# What Makes an Effective Cataloging Course?

## A Study of the Factors that Promote Learning

**Karen Snow and Gretchen L. Hoffman**

*This paper presents the results of a research study, a survey of library and information science master's degree holders who have taken a beginning cataloging course, to identify the elements of a beginning cataloging course that help students to learn cataloging concepts and skills. The results suggest that cataloging practice (the hands-on creation of bibliographic records or catalog cards), the effectiveness of the instructor, a balance of theory and practice, and placing cataloging in a real-world context contribute to effective learning. However, more research is needed to determine how, and to what the extent, each element should be incorporated into beginning cataloging courses.*

Cataloging is integral to the work of libraries. Its purpose is to provide and maintain content for the library catalog using content standards, encoding schemes, and controlled vocabularies, which facilitate discovery and access to library collections. In the cataloging process, library catalogers create bibliographic records that serve as surrogates for items in library collections. Catalogers apply various cataloging standards that guide the creation of descriptive records, including Resource Description and Access (RDA), Library of Congress Subject Headings (LCSH), Library of Congress Classification (LCC), or Dewey Decimal Classification (DDC). Cataloging is a complex process, and is a skill developed over time. Although cataloging is performed primarily by catalogers, ideally all librarians should understand cataloging to search the library catalog effectively and to assist library users.

Many librarians in all areas of librarianship are introduced to cataloging in a beginning cataloging course taken as part of their master's degree program in library and/or information science. Cataloging has been included in the library science curriculum since the beginning of the discipline in the late nineteenth century.[1] It is also one of the most challenging courses to teach. Cataloging is a complex subject, and learning cataloging can be difficult because students are introduced to a wealth of complex content. Students learn not only cataloging theory, but also how to apply cataloging standards to create descriptive records. Cataloging educators must be selective when choosing course content and learning activities because there is a limit to how much cataloging students can perform in one course. The pacing and timing of a cataloging course must

**Karen Snow** (ksnow@dom.edu) is an Assistant Professor in the Graduate School of Library and Information Science at Dominican University in River Forest, Illinois. **Gretchen L. Hoffman** (GHoffman@mail.twu.edu) is an Associate Professor in the School of Library and Information Studies at Texas Woman's University in Denton, Texas.

Paper submitted April 6, 2015; returned to author May 19, 2015 for revisions; revised manuscript submitted June 5, 2015; manuscript tentatively accepted and returned to authors for minor revisions July 6, 2015; revised manuscript submitted July 6, 2015; accepted July 6, 2015.

be considered carefully. Content should be introduced in a way that allows students to build cataloging skills without overwhelming them with work. In addition, unlike other courses in the curriculum, cataloging instructors often deal with student anxiety about taking cataloging. Some students enter the classroom convinced they will hate cataloging and will not pass the course. Cataloging educators often have to be cheerleaders, presenting cataloging as fun and doable to convince students they can succeed in the course.

To help students learn cataloging, it is important for cataloging educators to develop the most effective beginning cataloging courses. Research is needed to understand what makes an effective beginning cataloging course and what promotes learning. There is a long history of research on cataloging education, such as studies on the presence of required cataloging courses in library and information science schools, textbooks and cataloging resources used in the classroom, and which topics best prepare new cataloging professionals.[2] However, there are no known studies that examine the elements of a beginning cataloging course (including class activities, professor-student interaction, instructor's teaching style, and assignments) that contribute to student learning and how effective these elements are for beginning cataloging students.

This paper presents the results of a research study that was conducted to understand the elements of a beginning cataloging course that make a difference when learning cataloging. The focus on beginning cataloging courses is due to the desire to obtain a broader sample of experiences and backgrounds (not just those who are currently catalogers) and the fact that more students pursuing a master's degree in library and/or information science take a beginning cataloging course than advanced cataloging courses. The research question guiding the study is, what elements of a beginning cataloging course help students learn cataloging? To answer this question, an online survey was distributed in October 2013 that elicited more than five hundred responses and generated a large amount of data. The results suggest that there are four primary elements that make a difference when learning cataloging: cataloging practice, effectiveness of the instructor, balance of theory and practice, and a real-world context. Further research is needed to determine the best way to combine the elements most effectively in beginning cataloging courses.

## Literature Review

A historical look at cataloging education shows two things: the importance of teaching cataloging theory versus cataloging practice fluctuates over time, and there is very little research about the elements that make a difference when teaching and learning cataloging.

### Cataloging Theory versus Cataloging Practice

For almost a century after the founding of the first official library school at Columbia College in 1887, cataloging's place within the required curriculum was never doubted. The primary concerns about cataloging education in the late nineteenth and early- to mid-twentieth centuries were (1) how much time should be devoted to the topic, and (2) what is the appropriate balance of theory and practice? Library schools in this period typically offered only one-year programs of study. As more library schools were established and curricula expanded, each school decided on a seemingly arbitrary basis how many hours their students should devote to every area of study, including cataloging. There was little consensus among library schools regarding the number of class hours spent on cataloging content. According to the 1921 "Williamson report," an influential report of library training schools by librarian Charles Williamson, one school required 105 hours of study in cataloging while another required only 35 (and this did not include study of classification, which Williamson counted separately).[3]

Before the 1920s, very little theory was taught in library schools, and instead library schools focused on teaching the skills students would need for future positions. Melvil Dewey, who founded the School of Library Service at Columbia College, was very clear about his vision of the library school: "Its aim is entirely practical."[4] In 1943, Metcalf, Russell, and Osborn wrote that Dewey promoted "enlightened apprenticeship" where experiential learning was emphasized over discussion of principles.[5] There were skeptics to this approach, especially regarding the teaching of technical courses such as cataloging. Concerning the courses of the Library School at the University of Wisconsin in 1910, Mary E. Hazeltine (the "preceptress" at the time) "hoped to remove what she called 'the dread and the terror' from technical courses" that left students with a negative impression of cataloging.[6] The focus on cataloging seems misplaced since twenty-three students from the same library school signed a petition requesting a lighter class and workload, with no specific mention of cataloging.[7]

In the 1920s, the idea of library school as essentially an apprenticeship program was under heavier scrutiny. Ruth French Strout mentions that the Graduate Library School at the University of Chicago (founded in 1926) was created "on the premise that librarianship is something more than techniques."[8] In his 1921 and 1923 studies of library schools in the United States, Charles Williamson cautions against "routine processes of hand work and the memorizing of rules and classes," which frequently results in "deadening" students' "initiative and enthusiasm."[9] Instead, schools should focus more on theory, particularly in cataloging courses. Those students who desire to be catalogers could take advanced cataloging courses that would be more skills-based.[10] This

sentiment only increased over the next few decades. In 1943, Metcalf, Russell, and Osborn recommended a broader, more theoretical approach to cataloging instruction. Rather than focusing on the "standard ways of classifying books and preparing cards for various types of materials" that had been traditionally emphasized, they suggested that library schools focus more on principles and how cataloging impacts the work of other areas of a library.[11] The former approach is perhaps "partially responsible for producing a generation of students who too often do not want to be catalogers."[12] Emphasis should be placed on the fact that "cataloging serves other ends than its own . . . it is important to trace those ends and to study them in relation to one another."[13] This does not mean that all library schools were consistent in promoting cataloging principles over practice, but the literature suggests a greater desire on the part of educators and students to decrease the amount of hands-on practice in cataloging courses.

Later cataloging literature notes a backlash from library administrators and practicing catalogers against the heavier emphasis on theory in cataloging courses at the expense of practice. Some claimed that "new librarians seemed prepared to discuss cataloging, but not to do it."[14] However, cataloging educators continued to defend the emphasis on theory. Shera noted that "Such condemnation usually takes the form, 'They don't teach students how to catalog, anymore!' What is really meant, however, is 'They don't teach students how to catalog *the way we do it in our library!*'"[15] Tauber expressed his frustration with librarians who believed that library school graduates should possess the same cataloging knowledge when starting an entry-level position as those catalogers who have been working for many years.[16] Strout wrote that the question of "the practical versus the theoretical" should no longer be the focus of the library world's attention since the "questions which face it now are of greater complexity."[17] In response to another library educator's comment that library schools should produce graduates who meet "the expressed needs of libraries," Strout retorted,

> If our schools were to exist primarily for the purpose of fulfilling the *expressed* needs of libraries, they would indeed be training schools. . . . It may be that the needs which are *expressed* by libraries are not their greatest needs. Perhaps there ought to be people trained in theoretical concepts who might sometimes point a questioning finger at the status quo, and think up new and possibly even disturbing theories of what libraries and librarians ought to be.[18]

Shera expressed a similar sentiment that focusing on libraries' current needs (skills more than principles) does a disservice to students who will face many changes in needed skill sets throughout their careers.[19] "All who are concerned with the education of librarians must think constantly of the future, not of the present nor of the past, for the people who come seeking instruction will be practicing librarianship during the next twenty or thirty years, not during the decades of an earlier age."[20]

### Little Research about Cataloging Courses

Later in the twentieth century, discussion of cataloging education in the literature shifts from the theory versus practice debate, to more in-depth research on specific tools and skills taught in cataloging courses. MacLeod and Callahan conducted a study of cataloging courses in 1994 that is the most similar to the current study.[21] The authors surveyed eighty-four cataloging practitioners and forty-two cataloging educators to gather their opinions of cataloging course content, objectives, theory versus practice, and other topics related to cataloging education. Participants were asked to rank elements of cataloging education in terms of their importance for entry-level catalogers to know before receiving on-the-job training. Elements of a cataloging course in this context were primarily standards such as the Anglo-American Cataloguing Rules, 2nd edition (AACR2), Dewey Decimal Classification (DDC), Machine-Readable Cataloging (MARC) format, the use of bibliographic utilities, and department administration. Though there seemed to be some common agreement on the need for a balance of theory and practice, the study found a major disconnect between practitioners and educators regarding what is most important for students to learn in cataloging courses, how prepared students are when entering the workforce, and the objectives of cataloging education. While the study is enlightening in relation to what cataloging educators and practitioners think students need to learn in cataloging courses, the elements of a cataloging course that best promote learning are not discussed.

Current discussions in the literature about what "works" for students learning cataloging have been largely anecdotal, though heavily informed by years of teaching experience.[22] Intner, for example, noted that

> observation of student performance in formal library school cataloging classes for 40 semesters leads me to conclude that a direct relationship exists between the amount of hands-on cataloging done in the course through homework assignments and in-class exercises, and the ability of students to assimilate the factual material associated with cataloging practice and make it part of their personal knowledge.[23]

This, however, does not necessarily lead to an understanding of cataloging principles that inform good cataloger's judgment and prepare new professionals to be proactive and

flexible in the face of change.[24] Although Intner believes students may prefer practice to learning principles, she states that it is crucial for cataloging instructors to continually ask "why do we do this?"[25] The only known current study of student opinions on the theory versus practice debate is in Al Hijji and Fadlallah.[26] This study indicates that LIS students want more practice, more involvement from cataloging professionals, and more hands-on experience using library systems, utilizing cataloging tools and creating bibliographic records in their cataloging courses. However, does student preference for certain elements of a cataloging course mean that these are the same elements that have the most impact upon their learning of cataloging?

## Method

Within the context of this study, to say that a beginning cataloging course is effective means that graduates of Master of Library and/or Information Science (MLS/MIS/MLIS) programs are able to take what they learned in the course and apply it in the field, regardless of their position. To understand the elements of a beginning cataloging course that make a difference when learning cataloging, an online survey was developed and administered through Survey Monkey (www.surveymonkey.com). See the appendix for the survey. Survey methodology was chosen to gather data from participants in all areas of librarianship and to understand participants' experiences in beginning cataloging courses, as well as how they have used their cataloging knowledge in their work. The survey included multiple-choice questions intended to gather demographic and other data, and open-ended questions that allowed participants to respond freely to the questions. The survey was open from October 1–31, 2013, and the survey link was posted on many professional library discussion lists to gather responses from all areas of library and information science, not just technical services and cataloging. An advertisement for the survey was posted on technical services and cataloging–related discussion lists, such as RDA-L and AUTOCAT, and also on noncataloging-related discussion lists such as PUB-LIB, a discussion list for public librarians, LM_NET, a discussion list for school librarians, and LIBREF-L, a discussion list for reference librarians. An advertisement was also posted on library-related Facebook groups, such as ALA Think Tank.

The survey was limited to professional librarians who hold a master's degree in library and/or information science or the equivalent (such as library service), and who completed a beginning cataloging course as part of that program. For the purposes of the study, the beginning cataloging course must have included instruction in a traditional library cataloging standard such as the Anglo-American Cataloguing Rules, 1st or 2nd edition (AACR or AACR2), RDA, MARC, LCSH, Sears Subject Headings, LCC, DDC, etc. Surveys from participants who reported not receiving a master's degree or who did not complete a beginning cataloging course were removed from the pool. After removing incomplete surveys and surveys completed by those outside the specified study population, there were exactly five hundred completed surveys, which was an unexpectedly high number. It was anticipated that few nontechnical services and cataloging librarians would be willing to take a survey about cataloging courses, so the high number of completed surveys was welcome. Also, the sample population included librarians from all areas in librarianship. The survey participants are split almost evenly between those who work in technical services (44.6 percent) and those who represent areas outside of technical services (55.4 percent).

The data were analyzed from November 2013 through May 2014. Multiple-choice questions were analyzed using Survey Monkey and Microsoft Excel. Responses to open-ended questions and comments were analyzed using content analysis. Preexisting categories were not used. Instead, broad and specific categories were developed and agreed on during data analysis. All open-ended survey questions were divided equally between the two researchers. Each researcher read the responses of each assigned research question, and then coded each of the responses. The coding of each question took much time. The high number of surveys resulted in a large amount of data, and each response could be assigned multiple codes, so each researcher spent several days coding each question. To facilitate coding, each researcher maintained a codebook with a list of codes and decisions made during coding. Additionally, the researchers consulted with each other regarding responses that were not applicable or difficult to understand. After the coding was performed, the results of each question were ranked by percentage, and tables were created for each question. After the preliminary results were determined, the data were analyzed in other ways to validate the results. First, each researcher verified each other's coding. This was done by reading the responses and checking the other's coding to verify results. The data also were analyzed by the decade in which participants received their master's degrees and by current and primary job responsibilities of the participants (i.e., technical services versus nontechnical services). These additional data analyses support the results.

There are some possible limitations of the study's sample. One limitation might be the sample population. Many participants work in cataloging and technical services (44.6 percent), so this may have placed cataloging education in a more favorable light. Future research might focus solely on participants working in nontechnical services positions. In addition, this survey required participants to talk about past experiences. Some participants may not have been able to remember or talk about their experiences because too much

**Table 1.** Question 3: In what area of librarianship are your current and primary job duties?

| Answer options | No. of Respondents | % of Respondents |
|---|---|---|
| Technical services (e.g., cataloging, acquisitions, preservation, etc.) | 223 | 44.6 |
| Public services (e.g., reference, circulation, etc.) | 115 | 23.0 |
| Other (please specify) | 76 | 15.2 |
| Administration | 42 | 8.4 |
| Library and/or information science education | 21 | 4.2 |
| Not currently employed | 10 | 2.0 |
| Vendor/publisher | 7 | 1.4 |
| Retired | 6 | 1.2 |
| Total | 500 | 100.0 |

time has passed. Future research might want to focus on recent graduates. Another limitation might be the sample size. Five hundred people took the survey, which was quite unexpected. The large number of responses produced an incredible amount of data. Because many survey questions were open-ended to allow participants to freely discuss their experiences, data analysis was complex and took much longer than anticipated. Finally, this research looked at the question of what makes an effective beginning cataloging course from the participants' point of view. It focused on participants' perceptions of their learning; it did not attempt to assess what they actually learned. Future research could study students in cataloging courses to get a deeper understanding of learning cataloging. It could determine whether the elements reported by participants in this research survey actually affect learning in the classroom. This type of study could pinpoint how learning occurs in cataloging courses and identify ways to facilitate learning.

The following paragraphs describe the demographics and the current and primary job responsibilities of the study participants.

## Survey Demographics

The study demographics show who took the survey. Participants were asked when they received their master's degree, and responses ranged from the 1950s to the present. Most participants, however, received their master's degrees since the year 2000 (64 percent), and one-third of participants (32 percent) received their master's degrees between 2010 and 2013.

### Professional Responsibilities

Participants were asked about their current and primary position responsibilities. As shown in table 1, most participants (45 percent) work in technical services (e.g., cataloging, acquisitions, preservation). The next highest response was public services (23 percent), followed by administration (8 percent), library and/or information science education (4 percent), not currently employed (2 percent), vendors and publishers (1 percent), and retired (1 percent). In addition, many participants (15 percent) chose the "other" category, which includes positions such as school library media specialist, technology/systems administration librarian, and archives/special collections librarian. Those working in positions with responsibilities that fall within two or more of the above categories also chose the "other" category.

## Survey Results

The survey instrument was designed to elicit responses from participants to answer the research question: what elements of a beginning cataloging course help students learn cataloging? Because of space limitations, not all the survey questions and responses are included in this section. Instead, the questions that prompted the responses that most directly answered the research question are discussed below. The researchers have planned to examine the questions that do not directly answer the aforementioned research question in a future study.

### Cataloging Course Delivery and Instructor

Participants were asked how their course was provided, and who taught it. As shown in tables 2 and 3, most participants completed their beginning cataloging course face-to-face in a physical classroom (72 percent) from a full-time professor with a PhD (61 percent).

### Course Content

Participants were asked about the content of their beginning cataloging course, both regarding what was taught (theory, practice, or a mixture) and whether they learned to create physical catalog cards and/or online bibliographic records. Table 4 shows that most participants learned both theory and practice in their cataloging course (61.2 percent), and table 5 shows that of those participants who learned how to catalog, 57 percent learned how to create online bibliographic records only. A closer examination of the mixture of theory and practice question by decade the master's degree was received showed that participants who received their master's degree since the year 2000 noted that their beginning cataloging courses focused more on practice than those

who received their degree before 2000.

### Reflection on Courses

Several survey questions were open-ended and asked participants to reflect on what they *liked* about their beginning cataloging course, what they *did not like* about their beginning cataloging course, and what they felt was *missing* from the course that could have helped them learn cataloging. Table 6 shows that most participants (52 percent) liked cataloging practice (the hands-on creation of bibliographic records and/or catalog cards) and would prefer more of it. Table 7 shows that most participants (30 percent) *did not like* to learn specific types of course content, such as MARC format or DDC, but preferences and experiences varied widely from participant to participant. The same can be said about the question concerning what was *missing* from beginning cataloging courses. Table 8 shows that most of the responses (36 percent) focus on specific content they wished was covered in beginning cataloging courses, but was not taught (such as RDA and MARC format).

**Table 2.** Question 4: How was your beginning cataloging course delivered?

| Answer Options | No. of Respondents | % of Respondents |
|---|---|---|
| Face-to-face (in a physical classroom) | 359 | 71.8 |
| Online (in a virtual classroom, perhaps using a learning management system such as Blackboard or Desire 2 Learn) | 102 | 20.4 |
| Hybrid/Blended (some online, some face-to-face) | 35 | 7.0 |
| Other (please specify) | 4 | 0.8 |
| Total | 500 | 100.0 |

**Table 3.** Question 5: Who taught your beginning cataloging course?

| Answer Options | No. of Respondents | % of Respondents |
|---|---|---|
| Professor (PhD, full-time faculty) | 303 | 60.6 |
| Adjunct (part time, non-professor; practitioner or student) | 142 | 28.4 |
| Instructor/Lecturer (full time, non-professor) | 27 | 5.4 |
| I don't know/I don't remember | 18 | 3.6 |
| Other (please specify) | 10 | 2.0 |
| Total | 500 | 100.0 |

**Table 4.** Question 6: How would you describe the content of your beginning cataloging course?

| Answer Options | No. of Respondents | % of Respondent |
|---|---|---|
| A mixture of both theory and practice | 306 | 61.2 |
| Focused primarily on practice (more hands-on, creation of records) | 114 | 22.8 |
| Focused primarily on theory (less hands-on, more reading and discussing theories, ideas) | 72 | 14.4 |
| Other (please specify) | 8 | 1.6 |
| Total | 500 | 100.0 |

**Table 5.** Question 7: If you learned hands-on creation of catalog cards/bibliographic records, what were you taught to create?

| Answer Options | No. of Respondents | % of Respondent |
|---|---|---|
| Online bibliographic records only | 263 | 57.3 |
| Both cards and bibliographic records | 102 | 22.2 |
| Catalog cards only | 94 | 20.5 |
| Total | 459 | 100.0 |

### Applying what was Learned

Participants were asked if they have used what they learned from their beginning cataloging course in their previous or current positions. If they answered yes, participants were asked to explain how they have used what they learned. Most participants (82 percent) have used what they learned from their beginning cataloging course in their previous or current job positions. Among the answers given, performing cataloging on the job is cited in more than half of the responses (52 percent), perhaps emphasizing the importance of classroom practice in preparation for job responsibilities. Since a large number of participants are currently working in technical services positions, this makes sense. The next most common usage of beginning cataloging knowledge is to help users, provide reference assistance, and to search the catalog (13 percent), plus to learn, understand, and interpret catalog records (10 percent).

### Suggestions to Improve the Teaching and Learning of Cataloging

The final survey question asked participants to provide suggestions on how to improve the teaching and learning of cataloging. There was a wide range of responses, and general

**Table 6.** Question 8: Think about the specific aspects of the beginning cataloging course that you liked. What, if anything, helped you learn cataloging? For example, think about the professor/instructor, the most helpful assignments, exercises, content, class activities, etc.

| Aspects of a Beginning Cataloging Course | No. of Instances | % of Instances |
|---|---|---|
| Practice & "hands on" creation of records/cards | 489 | 52 |
| Instructor | 172 | 18 |
| Theory & history | 96 | 10 |
| Other class assignments & activities (not the creation of records) | 70 | 8 |
| Student/class interaction | 56 | 6 |
| Do not remember/nothing useful | 42 | 5 |
| Did not answer | 8 | 1 |
| Total | 933 | 100 |

Note: Percentages are based on the number of instances of that category within participant answers, not the total number of participants in the study.

**Table 7.** Question 9: Think about the specific aspects of the beginning cataloging course that you did not like. What, if anything, did not help you learn cataloging?

| Aspects of a Beginning Cataloging Course | No. of Instances | % of Instances |
|---|---|---|
| Other course content (except theory & hands-on creation of records | 205 | 30 |
| Course structure, assignments, etc. | 122 | 18 |
| Instructor | 121 | 18 |
| Theory | 110 | 16 |
| Disliked nothing/loved course | 94 | 14 |
| Do not remember | 15 | 2 |
| Did not answer | 13 | 2 |
| Total | 680 | 100 |

Note: Percentages are based on the number of instances of that category within participant answers, not the total number of participants in the study.

**Table 8.** Question 10: What, if anything, was missing from your beginning cataloging course? That is, what specific things do you think could have helped you learn cataloging?

| Aspects of a Beginning Cataloging Course | No. of Instances | % of Instances |
|---|---|---|
| Specific kinds of course content | 223 | 36 |
| Nothing/Everything was missing from the course | 88 | 14 |
| More practice/Hands-on creation of records | 79 | 13 |
| Course organization & assignments | 58 | 10 |
| No response/Did not answer question/Don't know | 51 | 8 |
| Theory/history/"big picture" discussion | 49 | 6 |
| Exposure to cataloging practice/practitioners | 38 | 9 |
| Instructor-related comments | 27 | 4 |
| Total | 613 | 100 |

Note: Percentages are based on the number of instances of that category within participant answers, not the total number of participants in the study.

course content was mentioned 67 percent of the time. The most common suggestion was to incorporate more hands-on practice in beginning cataloging courses, but participants also suggest more exposure to technology and integrated library systems (ILS), more "big picture" discussion of the importance of cataloging, and a better mix of theory and practice. After general course content, 11 percent of participants suggest improving cataloging instruction and course delivery. They report the need for more fun, humor, and enthusiasm from instructors, and more face-to-face instruction rather than online course delivery.

The results presented here focus on those survey questions that best answer the study research question about understanding the elements of a beginning cataloging course that help students learn cataloging. The next section provides a discussion of the survey results.

## Findings

What elements of a beginning cataloging course help students learn cataloging? The results suggest there are four primary elements that make a difference when learning cataloging:

1. Cataloging practice
2. Effectiveness of the instructor
3. Balance of theory and practice
4. Real-world context

Each element will be discussed separately.

### Cataloging Practice

Cataloging practice, defined as the hands-on creation of bibliographic records and cards, was stated by most participants as the most important element in a beginning cataloging course. This finding was very strong in the survey results. For example, most participants said they liked cataloging practice the most in a cataloging course, and most participants said they disliked not having cataloging practice in courses. Many participants said that cataloging practice was missing from cataloging courses and that more practice would improve cataloging courses. The high number of responses about cataloging practice was unexpected.

Although it was assumed that cataloging practice would be an important element in a cataloging course, it is surprising how strongly the participants felt about the importance of cataloging practice in a beginning cataloging course. Most participants said they want more cataloging practice, even when they noted that their beginning cataloging course included more hands-on practice than discussion of cataloging theory. This may be because many participants work in cataloging and technical services; however, the results are consistent for participants working in different parts of the library. For example, 51 percent of respondents who work primarily in technical services and 50 percent of respondents who work primarily in nontechnical services positions stated that practice was the element of their beginning cataloging course they liked the most. Additionally, this was the case for participants regardless of the decade in which they received their library science degrees. For example, except for the participants who graduated from 1950 until 1969, hands-on practice was the element most liked by those who graduated after 1970 (ranging from 25 percent (the 2000s) to 38 percent (the 1970s) of respondents). To most participants, cataloging practice is the most important element in a beginning cataloging course, and many responses illustrate this. For example, many participants reported they liked the "hands-on" nature of their courses over an entirely theoretical approach:

> I adored that our class was as hands on as it was. I couldn't imagine taking a class that was entirely theoretical. Every day at work I put into practice the rules and practices I learned in my cataloging class. Over the course of the semester we were asked to create about 15 records for semiunusual or complicated items which would test that we really knew MARC, AACR2, LC subject headings, authority records, call numbers, and the Dewey Decimal System.

Many participants said that applying cataloging practice helped them understand cataloging theory:

> I preferred it when we were actually putting theory into practice. Beginning cataloging introduces a lot of new words and concepts that I didn't really understand until I was using them. Once I could understand what I was trying to create, the theory became much clearer.

Other participants reported that they wished they had more cataloging practice in their courses. One participant who wished for more practice and knew more about MARC responded:

> I wish we would have done more to practice cataloging, doing the real work of creating records. I look at a MARC record during my work now and do not know what all those codes represent, and I feel like I should.

Some participants had courses that focused on cataloging theory only, which made cataloging very difficult for them to understand. For example, this participant said the focus on cataloging theory made the course "confusing" and "esoteric":

> The material focused more on theory than practice. I found it confusing and the coursework seemed esoteric. I would have appreciated a more "hands on" approach to the world of cataloging.

The desire for more cataloging practice is shown in this response from a participant who wants cataloging courses to be more "practical":

> More practical work! Cataloging is a skill learned through practice. Theory is important, and should be taught, but always with lots of practical applications to back it up.

### Instructor Effectiveness

Effectiveness of the instructor was cited as the second most important element that helped students learn cataloging. Effectiveness includes instructor attitude, knowledge, enthusiasm, teaching ability, and engagement. Participants report that the instructor is an important element in a beginning cataloging course, but participants did not mention the instructor as often as cataloging practice. This is an unexpected finding as well. With such a difficult and complex topic, it was assumed that the instructor would be the most important element of a beginning cataloging course. The instructor has the power to shape the course and guide learning. Although effectiveness of the instructor was the second most important element to participants, it did not emerge as strongly as cataloging practice. There were several characteristics of an effective cataloging instructor that emerged from the data. To participants, important characteristics include enthusiasm and passion for cataloging, the ability to provide clear explanations, possession of practical cataloging knowledge, and giving lots of feedback.

Responses focus on the importance of cataloging instructors and their ability to make a difference in the learning of cataloging. For example, this participant mentioned many elements that made a difference when learning

cataloging, even though the participant never intended to become a cataloger:

> The instructor . . . was actually a cataloger for a long time and made everything contextual. There were so many examples and she actually made the class really fun. I loved that we read the rules and then she would say, "Well, what the heck does that mean?" I was thinking that exact thing. [She] did a great job at breaking down these rules and making them make sense. Her examples were fun and people were actually really excited to participate. You could definitely feel her energy and she was so funny. You could tell that she was an expert and that she loved cataloging. I never wanted to be a cataloger and I probably will never be one, but I am glad that I took her class.

Another important characteristic for a cataloging instructor to possess is clear and effective instruction. This is shown in a comment from a participant who said the cataloging instructor was very clear:

> The instructor was very good at clarifying questions and confusing elements, and used her comments on homework assignments as another teaching opportunity.

Being a good communicator also was important to participants. This participant said good communication (among other things) is an important "trait" of a cataloging instructor:

> There are many traits that make a good instructor [and] my cataloging professor had all of them. He was relatable, a good communicator, funny, [and] knowledgeable about what he was teaching. I would have to say the hands-on exercises were the most beneficial.

However, several participants did not have positive experiences with their cataloging instructors. Some participants reported negative experiences. For example, this participant mentioned problems with unclear explanations and rigid teaching:

> My instructor was not very clear when teaching subject headings. It was her way or the highway and if anyone assigned variations, she said it was wrong but was not able to explain why.

This participant said the instructor's lack of knowledge of, and passion for, cataloging negatively affected learning in the course:

> My instructor was unfamiliar with the software being used to conduct the course, and the technological problems he encountered seriously encumbered the progress of the course. This, and the instructor's inability to seem engaged or enthused, were the things I most disliked about the course.

### Balance of Theory and Practice

The third element mentioned most by participants was having a balance of theory and practice. Many participants stated strongly that both theory and practice need to be included in beginning cataloging courses. Participants said they wanted more theory, more history, and to understand the "whys" of cataloging. Participants did not want a wholly theoretical course, and would have preferred a balance of theory and practice in their beginning cataloging courses. They used words such as "mix," "blend," or "balance" when discussing theory and practice. For example, this participant liked the "combination of theory and practice" in the cataloging course:

> I liked the combination of theory and practice. We would read theoretical articles on how we divide up "stuff" into discrete categories (and how ultimately arbitrary that can be) and on user behavior in searching for materials, and also created some basic MARC records for various types of items (a monograph, one volume in a series, etc.). Combining them reinforced what we were doing and why—having the theory helped us really understand why certain fields were useful, how adding different subject headings etc. would affect search results, how it would all help users for various purposes, and that made it easier to remember how to handle the technical aspects.

This participant stated that theory and practice must go "hand-in-hand":

> Theory and practice must go hand-in-hand. At times the theory would leave us behind because we didn't have the experience to really understand its implications.

Many participants used the phrase "balance between theory and practice." This participant believes that instructors do students "a great disservice" if they do not present a balance of theory and practice:

> I truly think there needs to be a balance between theory and practice. Whether that balance comes in the form of one beginning cataloging class or in

> two separate but REQUIRED classes doesn't matter so long as both are covered. You're doing students—especially students who have never worked in technical services—a great disservice if you don't give them both the theory and the practical side of the field.

This participant mentioned that finding the "right balance" of theory and practice is important for people who do not intend to become catalogers:

> I think it is important to strike the right balance between theory and practice. I think that a beginning cataloging class that is accessible to people who do not intend to be catalogers is important. That course should be supplemented by one or more advanced cataloging courses that people can take if they want to learn more.

#### Real-World Context

Placing cataloging in a "real-world context" is the last element participants cited as important in beginning cataloging courses. A "real-world" context includes putting cataloging in the context of library work, showing how cataloging helps users, providing real items and examples for cataloging practice, giving students access to cataloging tools used in practice, discussing local practices, providing experience with an integrated library system, etc. There were many responses about this topic. For example, this participant liked how the instructor put cataloging in the context of library work:

> The most helpful thing was that my instructor connected the concepts required to create good catalog records to the work in the rest of the library. She made clear how an accurate holdings list, with excellent access points, could make all the difference in public services (reference, ILL, circulation) as well as on the back end (database management, serials holdings, acquisitions). Truly, this has stuck with me for 14 years. I also found it helpful that she openly discussed the "failings" and challenges of AACR2 and LCSH, having us read Sandy Berman and other contrarians.

This participant stated that local practices should have been discussed in the course:

> I didn't like that there wasn't a lot of "real world" discussion. Theory is good, rules are good, but you also need discussions about local practices and what's best for different situations.

This participant would have liked more practice using an ILS:

> Hands-on with an actual ILS. We filled in bib[liographic] records on paper but seeing what a cataloger would see in the ILS would have been helpful. I know libraries use tons of different types of ILS but just seeing one would be better than nothing.

This participant stated that cataloging courses should give students a broader view and show how cataloging fits into the work of libraries:

> Give students a "whole picture" outlook. Not just how to catalog—what to put where and how to punctuate it, but the reasons for cataloging. What are the benefits to users (both patrons and other librarians) for what is done?

Another participant answered that cataloging courses should reflect how cataloging affects the real world:

> I think it would be very useful for students to see the "real world" impact of cataloging and the ever growing importance of quality metadata production in the brave new RDA world. It can be too easy to get lost among the trees— students need to be reminded of the beauty of the forest!

## Implications and Future Research

The survey results suggest that cataloging practice (hands-on creation of bibliographic records), effectiveness of the instructor, a balance of theory and practice, and a real-world context are elements that make a difference when learning cataloging. However, these elements are not disparate; they work together to help students learn cataloging. More research is needed to determine how these elements should work together to facilitate learning.

### More Cataloging Practice

From the results, it is clear that participants want beginning cataloging courses to include more cataloging practice. This does not necessarily mean that more cataloging practice is needed in beginning cataloging courses. Although cataloging instructors might want to incorporate more practice into classes, it does not exclude other topics such as cataloging theory or cataloging management. Additionally, participants want more cataloging practice even though they claim that cataloging instructors have been including more practice for the last decade. Therefore, is more cataloging practice

necessary in beginning cataloging courses? It would be interesting to understand how much practice is actually being assigned in beginning cataloging courses, and how much cataloging practice *should* be assigned. It also would be interesting to understand what constraints exist in a cataloging course. This may affect how much practice can be assigned. For example, beginning cataloging students are learning a very complicated skill, and there is a limit to how much learning can occur in one course. There are also time constraints in a quarter-long or a semester-long course. This type of research could be used to help students learn cataloging practice in a manageable way.

### Finding the "Ideal" Balance of Theory and Practice

Participants want more cataloging practice in beginning cataloging courses, but the results suggest that a balance of theory and practice is also important. This leads one to ask if there is an "ideal" balance of theory and practice. If so, what is that ideal balance? It would be interesting to understand if an "ideal" balance of theory and practice is dependent upon other factors such as a particular school, instructor, or mix of students. Another question for future research would be to understand what cataloging "theory" means in beginning cataloging courses. Participants defined "theory" differently. Does "theory" mean understanding various statements of principles, the purposes of cataloging, the history of cataloging, etc? In addition, what types of "theory" would be most beneficial for beginning cataloging students and how should instructors introduce theory to students? Understanding how to strike the right balance between cataloging theory and cataloging practice would strengthen students' understanding of both sides.

### How the Instructor Affects Learning

The survey results suggest that the effectiveness of the instructor is an important element in beginning cataloging courses, but more research is needed to determine how an instructor affects student learning and if an instructor affects student attitudes toward cataloging. The results suggest that cataloging instructors can affect student learning both positively and negatively, but it would be interesting to understand exactly how the instructor affects learning. Cataloging is a complex skill to learn, and effective instruction is vital. It would be interesting to understand what makes an effective cataloging instructor. This could lead to better teaching and learning of cataloging.

### Placing Cataloging in a Real-World Context

The results suggest that beginning cataloging courses should include some real-world context. To participants, it is important for cataloging to be framed in context of how the product of cataloging labor is important in different library environments. This could include factors such as showing how cataloging fits into a library's work, how cataloging affects users, having students catalog real items, having students use an integrated library system, etc. Future research could determine the best ways to provide a real-world context to give students "real" cataloging experiences. This may help students understand how cataloging is an important part of the mission of libraries, and not a task divorced from the work of libraries.

## Conclusion

The intent of this research study was to understand the elements of a beginning cataloging course that make a difference when learning cataloging. The study garnered a large number of responses from various areas of library practice and education about which aspects of a beginning cataloging course were most effective in helping participants learn cataloging. Cataloging practice, effectiveness of the instructor, balance of theory and practice, and a real-world context are four important elements that emerged from the data. Even though there were many participants who reported negative experiences in their beginning cataloging course, many more participants noted positive experiences and a greater understanding of the value of cataloging, especially after they began their professional careers. This is encouraging. Future research should attempt to understand the most effective ways to teach cataloging to beginning students, and cataloging educators should pay close attention to these findings. Improving the teaching and learning of cataloging not only benefits future catalogers, but all information professionals. Knowledge of cataloging principles and practices will help information professionals perform their jobs more effectively. Moreover, positive learning experiences in a beginning cataloging course will, in turn, inspire a greater appreciation of cataloging work, something solely needed in the cataloging profession today.

### References and Notes

1. Keyes D. Metcalf, John Dale Russell, and Andrew D. Osborn, *The Program of Instruction in Library Schools* (Urbana: University of Illinois Press, 1943).
2. For literature about the presence of required courses in library and information science schools, see for example Roxanne Sellberg, "The Teaching of Cataloging in U.S. Library Schools," *Library Resources & Technical Services* 32, no. 1 (1988): 30–42; Jodi Lynn Spillane, "Comparison of Required Introductory Cataloging Courses, 1986 to 1998," *Library Resources & Technical Services* 43, no. 4 (1999): 227–28; Daniel N. Joudrey, "A New Look at U.S. Graduate Courses in Bibliographic Control," *Cataloging & Classification*

*Quarterly* 34, no. 1–2 (2002): 57–99; Daniel N. Joudrey, "Another Look at Graduate Education for Cataloging and the Organization of Information," *Cataloging & Classification Quarterly* 46, no. 2 (2008): 137–81. Textbooks and resources used in the classroom, see Lois Mai Chan, "Instructional Materials Used in Teaching Cataloging and Classification," *Cataloging & Classification Quarterly* 7, no. 4 (1987): 131–44; Daniel N. Joudrey. "Textbooks Used in Bibliographic Control Education Courses," *Cataloging & Classification Quarterly* 34, no. 1–2 (2002): 101–18. Which topics best prepare new cataloging professionals, see Anaclare F. Evans, "The Education of Catalogers: the View of the Practitioner/Educator," *Cataloging & Classification Quarterly* 16, no. 3 (1993): 50–51; Debra W. Hill, "Requisite Skills of the Entry-Level Cataloger: a Supervisor's Perspective," *Cataloging & Classification Quarterly* 23, no. 3–4 (1997): 75–83.

3. Charles C. Williamson, *The Williamson Reports of 1921 and 1923, Including Training for Library Work (1921) and Training for Library Service (1923)* (Metuchen, NJ: Scarecrow, 1971).
4. Columbia University, School of Library Service, *School of Library Economy of Columbia College, 1887-1889: Documents for a History* (New York: School of Library Service, Columbia University, 1937), 99.
5. Metcalf, Russell, and Osborn, *The Program of Instruction in Library Schools*, 17.
6. Rachael K. Schenk, "'The Dread and the Terror' Curriculum of 1910," *Journal of Education for Library* 1, no. 2 (1960): 75.
7. Ibid.
8. Ruth French Strout, "Cataloging in the GLS Curriculum," *Journal of Cataloging & Classification* 12, no. 3 (1956): 123.
9. Williamson, *The Williamson Reports of 1921 and 1923*, 62.
10. Ibid.
11. Metcalf, Russell, and Osborn, *The Program of Instruction in Library Schools*, 29.
12. Ibid.
13. Ibid.
14. Selberg, "The Teaching of Cataloging in U.S. Library Schools," 33.
15. Jesse Shera, "On the Teaching of Cataloging," *Journal of Cataloging & Classification* 12, no. 3 (1956): 130–31.
16. Maurice F. Tauber, "Teaching of Cataloging," *Journal of Cataloging & Classification* 12, no. 3 (1956): 137.
17. Strout, "Cataloging in the GLS Curriculum," 124.
18. Ibid, 128.
19. Shera, "On the Teaching of Cataloging," 131.
20. Ibid.
21. Judy MacLeod and Daren Callahan, "Educators and Practitioners Reply: An Assessment of Cataloging Education," *Library Resources & Technical Services* 39, no. 2 (1995): 153–65.
22. For example, see Heidi Lee Hoerman, "Why Does Everybody Hate Cataloging?" *Cataloging & Classification Quarterly* 34, no. 1–2 (2002): 31–41; Robert P. Holley, "Cataloging: An Exciting Subject for Exciting Times," *Cataloging & Classification Quarterly* 34, no. 1–2 (2002): 43–50; Shawne D. Miksa, "Educators: What are the Cataloging Issues Students Get Excited About? Professional and Intellectual Appeals of Cataloging and Students' Misconceptions of Cataloging," *Cataloging & Classification Quarterly* 45, no. 3 (2008): 17–24.
23. Sheila S. Intner, "Persistent Issues in Cataloging Education: Considering the Past and Looking Toward the Future," *Cataloging & Classification Quarterly* 34, no. 1–2 (2002): 18.
24. Ibid.
25. Ibid, 20.
26. Khalfan Zahran Al Hijji and Omar Sulaiman Fadlallah, "Theory Versus Practice in Cataloging Education in Oman: Students' Perspectives," *Cataloging & Classification Quarterly* 51, no. 8 (2013): 929–44.

## Appendix 1. Survey Questions

Question 1: Informed Consent—Do you agree to participate?

Question 2: In what year did you receive your Master's degree in library and/or information science (or the equivalent)? (enter 4-digit year; for example, 2001)

Question 3: In what area of librarianship are your current and primary job duties?

- Technical services (e.g., cataloging, acquisitions, preservation, etc.)
- Public services (e.g., reference, circulation, etc.)
- Administration
- Library and/or information science education
- Vendor/publisher
- Not currently employed
- Retired
- Other (please specify)

Question 4: How was your beginning cataloging course delivered?

- Face-to-face (in a physical classroom)
- Online (in a virtual classroom, perhaps using a learning management system such as Blackboard or Desire 2 Learn)
- Hybrid/Blended (some online, some face-to-face)
- Other (please specify)

Question 5: Who taught your beginning cataloging course?
- Professor (PhD, full-time faculty)
- Adjunct (part time, non-professor; practitioner or student)
- Instructor/Lecturer (full time, non-professor)
- I don't know/I don't remember
- Other (please specify)

Question 6: How would you describe the content of your beginning cataloging course?
- Focused primarily on theory (less hands-on, more reading and discussing theories, ideas)
- Focused primarily on practice (more hands-on, creation of records)
- A mixture of both theory and practice
- Other (please specify)

Question 7: If you learned hands-on creation of catalog cards/bibliographic records, what were you taught to create?
- Catalog cards only
- Online bibliographic records only
- Both cards and bibliographic records

Question 8: Think about the specific aspects of the beginning cataloging course that you liked. What, if anything, helped you learn cataloging? For example, think about the professor/instructor, the most helpful assignments, exercises, content, class activities, etc.

Question 9: Think about the specific aspects of the beginning cataloging course that you did not like. What, if anything, did not help you learn cataloging?

Question 10: What, if anything, was missing from your beginning cataloging course? That is, what specific things do you think could have helped you learn cataloging?

Question 11: Which of the following best describes your attitude toward cataloging when you started your beginning cataloging course.
- Strongly Disliked
- Disliked
- Neutral/No Opinion
- Liked
- Strongly Liked

Question 12: Which of the following best describes your attitude toward cataloging at the end of your beginning cataloging course.
- Strongly Disliked
- Disliked
- Neutral/No Opinion
- Liked
- Strongly Liked

Question 13: Do you believe your beginning cataloging professor/instructor cared about your learning?
- Yes
- No
- I don't know/I don't remember

Question 14: Did you take a cataloging course beyond the beginning course?
- Yes
- No
- Other (please explain)

Question 15: If you answered "Yes" to the last question, what influenced you to take the advanced cataloging course(s)? (Check all that apply)
- Cataloging was the focus of my program
- I liked my professor's/instructor's approach to teaching
- I wanted to learn more about cataloging
- Other (please explain)

Question 16: Have you used what you learned in your beginning cataloging course in your current position and/or previous positions?
- Yes
- No

Question 17: If you answered "Yes" to the previous question, how have you used what you learned?

Question 18: What are your suggestions to improve the teaching and learning of cataloging?