

Training with Technology

*How Information Technology Enhanced the RDA Training Experience
at the University of Pittsburgh*

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To prepare for the nationwide adoption of the new Resource Description and Access (RDA) cataloging rules, the task was taken at the University Library System of the University of Pittsburgh to provide RDA training to librarians and staff with cataloging duties. This article discusses the trainers' experience, particularly in regards to the role information technology played in the training. It also recounts the experience of teaching a library school RDA class that included both in-person and online participants. Throughout these training and teaching opportunities, facilitating online participation and creating a website for training documentation put into focus the importance of technical support and ensuring long-term access to online materials. While using information technology to teach and train has become commonplace to the point of necessity, it is important not to lose sight of the objectives of education that precede the latest technological innovations.¹

Introduction

The adoption of Resource Description and Access (RDA) cataloging rules afforded many new teaching and training opportunities for catalogers at the University of Pittsburgh. RDA is the successor to the *Anglo-American Cataloging Rules, 2nd edition (AACR2)* (2002-2005) and is the first cataloging standard designed for use in online environments by libraries. In many ways, it represents a move away from the "book-centrism" of prior cataloging standards, acknowledging the growing prevalence of electronic resources in libraries. As such, it is fitting that RDA

teaching and training would make extensive use of technology. A combination of in-person instruction and online tools were used in a wide array of RDA teaching and training experiences at the University of Pittsburgh, which included training and information sessions for librarians and staff of the University Library System (ULS), as well as teaching in the University of Pittsburgh's School of Information Sciences (SIS).

With the approach of the first day of nationwide RDA implementation on March 31, 2013, also known as "RDA Day One," it was important for ULS catalogers to be sufficiently trained in advance. In the fall of 2012, the cataloging librarians from the ULS Cataloging Management Unit (CMU) taught themselves the workings of the new standard using online training materials available from the Library of Congress, including RDA Name Authority Cooperative Program (NACO) training modules. After becoming sufficiently familiar with RDA, two of the Cataloging Management Unit librarians, Faye Leibowitz and Brenda Salem, were asked to coordinate RDA training for ULS staff, which was scheduled for early 2013. The training included the option of participating remotely via web-conferencing software. All training documentation to be accessed by the trainees was uploaded to a dedicated website. After the staff training sessions, the rest of the CMU catalogers served as mentors for the ULS cataloging staff.

Literature Review

A two-part article by Janet Swan Hill (2004a; 2004b) on the historical trends in cataloging education in library schools and on-the-job training gives a good general overview of how technology has affected the way cataloging education is being delivered. Swan Hill (2004b) states that on-the-job cataloging training is often carried out by having experienced and skilled catalogers in the institution create training sessions for staff, but it is good to incorporate external training resources as well. She lists as a positive trend the increase of external education resources from professional associations and library organizations, such as the Association for Library Collections and Technical Services (ALCTS), the Library of Congress, the Program for Cooperative Cataloging, and regional consortia. At the time that the article was written, online offerings by these organizations were still on their way to becoming common, but Swan felt that having these resources online would make them more accessible and cost-effective. She adds that cataloging education includes giving librarians who are not catalogers an understanding of new cataloging developments.

The use of technology, particularly online tools, has become an increasingly large component of coursework in library schools and training sessions for library staff (Swan Hill, 2004a; 2004b). To take advantages of both online and in-person training, many institutions are taking a "blended learning" approach to library education and training (Staley et al., 2007). According to the *Blended Learning Guide*, a comprehensive guide on incorporating technology in library staff training, blended learning can be defined as the use of both online and in-person methods of learning. It can also be defined as the use of different online methods of learning (Staley et al., 2007). At the Ohio State University Libraries' Cataloging Department, training for cataloging student workers and paraprofessional staff took a deliberately blended approach (Chen, 2008). Apart from the self-paced online tutorials that the trainees completed through e-learning courseware, there were face-to-face sessions with supervisors or trainers. Chen, in discussing the project, stresses that the use of technology in training is not meant to replace face-to-face and one-on-one instruction, stating, "Face-to-face or one-on-one instructions, on the other hand, are still indispensable for more complicated assignments, and especially in the extended training/practice period and later ongoing supervision of the cataloging workflow" (2008, p. 232).

Morag Boyd (2012), in discussing how to take a learner-centered approach in online cataloging education, describes the various formats of online instruction (synchronous/asynchronous, one-time/over time) and talks of how a course or training session can be designed to include a combination of these formats. Boyd also enumerates the

various modes of online instruction (tutorials, webinars, and courses) and for what kinds of cataloging training situations they might work best. Moreover, Boyd talks of the importance of delivering content using a variety of media and tools to carry out learning objectives. The software used to deliver this content—such as course management, web-conferencing, or video capture software—may determine how the course is designed. When determining learning objectives and course design, it is also important to consider the participants' needs, learning styles, and prior knowledge of the subject being taught.

Focusing on heads of cataloging departments preparing for RDA, Hitchens and Symons (2009) outlined the ways that catalogers can self-train in order to be able to train staff in their departments to use RDA, if it were to be adopted nationwide. The recommendations included what content to cover and which modes of online delivery to use. In a follow-up to Hitchens and Symon's article, Sanner (2012) describes a survey given to heads of cataloging from 38 Association of Research Libraries (ARL) member institutions, asking them about the forms of RDA training they had taken, what they found useful, and what kind of training, in turn, they had given or were planning to give to their staff. In the results, it was found that the webinar² was the most common format heads of departments had used. The results also found the webinar to be the most helpful for learning about RDA (Sanner, 2012). In turn, the majority of cataloging department heads indicated that they have trained their department staff in RDA through in-house group training sessions. In discussing the survey results, Sanner notes that some of the department heads did not plan to train their staff themselves, instead having other already-trained catalogers in their department or outside their institution carry out the training. She concludes that many institutions have followed the recommendations of Hitchens and Symons.

Many of the articles in the literature that specifically discuss online cataloging training, or even RDA training, only make passing references to the use of web-conferencing software, but some, such as Bross and Beck (2010; 2011), go into detail about their experiences using this mode of technology, listing their advantages and disadvantages. Other articles that do discuss the use of web-conferencing software at length are not specifically geared towards cataloging training but are nonetheless helpful in comparing the specific features found in the different brands of software. They also reveal the technical issues that come with web-conferencing software and list the recommendations for overcoming these issues and adapting to online training. Prior and Salter (2011) talk about the use of Elluminate Live at the University of Bath (UK) in various ways that included coursework and group work in professional development programs. Barnhart and Stanfield (2011) discuss their experience providing library instruction to distance learning students at the University of West Georgia using WIMBA web-conferencing software.

NACO Training at Pitt

During their own RDA self-training in the fall of 2012, the ULS CMU cataloging librarians had an opportunity to participate online, both asynchronously and synchronously, in Name Authority Cooperative Program (NACO) training to contribute new name authority records, following RDA rules, to the Library of Congress authority file. Participants were required to view a series of video modules as an introduction to the new rules and theoretical concepts. There were nine modules, some with multiple parts; many were accompanied by slides, quizzes, etc. The collective duration of the video modules was over four and one-half hours.³

After completing the modules, the participants were required to participate in two live webinars given by the Library of Congress. The webinars involved several institutions simultaneously, with not only the ULS catalogers participating but also a host of catalogers from other institutions. Synchronous online participation was enabled through the iCohere platform,⁴ which works best in a presentation format (P. Frank, personal communication, September 20, 2012). The online setting allowed trainees to participate from the comforts of their own offices. All

participants were able to view what was being presented through the trainers' desktops, and instant messaging technology allowed participants to ask and answer questions and otherwise chat in real-time.

This differs greatly from previous models of NACO training. While past NACO training required attending multiple day-long sessions in person, RDA NACO training was entirely online, and this new paradigm offered greater flexibility for both trainers and trainees. Using webinars allowed participants to watch the video modules on their own schedules, letting them set their own pace to avoid fatigue and information overload. While in the old model, trainees probably benefited from real-life interaction with the trainers, the instant message chat technology was an acceptable substitute for in-person interaction. Overall, this new model of NACO training was considered successful by participants and granted appropriate levels of preparation in proceeding with authority work.

RDA Training for Staff

Preparing ULS staff to work comfortably and efficiently in RDA required trainers to make decisions about the information to be included in the training program. The concept of teaching, as in library school, implies a need for comprehensive coverage of theoretical and practical aspects of a topic with assessment through examinations and written essays. In contrast, the concept of training prioritizes a degree of instruction adequate to enable employees of an institution to meet current work environment standards, with assessment taking place through a job performance evaluation. ULS RDA training was an example of the latter, as the achievement of comprehensive RDA knowledge was not a practical objective for these sessions.

When incorporating information technology into the ULS RDA training sessions, two factors were taken into consideration. First of all, the physical location of the participants is spread out among several branch libraries both in and outside of Pittsburgh. Therefore, the option of remote participation through the use of conferencing software was deemed very important. The second thing to consider was that the training and the amount of information needed to become familiar with RDA would not be the same for everyone and depended on each person's job duties and past cataloging experience. However, the complexity of the RDA cataloging rules would make RDA training an ongoing commitment for both the cataloging librarians and the cataloging staff. Even with prior familiarity with the MARC format and prior cataloging experience, cataloging in RDA is something that cannot be taught in one session and requires much practice to simply become familiar with it. Therefore, a central online location for documentation that all participants could access regardless of physical location was considered very important for both the training sessions and for ongoing support in mastering RDA over time.

The RDA training sessions for staff took place during February and March of 2013. Two levels of RDA training were offered: one for catalogers and another for non-cataloging staff with responsibilities related to maintenance of bibliographic records. Furthermore, all sessions needed to be blended, that is, to be offered not only in an appropriate physical meeting space but also online. This model required the trainers to be flexible and respectful of various learning styles among trainees. Furthermore, the necessity of offering options for online learning required that resources, including presentations, examples, and reference sources, be made available electronically and that trainers be constantly mindful of the needs of both classroom and remote participants being trained simultaneously.

This dual training method presented other challenges to the trainers as well. The classroom setting allows trainers to feed off of visual cues from their trainees but with online training, one cannot be sure how well remote participants are receiving information. It would take much for communication to break down in an in-person classroom situation. However, technical difficulties can easily prevent remote participation or recording from taking place. Bad quality of sound transmission may prevent participants from being able to clearly understand what is being said and if online connectivity fails, those who are not physically at the training site will not be able to

participate at all. Barnhart and Stanfield (2011), on top of problems with the transmission of audio in WIMBA, cite the lack of nonverbal feedback from students, inherent in in-person teaching, as problematic in online instruction. Of the specific software issues that come with the use of Elluminate, Prior and Salter (2011) talk of problems with the transmission of sound, the lack of compatibility with certain web browsers, and the complex user interface that may be overwhelming to a person that is not technically savvy. On the other hand, online training can actually be beneficial for students who are shyer and reluctant to participate in an environment where they are surrounded by peers.

Because of the ease of commuting to the off-campus training site from the main campus and due to the importance of these hands-on sessions, most participants attended in person. However, the trainers did their best to accommodate remote participants by scanning portions of a book being cataloged as an exercise, by fielding questions from remote participants, and by sharing electronic documentation. In this case, while technology certainly enhanced the training in many ways, both trainers and trainees would have been hard-pressed to rely on it as a complete substitute for the traditional classroom training experience. However, the ULS RDA Training Site,⁵ a Google Sites application functioning as an information portal and a collocation of the training presentations, has proven to be a valuable resource during the time of transition to RDA.

ULS RDA Training Site

Many institutions have created a central online location for documentation of the various aspects of RDA training. These include links to outside resources on RDA, a place for discussion (such as a forum), and locally created documentation (such as examples used in the training sessions). Some institutions use free online services that allow the creation of wikis, blogs, and websites. In Nebraska, Casey Kralik, the Chair of the Technical Services Round Table (TSRT) of the Nebraska Library Association, created a statewide practice group in order to help libraries in Nebraska learn RDA and prepare for Day One. To do so, catalogers from all over the state had in-person monthly meetings and used a PB Works-created wiki⁶ as a virtual location for documentation relating to the group's training. It was also used for discussion and was open to those who could not attend the in-person meetings (Gardner & Bernstein, 2012). Others, such as staff at the University of California, San Diego (2013), and Penn State (2013), created a webpage or a set of webpages related to RDA training that were incorporated into their respective library's main website. Some of these webpages are meant for self-paced training, some are meant to complement in-person training, and some can be used as both. The Library of Congress created a website⁷ with training materials that other institutions have been able to incorporate in their learning and preparation for RDA, either as a way for catalogers to train themselves or as a complementary resource to local training. Hitchens and Symons (2009) recommend the creation of workflows in the RDA Toolkit for the self-training of cataloging librarians and for training other catalogers or students, in the case of LIS programs.

While in the ULS there already exists a "Behind the Scenes" Microsoft SharePoint site for staff to post and share documents and other information, the trainers felt that the site did not have the flexibility needed to design and create an online space suitable for trainees. The trainers also felt that a ULS site for RDA training documentation did not have to be restricted to ULS users. They wanted to organize the training resources and documentation with the ULS participants in mind, but they were open to the information being accessible to people beyond the ULS. In addition, the trainers wanted to be able to easily create an anonymous evaluation form in order to give participants a chance to give honest, constructive feedback. Therefore, the trainers decided to create a new space for training documentation.

Using, however, a complex content management system like Drupal or Wordpress to create a website would have been beyond the abilities and time constraints of the trainers. On the other hand, a website hosting

service such as Google Sites⁸ allows anyone to create simple websites without the knowledge of HTML (Google Sites Overview, 2011). Taking advantage of the features and functionality of Google Sites, website creators have the ability to easily upload files and customize their sites with calendars or polls. Uploading documents to the site or making modifications requires that the creators sign in to Google, but anyone can view the site and download documents without the need to sign in. Creating a training site using Google Sites was deemed the best choice for the needs of the trainers and participants because of its features and ease of use.

The ULS RDA Training Site was created with the help of Lisa Sisco, a student assistant who at the time was a library and information science graduate student in the University of Pittsburgh's School of Information Sciences. The site was divided into five major sections that covered the different aspects of RDA (see Figure 1). Many institutions nationwide were preparing for RDA Day One, so the trainers took advantage of the many excellent RDA training resources available online, such as those from the Library of Congress that had been used by the cataloging librarians for self-training. Links to these resources were posted to the site, as was local documentation created by the trainers. Trainer-created documentation included Word documents as well as PDFs of the PowerPoint presentations used in the sessions. Parts of a book and a spoken-word compact disc were digitized, and the images were converted to PDF for copy catalogers to use as examples for cataloging exercises. Other PDFs included scans of MARC records that had been used as examples in the training presentations. For those who do not catalog but work with MARC records, the site also features the "RDA in MARC" section that gives information on identifying RDA elements in MARC records.



Figure 1

The ULS RDA Training site, which focuses on five different aspects of RDA, is available to both ULS and non-ULS users

For the website to be useful, it was important to make participants aware of the site throughout the training. Before each training session, an e-mail was sent out to the participants with a link to the ULS RDA Training Site and directions on how to download or print examples and documentation in preparation for class. During the sessions, the trainers directed participants to the website and showed them the resources within the site that would be available to them. Participants could view these and other resources during class.

Using Web-Conferencing Technology

Remote participation for the RDA staff training was enabled through the use of WebEx, a web-based, online conferencing software that allows for sharing audio, video, and desktop programs. A meeting must be created on the web-based interface (see Figure 2) ahead of time and the link to it is sent to the participants. In order to hear the audio, participants can either call a number to listen in on the meeting through a telephone, or they can listen to the meeting audio on a computer using headphones or a headset with a microphone. There is also the option of recording WebEx sessions. While WebEx was at first mostly used at the ULS among faculty and staff for meetings and presentations, its value as a training tool became increasingly recognized. Several meetings had already been created at the ULS for Public Services staff training but our RDA training sessions marked the first time WebEx was used for Technical Services staff training. WebEx was already licensed and supported by the University of Pittsburgh, so it was the natural choice for allowing remote participation in the staff training sessions. The choice was also made to record all of our sessions so participants, including staff unable to attend the original sessions, would be able to review them at a later time. Recording the sessions would allow for asynchronous participation and, if deemed important, a historical record of the training. Having recordings can also serve as reference for the trainer to help plan future sessions.

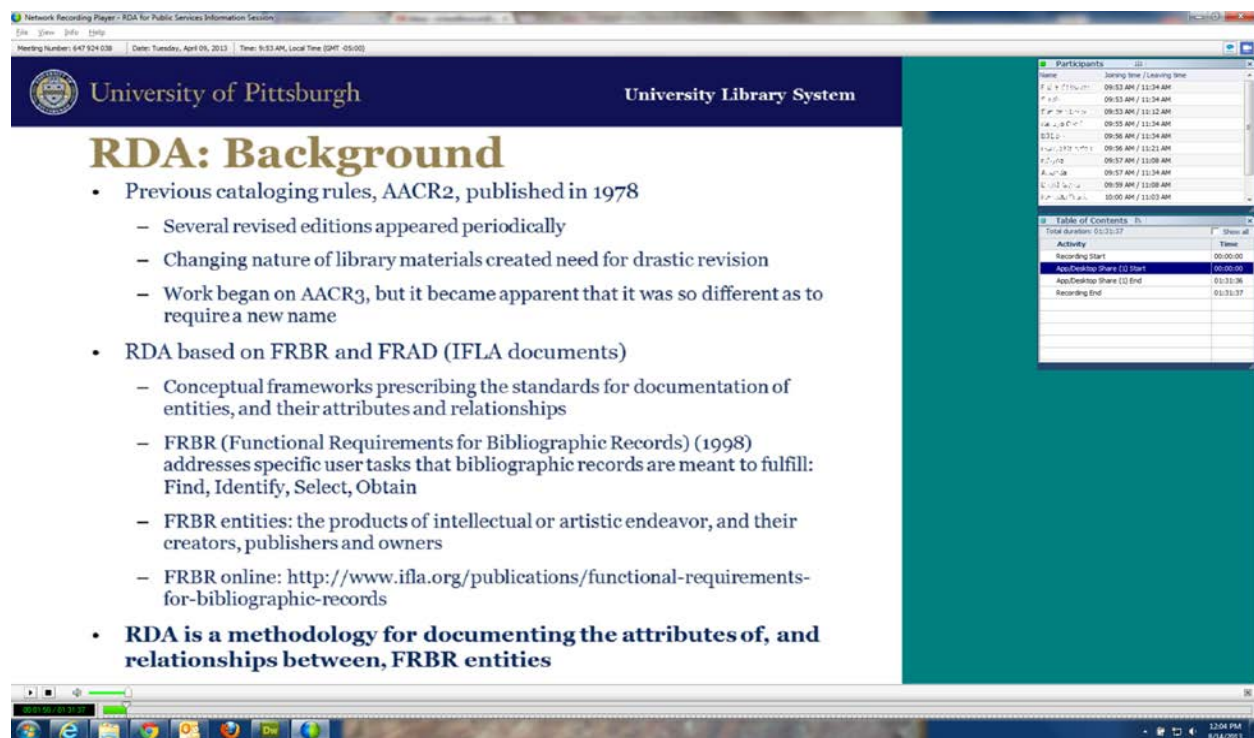


Figure 2

Remote participation for RDA staff training was enabled through the use of WebEx, a web-based, online conferencing software

To have WebEx training sessions function smoothly, a certain amount of preparation was needed. Since the trainers did not have the credentials to create meetings and were not completely familiar with the WebEx interface, they enlisted the help from staff in the ULS Information Technology Department, who held responsibility for creating and setting up meetings. The meeting creators were told how many sessions were planned, the time and dates of the sessions, and the locations. The meeting creators provided information on how to log into the online training, and the trainers shared this information with the trainees. The staff from Information Technology also made sure that the appropriate audiovisual equipment was available and set up in the designated room. Equipment included a screen and projector for the in-person participants and a conference phone to transmit audio to the WebEx participants.

On the day of the session, one of the ULS Information Technology staff members would open the meeting interface on the web browser, start recording, and monitor the meeting in case technical difficulties arose. As the trainers started the sessions, they would make sure to check the WebEx chat window to note who was participating remotely. They would also make sure to acknowledge WebEx participants and let them know they could ask questions either by speaking (if they had a microphone connected) or by typing their questions in the chat window. With WebEx's desktop sharing abilities, everything the trainers did on the computer screen could be seen by the remote participants. After the session ended, WebEx generated a link to the recording of the training session. This link was then shared with all participants.

Having the support of the ULS Information Technology Department was essential to having remote participation at all sessions, while at the same time, allowing the trainers to concentrate on the content of the training. Boyd (2012) emphasizes the value of an organization's technical support in online instruction, stating, "Administrative and technical staff from the sponsoring organization usually supports [the instructor's] work; for example, the staff may manage registration and resolve software problems. The successful instructor should draw on these resources, as resolving, for example, technical problems . . . is necessary but may become time-consuming" (p. 200). In addition to Boyd, Prior and Salter (2011) also stress the importance of having access to technical support staff, but in Barnhart and Stanfield's (2011) case, access to specialized staff was not an option because they did not have access to technical support staff during the evening, when their online library instruction classes were held, making necessary the dual role of "instructor and technician" (p. 63). Prior and Salter (2011) suggest making use of vendor and institutional support materials as a way to deal with issues such as setting up audio and navigating the often-confusing software interface. Both articles mention that the benefit of team teaching is being able to have at least one person deal with technical issues while the other person can concentrate on teaching the material (Prior & Salter, 2011; Barnhart & Stanfield, 2011).

The choices made for the kinds of information technology used for the ULS RDA training were based on the needs of the training participants, as well as on the time constraints and abilities of the organizers. These considerations, along with the support from the Information Technology staff, resulted in successful RDA training at the ULS for both the trainers and the trainees, as indicated in an online evaluation included in the website and completed by most participants.

Evaluation

In the follow-up e-mail sent by the trainers after the sessions, a link to the anonymous evaluation form (see Appendix) on the site was included, along with a reminder to complete it. The evaluation included five questions about the training sessions that participants rated from 1-5 (5 being the highest). There were also two open-ended questions and a space for comments. After each session, the trainers accessed a spreadsheet on Google Docs that gathered the responses to the online evaluation form. This allowed the trainers to not only measure the success of the sessions in general and receive constructive feedback, but also to improve future training sessions by incorporating

suggested changes. The average rating for the five questions in the evaluation was 4 out of a possible 5. The evaluation did not include specific questions about the technology used in the training or about the experience participating remotely. There were no major criticisms from those who participated remotely and one participant commended the easy access to training materials through the website. In future cataloging training sessions, asking participants for feedback regarding the technology used and the experience of remote attendees would help the ULS trainers better determine the effectiveness and success of what is a large influence on the training experience.

Future Access to Training Materials

RDA training at the ULS is an ongoing process. Thus, continued access to the training documentation was deemed important by the training organizers, which brought up questions about ensuring long-term access. Given unforeseen circumstances, ensuring that the documentation remains accessible requires that those organizing the training be proactive. This became apparent to the training organizers when it was announced that the University of Pittsburgh had decided to cease the use of WebEx for online conferencing throughout the institution as of May 1, 2013. With the help of the ULS Web Services Librarian, we had the links to the recordings posted on the “ULS Training” SharePoint site. However, due to the discontinuation of WebEx at Pitt, the recorded training sessions would eventually be inaccessible. Therefore, the files of the recordings were obtained from WebEx. In the future, the ULS Information Technology Department plans to convert the files to the Windows Media Player format (R. Hoover, personal communication, June 5, 2013).

The links and documentation on the ULS RDA Training site remain essentially the same, with the exception of a few updates. While it is easier to ensure that locally created documentation remains accessible, it is harder to control accessibility to the information maintained by other websites. While the links work for now, it is uncertain whether in the future, these websites will change location or disappear altogether. Unfortunately, the task of resolving dead web links has not been well supported by software tools, so maintaining links remains a labor-intensive, time-consuming task (Morishima, Nakamizo, Iida, Sugimoto, & Kitagawa, 2009). One of the factors that was influential in choosing Google Sites to create the ULS RDA training website was easy data migration of site contents (Migrate data away from Google Apps, 2013)—even though Google has a long list of services they have ended (List of Google Products, 2013). This option makes it easier to save the site’s information and structure and potentially reinstate it on another site hosting service.

RDA in Library Schools

While professional literature on the subjects of cataloging education and distance education is plentiful, resources that discuss cataloging education for MLIS students in online distance education programs are less often found. There are precious few publications dealing with this subject in the RDA environment, due no doubt to the cataloging standard’s relative newness. Early discussion of cataloging education in the online environment appeared in a 2002 issue of *Cataloging & Classification Quarterly*, in which Elaine Yontz (2002) enumerated advantages and disadvantages of distance education for cataloging and offered advice for the optimization of this mode of teaching. In the same issue, Harcourt and Neumeister (2002) discussed the role of mentoring in online cataloging education from the mentors’ perspective while Aulik et al. (2002) discussed the role of mentoring in online cataloging education from the students’ perspectives.

It is not until a special 2012 issue of *Cataloging & Classification Quarterly* that we find extensive discussion of issues surrounding distance education in cataloging. The special issue, entitled “Online Delivery of Cataloging and Classification Education and Instruction,” includes a variety of perspectives on the subject and includes some

consideration of RDA, as the special issue appeared at a time when libraries were beginning to prepare to transition away from AACR2. In his introduction, Robert L. Bothmann (2012) states his vision of the issue as “the beginning of a new body of literature addressing the delivery of cataloging and classification instruction in the online environment” (p. 90). Specific articles of interest include that of Heather Lea Moulaison (2012), who uses a case study of her experience at the University of Missouri to illustrate the potential for innovation in electronic cataloging education. Miller, Lee, Olson, and Smiraglia (2012) also present an exemplary case study from the University of Wisconsin-Milwaukee, which explicitly addresses the increasing attention demanded of cataloging instructors by RDA. La Barre, Roberto, and Leibowitz (2012) provide an account of their cataloging instruction in the pioneering distance education program at the School of Library and Information Science of the University of Illinois at Urbana-Champaign, with special attention paid to the differing experiences of synchronous and asynchronous teaching modes. Other articles by Douglas P. King (2012), Gretchen L. Hoffman (2012), and Lorraine F. Normore (2012) use instructors’ personal experiences to provide valuable elucidation of important considerations for online cataloging instructors, such as the use of course management software, methods for maintaining quality control, and the use of student course evaluations and feedback. This special issue of *Cataloging & Classification Quarterly* fulfills Bothmann’s vision, serving as a strong foundation for the body of published research.

RDA Teaching and Information Session

In the spring of 2013, ULS cataloger Carlos Peña was asked by a professor from the University of Pittsburgh’s School of Information Sciences (SIS) to deliver an introductory lecture on RDA in one of the core classes required for all SIS students. Like many of the courses offered in the school, it was a blended class, with some students attending in person and other students participating remotely by viewing digital recordings of classroom lectures and taking part in discussions and turning in assignments via Blackboard or Courseweb academic software. Prior experience teaching at SIS served as preparation for this teaching model.

It is open to debate whether this instructional paradigm is ideal for students. A great deal of recent scholarly literature has been devoted to questions related to the online, face-to-face, and blended modes of learning, and to some extent, effectiveness seems to vary among different instantiations of these modes.⁹ Good feedback from the students and professor in the classroom—not explicit, but rather in the form of questions, reactions, and visible levels of attention—enhanced the lecturer’s ability to adapt. However, since the distance learners can only watch recorded playbacks of the lectures or listen through streaming audio, their experience may not be as positive. Lecture styles tailored to the classroom do not necessarily work as well in a played-back recording. Alternately, a lecture designed to better fit the recorded delivery could cause classroom students’ learning experience to suffer.

The lecture at the School of Information Sciences, as does most academic public speaking, relied on technology that has become so common as to almost be taken for granted, such as PowerPoint, e-mail (used for announcements and distributing follow-up information), and links to external websites for information, illustrations, examples, etc. With a subject like RDA, external websites are especially germane because nearly all the relevant information exists online.

All these forms of technology were employed in an RDA information session in the ULS for public services librarians and staff. This session, held in April 2013, was designed to prepare other non-cataloging library employees for changes related to RDA that they may encounter in their day-to-day work. Another goal of the session was to foster a discussion about how to deal with the public display of new RDA-related fields of information in bibliographic records in our online catalog. This session, held at Hillman Library on the University of Pittsburgh main campus, was well-attended by both librarians and other staff members. In order to enable remote participation from librarians at branch campuses, the session was transmitted via WebEx. Some of the instructional challenges

encountered in these teaching and information sessions, such as the potential for technology failure and lack of non-verbal communication, are similar to those we experienced when conducting RDA training for the ULS.

Conclusion

Experience in all these types of training and teaching illustrates the pervasiveness of technology and the extent to which we rely on it. As we move further into the digital information age, we will surely come to depend on it even more. Technology promises to enhance our teaching methods as well as the reach that we can extend to prospective learners. This is especially true, as we have seen, when used in fields of learning, such as cataloging with RDA, that are so fundamentally rooted in electronic media. Such enhancement is surely exciting, but we must keep in mind that the most effective solutions to problems we encounter in teaching will not always be necessarily based in the most current technology, and that regardless of technology we may or may not use, many of the primary objectives and values of our educational missions remain unchanged from earlier technological eras.

Notes

¹ This article was developed from a presentation with the same title given by the authors in collaboration with Faye Leibowitz and Lisa Sisco at the Spring 2013 meeting of the Western Pennsylvania/West Virginia Chapter of ACRL (WPWVC ACRL).

² A webinar is also known as a synchronous web conference (Staley et al., 2007).

³ The modules for the Library of Congress's *RDA in NACO Training for AACR2 Catalogers* are available online (www.loc.gov/catworkshop/courses/rda_naco).

⁴ According to information on their website (www.icohere.com/service_government.htm), iCoHere is the online conferencing software used by a number of U.S. government agencies.

⁵ The *ULS RDA Training Site* can be viewed online (sites.google.com/site/rdatrainingpittsburghhuls).

⁶ The Nebraska RDA Practice Group wiki can be viewed online (rdapractice.pbworks.com/w/page/50284619/FrontPage).

⁷ The Library of Congress (LC) RDA Training Materials can be found online (www.loc.gov/catworkshop/RDA%20training%20materials/LC%20RDA%20Training/LC%20RDA%20course%20table.html).

⁸ There are other options for site creation that do not require knowledge of HTML. One that offers special support for educational sites is Weebly (education.weebly.com).

⁹ See, for example, Halverson (2012) and Yukawa (2010). More recently, a special issue of *Internet and Higher Education* (Owston, Archer, Garrison, & Vaughan, 2013) was devoted entirely to blended learning policy and implementation.

References

- Aulik, J. L., Burt, H. A., Geeraedts, M., Gruby, E., Lee, B. M., Morgan, A., & O'Halloran, C. (2002). Online mentoring: A student experience at Dominican University. *Cataloging & Classification Quarterly*, 34(3), 289-292. doi:10.1300/J104v34n03_02
- Barnhart, A. C., & Stanfield, A. G. (2011). When coming to campus is not an option: Using web conferencing to deliver library instruction. *Reference Services Review*, 39(1), 58-65. doi:10.1108/00907321111108114
- Bothmann, R. L. (2012). Introduction. *Cataloging & Classification Quarterly*, 50(2-3), 89-93. doi:10.1080/01639374.2012.655202
- Boyd, M. (2012). From the comfort of your office: Facilitating learner-centered continuing education in the online environment. *Cataloging & Classification Quarterly*, 50(2-3), 189-203. doi:10.1080/01639374.2011.651195
- Bross, V., & Beck, M. (2010). Catalogers in (cyber)space: Glimpses into the Starship's log of two online trainers. *Serials Review*, 36(1), 35-36. doi:10.1016/j.serrev.2009.11.001
- Bross, V., & Beck, M. (2011). Like a haven in the shifting economic sands: Making the most of web conferencing tools. *Serials Librarian*, 60(1-4), 203-205. doi:10.1080/0361526X.2011.556035
- Chen, S. (2008). Empowering student assistants in the cataloging department through innovative training: The E-Learning Courseware for Basic Cataloging (ECBC) Project. *Cataloging & Classification Quarterly*, 46(2), 221-234. doi:10.1080/01639370802177646
- Gardner, S. A., & Bernstein, R. (2012, September 27). RDA: Preparing for the change together. *Library Journal*. Retrieved from <http://lj.libraryjournal.com/2012/09/managing-libraries/rda-preparing-for-the-change-together-backtalk/>
- Google Sites Overview. (2011). Retrieved August 8, 2013, from Google Sites: <https://www.google.com/sites/overview.html>
- Halverson, L. R., Graham, C. R., Spring, K. J., & Drysdale, J. S. (2012). An analysis of high impact scholarship and publication trends in blended learning. *Distance Education*, 33(3), 381-413. doi:10.1080/01587919.2012.723166
- Harcourt, K., & Neumeister, S. M. (2002). Online distance learning with cataloging mentors: The mentor's viewpoint. *Cataloging & Classification Quarterly*, 34(3), 293-298. doi:10.1300/J104v34n03_03
- Hitchens, A., & Symons, E. (2009). Preparing catalogers for RDA training. *Cataloging & Classification Quarterly*, 47(8), 691-707. doi:10.1080/01639370903203234
- Hoffman, G. L. (2012). Using the Quality Matters rubric to improve online cataloging courses. *Cataloging & Classification Quarterly*, 50(2-3), 158-171. doi:10.1080/01639374.2011.651194
- King, D. P. (2012). One practitioner's perspective on online cataloging education. *Cataloging & Classification Quarterly*, 50(2-3), 144-157. doi:10.1080/01639374.2011.654383
- La Barre, K., Roberto, K. R., & Leibowitz, F. (2012). The common gaze: Conversations with cataloging instructors about teaching online at the Graduate School of Library and Information Science, University of Illinois at Urbana-Champaign. *Cataloging & Classification Quarterly*, 50(2-3), 127-143. doi:10.1080/01639374.2011.650840
- List of Google Products. (2013, August 10). Retrieved August 13, 2013, from http://en.wikipedia.org/wiki/List_of_Google_products#Discontinued_products_and_services
- Migrate data away from Google Apps. (2013). Retrieved August 13, 2013, from Google Apps Documentation and Support: <http://support.google.com/a/bin/answer.py?hl=en&answer=100458>
- Miller, S. J., Lee, H.-L., Olson, H. A., & Smiraglia, R. P. (2012). Online cataloging education at the University of Wisconsin-Milwaukee. *Cataloging & Classification Quarterly*, 50(2-3), 110-126. doi:10.1080/01639374.2011.651193
- Morishima, A., Nakamizo, A., Iida, T., Sugimoto, S., & Kitagawa, H. (2009). Bringing your dead links back to life: a comprehensive approach and lessons learned. *Proceedings of the 20th ACM Conference on Hypertext and Hypermedia-HT '09*, 15-24. doi:10.1145/1557914.1557921

- Moulaison, H. L. (2012). A new cataloging curriculum in a time of innovation: Exploring a modular approach to online delivery. *Cataloging & Classification Quarterly*, 50(2-3), 94-109. doi: [10.1080/01639374.2011.653096](https://doi.org/10.1080/01639374.2011.653096)
- Normore, L. F. (2012). "Here be Dragons": A wayfinding approach to teaching cataloguing. *Cataloging & Classification Quarterly*, 50(2-3), 172-188. doi: [10.1080/01639374.2011.651192](https://doi.org/10.1080/01639374.2011.651192)
- Owston, R., Archer, W., Garrison, R., & Vaughan, N. (Eds.). (2013, July). Blended learning in higher education: Policy and implementation issues [Special Issue]. *The Internet and Higher Education*, 18, 1-68. Retrieved from <http://www.sciencedirect.com/science/journal/10967516/18>
- Pennsylvania State University Libraries, Cataloging and Metadata Services. (2013, September 5). *Resource Description and Access (RDA)*. Retrieved September 26, 2013, from <http://www.libraries.psu.edu/psul/cataloging/catref/rda.html>
- Prior, J., & Salter, M. (2011, July 4). Piloting web conferencing software: Experiences and challenges. *Ariadne* (67). Retrieved from <http://www.ariadne.ac.uk/print/issue67/prior-salter>
- Sanner, E. M. (2012). Preliminary training for RDA: A survey of cataloging department heads. *Journal of Library Metadata*, 12(2-3), 213-241. doi: [10.1080/19386389.2012.699845](https://doi.org/10.1080/19386389.2012.699845)
- Staley, L., Van Noord, R., Gutsche, B., Hillman, L., Kellison, E., & Musselman, D. (2007). *Blended learning guide*. OCLC Online Computer Library Center. Retrieved from <http://www.webjunction.org/content/dam/WebJunction/Documents/webJunction/Blended-Learning-Guide.pdf>
- Swan Hill, J. (2004a). Education and training of catalogers: Obsolete? Disappeared? Transformed? - Part I. *Technicalities*, 24(1), 1,10-15.
- Swan Hill, J. (2004b). Education and training of catalogers: Obsolete? Disappeared? Transformed? - Part II. *Technicalities*, 24(2), 1, 9-13.
- University of California San Diego. (2013). *FRBR and RDA Training at UCSD: Documentation*. Retrieved September 26, 2013, from The Library: TPOT: <http://tpot.ucsd.edu/cataloging-resources/training-resources/frbr-rda-ucsd-documentation.html>
- Yontz, E. (2002). When donkeys fly: Distance education for cataloging. *Cataloging & Classification Quarterly*, 34(3), 299-310. doi: [10.1300/J104v34n03_04](https://doi.org/10.1300/J104v34n03_04)
- Yukawa, J. (2010). Communities of practice for blended learning: Toward an integrated model for LIS education. *Journal of Education for Library & Information Science*, 51(2), 54-75.

APPENDIX

Evaluation of ULS RDA training sessions

* Required

Date of training session *

When did you participate in the training session(s)?

- Feb. 19, 2013
- Feb. 26, 2013
- March 5, 2013
- March 13, 2013
- March 20, 2013
- April 3, 2013

Training Session Title(s) *

Did you attend the session for non-catalogers or the sessions for catalogers?

- RDA for Non-Catalogers
- RDA Training for Catalogers
- RDA Training for Catalogers-Exercises

The training session was presented in a clear and understandable manner

1 2 3 4 5

Strongly disagree Strongly agree

The session(s) was well organized

1 2 3 4 5

Strongly disagree Strongly agree

The pace of the session(s) was appropriate

1 2 3 4 5

Strongly disagree Strongly agree

The session(s) helped me learn what I need to know for my job

1 2 3 4 5

Strongly disagree Strongly agree

Overall, I was satisfied with the training session(s)

1 2 3 4 5

Strongly disagree Strongly agree

What did you like most about the training session(s)?

What did you like least about the training session(s)?

Please provide any additional comments or suggestions.

Never submit passwords through Google Forms.

Figure A1

Evaluation form for ULS RDA training sessions