What They Don't Teach in Library School: Competencies, Education and Employer Expectations for a Career in Cataloging

ALCTS/CETRC Preconference
Catholic University of America
Washington, DC
Friday, June 22, 2007

<u>**Minutes**</u>

Objectives
At the end of this preconference, participants will be able to:
- Identify current technical skills, educational requirements, and cataloging and bibliographic access competencies that employers and colleagues expect entry-level, experienced catalog librarians and technical services staff members to possess.
- Share research findings that identify and validate the changes in expectations regarding technical skills, education requirements, cataloging and bibliographic access competencies for catalog librarians and technical services staff.
- Encourage contributions to the Cataloger's Learning Website (http://www.loc.gov/catworkshop/), Metadata and Cataloging Education - Web Clearinghouse (http://timon.sir.arizona.edu/faculty/coleman/lc/final/guide.html), and other clearinghouses for technical services education resources and opportunities.

Welcome, Overview, Introductions: Suzanne Pilsk, Preconference Moderator

Moderator Suzanne Pilsk opened the preconference and offered thoughts and direction to the ALCTS/CETRC Task Force on Competencies and Education for a Career in Cataloging attendees. At the preconference conclusion participants will be invited to follow up on action items stemming from the breakout sessions. Created by CETRC, the purpose of the Task Force is to provide a working plan for the future of the cataloging profession. The following are minutes from the seven presentations given at the preconference.

Welcome. Provost James Brennan welcomed participants to the Catholic University of America. He highlighted the importance of libraries, information, and the LIS Program at CUA.

Core Competencies Required for a Catalog Career in Public Libraries
J. Randolph Call, Director for Public Services, Detroit Public Library

Randy Call stated that most public library systems are copy cataloging operations. They do not have catalogers who do original cataloging; what they do is "plain vanilla" cataloging.

The new catalogers whom he sees entering the profession have had an introductory cataloging course and some seminar work (e.g., serials, metadata). The contents of these courses provide limited exposure to topics. Call numbers are touched on briefly in introductory classes, and more deeply in advanced courses. Wayne State University, the library school across the street from the Detroit Public Library, requires a one-term practicum, not necessarily in cataloging.

What do the new catalogers know, Randy asked? They have not had enough practice, but they do have enough exposure to realize how much more they need to know. They are often shaky on how what they have learned is affected by local practices and technologies used in their employing institution.

What don't they know? They don't understand how long it will take them to get to where they need to be. At Detroit Public Library six months of close supervision under a trainer are needed to make staff competent copy catalogers; another eighteen months are needed to become an original cataloger with experience in the various formats or to work with one of Detroit Public Library's special collections.

There is a production atmosphere with volume expectations, goals, and even quotas. Priorities, deadlines, and the technology used to accomplish them change often.

How can Library and Information Science curricula address these issues, Randy queried? (1) Leave the basic "nuts and bolts" curriculum at the concept level, and prepare graduates with a suite of management tools, such as time management training. (2) Give students exposure to project planning systems and some idea of their own personal management style and understanding of what other people's styles are. (3) Give students exposure to actual practitioners to whom they can ask questions.

In response to a question from the audience, Randy said that his comments were based on his personal experience, not on studies he had conducted.

Managing a Shortage of Catalogers: A Research Library Perspective
Beacher Wiggins, Director for Acquisitions and Bibliographic Access, Library of Congress

Beacher Wiggins noted that with a cataloging staff of slightly over 400 (though reduced from over 700 in the early 1990s), the Library of Congress is arguably the world's largest cataloging operation. Many of the events of the past years, such as LC's decision to cease providing controlled series access, can be described as instances of LC's seeking ways, with the least negative consequences, of managing a shortage of catalogers.

Beacher said that today's sessions would address the varied components that underpin developing and maintaining the nation's supply of catalogers. He used LC as a case study of how one research library, though unique in some respects, is planning for a

major reorganization in the fiscal year 2007 to achieve optimal workflow and output. LC's planning constitutes one approach to tackling a shortage of catalogers.

Prior to 1992, LC's cataloging operation was set up as a structured assembly line approach with different people doing only descriptive cataloging (including authority work), assignment of subject headings and LC classification numbers, shelf listing, and assigning Decimal Classification numbers. In 1992, during a major reorganization of the Cataloging Directorate, LC implemented whole item cataloging, in which descriptive and subject cataloging were brought together in a single position. Shelf listing and the assignment of DDC numbers still remain separate duties.

In the years since then, a number of factors (e.g., the expansion of Beacher's sphere of responsibility, advances in technology, etc.) have stimulated his ideas on how functions, operations, and responsibilities might be altered for improved services and output. An early step was shifting responsibilities among the cataloging staff, such as giving technicians tasks that had heretofore been rigidly reserved for catalogers, e.g., cataloging and completion of cataloging-in-publication records. In 2007, LC finds itself re-fashioning the position descriptions of technical services librarians and technicians.

Before exploring how redescribing catalogers' duties can help address a shortage of catalogers, Beacher talked about the current organizational structure for acquisitions and cataloging at LC. Since 2004, LC has been realigned into one administrative directorate. However, this alignment is purely administrative, with meager meshing of workflows and duties. To achieve an optimal workflow and an optimal output, LC will need to totally restructure its technical services operations, so that duties between acquisitions and cataloging staff are incorporated into a single set of responsibilities. Beacher described a number of actions that will be taken to perform this reorganization and the resulting benefits.

In addition to the integration of acquisitions and cataloging, the other linchpin in LC's reorganization efforts is the reconceptualization of what should constitute the job description for catalogers as technical services librarians. Beacher suggested that the job descriptions become more encompassing and not be limited to cataloging, so that they become "blended" or "hybrid" assignments.

For the librarian position descriptions, four components (sets of duties) are delineated with expectations that anyone can be called upon to carry out. While individuals can perform all four sets of duties, staff members will not perform them simultaneously and some librarians may never perform all four. These new position descriptions give LC the flexibility of assigning the full range of tasks as circumstances warrant. The four components are:

- Acquisitions and metadata services (to include selection/collection development, acquisitions, cataloging and shelf listing)

- Analysis and organization of information and materials (assignments involving complex or novel problems or those with special requirements, such as recommendations for improvements in workflow and procedures)
- Consultation and provision of liaison duties (consultation with internal and external constituents and users of materials acquired and metadata imported or created); and
- Provision of training and mentoring to apprentice librarians and technicians

Certain tasks and duties need to be assumed by technician staff, resulting in a corresponding reworking of the job descriptions that define their work. The blended positions for technicians' tasks are also grouped into four components that cover the support functions for acquisitions and cataloging, including:

- Acquisitions and metadata services (acquisitions, cataloging, and serials control. *A long-term goal is to have technicians be the primary crafts persons for providing all descriptive cataloging.*)
- Service to library patrons
- Online searching /use of automated tools
- Collections materials processing

Because technicians will be assigned more responsible tasks for the full array of library materials acquired and cataloged, foreign language competencies will become more critical for new technician hires.

The planning for this proposed reorganization (involving some 600 acquisitions and cataloging staff) was all done in house over 2 years by managers of the Acquisitions & Bibliographic Access Directorate. To get an external review of the process, LC contracted with Outsell (who used in-house staff with library degrees) to look at the planning documents, implementation reports, new position descriptions, and proposed workflow diagrams to assess the feasibility of the proposal and to determine if the reorganization will achieve the desired outcomes of improved throughput of content, increased productivity, and flexibility. Issued on June 1, 2007, the Outsell report contained a number of recommendations and some cautions on how LC might mitigate the impact of this major undertaking; however, the overall assessment was positive. The Outsell report stated that the proposed reorganization "will provide an environment which will attract young librarians (future new hires), who are used to a more fast-paced, multitasking world." Beacher said that this statement highlighted a reality that is worthy of noting today, as we ponder steps to take to address a shortage of catalogers – the next generation of librarians, whether catalog librarians or other types, who will expect to be engaged in a variety of tasks and not be as pigeon-holed as his generation of librarians were.

Questions to Beacher Wiggins from the audience:
Question: Will this report be shared with others outside of LC?
Answer: Yes.

Question: Who are your new hires?
Answer: The last group LC hired (30-40 at one time) was about 5 years ago. LC was overwhelmingly pleased. All had one to two years of library work in cataloging or technical services; none came straight from library school.

On Competition for Catalogers
Karen Calhoun, Vice President, OCLC WorldCat and Metadata Services

Karen Calhoun began by stating that competition can be the type where catalogers are competing against other catalogers or institutions that provide cataloging, and their methods to describe information. Or it can mean a kind of competition in which suddenly nearly everyone is alert to a person's knowledge and expertise.

She focused on a discussion of what needed to happen to instigate keen attention and even competition for catalogers' knowledge and expertise in a university or college community. Speaking from an academic research library perspective, she stated that there are other perspectives and that the future of cataloging looks different elsewhere.

Catalogers are the most flexible people in the library profession, Karen said. They have been through a lot in the last ten years. First was More, Better, Faster, Cheaper. Then technical services departments were downsized. Next came e-resources and metasearch and "integrating" resources. Now cataloging management is the back end of a process directed to move thousands of titles to offsite storage or through mass digitization projects. Through it all, catalogers have coped. Catalogers continue to crank out the work that keeps library book and journal collections vital and accessible.

Karen stated that the incredibly valuable role catalogers have played is no longer enough. Not because they are doing anything wrong or are intractable, but rather due to the changes in the work environment. She described aspects of this new context in which catalogs move forward into the future in a report for LC on "The Changing Nature of the Catalog and Its Integration with Other Discovery Tools," now infamously known as the Calhoun report (http://www.loc.gov/catdir/calhoun-report-final.pdf).

In the report, she suggested taking a fresh look at the catalog in terms of who is likely to be served, for what purpose, how information seekers interact with the catalog, and where it should be positioned in the user's information sphere. Given these shifts, Karen challenged catalogers to rethink the catalog in light of a changed world. Users are not getting what they need from online libraries and catalogs. Content has changed. Users have changed. The library service model must change. The catalog must change. Catalogers must change.

Karen extended her thesis to rethink that catalog and spoke about how catalogers must change as a result of all the differences in how members of our own communities learn, teach, and conduct research.

Since the late 1960s, we have witnessed a largely unacknowledged miracle as MARC, the cataloging content rules, LC, libraries, and some visionary people in Ohio and California have built cooperative shared cataloging systems that drove the cost of cataloging to affordable levels and enhanced access to library collections all over the world. Online cooperative cataloging is a successful and valuable service.

As helpful as that model has been, it is becoming less affordable for our libraries. One aspect of the budget pressures that libraries face has been the growth in the number and types of information objects that make up the scholarly information universe.

There are other ways in which the present model for cataloging does not scale. In general, catalog data is descriptive metadata. Many other types of metadata – rights, technical, structural, administrative, evaluative, preservation, and linking metadata – are needed for the new array of scholarly information objects.

Library cataloging practices are problematic, because many communities outside librarianship use metadata – metadata that can and should be reused. The Internet facilitates interactions between formerly separate communities, making interoperability of library cataloging with other communities' metadata of critical importance.

Karen then turned to two questions: 1) How and for what purpose might the library's base model for metadata change?; and 2) To what kind of information retrieval systems might catalogers, current and future, lend their expertise?.

The Millennials, who promise to be as influential a generation as the Baby Boomers have been, can give us some clues, she responded. There is evidence that Millennials and Gen Xers will respond enthusiastically to digital library collections.

Most catalog librarians today may not have the know-how to help build and sustain such sites, but catalog librarians do possess an understanding of the principles of information organization on which such sites depend.

A new kind of cataloger and Base model for metadata. Catalogers have new opportunities as the academic library assists faculty with the creation and management of repositories and the next generation of collection, storage, access, delivery and preservation systems and services. In doing so, academic librarians must focus on the needs of particular disciplines or communities of users to make data available.

Another significant opportunity for institutions is to use what catalogers know to make all kinds of information objects more visible and easier to use. As an example of the kind of work to which catalogers can make important contributions, Karen offered VIVO, a virtual community center developed at Cornell (http://vivo.cornell.edu).

Opportunities for "New age" catalogers. Tying up the discussion of the library's base model for metadata, Karen shared her belief that in the process of libraries' continuing mission to advance the progress of knowledge in their communities, the academic

library's base model for metadata will extend to embrace many more types of information objects. Full text indexing will not make metadata irrelevant indexing.

Today's catalogers can evolve into digital project managers or workflow managers and analysts, constantly seeking improvements on how data and metadata can be recycled, converted, improved, extracted, ingested, remapped, and reused. This kind of work is essential in 21st century libraries, in which data and metadata come in many forms and formats, and from many sources. Full text indexing, content management, and retrieval from unstructured data files will all be features of the 21st century cataloger's landscape.

Am I saying that books and journals are no longer relevant to higher education, Karen questioned? Or that catalogers have no role to play in organizing these materials? No, she answered, books and journals will still be relevant. There are millions and millions of books in the world's library collections and millions will be added. At the same time, Karen stated that libraries are in an age of transition and cataloging professionals are beginning to have transitional roles. Cornell has twenty cataloging MLIS librarians in its approximately ninety-person technical services department. Only two have jobs that can be described as catalogers. Other staff members with bachelor's degrees and diverse subject and language backgrounds perform the original cataloging. The two catalogers are training the other staff.

Digitization projects offer another opportunity for catalogers, requiring some re-training and new knowledge, but are definitely an opportunity for the person who wants to step up to the plate and get involved. Catalogers must focus on what they can offer rather than on the methods they have used. Karen shared William Wulf's quote, "Instead of being a hoarder of containers, the library must become the facilitator of retrieval and dissemination." (Wulf, 2003)

On the subject of opportunities for catalogers, Karen indicated that in the future there will be fewer places for librarians with jobs that are almost all traditional cataloging work, with books and serials in our hands. Catalog librarians, present and future, have the potential to use their expertise to make important contributions to university communities and to future information retrieval and dissemination systems. Doing so will require us to focus on the needs that catalog librarians meet, rather than the methods we use. When catalogers identify what they contribute with the product they provide – the catalog – and with their methods – the cataloging rules – they face the danger of a kind of myopia or near-sightedness. The danger of myopia is focusing on what is in front of us and neglecting the view on the horizon.

Karen challenged participants to focus on some specific issues, not to be critical of what has been accomplished, but to offer some ways of thinking about where we are and how we might use what we know in new ways.

Availability of catalog librarians: Cataloging is no longer at the center of the curriculum. Library and information sciences schools are not teaching cataloging. It is interesting to

evaluate how many cataloging courses today are being taught by adjuncts. The upside is that there will be new roles for metadata specialists.

Library and information science graduates are not choosing cataloging. Stanley Wilder's work on ARL hiring practices and age demographics of the library profession over the past 15 years proves evidence of that. For example, Wilder documents that between 1985 and 2000, the number of new hires into cataloging positions dropped 45%, and the number of new professionals taking first jobs as catalogers dropped 64%. This situation has created a subset of librarians for which a major wave of retirements will hit, peaking perhaps around 2010, not too long from now. Who will replace these catalogers? What succession planning has been done? Karen suggested that her answers might be – classified staff on the one hand, and very little on the other.

Significance of the catalog: The catalog is one part of a much larger infosphere. Many new types of scholarly information objects are not covered by the catalog.

Future of individual library catalogs: Less emphasis on one catalog per library will result in a shift toward multiple catalogs appearing as one catalog, shared catalogs, and cataloging or indexing interwoven into the Web (e.g., Google Scholar, Open WorldCat, Worldcat.org).

Forecasts and implications for metadata specialists: Increasing investments in access systems will result in their help to build new kinds of systems for IR and delivery. Using many new kinds of metadata, an emphasis on re-use, interconnections and interoperability will emerge.

Active participation in the university community: Blurring of lines between public services and technical services will empower librarians in project and team-based workplaces; etc.

Technology-driven research, teaching and learning: Need for "IT" fluency, especially metadata specialists continues to grow.

The changes needed for libraries to innovate and modernize their services offer huge opportunities to people who know how to organize and structure information for discovery and delivery. That's us – catalogers, Karen said, and, we hope, the people who will come after us. Yes, the situation requires retraining and skill development. Maybe these individuals won't be called catalog librarians anymore; they will have new titles.

The dominance of the Internet and astounding progress in information technologies have led to serious competition for the attention of the university's information seekers, some of whom feel they no longer need libraries, library collections, or librarians. So long as we librarians continue to define ourselves by our current specializations – for example, as catalogers – and to focus inwardly on library collections, catalogs, and

buildings, we risk being marginalized at the speed with which information seekers' preferences shift to online, more dynamic, and collaborative information environments. This shift is inevitable as new generations, like the Millennials, become more mature and take their places as adults.

Catalogers are well positioned to make worthwhile contributions to the university communities they serve, provided they focus on the meeting users' needs rather than the methods they use. Metadata is key to empowering information seekers and to building scholarly information access systems that are easy to use. Metadata expertise is a sustainable strategic advantage that libraries and librarians should embrace and promote to faculty and other members of the university community. Let's seize the opportunities we have to contribute our expertise to the continuing mission of libraries, Karen said – saving readers' time and helping the academic community transform mere 'information' into knowledge, insight, and action.

Question: Please clarify, what is the source for the statement that users are not getting what they need from catalogs?
Answer: There are lots of studies. Users start searches with Google and other search engines. Cf. Tim Burke. Transaction logs and LibQual studies.

Question: Is the drop in hires because managers aren't hiring, not because people aren't interested.
Answer: Yes, in part.

Question: Is the approach you described Cornell as taking, of doing cataloging training primarily in-house, a reversion to a pre-Williamson Report world?
Answer: With all that libraries are doing, we can't afford the money to hire MLS librarians to work on production systems; we need them to be designers and consultants, not just bibliographic control specialists.

The Brick Wall: Recruiting People to a Career in Cataloging
Janet Swan Hill, Associate Director for Technical Services, University of Colorado at Boulder Libraries

The problem of recruiting catalogers is a long-standing one and solutions have been identified, Janet began by saying. However, how well those solutions have been applied is unknown.

Why is it hard to get people into cataloging, Janet asked? Because we are invisible. In the common view, librarianship equals reference. The disciplines that people come from may not be the richest sources of prospective catalogers. Career guidance is off target; a guidance counselor once told Janet she was suited to become a forest ranger. Women now have more career choices than in the past, thus reducing our pool of candidates.

In library school programs the cataloging related curriculum is limited. Cataloging is not a requirement at many programs. Coursework may not include actual cataloging. Many faculty members convey an inaccurate message about cataloging. Cataloging faculty are in the minority (the percentage of faculty devoted to an area gives an indication of the value the profession gives to that area). In response to an AUTOCAT question on why they became catalogers, many respondents said that until they had been exposed to cataloging in class or a practicum, they had no interest in it. Many of their library school faculty and advisers discouraged them from becoming catalogers.

The impact of automation is over-estimated. Many people who believe automation will make cataloging obsolete act as if that were already done. The jobs sound dull. The language sounds stodgy to those entering the field. What can we do to change this, Janet asked? Cultural issues are difficult to address. Our recruitment energies may better be engaged elsewhere.

We need to move from passive to proactive recruitment. We should target undergraduates and graduate students in their major departments and target faculty in their own departments. We need to provide a recruitment kit tailored for these efforts and develop a recruitment pool and program. We have to involve library and information science faculty on their own campuses. They could prepare grants to develop catalogers and provide scholarships to would-be catalogers.

We need to identify common career guidance instruments and ascertain if cataloging and the characteristics of catalogers are part of the instruments. We need the support and backing of an association.

We need to determine the competencies that all new librarians and all new catalogers should have. We need to cooperatively develop basic cataloging courses. We need to require cataloging for all library and information science students. We must pay attention to the accreditation standards revision process.

Cataloging is difficult to imagine; it must be experienced. Therefore, cataloging courses must include actual practice. Practitioners can assist as guests in classes. More libraries should host internships and practica for which ALCTS/CETRC could provide guidelines. Being a paraprofessional, student, and/or having a work experience is a practicum.

Fulltime faculty control the curriculum and direction of library and information science programs and serve as advisors, but cataloging faculty are in a minority in these programs. We must find a way for adjunct faculty to have a substantive voice in the faculty when it comes to cataloging.

Employers' Expectations for Cataloging Recruits
Brian E.C. Schottlaender, University Librarian, University of California at San Diego

Brian Schottlaender said prior to the preconference he attended a CLIMB program on the use of computational linguistics to extract metadata. He used that approach to determine UCSD's expectations for new catalogers.

The UCSD Library has a staff of 350 full time employees, of whom sixty to sixty-five are professionals. Between 2001/02 and 2006/07, UCSD filled nine professional cataloging positions (ten FTE). Five FTE are in a librarian series for which the MLIS is not required (but all incumbents have one). Four serve as managers in language or subject specialties, two are format specialists, three are generalists, and one is a subject specialist (there is some overlap).

Brian conducted a linguistic analysis of the nine position functions. First, he performed a phrase frequency count of words used three or more times, then he distilled the results by deduplication, stem analysis, and synonym conflation. He then massaged the resulting distilled lists and conducted a phrase count of the raw, distilled, and massaged terms to identify groups of cognates. Below are the results of his analyses.

KNOWLEDGE, SKILL, AND ABILITY
General skills:
   Critical thinking skills (e.g., analysis, problem solving, evaluation)
   Communication skills (e.g., listening, writing)
   Ability to work independently
   Ability to work well with others
   Ability to plan and organize
   Ability to set and maintain priorities

Functional/technical skills

Behaviors
  Creative
  Takes initiative
   Participates
   Follows issues and trends
   Has strong service orientation

Values access to information

Question: How many applicants were there per job?
Answer: Usually six to fifteen.

Question: In what skill areas do you find it difficult to get good applicants?
Answer: Probably the communication skills.

Question: How important is it to you that the applicant has experience versus being willing to hire someone motivated without experience.
Answer: UCSD doesn't require experience.

Janet Swann Hill encouraged employers to judge each position and applicant individually when hiring. The hardest thing for Colorado she said is to find people who can qualify for tenure.

Training Issues Managers Face
Matthew Beacom, Metadata Librarian, Yale University Library

Matthew Beacom emphasized his view as a librarian who had been a cataloger and became a metadata librarian and manager.

Managers need to be smart about managing morale and budgets. It is about managing people and putting individuals and institutions in sync. Morale is an emotional state and a critical tool to use in evaluating our success, Matthew said. Morale is an indicator of how well or poorly we are doing. Individuals with poor morale do not take to being trained. Institutions with poor morale are not very successful.

Change can be incremental; such change is easy to adjust to but it is cumulative. It can be disruptive and difficult for individuals to adjust, but change is intermittent. We can respond to change in these ways:
    We can DENY or RESIST change;
    We can MANAGE or CONTROL change; or,
    We can THRIVE on change.

It is difficult to address morale in an abstract way. We need to identify the basic institutional supports that need to be put into place, so that individuals can gain the competencies they need to perform the new tasks.

People need a basic set of skills, such as:
    Works well with others.
    Manages self/ follows directions/ leads
    Solves problems
    Is highly literate
    Is adept with information technology
    Knows another language or two

More specialized skills include:
    Knows subject area
    Trained in description
    Trained in subject analysis and assignment
    Trained in classification
    Trained in particular tools

People have their limits, Matthew said. One person can't do everything. We tend to forget how long it takes to learn new things. Managers need to craft an environment in which staff can learn new skills. Because people need cohesive work units, we have to

create a work environment in which individuals share a common purpose and help each other. Cohesion depends on trust, communication, and productivity.

We train individuals to be more productive personally and as members of working groups. Production is the measure of success for the individual as well as for the work unit. We need to redefine the measures of productivity.

Question: Do paraprofessional staff at Yale need languages?
Answer: Yes, at Yale work tends to be broken up in language and/or subject skill areas.

Cataloging Education: A New Emphasis for the LIS Curriculum
Sylvia D. Hall-Ellis, Associate Professor, Library and Information Science Program, University of Denver

Sylvia Hall-Ellis highlighted facts about LIS education. The accredited MLIS is the only degree that ALA accredits. There are 55 public and library private schools in the United States and Canada. Each year a proportion of the approximately 15,000 graduate students in library schools complete their studies. The degree requirements include 36 semester hours, which translate into 58-quarter hours. Every student takes core courses that range from two courses at some schools to a very prescriptive core, such as University of Denver with eight courses. About half of the LIS faculty members are full-time and tenure track, but the number of contingent, part-time, and adjunct faculty is increasing. Sylvia said University of Denver follows the Boyer model of scholarship and earned tenure, as do colleagues in other disciplines, by active and successful work in the scholarships of teaching, research, service, integration, and engagement. The mission, vision, and goals of the institution and LIS program, accreditation requirements and professional competencies require faculty to figure out how to make them work in every class for each student.

Sylvia discussed these points:

Library school students are adult learners. They have different expectations, come to schools for different reasons, and learn in completely different ways. Seasoned students challenge faculty and force library education to move forward in a different way than the days older graduates might remember from library school.

Cataloging education itself. There are nine library schools in North America that currently require every student to take a "real" cataloging course. Most of the ALA-accredited library schools offer one cataloging course; the average is two courses. University of Denver has a full specialization of 15 hours in cataloging that are called Resource Description and Access.

Cataloging is a moving target. Employers are quicker than we are, Sylvia said, and faculty attempt to keep abreast. Cataloging is a support and partner to public service, archives, and special collections.

Placing students in practica and internships is a challenge. The most important activity that employers can do is to help educators place students in practica and internships. Educators need employers' help to do that.

The description of resources changes. University of Denver faculty teach students about print, digital assets, media, sound, notated music, cartographic materials, and cultural heritage resources. It is very challenging to walk a student through that kind of curriculum. Graduates can't get a job if they can't do the work that employers have for them, and the higher the expectations, the harder educators work to get students prepared.

Cross training of staff and outsourcing. Students need to know about these conditions in the environment. University of Denver has librarians who speak with students about these activities and services. The idea of shelf-ready is a difficult problem for University of Denver library staff.

No cataloging jobs. Sylvia's research suggests a trend that many don't like, which is the collapsing of professional positions into paraprofessional jobs. Differentiating the knowledge of professionals from paraprofessionals is key, so that employers, colleagues, and users can tell the difference.

Technology convergence. LIS programs support and teach students how to use the technologies found in the work and projects happening in libraries. Students thrive when they can work as part-time employees, a key to placement after graduation.

Employers' expectations. Students need to master technical skills, cataloging competencies, and related software packages. They must have workplace competencies that relate particularly to communication, flexibility, civility, and manners.

Cataloging education research. Educators have questions related to cataloging that only the application of research methodologies can solve. There is no other way to solve some of these questions. The practice of teaching relies on the research reports and the statistical analysis that we get from doing field-based investigations. All of us need to be involved, Sylvia said.

Next steps. Your local library school wants to hear from you. Offer to collaborate; serve on an advisory board; drop in and lecture; come and visit; talk with students. They need to know who you are.

Volunteer. If you would like to have a research project done, see if someone from a library school can help. These experiences entice student to your area of expertise. Sometimes, it's that research the student finds challenging and interesting. The more that can we share, the more time we have to do important things. Not that this isn't important, but working with people individually, helping your staff, training new people, recruiting new librarians and paraprofessionals is more important, maybe, than photocopying that presentation.

Speak up when you are on the listservs. We need your best ideas, Sylvia said. The kinds of things that we are trying to do with our task force and with the work of CETRC is to prepare people to be catalogers. We are looking for the brightest and the best. We are looking for the people who should be in library school. We are looking for the leaders who will come after us.

Moderator Suzanne Pilsk summarized the preconference and encouraged participants to volunteer for service on the ALCTS/CETRC Task Force on Competencies and Education for a Career in Cataloging.