

# What do Job Postings Indicate about Digital Curation Competencies?

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# Professional Evolution

- Advances in management, preservation & dissemination of digital resources
- Many streams of activity (e.g. computer science, archivists, records managers, librarians, data engineers, museum curators, MIS staff)
- Increasing recognition of common challenges & opportunities
- Recent adoption of term “digital curation” – reflects increasing confluence of previously distinct communities

# Digital Curation

“The active management and preservation of digital resources...for current and future generations of users.”\*

\*Digital Curation Centre. “What is Digital Curation?” <http://www.dcc.ac.uk/about/what/>

## Big Question:

What knowledge & competencies do professionals need in order to do digital curation work?

# DigCCurr Project

- Funded by Institute for Museum & Library Services (IMLS)
- Developing curricular framework, educational materials & professional field experiences to prepare students to work in emerging arena of digital curation
- Organization & hosting of 2 conferences – second (DigCCurr2009) on April 1-3, 2008 in Chapel Hill
- Funding 5 masters students as Fellows, who work on digital curation initiatives at UNC-CH

# They love them so much...

- ITS funding two additional Fellows & Odum Institute funding one additional Fellow this year
- Great sign of benefit to partners -- willing to pay for more!

# DigCCurr2

- Also funded by IMLS (4 years), starting this fall
- Focus on:
  - Doctoral-level education & research
  - Summer continuing education workshops – first in June 2009
- Funding for doctoral student Fellows – we'd love to hear about promising candidates for Fall 2009!

# Sub-Questions

- 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

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

# 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

# Elaboration of Digital Curation Functions

- Main focus of matrix development & fundamental to curriculum development
- “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

# Curriculum Development at SILS

- Identifying relevant current offerings & major gaps in offerings at SILS
- Developing modules on specific topics – first modules to be released this academic year
- Developing whole new classes
  - Introductory seminar for Fellows
  - Special topics seminar with many guest speakers (source of modules)
  - Understanding Information Technology for Managing Digital Collections (this semester)
  - Future coursework on building preservation environments

# Collection & Analysis of Job Postings

- Identified 19 professional mailing lists likely to have relevant postings
- Queries:
  - “digital preservation” OR “digital curation” OR “digital collection” OR “digital archive” OR “digital repository” OR “data curation” OR “institutional repository” AND
  - job OR position OR vacancy
- Actually collected posting from only 9 lists, due to interfaces not supporting batch search/capture

<b>Mailing List</b>	<b>Job Posting Count</b>
Archives & Archivists (up to 2006)	206
DIGITAL-PRESERVATION	28
ERECS-L	9
Idealist.org	20
JESSE	3
JISC Repositories Discussion	13
Monster.com	20
Oss4lib	2
RECMGMT-L	2
<b>Total Unique Postings</b>	<b>304</b>



# Coding of Job Postings

- Download & inventory by Jacob Kramer-Duffield
- Imported into NVIVO & coded – using matrix as main source of tree nodes (heavy lifting by Amber Cushing)
- Analysis still underway

# Initial Results

# Variety of Job Titles

Term appearing in Job Titles	Number of Job Titles including Term
archivist	78
librarian	44
manager	33
assistant	25
specialist	21
head	17
director	16
curator	10
coordinator	8
developer	7
analyst	7
administrator	4
architect	4
engineer	3

# Exploring Bottom-Up Analysis

- Many of the matrix nodes do appear
- Given large number of coding categories from matrix, running simple statistical tests not very useful
- Need to further investigate patterns (great suggestion from Paul Conway to use software to visualize semantic patterns)

# Questions for Discussion

- Are requirements stated in job postings a valid indicator of actual market **needs**?
- How best to **sample** for job postings (e.g. where to look, what terms to use)?
- What **other data/methods** would help us to answer the question of what digital curation professionals need to know?