

**Образование в области библиотечных и информационных наук:
обучение методам исследования в американской учебной программе
для библиотечных и информационных специальностей**

**Education for Library and Information Studies:
A Study of Research Methods in the American LIS Education Curriculum**

**Освіта у галузі бібліотечних та інформаційних наук: навчання методам
дослідження в американській навчальній програмі для бібліотечних
та інформаційних спеціальностей**

Полин Ротстейн

*Школа библиотечных и информационных наук Палмера,
Университет Лонг-Айленда, Нью-Йорк, штат Нью-Йорк, США*

Pauline Rothstein

Long Island University, Palmer School of Library and Information Science, New York, NY, USA

Полін Ротстейн

*Школа бібліотечних та інформаційних наук Палмера,
Університет Лонг-Айленда, Нью-Йорк, штат Нью-Йорк, США*

Какие навыки и знания требуются студентам библиотечных и информационных специальностей для применения методов исследования и программы оценки. Проводилось несколько исследований в области преподавания методов исследования в библиотечных школах Соединенных Штатов. Из этих исследований ясно, что объем этого курса в разных школах не совпадает. На основе анализа учебных планов американских библиотечных школ я составила таблицу, в которой отражены исследовательские навыки, получаемые по всем программам, и те навыки, которым обучают только по отдельным программам. В то время как некоторые программы имеют своей целью научить интеллектуальной оценке предмета исследования в области библиотечных и информационных наук, другие программы обучают студентов тому, как проводить исследование. Для объединения усилий исследователей и практиков при продвижении библиотечной науки как дисциплины и библиотечного дела как профессии очень важно, чтобы обе группы понимали друг друга. Полезно разработать общие цели и задачи для общего вводного курса по методам исследования. Поскольку семестр в Соединенных Штатах длится обычно 15 недель, важно выбрать те задачи, которые можно реализовать за этот период. Начало данному исследованию было положено несколько лет назад, когда я искала учебник для курса по методам исследования для Школы библиотечных и информационных наук Палмера в Университете Лонг-Айленда и обнаружила, что хотя стандартный учебник существовал, большинство факультетов его не использовало. Вместо этого они использовали различные учебники по общим методам исследования и статистике. Я подготовила настоящий доклад на основе данных учебных планов 12 американских библиотечных школ и бесед с преподавателями, обучающими методам исследования. Находясь в России, я надеюсь задать ряд вопросов, которые дадут информацию по преподаванию методов исследования в библиотечных учебных заведениях России. Надеюсь, это положит начало сравнительному исследовательскому проекту.

What are the skills and knowledge needed in a Research Methods and Evaluation curriculum for Library and Information Science (LIS) students? There have been several studies of the teaching of Research Methods in library schools in the United States. What is clear from the studies is that the scope of these courses varies across schools. From an analysis of syllabi from American library schools, I have identified skills which they all share and skills which are taught in selected programs. While some programs have as their goal the evaluation of research articles in library and information science, others emphasize how to do research. With the current emphasis on bringing researchers and practitioners together to advance library science as a discipline and librarianship as a profession, it is important for both groups to understand one another. It is to our advantage to develop shared goals and objectives for one introductory research methods course for all Masters level students. Since a semester in the United States is usually 15 weeks, it is important that we select those goals which are achievable in this time frame. The genesis of this research began several years ago when I looked for a textbook to teach a Research Methods course for the Palmer School of Library and Information Science at Long Island University and discovered that while one standard text existed, many faculty were not using it. Instead, they used a variety of general research methods and statistics texts. I prepared this paper based on a content analysis of information from twelve American library school syllabi and talks with faculty who teach research methods. All syllabi are available on the internet. References are listed. While I am in Russia, I hope to ask the kinds of questions which will yield information about the teaching of research methods in Russian library schools. I hope this will be the beginning of a comparative research project.

Які навички та знання потрібні студентам бібліотечних та інформаційних спеціальностей для застосування методів дослідження та програми оцінки? Проведено декілька досліджень у галузі викладання методів дослідження у бібліотечних школах Сполучених Штатів Америки. Виявлено, що об'єм цього курсу в різних школах не збігається. На основі аналізу навчальних планів американських бібліотечних шкіл я склала таблицю, в якій відбито дослідницькі навички, отримані з усіх програм, і ті навички, яким навчають лише за окремими програмами. Коли деякі програми мають за мету навчити інтелектуальній оцінці предмету дослідження в галузі бібліотечних та інформаційних наук, інші програми навчають студентів тому, як проводити дослідження. Для

об'єднання зусиль дослідників та практиків у розвитку бібліотечної науки як дисципліни та бібліотечної справи як професії дуже важливим є взаємне розуміння між двома групами. Доцільно розробити сукупність цілей та задач для загального ознайомчого курсу з методів дослідження. Оскільки семестр у Сполучених Штатах триває зазвичай 15 тижнів, важливо обрати ті задачі, які можна реалізувати за цей період. Початок даному дослідженню було покладено декілька років тому, коли я шукала підручник для курсу з методів дослідження для Школи бібліотечних та інформаційних наук Палмера в Університеті Лонг-Айленда і виявила, що хоч стандартний підручник існував, більшість факультетів його не використовували. Замість цього вони користувались різними підручниками із загальних методів дослідження та статистиці. Я підготувала цей доклад на основі даних навчальних планів 12 американських бібліотечних шкіл і бесід з викладачами, що навчають методам дослідження. Під час перебування в Росії я сподіваюсь задати ряд питань, які дадуть інформацію, щодо викладання методів дослідження в бібліотечних навчальних закладах Росії. Сподіваюсь, що це покладе початок порівняльному дослідницькому проекту.

What are the skills and knowledge needed in a Research Methods and Evaluation curriculum for Library and Information Science (LIS) students? There have been several studies of the teaching of Research Methods in library schools in the United States. What is clear from the studies is that the scope of these courses varies across schools. From an analysis of syllabi from American library schools, I have identified skills which they all share and skills which are taught in selected programs. While some programs have as their goal the evaluation of research articles in library and information science, others emphasize how to do research. With the current emphasis on bringing researchers and practitioners together to advance library science as a discipline and librarianship as a profession, it is important for both groups to understand one another. It is to our advantage to develop shared goals and objectives for one introductory research methods course for all Masters level students. Since a semester in the United States is usually 15 weeks, it is important that we select those goals which are achievable in this time frame. The genesis of this research began several years ago when I looked for a textbook to teach a Research Methods course for the Palmer School of Library and Information Science at Long Island University and discovered that while one standard text existed, many faculty were not using it. Instead, they used a variety of general research methods and statistics texts. I prepared this paper based on a content analysis of information from twelve American library school syllabi and talks with faculty who teach research methods. All syllabi are available on the internet. References are listed.

Research Methods is taught as part of the core in some Schools of Library and Information Science in the United States. In others it is either an elective or not available. In a 2001 survey, Park and O'Connor wrote about the «Crisis in LIS Research Capacity» in *Library and Information Science Research*. They found that 38.5% of American Library Association (ALA) accredited schools did not require Research Methods. In addition, they found that only half of the 24 top rated MLS programs required Research Methods. In these cases it is possible that the subject is taught across the curriculum in other subjects.

Those outside the field might wonder why Research Methods is such an important element in the education of LIS students. While I could write paragraphs on this topic, I will list a few of the most important reasons. These include the following:

1. To apply the scientific method to analyze the problems which library/information professionals must explore.
2. To evaluate the research of others.
3. To use the application of research for improved decision making, better and more accountable services and programs, and the development of LIS as a discipline.
4. To build a foundation for further cooperation between practitioners and researchers.
5. To gain skills needed for proposal and grant writing.
6. To enable students to become familiar with the research process so they can assist users who are engaged in research.

As Jesse Shera, an eminent library professional said in 1952, «A specific part of the course of study for a graduate student in librarianship should be the acquiring of a knowledge of the principles and methods of research as applied to the investigation of library problems, together with the ability to evaluate research results, especially in librarianship. « Even before the advent of the internet and other advanced communication technologies, Research Methods was a useful subject for library/information professionals. Now that we are all connected, a coordinated method or several model curricula could be shared as a way to develop a common set of skills and knowledge for all graduates of Masters programs in library and information science (studies).

We need to educate information professionals to investigate and evaluate the intended and unintended consequences of developments in information technology while keeping the relevant core values of our discipline.. LIS professionals have to make choices involving huge expenditures of money and time. Information is always available...the question is often how much or how fast do we want it and what does it cost. How accessible must information be, for whom should it be accessible, and when, and in what format is a question asked of information professionals. Without a good foundation in Research Methods, it is not possible for them to provide answers.

Content Analysis

I teach Research Methods for the Long Island University Palmer School of Library and Information Science. Always on the lookout for a new text that will do exactly what I want, I have looked at the syllabi of many research methods courses and have asked faculty in the subject area. The fact that I have not received a resounding answer that someone is using a wonderful text to teach research methods and statistics in the *15 weeks or one semester* given to it by most U. S. schools has led me to investigate the content of these courses.

I selected syllabi from twelve (12) library and information science schools in North America, two from Canada and ten from the United States. There is a mix of schools granting the Masters degree and those granting the Masters and Ph. D. degree. For the purpose of this initial content analysis, I chose only syllabi from the Masters' programs. These syllabi were chosen because they are currently available on the internet. Most represent courses given between 2000 and 2005. The name of the professor who created each syllabus follows the name of the school. Note that there may be no shared model for a research methods course given by any single LIS program.

Dalhousie University (Canada) Dr. Margaret Higgins, LIS 506

Long Island University Dr. Deirdre Stam, LIS 514-01

Simmons College Dr. Benoit, LIS 403

Southern Connecticut State University, Dr. Mary E. Brown, ILS 680

University of Texas Professor Ruth A. Palmquist, LIS 397.1

University of North Carolina Professor Diane Kelly, INLS — 201

University of Tennessee Dr. Peiling Wang, IS 540

University of Wisconsin-Milwaukee Dr. Elizabeth A. Buchanan. LIS 540-891-001

University of Arizona Dr. Xiaolong (Luke) Zhang, IRLS 506

University of South Florida Boryung Ju LIS 6271

University of Kentucky Dr. Donald Case LIS 608

University of British Columbia (Canada) Ann Curry, LIS 590

All courses have at least one main textbook. Some have more than one research methods text. Others also have a statistics textbook. A total of eight (8) different textbook titles were used as the main research methods text in the twelve courses represented by these syllabi. Only one text, the Powell (3rd and 4th edition) was specific to Library and Information Science. The Leedy was used in the 7th and 8th edition. Some syllabi used more than one main text. The following title list indicates the number of syllabi listing each text.

Babbie, Earl R. (2003). *The practice of social research*. Tenth edition. Belmont, CA: Wadsworth Publishing. (2)

John W. Creswell (2003) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, Sage Publications: Thousand Oaks. 246 pp. (2)

Leedy, Paul. D, and Ormrod, Jeanne E. (2001). *Practical Research: Planning and Design*. (7th Ed.). Upper Saddle River, NJ: Merrill Prentice Hall. 2001 (1)

Leedy....8th edition, 2004 (2)

Martella, R., Nelson, R., and Martella-Marchand, N. (1999). *Research methods: Learning to become a critical research consumer*. Boston: Allyn and Bacon. (1)

Patten, M. L.. (any recent edition). *Understanding Research Methods: An Overview of the Essentials*, 3rd Ed., California: Pyrczak Press. (1)

Powell, Ronald R., & Connaway, Lynn Silipigni (2004). *Basic research methods for librarians*. 4th ed. Greenwich, Conn.: Ablex. (3rd edition available) ISBN: 1-56750-338-1. (4)

Trochin, Willim M. K. *The Research methods Knowledge Base*. 2nd ed. Cincinnati, OH: Atomic Dog Publishing, 2001 (1)

Williamson, Kirsty. *Research methods for students, academics and professionals: Information management and systems*. 2nd ed. Wagga Wagga, NSW: Charles Stuart University — Centre for Information Studies, 2002. (1)

In addition to the research methods text, some syllabi included a required statistics text. More included websites or articles as guides to statistics instruction. The following texts were required.

Hernon, Peter. (1994). *Statistics: A component of the research process* (Rev. ed.). Norwood, NJ: Ablex. (3)

Stephens, P. & Hornby, S. *Simple Statistics for Library and Information Professionals*, London: Librarian Association Publishing, 1997 (1)

Vaughan, Liwen. *Statistical Methods for the Information Professional*, ASIS&T, ASIS Monograph Series, Information Today: Medford, NJ 2001 (2)

All syllabi readings reflect the interests of the specific faculty member with an extensive use of recommended books, articles, websites, and even one coursepak. Only one book was recommended reading on as many as six (6) syllabi. This was the Busha and Harter book (Busha, Charles H. and Harter, Stephen P. *Research Methods in Librarianship: techniques and interpretation* NY: Academic Press, 1980.) I have heard research methods faculty wish for an update to this text. Articles from the following journals were recommended reading on most syllabi: *Library and Information Science Research*, *Journal of the American Society for Information Science*. *Journal of the*

American Society for Information Science & Technology, Library Trends, and Library Quarterly. In some syllabi articles were cited from journals on specific subjects such as ethnographic research, qualitative research, case studies, Ethics, or issues in college, school or public libraries.

While most syllabi had similar goals and objectives, they differed in the amount of time devoted to statistics. Because of the many different words used to identify lessons on statistics, I have counted as statistics sessions all those using words such as experimental design, data analysis, reporting results, sampling, analysis of quantitative data, quantitative approaches to research, designs & error, introduction to statistics, descriptive research, inferential statistics, experimental research, measures of central tendency, probability, sampling, statistical analysis tools, measurement, and specific statistical terms such as stratified, random, reliability and validity. Although some lessons covered statistics and another subject or two, I counted a lesson as a statistics session in those instances where it appeared to be the main subject. I was surprised that almost half the syllabi had 5 lessons on statistics. Two syllabi had 2 lessons; three had 2 lessons; four had 3 lessons; and five had 5 lessons. No previous statistics course was assumed for any of the courses.

It is clear from this minimal analysis that we need to do further research to find out the level of statistical understanding that research methods faculty expect from students. Reading the syllabi did not provide enough information to reach any conclusion. Only two schools, Texas and Tennessee required use of a computerized statistical package (SAS or SPSS). Both of these schools are in research institutions that grant the Ph. D. One class had a teaching assistant. Both had access to a computer lab. There was no indication that the students had extra class time to learn SPSS.

Two goals for this introductory research methods course (the only one most students will ever take) are the *evaluation of research* they read and *the preparation of a basic research proposal*. In all syllabi students were allowed to choose a topic of interest. *Grading* of the research proposal differed in the percentage allotted to this proposal as part of the total grade. There were 4 syllabi which did not indicate the grade percentage for the proposal. Of the other 8 syllabi, the grade percentages were as follows: 20% = 1; 30% = 3; 35%= 2; 50%=2. Even in the syllabi with no percentage breakdown, it was clear from the narrative and in two cases, the step-by-step assignments, that learning to prepare a research proposal is part of all courses but one where the students are allowed an open assignment which, I suspect, is usually a proposal (their other assignments are design of a questionnaire and a critique of a research article).

It is my view that the purpose of doing a research proposal for most students is to help them understand, evaluate, and apply the research they read or encounter in other ways. Most students who do not go on to the Ph. D. will not do research. Instead, they will need to understand it for two major reasons (1) To make decisions in practical situations. and (2) To enter into a productive dialogue between researchers and practitioners. This dialogue is needed to advance librarianship as a discipline and as a profession.

I was impressed by the large number of creative activities and lessons developed to teach what can be a difficult subject for some students. It would be useful to have a group of library and information science research methods faculty find a formal way to share «successful lessons and assignments» to accompany one or more of the texts used to teach this subject.

Bibliography

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2. Leedy, Paul. *Practical Research: Planning and Design*, 8th ed. Upper Saddle River, NJ: Merrill Prentice Hall, 2004
3. Meadows, A. J. *communicating Research*, San Diego, Academic Press, 1998
4. O'Connor, Daniel O., and Soyeon Park. «Crisis in LIS Research Capacity,» *Library and Information Science Research* 23 (2001) 103-6
5. Shera, Jesse. «On the Value of Library History,» *Library Quarterly* (22) (July 1952) 249-51
6. Wilson, Tom. « 'Information Science' and Research Methods,» Paper published by the Department of Library and Information Science, Comenius University, Bratislava, Slovak Republic. Updated March 2002. Available at <http://informationr.net/tdw/publ/papers/slovak02.html>
7. While I did not use this paper directly in my writing here, the models it suggests would be a useful basis for developing a framework for a research methods curriculum.