Innovative iSchool Graduates for 21st Century Research Libraries

Elizabeth D. Liddy, Dean
School of Information Studies
SYRACUSE UNIVERSITY

liddy@syr.edu
@lizliddy

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60 Second History

1988
Move to organizing started with ‘The Gang of 3’
Deans from Drexel, Pitt & Syracuse

2005
iSchool Caucus officially founded
10 member iSchools
(former ‘Gang of 10’)
Mission – To advance the information field in the
21st Century

2012
38 iSchools, in 11 countries,
on 4 continents
Expanding Presence of the iSchools
iSchools

- UC, Berkeley
- UC, Irvine
- UCLA
- Carnegie Mellon
- Drexel
- Florida State
- Georgia Tech
- Humboldt University, Berlin
- Illinois, Urbana-Champaign
- Indiana
- Maryland
- Michigan
- North Carolina, Chapel Hill
- Penn State
- Pittsburgh
- Royal School of Library & Information Science, Denmark
- Rutgers
- Singapore Management University
- Syracuse
- UT – Austin
- Toronto
- Washington, Seattle
- Wuhan, China
- British Columbia
- University College – Dublin
- Glasgow
- Kentucky
- University College – London
- Maryland, Baltimore
- Melbourne, Australia
- Nanjing, China
- UNT
- Sheffield
- Tampere, Finland
- Wisconsin-Milwaukee
- South Australia
- Tsukuba, Japan
Commonality & Variety Of iSchool Names

- Communications & Information Studies
- Computing
- Education & Information Studies
- Humanities, Advanced Technology & Information
- Informatics & Computing
- Informatics & Computer Sciences
- Information
- Information & Library Science
- Information & Library Studies
- Information Management
- Information Science & Technology
- Information Sciences
- Information Studies
- Information Systems
- Information Systems & Management
- Library, Archival & Information Studies
iSchool Programs

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Profile of the iSchools

Community

People

Information

Technology

Domain Expertise
Masters Degrees

To Expand Human Capabilities through Information

Innovative iSchool Graduates for 21st Century Research Libraries
Data Science Librarian

Library Skills + Data Science = Data Science Librarian
Stages of the Data Life Cycle

Collection ➔ Management ➔ Analytics ➔ Presentation Visualization ➔ Archiving Preservation
Data Science CAS Courses

Data Management & Storage
- Technologies for Web Content Management
- Foundations of Digital Data
- Creating, Managing, and Preserving Digital Assets
- Metadata
- Data Warehousing
- Advanced Database Management

Data Analytics
- Data Mining
- Basics of Information Retrieval Systems
- Natural Language Processing
- Advanced Information Analytics
- Research Methods in Information Science and Technology
- Statistical Methods in Information Science and Technology

Data Visualization
- Information Architecture for Internet Services
- Information Design
- Information Visualization

General Systems Management
- Enterprise Technologies
- Managing Information Systems Projects
- Information Systems Analysis
Positions of MLIS + Data Science Graduates

- Science Research Support Librarian
  - Center for Science & Social Science Information, Yale University Library
- Digital Curation Librarian
  - University of California, Merced Library
- Metadata Librarian
  - Hamilton College Library
- Data Coordinator
  - Axiom Consulting & Design
- Data, Network & Translational Research Librarian
  - University of Wisconsin, Madison Ebling Health Sciences Library
Role of the Data Science Librarian
Research Data Repository & Services

- Data management planning services for faculty researchers
  - Tailored for standards in specific fields & specific funder requirements
- Metadata assignment
- Best practices for ensuring data's integrity & security
- Consultative support on analytic & data visualization software tools
- Evaluation of data sharing options
- Archiving of research data through a jointly-managed repository
- Web-based sharing
Qualitative Research Data
Survey of Qualitative Researchers’ Data Needs

- 115 qualitative researchers
- Data types:
  - Documents, newspaper articles, notes & transcripts of interviews, focus groups, oral histories, participant observations, ethnographic studies
- 64% of researchers rarely / never shared their data with other scholars ---
- But if a dedicated repository for qualitative data, as well as guidance & training in data preparation, analysis, & management had been –
  - They would have!
Benefits to Library in a Data Science Role

- Advance research by building on data produced by other researchers
- Avoid redundant data collection
- Provide ability to replicate and/or make comparisons
- Make your university user community more productive
- Support use of data from a repository for teaching
  - 82% of responders said they would
- Serve as a means for finding new research partnerships
- Embed the library in the core missions of the university
- Be included as a cost item in researchers’ proposals
Vision of the Academic Research Library’s Role

- A key partner in the academic enterprise, the library can be a leader in the innovative application of information technology to meet the needs of the university’s researchers.

- The iSchools are working to educate professionals to work within Academic Research Libraries to achieve this vision.