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Developing library school student's research skills through assignments in a collection management course

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Abstract

Schools of Library and Information Science in Canada and in the U.S. are graduate professional schools that train librarians and information specialists and pursue a combination of practical and academic educational goals. Students are introduced to research through a Research Methods course, however further application of research skills is limited by the lack of a requirement for a Master's Theses. The paper discusses ways of introducing research through assignments in a Collection Management class. Assignments were designed to address the main content aspects of the discipline through the application of a research process in such standard formats as technical reports, short research proposals and presentations.

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1. Introduction

Library Degrees are graduate level professional degrees that are granted by over fifty U.S. and Canadian Universities. In the course of the last two decades the names of most of these schools have changed from "Library Schools" to "Schools of Library and Information Studies", or "Schools of Information Management" or "Schools of Information". Regardless to the title all of them continue to train professional librarians and grant a Master's Degree in the field of Library and/or Information Science. This degree is a required qualification for any professional librarian's position.

The need for librarians to combine practice and research in their jobs is widely recognized. To address this need the curriculum of a Library School includes a course on Research Methods, however does not include a requirement for a Master's Theses. Writing a thesis is optional. It can be substituted and in most of the cases is substituted by a portfolio of course work. Opportunities for students to develop research skills although encouraged through different venues, are limited to the content of individual courses.

Teaching research in Library Schools is also shaped by the diversity of student's educational backgrounds. The majority of students come with an undergraduate degree, although some have a Master's and a Ph.D. Most of the students have a background in the humanities, fewer – in the social sciences and very few- in the sciences and

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engineering. The level of previous education and the subject background inevitably affects the understanding of the research process and determines significant differences in the student's familiarity with research methodologies.

For most of the students a research methods class that is not supported by opportunities to apply the acquired knowledge is insufficient. Surveys of both -library school students and librarians conducted in the last decade show that most of the respondents consider more training and broader exposure to research very beneficial.

2. Goal, objectives and material

The purpose of the work summarized in this paper was to develop a teaching strategy that contributes to the development of research skills among library school students through their application to the content of a practical professional course. More specific question included:

- identifying priority areas of the course the study of which could be improved by a more academic research based approach

- identifying priority aspects of research in library science that can be realistically taught in the conditions of a professional course when opportunities to work on a research project comprehensively are limited

- devising concrete assignments that address the two objectives identified above

The approach discussed in this paper was developed as a result of teaching a course on Collection Management. The course is offered in all library schools and although usually elective - is traditionally considered central to the profession. The content of the course covers a broad range of issues related to the development of library collections in different types of libraries and information centers and therefore opens broad opportunities to place research into a practical and professionally meaningful context.

The course was taught by the author at San Jose State University since 2008 in a fully online environment. The content was delivered in weekly modules each of which included a weekly document outlining the learning goals and objectives of learning, lectures and readings. Required activities included participation in weekly discussions and six separately graded assignments. These two types of required activities were used as venues for introducing research.

3. Professional roles of librarians and the need to teach research methods: a brief review of literature

A professional discipline like librarianship is based on two forms of knowledge: theoretical and practical. Theoretical knowledge is produced as a result of research and is disseminated primarily through scholarly channels, publications being the main of them. Practical knowledge is created as a result of everyday professional practice and is disseminated through various channels including professional publications. There obviously is a strong connection between these two forms.

The importance of the connection between research and practice for the library profession was addressed in a number of publications. Powell, Baker, and Mika (2002) indicate that research contributes to the advancement of the discipline through producing new knowledge. This new knowledge lays foundations for the improvement and innovation in professional practice and enhances the critical thinking and problem-solving ability of practitioners. Park (2003) differentiates between two levels of competencies both of which are necessary for practicing in the field of library and information science: the consumer level and the contributor level. At the consumer level library and information science practitioners read, evaluate and make use of research publications. At the research contributor level they produce research. The two levels are closely connected.

Integration of research into practice is especially important in the academic library world. The formal side of it is determined by the fact that librarians working at university libraries usually have faculty status and are required to publish for tenure and promotion. Traditional forms of library practice, such as reference consultations, instruction and various library management activities are known to have improved as a result of a more academic approach to work (Bodi, 2002). A more recent tendency in the academic library work is to encourage librarians to collaborate with faculty and graduate students through their involvement into the research process by participating in the

preparation of systematic reviews, participation in grant application by aggregating and analyzing research metrics, and data curation.

In spite of the broad understanding of research as an integral part of the profession opinions were expressed about the insufficient integration of research into practice (Riggs, 1994, McClure, 1989;) Reason leading to this are numerous, but many stem out of the insufficient training received by library school students in areas pertinent to research.

A substantial number of publications discuss research skills as an essential competency of professional librarians that has to be developed through teaching research methods within the library school curriculum. These publications are based either on surveys conducted among the involved groups (library school faculty, library school students and working librarians), or on reviews of the library school curriculum and syllabi. The following brief overview provides examples of findings and thoughts supporting the need to look for ways of strengthening research training of librarians.

Stephenson (1990) reported the results of a detailed survey of instructors teaching a research methods class in over 50 accredited U.S. and Canadian Library Schools. One of her findings pertained to the very limited opportunities to practice research skills by working on concrete projects because not all of the research methods courses included a requirement for a research project.

Park (2003) reviewed the curriculum of a similar number of accredited U.S and Canadian library schools with respect to their inclusion of a research methods course. According to the findings only in half of the library schools a research methods course was offered as a core course, although at the same universities research methods classes were offered in most of the science and social science programs, and most importantly – in other graduate professional programs such as Business and Social Work.

Andersen (2002) analysed the results of a survey conducted among Master's students at the University at Albany, State University of New York. The results of the survey are discussed in the context of developing student's analytical skills in order to meet the changing requirements of the profession. According to the obtained results research was recognized by the library students as an important part of their education.

Luo (2011) conducted a detailed survey of librarians working in different types of libraries with respect to their knowledge of research methods and the usefulness of courses on research methods offered in library schools. The article describes many interesting findings and makes useful practical suggestions, such as offering continuing education opportunities and more flexibility within the curriculum.

4. Research as a component of assignments in a collection management course

Two aspects had to be considered in the development of the assignments:

- the content part of collection management to be addressed in the assignments
- ways of integrating research into assignments in order to facilitate a more academic approach to mastering the content of collection management.

The choice of the core areas of collection management was based on a traditional understanding of the scope of the discipline reflected in texts and most importantly - on concrete projects that a collection management librarian handles at work. Knowledge and skills necessary for performing the most common collection management tasks determined the choice of the following content areas for the assignments: 1. studies of user's needs 2. development of collection management policies 3. selection of library materials and 4. evaluation of library collections. A separate assignment required an in-depth study of one of the core collection management topics chosen by the student.

Several ways of introducing research into the content of the course were considered. Following the system of teaching described in texts on basic research methods in the social sciences was impossible. The limitations of a practical course made it necessary to devise a more focused approach tailored to the concrete content of the discipline. The decision was made to emphasize the importance of all standard components of a research process, but focus on the formulating of the objective and research questions, familiarity with the basics of research design, familiarity with methods of data collecting and analysis that are most commonly used in library science and applicable to collection management. For this purpose a combination of several sources was reviewed: categories related to research in the field of library and information described by Hernon (2001) and B. Widemuth (2009), methods of research identified by Peritz (1980) as the most commonly used in library science publications, results of

the survey of instructors teaching a research methods class in Library Schools reported by Stephenson (1999) and research methods described by Eldredge (2004) for the field of medical librarianship.

Both – the collection management content and the research aspect were introduced through two types of assignments: weekly discussions of the studied topics and five separately graded short project types of assignments.

4.1. Discussions of a topic on the basis of articles from scholarly journals as an assignment

Learning to work with scholarly literature was addressed as an essential component in the development of student's research skills and as a foundation for the separately graded assignments that required work with original data. In many cases selected readings were studied as examples of research in collection management.

Each week students were required to contribute to the discussion of a broad collection management topic. The discussion was based on the reading of 3-4 articles selected by the instructor from peer-reviewed sources and was directed by questions asked by the instructor. The questions were formulated with the intention to facilitate a more scholarly research-based approach to a practical library science topic by drawing attention to the importance of the theoretical background in the study of the topic, clarity in the understanding of the goals, methodology, and conclusions. Selected articles were discussed with respect to their applicability in future work.

Examples of questions posted for discussion: What is the importance of the theoretical background for the study of the problem? What elements of the methodology devised by the author of the article can be applied in similar research? What conclusions of the research described in the article are most relevant to the work of a library practitioner?

4.2. Separately graded assignments

The course included a system of six separately graded assignments. The first five assignments required research. The sixth assignment was a review of the course that was not included into this study. The use of a combination of several shorter assignments rather than one large project was more suitable for the study of the diverse content of collection management. The sequence of the assignments reflected the logic of practical collection management in all types of libraries.

Table 1. Characteristics of assignments in a collection management course

| Content of Collection Management addressed by the assignment | Presentation Format | Aspects of the research process emphasized by the assignment | Type of research design |
|---|----------------------------|---|--|
| Study of user's information needs | Short research proposal | Problem statement, Theoretical framework, Objectives/ research questions, Research design | Case study, study of Special populations |
| Collection Policies | Technical report | Description of the phenomena or setting, Research design | Comparative study, audit |
| Selection of Library Materials | Technical report/article | Objectives/research questions, Data collecting, Data analysis | Case study |
| Evaluation of Library Collections | Technical report/article | Problem statement, Objectives/ research questions, Research design | Case study, Comparative study |
| In-Depth study of a selected topic | Presentation | Data gathering, processing and analysis, Problem statement, objectives/research questions, Other elements depend on the topic | Case study |

5. Conclusions and recommendations

The widely recognized need to strengthen the research component of library school education can and should be implemented along different venues including the inclusion of elements of research into practical library school courses.

Assignments in courses like Collection Management are among the most obvious ways of doing it. Using a variety of assignment types and directing students to address them as short research projects would contribute to the understanding of research and provide meaningful opportunities to practice research skills. Learning to work with scholarly literature, emphasis on the understanding of the theoretical background of library research, clarity in research design and methodology should be emphasised at every opportunity.

Written and verbal comments received from students at the end of the term showed that the systematic use of scholarly literature made the course more academic and the discipline more interesting. Some students indicated that their understanding of the professional and research opportunities in library and information science have broadened and that their interest in the discipline strengthened. Some indicated that their academic writing skills improved.

A formal structured assessment would be beneficial for the understanding of the learning outcomes of the described approach and can be a subject of a follow-up study.

References

- Andersen, D. L. (2002). Teaching analytic thinking: Bridging the gap between student skills and professional needs in information science. *Journal of Education for Library & Information Science*, 43(3), 187-196. doi:10.2307/40323962
- Bodi, S. (2002). How can we bridge the gap between what we teach and what they do? Some thoughts on the place of questions in the process of research. *Journal of Academic Librarianship*, 28, 109–114.
- Dilevko, J. (2000). A new approach to teaching research methods courses in LIS programs. *Journal of Education for Library & Information Science*, 41(4), 307-329. doi:10.2307/40324048
- Eldredge, J. D. (2004). Inventory of research methods for librarianship and informatics. *Journal of the Medical Library Association*, 92(1), 83-90. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=llf&AN=502918603&site=ehost-live>
- Hernon, P. (2001). Components of the research process: Where do we need to focus attention? *Journal of Academic Librarianship*, 27(2), 81-89. doi:10.1016/S0099-1333(00)00179-8
- Luo, L. (2011). Fusing research into practice: The role of research methods education. *Library & Information Science Research (07408188)*, 33(3), 191-201. doi:10.1016/j.lisr.2010.12.001
- McClure, C. (1989). Increasing the usefulness of research for library managers: Propositions, issues and strategies. *Library Trends*, 38(2), 280–294.
- Park, S. (2003). Research methods as a core competency. *Journal of Education for Library & Information Science*, 44(1), 17-25. doi:10.2307/40323939
- Peritz B. (1980). The Methods of Library Science Research: Some Results From a Bibliometric Survey. *Library Research* 9(17), 3-83
- Powell, R. R., Baker, L. M., & Mika, J. J. (2002). Library and information science practitioners and research. *Library & Information Science Research*, 24, 49–72.
- Riggs, D. E. (1994). Losing the foundation of understanding. *American Libraries*, 25, 449.
- Stephenson, M. S. (1990). Teaching research methods in library and information studies programs. *Journal of Education for Library & Information Science*, 31, 49-65. doi:10.2307/40323727