• Purchasing & Managing Licenses
• Reference & User Support
• Selection, Appraisal & Disposition
• Systems engineering & development
• Transfer
• Transformation of Digital Objects/Packages
• Use, Reuse & Adding Value to Accessed Information
• Validation & Quality Control of Digital Objects/Packages
Meta-Level Functions

- Analysis & Documentation of Curation Functions
- Education & Sharing of Expertise or Guidance on Curation Functions
- Evaluation & Audit of Curation Functions
- Research & Development to Support Curation Functions
What parts of the DigCCurr Matrix...

• are you currently addressing in educational offerings?
• are the least/most adequately addressed by current educational offerings?
• should be the highest priorities for future development of educational offerings?