Development of Education Programs in iSchools

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IDCC
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• **Workforce trends** identified in Larsen’s analysis

• **Challenges and gaps for educational programs** identified in 2010 Research Data Workforce Summit

  • In relation to placement data on graduates with Specialization in Data Curation

• **Challenges & Opportunities** from Symposium on Digital Curation in the Era of Big Data
Current positions

Positions that (probably) didn’t exist 5 years ago
- Data Management Consultant
- Data Science & Informatics Librarian
- Data Curator
- Assistant Dean, Digital Humanities Research

Non- or Less traditional (for our students)
- Research Scientist
- GIS Specialist
- Director of Archive Technology
- Data Analyst
- Digital Asset Manager
- Information Architect
- Information Systems Associate
- Digital Project Coordinator
- Media Content Specialist

Note: first data services librarian placed in 2002

Librarians
- Research Data Librarian
- Data Librarian
- Digital Curation Librarian
- Digital Preservation Librarian
- Archivist and Digital Librarian
Placements, data responsibilities

Half in academic / half in corporate, data & research centers, government…

<table>
<thead>
<tr>
<th>Salary</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000 and over</td>
<td>4.8</td>
</tr>
<tr>
<td>$80,000-89,999</td>
<td>4.8</td>
</tr>
<tr>
<td>$70,000-79,999</td>
<td>14.3</td>
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<tr>
<td>$60,000-69,999</td>
<td>14.3</td>
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<td>$50,000-59,999</td>
<td>42.9</td>
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<tr>
<td>$40,000-49,999</td>
<td>9.5</td>
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<tr>
<td>$30,000-39,999</td>
<td>9.5</td>
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</tbody>
</table>
Report from the
Research Data Workforce Summit

Sponsored by the Data Conservancy

6 December 2010
Chicago, IL

Summit coordinated by:

Carole L. Palmer & Melissa H. Cragin
Center for Informatics Research in Science & Scholarship
Graduate School of Library and Information Science
University of Illinois at Urbana-Champaign

Bryan Heidorn
School of Information Resources and Library Science
University of Arizona
Summit aims; challenges identified

- Immediate and near term workforce needs for scientific organizations
- Gaps in current education programs
- How to keep curriculum current with state-of-the-art

- Student recruitment
- Involvement of practicing experts in formal education
  - internships and field experiences for students
- Documentation of emerging best practices
- Clarification of roles in data curation, data management, & data science
- Substantive curriculum revision for contemporary programming and processing
- Transitioning programs toward continuing professional education
- Coordination within programs among domain sciences, information science, and computer science

Summit report: http://hdl.handle.net/2142/25830
Graduates experiences and recommendations

<table>
<thead>
<tr>
<th>Strongest areas of preparation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metadata and documentation</td>
<td>74</td>
</tr>
<tr>
<td>Digital preservation</td>
<td>61</td>
</tr>
<tr>
<td>Modeling and ontologies</td>
<td>57</td>
</tr>
<tr>
<td>Data management</td>
<td>52</td>
</tr>
</tbody>
</table>

**Greatest challenges in current position**

- Keeping up-to-date with data formats, standards, and best practices
- Ongoing professional development
- Collaborating and coordinating across domain communities
- Clarifying roles in the range of data work

**Recommend further emphasis in**

- computer programming
- change management
- hands-on classroom work
- domain science processes
- engagement with scientific communities and data producers
Symposium on Digital Curation in the Era of Big Data

Data Scientist perspective - Vicki Lynn Ferrini, Lamont-Doherty Earth Observatory

Spanning the continuum

Scientific Data Center perspective –

Margarita Conkright Gregg
U.S. National Oceanographic Data Center

http://sites.nationalacademies.org/PGA/brdi/PGA_070217
Over to our responders

David DeRoure

Liz Lyon