WORK IN MOTION / ASSESSMENT AT REST:

AN ATTITUDINAL STUDY OF ACADEMIC REFERENCE LIBRARIANS

A CASE STUDY AT MID-SIZE UNIVERSITY (MSU A)

by

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Bella Karr Gerlich, PhD

It is reasonable to assume the existence of a new "dynamic" that influences how to measure reference services in libraries and how we evaluate the reference librarians who provide those services. Traditional, face-to-face delivery of reference services is reported to be declining, and there is myriad evidence, albeit largely uncollated and little evaluated, that suggests reference librarians are delivering significant and increasing amounts of the services they render in network environments. These trends raise questions, in turn, about how well we understand the current state of affairs in reference services, particularly where the management and evaluation of reference services in network environments are concerned.

The purpose of this study is to investigate relevant circumstances and conditions bearing -- directly and indirectly – on changes in the nature, form, substance, and effects of reference services – through the reference librarian experience. Specifically, this attitudinal study will account for and assess changes in reference services (in the context of a medium-sized private university with a national reputation for successfully integrating information technologies into the educational process), with the further aim of developing an understanding of how to capture statistics and evaluate reference services and personnel in this dynamic environment. Reference librarians at a second mid-sized public university library were also interviewed for comparative data analysis in this study.

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PREFACE

Special thanks to Grant – he is *the* Man.

1.0   INTRODUCTION

There is an abundance of evidence suggesting that the nature of reference work is changing in large measure because libraries now deliver many digitized resources and services in networked settings. This available evidence of change is confusing and scattered, meaning that there is no wholly reliable source of data; nor is it clear that the overall demand for reference services is growing or declining, etc. This lack of cohesive observation is felt especially in the academic community, where both library and technology infrastructures are commonly well-developed and organizationally mature. There is also reason to believe that the statistics gathered and standards by which the performance of reference librarians is evaluated have evolved, at least in recent times, at a pace substantially slower than that of reference work itself. A recent study published in 2002 by the Association of Research Libraries to determine the state of statistical reporting in academic libraries 'hoped that the survey results would reveal current best practices, but instead, they revealed a situation in flux':

> The study reveals a general lack of confidence in current data collection techniques. Some of the dissatisfaction may be due to the fact that 77% of the responding libraries report that the number of reference transactions has decreased in the past three years. With many librarians feeling as busy as ever, some have concluded that the reference service data being collected does not accurately reflect their own level of activity. (ARL SPEC Kit 268, Reference Services & Assessment, 2002)

It would be fair to state that while the dissonance is regarded by at least some influential reference librarians to be a significant problem, it is not yet clear whether it will achieve the proportions genuinely warranting the status of a "serious problem". But it would also be fair to say that the failure to study the causes of this dissatisfaction might well guarantee that the conflict between service assessment standards and service practice in professional work grows into a serious problem of the library profession. The organization that produced the SPEC Kit, the Association of Research Libraries (ARL), currently has projects underway to address this issue. Data from this study could be useful for an in-depth illustration of a single point of view and information comparison purposes. The information collected in this study will determine if these issues are also experienced in a non-ARL setting, as well as add to subsequent research efforts by the ARL and other professional associations or organizations a mine of qualitative data that focuses on the reference librarian's unique point of view.

The primary purpose of this investigation was to:

- collect information on the perceptions of librarians at an academic library on the contemporary nature and state of reference work;

- compare those findings to the structure and content of current standards for reference librarians; and, on the basis of that analysis

- collect information on the perceptions of reference librarians regarding satisfaction with their work, perceptions of current position responsibilities, perceptions on value of work (theirs, users, and administrators), their perceptions on the value of statistical and evaluative measures of academic library reference.

The investigation focused entirely on the reference practice of one mid-sized University Library (identified as MSU A) with strong programs in computer science, engineering, the arts and a significant long-term investment in both information infrastructure and digital library services. Additionally, reference librarians were interviewed at a similar, though public, mid-size university (identified as MSU B) for comparative analysis purposes. As institutions, both MSU A and MSU B are known leaders in technology research and curriculum – studying the library and their practices regarding reference work, assessment and data gathering provided additional information on how these librarians feel services and personnel assignments might change in the current environment, and their perceptions as to whether assessment of the same continues to rely on traditional methods.

The survey of Association of Research Libraries, of which MSU B is a member, done in 2002 to gather information on current reference statistics and assessments gives supporting evidence that many academic institutions are not completely satisfied with the usefulness of the statistics gathered – data collection that defines reference services in today's networking environment has thus far been elusive, noting that 'the migration of reference activity to areas beyond the traditional reference desk (e-mail, chat, office consultations), has further motivated many libraries to re-examine and modify current practices' (ARL SPEC Kit 268, Reference Services & Assessment, 2002). A scan of library literature databases also supports the idea that there are a number of academic libraries and consortia of all sizes that are experimenting with new ways to collect

statistics related to reference work. Because MSU A is not an ARL member, a case predicated on the perceptions of professional librarians at this library should provide additional information regarding how librarians feel regarding reference issues in the academic library community not represented by the ARL survey.

This case study employed qualitative research methodology using the grounded theory approach. Semi-structured interviews of library reference personnel, library administrators and users were conducted, and interviews transcribed, coded and analyzed by question using the qualitative analysis tool HyperRESEARCH, version 2.6.1.

Qualitative case study methodology using interview techniques was selected as the preferred strategy for conducting this research and enabled the researcher to focus on naturally emerging language and meanings assigned by individual to particular work - life experiences. Elements representing behavior, routine, personal experiences are left to surface in the participant's time with their value systems in place, allowing patterns to emerge naturally amongst the group. Qualitative research is inductive and naturalistic, taking place in an open system in a dynamic reality, where a close relationship is developed between the researcher and the subject.

1.1   RANGE OF INVESTIGATORY POSSIBILITIES

There are a series of investigations that are directly relevant to the research conducted.

Watson-Boone's *Constancy and Change in the Worklife of Research University Librarians* is a study comprised of observations and attitudes by and about librarians and their experiences and feelings about the work and worklife that is librarianship. One of the few examples of an intensive qualitative study in librarianship that takes the view of the worker, this text connects to the researcher's premises in this study a number of ways. Foremost, it is an example of a successful case study methodology used at an academic library that the researcher can refer to and expand upon one facet of librarianship. Where Watson-Boone's research interviewed all librarian work types, this researcher focused only on reference personnel and services. The researcher also connects with Watson-Boone's assertion that "centering a study on job content or design can lead to ignoring the people who perform the work". The ARL SPEC Kit study likewise confirms this in its survey that suggests reference librarians feel the data gathered at their institutions are not reflecting their work effort. The researcher asserts that interviewing reference librarians like Watson-Boone did in her landmark study will provide information on what might be included in statistic collection efforts.

A reference study done at East Carolina University (ECU) in 2000; *A New Classification for Reference Statistics* by Debra G. Warner gives insight into the attitudes of librarians and staff that tested an alternative reference data gathering model. This study differed from the research done by Warner in that analysis predicates on the research, not effect as in the Warner study. Warner's proposal for a new reference transaction data gathering technique was based on the combining of reference and circulation services at a 'triage' or 'single point of service' desk. There was no consideration for recording effort or labor because the environment was

networked, though in formulating the categories of types of reference questions for the three level scale, technology assistance was recorded in one of the question categories.   The research in this study goes beyond the quest to satisfy the statistical needs of one type of information service at a library and study reference librarian's attitudes about their work and how statistics may or may not reflect this effort.   Warner's study did suggest that the majority of the participants preferred the new statistical model she introduced, with one worker asserting that it described more fully the work being done.   This study expanded the interview data gathering process used by Warner to include analysis on reference librarian's responsibilities, attitudes about work and perceptions of data collection and assessment.

Personalized library portals as an organizational culture change agent by Amos Lakos and Christopher Gray suggests that by initiating a new service and introducing new technologies an organization can experience cultural change. This article connects to this study in terms of recognizing the changing nature of librarian's work with the introduction of technology. Research presents additional evidence to support this observation.

The Academic Library by John M. Budd provides a historical background for the research here. This text uses historical methodology to give the reader an understanding of the history of academic libraries, its services, the professional culture and the relationship between the library and higher education. Budd's work suggests organizational memory and organizational culture play key roles in the study of librarianship, and the perceptions that librarians have with regards to their work, professional status and value for their services within the organization. In this study, interviews with librarians expands upon Budd's research from the historical perspective to

one of current and future influences that will define the librarian's role in the university as defined by current perceptions of work value, statistical measurements and assessment of services.

In the article *Server Logs: Making Sense of the Cyber Tracks,* Darlene Fichter walks the reader through the hows and whys of web log analysis. This work supports the researcher's assertion that web log analysis has statistical value for reference librarians. This study determined through reference librarian interviews if web log analysis may prove a useful measure for arguing for the continuation to develop web resources in the academic networked environment.

Finally, the Quinn article *Beyond efficacy; the exemplar librarian as a new approach to reference evaluation* suggests that there is value in searching for a qualitative approach to evaluating and understanding reference librarians and their work.

1.2   LITERATURE REVIEW

1.2.1   Book Reviews

SPEC Kit 268, *Reference Service Statistics & Assessment*, Eric Novotny, published in September 2002 paints a clear picture of changing reference services and stagnant assessment measures of the same in research libraries.

This SPEC Kit surveys and documents how ARL libraries are collecting and using reference service transactions data. Reference transactions, were defined as "an information contact that involves the knowledge, use, recommendations, interpretation, or instruction in the use of one or more information sources by a member of the library staff" and did not include directional queries, library instruction or database or Web site usage.

This survey described in its executive summary confusion and angst surrounding modern reference work as libraries scramble to collect data. Many institutions noted that they changed dramatically how they gathered statistics – that is, went from daily data gathering to sampling or visa versa, 96% - but continue to value above all else the total number of transactions as a measure of service assessment. The next most popular method was through survey of the users, such as LibQUAL or user interviews – but there is no mention of tapping the reference librarians for what they feel should be measured or assessed as a 'successful' reference transaction. The reasons for collecting data also seem to be mired in the traditional; staffing needs, budget, reporting figures to appropriate bodies, some user satisfaction. There is no mention of improving reference quality, developing employees or recognition of work effort – the study did not distinguish between a successful or unsatisfactory transaction.

Many of the changes made to gathering data come in the form of new electronic methodologies – but the survey was limited in its scope of what a reference transaction is defined as, and as such, does not recognize the search for information by a user using Web research guides authored by reference librarians. While it recognizes the use of electronic tools to gather

data, there is a failure to recognize the librarian's use of electronic tools to distribute information in any sense outside of the narrow confines of the 'transaction' definition.

This study was most useful for this work in that it painted a picture that the system of reference assessment in use by ARL libraries appears to be in flux. In its micro traditional definition of transactions, the survey also supported the problem proposed that there is a great disconnect between a) what is defined in our modern era non-traditional reference work effort / transactions in a networked society and b) how we should assess and evaluate this work.

Rebecca Watson-Boone's book, *Constancy and Change in the Worklife of Research University Librarians* is a study that interviewed and observed 29 (non-administrative) librarians at a large anonymous Midwest Public Research-I University (MIRI-U). The voice of the study is one comprised of observations and attitudes by and about librarians and their experiences and feelings about the work and worklife that is librarianship. Watson-Boone chose the qualitative method of constant comparative approach of grounded theory, which she describes in detail in the appendix of the book, including stages, site selection, participating librarians, data collection and analysis, coding data, assumptions and limitations. Watson-Boone used several types of data gathering techniques – interview, note gathering, personal journals and observation.

In the introduction to *Constancy and Change*, Watson-Boone states her intention for the study to act as a benchmark for what it is like to work, in a large U.S research University in the mid-1990s. Watson-Boone suggests that this benchmarking is important because though much has been written about recent changes in libraries (such as technological advances) there is a

clear lack of studies that correlate the relationship between change and effect on the librarian's jobs, ergo, worklife attitudes. Because library literature has little to offer in attitudinal studies of librarians, Watson-Boone turned to numerous studies regarding worker attitudes from other professions. Most oft referenced is the 1987 survey by the Meaning of Working International Research Team (MOW IRT), an eight country study of 15,000 workers. These references to other studies outside the library specific realm spoke to the heart of Watson-Boone's rationale for a study of this magnitude – there is very little research done on the attitudes and reflections of the librarian as worker – this likewise lays a foundation for this research as it has a basis in applying qualitative research methodologies.

Watson-Boone also stresses that the movement from a manufacturing to a service economy that has been occurring in the United States for decades is the basic work-related change facing and effecting librarianship. This new service economy has resulted in what the author cites Mike Hales (1980) called "thinkwork" – a term Watson-Boone uses throughout the text to describe librarians' tasks or efforts. In addition to setting a historical path of work attitudes, Watson-Boone's study acquaints readers with the Social-Psychological Approach to the study of work. Watson-Boone sums it up by saying simply "to understand a librarians' work, one must both understand the librarians and the work they do".

Watson-Boone's research defines the meaning of working through the study of the psychology of work, giving examples of how librarianship can be studied from either a psychological and or sociological perspective, which then brings a clear understanding of why a combined approach to the study, the social-psychological approach, would best represent and

encompass the social behaviors and individual inflections of the librarians. Watson-Boone uncovers shared realities of coworkers and what is 'real' and how professional cultures are formed. She introduces the concept of *work centrality*, defined as 'the extent to which a person defines himself through work or commitment to work'. The author also introduces two other work meanings to discern reality for a group, *extrinsic features* centering on job tasks, and *intrinsic* focusing on physiological motivators. Watson-Boone study ponders where librarians would fall in the reality of their work meanings – or do they favor a ratio of all three?

In the second chapter, "Tell Me What You Do", Watson-Boone's work focuses on librarians own descriptions of their positions. The author's categories of jobs: collection work, catalog work, reference work and learning-teaching-training work are broad representations of traditional librarian roles. These categories constitute the librarians' primary work, as defined by such factors such as time increments, personal likes and how they defined their position. There were differences between the reference services librarians (in the public eye) and the technical services librarians (behind the scenes) in the values placed on primary tasks that were expected. Reference services librarians place high value on interacting with patrons, while the technical services people value the ability to work alone and on their own. The majority of the participants shared a higher value on the work than salary or prestige.

Within each category, Watson-Boone goes into detail breaking down to some specificity with regards to tasks and degrees of satisfaction. Using quotes from the librarians brings color and feeling to the text and gives an insider's view of the culture that is MIRI-U. In the chapter "The University and the Library", Watson-Boone examines the relationship between the

librarians, their administration and the institution at large. Watson-Boone first sets the stage that relationship between the University and its employees and as being 'adhocratic' – that is, one that places emphasis on continuous skill development, more lateral than upward career mobility and a flatter organizational structure. Watson-Boone then describes MIRI-U and the Libraries and their attributes and reporting structures. It is interesting to note that it is this chapter that finds the librarians at their most critical.

Waston-Boone observes, "The librarians' sense of life-at-work is centered on their primary tasks, their unit and their colleagues. Within their units they are 'we' – outside it is 'they', though the strength of this statement depends on the topic being discussed at the time." The librarians interviewed did not aspire to administration, and they were critical and suspicious of the highest tier of administration, equating their large size to bureaucracy and citing poor communication as reasons for dissatisfaction. Again, Watson-Boone's ability to weave quotes and citations paints a vivid, if somewhat unflattering view that fits in with the adhocratic relationship of a society where the norm is to revere collegiality and revile the administration.

In the next chapter, "Expressions of Self", Watson-Boone's asserts that job conditions are affected by personality, and individuals work meanings influence motivation and performance. Specific concepts with regards to primary work and their work setting create a physiological and organizational sense of self and an overall sense of work identity. In this chapter, the librarians' statements are sometimes contradictory with earlier statements and feelings. For example, it seems ironic that autonomy was the primary job characteristic that the librarians valued, but they could not recognize its value in their leadership.

The final chapter "The Post Industrial Future" primary goal was to document the librarians' view of their work life and shared realities of the organization. Sharing with librarians the kinds of changes predicted for libraries at the end of the chapter and recording their thoughts and where they envisioned librarianship in the future might have enhanced the chapter and the study.

1.2.2   Articles

A New Classification for Reference Statistics by Debra G. Warner gives small insight into the attitudes of librarians and staff that tested an alternative reference data gathering model. The impetus for creating the classification model in Warner's case was borne out of need for training and triage at a new single point of service desk at Eastern Carolina University, as opposed to the interest in studying attitudes regarding capturing statistics that reflect the evolution of reference work in a networked environment. Warner takes the reader through the development, deployment and methodology of the study – a three point scale based on question difficulty was developed, tested and deployed to those staff working at the combined service point and employees were subsequently polled for their reactions using the scale as compared to only recording number of questions. Interviewing participants is an opportunity to collect data that can be rich with information and direct quotes could have spoken to the satisfaction factor she suggested. Warner's study changed from a daily collection of data for the first three months to a randomly selected once a month prospect – Warner suggested that the mean numbers derived from this method were representative of pervious patterns, but this was not discernable in the study. Warner's research and subsequent implementation of a classification system in this case

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lays a foundation for this attitudinal study by introducing alternative methods for gathering statistics. The opportunity also exists for validation of the data presented.

An article by Brian Quinn, *Beyond efficacy; the exemplar librarian as a new approach to reference evaluation* takes an interesting approach as it suggests using qualitative methods of evaluating reference librarians by first asking 'what makes a reference librarian great?' From survey responses, the author suggests a profile is formed with three dimensions: attitude, professional skills and interpersonal skills. Quinn asserts that his study implies good reference behavior is learned and that cultural preparation is a must. The study also found that not one single factor made a librarian great – it is a combination of skills. Quinn's study found that the most important characteristic described by librarians was exemplar mastery of skills, and this is proficiency that he believes can be measured through testing and training. Quinn ends his article calling for a move 'beyond the tunnel vision that presently characterizes reference evaluation'. Quinn's article focuses on behavioral aspects of reference librarianship; this study will add to those findings by determining position responsibilities, attitudes and perceptions about users / administrators and how to capture those behavioral qualities and efforts in a meaningful statistic.

Personalized library portals as an organizational culture change agent by Amos Lakos and Christopher Gray suggests that by initiating a new service and introducing new technologies an organization can experience cultural chance. Lakos and Gray begin their article talking about important future trends identified by the Library and Information Technology Association (LITA) experts for technologies in the libraries at the 1999 ALA Midwinter meeting. The LITA group emphasized the user-focused approach as the trend of the future, with the emphasis in this

paper on personalized library portals. The authors contend that by creating a dynamic library portals libraries' will become more customer centered, and that library organizational cultures will begin to include continual assessment strategies in order to better serve clientele and in doing so will change the way library staff work.

This study gives supporting evidence to suggest that the work of the librarian may change as a result of a service like this – however it is difficult to assume library culture will change if the strategies for gathering data associated with this service are not also reassessed. Already there have been great leaps in technology related services and yet most library staff clings to traditional organizational values – perhaps in light of the fact that more apt and appropriate statistical data gathering methods on services such as reference have yet to be adopted, as suggested here. Lakos and Gray give an overview of what culture is – and they suggest how external factors influence can change an organizational culture, but they do not explain how a personalized portal will change the culture of a library internally. In the article, the authors also list a number of new tasks librarians would have to do to assist portal customers. This list reads like the job description close to that of an online computer assistant, and it supports the assertion in this study that the work of librarians has changed significantly since the introduction of the networked environment. It speaks little to recognize the value of intellectual work, instead suggesting there is a need to improving technology skills in reference librarians. Likewise, there is no discussion regarding how one might assess or measure the effects of this training or recognize that the culture of an organization is changing. This research takes some of the ideas proposed to the next level by including attitudinal studies.

The Academic Library by John M. Budd supplements any research in academic librarianship. Budd uses historical methodology to give the reader an understanding of the history of academic libraries, the professional culture and the relationship between library and higher education. Most relevant to the research proposal presented here was Budd's chapter *A Brief History of Higher Education and Academic Libraries in the United States*. Here evidence was found to suggest that outside influences might have shaped library culture and subsequent group dynamics and reference interactions with users that still resonate. This was pertinent to this study because it shaped the perceptions of librarians, the user and their relationship. In the earliest days of academia in the New World, books were few. Libraries were open an average of 10 hours a week, access was usually restricted to faculty and collection management practices were poor. Tired of restrictions and inaccessibility, students formed societies where membership dues paid for securing large book collections. Budd then paints a grim portrait of the profession: the role of librarian was not regaled. The position of librarian was not considered worthy of anyone with intelligence and ambition. An excerpt of a conversation to Daniel Coat Gilman (librarian of Yale) from then president of Yale Woolsey on hearing of his resignation had this to say: "In regard to your leaving your place my thoughts have shaped themselves thus: the place does not posses that importance which a man of active mind would naturally seek…with the facilities you possess…you can in all probability secure for yourself a more lucrative, a more prominent and a more varied as well as stirring employment…". It is easy to understand then on some scale in most academic environments why even today librarians do not feel as valued as other members of the university.

Budd then continues on his history of the academic library through the years and informs the reader how libraries experienced their most active growth in the 20th century, when the focus of campuses shifted to research and professionalization of faculty.

The historical overview presented in Budd's text is vital for helping to paint a picture of the librarian as worker over time. Budd's work suggests organizational memory and organizational culture play key roles in the study of librarianship, and the perceptions that librarians have with regards to their work, professional status and value for their services within the organization. In this study, interviews with librarians expanded upon Budd's research to define the librarian's role in the university by including current perceptions of work value and assessment of services.

In the article *Server Logs: Making Sense of the Cyber Tracks,* Darlene Fichter walks the reader through the hows and whys of web log analysis. With major headings that include identifying user patterns and what access logs can tell observers, Fichter makes a compelling argument for learning to actively read web log analysis. Fichter does make a point of saying that web log files only tell a part of the story, and are best used as part of an iterative process with other evaluative measures. The researcher proposed to introduce in this study what Fichter suggests, that reference librarians feel that a combination of evaluative measures, including web log analysis, may more accurately reflect the work of the today's librarian and lead to better statistical gathering and an understanding of responsibilities.

2.0   REFERENCE LIBRARIANSHIP IN CONTEXT OF MODERN LIBRARIANSHIP

In 1955, Samuel Rothenstein noted that the publishing boom of scientific literature after World War II resulted in an increase of the responsibilities of reference librarians in academia as researchers recognized that the sheer volume of new materials alone was impossible for any one scientist to keep abreast of. Just as profound a change as the publication explosion for reference librarians was the introduction of the networked environment. In addition to an extreme growth in published materials, the format and dissemination of information in an electronic format brought with it new challenges and roles for reference librarians: "The computer is the single biggest agent of change in reference work in the twenty-five years that I have been a reference librarian. In the early 1970's none of us had a clue that by 1980 our working lives would revolve around the idiosyncrasies of this box on the desk" (Constance A. Fairchild, The Reference Librarian, 1991).

Technology, or more specifically, computers and the connections between them, has changed reference services "forever" (Kelly and Robins, 1996). Cindy Faries wrote that the most significant change for reference librarians and users was the introduction of the online catalog in the 1980s:

> Patrons could access holdings of their libraries more quickly, and this often led to a greater demand for increased services and collections. Furthermore, reference librarians were

now forced to learn much of that mysterious stuff only their cataloging colleagues previously knew such as authority control; expert manipulation of Library of Congress subject headings; and the interpretation of a MARC record. The online catalog also introduced the reference librarian to the technical side of the computer and forced a growing collaboration with programs and technicians. (Cindy Faires, 1994).

The information needs of the electronic user bring new labor demands on the reference librarian as well. New information resources are often very expensive to own and require librarians to constantly train and retrain if they are to stay abreast of database changes (Shaw, 1991). Reference librarians who once created extensive bibliographies, indexes and abstracts on paper now turn their efforts to web authoring and content control, creation and continuity to insure users are finding the information they need when researching online, because users can become easily lost in cyber space and will seek directions through web transactions. Librarians must be flexible and adapt to changing technologies and new services, features and products at the same pace at which they are developed. With more choices available to access the same data, reference librarians must carefully weigh the pros and cons of each format and service to make well-informed decisions, a process that can take valuable time (Faries, 1994).

This study included data from librarian interviews to determine the extent to which they feel that the current practices of recording statistics and evaluative measures are adequate or that they do not reflect the augmentation that has occurred in reference librarian responsibilities with the introduction of the networked environment and the reallocation of resources / work efforts of librarians to offer reference services electronically. Interviews of librarians determined the

extent to which in-person interactions at the point of service are a necessary and satisfying learning experience for users and librarians alike, and during periods of low patron activity how productivity of the librarian is re-directed to other tasks all necessary to meet user demands for information. Interviews of library administrators and users are used for comparative purposes.

2.1   EVOLUTION OF REFERENCE SERVICES

2.1.1   Analog

Reference transactions prior to the networking age were primarily communicated through in-person consultations – information which may have seemed foreign, unreachable or just too difficult to find for many users meant traffic lines at information desks. Also, users were typically localized citizens or researchers associated with an institution. Reference librarians assisted faculty and graduate students with their research and collection needs and prepared bibliographies and handouts in paper format and taught library instruction. Librarians helped find accurate and the most up-to-date information, made notations in card catalogs, created pathfinders and bibliographies, located remote resources and paved the way for researchers with letters of introduction and collaborative relationships. Putting data in a prescribed order and helping with the proper annotation of citations were also expected. Work was focused primarily on satisfying in-person queries for information and working with common tools – typewriters, phone, and books – and some redundancy of work. With the introduction of the digital realm came diversity in the user population – online and offline clientele – and new tools added to the

complexity to the work. This study sought to determine the value and commitment of the traditional point-of-contact action.

2.1.2 Digital

Almost all academic libraries now use the web as the primary access gateway to their resources. With the presence of the library now assured in this virtual world, there is a shift not only in how users interact with these same reference services or what they might expect, but in the 'who'; with physical boundaries effectively erased by technology, reference librarians now have the world's population as potential clientele. The web interfaces of academic libraries are available to anyone who wants to utilize them – excepting those databases which require campus user authentication, the intellectual work done by a reference librarian identifies resources or outlines course needs – are accessible and used by thousands of others on a daily basis – and this action may lead to inquiries. As most academic reference desk services find themselves expanding beyond the physical campus via the Internet, communication skills and cultural awareness on a global scale are paramount for a fulfilling reference transaction.

With the potential to reach an audience through networked systems, reference librarians offer 'virtual' services, such as providing real time live 'chat' reference services via the web to assist online users who sign on just as they would help a person at a desk. The Reference Librarian, Numbers 79/80 2002/2003 (Hawthorne Press, 2002), one volume dedicated entirely to digital reference service issues, explored through a variety of articles that study the operation, use and communication strategies of libraries engaged in digital reference. With this shift from manual searching to online access comes an expectation of speed and instant gratification from

proficient web surfing students – the Generation Netters (Alch, 2000).   This generation is the first to grow up exclusively in the Digital Age (ibid). Even with their revolutionary computer skills, information gratification can be difficult to achieve without the assistance of the well versed, knowledgeable reference librarian who is familiar with the current licensing packages, intricacies of Boolean searching and subject headings. Additionally, along with accelerated growth of electronic information and related services comes a host of changing (or 'upgraded') instruction issues that can cause confusion for that same user who can easily find and download an audio MP3 (Moving Pictures Expert Group – level 3 compressed file), but has trouble a) knowing what Library of Congress terms to use for a successful search strategy and b) discerning which is the best database to use for their particular research need amongst the hundred or so the library subscribes to.   More critical still is the need to instruct and communicate with the introduction of a new user – the virtual client – a remote user who may never set foot in a building, but who requires the same consideration for assistance in navigating databases amongst numerous platforms. The interactions of a virtual interview, while similar to a live consultation, may be more difficult and time consuming due to the nature of the asking and answering process (typing and waiting for a typed response when conducting the 'reference interview'; assisting the multitasking clients who take their attention away from the interview at hand; explaining steps in information retrieval techniques screen by screen take more time than in-person interviews, especially if native languages are different between the librarian and the user, in which case word selection becomes even more crucial) and have a host of other problems unique to services dependent on technology. The reference interview in a traditional setting permits the librarian to perceive many more cues than mere words alone convey (Taylor and Porter, 2002). With virtual

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users, there can be communication challenges, issues with compatibility, connectivity, and technical problems.

2.1.3 Hybrid

State of the art reference services must include a hybrid of traditional services and electronic and added responsibilities for librarians. At the MSU A Libraries, where Live Chat and Email reference are offered as two methods of communicating with reference staff, users still value the human point of contact when seeking information in the library:

Reference Transactions by Type, MSU A Librari 2003 -2004

Email 1,227   Chat 485

Personal Contact 26,793*

*Personal Contact Transactions include
directional and reference queries, phone and walk up
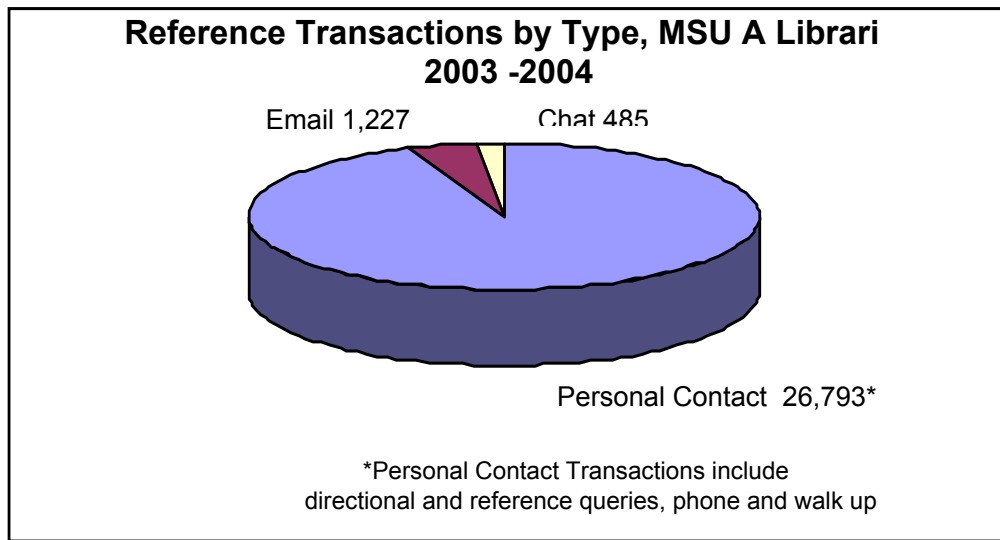
Figure 1. *Reference Transactions by Type, MSU A*

Virtual clients likewise seek the expertise of reference librarians and access to the web research guides is actively pursued.

Libraries today provide services and resources in a hybrid-operating environment: there is the physical library and there is the electronic one (Bertot, et al, 2004). The explosion of Web publishing and digital products has added new challenges in reference services while increasing the opportunities for reference librarians to serve a new user group – virtual customers. Interviews with reference librarians uncovered their reactions to serving this clientele and what statistics they feel should reflect the new reference services developed for the online user as well as the traditional physical reference 'desk' interaction.

The relationship between digital services and traditional modalities of reference work was explored and is illustrated here (Figure 2):
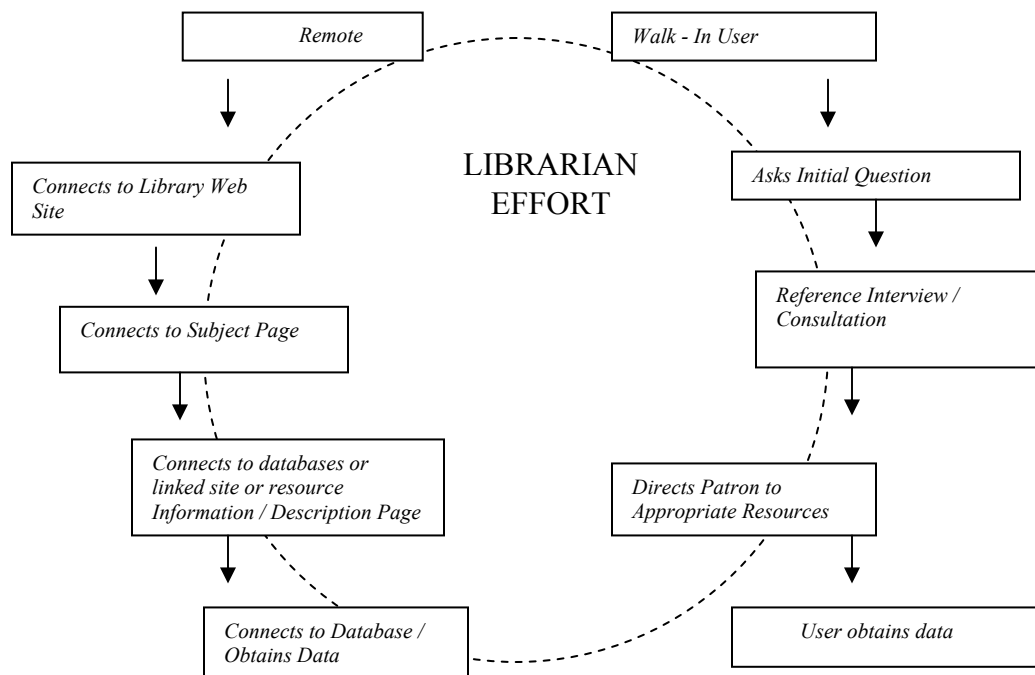
Figure 2. *Relationship between digital services and traditional modalities of reference work*

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The reference interaction as suggested here demonstrates that the digital transaction requires the same cognitive traits of the reference librarian, but it only tells part of the story. How do reference librarians feel about providing services in the networked environment? Are adequate considerations given to this aspect of their positions?

In addition to querying librarians about their contribution to the electronic medium, this study assessed through the interview process if the ongoing importance of the physical presence / comfort / interactions that occur at the reference desk continues to play an important role in reference activities, for both the user and the reference librarian:

> "One of the great strengths of reference librarianship is this commitment of a set of humanistic values that puts a high premium on person-to-person relationships. Because of these values, reference service has a remained labor-intensive, helping profession. Thus it is possible for the reference department to incorporate high technology into its services while maintaining a caring attitude toward students and faculty alike". (Mabel W. Shaw, 1991).

2.2   REFERENCE LIBRARANSHIP AS PROFESSIONAL SPECIALIZATION

The manifestation of specialization in reference services has seen the emergence and evolution of competencies and performance standards. First published in 1996 with the intent to be used in the training, development, and/or evaluation of library professionals and staff, the

American Library Association's (ALA) Reference and User Services Association (RUSA) created Guidelines for Behavioral Performance to serve as the standards for measurement of effective reference transactions. These guidelines do not emphasize quantitative data gathering for determining effective reference services but instead focus on qualitative measures that might be applied to assessment and evaluation. Updated in 2001 and 2004, the Guidelines reflect the changes in the reference profession to include the networked environment:

The five main areas (Approachability, Interest, Listening/Inquiring, Searching, and Follow Up) remain the same [since developed in 1996], but three distinct categories have been added (where appropriate) under each. They are:

General--Guidelines that can be applied in any type of reference interaction, including both in person and remote transactions.

In Person--Additional guidelines that are specific to face-to-face encounters, and make the most sense in this context.

Remote--Additional guidelines that are specific to reference encounters by telephone, email, chat, etc., where traditional visual and non-verbal cues do not exist.

(RUSA Reference Guidelines – Guidelines for Behavioral Performance, 2004)

Listing the reference responsibilities / tasks / services in the pre- and post-network environment at MSU A University Libraries, the shift in services, expectations and professional work likewise becomes profoundly noticeable – yet assessment measures for these services and personnel remain unchanged and statistics gathered rooted in the traditional at the organizational

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level. This appears to be the norm rather than exception; for example, data gathering as recommended by the Association for College and Research Libraries (ACRL) June, 2004 recommends the following ratios when reporting or gathering data (as related to reference services): a ratio of reference questions (sample week) to combined student and faculty FTE; a ratio of material/information resource expenditures to combined total student and faculty FTE; a ratio of number of students attending library instructional sessions to total number of students in specified target groups. Likewise, an overwhelming majority (96%) of members of the Association of Research Libraries (ARL) surveyed in 2002 indicated the primary methodology for evaluation of reference transactions was quantitative in nature – number of transactions either in total or based on sampling strategies.

In the pre-network environment at MSU A University, librarians were classified as staff and faculties from the various departments were responsible for collection development as they were the experts in their respective fields. The curriculum was more structured; users where primarily the campus community and the tasks of the librarians were localized (Table 1):

Table 1. MSU A Pre-Network Environment Reference Services

Pre-Network Environment Librarian as Staff Member	Tools/Skills	Tasks	User	Curriculum	Faculty/ Researcher
	Print Resources	Questions	Local	Structured	Collection development
	Telephone	Office consultations			Expert in research resources
	Fax	Bibliographies			
	Typewriter	Subject Guides			
	Mail	Abstracts			
	Knowledge	File Documents			
	Communication	Committee work			
	Writing				
	Terminology				
	Print Resources				
	Telephone				

The changes observed in the duties of reference librarians over time at MSU A Libraries are typical, as illustrated by the recently updated RUSA Guidelines for Behavior listed earlier. The post-network environment at MSU A demonstrates the addition of reference services / skills / tools with the introduction of a networked community. Faculty, recognizing the amount of information being published was too great to keep abreast of began to rely on librarians, first as a point of contact, then as experts in the various disciplines; curriculum is more interdisciplinary and less structured with the ability to transcend subject matter, interconnect themes and communicate via the Web; users have expanded far beyond the local community to an

international audience; librarians at MSU A Libraries are recognized as faculty and are expected

to conduct their own independent research as outlined in the promotion process (Table 2):

Table 2. MSU A Pre-Network Environment Reference Services

	Tools/Skills	*Tasks*	*User*	*Curriculum*	*Faculty/ Researcher*
Post-Network Environment Librarian as Faculty	Computer	Questions	Local	Inter-disciplinary	Requests purchases
	Online Catalog	Bibliographies	National	Less Structure	Use Librarians as Resources
	Print Resources	Indexes	Inter-national		
	Electronic Resources	Subject Guides	Virtual		
	Internet Search Tools	Abstracts			
	Intranet	Review Databases			
	Fax	Tests catalog/products			
	Mail	Bibliographic Instruction			
	E-Mail	Create Online tutorials			
	Live Chat	Review Websites			
	Online Resources	Create / update web pages			
	Knowledge	Troubleshoot equipment			
	Technology	HTML creation			
	Terminology	Collection Development			
	Communication	Continuing education			
	Database searching	Department liaison			
	HTML	Work with vendors to create / test tools / content			
	Writing	Committee work			
		Subject specialist			
		Chat reference			
		Office consultations			
		Research / professional work (as faculty)			
		Selects content for digitization			
		Create databases			

3.0 PERFORMANCE EVALUATION OF REFERENCE SERVICES AND LIBRARIANS

The SPEC Kit published in 2002 by the Association of Research Libraries 'hoped that the survey results would reveal current best practices, but instead, they revealed a situation in flux':

> The study reveals a general lack of confidence in current data collection techniques. Some of the dissatisfaction may be due to the fact that 77% of the responding libraries report that the number of reference transactions has decreased in the past three years. With many librarians feeling as busy as ever, some have concluded that the reference service data being collected does not accurately reflect their own level of activity. (ARL SPEC Kit 268, Reference Services & Assessment)

The executive summary also reports that 'reference transactions no longer occur solely at the reference desk and libraries are attempting to capture data from a number of service points'. How can libraries capture all the different types of questions? And how then should reference visits in the networked environment, virtual and in person, be analyzed to satisfy both the standards of the profession, the work value for the reference librarian, and the manager's need to assess and improve services for the academic community?

Even though there is general dissatisfaction among librarians with the current data gathering methodology for academic reference services as reported by the ARL researchers, the statistics gathered for reference still continue to primarily value volume, i.e., number of interactions at a particular service point: 96% of the survey respondents indicated they tracked the number of reference transactions as a way to evaluate effective reference services, followed by user surveys & focus groups, with fewer than 16% including analysis of email and chat activities. Of these respondents, 99% reported manually recorded transactions using tick marks on paper, with less than 8% indicated they track hits on subject Web pages. When asked to indicate impressions about the quality of their library's assessment activities with respect to recording, analyzing and using reference transaction data, as a group the respondents rated their performance **below** minimum performance level in analysis and use of transaction data, just above bare **minimum** for perceived performance in recording transactions, and in collection, analysis and use of data performance was deemed to fall far short of desired performance levels, 'although the reasons for poor self-ratings were not disclosed, the scores clearly indicate widespread dissatisfaction with current practices relating to reference transaction data.' (ARL SPEC Kit 268, Reference Services & Assessment).

This study asked librarians if they felt that current data gathering at MSU A University Libraries adequately reflects the effort or (the librarians' perceived) value of reference work, either in the traditional sense or within the networked community. Traditionally, libraries have used statistics to secure more funding, personnel, professional standing, etc as indicated by responses from the ARL SPEC Kit survey participants, and so the decline of the total number of at-the-desk reference transactions over a period of time is viewed unfavorably. This issue has

real world consequences because of the way libraries compete for resources. But are these declines accurate? Or are the data not inclusive of the added reference dimensions and shift in resources and responsibilities brought about by the networked environment? Are the changes in library practice moving at such a rapid pace that the current methodologies for statistical gathering are in need of recalibration to reflect current services and user trends? If reference librarians truly feel a lack of confidence in the statistics gathered for evaluative purposes, how does this reflect on their attitudes towards their work, their profession, their users, their administration?

One example that demonstrates a current work dimension that is not measured for its value as a reference service is the amount of time the librarian spends creating Web pages for users to visit 24/7 (time that might have been previously spent answering questions in person). There is no prescribed formula for assessment of these virtual visits vis-à-vis the *reference* transaction – but could there be? Are declines in reference transactions at the reference desk due in some part to the virtual visit to the online research guides created by librarians? Web pages are counted and the parent institution analyzes hits, but without the important link back to the author for an assessment of the 'reference service' the virtual user received. Another ARL project, the E-Metrics project, is an ongoing effort to explore the feasibility of defining and collecting data on the use and value of electronic resources. Interviews with reference librarians in this study can help determine the amount of time librarians surmise they spend on creating web pages, the value they place on this activity, and if a dichotomy exists between position expectation and service.

Reference librarians were asked what the role of these research / subject guides play in reference services. Is the work / function / transaction recorded? The virtual client is, on a simplistic level, no different than a personal contact reference transaction at the service point – the user needs guidance on resources for his/her topic (wants assistance, and goes to the library web site), selects the appropriate web guide (an electronic 'reference desk' for the subject that is either discovered by the user or introduced in a library instruction session), and follows the guide the librarian has prepared (if looking for databases, encyclopedias, etc these are the best ones for this subject 'X'). The differences between in-person and virtual users are likewise simplistic – proximity & time (home base of clientele and open hours of facility), personal preference or learning styles (in-person interaction more effective), ability to use resources locally (resources not available via the Web), curricula (assignments of professors for specific tasks). The opportunity to interact with a virtual visitor in real-time is difficult or impossible in the best of circumstances – especially when there is a potential for platform / program / hardware / linguistic / cultural compatibility issues – yet there is little evidence to support that these transactions are given even minor consideration in terms of accountability or accolades with regards to individual performance and effort, and whether there is any attempt to determine if the guide is effective, or reaching its intended audience. Interviews in this study determined where the librarians place this job function in their hierarchy of importance.

3.1   RECORDING POINT OF SERVICE REFERENCE TRANSACTIONS

At MSU A University Libraries, the following figures for total reference transactions (includes email, phone, Chat, directional and reference queries) were reported for 1998 – 2002 (Table 3):

Table 3. **Total reference transactions, MSU A**

Reference Transactions Reference Transactions include chat, email, phone as well as in person transactions. Margin of error information not available.	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003
	29,421	27,236	30,209	30,409	26,793

When viewed in isolation, the 12% decline in reference transactions from 2001/2002 to 2002/2003 may appear significant, though over time the number of transactions is steady, with approximately 30,000 transactions per year. However, without additional information as to librarian responsibilities, work productivity, costs associated with a networked office etc., these figures cannot reflect the librarians effort / effectiveness with regards to traditional inquiries. Is this a meaningful decline? Are the declines symptomatic of a serious problem? Why are there fewer questions? Anne G. Lipow, in her keynote address at the Information online & on disc '99: Strategies for the next millennium conference in Sydney, Australia (1999) suggested the following:

> One reason must certainly be that their Internet-using clients are answering more questions on their own. And if that is indeed the reason and the only reason, then it is right that we should disappear. But is that the only reason, or is it even the reason at all? There's a good chance, even when the reference desk is within eyesight, that for at least some people the reason they don't ask is simply that to leave a workstation and go to the reference desk

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with a question risks losing their seat to someone waiting for it. Others might think that having to explain their problem by leaving their workstation and trying to repeat the symptoms on the librarian's computer is too complicated, so they don't ask. (Anne Lipow, 1999).

Lipow admitted these were just guesses, but she further emphasized that, without further investigation into the causality (or meaningfulness of said decline) these figures can have an effect on operations of a library and the attitude of reference workers:

However, administrators and funders of libraries don't guess. With no one to contradict them, they believe the reason we're getting fewer questions is that the search engines can now do the job — and better than we can. So, as they reorganise library work, reference gets downsized, downgraded, or eliminated. Anthropologist Bonnie Nardi explains that librarians are prime targets for elimination because our work is invisible — to our clients, to our administrators, even sometimes to ourselves. In her introduction to a recent issue of Computer Supported Cooperative Work devoted entirely to perspectives on this important concept of invisible work, Nardi says of librarians that no-one recognises that real work is being done or that it is of value, or they don't understand the importance of what librarians do, and so administrators are willing to cut library funds. She says that the methodologies used in studies that purport to analyse and measure the work of intermediaries such as librarians do not uncover their non-repetitive, non-routine, conceptual work. You can imagine, for example, that if you measure your reference service simply by dividing your hourly wage by the number of questions you answer on average in an hour, that comes to an expense that keeps going up as the number of questions answered per hour goes down, till it

reaches a point where it seems very expensive. (Anne Lipow, 1999).

Interviews with librarians provided information on how helpful they perceive gathering these statistics to be. Using Lipow's suggestion that one reason for diminishing reference inquiries might be users answering their own questions vis-à-vis the Internet, the following data was gathered during the same time period, recording significant virtual visits to reference librarians' Web research guides (significant visits recorded at MSU A University Libraries are defined as continuous uninterrupted 20 minute plus web session from a single IP address) (Table 4):

Table 4. Reference Research Guide Web Visits, MSU A

Reference Research Guides - User Web Visits	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003
	143,818	160,861	400,000	587,367	634,485

These figures show an increase of 8% from 2001/2002 to 2002/2003 of online activity at 57 research guides - activity where users are seeking a specific knowledge base created by reference librarians that address research needs in a particular subject area - just as they actively select which reference desk to approach based on their information need. The rise in virtual visit activity since 1998 shows a more dramatic increase – 340%.   When virtual visits and traditional reference desk counts are correlated together, the results are as follows (Figure 3):
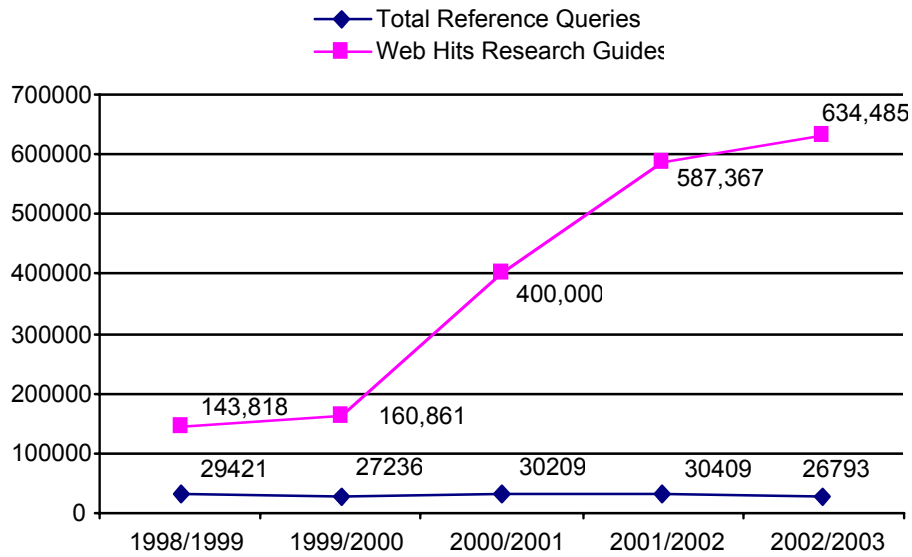
Figure 3. *Total reference queries and web visits, research guides at MSU A Libraries, 1998-2003*

The decline of the traditional reference transactions appear less dramatic when paired with the increased use of web research guides, and a more accurate view of reference work – reference librarians create research guides so that users can more easily access information independently in an organized way – in this case, by subject area.   Patron reference traffic, though lower than previous years, continues to be a stable albeit steadily declining sought after service that users have not yet abandoned.

Currently, reference statistics collected at most academic institutions use first and foremost quantitative methodology as the accepted standards. This method – accumulated hash marks over a prescribed period of time – only counts transactions between the user and the librarian – in most instances, no other data describing the interaction or information delivery is

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mined. While the ARL survey recorded a small number of libraries amongst their respondents that recorded types, time to answer and difficulty of question, these measures where in the minority, and in no way evaluated librarian effort. The ARL executive report noted that "With as many librarians feeling as busy as ever, some have concluded that the reference service data being collected does not accurately record their level of activity." Reference transaction figures are gathered by sampling or accumulation over 12 months and categorized into 'reference' and 'directional' categories and reported to professional organizations, such as the Association of College and Research Libraries. These figures are published in various formats and used for benchmarking, reporting to accreditation bodies and in most instances, staffing service points.

Using a quantitative statistics-gathering module in the current reference landscape focuses primarily on quantity as opposed to effort in terms of a success rate from a librarian perspective, despite the existence and use of external survey tools which value service. The ARL study summarized respondents to the 2002 survey on current reference statistics and assessment:

> The study reveals a general lack of confidence in current data collection techniques. Some of the dissatisfaction may be due to the fact that 77% of the responding libraries report that the number of reference transactions has decreased in the past three years. With many librarians feeling as busy as ever, some have concluded that the reference service data being collected does not accurately reflect their own level of activity. This is not a new sentiment, the library literature is replete with lamentations over the inadequacies of reference statistics, but the dramatic decline in recorded reference desk activities appears to have generated renewed interest in addressing the problem of developing meaningful

measures of reference activity. (ARL SPEC Kit 268, Reference
Services & Assessment).

This summary supports the notion in part by anthropologist Bonnie Nardi's (Lipow, 1999) that librarians' work is invisible because "the methodologies used in studies that purport to analyze and measure the work of intermediaries such as librarians do not uncover their non-repetitive, non-routine, conceptual work". Interviews with librarians determine what these activities and tasks might be, and how they perceive assessment on such responsibilities are carried out.

4.0 CRITERIA FOR THE DEVELOPMENT / SELECTION OF METHODS TO BE USED IN THE STUDY

Statistical gathering measures have remained arithmetical and non-descriptive. The most obvious response for libraries has been to change data gathering from the user's perspective – external survey tools such as LibQUAL, while useful for determine client satisfaction, are not telling as much what the library is doing, but only the effects that are valued by the clients – there is no insight as to the reference librarians activities / position responsibilities other than those perceived by the public encounter. The primary focus of gathering statistics when it comes to reference transactions continues to be one of numbers – with the total number of transactions used for a measure of 'success' and still essentially non-descriptive.

As the ARL study suggests, many librarians feel the methodology for keeping references statistics which counts transactions only, does not adequately portray the level of activity of the reference librarian, whose services have 'migrated beyond the traditional reference desk'. This study gathered information on the perceptions of librarians at one academic institution regarding current reference data collection efforts.

4.1   METHODOLOGY AND TOOLS

Descriptive case study methodology was used, with MSU A University Libraries as the case study institution and MSU B as the comparative institution. Descriptive case exploration, as defined by Bruce L. Berg (2004) in *Qualitative Research Methods*, fifth edition, requires that the investigator present a descriptive theory which establishes the overall framework for the investigator for follow throughout the study. The five component elements recommended by R.K. Yin (1994) for descriptive case study design were also used: study questions; study propositions or theoretical framework; identification of the units of analysis; logical linking of data to propositions; criteria for interpreting findings.

MSU A is a representative case institution on a number of levels: as one of the private institutions classed in the Doctoral/Research Universities-Extensive category by the Carnegie Classification of Institutions of Higher Education; MSU A University represents a growing number of educational institutions that recognize the need for consortia relationships re. digital content and is a member of national and local organizations. A case predicated on the attitudes and opinions of its professional librarians may be expected to have larger meaning on a number of levels in the academic library community – the data gathered at a second public institution (MSU B) enabled the researcher to compare results to determine if attitudes about reference work are similar at different universities (See Profiles, Figure 4):

<u>Profiles - Case Study Subject, MSU A University Libraries</u>

MSU A University was founded in 1900. Today, MSU A is a top ranked university composed of seven colleges and numerous research institutes. MSU A is a multidisciplinary research institution of 7200 students, 1070 faculty and 3350 staff. The university offers more than 140 named degrees, graduate and undergraduate, professional and academic. The academic units are complemented by some 57 research centers, institutes, and groups dedicated to specific subject areas. MSU A is a private, coeducational university incorporated under the laws of its state.

<u>Reference Service Points and Staff</u>

There are four service points located in three buildings for users seeking reference assistance at MSU A University Libraries: Business, Humanities & Social Sciences Reference; Arts & Special Collections; Engineering Reference; Biological Sciences Library.

Staffing for these service points includes fourteen (14) liaison / reference librarians who are subject specialists, plus graduate students and staff associates. Librarians are faculty appointments. Only librarians were interviewed. Thirteen (13) librarians participated in the study (one participant had left the institution).

Two of the librarians interviewed are department heads for their reference unit. For the purposes of this study they were included in the librarian group (supervisory responsibilities being only a portion of their responsibilities).

There is one dean and one associate dean who supervise reference staff that were interviewed for a total of two (2) administrators participating.

<u>Users</u>

A call for volunteers to answer a set number of questions for a $5.00 stipend was advertised on a popular listserv at MSU A (Appendix A). Twelve (12) volunteers self-nominated and participated in the study, with the target number being 6 – 12. This number was selected as it is equal to the recommended number of participants needed for a focus group study.

<u>Identification</u>

Participants of this study were given a letter and number identifier. MSU A librarians were identified with the letter "P" followed by a number; administrators "PA" and number; users "UP" and number.

Reference Service Hours of Operation

Each service point schedules and maintains its own service hours. These hours are posted on the Libraries' Homepage and advertised in a number of printed venues when applicable (such as packets for incoming freshman and graduate students).

Locations, schedules and concentrations of reference service points, MSU A University Libraries:

Business, Humanities & Social Sciences Reference

This desk is the central point for general reference help and information. Subject specialties include business, humanities and the social sciences. Hours of operation during the semester are:

> Monday – Thursday   9 am – 8 pm
> Friday   9 am – 5 pm
> Saturday   1 pm – 5 pm
> Sunday   1 pm – 8 pm

Responsible for 7 hours of Live Chat per week.

Arts & Special Collections Reference

Subject specialties include art, architecture, design, music, drama and special collections (rare books, artists' books, related archives). Hours of operation during the semester are:

Monday – Thursday   9 am – 8 pm
> Friday   9 am – 5 pm
> Sunday   5 pm – 8 pm

Responsible for 6 hours of Live Chat per week.

Engineering Reference

Subject specialties include computer science, engineering, mathematics, physics and robotics. Hours of operation during the semester are:

> Monday – Thursday   9 am – 8 pm
> Friday   9 am – 5 pm
> Saturday   1 pm – 5 pm
> Sunday   5 pm – 8 pm

Responsible for 6 hours of Live Chat per week.

Biological Sciences Reference

Subject specialties include biological sciences, chemistry and chemical engineering. Hours of reference operation are:

Monday – Friday   9 am – 5 pm

Responsible for one hour of Live Chat per week.

Comparative Subject, MSU B University Libraries (ARL member)

MSU B was founded in 1885 and is a top ranked research university, distinguished by its commitment to improving the human condition through advanced science and technology.

MSU B's has over 16,000 undergraduate and graduate students that receive a focused, technologically based education. MSU B one of thirty four public institutions of higher education that comprise the Public University System of its' Home State.

Reference Service Points and Staff

There is one service point at the main MSU B Library with 21 liaison/ reference librarians who are subject specialists, plus students and staff associates. Librarians are faculty appointments. Only librarians were interviewed. There is one additional department library, however the librarian declined to participate in the study. Eleven (11) librarians agreed to participate in the study. One recorded interview was not usable – the recording device failed. This study reflects ten (10) total librarian interviews.

Two of the librarians interviewed have some management oversight for the reference unit. For the purposes of this study they were included in the librarian group (supervisory responsibilities being only a portion of their responsibilities).

The dean and the head of public services that manages reference personnel were interviewed for a total of two (2) administrators participating in the study.

Users

A call for volunteers to answer a set number of questions for a $5.00 stipend was advertised on a popular listserv at MSU B (Appendix A). Six (6)

volunteers self-nominated and participated in the study, with a target of 6 to 12. This number was selected as it is equal to the recommended number of participants needed for a focus group study.

Identification

Participants of this study were given a letter and number identifier. MSU B librarians are identified with the letter "L" followed by a number identifier; administrators "LA" and number; users "UL" and a number.

Reference Service Hours of Operation

Sunday – Thursday, 24 hours a day
Friday 12:01 am – 6 pm
Saturday 9 am – 6 pm

Chat and Email Services are available during the same service hours schedule above.

Figure 4. *Profiles, MSU A and MSU B Institutions, Service Points and Study Participants*

As discussed earlier, one of the rationales for undertaking such a study at this time is that the survey of members of the Association of Research Libraries in 2002 to gather information on current reference statistics and assessments found that there is a 'general lack of confidence in current data collection techniques' and 'the dramatic decline in recorded reference desk activities appears to have generated renewed interest in addressing the problem of developing meaningful measures of reference activity'. The study also cited some librarians as concluding 'that reference service data being collected does not accurately reflect their own level of activity' and fails to recognize the impact the network environment has had on traditional reference services and how data should be gathered, noting that 'the migration of reference activity to areas beyond the traditional reference desk (e-mail, chat, office consultations), has further motivated many libraries to re-examine and modify current practices'.   This research may inform the future direction of reference statistics and assessments in academic library communities through

providing additional information and comparative analysis on the attitudes of librarians at two academic institutions – one outside of ARL and one an ARL member.

A scan of library literature databases also supports the idea that there are a number of academic libraries of all sizes and consortia that are experimenting with new ways to collect statistics related to reference work. This study sought to contribute additional information on the attitudes of reference librarians. For example, like most academic libraries, reference librarians at MSU A University Libraries continue to staff reference desks in both the physical sense (phone, in-person) and the virtual (chat, email); reference librarians in academia are often responsible for appropriate subject specialization and as well as general reference assistance; staffing / management of service points is decided, in large part, by the quantitative statistics gathered at the physical reference desk; like other academic libraries, the introduction of the digital environment has seen a necessary shift in reference services and work, where position descriptions and responsibilities are dictated by networking capabilities and new user groups.

As institutions, MSU A and MSU B are known leaders and innovators in technologies – studying their practices in reference service assessment at the library level provided additional information on personnel and change in library environments and whether the perception of these librarians is that assessment of the same continues to rely on traditional methods. Likewise, the SPEC survey kit reference presents evidence that demonstrates the overwhelming majority of ARL Libraries, of which MSU A is not a member, also continue to gather statistics in traditional ways and are struggling to determine what data to gather, and why.

As a case study, librarian interviews gathered data that provide additional information on academic librarians' perceptions of:

- the current nature and state of reference work;
- compare such findings to the structure and content of current standards for reference librarians;
- current position responsibilities, value of work (theirs, users, and administrators), value of statistical and evaluative measures as they exist today

Interviews of library administrators and users were conducted to compare to librarian perceptions of how these groups view reference services.

Qualitative research methodology was used and semistandardized interviews conducted of library reference personnel. (See Figure 5). The semistandardized interview had the following criteria:

- more or less structure;
- questions may be reordered during the interview;
- wording of questions flexible;
- level of language may be adjusted;
- interview may answer questions and make clarifications;
- interviewer may add or delete probes to interview between subsequent subjects.

Four types of questions were included in the survey instrument:

- essential questions (concerning the central focus of the study);

- extra questions (equivalent to the essential questions, used to check response reliability);

- throw away questions (essential demographic questions or questions used to develop rapport between interviewer and subject);

- probing questions (draw out more complete stories).

Interview Guide, Figure 5:

Interview Guide for Reference Librarians

The Position (Responsibilities)

The rationale for this group of questions is to establish the responsibilities each librarian has, how they differ, how they are the same – then it is to get their personal feelings about what they view is the most important aspect of their position.

- If you had to describe to someone what it means to be a reference librarian, what would you say?

- How do you think your constituents might describe a 'reference librarian'? *(Rationale: says how a librarian thinks they are seen & how they might interact with customers)*

- What do you think an administrator thinks a reference librarian does? *(Rationale: does the librarian's perception match with the administrator? Do these perceived values match reward systems / statistical data gathered?)*

- What would you say is the primary function of your job? *(Rationale: is the primary function the same as perception listed above?)*

- Can you list for me your job responsibilities / tasks? *(Rationale: are additional responsibilities listed here not mentioned in the first question?)*

- Can you rank your job responsibilities in order of importance? *(Rationale: does the rank differ from the responsibilities order giving more importance to one*

function that the other? Is the order of importance also reflected in the perceptions of what it means to be a reference librarian for the participants?)

- What aspect of your job gives you the most personal satisfaction? Why? *(Rationale: will give personal insight)*

- What aspect of your job gives you the least personal satisfaction? Why?

- Can you describe a typical reference shift for you? *(Rationale: trying to establish what the librarian feels is typical for being at the desk, what other tasks might be getting done when not helping patrons & given ratio of task expectations.)*

- What part of your job do you spend the most amount of time on? *(Rationale: is what they see as most important and the percentages jibe? How does this equate into work given ratio of desk service hours vs. other scheduled time?)*

- Using the your own personal experience, during the time you have been a reference librarian, what has changed for you the most over the course of time? *(Rationale: will identify outside factors, trends, etc that influence either the position responsibilities or the librarian. Will this reflect on how they value public services? How will respondents' opinions differ?)*

- What has remained constant? *(Rationale: will librarians differ on constancy in the profession?)*

- What role do subject / research guides play in reference? *(Rationale: does this coincide with responsibilities / users expectations / perceived declines experienced at the reference desk?)*

- Can you tell me about a 'best experience' as a reference librarian you have had? *(Rationale: gives personal insight)*

- Can you tell me about a 'worst experience'? *(Rationale: gives personal insight)*

  About Reference Service evaluation and statistics

- What's the most challenging thing about being a reference librarian at (LIBRARY)? *(Rationale: gives personal insight. Are challenges external or internal?)*

- How are you evaluated as a reference librarian? *(Rationale: are evaluated measures tied to specific tasks / responsibilities listed?)*

- What statistics are gathered and reported for reference services? *(Rationale: what statistics are gathered that reflect work or expectations)*

- How do these statistics reflect the work you do or your effectiveness as a reference librarian? *(Rationale: personal insight on the collecting and reporting of statistics as a reflection of work effort / responsibilities)*

- What management decisions do you think are made with this data? *(Rationale: personal insight as to perception of data collection purposes. Does answer reflect any of the responsibilities or perceived importance of position?)*

- What kind of statistics might you gather that would be meaningful to you as a reference librarian? *(Rationale: personal insight on importance of statistics / librarian interest)*

- What of your tasks would you like to be assessed on? What might be meaningful? *(Rationale: personal insight on desire for recognition or performance)*

Interview Guide for Library Administrators

These questions match those of the reference librarian interview, to enable a comparative analysis of perceptions

The Position (Responsibilities)

- If you had to describe to someone who a reference librarian is, what would you say?

- Can you list their responsibilities?

- What would you say is the primary function of a reference librarian's job?

- What job task do they spend the most amount of time on?

- In the course of your career as a librarian / administrator, what would you say has changed the most about reference librarianship? *(Rationale: are they cognizant of changes in reference services? Do they perceive the same changes as the librarians?)*

- What has remained constant?

About Reference Service Evaluation

- What's the most challenging thing about being a reference librarian at (LIBRARY)?

- How are reference librarians evaluated?

- What statistics are gathered and reported for reference services?

- What management decisions are made with this data?

- How do these statistics reflect the work effectiveness of a reference librarian?

Interview Guide for Library Users

These questions match those of the reference librarian interview, to enable a comparative analysis of perceptions. Additional demographic data was gathered to describe randomness or sameness in participation.

Faculty, Staff or Student?

Major: (if student)

Year:

- If you had to describe to someone what a reference librarian does, what would you say?

- Have you ever asked a reference librarian a question?

- If they say yes, ask how did the librarian assist you? Did you learn anything?

- Ask how do you find information / resource materials you need for assignments / papers?

- Do you use the subject research guides on the library web site? If they say yes, ask what they found useful – if they say no, ask why not?

Figure 5. *Interview Guides for Librarians, Administrators and Users*

Interviews were transcribed, coded and analyzed by question. A blending of manifest and latent content analysis strategy were used. The following elements were considered when

coding the interviews: words, themes, concepts, and semantics. Open coding methodology was

conducted and 80 codes were devised, with the master themes of Evaluative Measures, Job

Satisfaction, Job Satisfaction Challenges, Perception, Perception Responsibility Ranks,

Perception Role Use of Study Research Guides, Work Habits Time, Reference Experience,

Reference Experience Changes, Responsibilities, and Statistical Measures. (See Figure 6).

Evaluative Measures
     Cataloging
     Collection Development
     Computer Skills
     Desired
     Knowledge
     Liaison Work
     Library Instruction
     Management
     Personal Skills
     Reference
     Research Professional Dev
     Self Evaluation
     Web Page

Job Satisfaction
     Least Satisfying
     Most Satisfying

Job Satisfaction Challenges of Workplace
     External
     Internal

Perception

       Administrator

       Administrator Management Decisions

       Librarian Administration Viewpoint

       Librarian Management Decisions

       Librarian Viewpoint

       Primary Function

       User

       Librarian User Viewpoint Faculty

       Librarian User Viewpoint Student

Perception Responsibility Ranks

       Rank Most Important First

       Rank Most Important Second

       Rank Most Important Third

Perception Role Use of Study Research Guides

Work Habits Time

       Most Time Consuming

       Time Rank Order First

       Time Rank Order Second

       Time Rank Order Third

Reference Experience

       Best Experience

       Worst Experience

       Job Sameness

       Most Important

       Typical Shift

Reference Experience Changes

       Changes in Job

       Job Sameness

       Technology

       Amount of Resources

Responsibilities

       Collection Development

       Liaison Work

       Research Professional Dev

       Web Page

       Cataloging

       Computer Skills

       Consulting

       Development

       Library Instruction

       Other

       Chat

       Reference Desk

       Email

       Supervising

Statistical Measures

       Effectiveness

       Chat Transactions

       Desired

       Email Transactions

       Instruction

       Off - Desk

Other

Phone Transactions

Point of Contact Transactions

Web logs

Figure 6. *Themes / Master Code List*

5.0   ANALYSIS

The purpose of this study was to investigate relevant circumstances and conditions bearing --
directly and indirectly – on changes in the nature, form, substance, and effects of reference
services – through the reference librarian experience. Specifically, this attitudinal study aimed to
account for and assess changes in reference services (in the context of a medium-sized private
university), with the further aim of developing an understanding of how to capture statistics and
evaluate reference services and personnel in this dynamic environment. Reference librarians at a
second mid-sized public university library were interviewed for comparative data analysis.

The primary purpose of this investigation was to:

- collect information on the perceptions of librarians at an academic library on the
  contemporary nature and state of reference work;
- compare such findings to the structure and content of current standards for
  reference librarians; and, on the basis of analysis
- collect information on the perceptions of reference librarians regarding
  satisfaction with their work, perceptions of current position responsibilities,
  perceptions on value of work (theirs, users, and administrators), their perceptions
  on the value of statistical and evaluative measures of academic library reference.

5.1 RELVANT VARIABLES (THEMES IN ANALYSIS)

Watson-Boone (1998) noted that "centering a study on job content or design can lead to ignoring the people who perform the work". This study proposes that by interviewing academic reference librarians we can begin to understand the responsibilities of today's networked librarian and the great effects the virtual environment has had on determining tasks, evaluations and statistics gathered on the psyche of the academic reference librarian. The information gathered in these interviews will enable the further study of retooling of staffing strategies to utilize the skills of the academic librarian more fully; explain what this is and exactly how it will work – to see an increase in self-awareness and a more positive image of the professional that can be more accurately described and be recognized for the intellectual work that is done in a meaningful way.

Primary themes in this study:

A: Perceptions of reference librarianship

- Librarian view

- User view

- Administrator view

B: Responsibilities

- Tasks

- Primary function

- Responsibility rankings in order of importance

- Time spent on specific tasks

- Typical reference desk shift

- Role of research / subject guides

C: Reference Experience

- Changes

- Constancy

- Best experience

- Worst experience

D: Job Satisfaction

- Most and Least satisfying component

- Challenges of the workplace

E: Statistical Measures

- What is counted

- What value do they hold for the librarian?

- Perceptions of decisions made with data sets

- What would they count?

F: Evaluation Measures

- What tasks are they evaluated on?

- Desired measures

6.0   RESULTS

6.1   PERCEPTIONS OF REFERENCE LIBRARIANSHIP

6.1.1   Perceptions of reference librarianship

When asked if they had to describe to someone 'what is means to be a reference librarian', 13 (100%) of MSU A study participants (identified as "P") used words and phrases describing the activity associated with a reference transaction and assisting patrons in their quest for finding information, such as help or helping; investigate / detective work / how to find; research; teaching; interpreting; needs; mediate (information needs); make yourself available (for the consultation). All responses were social in nature, describing an interaction with receptive communication, user needs and teaching roles emphasized, suggesting that the librarian places high value on the 'meaning' of being a reference librarian:

>   P 1; To me it is more like detective work. It's listening to a
> person and trying to figure out what they need, and just detective
> work, that kind of thing.

>   P 2; To be a reference librarian, is a person who helps
> people by providing information, solving problems, research,

investigating things that interest them, I have always kind of likened it to like a go to person.

P 3: It means an opportunity to within my field, the community I serve, to have an opportunity to learn about the resources, in my case, (subject areas removed), to take the knowledge of how to gather and collect, and investigate, discovery of topics, take that knowledge base and apply it to any question that will come my way via the reference desk physically, E-mail, anyway my community wants to reach me, and it gives me a chance to aid students during their education in learning how to find information, disseminate that information, share it with others, do correct research methods, and be successful in their degree.

P 4: Well, in a nutshell it's doing my best to ascertain what the other person's information needs are. I try to put myself in their place, so I can help lead them out of the problems that they're having, and help them achieve success in what they're looking for.

P 5: He's responsible for making this whole chaotic world of information whether it be in print or another format, as much available to the user as possible and help students on an individual basis as well in a personal way. So I do see the role as being a mediator between publications and knowledge and people who use both.

P 7: It's about helping people navigate information and helping them get resources and it involves teaching …. it can be very simple or very in depth.

P 8: I would say that the Reference Librarian is a person who is an expert on the whole universe of structure, nature, the means of finding and preserving information. He's responsible for making this whole chaotic world of information whether it be in print or another format, as much available to the user as possible and help students on an individual basis as well in a personal way. So I do see the role as being a mediator between publications and knowledge and people who use both.

P 9: Helping get the right book or the right material of information to the right person and if they need help interpreting it in it's relative importance, that too, but sometimes it's just getting the right stuff to the right person. In an academic library, being a Reference Librarian is also teaching them some skills so the students can do it themselves later on.

P 10 : Well, being a Reference Librarian; I'm more than a Reference Librarian. I do collecting and all sorts of other things, but if I were just a Reference Librarian, I would say the Reference Librarian facilitates accessed information and/or enhances the patrons knowledge or vice-versa. Most importantly, communication between the librarian and people or peoples to either find, put together, evaluate information.

P 11: It means that you make yourself available and you make it know that you're available to assist your constituents and sometimes a larger audience with research needs and specific informational questions or how do I go about do this questions or

consultation about the topics and trying to engage positions with your requester.

P 15: A reference librarian is a person that has to have many hats; to know about the information, how to find information, how to research information, how to score information and how to convey information to others. To be able to find whatever a person's needs are.

These responses mirror those 'humanistic' values described by Shaw (1991) as one of the 'great strengths of reference librarianship that puts a high premium on person-to-person relationships'. The Guidelines for Behavioral Performance developed by the Reference and User Services Association (RUSA) likewise recognize the importance of these values by noting 'Interest, Listening/Inquiring and Searching' as three of the five main traits that could be measured in the performance of the reference librarian (1996).

Phrases were also used by the majority (10, 77%) of the librarians above to describe the tactile data searched for or used for the transaction: information; publications, book, resources, print, format – associating an action with specific physical properties.

Only three of the 13 (23%) participants listed other responsibilities associated with being a reference librarian:

I always had a problem like tangling out instruction from reference service, web pages from instruction, from reference services, and I mean the only one that clearly stands out is like collection development

Well, being a Reference Librarian; I'm more than a Reference Librarian. I do collecting and all sorts of other things, but if I were just a Reference Librarian, I would say the Reference Librarian facilitates accessed information and/or enhances the patrons knowledge or vice-versa.

I would ah, talk about the many responsibilities that I have as a reference librarian and I would talk about ah the collection development aspect of my particular job, and so a lot of people think I just sit behind a desk eight hours a day and I would tell them that would drive any sane person crazy after about four hours. So I explain that I go to committee meetings for various committees that I am on, I do collection development for the two departments that I look after, which are (department names deleted). I also meet with professors; deal with their own questions off the desk, so I have a number of off desk questions as well. And I would also tell them um, what else would I tell them (low voice) uh, reference responsibilities in our department also include instruction, teaching and maintaining web pages, so all these things add up to up to a full days work, uh if you think of it this way.

This suggests that most librarians at MSU A do not think globally in terms of their responsibilities as a reference librarian when defining themselves on a personal level, that foremost is the reference transaction, the social activity and the execution of the search for information becomes the single most defining view of a reference librarian. This is reflected

again later in the interview process, when responses to the query regarding personal job satisfaction the interaction of assisting a user is overwhelmingly responsible for job satisfaction.

At MSU B, (individuals identified as "L") the scope of 'meaning' matched those of MSU A. All participants (10, 100%) used the same vocabulary as MSU A when describing what it means to be a reference librarian, using words such as information; helping; research, etc. with inflections leaning towards the social aspects of the transaction, and describing physical attributes to the resources:

L 1: Helping people find things that they need is the first thing that came to mind, in the quickest and most sufficient way possible.

L 2: A system of finding information usually in relation to a research that they're doing it could be for their personal reasons too.

L 3: Here a Reference Librarian is really an information consultant; so it means that we do desk time, directly helping users but it also means that we liaison with various departments around campus so it also means that we have instruction responsibilities with those departments, collection development responsibilities, PR marketing responsibilities. Also, there's some other things that go along with providing reference and consultation work.

L 4: Our most important job is to serve on the desk and answer questions that the clients; our primary clients are of course the ____ community of faculty, staff and students, but we also answer questions for the public as they come in and have questions for us.

L 5: A reference librarian is an individual who is available in libraries; she is available either in person or these days in various was such as phone, e-mail, chats and they are available to answer questions, to direct patrons/students and to provide assistance in research or using library resources.

L 7: Well the first old-fashioned kind of definition is that you sat at a reference desk or some kind of a counter and people walk into the door or they're either students or a faculty or from the general (state name removed) population and you feel the variety of questions and you use either ready reference books that you have available or you use databases that are now available or you draw from your general knowledge of where they can find the information.

L 10: Be ready to respond to any question that can come up on any subject matter from very simple directional kind of questions to technology questions to research level questions to kind of ready reference fact kind of questions and also making referrals to either people in the institution or in the library ... subject experts or on campus or in the community or on the web. Knowing where to look for information; not having all the answers but just knowing where to look.

L 12: Well I guess I would say that they are uh a smart agent who helps individuals who are intent are learning, find information data or needed stuff to uh get there efficiently, effectively, hopefully sympathetically and with a mind of what the user really is after.

L 11: … I usually describe to people what I do is I help students find the resources they need. I help people find the answers to their question….

L 13: I would say someone kind of helped, especially... reference librarian means someone can help students, patrons, um with their research help.

Four (4, 40%) participants at MSU B included other responsibilities in their description of what it means to be a reference librarian, one more than at MSU A, and with two fewer participants the percentage of librarians thinking globally in terms of responsibility is 20% overall higher than that of MSU A, suggesting that perceptions may be affected locally:

…it also means that we have instruction responsibilities with those departments, collection development responsibilities, PR marketing responsibilities. Also, there's some other things that go along with providing reference and consultation work.

Also, next important is in this university is that we do ... we are the subject librarians for different schools or departments and it's very important for us to do outreach to those departments in order that they know what we've got available and what we've can offer them. I have to say I've been here a long time so I've got a lot of experience with ___ but it's been my only professional job so I don't clarifying experience of other institutions as a librarian though I worked in other places before I got my MLS.

Traditionally we weren't really that concerned about the selection process or the cataloging process and I think now it's kind of all merged together in some ways and now we do reference the same way or maybe use different media. We have specific subject areas where we're responsible for putting up information on our website or on a particular page that we own basically and we're in the process here of revamping on with that. We've broken it down ... actually I think the persons does not really necessarily have to walk in the door to find the answer to their question and so our role then becomes more of managing the information and controlling what we think is important and what we think is reliable information.

I think it's hard because over Memorial Day I got involved with my family and they have no idea really what I do. I think what a lot of us kind of face is that people don't know what we do. I think each profession has its own limitation, but I usually describe to people what I do is I help students find the resources they need. I help people find the answers to their question. It's a little bit more too that I'm that ... I spend half of my time doing

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marketing for the library myself, other than asking question. A lot
of my area is ___, which is hopeful because on theory and math
there not a lot of research. There's only a couple of the classes
where they have to view real research that involves the library so
that's kind of a ... it gets me a way to target it. Marketing status,
we usually do about six hours a week on the desk and right now it's
dead in the summer. I kind of describe it like that, where I'm
interacting with students and trying to help them find the time
where they need secondary is promoting ... and also keeping up
with what's going on at the campus level ... changes that are going
on ... what's going on with the department that I liaison with ... and
then caught up in their industry, I read some of their journals. I
don't understand it but I can kind of know what's ... the industry, so
kind of those three; the marketing, traditional reference and the
liaisonship.

This last response described explaining the role outside the profession (librarianship)
especially difficult, reinforcing the historical perceptions of Budd (1998) that the role of librarian
is undervalued because of a lack of knowledge of the responsibilities.

With 100% response rate at both institutions identical for 'meaning' regarding reference
librarianship reflecting the 'humanistic values' as Shaw described them with the inclusion of
skills associated with the reference activity, knowledge, listening / inquiring / searching /
mediating, this research suggests that the attitudinal data gathered in this study is representative
of the attitudes of all academic reference librarians. This is supported by the Watson-Boone's
findings in her book *Constancy and Change in the Worklife of Research University Librarians*

(1998), where in the chapter "Tell Me What You Do" reference librarians interviewed likewise placed a high value on interacting with patrons.

It is clear from the data collected in this study that point of contact with a patron is the most highly valued and recognizable feature when reference librarians are asked to self-identify. In *Constancy and Change,* Watson-Boone concept of *work centrality*, defined as 'the extent to which a persons defines himself through work of the commitment of work' gives supporting evidence to the importance of defining particular work traits by librarians.

Recognizing the importance of the humanistic qualities defined by reference librarians when self-describing could lead to more effective and appropriate assessment measures by managers in the field. Developing methodologies for the identification, accumulation, recognition and improvement of traits valued / desired as described by reference librarians in their definition of 'what it means to be a reference librarian' would elevate the most desirable, recognizable and sought after characteristics of this position and provide meaningful criteria when developing individual goals and training opportunities.

6.1.2 Perceptions of reference librarianship – librarian view – how the user might perceive a reference librarian

When asked to describe how a user might perceive a reference librarian, both MSU A and MSU B librarians projected similar ideals. Most imagined their (student) users thinking in terms of 'someone to help', and some suggested 'an old fashioned model' with 'bun and glasses', that

'person behind the desk' with little or no recognition of differences between a reference librarian and other library workers:

MSU A Reference Librarian Responses:

P 1: Students, huh...I think they are kind of intimidated. I don't know why. Like I don't think they always want to approach someone initially, until it is like a last ditch effort, and call the reference librarians. I mean I love going to someone, because I know I can ask them a question, if I don't know, like for a chat. Like I like calling up _____, and you know just asking her for her opinion on some things. So I feel like I can approach other reference librarians, but I think for students there is still a barrier or something.

P 2: That's a great question. I mean, I think sometimes maybe they think that we just help the old-fashioned model; we help to shelve books that we are the people who are, it's true, responsible for bringing in whatever materials, into that library, but I think they tend to think it stops there. They don't realize wait a second, there is considerably more that goes into it than that.

P 3: Somebody with a bun, glasses, uninteresting clothes. I think they would describe it as a person who, well they may not put them on the same level, necessarily as a professor, they are another adult, if you will, on campus who is knowledgeable in a particular area, and can help them get the answers to questions that they have. Another person who is aiding their educational journey.

P 4: Users um, well, I'm hoping that they at least giggled their way through a bibliographic instruction session where I've actually tried to tell them what in the world we're trying to do there. I realize they're using us as a last resort, and only through education, reassurance, and hopefully initial success with the first encounter will they feel more welcome; feel like coming back.

P 12: Um, here at _____ the undergraduate, graduate student would probably say the reference librarian is a person at the desk, which you don't notice until you need them.

P 13: They might ... say they're sitting at the desk at a library and providing information without describing what this information might be, it would depend on what they're doing in their subject areas too on how they would answer the question, I would say. If it's a large library ... if it's a small library, they might say reference librarian means checking out a book. You know, their library might be so small that they're doing everything so they see that under the umbrella of reference so that might be.

P 5: Helping them get to the information that they need [laughter].

P 7: I don't think they make a distinction of what a reference librarian is….. they would just think librarian, somebody who works in the library, someone who they are hoping can get this article.

P 8: I think a user thinks a Reference Librarian is somebody that's very, very familiar with reference sources and helps them find factual information.

P 9: A point of last resort for help in a crisis.

P 11: Probably as someone they ask for help when they're not quite sure how to proceed or they have failed to find information they need or think they need.

MSU B Reference Librarian Responses:

L 1: I think that there's always been a real image problem and people really don't know what librarians do. They still think that we check books out and I personally think that we should change things and just get rid of the "L" word and call ourselves something else.

L 2: I think a lot of people don't know what a Reference Librarian means unless they've been exposed to a library before and saw a sign, Reference Librarian, in a reference department. They wouldn't know what that is but if they'd been exposed to a library I would assume that they would know that's where you go to ask for help.

L 3: I think if you ask a student they would say it's the folks behind the desk. That's probably the general view of us. Since I'm the Instruction Coordinator here, probably many of them would say if they asked about (name), oh she's the one that teaches the classes.

L 4: The old bat that sits in this area answers my questions.

L 5: A person at the desk that we can ask questions of.

L 7: The person that I can call on e-mail and they can give me the answer to the question; they'll help me do my paper. I think they don't really care where they get the information a lot of times, it's just that they're going to call and hope that they find the answer, hope it's not too late.

L 10: I'm the Subject Librarian for the _____ here at ____ and one of the things I believe they might say is that I'm the point person for the library and this was not included in my definition, but if they have trouble with a circulation kind of thing or with a library loan thing, with a reserve item in trouble or something maybe that's not the norm or they're ... they contact me, they go through me so I'm more ... I'm kind of the point person. ….A lot of them think I have the power that when something's overdue or that they've gotten these huge fines because they haven't returned the reserve item that I can do something about it.

L 11: I think they have an interaction with me other than like more of a stereotypical like someone that's over the library patrolling, authoritative and ... I think that because we have the image of being all about books and hard copies that that's kind of the thing that's changing. The want digital ... they are on a different side of the campus and they need ... I think they see us as disconnected. We try to be more interactive with them, collaborative but the physical states make us disconnected.

L 13: I guess most of them think we're here just for bookkeeping (laughing) they really don't know, it a difference between reference librarian other people work in the library. They always think they all the same, um but after I contact with my users after I helped them they know much better what we're doing.

When talking about faculty in particular, most reference librarians at both MSU A and MSU B mentioned their roles as subject specialists or liaisons 'all the reference librarians here tend to be liaisons to one or more departments', and 'I think they would go by their subject specialty', 'I also think they see me in the department a couple hours a week; I think they see me as a colleague':

If they are library users from the gate, then they understand how to assess our role and what we can do for them. So it is a give and take relationship, and I don't think we are automatically, I think in general most people automatically see libraries, the building, and the services of a library, as a necessary thing and a common thing on an academic institution campus, but whether or

not they take it a bit further and recognize inside that building with that collection are people who actually know how to get into the collection, is a whole another leap of knowledge and experience.

Faculty are kind of know to describe a reference librarian as somebody who can not only help them with a question when they come to the desk, but also because all the reference librarians here tend to be liaisons to one or more departments, they would describe us as somebody who can also order books for them, somebody who can teach librarian instruction with photographic information to their students, so. So they would think that a reference librarian important although I think, ah the opinion of reference librarians is probably related to how often they have contact with us, so uh a handful of faculty that I would call library supporters know who I am, know what I do and really appreciate what I do, but there is always that percentage of faculty that has no idea what I do, has never asked me a single question, in which case they would probably say, we're probably more there for the students.

I think they would go by their subject specialty too; like they might say, well I might say I'm the _____ librarian, so these are the subjects that I'm concentrating on; however, when I'm on the desk I might get any kind of question from any subjects at the university libraries. So, I would go by my subject specialties and they would probably stay with theirs to describe themselves as a Reference Librarian if that's their specialty underneath the larger picture of providing service, whatever the library function might be.

> If you asked our faculty, I think our faculty would say we're the folks who run interference for them when something is needed. Either they need some sort of resource or they need information or they need help with their classes or whatever,

> Most of them will send things that they want for reserves through me because ... spite me, you know, showing them where to do it. t. I also think they see me in the department a couple hours a week; I think they see me as a colleague, more ... I think they would say that now that I've been over there about five years and they know me a lot of times people will come by, students and faculty, just to say hello or just to transact some little bit of business like routing off something they're interested in buying, but it's more of a collegial friendly relationship than it was before because I'm in their space.

The reference librarians' perception of the user as student appears somewhat stereotypical in some responses, suggesting generational attitudes on the librarian's behalf, which include generalizations of library jobs and librarians themselves, such as ' the person who do the shelving' and someone with 'a bun and glasses'. This can be a reflection of what activities are currently accounted for in terms of statistical data and assessment practice, and the importance placed on the perceived decline of activity at the service point and lack of confidence in data collection techniques, as suggested by the ARL SPEC Kit 268 (2002). Reference librarians describe a user who sees little distinction between different librarians or staff at public service points 'that person behind the desk'.

Also lacking from their perceptions is the role the reference librarian has with regards to selecting and disseminating electronic information in the form of subject guides or acquisition of databases. These are vital roles of the reference librarian in today's networked environment, but the librarians' lack of listing this activity suggests that this activity is undervalued.

The view of faculty perceptions from the librarian's point of view is more clearly defined in the liaison, subject specialization and instruction sense – responsibilities relatively new in the history of reference librarianship – and tied to more collegial activities that are expected of the faculty status of the reference librarians in this study.

6.1.3 Perception of reference librarianship – Users point of view

Users were asked what they thought it meant to be a reference librarian to enable a comparison between the librarian's perception and the actual viewpoint of the user.

When users where asked what it meant to be a reference librarian, most respondents at MSU A appeared knowledgeable of what it meant to be a reference librarian, exceeding the perceptions of librarians themselves. Users applied active verbs and were specific with the types of services and effort usually associated with an interaction at the reference desk. 83% (10 of 12) described specific reference associated activities, including mediation moments, such as 'point in the direction you need to go', 'They will help to find [a] newly published book and to find some useful information', 'I think a reference librarian basically has if not the knowledge of the field, enough to know how to search or which sources would be relevant to the subject.' These responses matched those of the librarians at both institutions in the use of words 'help', 'find',

'information', research' when describing their personal meaning of being a reference librarian. This suggests that this activity is recognizable, expected and valued in this position from the user point of view. Users also identified the reference transaction / librarian with specific item types – using the same depictions of the study participants, 'book', 'stacks', 'articles', 'journals', 'databases', 'material' and even 'reference':

MSU A Users:

UP1: What is that? (pointed to reference librarian on duty) The only time I go (to the desk) is when I need help finding journals. Sometimes I need journals going back to the 1940s so I need help. They help find information.

UP2: They know the reference book very well. And they can help us to find which one is useful to us.

UP3 : Ahhh, reference librarian...ahhh (a bit puzzled, but works it out).They will help to fid newly published book and to find some useful information. They studied library and help to have people use library more effectively. And they manage the library. If no one manages the library, books everywhere. I can't find location. Yes, they are necessary.

UP4: I guess they help you look up where to find the kinda sources - they point you into where you should start looking.

UP 5: Um, someone who can help you find - if you have articles that you've found, they can help you find 'em in the stacks. Or if you have a topic, they can help you with (the online catalog). I guess that's more for freshmen and sophomores who don't know how to use (online catalog).

UP6: I guess they manage the placement and organization of books. But I know you can get a degree in library studies, so I presume there is something more to it.

UP7: In terms of specific activities, I don't see a reference librarian do so much doing of your work, but pushing you in the right direction [like]...'these are relevant databases that may help you or no, we don't have that book, but I can help you find it at another library, did you consider looking here and here.

UP8: They answer questions that anybody might have whether in person, via the phone or email about how to search for certain information or what information is in the library.

UP9: Um, they are people that are very good at research. They specialize in humanities or arts or some specific genre. They are very helpful at directing you to databases for your research or to general information in journals and stuff.

UP10: Um, mmm, I would say they are there to answer questions you have about your research using reference books in the library such as encyclopedias and also online databases.

Sometimes they answer questions on the phone or email. I know there is an online chat or something. I have never used it. There's all sorts of reference materials, but I probably wouldn't know where to start to find them.

UP11: Um, I'd say they'd be able to find sources for you or even if the library doesn't have it, they can get it online…or you might need a certain paper by someone…[and they can help you find it].

UP12: I think a reference librarian basically has if not the knowledge of the field, enough to know how to search or which sources would be relevant to the subject. They know which search terms, phrases, or approaches to use. And they help you plan your research and help you find things.

MSU B Users:

At MSU B most of the users also used expressions that would suggest they assigned certain functions (four of six, or 66%) to reference librarians, though they blurred the lines a little more and were less specific about transaction types of activities. This may be because MSU B has a single service desk model, where the reference function occurs at one end of a long service counter where circulation functions also take place:

UL1: What is the difference with other librarians?

UL2: To be able to find relevant material regarding the information I'm seeking; also possible different media types ie web, journals, books etc.

UL3: Someone who helps with research, articles, knows a lot about the location of journals and reference materials.

UL4: Someone to ask where to find a book or author or subject or articles in the subject.

UL5: The people downstairs who help students with the basics of finding stuff they need - keep the library in order - basically help people.

UL6: That person is the one who refers you to the locations of books, periodicals, stuff like that.

Users at both institutions were asked a follow-up question as to whether or not they had ever asked a reference librarian a question. At MSU A, nine of 12 (75%) reported they had. At MSU B, five of six (83%) also responded that they had asked librarians questions.   Some examples included:

Yes, it was helpful. It helped me look into the books and see what resources they used. It was a 10 year old subject, so I couldn't just Google it.

Yes, many times.

When I was a freshman. I didn't know how to use PsychInfo. It was great. It was very informative. And I got to teach my peers later cause we were all in the same class. And I'd like to say that I felt really comfortable asking for help at the big open as opposed to going into an office.

They went to the computer and looked up books in my research topic.

Learned how to use the catalog and find books on my topic - once I learned that I never had to ask another question.

Sure. Like when I first got here, I didn't know there were different libraries and I found a book in the online catalog and it says where it's located, but was confused - like, what the hell does that mean and where is it? So I asked and they were very helpful.

I was trying to track down a book called Cole's Directory. And I didn't know where it would be located. So I asked the librarian - who knew exactly where it was located and she handed it to me.

The (library instruction) sessions <u>are</u> tailored to specific
classes and that's helpful.

When queried how they searched for resources when they did not seek assistance from a reference librarian specifically, one user said 'Just regular Google. Rarely do I run into a lack of information from searching'. Another also said Google was a primary source when 'I'm lazy', but 'If I want to go beyond, I've done some work with the online searching through this library. Mainly searching databases and seeing if we have it and hoping it's here at this library rather than somewhere else'. The majority indicated use of some kind of library resource when researching without assistance – but there was no connection made between these searches (successful or not) and reference services. This data is important to record because it demonstrates the assertion made by the researcher that the work done by reference librarians in this area is currently invisible, supported by Nardi in Lipow (1999). Further research is needed to incorporate the recording of electronic search activity back to the work reference librarian and more clearly define / recognize when a successful online transaction occurs (see p.26 and p.33, of this document).

The users acknowledge the importance of the point of contact reference service – but they also acknowledge that they first go to electronic resources – using resources that reference librarians may often be responsible for. When there is no recognition of this activity, though the information seeking behavior and results are often very similar, then the responsibility is devalued. The users' answers indicate that what occurs remotely could be defined as a successful albeit unrecognized reference transaction – and that some form of assessment / evaluative /

recognition measures need to be developed to account for this activity. As suggested by Lakos and Gray (2000) further investigation in this area would determine just how this type of searching and success could be attributed to the work reference librarians and potentially changing the culture / nature of reference services.

It is significant to note that the majority of users in this study had a similar perception of what it means to be a reference librarian. It validates the importance of the interaction and functionality of the reference librarian and point of service transactions that occur, despite the somewhat self-depreciating perceptions the reference librarians attributed to users. This may be because the current assessment and statistic gathering methodologies surrounding reference services per se do not record or value the skills / knowledge / humanity required of the reference librarian.

Managers of reference services could use this data to develop more specific assessment tools that take user perceptions of reference assistance into consideration and also recognize the role of electronic reference services that for the most part are currently unobserved in terms of a 'reference activity'.

6.1.4   Perceptions of reference librarianship – librarian view – how the administrator might perceive a reference librarian

Librarians were asked what an administrator perceives it means to be a reference librarian. At MSU A, seven of 13 (53%) described the reference function, while the rest were scattered – two listed liaison responsibilities, one listed collection development, two were non-specific and two

suggested that administrators had no idea what a reference librarian did in the course of their work, aside from staffing a desk, 'So I don't think they have any idea what a Reference Librarian does. They think that they're at the desk all of the time, frankly.'

<u>MSU A Reference Librarians:</u>

P 1: Helps people...anyone at the university in anyway that they can, and that's answering questions.

P 2: I think maybe an administrator may think a reference librarian is going to have perhaps more one-on-one, doing research with some people, and that is what I am thinking, and that is something that is going to vary.

P 3: I think they would say, hopefully they would articulate that we have a variety of differences among the reference librarians, completely dependent on the subject area that they serve, that we have been educated in the resources in our particular area, and that our job is to work closely with our departments and our faculty to assess their needs and make sure that they get what they need.

P 4: I have to put them into two camps, those that have done it or those that have studied it in the right spirit. I think people with a lot of exposure to what the reference process is like, where they would have done it themselves and haven't forgotten it, or learned it correctly, can truly appreciate it, but I'm very, very,

very concerned that too many people are achieving administrative positions that have no clue. And, my view of what they think it is, is just sitting around drinking coffee, waiting for somebody to ask a question.

P 5: I have no idea. I think that would probably vary by the administrator. I really don't know.

P 7: Well, you would hope the administrators would at least have more exposure to the function of reference departments, so that they... the subtleties, like the means by which we fill questions, whether its log in or e-mail, through personal conversations, and also the perceptions of what are expertise is in terms of understanding, keeping up to date of what the information resources are. Worse case scenarios might be how administrators who don't library background or come from a different area, they would probably just see it as a service function, and not really understand all the tasks, the range of tasks, the range of knowledge, the amount of time it takes.

P 8: Most of the administrators that I know and I've come out of the technical services background, it's very rare for an administrator to come out of a reference background and so I think that they are more familiar with the cataloguing and acquisitioning side of library operations. Nowadays, the computer side and the reference side. So I don't think they have any idea what a Reference Librarian does. They think that they're at the desk all of the time, frankly.

P 9: I think an administrator thinks that a Reference Librarians does 50% of their time on the desk at which point they may or may not be answering questions; they may or may not be doing other relevant work such as reading dealer catalogs or supply catalogs or publishers catalogs to buy books. And the other 50% of the time talking to the administration things that we're talking to faculty and the popular students and being more current and up-to-date with the particular field that we're the Reference Librarian for. I think that's what they think we do.

P 10: Well, it depends on the administrator. If the administrator does reference, him or herself; then I would say that they would probably know quite a bit about it. I think it's a little bit more difficult in my experience as time goes on administrators kind of lose touch with actually what's going on with users. They depend more and more on people that actually, you know, deal with user's everyday.

P 11. I suppose an administrator thinks of a Reference Librarian as the primary public face of the library. The person who knows the library resources best at least when it comes to specifics and someone who is able to engage the library audits on a regular basis.

P 12: Um, I think a librarian administrator has pretty good idea what a reference librarian does, uh because a lot of librarian administrators were a reference librarian at one time or another or they at least uh, see us all the time, so they have a good idea what we do. University administrators uh, they probably see references

as an important part of uh having a library on campus, I don't think they always know what to make of us because um, we in fact faculty according to a lot of administrators, but we're not exactly staff either. We're a skilled staff and so some of us would think, of course their faculty, but others would probably think that, no their really just skilled staff positions. And some of them are even surprised that it takes a master's degree to do this job, so.

P 13: Hmmm. I think that they might not know the detail of what we're doing, how much time we might take in answering a question. I think that they understand the Reference Librarian is there to help the patrons and the university clients that we have coming in. I think they might get a good sense of ... they do have a good sense of what the value of the Reference Librarian, but they might not know the details of how much time we're spending on what types of questions ... when during the day or what kind of interruptions we're having.

P 15: An administrator thinks a Reference Librarian assists ... gets information for students, for faculty, staff, whatever. They should be able to find mostly anything. I think they're just there to start research. But there's more to a Reference Librarian than just researching.

Perceptions from MSU B were the same in that the majority (seven of 10, or 70%) listed reference responsibilities, however four of 10 (40%) also mentioned liaison work and two listed collection development. None suggested that their administration had no idea of their task, and only one respondent referred back to their own definition.

L 1: Pretty much my first answer, help people find information in the quickest way possible.

L 2: Well, I bet a lot of them now talk in terms of electronic resources or spend most of their time researching electronic resources in order to find answers to questions from patrons.

L 3:   I guess if you went to our Dean; hopefully he has an understanding of what we do.   I think (administrator's name) would probably say all those aspects of our job but it he had to pinpoint one he would probably say our most important aspect is the collaboration of partnering with faculty and campus for whatever reason; whether it's to make collection decisions, to make ... to honor instruction requests, to handle problems or whatever but I think that's what he would say.

L 4: The public face we present to our clients that deals with their immediate needs.

L 5: They would probably include one thing that I didn't and that is a professionally trained MLS individual who handles the same tasks I mentioned before as far as providing service to customers and is involved in collection development and various areas related to their areas of reference work.

L 7: Of course, the person who answers the question and sits on the desk or selects some ... more into the selection process of what databases or where you place print stuff and the reference librarians would become involved with the selection process, which database provides the most information for their particular subject. We still don't have the control to buy the product but we can recommend and do selection in that manner. I think the administrator also looks at us on this campus because we are information consultants. We are the marketing PR people for the library who go out to the professors and to the classes and so we represent the library out there in the greater community. In my case, I'm with the patents and trademarks at the depository library so we have to serve the general public as well; so I go out there and expose third grade ... so I'm the outreach for the school. I think an administrator sees that role as well because that ultimately leads back to how the general campus community see the library and I think that leads back to when you're looking for budget money and things like that. If they have a positive experience with the reference librarian it's sort of the first line.

L 10: Depending on the administrator ... I think my supervisor really understand what we do. I think he would describe us as the heart of the library, really central part of the outreach, of the pace of the library. I know he's really pleased that we are the first kind of service point that comes into the library. ____ would describe us as a talented group of individuals who satisfy faculty. I think the faculty would come first, then students and then again a person ... the face of the library to the campus community. That's all I've got on that.

L 11: I think they see us as customer focused; we have to be more of the public persona with what the library is ... you know, more than anyone else, we're kind of the people out there. We have to be the salesman but we also have to be the knowledge ... the database of the library, how to use it, how to find the resources so we're really in that public eye. That's kind of ... they see us more as the people persons. There's a lot of administrators that I know that didn't come up through Reference; they've gone through Tech Services so I think there's kind of that disconnect in that ... what Tech Services does what Reference does, I'm not sure if they know exactly our rules they just know that they're providing service and kind of trust it, that's what they're doing, which is just my expert opinion.

L 13: Hum, that never part I never thought about that, from the administrator point I would feel I think reference librarian means somebody who manages the collection related to the two, there are subject ?? other collections I mean collection development level and also outreaching. Reference librarians are the contact point between library and other department.

Responses from both institutions suggest that perceptions on behalf of the librarians were driven by localized factors that can be attributed to their particular governance structure and personalities, though the majority was in agreement that working the reference desk, helping users, the humanistic characteristics valued by the reference librarian were traits that would be attributed to them by their administrators.

Watson-Boone's case study research described an 'adhocratic' relationship between administrators and librarians at that institution – the responses between MSU A and MSU B suggest that, in terms of administrator perceptions by librarians, there will usually be agreement in the majority with regards to how specific jobs or tasks might be described, but feelings about work relationships / personality traits with regards to specific administrators will vary based on experiences / individual prejudices.

6.1.5 Perceptions of reference librarianship – administrators view

Administrators from both institutions (four, 100%) talk about the reference transaction component when describing what it means to be a reference librarian. In the case where other duties are also included in the description (10%) reference desk responsibilities are mentions first, suggesting it is the primary function:

MSU A Administrators:

> PA 6: I would say a reference librarian is a ...because they are a librarian, they are a degreed librarian, which means that they have their MLS, and their primary purpose is to work with the public, be it either in person, over the phone, or any other kind of technology that we have today, or will have in the future to help them find and address the information needs that they have, either at the moment, at the time, or thinking, and then also be proactive in thinking about I've had so many kinds of ...we've had so many kinds of requests for information, particular areas, how do we plan for the future if this is kind of the trend. So a reference librarian,

the reference activity happens at the desk, but it is just not simply the answering of questions, but it is in fact trying to...it leads into other kinds of areas, which is thinking about what other kinds of collection areas you need to support the questions that come in. ….. the research, the response; where does that happen, and I don't think it's a thing that's tied to a place, but it's an activity that can happen wherever an organization feels it needs to have them for maximum effectiveness with their user base… But in fact, but it is more than, it is certainly more than just sitting behind a desk and giving the answer. It really is trying to connect with people and information, and then thinking about modes of delivery.

PA 14: I would say that we use the term Reference Librarian to typically refer to people who do about three kinds of things in the library. First they work on the reference desk and field questions from people who usually from several different disciplines and several different calibers of depths. Secondly, they're responsible for instruction with a set number of students. They do collection development. But, the term Reference Librarian often means a person who does all three of those kinds of chores.

MSU B Administrators:

LA 8: I suppose what I would try to do is elaborate on the word reference and make sure they understood that what the librarian is available to do is mediate between the individual's interest; whatever that might be ... the subject interest, and the intellectual content that's available and whatever sources are

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appropriate. If the individual is interested in any kind of sources that are obviously the reference librarian has to be a very interesting area. But that's basically a mediator.

LA 9: I would say that it is ... it has been an enjoyable profession. I enjoy working on campus, I enjoy working with students and faculty. I love the variety of the work that I do when I have been able to learn and become expert at and assist others as far as their research and expertise. To a great extent a lot of what we do is like detective work and that part of what we do and learning new ways of finding information is very enjoyable to me.

Except for the lone administrator at MSU A where three distinct components are additionally described, and the administrator from MSU B who used personal experience as a former reference librarian, these responses mirror the reference librarians' 'meaning' attached to their being: the interaction with the user, the answering of questions, mediating information sources, is the fulcrum of the reference librarian position, suggesting it is the single most defining criteria of the position. Watson-Boone identified this as *work centrality* from the librarian's point of view – when attributed to the administrator the concept takes on *extrinsic* (centered on job tasks) and *intrinsic* features (focused on physiological motivators).

It is significant to note that at an opportunity to list a variety of responsibilities that could describe what it means to be a reference librarian, three out of four administrators mention the reference transaction component alone, signaling that is the single most defining facet of the reference librarian's work.

By comparing responses from two different institution study groups it can be concluded that the data presented in this case study is representative of the attitudes of academic reference librarians, administrators and users with regards to what it means to be a reference librarian.

6.2   RESPONSIBILITIES

6.2.1   Responsibilities – tasks

Librarians and administrators were asked to list a reference librarian's responsibilities to establish job duties (See Table 5).

Reference / desk as a responsibility had the most recorded responses, 100% at MSU A and 90% at MSU B. This is expected, as it was the one function that defined 'meaning' for reference librarianship.   It may be that one librarian at MSU B did not list reference as a responsibility because it had already been mentioned by the respondent in an earlier question and felt it was an obvious task.   It is interesting to note that Instruction, Liaison, Collection Development and Professional Development received the most responses in that order and were very close in response rate percentage to that of the reference component, suggesting that these tasks were of almost equal importance to that of 'reference' itself. Consulting was isolated by 13 of 23 librarians (56%), suggesting efforts were made to create specific meeting opportunities – but also suggesting that 44% of the participants may be including this behavior / task with their 'reference' component. 61% of MSU A librarians listed computer skills as a responsibility, with

their administration in agreement (100%). MSU B had only 40% of their librarians list computer

skills, and zero response from administrators on this point. This suggests expectations /

recognition on both sides of the employer – employee at MSU A in this area, while not as

important at MSU B – even though their service point integrates technology assistance with

reference services. 53% of the librarians at MSU A listed email as a specific responsibility – one

administrator at MSU A also listed this as a task – suggesting that considerable time is devoted

to the task and there is an expectation for outcome. Of the MSU B librarians, only 10% listed

email as a responsibility, with no administrator recognition as a task.

Table 5. Responsibilities - Tasks

TASK	MSU A	MSU B	ADMIN A	ADMIN B
Reference/Desk	13	9	2	1
Instruction	12	8	2	2
Liaison	12	9	2	1
Collection Dev	13	7	2	2
Professional Dev	10	10	1	1
Web Pages	8	3	2	1
Computer Skills	8	4	2	0
Consulting	8	5	0	0
Email	7	1	1	0
Supervising	7	1	0	0
Other	1	5	1	1
Chat	2	2	0	0
Cataloging	2	0	0	0
Development	1	0	0	0

The lists of responsibilities here mirror the job responsibilities described earlier in this document (page 30) and can be described as broad headings under which many of the tasks listed would be subsumed.

Eleven responsibilities were listed at both institutions – cataloging and development were noted only at MSU A, suggesting these were institution specific or low priority for MSU B librarians. It also suggests that tasks and responsibilities of reference librarians at differing institutions are the same. Administrators at both MSU A and MSU B listed most of the same responsibilities, but with only 100% agreement on Instruction and Collection Development. MSU A administrators had consensus on six of the 14 tasks listed by librarians at their institutions (41%) while MSU B administrators had consensus on only two of 12 tasks listed by their librarians (16%).

Administrators at MSU A individually recognized three additional tasks, suggesting that they are in agreement with the scope and recognition of tasks and responsibilities. MSU B administrators split on five tasks – suggesting that there is a higher degree of differing opinion on what is recognized / valued at that institution in terms of responsibilities of reference librarians.

Reference work was also recognized by all of the Users at both institutions. Several acknowledged the housekeeping role of librarians, but had no knowledge of their other duties specifically, except for one user who recognized their role in library instruction.

6.2.2   Responsibilities – primary function

The question of what was the primary function of a reference librarian's job was asked to illicit comparisons between what it meant to be a reference librarian and the order of responsibilities listed in the previous question:

Table 6. Primary Function

TASK	MSU A	MSU B	ADMIN A	ADMIN B
Reference	8	4	2	2
Instruction	2	0	0	0
Supervisory	0	2	0	0
Liaison	0	2	0	0
Did not distinguish	3	0	0	0
Non-responsive	0	2	0	0

When asked what was perceived to be the 'primary function' of their position, 61% at MSU A and 40% at MSU B listed reference (answering questions, helping users, etc) as their primary function:

> Our most important job is to serve on the desk and answer questions that the clients.

> I'd say the primary function is to answer patron's question, no matter who the patron is coming in, either by e-mail, in person, by phone or whatever reason they're calling the   library

for their research needs. My primary duty is to answer that question above anything else.

And our whole approach, reference is job one.

To help students.

Our most important job is to serve on the desk and answer questions that the clients have.

The primary function of the job is to facilitate individuals who have particular information or research needs.

Administrators were in 100% agreement at both institutions. At MSU B, only four of 10 librarians viewed reference as the primary function of their job, however this was still the highest total percentage of responses overall for that institution. This reinforces a pattern of recognition that reference is the most identifiable and expected task associated with this position at both institutions, and it reinforces the earlier observation that librarians at MSU B were more global in describing their responsibilities with regards to being a 'reference librarian'. Instruction, Supervisory and Liaison work all received the same number of responses, with Instruction receiving 15% response from MSU A only, and Supervisory and Liaison work receiving 20% each from MSU B only. At MSU A 23% librarians could not distinguish a primary task, and 20% at MSU B did not give responses. Collection Development, high on the list of responsibilities at both institutions (100% at MSU A, 70% at MSU B, and 100% by administrators from both institutions) was not mentioned as the primary function from any

librarian. This may give an indication of personal insight as to task likes or dislikes; it may also suggest that from an administrator hierarchal point of view a perceived level of importance, and a lack of recognition for specific tasks done by librarians in this field.

6.2.3 Responsibilities – librarian rankings

Reference librarians were asked to rank their job responsibilities in order of importance – first, second and third – to determine if there were differences between the primary function in the previous question and determine any pattern amongst librarians and previous responses.

Table 7. Librarians responsibility rankings in order of importance 1st

TASK	MSU A	MSU B
Reference	5	3
Instruction	1	1
Liaison	1	3
Collection Dev	1	0
Supervising	1	0
Priority Driven	2	0
No rank given	2	3

When ranking their responsibilities in order of importance, librarian responses mirrored the rankings of the overall job responsibilities listed and the primary function identified, with reference 34% (eight of 23) having the highest response rate. The next highest percentage of librarians not willing to rank 21% (five of 23) again mirror the rankings of responsibilities in

number and order mention, suggesting that the majority of the librarians either felt that their tasks were all equally important, or in reality the reference function does not take the most effort.

Table 8. Librarians responsibility rankings in order of importance 2nd

TASK	MSU A	MSU B
Reference	2	1
Instruction	1	1
Liaison	2	3
Collection Dev	4	0
Supervising	2	0
Web Page	1	0
Consulting	1	0
No 2nd rank given	4	5

Table 9. Librarians responsibility rankings in order of importance 3rd

TASK	MSU A	MSU B
Liaison	1	1
Collection Dev	2	4
Every day work	1	0
Cataloging	1	0
Professional Dev	1	0
Development	1	0
No rank 3rd rank	6	5

Most librarians did not want to rank responsibilities in order of second or third importance, suggesting that there are no clear definers between importance of task and lack of recognition from administrators at these levels as well. The overall order of importance in the categories that did emerge continue to closely mirror the initial listing of responsibilities given at the onset by librarians, though 'Email' is not listed at any ranking, it may have been subsumed internally by the librarians into the reference and liaison category, moving from a 'task' to a communication tool.

It is interesting to note that 11 of 23 librarians put reference at the one or two spot in terms of ranking responsibilities, but that overall the highest percentage of respondents indicated that they could not rank their responsibilities in order of importance, suggesting that the current work environment in the academic library is kinetic and operating in a just in time reactionary model – attune to the immediate needs of the user, latest trends etc.

6.2.4 Responsibilities – time spent on tasks

Librarians and administrators were asked which task is the most time consuming for reference librarians to determine where energies where being spent for their work and to compare with previous answers for responsibility rankings, etc:

Table 10. Most time consuming tasks

TASK	MSU A	MSU B	ADMIN A	ADMIN B
Reference/Desk	6	3	1	1
Instruction	0	1	0	0
Liaison	2	0	0	0
Collection Dev	2	2	0	0
Balance/Projects	2	4	0	1
No response	1	0	1	0

At MSU A 46% (6) of the librarians identified reference as taking up the most time. Examples were given that listed both with number of hours scheduled to work at a service point, and the time associated with intensive research:

> I would have to say that I think I spend, as a reference librarian component of my job, most of my time is spent getting to know people and dealing with the public, working with the people.

> Well, I've always liked numbers, probably 13 hours a week, all reference time.

> The reference work is what I would spend the most time on.

> I'd say at the desk, at the reference desk; because I'm doing, you know, say like thirteen hours a week. That doesn't seem like a lot in a thirty-seven hour work week but I'm doing follow-up with it often when I go back to my desk and I'm training an I.A. on the same type of work or ... okay I got a question and I'm like okay

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why couldn't we answer this or what could we do to improve this

so I'm still working on the reference related questions when I'm

back at my desk.

One administrator at MSU A agreed with this; 'Well, I suppose they spend the most of

their time actually answering reference questions', while one administrator could not identify a

most time consuming task. This suggests there may be a disconnect between one administrator

and the reference librarians at this institution as far as effort expended. At MSU B only three or

30% of the librarians listed reference activities as the most time consuming, with one

administrator in agreement. The highest percentage, 40%, listed balancing of projects / work

activities as being the most time consuming, 'It's a toss up between ... now I'm trying to work on

the desk and maybe ... I can't spend a lot of time getting prepared if I have any classes to do. It

just varies. I have a paper I'm trying to get ready so it really just kind of depends', noting that

tasks were typically driven by a reactionary mode of operations. The other administrator from

MSU B agreed with this sentiment.

Combined responses at both institutions place reference work as the most time

consuming (40%, or 11 of 27), balancing of projects (25%, or seven of 27) second and collection

development (14% or four of 27) as the third most time consuming element overall. These

responses mirror the primary function and responsibility rankings listed earlier.

6.2.5 Responsibilities – typical reference desk shift

Librarians were also asked to describe a typical reference desk shift in order to paint a picture of the physical environment of the reference desk and the activities surrounding it. The question also helps to outline the execution of work now done remotely that used to be reserved for the office or in another part of the library, prior to the introduction of the networked environment.

Table 11. Typical reference shift description

ACTIVITY THAT OCCURS	MSU A	MSU B
Answering questions	13	10
Email	8	3
Liaison	1	0
Collection Dev	11	4
Projects	6	6
Prof Dev / Committee work	7	5
Web Pages	2	0
Computer Skills	1	0

Most librarians initially responded to this question by either describing in person reference transactions, or suggesting that there was not a typical reference shift: '….typically it is ...a lot of times it is quiet and at other times it is really busy. So no real pattern to it.' Their immediate reactions might be a reflex suggested by the ARL Spec Kit study (2002) that librarians are defensive regarding the perceived decline of reference transactions, especially as some librarians begin to apologize for describing a time when they were not answering many questions at the desk: 'If I'm not actively helping people, and I mean I don't want to make it

sound like there is never any activity at the desk, but nothing that would really stick out in my mind, like the way it used to be...like I would say really hectic.' The researcher rephrased the question as needed to ask librarians to describe a busy shift, and a shift when there were few interactions. This was done to uncover what types of work activities / tasks were occurring at the reference desk when there were few 'in person' reference transactions occurring during a scheduled shift. By describing more fully the work taking place while at the reference desk, the researcher can support the notion also asserted by the ARL Spec Kit survey that 'reference librarians are feeling busier than ever' and in describing their daily activities, many of which are carried out in some fashion at the reference desk, confirm the expanded responsibilities and tasks of today's reference librarian. Many of these tasks would not have been possible in the old model, as networking technologies have made it possible to transfer work from one virtual desktop to another.

Answering questions had a 100% response rate at both institutions as an activity at the desk. The next most recorded activity was collection development (MSU A 84%, MSU B 40%), email (MSU A, 61%, MSU B 3%), professional development / committee work (MSU A 53%, MSU B 50%), project work (MSU A 46%, MSU B 50%), liaison and computer skills (MSU A, 7% each) and web page creation / modification (MSU A 15%). Again, these activities mirror primary function / responsibilities / rankings described earlier, suggesting that even when librarians are not answering questions or assisting people they are working on a variety of complex tasks. Three of the activities listed (email as correspondence, web page creation and liaison work) are not currently recorded / recognized as 'reference' activities, but they are large components of the reference librarian responsibilities. Both email correspondence and web page

creation could arguably be considered a type of reference transaction when they have a direct impact on the user / receiver with regards to information seeking behavior.

6.2.6   Responsibilities – role of research / subject guides

Librarians were asked their perception of the role of research guides to determine what value / roles they assign to web page creation for reference and their select subject areas (as liaisons), and where it fits in with their responsibilities and recognition in terms of expended effort. When listing responsibilities (see p. 76), eight or 61% of the librarians at MSU A listed web page creation as a task, and both (100%) administrators mentioned this responsibility as well, whereas only three or 30% of MSU B librarians listed web pages as a specific task, with one administrator (50%) also referring to it as a responsibility. The lower response rate at MSU B for role or responsibility regarding web pages may be that as an institution, they had only recently been assigned the task to create individual research / subject guides as a part of their job – prior to that the importance of librarian constructed web pages was not a priority of the administration.

Table 12. Perceived role of research / subject guides

ROLE	MSU A	MSU B	ADMIN A	ADMIN B
Expand ref / ready ref / save time	13	9	2	2
Assist ref librarians	4	5	1	1
Expansion of clientele	1	0	0	0
Remove time barrier	1	0	1	0
Statistics	1	1	0	0
Historical record	1	0	0	0
Instruction	2	0	1	0
Classroom tool	4	0	1	0
Advertising	3	2	0	0

The expansion of reference services / creating ready reference options to save time was the number one perceived role assigned to web page creation, with 100% from MSU A librarians and administrators; MSU B with 90% rate and 100% response from its administrators. The second most common role for research web pages was to assist reference librarians themselves – they valued the guides when they were asked a question in a subject area they were not familiar with, with 30% rate from MSU A and 50% rate from MSU B. This use of research / web guides by reference librarians in house as a resource vis-à-vis the reference transaction should not be overlooked – the action of using the reference guide of a colleague, an expert in the field carries the same action and worth of effort and expansion of knowledge as demonstrated in the illustration on page 26.

Users at both institutions were asked if they used the research subject guides. A follow up question was asked – if the response was a negative, users were shown the guides and then asked if they would use them now.

Table 13. Users and Research Guide Use

USE BEFORE?	UP	UL
Yes	2	2
No	10	4

USE NOW?	UP	UL
Yes	5	2
No	2	2
Indifferent	5	2

REASON FOR NOT USING GUIDES	UP	UL
Didn't know about them	10	3
Don't need them	0	2

Those users who had used the web pages at both institutions used them for specific reasons: 'Yes, it is useful to separate in majors so we can find out what we need quickly,' 'Used for English class, not my subject area', 'Has all the databases listed'. When those who did not know they existed were shown the pages and asked if they may use them, their responses were favorable, with five out of five (100%) users from MSU A indicating they would use them and

two of three MSU B users (66%) indicating they would consider using them: 'Wow. That should be known', 'Didn't know they existed, but they might be useful', 'I would use them'.

The responses to these questions suggest that there is little promotion of the research / subject guides in a meaningful way to users at either institution. As mentioned earlier, MSU B is only now focusing on web pages as research guides, so the concept on their campus is new and the format unknown to their users. Responses from users at both institutions also suggest that if the users knew about the guides, they may use them for research purposes. Many of the users did indicate using library resources online, but did not associate a person or a position to a responsibility for creation or maintaining or acquisition of the resource – something the librarians all list part of their responsibilities (collection development, computing skills, web page creation).

Data gathering to record the use of subject guides is not active at either MSU A nor MSU B, but the creation of the work is listed by both the librarians (11 out of 23) and administrators (three of four) as a primary responsibility.

One librarian summed up use of research guides in this way: 'Another thing, and it's only recently I think that I caught the religion of it, is to realize that a lot of your reference traffic doesn't even come to a desk anymore. They won't even visit you in Cyberland, they'll go to what you constructed.' This supports Lakos and Gray's assertions in their article *Personalized library portals as an organizational culture change agent* that if you build it, they will come – if they are aware of its availability. Fichter (2003) also outlines web analysis techniques that can be

applied to research / subject guides created by librarians. Creating / identifying / recognizing the labor and outcomes associated with a digital presence is paramount to the assessment and success of reference librarians in the networked environment. It is recognized and reaffirmed by experts – and the users in this study – that today's student first try to acquire information on their own – via the web – before seeking a reference librarian's assistance in the physical sense – so it is paramount that this work be supported and assessed in a statistically meaningful way for the reference librarian. Counting page use with comparisons to known user groups can help determine which users may be underserved; how a user navigates through a webpage can help determine link placement; observations of social networking technologies and their application to library webpage designs / functionality could bring reliable resources to the top of a students search more quickly; the acknowledgement that accessing of a reference librarian created resources is a reference function, a cyber-transaction, worth recording and applying credit or creating training opportunities.

6.3   REFERENCE EXPERIENCE

6.3.1   Reference Experience – most changes over time

Reference librarians were asked to describe what about reference services had changed the most over time. This question was asked to determine what the common denominators were that would account for the shift in responsibilities over time:

Table 14. Most changes over time in reference services

CHANGE	MSU A	MSU B	ADMIN A	ADMIN B
Technology	13	10	2	2
Amount of Resources	8	1	1	1

There was a 100% consensus from MSU A and MSU B study participants that Technology was the most significant change in reference services over time.

Words used to express changes in work, specifically: new model (reference desk to liaison / outreach), web use increase, tool development (involved with), queries more difficult, self-training increased, less traffic at desk, web pages as medium, more things done in the same amount of time, staff now at reference desk (as opposed to just librarians), stress & space, faster pace, more in depth research assistance needed, questions now more about technology than reference, collection development models, one stop shopping model.

Librarian's experience with technology and change were similar, some very specific and others more broad:

> It is just so much computer work.

> The number one change, for me, is the fact that since we are...are pretty far along in technology advancements, the glaring difference from when I started to now is, I've gone from a card catalog to high-end technology, and the fact that access points are so much deeper now, you know when you had the card catalog

there are only three places you can go; Subject, Doc. or Title, I guess.

Well, computers appeared on the reference desk, and it never use to be there and the information tools that appeared on the computer on the reference desk.

So I would say that was...so I guess I would have to say technology had the biggest effect.

I'd say the technology issue and technology for better or for worse has been the reigning influence on how I do my work and how I communicate from databases to e-mail to chat.

I don't have to leave my computer most of the time. I don't have to walk someone back into the stacks. So the digital resources; how wonderful the internet is in finding something quick to build on, you know, just being able to GOOGLE a word; some word that I don't know or looking into on-line science dictionary to find something and how quick I can absorb that little bit of information and say I know what this person might be talking about now or I can build on something instead of having to go through volumes of prints or having to go through this directory here; it's like the digital is really helpful.

Well I mean I've lived through the whole Internet revolution as a Reference Librarian.

Very little, and I'm talking a long career here, very little access to computers to maybe even none at the very early stages of my career, to desk top access to the majority of what I need.

The computers for sure and the Internet.   Now it's much easier.

That's the big change I think in how we do business and the fact that we don't see as many people because they can access the information.

It's clear from the data that today's reference librarian has become a technology expert on a number of levels, and continually train themselves to learn new tricks of the trade as interfaces change, delivery methods become increasingly complex, new ways of communicating are invented. How is this process valued, identified, rewarded or assessed?

6.3.2   Reference Experience – constancy in reference

Librarians were also asked to list those experiences / factors in reference services that were in their view constant and unchanging over time:

Table 15. Constancy in reference service

CONSTANT	MSU A	MSU B	ADMIN A	ADMIN B
People / interaction / questions	10	9	2	1
Access / Info Seeking	1	0	0	0
Collection Dev needs	1	1	0	0
Nothing	0	0	0	1
No response	1	0	0	0

There was no significant difference between the most oft reported constancy amongst librarians. Responses also reflected earlier perceptions of position responsibilities and what it means to be a reference librarian. Both MSU A (76%) and MSU B (90%) reported constancy in terms of answering / assisting with reference questions, people interaction, mediation of services – human elements associated with reference services. One administrator from each institution (three of four, or 75%) listed the same constancy, with one remarking that 'nothing' was the same. Examples were given both on a personal level and on a professional level – mirroring earlier responses on primary functions, responsibilities, time factors etc with regards to reference librarianship:

> Well the principle is the same. I mean the whole point...the whole purpose of the game, if you will, is to get access to materials that deal with your particular subject, and I guess the thing that has remained constant is the three ways we had back in the days with the card catalog, I'm still using those three ways now.

The general thrill of the chase, in some ways, even though they are automated.

You still have students that just come up to your and ask you questions. You still have some that want them to help you with your research. I that's it basically.

What's remained constant is human nature; trying to work with your student or faculty member and to be sure you're answering the right question or they're asking the right question. That human nature is still the same.

What's constant, I guess, if you still have to cope with the issue of how you connect people with what they need.

It's still directing the client or patron to the resource that's going to provide them the answer or at least gets them going on with their researching. I'm still like the middle man, the teacher, the partner in providing this. Maybe I'm using different methods but I'm still the pointer.

Well, I think the same function of a Reference Librarian is still there, you know, people come and ask for information, you do instruction and they think that it's the media that's changed not ... instead of looking in a book to find an answer to a question you're looking on databases and that way you have bigger access; you're not dependent on your collections so in some ways that's a lot better.

The whole concept of reference itself, there's the library, still I mean there's all this talk about other opportunities to find information but the library is still expected to provide that human touch whether it's e-mail or ... it doesn't matter just that there's an expert there to help you get what you need.

I guess no matter how technology changes students are still the same I mean although their different generations they pretty much they have projects, year after year, they pretty much ask the same question.

6.3.3   Reference Experience – best experience

Librarians were asked to share a best experience as a reference librarian to compare 'meaning' and responsibility responses:

Table 16. Best experience as a reference librarian

ACTIVITY / FACTOR	MSU A	MSU B
Helping people / gratitude / satisfied user	5	5
Liaison / Knowledge	4	4
Question	1	0
No response	3	1

The responses between MSU A and MSU B were very close for best experience descriptions. The number one and number two responses matched to describing best experiences for both. Helping people received the highest response from both institutions (38% from MSU A and 50% from MSU B)…

> The thing that I really like is the students come in really stressed out and then you're able to show them quickly how to find the good resources that they need.

> I guess when you work on the desk and um, some of these people will look, people will look very confusing and they hesitant to ask you questions, but when they approach and finally you get them through give them exactly what they need they appreciate you so much and at that moment, you know you're just, you feel so satisfied and you know you helping them and in the right way, that's such a good great feeling.

> Just a general, I think a general best experience would be just when I'm helping someone, especially in my subject area find something that I'm really putting my knowledge of area to be used and I'm finding quickly and I'm finding something accurate and finding something enlightening for them and I know that research is going to be helped by it, that's the best experience.

…and with using their liaison / subject expertise (four of 13, or 30% MSU A and four of 10, or 40% for MSU B) a close second. It could be argued that these responses should be

combined together to reflect a 78% response, as they both involve assisting users and the reference transaction and the distinctions between the two are insignificant.

6.3.4 Reference Experience – worst experience

Librarians were asked to express a worst experience as well:

Table 17. Worst experience as a reference librarian

ACTIVITY / FACTOR	MSU A	MSU B
Lack of knowledge / can't help	4	3
Bad experience with user	6	4
Team no working together	1	0
No response	3	3

The responses to this question were similar in scope to the 'best experience' reported. Number one and number two responses were bad experience with a user (10 of 23, or 43% when MSU A and MSU B are combined) and lack of knowledge / inability to help a user with a query (seven of 23, or 30% when responses are combined) for a result of 73% in areas that combine lack of knowledge and personal interaction:

> It is not anything in particular; it is just usually these nights
> where I'm just off, and it is frustrating because something is not on
> the shelf, cannot find it anywhere, they ask me something crazy
> and, you know you just spend a long time looking for it, I cannot
> find it, and those nights are hard.

The worst experience is again generically you figure what you should have done when they're gone.

I would say my worst experience is not any one experience but it's any experience where I feel clueless; where I'm trying to do research and I'm not finding what the person really needs and I think there was one recently ...

Again, combining these results has is acceptable as both actions include interactions with users and the reference transaction.

These responses reinforce the 'meaning' of reference librarianship and the importance that librarians place on reference transactions / interactions with users as positive / negative reinforcements in their work.

6.4   JOB SATISFACTION & CHALLENGES

6.4.1   Job Satisfaction & Challenges – most satisfying

Librarians were asked to list those components they found most satisfying about being a reference librarian.

Table 18. Most satisfying component

COMPONENT	MSU A	MSU B
Working with / helping people	10	6
Subject specific question	1	0
Difficult question	1	0
Collection Dev	1	0
Projects / Committee work	0	1
Instruction	0	2
No response	0	1

Most librarians at both institutions said that working with / helping people was them most gratifying component of their job with a response rate of 69% (16 of 23). A response that is personal in nature, it the responses of 'what it means to be a reference librarian' where helping people was the most common response (100%). This supports Mabel Shaw's (1991) observation that there is commitment on the part of reference librarians that puts 'a high premium on person-to-person relationships'.

Strong similarities across both MSU A and MSU B reinforce the earlier findings that interaction with users is paramount to the work / experience of the reference librarian and attitudes of reference librarians at any academic institution will reflect this sentiment.

6.4.2   Job Satisfaction & Challenges – least satisfying

Librarians were also asked to describe those components they found least satisfying in their work:

Table 19. Least satisfying component

COMPONENT	MSU A	MSU B
Lack of appreciation (from admin)	1	0
Web pages	0	1
Road blocks (to progress / change)	1	0
Poor Training	1	0
Liaison / Outreach	0	1
Meetings	2	1
Collection Dev Lack of Training	4	0
Technology (lack of / support)	1	1
Butting Heads	1	1
Weekend hours	0	1
Strategic Planning	0	1
Details / Reporting	1	1
No response	1	2

There was no majority of responses when it came to describing the least satisfying aspects of their work as reference librarians. The components were widely varied, suggesting that dissatisfaction on a more personal level was individualized; where there is commonality between both institutions, the majority is personnel / support related.

Because there is no significant similarities or differences between MSU A and MSU B it can be determined that dissatisfaction of reference librarians at any academic institution will be localized and personal in nature, depending on training, resources, governance etc.

6.4.3   Job Satisfaction & Challenges – challenges of workplace

Librarians and administrators were asked to describe challenges of their workplace to distinguish any differences / similarities between the institutions that could effect their work / experience as a reference librarian, and to see if changes already described correlated with any responses. The researcher then divided the challenges into external (to the library) and internal (within the library) challenges.

Table 20. External Challenges

CHALLENGE	MSU A	MSU B	ADMIN A	ADMIN B
Keeping up w/ new resources	2	0	0	0
Pace	1	0	0	0
Technology (external)	2	0	0	1
Respect of outside faculty	1	0	0	0
Cooperation w/ other universities	1	0	0	0
Diverse People	1	0	0	0
Institutional issues	0	1	0	0
Change	1	0	0	0

Table 21. Internal Challenges

CHALLENGE	MSU A	MSU B	ADMIN A	ADMIN B
Long time to get things done	1	0	0	0
Many things to learn	1	2	1	0
Lack of funding	4	4	0	0
Day-to-day procedures	2	0	0	0
Technology (internal)	2	4	0	0
Personnel	1	1	0	0
Lack of affirmation	1	0	0	0
Lack of leadership	1	0	0	0
Committee work	2	1	0	0
Communication	1	0	0	0
Lack of time	0	2	0	0
Changes	0	1	0	0
Variety of topics	0	1	1	0
New staff	0	1	0	1
Outreach	0	1	0	0

Responses to challenges were varied in both external and internal instances, with no clear pattern, though the majority of responses by librarians noted a lack of funding (34%, or eight of 23), which is controlled internally, followed up by technology challenges (26%, or six of 23). This suggests that responses are localized and personalized and have little effect on the work of reference librarianship, per se. There was no significant correlation between changes described earlier, where technology dominated the category.

6.5   STATISTICAL MEASURES

6.5.1   Statistical Measures – data gathered

Librarians were asked to describe what statistics where gathered at their institutions. Responses provide a framework to determine if the librarians perceive the statistics being gathered reflect those activities / responsibilities listed by reference librarians and administrators to determine meaning / success / job satisfaction:

Table 22. What is counted

MEASURES	MSU A	MSU B	ADMIN A	ADMIN B
Reference Desk	13	10	2	1
Instruction	2	1	0	0
Off Desk / Consults	4	3	0	1
Book retrieval	0	0	1	0
Technology component	0	1	0	0
Time component	0	1	0	1
Subject / department spec	0	0	0	1

Librarians at both institutions reported 100% (23 of 23) the recording of reference transactions that occur at the reference desk. 75% (three of four) of the administrators listed that statistic as something counted as well. The rest of the statistics reported as being counted are not statistically significant – which is significant in itself because four (4) of the measures listed above are specific position responsibilities that both librarians and administrators listed in previous responses.

6.5.2   Statistical Measures – value of statistics for librarians (effectiveness)

Librarians and administrators were asked if they felt that the current data gathering methods / statistics reported at their respective institution illustrated their effectiveness as reference librarians:

Table 23. Reflection of Effectiveness of Reference Librarian

EFFECTIVE	MSU A	MSU B	ADMIN A	ADMIN B
No	8	8	2	1
Don't Know	1	0	0	0
Minimally	2	1	0	1
As Department Activity	2	0	0	0
Not Accurate (count)	0	1	0	0

The majority (16 or 69%) of the librarians indicated they did not:

> Well ... I don't ... it's really hard, if I didn't know anything about what I did and I looked at the hash marks it would mean nothing.

> Not at all. Not my effectiveness at all; they reflect maybe the need to have a warm body at the desk.

> My particular effectiveness you probably wouldn't be able to tell in that way; at least I don't know how you would tell in that way.

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Um, those statistics only reflects how many questions we got and how many times we spend on those questions.

No, I think in some ways it's just a number.

Most administrators (75%, or three of four) agreed with this sentiment as well:

I would say there probably isn't much happening as far as that is concerned.

There are quantitative measures and they're not checked by Reference Librarians, they're only checked by desks; so it's simply a quantitative measure of the work of the multiple group.

It's a transaction that happens between the librarian and the user, there's no assessment of was it good, was it bad, it's just there, and it's done, so it's not really...there's no kind of real qualitative aspect because we don't look at that.

The remaining responses (30% of librarians, and 25% of administrators) are non-committal, except where suggesting current data gathering could reflect departmental activity.

6.5.3 Statistical Measures – perceived management decisions

Librarians and administrators were asked to describe management decisions made with statistical data gathering in the present:

Table 24. Management decisions made w/ statistics perceived (Librarians) vs actual (Administrators)

DECISIONS	MSU A	MSU B	ADMIN A	ADMIN B
Trends	1	0	1	0
Hours	4	5	1	0
Resource allocation	1	1	0	1
Training	0	0	0	1
Collection Dev	0	1	0	1
Staffing	4	5	1	2
Instruction assessment	0	1	0	0
Don't know	2	2	0	0

Librarians' perceptions are mostly in sync with administrators' practice and responses the same at both institutions in this regard - 30% of MSU A and 50% of MSU B noted setting service hours as an outcome of statistics gathering. One administrator (25%) acknowledges this management activity. Staffing decisions were also suggested as a possibility for decision making by 30% of MSU A and 50% of MSU B as an outcome of the statistics gathered. 75% (three of four) of the administrators list this as a management directive based on reference statistics. It's interesting to note that with the number of hours and staffing decisions made with the statistical data, its obvious that the reference activity is somewhat valued, but there is no determination to look beyond the pure number of transactions to staffing ratio.

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6.5.4 Statistical Measures – statistics desired

Librarians were asked to list statistics they would like to see collected that might be useful for them or more reflecting of the work they do:

Table 25. Statistics desired

MEASURE	MSU A	MSU B
Question type (more detail)	8	3
Repetitive use of resources	1	1
Subject experience / knowledge	4	1
Project work	1	1
Value of service	1	0
Accuracy	0	1
Collection Dev (item use)	3	2
Web Pages	3	1
Library Instruction	2	1
Question by user type	2	1
User statistics	1	1
Time	1	1
How resources are used	1	0
Long-term effects of service	1	0
Monthly reports	1	0
Comment box	0	2
Don't know	1	2

At MSU A, where reference transactions are recorded as either 'directional' or 'reference' the majority suggested collecting additional qualitative data related to the questions they assisted patrons with (61%). At MSU B, there was no clear statistical winner though the most responses matched those of MSU A's dominant choice (30%) of more qualitative data when it came to question type, even though MSU B's statistical data for reference transactions already includes a number of categories such as technology, database query, etc for each question.

The other areas where additional statistics gathering was suggested with 3 or more responses were subject knowledge, web pages, collection development, library instruction, and question by user type. It is important to note that all but one of these – question type – directly reflect the position responsibilities listed earlier in this study by both librarians and administrators.

6.6   EVALUATION MEASURES

6.6.1   Evaluation Measures – tasks evaluated

Librarians were asked to list the responsibilities they were evaluated on specifically:

Table 26. What tasks are they evaluated on?

TASK	MSU A	MSU B	ADMIN A	ADMIN B
Reference/Desk	0	0	0	0
Instruction	2	1	0	0
Collection Dev (not spending)	2	0	0	0
Professional Dev	2	4	2	0
Web Pages	0	0	0	0
Skills	0	1	0	0
Consulting	0	0	0	0
Email	0	0	0	0
Supervising	2	1	0	0
Self evaluation	4	5	0	0
Chat	0	0	0	0
Cataloging	0	0	0	0
Development	0	0	0	0
Projects	3	1	0	0
Communication	2	0	0	0
Goals	2	3	1	2
Don't Know	2	1	0	0

The answers recorded are quite noteworthy, because the response rates do not reflect the responsibilities listed and ranked in earlier questions:

Table 27. Responsibilities reported

TASK	MSU A	MSU B	ADMIN A	ADMIN B
Reference/Desk	13	9	2	1
Instruction	12	8	2	2
Liaison	12	9	2	1
Collection Dev	13	7	2	2
Professional Dev	10	10	1	1
Web Pages	8	3	2	1
Computer Skills	8	4	2	0
Consulting	8	5	0	0
Email	7	1	1	0
Supervising	7	1	0	0
Other	1	5	1	1
Chat	2	2	0	0
Cataloging	2	0	0	0
Development	1	0	0	0

This is a significant point in the study, as the highest percentage of what the librarian's appear to be evaluated on at both institutions is not reflected in their evaluation process, per se. The variety of responses, none of which are overwhelmingly in one category over another, suggests that there is no one clear measure or activity that reference librarians are evaluated on at either institution. The majority of responses are found in Self-Evaluation (MSU A four (30%), MSU B, five (50%); Professional Development (MSU A two (15%), MSU B four (40%), ADMIN A two (100%); Goals (MSU A two (15%), MSU B three (30%), ADMIN A one (25%), ADMIN B two (100%).

6.6.2   Evaluation Measures – desired evaluative measures

Librarians were then asked to describe any measures they might like to be assessed on or 'given credit' for work being done. These desired measures more closely mirror the responsibilities of librarians at both institutions as well as reflect primary functions listed and responsibility rankings:

Table 28. Desired measures

TASK	MSU A	MSU B
Reference/Desk	9	6
Collection Dev	7	0
Instruction	4	1
Liaison	2	1
Supervising	0	1
Web Pages	1	0
Cataloging	1	0
Projects	1	0
Knowledge	1	0
Continuing education	1	0
Don't Know	1	0
No additional measures desired	0	4

Librarians were encouraged to list ways to accomplish these evaluative measures: circulation statistics (for collection development), outside evaluators (reference and instruction), peer evaluations (reference and instruction), diary keeping (for detailed activity), continuing education.

7.0   CONCLUSIONS AND SIGNIFICANT FINDINGS

The purpose of this study was to investigate relevant circumstances and conditions bearing -- directly and indirectly – on changes in the nature, form, substance, and effects of reference services – through the reference librarian experience. Specifically, this attitudinal study aimed to account for and assess changes in reference services (in the context of a medium-sized private university), with the further aim of developing an understanding of how to capture statistics and evaluate reference services and personnel in this dynamic environment. Reference librarians at a second mid-sized public university library were interviewed for comparative data analysis.

The primary purpose of this investigation was to:

- collect information on the perceptions of librarians at an academic library on the contemporary nature and state of reference work;

- compare such findings to the structure and content of current standards for reference librarians; and, on the basis of analysis

- collect information on the perceptions of reference librarians regarding satisfaction with their work, perceptions of current position responsibilities, perceptions on value of work (theirs, users, and administrators), their perceptions on the value of statistical and evaluative measures of academic library reference.

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7.1   CONTEMPORARY NATURE AND STATE OF REFERENCE WORK

- Collect information on the perceptions of librarians at an academic library on the contemporary nature and state of reference work:

Librarians reported technology as the number one reason for change in reference services, while people and the need to mediate information as the number one constancy. With technology, librarians have been enabled to expand the reference desk globally and provide services 24/7, but this work is invisible and undervalued. Emails are not counted. Web page creation is not counted nor promoted. Librarians themselves value highly the work of their colleagues on subject guides, consulting them when they need to assist users in an area they are not familiar with. This use goes uncounted, as well as the hits from outside the library environment. In addition, librarians are responsible for the acquisition of electronic resources – the users in this study mention many of them, yet are they aware that they have been selected, tested and approved by a reference librarian?

The State of Reference Work:

- Typical reference work: 100% of respondents at both institutions listed answering questions as an activity at the desk. The next most recorded activity was collection development, email, professional development / committee work, project work, liaison and computer skills, and web page creation / modification. Again, these activities mirror

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primary function / responsibilities / rankings described earlier, suggesting that even when librarians are not answering questions or assisting people they are working on a variety of complex tasks.

- Role of research / subject guides: The expansion of reference services / creating ready reference options to save time was the number one perceived role, with 100% from MSU A librarians and administrators; MSU B with 90% rate and 100% response from its administrators. The second most common role was to assist reference librarians themselves, with 30% rate from MSU A and 50% rate from MSU B. Most users interviewed were not aware of the web pages, indicating that this work is currently going unnoticed by their targeted audience.

Contemporary Nature of the Reference Work:

- Changes: There was a 100% consensus from MSU A and MSU B study participants that Technology was the most significant change in reference services over time. The 'amount of resources' was second – and this factor comes from the technology issue. Librarians are continually learning new skills – but there is no standard assessment, evaluation, recognition of the skills acquired or involved in reference services.

- Constancy: Both MSU A (76%) and MSU B (90%) librarians reported constancy in terms of answering / assisting with reference questions, people interaction, mediation of services – human elements associated with reference services.

- Best experience / Worst experience: Reference librarians at both institutions listed the human element and subject knowledge (or lack thereof) as the their best / worst experiences as reference librarians. This was expected, as reference service is consistently at the top of responses regarding tasks, functions, expectations, identity and satisfaction.

The reference desk is recognizable as both place and function. In its current state, reference work is a series of complicated but invisible tasks aimed at providing premium service / information options for clients. While the traditional role of the reference librarian, assisting users with their information needs on a personal level, continues to be most valued, new responsibilities that support this work have evolved but appear not to be appreciated / evaluated on a task level. Subject guides are used as a reference source for librarians, suggesting they value the intellect / information knowledge of their colleagues, but recognition for this work is on an insider level. To acknowledge / evaluate the current state of reference work, librarians and administrators should:

- Recognize that the exchange of information is key, and develop ways to evaluate / recognize value in the transaction / information exchange at the traditional service point;
- Acknowledge that additional tasks are performed at the reference desk that support the primary responsibility and devise evaluative / rewarding measures for this work;
- Recognize / reward the intellectual / reference value of subject guides – some possible ways include:
  - Peer to peer blind web site evaluations

- Survey of clientele / promotion of web guides

- Involvement of clientele in the design process

- Develop a standardized way to count use of web pages as a reference transaction, such as following a user's activities through the site and time spent at the site

• Reference librarians / libraries have two constancies – technology and service to users – skills developed in these areas should be rewarded / measured in standardized ways, for example:

- Established competencies / training for technology skills

- Established point of contact 'humanistic' skills

7.2   STRUCTURE AND CONTENT OF CURRENT STANDARDS

• Compare such findings to the structure and content of current standards for reference librarians:

Typical reference shifts were described as busy work environments – most often described first in terms of helping people in great detail and when not helping patrons as a portable office. No one suggested that reference desks close – again, their primary function and reason for wanting to be a reference librarian was expressed in terms of helping people. When not assisting users, librarians spend their time fulfilling the other responsibilities assigned to them. It appears that a large amount of their liaison correspondence, collection development, computer skills and answering reference emails in particular (often not recorded) is done at the desk.

Working at the reference desk / consulting / helping patrons was also listed as the part of the job that was most time consuming by both librarians and administrators – whether it was because it was an assigned number of hours at the desk or if it was helping people with their research needs.

Challenges described at the institutions mirrored the responses received when describing a least satisfactory reference experience – they ran the gamut and appeared to be secondary in nature, though lack of funding found the most common ground amongst the librarians.

The Reference and User Services Association (RUSA) Professional Competencies for Reference and User Services Librarians focus on the abilities, skills, and knowledge that make reference and user services librarians unique from other professionals:

Access
- Responsiveness
- Organization and Design of Services
- Critical Thinking and Analysis

Knowledge Base
- Environmental Scanning
- Application of Knowledge
- Dissemination of Knowledge
- Active Learning

Marketing/Awareness/Informing

- Assessment
- Communication and Outreach
- Evaluation

Collaboration

- Relationships with Users
- Relationships with Colleagues
- Relationships Within the Profession
- Relationships beyond the Library and the Profession

Evaluation and Assessment of Resources and Services

- User Needs
- Information Services
- Information Resources
- Information Interfaces
- Information Service Providers

Responses from study participants listed tasks / responsibilities that fall into categories as outlined above:

- Tasks: Eleven (11) tasks were reported by librarians at both institutions, with the top seven (7) in order being reference, instruction, liaison, collection development, professional development, computing skills, consulting. Only two categories – cataloging and development, were listed by librarians at MSU A but not at MSU B. The following responsibilities listed by librarians, but not listed by Administrators at MSU A:

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consulting, supervising, chat, cataloging, development. At MSU B, administrators did not list the following: computer skills, consulting, supervising, chat, cataloging, development, email. Overlap occurred for supervising, chat, cataloging, development.

- Primary function: Four (4) primary functions were identified; reference, instruction, liaison, supervisory. The majority (61%, MSU A, 40% MSU B) listed reference as their primary function. Administrators agree – 100% from both institutions.

- Responsibility rankings in order of importance: When giving a response, this data follows the same pattern – reference first, liaison second, collection development third – though the majority of librarians at both institutions preferred not to give ranks to tasks beyond the third tier, indicating all of their tasks were important – or is it because reference takes the least effort?

- Time spent on specific tasks: Combined responses at both institutions place reference service work / desk schedule first (40%, or 11 of 27), balancing of projects (25%, or seven of 27) second and collection development (14% or four of 27) as the third most time consuming element overall. These responses mirror the primary function and responsibility rankings listed earlier.

7.3   WORK SATISFACTION, RESPONSIBILITIES, VALUE OF WORK

- Collect information on the perceptions of reference librarians regarding

  satisfaction with their work, perceptions of current position responsibilities,

  perceptions on value of work (theirs, users, and administrators), their perceptions

  on the value of statistical and evaluative measures of academic library reference:

Reference work in today's networked environment is a dynamic, service driven function of the modern academic library. Reference librarians' and administrators agree that responsibilities have expanded exponentially, yet there is little recognition / promotion of these functions / tasks either in terms of evaluative measures or statistical data gathering. When asked if they felt current reference statistic gathering practice reflected their effectiveness as a reference librarian, the overwhelming majority, including administrators, said no.   There was a resounding dissatisfaction with data gathering in general, and an expressed interest in seeking new methods of recording effort / knowledge / work value.

Perceptions of reference librarianship:

- Librarian view: When asked if they had to describe to someone 'what is means to be a

  reference librarian', 100% of the study participants used words and phrases describing

  the activity associated with a reference transaction and assisting patrons in their quest for

  finding information, such as help or helping; investigate / detective work / how to find;

  research; teaching; interpreting; needs; mediate (information needs); make yourself

  available (for the consultation). All responses were social in nature, describing an

  interaction with receptive communication, user needs and teaching roles emphasized,

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suggesting that the librarian places high value on the 'meaning' of being a reference librarian

- User view: The majority of users in this study had a similar perception of what it means to be a reference librarian, using the same descriptive terms expressed by the librarians themselves. This validates the importance of the interaction and functionality of the reference librarian and point of service transactions that occur.

- Administrators: Administrators from both institutions (4, 100%) talk about the reference transaction component when describing what it means to be a reference librarian. In the case where other duties are also included in the description (10%) reference desk responsibilities are mentions first, suggesting it is the primary function. Except for the lone administrator at MSU A where three distinct components are additionally described, and the administrator from MSU B who used personal experience as a former reference librarian, these responses mirror the reference librarians' 'meaning' attached to their being: the interaction with the user, the answering of questions, mediating information sources, is the fulcrum of the reference librarian position, suggesting it is the single most defining criteria of the position.

Job Satisfaction:

- Most and Least satisfying component: Most librarians at both institutions said that working with / helping people was them most gratifying component of their job with a response rate of 69% (16 of 23). A response that is personal in nature, it the responses of

'what it means to be a reference librarian' where helping people was the most common response (100%). This supports Mabel Shaw's (1991) observation that there is commitment on the part of reference librarians that puts 'a high premium on person-to-person relationships'. Similarities across both MSU A and MSU B reinforce the earlier findings that interaction with users is paramount to the work / experience of the reference librarian and attitudes of reference librarians at any academic institution will reflect this sentiment. There was no majority of responses when it came to describing the least satisfying aspects of their work as reference librarians. The components were widely varied, suggesting that dissatisfaction on a more personal level was individualized; where there is commonality between both institutions, the majority is personnel / support related. Because there is no significant similarities or differences between MSU A and MSU B it can be determined that dissatisfaction of reference librarians at any academic institution will be localized and personal in nature, depending on training, resources, governance etc.

The manifestation of specialization in reference services has seen the emergence and evolution of competencies and performance standards. The American Library Association's (ALA) Reference and User Services Association (RUSA) created Guidelines for Behavioral Performance to serve as the standards for measurement of effective reference transactions. The Guidelines reflect the changes in the reference profession to include the networked environment:

- Approachability
- Interest
- Listening/Inquiring

- Searching
- Follow Up

Each standard includes three distinct categories under each (where appropriate) they are:

- General--Guidelines that can be applied in any type of reference interaction, including both in person and remote transactions.
- In Person--Additional guidelines that are specific to face-to-face encounters, and make the most sense in this context.
- Remote--Additional guidelines that are specific to reference encounters by telephone, email, chat, etc., where traditional visual and non-verbal cues do not exist.

The statistics / evaluative measures outlined above are not reflected at MSU A or MSU B:

Statistical Measures:

- Librarians at both institutions reported 100% (23 of 23) the recording of reference transactions that occur at the reference desk. 75% (three of four) of the administrators listed that statistic as something counted as well. The rest of the statistics reported as being counted are not statistically significant (Instruction, three responses - Consultations, seven responses - Computer skills, one response) – which is significant because these four (4) of the measures are specific position responsibilities that both librarians and administrators listed in previous responses.

- Do they hold value for the reference librarian? 69% of the librarians indicated no, 75% of the administrators agreed – the rest were non-committal, suggesting they had no stake in

the process.

- Perceptions of decisions made with data sets: Librarians' perceptions are mostly in sync with administrators'. Service hours (30% of MSU A and 50% of MSU B) were noted as one possible outcome of statistics gathering. One administrator (25%) acknowledges this management activity. Staffing decisions for the reference desk (30% of MSU A and 50% of MSU B) were also listed as a possible outcome of the statistics gathered. The majority 75% (three of four) of the administrators listed this as a management directive based on reference statistics. It's interesting to note that with the number of hours and staffing decisions made with the statistical data, its obvious that the reference activity is somewhat valued, but there is no determination to look beyond the pure number of transactions to staffing ratio.

- What would they count? At MSU A, where reference transactions are recorded as either 'directional' or 'reference' the majority suggested collecting additional qualitative data related to the questions they assisted patrons with (61%). At MSU B, there was no clear statistical winner though the most responses matched those of MSU A's dominant choice (30%) of more qualitative data when it came to question type, even though MSU B's statistical data for reference transactions already includes a number of categories such as technology, database query, etc for each question. The other areas where additional statistics gathering was suggested with 3 or more responses were subject knowledge, web pages, collection development, library instruction, and question by user type. It is important to note that all but one of these – question type – directly reflect the position

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responsibilities listed earlier in this study by both librarians and administrators.

 Evaluation Measures:

- What tasks are they evaluated on? Work responsibilities / tasks are not reflected in the evaluative process or the statistical measuring processes. The highest-ranking list of evaluative measures by librarians and administrators were self-evaluation, professional development, and goals – none of which are task specific. Reference is absent all together. Eight major responsibilities were identified by librarians and administrators, but administrators only listed evaluating performance based on professional development / goals.

- Desired measures: Librarians were then asked to describe any measures they might like to be assessed on or 'given credit' for work being done. These desired measures mirror the responsibilities listed by librarians / administrators as well as reflect primary functions listed and responsibility rankings: reference desk, collection development, instruction, liaison.

Reference librarians and administrators alike identify that the reference transaction is the defining characteristic, the most important function and the most time consuming responsibility of the reference librarian's work. Reference librarians also equate this activity as the most satisfying component of their profession; however statistical data and evaluative measures do not capture this activity in any meaningful way. Reference librarians also list a number of other work responsibilities that are likewise not recorded, measured or rewarded except anecdotally at

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best. Suggested ways to bring their activities to light include:

- Find new statistical measures:
    - Introduce qualitative data gathering techniques to supplement the quantitative data gathered, such as a tool that measures the effort / knowledge / skills of the librarian expended during the reference transaction;
    - Recognize the use of technology in the field, and count use of subject guides as a type of reference transaction;
    - Recognize subject specialization and define measures for expertise in consulting during the reference transaction;
    - Recognize that transactions away from the traditional service point are often not counted, and measures must include ways to account for this activity, either in person or through electronic means (Chat, email)
- Find new evaluative measures:
    - Acknowledge the importance of personal contact and customer service at the reference desk and evaluate / reward librarians in their humanistic approaches and user satisfaction through peer-to-peer evaluations, observation techniques, client surveys;
    - Recognize the importance of collection use with regards to collection development / reference activity, and use circulation activity, database use and curriculum comparisons locally and with peer institutions as measures of success or realignment need in this area;
    - Develop local measures for evaluating liaison activities, such as consulting with

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assigned department's head, faculty and students, recording activity in collection development areas, recording subject specific consultations or activities in the department such as instruction, class specific web guides or committee work;

- o Recognize that librarians must continually test library systems such as the online catalog, new databases, etc and develop criteria for measuring / rewarding this activity such as finding anomalies and reporting problems, self-proclaiming expertise by attaching their moniker to a specific tool, disseminating search strategies, features etc to appropriate clientele;

- o Develop library instruction evaluations with regards to users knowledge (pre & post testing of material introduced, student surveys) and effectiveness (developing lesson plans, instructor evaluations by peers or managers);

- o Develop standards for web pages created and evaluate librarians for this work as well as applying strategies for increasing use;

- o Develop standards for technology expertise vis-à-vis hardware, software and evaluate librarians in this activity where appropriate

The purpose of this study was to investigate relevant circumstances and conditions bearing -- directly and indirectly – on changes in the nature, form, substance, and effects of reference services – through the reference librarian experience.

Reference librarianship is a multi-faceted profession. Technology has changed the work of the reference librarian, but it's strong service component and initial calling – helping people find information – remains constant. Reference librarians, administrators and users rate the

'humanistic value' of the transaction above all other position responsibilities – yet there appears to be little or no recognition or evaluative measures that reflect these knowledge / skills / experience, resulting in 'a general lack of confidence in current data collection techniques' felt by librarians and administrators alike.

Possible additional uses and long-term implications of the information collected in this research include:

A) A study which compiles and contrasts librarians attitudes with regards to using other measures to support the idea that there is a need for academic libraries to consider librarians' unique perspectives

B) Investigate alternatives to transaction data gathering techniques that assess / evaluate / appreciate the 'humanistic value' of reference librarianship and reflect current responsibilities and the networked environment

C) Generate ideas for creating new ways to gather statistics for traditional / non traditional reference services / transactions

E) Establishes a place in time to benchmark similar data collection in the future

F) Develop local and standard practical applications for evaluative measures, training opportunities, recognition mechanisms and assessment in general.

APPENDIX A

TEXT FOR ADVERTISEMENTS FOR USERS

Email message was posted to appropriate market listservs advertising position opportunities for the campus communities. Flyers were not posted.

It was determined that 6 – 10 users would be sufficient to interview. This was based on the recommended number of participants for a focus group session.

* * * * * *

10 subjects needed for a paid research study opportunity – earn $5.00 to answer 5 questions!

The purpose of this study is to gather data about select library services. Participation is open to any interested library user.

One day only: (DATE). Interested participants should contact (RESEARCHER EMAIL) indicating available time. Participants should allow 15 – 20 minutes for the interviews.

Participants will receive $5.00 in compensation for their time and effort.

Study will be held in (LOCATION).

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