

COURSE SCHEDULE

Library Operations, INLS 210-40
<http://LibraryOperations.com>
Spring 2005

This is a dynamic schedule—check frequently for updates

Wed Jan 12

Introduction, Outline of the course.

Wed Jan 19

Assignment due at the beginning of this class: Get a computer account on “ruby” – see Scott Adams, the SILS director of Information Technology.

Data Collection.

Probabilistic Methods and Decision Making.

Economic Models (**Read for this class:** (Liu, 2003a))

Mon Jan 24

Regressions

Wed Jan 26

Linear & Non-linear systems

Queueing Theory

Assignment due at the beginning of this class: Observe the circulation desk of a traditional library for 20 minutes. Note the exact (to the second) arrival time and the departure time of each patron during the 20 minutes. Decide how you will address people who arrive outside your time window but depart during the window, or those who arrive during your 20 minutes and depart afterwards.

1. Compute the average rate of arrival of patrons, per minute.
2. Compute the average service time per patron. How long does it take on an average, between when patrons arrive and when they depart. Express this as a fraction of a minute (e.g., 5 seconds is 5/60).
3. Simply, crudely (I'm not looking for neatness) plot the number of arrivals per minute compared to the number of minutes where this occurs. Use your raw data as the source.
4. Simply (as above) plot the service time compared to the number of people requiring that amount of time.

Mon Jan 31

Factor Analysis (**Read for this class:** (Chao, 2002))

Small World models

“Bibliomining” (**Read for this class:** (Nicholson, 2003))

Assignment due at the beginning of this class: For your data gathered for the previous class, and using the Mathematica code from the previous class, what is the average waiting time (before departure) for a person at the circulation desk if there is a single person working at the desk?

Mon Feb 7

Remember that the emphasis from here on is on how one “does it right” from the beginning, rather than saying “Oops” 10 years after a policy has been developed.

Selection and Weeding

(Walters, 2004; Crotts, 1999)

Read or scan for this class if time permits: (Rutledge & Swindler, 1987). This describes work done at (and used by) UNC-CH

Mon Feb 14

Weeding

(Sargent, 1979; Robb & McCormick, 1997)

Mon Feb 21

Book and Journal Use

(Burrell & Fenton, 1994; Byrd, 1999)

Mon Feb 28

Evaluating Collections

(Covi & Cragin, 2004; Serebnick & Quinn, 1995)

Mon Mar 7

Shelving and Loss

(Sapp & Suttle, 1994; Pedersen, 1990)

Mon Mar 21

Preservation

(Larson, 1999; Gertz, 2000)

Mon Mar 28

Technical Services

(Halcoussis, Halverson, Lowenberg, & Lowenberg, 2002; Taniguchi, 2004)

Mon Apr 4

Consortia

(Scigliano, 2002)

One of the following two:(Pederson & Gregory, 1994; Kurosman & Durniak, 1994)

Mon Apr 11

Reference

(Larson & Dickson, 1994; Kasowitz, Bennett, & Lankes, 2000)

Mon Apr 18

Budgets

(Ottensmann & Gleeson, 1993; Sweetman & Wiedemann, 1980)

Mon Apr 25

Users

(Jiao & Onwuegbuzie, 1999; Martensen & Gronholdt, 2003)

Wed Apr 27

Presentation of Course Research Projects

References

- Abels, E. G., Kantor, P. B., & Saracevic, T. (1996). Studying the cost and value of library and information services: Applying functional cost analysis to the library in transition. *Journal of the American Society for Information Science*, 47(3), 217–227.
- Al-Fares, H. K. (1998). Optimizing a library's loan policy: An integer programming approach. *Journal of the American Society for Information Science*, 49(13), 1169–1176.
- Alvarez, P., Escalona, I., & Pulgarin, A. (2000). What is wrong with obsolescence?. *Journal of the American Society for Information Science*, 51(9), 812–815.
- Axford, H. W. (1971). The economics of a domestic approval plan. *College & Research Libraries*, 32(5), 368–375.
- Bartle, L. R. (1999). Designing an active academic reference service point. *Reference & User Services Quarterly*, 38(4), 395–401.
- Beckman, M. (1983). Library buildings in the network environment. *Journal of Academic Librarianship*, 9(5), 281–284.
- Beeler, R. J., & Lueck, A. L. (1984). Pricing of online services for nonprimary clientele. *Journal of Academic Librarianship*, 10(2), 69–72.
- Bentley, S., & Farrell, D. (1984). Beyond retrenchment: The reallocation of library materials budget. *Journal of Academic Librarianship*, 10(6), 321–325.
- Bolgiano, C. E., & King, M. K. (1976). Profiling a periodicals collection. *College & Research Libraries*, 39(1), 99–104.
- Bommer, M., & Ford, B. (1974). A cost-benefit analysis for determining the value of an electronic security system. *College & Research Libraries*, 35(4), 270–279.
- Bookstein, A., & Swanson, D. R. (1973). A stochastic shelf-reading model. *Library Quarterly*, 43(2), 138–141.
- Bookstein, A. (1973). Models for shelf reading. *Library Quarterly*, 43(2), 126–137.
- Bothmann, R. (2004). Cataloging electronic books. *Library Resources & Technical Services*, 48(1), 12–19.
- Boyer, C. J. (1974). State-wide contracts for library materials: An analysis of the attendant dysfunctional consequences. *College & Research Libraries*, 35(1), 86–94.

- Brandt, K. A., Campbell, J. M., & Jr., W. F. B. (1996). Reflections on reference services. *Journal of the American Society for Information Science*, 47(3), 210–216.
- Brazell, T. V. (1971). Comparative analysis: A minimum music materials budget for the university library. *College & Research Libraries*, 32(2), 110–120.
- Broadus, R. N. (1985). A proposed method for eliminating titles from periodical subscription lists. *College & Research Libraries*, 46(1), 30–35.
- Budd, J. M., Zink, S. D., & Voyles, J. (1991). 'how much will it cost?' predictable pricing of ill services: An investigation and a proposal. *RQ: Reference Quarterly*, 29(1), 70–74.
- Budd, J. M. (1989). It's not the principle, it's the money thing. *Journal of Academic Librarianship*, 15(4), 218–222.
- Burke, R. A. (1970). The separately housed undergraduate library versus the university library. *College & Research Libraries*, 31(6), 399–402.
- Burrell, Q. L. (1990). Using the gamma-poisson model to predict library circulations. *Journal of the American Society for Information Science*, 41(3), 164–170.
- Burrell, Q. L., & Fenton, M. R. (1994). A model for library book circulations incorporating loan periods. *Journal of the American Society for Information Science*, 45(2), 101–116.
- Bustion, M., & Treadwell, J. (1990). Reported relative value of journals versus use: A comparison. *College & Research Libraries*, 51(2), 142–151.
- Byrd, G. D. (1999). Medical faculty use of the journal literature, publishing productivity and the size of health sciences library journal collections. *Bulletin of the Medical Library Association*, 87(3), 312–321. Electronic version available through UNC Libraries.
- Carmack, B., & Loeber, T. (1971). The library reserve system - another look. *College & Research Libraries*, 32(2), 105–109.
- Chao, H. (2002). Assessing the quality of academic libraries on the web: The development and testing of criteria. *Library & Information Science Research*, 24, 169–194. Electronic version available through UNC Libraries.
- Chressanthis, G. A., & Chressanthis, J. D. (1994). A general econometric model of the determinants of library subscription prices of scholarly journals: The role of exchange rate risk and other factors. *Library Quarterly*, 64(3), 270–293.
- Cline, G. S. (1987). The high price of interlibrary loan service. *RQ: Reference Quarterly*, 27(1), 80–86.
- Constantinou, C. (1995). Destruction of knowledge: A study of journal mutilation at a large university library. *College & Research Libraries*, 56(6), 497–507.
- Cooper, W. S., Thompson, D. D., & Weeks, K. R. (1975). The duplication of monograph holdings in the University of California library system. *Library Quarterly*, 45(3), 253–274.
- Covi, L. M., & Cragin, M. H. (2004). Reconfiguring control in library collection development: A conceptual framework for assessing the shift toward electronic collections. *Journal of the American Society for Information Science & Technology*, 55(4), 312–325.
- Creaghe, N. S., & Davis, D. A. (1986). Hard copy in transition: An automated storage and retrieval facility for low-use library materials. *College & Research Libraries*, 47(5), 495–499.
- Creaser, C., & Sumsion, J. (1995). Affluence and public library use: The DoE index of local conditions and library use in london and the metropolitan districts of England. *Library Management*, 16(6), 3–16. Electronic version available through UNC Libraries.
- Crotts, J. (1999). Subject usage and funding of library monographs. *College & Research Libraries*, 60(3), 261–273.
- Davis, D. G. (1971). Security problems in college and university libraries: Student violence. *College & Research Libraries*, 32(1), 13–22.
- DeeAnn Allison, B. M., & Swanson, S. (2000). Database selection: One size does not fit all. *College & Research Libraries*, 61(1), 56–63.
- Dennison, R. F. (1999). Usage-based staffing of the reference desk. *Reference & User Services Quarterly*, 39(2), 158–165.
- Dickinson, J., Martin, C. K., & Mering, M. (2003). Falling in and out of love. *Library Resources & Technical Services*, 47(3), 125–131.
- Drake, M. A. (1976). Forecasting academic library growth. *College & Research Libraries*, 37(1), 53–59.
- Eaton, A. J. (1971). Fund raising for university libraries. *College & Research Libraries*, 32(5), 351–361.
- Edwards, P. M. (2004). Collection development and maintenance across libraries, archives and museums. *Library Resources & Technical Services*, 48(1), 26–33.
- Edwardy, J. M., & Pontius, J. S. (2001). Monitoring book reshelving in libraries using statistical sampling and control charts. *Library Resources & Technical Services*, 45(2), 90–94.
- Engeldinger, E. A. (1986). Weeding of academic library reference collections: A survey of current practice. *RQ: Reference Quarterly*, 25(3), 366–371.

- Ercagovac, Z. (1998). Minimal level cataloging: What does it mean for maps in contexts of card catalogs, online catalogs, and digital libraries?. *Journal of the American Society for Information Science*, 49(8), 706–719.
- Estabrook, L. S. (1986). Valuing a document delivery system. *RQ: Reference Quarterly*, 26(1), 58–62.
- Exon, F., & Punch, K. F. (1997). The self-sufficient library collection: A test of assumptions. *Journal of the American Society for Information Science*, 48(1), 11–16.
- Fishman, D., & Walitt, R. (1972). Seating and area preferences in a college reserve room. *College & Research Libraries*, 33(4), 284–297.
- Frank, E., & Paynter, G. W. (2004). Predicting library of congress classifications from library of congress subject headings. *Journal of the American Society for Information Science & Technology*, 55(3), 214–227.
- Gertz, J. (2000). Selection for preservation in the digital age. *Library Resources & Technical Services*, 44(2), 97–104.
- Gleaves, E. S., & Carterette, R. T. (1982). Microform serials acquisition: A suggested planning model. *Journal of Academic Librarianship*, 8(5), 292–295.
- Gleeson, M. E., & Ottensmann, J. R. (1993). Using data from computerized circulation and cataloging systems for management decision making in public libraries. *Journal of the American Society for Information Science*, 44(2), 94–100.
- Glover, F., & Klingman, D. (1972). Mathematical programming models and methods for the journal selection problem. *Library Quarterly*, 42(1), 43–58.
- Goehlert, R. (1979). The effect of loan policies on circulation recalls. *Journal of Academic Librarianship*, 5(2), 79–82.
- Goyal, S. K. (1973). Allocation of library funds to different departments of a university - an operational research approach. *College & Research Libraries*, 34(3), 219–222.
- Gray, S. M. (2000). Virtual reference services. *Reference & User Services Quarterly*, 39(4), 365–375.
- Greenwood, L., & McKean, H. (1985). Effective measurement and reduction of book loss in an academic library. *Journal of Academic Librarianship*, 11(5), 275–283.
- Gupta, U. (1990). Obsolescence of physics literature: Exponential decrease of the density of citations to physical review articles with age. *Journal of the American Society for Information Science*, 41(4), 282–287.
- Gwinn, N. E., & Mosher, P. H. (1983). Coordinating collection development: The RLG conspectus. *College & Research Libraries*, 44(2), 128–141.
- Halcoussis, D., Halverson, A. L., Lowenberg, A. D., & Lowenberg, S. (2002). An empirical analysis of web catalog user experiences. *Information Technology and Libraries*, 21(4), 148–157. Electronic version available through UNC Libraries.
- Hardesty, L., & Wright, J. (1982). Student library skills and attitudes and their change: Relationships to other selected variables. *Journal of Academic Librarianship*, 8(4), 216–220.
- Harloe, B. (189). Achieving client-centered collection development in small and medium-sized academic libraries. *College & Research Libraries*, 50(3), 344–353.
- Haslam, M., & Stowers, E. (2001). Library-subsidized unmediated document delivery. *Library Resources & Technical Services*, 45(2), 80–89.
- Hawbaker, A. C., & Wagner, C. K. (1996). Periodical ownership versus fulltext online access: A cost-benefit analysis. *Journal of Academic Librarianship*, 22(2), 105–109.
- Hayes, R. M. (1996). Cost of electronic reference resources and lcm: The library costing model. *Journal of the American Society for Information Science*, 47(3), 228–234.
- Hazen, D. (2000). Selecting for storage: Local problems, local responses, and an emerging common challenge. *Library Resources & Technical Services*, 44(4), 176–183.
- Heilprin, L. B. (1991). The library community at a technological and philosophical crossroads: Necessary and sufficient conditions for survival. *Journal of the American Society for Information Science*, 42(8), 566–573.
- Heinritz, F. (1974). Rate of growth for library collections. *College & Research Libraries*, 35(1), 95–96.
- Heller, J. S. (1986). Copyright and fee-based copying services. *College & Research Libraries*, 47(1), 28–37.
- Hicks, D. A. (1980). Diversifying fiscal support by pricing public library services: a policy impact analysis. *Library Quarterly*, 50(4), 453–474.
- Hodge, S. P., & Ivins, M. (1987). Current international newspapers: Some collection management implications. *College & Research Libraries*, 48(1), 50–61.
- Hodowanec, G. V. (1979). An acquisition rate model for academic libraries. *College & Research Libraries*, 39(6), 439–447.
- Hodowanec, G. V. (1983). Literature obsolescence, dispersion, and collection development. *College & Research Libraries*, 45(6), 421–443.
- Holicky, B. H. (1984). Collection development vs. resource sharing: The view from the small academic library. *Journal of Academic Librarianship*, 10(3), 146–147.

- Holley, R. P. (1984). Priority as a factor in technical processing. *Journal of Academic Librarianship*, 9(6), 345–348.
- Holman, L. (2000). A comparison of computer-assisted instruction and classroom bibliographic instruction. *Reference & User Services Quarterly*, 40(1), 53–60.
- Hopkins, D. M. (1993). A conceptual model of factors influencing the outcome of challenges to library materials in secondary school settings. *Library Quarterly*, 63(1), 40–72.
- James, S. E. (1985). The relationship between local economic conditions and the use of public libraries. *Library Quarterly*, 55(3), 255–272.
- Jenks, G. M. (1972). Book selection: An approach for small and medium-sized libraries. *College & Research Libraries*, 33(1), 28–30.
- Jestes, E. C. (1980). Manual versus automated circulation: A comparison of operating costs in a university library. *Journal of Academic Librarianship*, 6(3), 144–150.
- Jiao, Q. G., & Onwuegbuzie, A. J. (1998). Perfectionism and library anxiety among graduate students. *Journal of Academic Librarianship*, 24(5), 365–371.
- Jiao, Q. G., & Onwuegbuzie, A. J. (1999). Identifying library anxiety through students' learning-modality preferences. *Library Quarterly*, 69(2), 202–216.
- Johnson, C. A., & Trueswell, R. W. (1978). The weighted criteria statistic score: An approach to journal selection. *College & Research Libraries*, 39(4), 287–292.
- Johnson, S. D. (1985). Rush processing. *Journal of Academic Librarianship*, 11(4), 214–218.
- Jr., G. W. B. (1981). Estimating collection size using the shelf list in a science library. *Journal of Academic Librarianship*, 6(6), 339–341.
- Kane, L. T. (1997). Access vs. ownership: Do we have to make a choice?. *College & Research Libraries*, 58(1), 59–67.
- Kantor, P. B. (1981). Demand-adjusted shelf availability parameters. *Journal of Academic Librarianship*, 7(2), 78–82.
- Kasowitz, A., Bennett, B., & Lankes, R. D. (2000). Quality standards for digital reference consortia. *Reference & User Services Quarterly*, 39(4), 355–363.
- Kellerman, L. S. (2002). Out-of-print digital scanning. *Library Resources & Technical Services*, 46(1), 3–10.
- Kilgour, F. G. (1995). Cataloging for a specific miniature catalog. *Journal of the American Society for Information Science*, 46(9), 704–706.
- Kohl, D. F. (1982). High efficiency inventorying through predictive data. *Journal of Academic Librarianship*, 8(2), 82–84.
- Kohut, J. J. (1974). Allocating the book budget: A model. *College & Research Libraries*, 35(3), 192–199.
- Kronick, D. A. (1982). Goodbye to farewells - resource sharing and cost sharing. *Journal of Academic Librarianship*, 8(3), 132–136.
- Kurkul, D. L. (1983). The planning, implementation, and movement of an academic library collection. *College & Research Libraries*, 44(3), 220–233.
- Kurosman, K., & Durniak, B. A. (1994). Document delivery: A comparison of commercial document suppliers and interlibrary loan services. *College & Research Libraries*, 55(2), 129–139.
- Lanier, D., & Wilkins, W. (1994). Ready reference via the internet. *RQ: Reference Quarterly*, 33(3), 359–368.
- Larson, C. A., & Dickson, L. K. (1994). Developing behavioral reference desk performance standards. *RQ: Reference Quarterly*, 33(3), 349–357.
- Larson, P. S. (1999). Books and bytes: Preserving documents for posterity. *Journal of the American Society for Information Science*, 50(11), 1020–1027.
- Lawrence, G. S. (1981). A cost model for storage and weeding programs. *College & Research Libraries*, 42(2), 139–147.
- Lee, J. H., & Miller, Jr., A. H. (1981). Introducing online data base searching. *Journal of Academic Librarianship*, 7(1), 14–22.
- Leffler, W. L. (1964). A statistical method for circulation analysis. *College & Research Libraries*, 25(6), 488–490.
- Liu, L. G. (2003a). The cost function and scale economies in academic research libraries. *Library Trends*, 51(3), 293–311. Electronic version available through UNC Libraries.
- Liu, L. G. (2003b). The economic behavior of academic research libraries: Toward a theory. *Library Trends*, 51(3). Electronic version available through UNC Libraries.
- Lochstet, G., & Lehman, D. H. (1999). A correlation method for collecting reference statistics. *College & Research Libraries*, 60(1), 45–53.
- Locke, W. (1969). Selling books in libraries. *College & Research Libraries*, 30(1), 39–44.
- Losee, R. M. (1987). A decision theoretic model of materials selection for acquisition. *Library Quarterly*, 57(3), 269–283.
- Losee, R. M. (1988). Theoretical adequacy and the scientific study of materials selection. *Collection Management*, 10(3), 15–26.

- Lowry, C. B. (1990). Resource sharing or cost shifting - the unequal burden of cooperative cataloging and ill in network. *College & Research Libraries*, 51(1), 1-19.
- Lynch, C. A., & Brownrigg, E. B. (1986). Conservation, preservation, and digitization. *College & Research Libraries*, 47(4), 379-382.
- M. J. Bennett, D. T. B., & Capriotti, E. (1979). Shelf-reading in a large, open-stack library. *Journal of Academic Librarianship*, 5(1), 4-8.
- Mancini, A. D. (1996). Evaluating commercial document suppliers: Improving access to current journal literature. *College & Research Libraries*, 57(2), 123-131.
- Marks, K. E., Nielsen, S. P., Petersen, H. C., & Wagner, P. E. (1991). Longitudinal study of scientific journal prices in a research library. *College & Research Libraries*, 52(2), 125-138.
- Markuson, B. E. (1979). Cooperation and library network development. *College & Research Libraries*, 40(2), 125-135.
- Martensen, A., & Gronholdt, L. (2003). Improving library users' perceived quality, satisfaction and loyalty: An integrated measurement and management system. *Journal of Academic Librarianship*, 29(3), 140-147.
- Martin, M. (1977). Budgetary strategies: Coping with a changing fiscal environment. *Journal of Academic Librarianship*, 2(6), 297-302.
- Maxin, J. A. (1979). Periodical use and collection development. *College & Research Libraries*, 40(3), 248-253.
- McDonald, E. (1985). University/industry partnership: Premonitions for academic libraries. *Journal of Academic Librarianship*, 11(2), 82-87.
- McGrath, W. E. (1986). Circulation clusters - an empirical approach to decentralization of academic libraries. *Journal of Academic Librarianship*, 12(4), 221-226.
- McGrath, W. E. (1996). Periodicity in academic library circulation: A spectral analysis. *Journal of the American Society for Information Science*, 47(2), 136-145.
- McPherson, W. (1983). Quantifying the allocation of monograph funds: An instance in practice. *College & Research Libraries*, 44(2), 116-127.
- Metcalf, K. D. (1962). Compact shelving. *College & Research Libraries*, 23(2), 103-111.
- Meyyappan, N., Foo, S., & Chowdhury, G. G. (2004). Design and evaluation of a task-based digital library for the academic community. *Journal of Documentation*, 60(4), 449-475. Electronic version available through UNC Libraries.
- Miller, B., & Sorum, M. (1977). A two stage sampling procedure for estimating the proportion of lost books in a library. *Journal of Academic Librarianship*, 3(2), 74-80.
- Millson-Martula, C. (1985). The effectiveness of book selection agents in a small academic library. *College & Research Libraries*, 46(6), 504-510.
- Morse, P. M. (1972). Measures of library effectiveness. *Library Quarterly*, 42(1), 15-30.
- Nachlas, J. A., & Pierce, A. R. (1979). Determination of unit costs for library services. *College & Research Libraries*, 40(3), 240-247.
- Nicholson, S. (2003). Bibliomining for automated collection development in a digital library setting: Using data mining to discover web-based scholarly research works. *Journal of the American Society for Information Science & Technology*, 54(12), 1081-1090. Electronic version available through UNC Libraries.
- Niland, P., & Kurth, W. H. (1976). Estimating lost volumes in a university library collection. *College & Research Libraries*, 37(2), 128-136.
- O'Hanlon, N. (1988). Up the down staircase: Establishing library instruction programs for teachers. *RQ: Reference Quarterly*, 27(4), 528-534.
- Orne, J. (1960). Storage and deposit libraries. *College & Research Libraries*, 21(6), 446-452.
- Ottensmann, J. R., & Gleeson, M. E. (1993). Implementation and testing of a decision support system for public library materials acquisition budgeting. *Journal of the American Society for Information Science*, 44(2), 83-93.
- Parker, T. F. (1975). Models and methods: The tools of library networking. *College & Research Libraries*, 36(5), 480-486.
- Pedersen, T. L. (1990). Theft and mutilation of library materials. *College & Research Libraries*, 51(2), 120-128.
- Pederson, W., & Gregory, D. (1994). Interlibrary loan and commercial document supply: Finding the right fit. *Journal of Academic Librarianship*, 20(5/6), 263-272.
- Prorak, D., Gottschalk, T., & Pollastro, M. (1994). Teaching method and psychological type in bibliographic instruction: Effect on student learning and confidence. *RQ: Reference Quarterly*, 33(4), 484-495.
- Quandt, R. E. (1996). Simulation model for journal subscription by libraries. *Journal of the American Society for Information Science*, 47(8), 610-617.
- Reger, N. K. (1999). Redefining reference services. *Reference & User Services Quarterly*, 38(1), 73-75.
- Riley, W. J. (1977). Library security and the federal bureau of investigation. *College & Research Libraries*, 36(1), 104-108.

- Robb, D. J., & McCormick, A. (1997). Decision support for serials deselection and acquisition: A case study. *Journal of the American Society for Information Science*, 48(3), 270–273.
- Rogers, E. P. (1987). Cooperation, collection management, and scientific journals. *College & Research Libraries*, 48(3), 247–251.
- Rovelstad, M. V. (1976). Open shelves/closed shelves in research libraries. *College & Research Libraries*, 37(6), 457–467.
- R.R. Korfhage, U. B., & Nance, R. (1972). Graph models for library information networks. *Library Quarterly*, 42(1), 31–42.
- Rutledge, J., & Swindler, L. (1987). The selection decision: Defining criteria and establishing priorities. *College & Research Libraries*, 48(2), 123–131.
- Sanders, N. P., O'Neill, E. T., & Weibel, S. L. (1988). Automated collection analysis using the OCLC and RLG bibliographic databases. *College & Research Libraries*, 49(4), 305–314.
- Sapp, G., & Suttle, G. (1994). A method for measuring collection expansion rates and shelf space capacities. *Journal of Academic Librarianship*, 20(3), 156–161.
- Sargent, S. H. (1979). The uses and limitations of Trueswell. *College & Research Libraries*, 40(5), 416–423.
- Sauer, T. (1978). Predicting book fund expenditures: A statistical model. *College & Research Libraries*, 36(6), 474–478.
- Saunders, E. S. (2003). Cost efficiency in ARL libraries. *The Bottom Line*, 16(1). Electronic version available through UNC Libraries.
- Schwartz, J. (2002). Internet access and end-user needs. *Reference & User Services Quarterly*, 41(3), 235–263.
- Scigliano, M. (2000). Serial use in a small academic library: Determining cost-effectiveness. *Serials Review*, 26(1), 43–52. Electronic version available through UNC Libraries.
- Scigliano, M. (2002). Consortium purchases: Case study for a cost-benefit analysis. *Journal of Academic Librarianship*, 28(6), 393–399.
- Scoyoc, A. M. V. (2003). Reducing library anxiety in first-year students. *Reference & User Services Quarterly*, 42(4), 329–341.
- Serebnick, J., & Quinn, F. (1995). Measuring diversity of opinion in public library collections. *Library Quarterly*, 65(1), 1–38. Electronic version available through UNC Libraries.
- Shad, J. G. (1970). Allocating book funds: Control or planning. *College & Research Libraries*, 31(2), 155–159.
- Shaw, Jr., W. M. (1978). A practical journal usage technique. *College & Research Libraries*, 39(6), 479–484.
- Shill, H. B. (1980). Open stacks and library performance. *College & Research Libraries*, 41(3), 220–226.
- Sloan, B. (1998). Electronic reference services. *Reference & User Services Quarterly*, 38(1), 77–81.
- Smith, J. B., & Knapp, S. D. (1982). Data base royalty fees and the growth of online search services in academic libraries. *Journal of Academic Librarianship*, 7(4), 216–220.
- Smith, M. M. (1985). Cooperative collection development for rare books among neighboring academic libraries. *College & Research Libraries*, 46(2), 160–167.
- Stacy-Bates, K. K., Fryer, J., Kushkowski, J. D., & Shonrock, D. D. (2003). Competencies for bibliographers. *Reference & User Services Quarterly*, 42(3), 235–241.
- Stefano, P. D. (1995). Use-based selection for preservation microfilming. *College & Research Libraries*, 56(5), 409–418.
- Stiffler, S. A. (1963). A philosophy of book selection for smaller academic libraries. *College & Research Libraries*, 24(3), 204–208.
- Sweetman, P., & Wiedemann, P. (1980). Developing a library book-fund allocation formula. *Journal of Academic Librarianship*, 6(5), 268–276.
- Taniguchi, S. (2004). Design of cataloging rules using conceptual modeling of cataloging process. *Journal of the American Society for Information Science & Technology*, 55(6), 498–512.
- Tomer, C. (1985). Developing financial support for library preservation: An alternative approach. *Journal of Academic Librarianship*, 11(2), 133–135.
- Turner, S. J. (1980). Trueswell's weeding technique: The facts. *College & Research Libraries*, 41(2), 134–138.
- Tweedale, D. M. (1965). Procurement and evaluation of materials for a university archives. *College & Research Libraries*, 26(6), 517–524.
- Varlejs, J. (1987). Cost models for staff development in academic libraries. *Journal of Academic Librarianship*, 12(6), 359–364.
- Varlejs, J. (1999). On their own: Librarians' self-directed work-related learning. *Library Quarterly*, 69(2), 173–201.
- Verhoeven, S., Cooksey, E. B., & Hand, C. A. (1996). The disproportionate use of reference desk service by external users at an urban university library. *Reference Quarterly*, 35(3), 392–397.
- Voigt, M. J. (1975). Acquisition rates in university libraries. *College & Research Libraries*, 36(4), 263–271.

- Walch, T. (1977). The improvement of library security. *College & Research Libraries*, 38(1), 100–103.
- Walker, G., Greenfield, J., Fox, J., & Siminoff, J. S. (1985). The Yale Survey: A large-scale study of book deterioration in the Yale University Library. *College & Research Libraries*, 46(2), 111–132.
- Walters, W. H. (2004). Criteria for replacing print journals with online journal resources. *Library Resources & Technical Services*, 48(4), 300–304.
- Warner, D. G. (2001). A new classification for reference statistics. *Reference & User Services Quarterly*, 41(1), 51–55.
- Weessies, K., & Wales, B. (1999). Internet policies in midsized academic libraries. *Reference & User Services Quarterly*, 39(1), 33–41.
- Weimer, K. H., Lillard, L., Arant, W., & Mitchell, D. (2000). Security and access to cd-roms accompanying books. *Library Resources & Technical Services*, 44(4), 201–208.
- Werking, R. H., & Jr., C. M. G. (1981). Using choice as a mechanism for allocating book funds in an academic library. *College & Research Libraries*, 42(2), 134–138.
- White, G. T. (1977). Quantitative measures of library effectiveness. *Journal of Academic Librarianship*, 3(3), 128–136.
- Whitmire, E. (2002). Academic library performance measures and undergraduates' library use and educational outcomes. *Library & Information Science Research*, 24, 107–128. Electronic version available through UNC Libraries.
- Wilkins, A. W., & Grant, S. M. (1995). Confidentiality policies and procedures of the reference departments in Texas academic libraries. *Reference Quarterly*, 34(4), 473–485.
- Witucke, V., & Schumaker, C. J. (1991). Analyzing reference activities: The affordable solution. *RQ: Reference Quarterly*, 29(1), 58–69.
- Wood, E. J. (1983). Strategic planning and the marketing process: Library applications. *Journal of Academic Librarianship*, 9(1), 15–20.
- Zelkind, I., & Sprug, J. (1971). Increased control through decreased controls: A motivational approach to a library circulation problem. *College & Research Libraries*, 32(3), 222–226.
- Zumalt, J. R., & Pasicznyuk, R. W. (1998). The internet and reference services. *Reference & User Services Quarterly*, 38(2), 165–172.