# Evidence Summary

# Staffing an Academic Reference Desk with Librarians is not Cost-effective

#### A Review of:

Ryan, Susan M. "Reference Transactions Analysis: The Cost-effectiveness of Staffing a Traditional Academic Reference Desk." <u>Journal of Academic Librarianship</u> 34.5 (2008): 389-99.

## Reviewed by:

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**Objective** – To determine whether it is cost effective to staff an academic reference desk with librarians through an examination of the types of reference questions being asked and the qualifications required to answer them.

**Design** – Content analysis of reference transaction logs and activity-based costing for reference services based on quantitative data derived from the logs.

**Setting** – Stetson University, a private institution in the United States with an FTE of approximately 2500.

**Subjects** – 6959 phone, email, and in-person reference transactions logged at the reference desk by four full-time and two part-time librarians.

Methods – This study repurposes data originally collected to determine the frequency with which librarians turned to online versus print sources when responding to questions at the reference desk. Librarians working at the Stetson

University library reference desk recorded all reference queries received in person, by phone, or by email for a total of eight months between 2002 and 2006. Data collection took place in two month intervals in fall 2002, spring 2003, spring 2006, and fall 2006. Each question and the sources used to address it were logged by the librarian. Directional questions that were not related to the library's collections and technical questions dealing with printer or copier mechanical problems were counted, but the specifics of these questions were not recorded. It was felt that these queries would not yield data relevant to the original research question on sources used as they "did not directly relate to an information need" (391).

A total of 6959 questions were logged by librarians during the four collection periods. Questions were recorded for only 4431 transactions; the remaining 2528 queries related to printer/copier problems or non-library specific directions and were described as "direction and machine: non-

informational" (394). The 4431 recorded questions were then divided into four categories derived by the researcher: lookup (a search for a known item), directional (library-specific orientation to the space and collections), technology (assistance with using library technology and electronic resources), and reference. The category of reference was further subdivided into eight additional categories: catalogue search, citation help, database help, "guide to correct databases," "personal knowledge or referral," "quick internet search," research, and Serials Solutions (392). "Guide to correct databases" referred to advice on the appropriate database to answer a question and serials solutions included questions that could be answered using the Serials Solutions product, such as the availability of a particular journal or article in the collection (392). Questions were assigned to the single most appropriate category by the researcher.

Question categories were then mapped to "suggested staffing levels" (396). This determination was made by the researcher, and no details were given as to how the decision was made for each category. The three levels of staffing discussed were librarian, "trained student or staff," and "well-trained staff/occasional librarian referral" (396).

The cost of staffing the reference desk during the eight months captured in this study was calculated by multiplying the hours worked by each librarian by his/her individual average rate of pay across the four data collection periods. Indirect staff costs such as benefits were not included in this calculation. The average cost per reference transaction was determined by dividing the total salary costs by the total number of reference queries during the periods of study. Costs for those categories of questions best addressed by a librarian could then be determined.

The actual number of librarians who participated in the study is unclear. The methodology refers to four full-time and two part-time librarians (391). However, later in the article there is reference to five full-time and three part-time librarians rather than the numbers initially stated (396). This may reflect staffing changes during the study period, with the first set of numbers referring to positions rather than individuals, but this cannot be verified with the evidence presented in the article.

**Main Results** – It was determined that most questions asked at the reference desk during the study period could have been addressed by trained student and staff member rather than librarians. Only 11% (784) of questions logged were deemed sufficiently complex by the researcher to require the attention of a librarian. The remaining 6175 transactions (89% of all those logged) could most likely be handled by a different staffing complement. According to Ryan, approximately 74% of the reference transactions, including directional, technology, "quick internet," and known item searching questions could have been answered by "trained student and staff" (396). Questions on catalogue searching, databases, citations, Serial Solutions, and personal knowledge/referrals, representing approximately 15% of all questions, could have been handled by experienced and knowledgeable staff with limited librarian intervention. The complexity of the question was in part judged by the number of sources required to answer it, with most (75%) answerable with just one source.

The total cost of staffing the reference desk with librarians for the eight months studied was approximately US\$49,328.00. A total of 6959 questions were logged during this period, resulting in an average cost of US\$7.09 per reference transaction. This cost is approximate, as the exact time spent on each question was not recorded. The cost of

answering "non-informational" directional and technical questions was the most significant (396). This category represented 36.3% of all questions received at the reference desk, with a total staffing cost of \$17, 919.41 (\$7.09 x 2528). "Informationorientated" directional and technology questions followed at 15.4% (US\$7,620) and 12.4% (US\$6,110.18) respectively (396). According to Ryan, questions in all three categories could be addressed by students and staff. The cost of addressing research questions, the only category requiring librarians, was US\$5557.29. Research transactions were greatly outnumbered by directional and technology related questions. An average of 3.6 research questions were asked at the reference desk during the 12 hours it was open each day, compared to 20.8 directional/technical questions.

**Conclusion** – The nature of questions logged at the Stetson University library reference desk suggests that it is inefficient to staff the desk with librarians, given the salary costs of such a staffing model and the fact that librarian's skills may not be required to answer most of the questions posed. Since the number of questions that need a librarian is so low, Ryan suggests that alternative staffing and service models be considered, so the energies of librarians could be more effectively employed elsewhere in the organization in areas such as information literacy instruction and the development of enhanced web services. It is noted that any reorganization of reference services should be done in concert with user surveys, consultation with staff, and extensive training to prepare staff for new roles. Suggested areas for further research identified by the researcher include the quality of reference transactions in an increasingly online environment.

## Commentary

This study provides a fascinating look at the types of questions encountered by staff at an academic reference desk. The large number of questions logged relating to computer or copier problems will not be surprising to those currently working in such an environment, but quantifying these queries perhaps lends more weight to shared anecdotal experiences. It would have been interesting to see if the incidence of such questions increased in the time between the first round of data collection in 2002-2003 and the follow-up collection periods in 2006, or if the types of questions and their frequencies remained stable.

Where Ryan departs from previous discussions around what should be done with the reference desk in an increasingly digital environment is in her attempt to calculate staffing costs per transaction as evidence for the need to change an organization's existing staffing model. What is not clear in the study, however, is how representative Stetson's practice of staffing a reference desk solely with librarians actually is. Many academic libraries are already employing a mix of librarians, paraprofessionals and students in their delivery of reference services. Banks and Pracht recently surveyed a random sample of 191 midsize American academic libraries about their reference desk staffing model. Sixty percent of the librarians' who responded indicated that staff who do not hold a MLIS were working at their reference desk (54).

Reasons given for the use of paraprofessionals and students to cover reference services in the study by Banks and Pracht include reduced staffing costs and freeing librarians for other activities (56). Both of these arguments figure prominently in this article as it attempts to justify a staffing shift at an academic library reference desk by tying staffing costs to the

types of questions library patrons are asking. The sheer volume of directional and technical questions logged at Stetson not specific to the library is daunting, and the message is clear that a librarian performing mundane tasks like fixing printer jams costs the institution as much in salary costs as answering database search questions. However, the process of classification employed by the author accentuates the impression of reference staff functioning largely as tech support by parsing reference questions into ever finer subcategories while technology and directional questions remain largely unpacked. For example, the label of research is essentially a catch-all for questions that do not cleanly fit into the seven other categories available.

At times, the number of subcategories seems excessive – for example, having a separate category for Serials Solutions isolates full text retrieval or known journal searching from database help or catalogue search when the Serials Solutions tool is linked with both resources. The distinction between database searching and research is also a fine one, as both require the development of complex search strategies. It is also not clear if a transaction that crosses several of these categories is automatically assigned to research or if each part of the transaction is isolated into separate categories. The isolation of research questions in this manner is particularly significant as this is the only category Ryan assigns to librarians. Ryan acknowledges that this process of categorization may be subjective, but greater discussion of the reasoning behind this home-grown classification scheme would have been welcome given the importance of these categories in later discussions of proposed staffing complements.

Linking a question's complexity with the number of sources used to answer it also fails to account for the time, skill, and effort it can sometimes take a librarian to walk a user through a single source. When it comes to questions of cost, time seems to be an important variable that is missing in this discussion. While Ryan could refer to the data to find out exactly what sources were used, she could only estimate the time involved with each transaction based on her own experiences. Ryan's use of data that was originally collected for another purpose (to see how often librarians were turning to electronic sources over print in answering reference questions) means that she is limited from the outset in the conclusions she can draw, as she has to build a methodology on someone else's foundation.

Even more troubling is the lack of clarity around how decisions were made about the staffing needs assigned to each question category. Ryan writes, "although it can be difficult and subjective to determine exactly which reference transactions require the skills of a librarian, more easily addressed are those questions that do not need a librarian" (395). In Ryan's estimation, most questions do not need a librarian, leading to the reader to at times question what the value of an MLIS is in the first place if, as Ryan suggests, "Many librarians would argue that much of the skill set they use to answer reference questions was not learned in a graduate library program" (395). The difference between a "trained" and a "welltrained" staff member is also not clear, even though they are assigned to tasks of differing complexity (396). There is also no acknowledgement of the range of qualifications staff members could possess (e.g., college diplomas, undergraduate degrees, etc.) other than their lack of an MLIS. The potential impact of the shift in staffing on the quality of reference transactions is not discussed, although research on the effectiveness of such staffing models exists in the literature.

Also not addressed in detail are the costs of

hiring and training other staff to provide reference services. Ryan does point out that these costs would need to be considered before any changes to the service model were made, but it is difficult to talk about cost effectiveness of librarians on the desk when the estimated costs of the alternative staffing models proposed are not provided for comparison. Also, the article largely speaks of paraprofessionals at the reference desk as a way of freeing up librarian's time for other duties, but this implies additional staff costs on top of existing librarian salaries to cover reference shifts. This is briefly addressed at the end of the article, but further emphasis on this point is required, particularly as the researcher also makes references to cost savings enjoyed by other institutions who replaced librarians at the reference desk.

Ryan rightly emphasises that individual libraries should assess their current reference models to see if new staffing complements or even new methods of service delivery would provide more value for their user communities. By placing a dollar value on each reference transaction, however, the activities of the reference desk are framed by default as an expense rather

than an investment. The lack of data on the value placed on these services by users at the institution or the impact of these activities in terms of fostering relationships with users makes it difficult to determine the overall cost-effectiveness. Ryan acknowledges the need for more research before drastic changes in service delivery are made, but the lack of context provided about how reference fits into Stetson's overall service model takes away from the need to consider these numbers as part of an overall assessment of reference. In particular, academic libraries should consider how reference services may or may not support the librarian's teaching mandate within an academic institution, and how participating in such interactions potentially inform and enrich a librarian's understanding of their users' concerns in a way that remaining "behind the scenes" does not (398).

#### **Works Cited**

Banks, Julie, and Carl Pracht. "Reference Desk Staffing Trends: A Survey." <u>Reference & User Services Quarterly</u> 48.1 (2008): 54-9.