

## **How Should We Teach Metadata? What Comparisons Between Job Ad and Classroom Trends Can Tell Us About Preparing LIS Students**

Deborah Maron  
University of North Carolina  
Chapel Hill, USA  
maron@ad.unc.edu

Jacob Hill  
University of North Carolina  
Chapel Hill, USA  
jacobhill.mail@gmail.com

**Keywords:** metadata; education; pedagogy; job ads; information organization; Linked Data; cataloguing; content analysis; AUTOCAT

### **1. Context**

Metadata is the cornerstone of Galleries, Libraries, Archives and Museums (GLAM) and Digital Humanities (DH) enterprises, and is a fundamental aspect of data management discourse. Information professionals with metadata knowledge are situated as central players in such environments, while those workers lacking such expertise are typically encouraged to acquire it. Metadata literacy, a term defined by Erik Mitchell and used by other scholars, is thus essential for current and nascent information professionals alike (Mitchell 2009).

### **2. The Problem**

Studies detailing the cataloguing and metadata skills required in jobs exist in the literature (Ataman, 2009; Boydston & Leysen, 2014; Chapman, 2007; Hall-Ellis, 2006; Han & Hswe, 2010; Hider, 2006; Millner, 2009; Park & Lu Caimei, 2009; Park, Lu Caimei, & Marion, 2009; Riemer, 2009; Sun Li, 2008; Veve & Feltner-Richert, 2010; Zhu Lihong, 2008). However, the authors hypothesize that the types of knowledge and skills specified in metadata job ads have shifted in the last ~4 years, and yet, there has been no well-publicized content analysis detailing these changes. This lack of research leaves professors of information organization and metadata without a standard for prioritizing the many subjects they could potentially teach in their courses. They are left wondering whether the content they have chosen will adequately prepare their students for the job market.

### **3. The Study and Anticipated Significance of Findings**

In an effort to identify emerging trends in metadata employment and potential deficits in metadata education, the authors extend a study originated by Marcia Zeng, using identical sampling and methodology. Within Zeng's study, a content analysis was performed on five years of AUTOCAT job ads (2007-2012) which were collected manually from the archives and segmented into Excel spreadsheets according to classification (title, skills required, skills desired, etc.). AUTOCAT is a listserv dedicated to issues related to metadata, cataloguing and classification. Because of AUTOCAT's specialization, employers regularly post job ads seeking LIS professionals with the aforementioned skills. Zeng analyzed trends regarding vocabularies, the presence (or absence) of MARC, various metadata standards, Linked Data, programming language requirements and more. Since this is a continuation of an earlier study, it was necessary to limit our data to the AUTOCAT list for the sake of continuity. The authors considered including other sources such as LinkedIn and CODE4LIB but concluded that because these sources are directed at different audiences they were unsuitable for their purposes. The authors are now recording AUTOCAT job competency requirements from October 2012-April 2015. The trends from the cumulative period of 2007-2015 will then be analyzed and the results visually summarized in the accompanying poster.

Upon completion of this initial survey, a follow-up study analyzing terms gleaned from the knowledge organization-related syllabi of LIS programs shall determine if educational trends match hiring trends. The authors argue that the findings will be significant for instructors attempting to align their instruction with needs in the job market, and will complement recent studies on information organization courses and professional development in the classroom (Bibbo & d' Erizans, 2013; Joudrey & McGinnis, 2014). Finally, findings will be significant to the authors of this study as they further develop their own knowledge organization syllabi and digital tools for metadata pedagogy. The authors acknowledge that conducting similar work in other fields would aid their interpretation of this data; however, an extended study it is beyond the scope of this current work. The intention is to illuminate metadata needs for GLAM and DH only at this time.

## Acknowledgements

The authors would like to thank Marcia Zeng for her assistance and permission to update her study. They would also like to sincerely thank Adrian Ogletree and Jane Greenberg of Drexel University's Metadata Research Center for their support in presenting the accompanying poster at DCMI 2015.

## References

- Ataman, B. K. (2009). Requirements for information professionals in a digital environment: some thoughts. *Program: Electronic Library & Information Systems*, 43(2), 215–228. <http://doi.org/10.1108/00330330910954415>
- Bibbo, T., tamatha\_bibbo@asl.org, & d' Erizans, R., roberto\_derizans@asl.org. (2013, December 11). The Future of the Librarian as a Metadata Specialist. *Library Media Connection*, 32(3), 26–28.
- Boydston, J. M. K. ., jboydsto@iastate.edu, & Leysen, J. M. . (2014). ARL Cataloger Librarian Roles and Responsibilities Now and In the Future. *Cataloging & Classification Quarterly*, 52(2), 229–250. <http://doi.org/10.1080/01639374.2013.859199>
- Chapman, J. W. (2007). The Roles of the Metadata Librarian in a Research Library. *Library Resources & Technical Services*, 51(4), 279–285.
- Hall-Ellis, S. D. (2006). Cataloging Electronic Resources and Metadata: Employers' Expectations as Reflected in American Libraries and AutoCAT, 2000-2005. *Journal of Education for Library & Information Science*, 47(1), 38–51. <http://doi.org/10.2307/40324336>
- Han, M.-J., & Hswe, P. (2010). The Evolving Role of the Metadata Librarian: Competencies Found in Job Descriptions. *Library Resources & Technical Services*, 54(3), 129–141.
- Hider, P. (2006). A Survey of Continuing Professional Development Activities and Attitudes Amongst Catalogers. *Cataloging & Classification Quarterly*, 42(2), 35–58. [http://doi.org/10.1300/J104v42n02\\_04](http://doi.org/10.1300/J104v42n02_04)
- Joudrey, D. N., & McGinnis, R. (2014). Graduate Education for Information Organization, Cataloging, and Metadata. *Cataloging & Classification Quarterly*, 52(5), 506–550. <http://doi.org/10.1080/01639374.2014.911236>
- Millner, M. (2009). *A Content Analysis of Job Descriptions for the Position of Metadata Librarian at Eleven American Universities*.
- Mitchell, E., (2009). *Metadata literacy [electronic resource] : an analysis of metadata awareness in college students*. University of North Carolina at Chapel Hill, Chapel Hill, N.C.
- Park, J., & Lu Caimei. (2009). Metadata Professionals: Roles and Competencies as Reflected in Job Announcements, 2003-2006. *Cataloging & Classification Quarterly*, 47(2), 145–160. <http://doi.org/10.1080/01639370802575575>
- Park, J., Lu Caimei, & Marion, L. (2009). Cataloging Professionals in the Digital Environment: A Content Analysis of Job Descriptions. *Journal of the American Society for Information Science & Technology*, 60(4), 844–857. <http://doi.org/10.1002/asi.21007>
- Riemer, J. J. (2009, February 1). Copy Cataloging as a Catalyst for New Metadata Roles in Cataloging Units. *Technicalities*, 29(4), 1–11.
- Sun Li. (2008). A metadata manager's role in collaborative projects: The Rutgers University Libraries experience. *Electronic Library*, 26(6), 777–789. <http://doi.org/10.1108/02640470810921574>

- Veve, M., & Feltner-Richert, M. (2010). Integrating Non-MARC Metadata Duties into the Workflow of Traditional Catalogers: A Survey of Trends and Perceptions among Catalogers in Four Discussion Lists. *Technical Services Quarterly*, 27(2), 194–213. <http://doi.org/10.1080/07317130903585477>
- Zeng, M. (2014-2015). Personal correspondence.
- Zhu Lihong. (2008). Head of Cataloging Positions in Academic Libraries: An Analysis of Job Advertisements. *Technical Services Quarterly*, 25(4), 49–70. <http://doi.org/10.1080/07317130802128072>