The Future of Reference Services in Public and Academic Libraries: 
An Annotated Bibliography

Donna Plante
INFO 522: Information Access & Resources
March 17, 2013
Introduction and Scope

The following bibliography covers the future of reference services in public and academic libraries. Articles explore changes in technology (i.e. mobile/portable services, Second Life, digital libraries, etc.), community cultures and demographics, relationships between users and reference librarians, and the user's expectations during reference transactions. While the majority of articles present optimistic attitudes regarding the future of reference services, there are a select number of articles included that present an adverse outlook. The articles were published from 1999 to 2011 in a variety of countries. The most recent literature was favored during the selection process so that all the information included is currently applicable. This is especially important because many factors that directly affect current and future reference work are rapidly changing such as technology and users’ needs.

Description

Reference services (also known as reference and information services) are often offered at public and academic libraries as a way to help library users find the information they are seeking and to directly address the users’ needs. However, reference services cannot be simply marketed to the masses—“it is a service that treats every library patron as an individual with unique needs” (Tyckoson, 2001, p. 190). Typically, a reference librarian has four major responsibilities: “instruct patrons on how to use the library, answer patron queries, aid the patron in selecting resources, promote the library within the community” (Tyckoson, 2001, p. 186). While reference librarians have provided personalized services to users for decades, “With the increasing availability of electronic
information services, and the emergence of the Web and digital libraries, an obvious question arises: is there a need for such personalised services?” (Chowdhury, 2002, p. 259). Additionally, will library reference services still exist in the future? These questions are ones that library and information professionals still do not have answers for.

**Summary of Findings**

Despite the fact that library and information professionals are all working towards the same goal (serving the user), there are many varying ideas regarding the future of reference services. Since the future will always remain unknown, librarians have resorted to examining past and present themes that have affected reference work. An overwhelming majority of the literature discusses the theme of technology.

Recent changes in technology have forced libraries to refocus resources. Tyckoson explains that “Although it has taken hundreds of years, the evolution of libraries has been moving in one direction—from internally-focused institutions to externally-focused institutions” (2003, p. 14). This change is partly due to advancement in the area of distance education. As a result, there has been a surge in remote library users that expect to access all the information they need online at any time that is convenient for them (Moyo, 2002).

However, online students are not the only ones turning to the internet. Academic and public library users alike are using the internet as a convenient source of information, which is significantly reducing the number of quick ready reference questions that reference librarians receive. For instance, the launch of Google and Google Scholar greatly affected the amount and type of reference queries that reference librarians received because the search engine gives users a convenient method of finding information
themselves. This “intensified fears that libraries and librarians will become marginalized” (Zabel, 2005, p. 105).

Another example is Second Life, a virtual online world that “provides the opportunity for real-time interaction between the librarian and patron” while maintaining the patron’s anonymity through avatars (Gerardin, 2008, p. 324). Second Life offers breakthrough technology that any business may be able to benefit from, but Hurst-Wahl believes Second Life will eventually initiate the development of other similar tools. By participating in Second Life now, librarians “are positioning themselves for the tools, services, and user environments that will come after it” (Hurst-Wahl, 2007, p. 53).

Both examples lead to another type of reference service entirely: mobile reference services. These kinds of services are accessible through any mobile device such as chat reference services, text reference services, and virtual services like Second Life. Mobile reference services continue to raise the bar in terms of user expectations. Peters insists that in order to deliver quality mobile services, libraries need to offer 24/7 services with a rapid turnaround time of about ten minutes (2011, p. 89).

The additional challenge originates from the questions themselves. As a result of external technologies that can answer ready reference questions, reference librarians have begun receiving questions that require them to “pause, reflect, and devise complex, multifaceted research strategies” (LaGuardia, 2003, p. 41). Although, LaGuardia notes that the public desk is not an appropriate space for answering these types of questions meaningfully, which is why she predicts that reference service will evolve into research consultations, “a high-tech, high-touch solution that involves face-to-face meeting away from a public desk combined with e-mail and telephone communication” (2003, p. 41).
Chowdhury reiterates that the reference librarian’s skills are needed for complex searches and finds it doubtful that digital libraries will replace human experts and personalized services (2002). However, Chowdhury predicts a much more drastic change of physical space in the form of outsourcing. This means libraries will look to non-library and commercial organizations to provide expert information to their users (2002, p. 262). Outsourcing would allow libraries to cut the cost of reference staff but still provide reference services to users off-site. Whitlatch also predicts that outsourcing could be a future scenario for library reference services. In fact, it is already happening through the Jones Knowledge company that offers customer service for client libraries and provides access to a team of reference librarians who provide research assistance seven days a week (Whitlatch, 2003, p. 26).

The question is would users still consider off-site services to be personalized services? Unfortunately, Chowdhury and Whitlatch do not entirely address that question. Tyckoson notes that it is a key question because the future of reference services depends on reference librarians providing personalized services. This is because users value personalized services most in “an increasingly impersonal world” (2003, p. 15). LaGuardia argues that the real problem stems from users not knowing or understanding that their library offers personalized services. As such, “the ills and uncertainties facing reference librarians are based on inadequate public relations” (LaGuardia, 2003, p. 41). Therefore, users cannot value what they have not experienced or what they do not know exists.

In terms of predictions, Tyckoson takes a more traditional route, bringing up that despite the advances in technology, the basic values of reference service have not changed; reference librarians may be using different tools, but the process in which they are engaged
is very similar (2001). Tykoson maintains that the traditional, in-person reference service still exists in libraries today because the traditional model continues to meet users’ needs (2001). Although, Tykoson does admit there will be change when it comes to the parent communities that libraries serve. He states that libraries will be serving “people with a much wider cultural range than today,” but at the same time librarians will also be a much more diverse group of people (2003, p. 16). Wilson continues, affirming that “librarians must comprehend this changed culture and fundamentally transform their role to accord with it” (2000, p. 389). However, Wilson disagrees with Tykoson’s take on traditional reference services. Wilson argues that “no effort to reassert a traditional reference librarian role can possibly succeed” because the internet has altered the user culture beyond the point of no return (2000, p. 389).

Frank takes an entirely different viewpoint and reflects instead upon the qualities that reference librarians will need to exhibit in order to advance in the field of reference. He asserts that reference librarians will need to be creative, innovative, flexible, adaptable, lifelong learners (Frank, 1999, p. 156). Additionally, in order to be leaders in the field, librarians need to progress from “‘I know’ to ‘Let’s learn’” (Frank, 1999, p. 156).

Bibliography

Entry 1:

Abstract: “Reference services have taken a central place in library and information services. They are also regarded as personalised services since in most cases a personal
Donna Plante

discussion takes place between a user and a reference librarian. Based on this, the librarian points to the sources that are considered to be most appropriate to meet the specific information need(s) of the user. Since the Web and digital libraries are meant for providing direct access to information sources and services without the intervention of human intermediaries, the pertinent question that appears is whether we need reference services in digital libraries, and, if so, how best to offer such services. Current digital libraries focus more on access to, and retrieval of, digital information, and hardly lay emphasis on the service aspects. This may have been caused by the narrower definitions of digital libraries formulated by digital library researchers. This paper looks at the current state of research in personalised information services in digital libraries. It first analyses some representative definitions of digital libraries in order to establish the need for personalised services. It then provides a brief overview of the various online reference and information services currently available on the Web. The paper also briefly reviews digital library research that specifically focuses on the personalisation of digital libraries and the provision of digital reference and information services. Finally, the paper proposes some new areas of research that may be undertaken to improve the provision of personalised information services in digital libraries.”

**Annotation:** This article examines how emerging technologies and features in digital libraries are affecting library reference services. It describes numerous examples of current digital library resources in order to support the overall theory that personalized services only exist in reference work and cannot be replaced by digital libraries.

**Search Strategy:** I searched the Web of Science because the database stores “scholarly literature in the sciences, social sciences, arts, and humanities.” The database even has a category dedicated to information science and library science. When conducting this search, I looked up the exact category title and combined it with two keyword searches using the topic field tag for both.

**Database:** Web of Science

**Method of Searching:** Keyword searching

**Search String:** TS=(librar* AND reference) AND TS=(trend OR future) AND WC="Information Science & Library Science"

**Scholarly/Refereed Status:** Ulrich’s lists the journal as scholarly and refereed. The journal’s website also states that “All papers are subject to blind peer review by at least two referees.”

---

**Entry 2:**
Abstract: “Here we examine the accuracy and relevance of the predictions made in ‘The Reference Librarian of the Future: A Scenario,’ an article published in RQ in 1985. We also discuss the evolution of reference service over the past fifteen years. In this analysis, three distinct periods emerge: the classical period, the experimental period, and the eclectic period. We also explore such topics as reference services, the roles and responsibilities of reference librarians, organizational structures, leadership, information technologies, and information access.”

Annotation: While all the information presented in this article is not as timely as others in this bibliography, the authors’ conclusions and comments on leadership and vision are useful as leadership and culture in reference services are still transforming. They also review “the skills and qualities necessary for future success” (Frank, 1999, p. 156). These skills and qualities can certainly still benefit current reference librarians.

Search Strategy: I searched the Web of Science because the database stores “scholarly literature in the sciences, social sciences, arts, and humanities.” The database even has a category dedicated to information science and library science. When conducting this search, I looked up the exact category title and combined it with two keyword searches using the topic field tag for both.

Database: Web of Science

Method of Searching: Keyword searching

Search String: TS=(librar* AND reference) AND TS=(trend OR future) AND WC="Information Science & Library Science"

Scholarly/Refereed Status: Ulrich’s lists the journal as scholarly and refereed. The journal’s website includes the editorial policy “of double-blind refereeing of articles in advance of publication.”

Entry 3:

Abstract: “In the fall of 2007, an adventuresome group of students taking up a Master of Library and Information Science (MLIS) course in an advanced reference class at San Jose State University in California set out to examine the current state and future potential of reference service in an immersive environment. After reviewing the literature on reference in Second Life (SL), they created avatars, explored numerous SL libraries, attended a guest lecture by an experienced SL librarian, and engaged in simulated reference interactions ‘in world.’ Students were then asked to describe and reflect upon their experiences, and to analyze the viability of SL as a platform for reference services by addressing the question,
'Will librarians find the mother lode or fool’s gold in virtual environments?’ Their responses offered the collective insight of the next generation of reference librarians into what some see as the next generation of Web-based library services. This column presents three of their thoughtful assessments of SL’s pitfalls, as well as its potential for enhancing reference services.”

Annotation: While the authors of this article are not experienced librarians, their observations and ideas are valuable as they present their findings from the user’s perspective of Second Life. Their suggestions are well-supported and particularly helpful for librarians and virtual reference designers.

Search Strategy: I searched the Library and Information Science Abstracts because the database stores a variety of journals and articles that focus on specific areas of library science. I conducted several keyword searches and a controlled vocabulary search in the database beforehand. Using the results from previous searches, I combined one of the subject headings from the controlled vocabulary search with a keyword search in just the abstract. The subject heading combined with the keyword eliminated a lot of the false drops I received when conducting a straight keyword search.

Database: Library and Information Science Abstracts (ProQuest)

Method of Searching: Keyword and controlled vocabulary searching

Search String: SU("Reference work") AND AB(future)

Scholarly/Refereed Status: LISA lists Reference & User Services Quarterly as a peer-reviewed journal in this article’s indexing details. Ulrich’s also lists the journal as scholarly and refereed. The journal’s website includes the editorial policy “of double-blind refereeing of articles in advance of publication.”

Entry 4:

Abstract: “Looks at some of the things librarians are doing at Second Life (SL), a three-dimensional, multi-user online digital world that is being created by its residents. Currently, there are more than six million residents of SL. More than 28,000 people are online interacting with each other in this world that contains buildings, restaurants, clubs, parks, libraries, and more - all created by the people who are living there. There are also malls, restaurants, dance clubs, casinos, libraries, exhibits, and private homes. Some of the library activities at SL are: providing library services to SL residents; networking; collaboration; rethinking space; supporting virtual communities; learning to use virtual space for education; discussing the use of role-playing; creating new tools; and positioning for the future.”
Annotation: This article gives a thorough review of Second Life’s potential as it relates to librarians and library users. Since the author is an advocate for Second Life, it does have a slight bias as she does not mention many of the software’s negative qualities. Regardless, it is still valuable because it builds on how librarians in particular can benefit from the online digital world and how Second Life will affect the future of librarianship.

Search Strategy: I read through Gerardin and Gordon's *Fresh perspective on reference work in Second Life* and found a couple direct quotes from this article that were very helpful, so I found it listed in the references. I then searched all databases in ProQuest and found a full-text version of the article.

Database: N/A

Method of Searching: Footnote chasing

Search String:
Referenced in:

Scholarly/Refereed Status: Ulrich’s lists the journal as scholarly and refereed.

Entry 5:

Abstract: “This exploratory study was designed to produce a preliminary sense of reference librarians’ experiences in adapting reference practice to the digital environment, to relay their descriptions of their own views about what is special or unique about digital reference, and to contemplate the implications of those views. We wanted to know how digital reference services were started in their libraries and if these librarians have shared similar or common experiences in inception, development, and implementation. We also sought to identify how traditional reference practice and concepts fit into and determine new practice in reference and conceptions around it. Finally, we sought to develop the framework and outline for a larger-scale investigation of librarians’ experiences with these changes. Findings describe a wide variety of experiences and include discussion around service character and policy, the digital reference interview, and future directions for reference practice. In conclusion, future research is proposed and unanswered questions are outlined. It is our hope that in the stories of these librarians we will uncover clues to better understand, conceptualize, and articulate what reference is becoming in the digital world and to help the profession of reference librarianship better prepare for what lies ahead.”
Annotation: The research presented in this article was thoroughly collected through interviews and a discussion board; it was also well supported by a literature review. The librarians’ responses are valuable because they all have experience with digital reference services and can therefore compare their experiences with in-person reference interactions. Through their comparisons, they were able to pinpoint what aspects of digital reference are most challenging and what needs to change in order to provide the best service to users.

Search Strategy: I read Digital libraries and reference services: present and future and found this article in the references. I then searched the library catalog for the full-text version of the article and was able to access it through ProQuest.

Database: N/A

Method of Searching: Footnote chasing

Search String: Referenced in:

Scholarly/Refereed Status: ProQuest lists Reference Services Review as a peer-reviewed journal in this article’s indexing details. Ulrich’s also lists the journal as scholarly and refereed. The journal’s website notes that it is a “refereed, international journal.”

Entry 6:

Abstract: “This paper takes a pragmatic practitioner’s view of the future of reference. It discusses five issues that need to be addressed for reference to advance logically: designing the right systems; keeping a local focus on user needs; getting a realistic perspective on library instruction; acknowledging the paradigm shift in reference question complexity; and the public relations aspects of reference services. Emphasis is placed on using technology as a tool to gain our ends, rather than employing it simply as a new toy and an end in itself.”

Annotation: This article presents how librarians can successfully provide high quality reference services in the future using tools that are presently available. LaGuardia is authoritative, using her wide range of library experience and her previously published article to support her suggestions.

Search Strategy: I searched the Library and Information Science Abstracts because the database stores a variety of journals and articles that focus on specific areas of library
science. I conducted several keyword searches and a controlled vocabulary search in the database beforehand. Using the results from previous searches, I combined one of the subject headings from the controlled vocabulary search with a keyword search in just the abstract. The subject heading combined with the keyword eliminated a lot of the false drops I received when conducting a straight keyword search.

Database: Library and Information Science Abstracts (ProQuest)

Method of Searching: Keyword and controlled vocabulary searching

Search String: SU("Reference work") AND AB(future)

Scholarly/Refereed Status: LISA lists Reference Services Review as a peer-reviewed journal in this article’s indexing details. Ulrich’s also lists the journal as scholarly and refereed. The journal’s website notes that it is a “refereed, international journal.”

Entry 7:

Abstract: “Discusses how technological developments in libraries have led to the emergence of new service paradigms, Reference services are receiving prime attention as librarians strategically position themselves to serve users who are entering the library both through the physical gateway and the electronic gateway. Recent trends in electronic libraries, with particular reference to academic libraries, point to the need to provide value-added library services to support virtual communities in their access to, and use of the exploding body of electronic sources. Also discusses the dynamic nature of reference services in the context of rapidly changing technologies and heightened user expectations and explores the issues associated with planning virtual reference services in an academic environment. Outlines the service rationale, software and technology considerations taken by the Pennsylvania State University in planning towards on-line, real-time reference services and provides an overview of the planned pilot project, includes a list of links to Web sites with useful resources as well as links to sites of some projects on virtual reference services.”

Annotation: This article thoroughly reviews the process behind implementing an online, real-time reference system in an academic library setting where there is a growing demand to serve students enrolled in distance learning programs. The software considerations and links to previously implemented examples are particularly helpful. Overall, the article is valuable in discussing how to respond to demands for remotely accessible library services.

Search Strategy: I searched the Web of Science because the database stores “scholarly literature in the sciences, social sciences, arts, and humanities.” The database even has a category dedicated to information science and library science. When conducting this
search, I looked up the exact category title and combined it with two keyword searches using the topic field tag for both.

**Database:** Web of Science

**Method of Searching:** Keyword searching

**Search String:** TS=(librar* AND reference) AND TS=(trend OR future) AND WC="Information Science & Library Science"

**Scholarly/Refereed Status:** Ulrich’s lists the journal as scholarly and refereed. The journal’s website notes that “each paper is reviewed by the editor and, if it is judged suitable for this publication, it is then sent to two independent referees for double blind peer review.”

---

**Entry 8:**

**Abstract:** “The mobile revolution, the fastest diffusion of technology in human history, is rapidly changing the future of reference services. Using personal, portable information, communication, and entertainment (PP ICE) devices to ask and receive reference information is not just another in the growing list of reference communication channels. PP ICE reference fuels mobile information experiences, which are integrated more closely with what one is doing and thinking at the moment. To be useful in the mobile era, library reference services need to overcome the reference desk mentality and the schedule fetish. Because of the mobile revolution, social search will rise again.”

**Annotation:** This article is very timely and delves into how librarians need to adapt in order to provide successful mobile reference services. It covers services such as chat, texting, and Second Life. Peters advocates for 24/7 reference services, quick response times, and getting rid of the physical and mental reference desk.

**Search Strategy:** I used the Library Literature & Information Science Full Text database through EBSCOhost because the database stores and retrieves articles focusing on the areas of library science. As this was an initial search, I just used title field tags. However, I used the advanced search options to limit the results to scholarly articles.

**Database:** Library Literature & Information Science Full Text (H.W. Wilson) [EBSCOhost]

**Method of Searching:** Title searching

**Search String:** TI (reference AND librar*) AND TI (trends OR future)
Scholarly/Refereed Status: EBSCOhost categorizes the journal as an academic journal. Ulrich’s lists the journal as scholarly and refereed. The journal’s website notes that it “uses ScholarOne Manuscripts to peer review manuscript submissions.”

Entry 9:

Abstract: “Purpose – The purpose of this paper is to explore the evolving balance between the use of print and electronic sources for answering reference questions. Design/methodology/approach – A review of the international literature from the mid-1990s is conducted. A case study of reference questions received at the Northern Territory Library is undertaken, by auditing data held in the online reference information management system, RefTracker. Over 620 questions are categorised according to the sources used in responding to those questions. Findings – Results indicate that print and electronic sources are both important to the reference service at the Northern Territory Library. Research limitations/implications – There is great difficulty in assessing what constitutes a “correct” balance between print and electronic sources for responding to reference questions, and the current practice is likely to differ significantly between libraries. The results of the study are discussed in terms of their implications for the future of reference services and the education and training needs of reference librarians. Originality/value – From the results of this study, coupled with data gathered from the review of international literature, it is possible to identify trends and issues influencing reference services and collections.”

Annotation: This article includes a thorough literature review, which supports the purpose of the study. The process and results of the study are easy to understand. The discussion is particularly valuable as the results point towards both electronic and print resources being utilized nearly equally, but there may be a difference in preference between users and reference librarians that will affect future reference transactions.

Search Strategy: I searched the Library and Information Science Abstracts because the database stores a variety of journals and articles that focus on specific areas of library science. I conducted several keyword searches and a controlled vocabulary search in the database beforehand. Using the results from previous searches, I combined one of the subject headings from the controlled vocabulary search with a keyword search in just the abstract. The subject heading combined with the keyword eliminated a lot of the false drops I received when conducting a straight keyword search.

Database: Library and Information Science Abstracts (ProQuest)

Method of Searching: Keyword and controlled vocabulary searching
**Search String:** SU("Reference work") AND AB(future)

**Scholarly/Refereed Status:** Ulrich’s lists the journal as scholarly and refereed. The journal’s website notes that “Each paper is reviewed by the editor and, if it is judged suitable for this publication, it is then sent to two independent referees for double blind peer review.”

---

**Entry 10:**

**Abstract:** This article “Presents a strong argument that the future of reference is part of an evolutionary process and that, by understanding the relationship of reference service to the library and of the library to its community, one can better understand how those relationships will evolve in the future. [The article] Notes that the four functions for reference librarians, as defined by Samuel Swett Green in 1876, remain the core of reference service today.”

**Annotation:** In this article, Tyckoson anticipates that there will be a greater demand for reference librarians’ research, critical thinking, and interpersonal skills to the extent that librarians will become “information generators.” He approaches his conclusions methodically, using past and present observations to support each prediction. Despite the article’s age, his predictions are based on information that is still timely and accurate.

**Search Strategy:** I searched the Library and Information Science Abstracts because the database stores a variety of journals and articles that focus on specific areas of library science. I conducted several keyword searches in the database beforehand. Using the results from previous searches, I combined two of the most appropriate subject headings to conduct this search and narrowed the results to just peer-reviewed journals.

**Database:** Library and Information Science Abstracts (ProQuest)

**Method of Searching:** Controlled vocabulary

**Search String:** SU("Reference work") AND SU("Future developments")

**Scholarly/Refereed Status:** LISA lists *Reference Services Review* as a peer-reviewed journal in this article’s indexing details. Ulrich’s also lists the journal as scholarly and refereed. The journal’s website notes that it is a “refereed, international journal.”
Entry 11:

**Abstract:** “Reference service is based upon a sect of core functions that have remained valid since the earliest days of the public library movement. Inherent in those functions is a set of core values, including accuracy, thoroughness, timeliness, authority, instruction, access, individualization, and knowledge. Models of reference service that emphasize different aspects of those values take very different forms. In determining the best model for a specific library, the values of the community that the library serves must be taken into account. No one model is best for all libraries.

For anyone using libraries today, reference service is a standard feature. Regardless of the type of library, the size of its collections, or the demographics of its users, patrons expect to get help with everything from complex research projects to finding materials in the collections. Service has become almost synonymous with libraries.

This was not always the case. Reference service is a relatively recent development in library history, and the methods in which reference services are provided are still evolving. Administrators and reference librarians alike struggle to develop the most efficient and effective means of providing reference service to their users. During a time when change seems to be the only constant, librarians are seeking new models for providing service to their users.

Beginning around 1980, a number of innovative methods for providing reference service began to be created and promoted in the literature. From the Rethinking Reference project (Rettig, 1992) to the Brandeis model of tiered reference service (Massey-Burzio, 1992) to 24/7 online call-center-based electronic information services (Coffman, 1999), each new method has been promoted as the next revolution in the provision of service. Those who create these methods are often lauded for their innovations; while at the same time, those who retain older models often worry that they are becoming marginalized and outdated. Predictions of the demise of libraries in general—and of reference services in particular (Campbell, 1992)—have left many reference librarians wondering what the future holds in store. Some wonder if reference has a future at all.

Many see the values that attracted them to the field of reference as slipping away in a sea of electrons. Newly hired reference librarians often reinforce this perception as they show clear preferences for the Internet and databases over traditional reference works and the library catalog. At a time when fear seems to be replacing faith as one of the prime motivating factors among reference librarians, we need to reexamine the foundation of what we do and identify the core values inherent in reference services. By viewing change within those values, we can better understand how new models of service can enhance—or hinder—the provision of reference service.”

**Annotation:** This article is important for providing the foundation of reference services because one needs to understand the basics before making predictions about the future of reference. The section on *New Models, Old Values* is particularly helpful as it systematically defines each model of reference work. *Technology and Change* also provides insight into how technology has affected and will continue to affect reference services.
**Search Strategy:** I recognized Tyckoson as an author who had published a lot of literature pertaining to reference services when I found one of his articles in LISA. I decided to conduct an author search in order to find more of his work. I used the Library Literature & Information Science Full Text database because the database stores and retrieves articles focusing on the areas of library science. Additionally, all results would be available in full text.

**Database:** Library Literature & Information Science Full Text (H.W. Wilson) [EBSCOhost]

**Method of Searching:** Author searching

**Search String:** AU (Tyckoson) AND TX (reference)

**Scholarly/Refereed Status:** *Library Trends* is categorized as an academic journal on EBSCOhost. Ulrich’s also lists the journal as scholarly and refereed. The journal’s website notes that the issue editor “arranges for peer review of each article.”

---

**Entry 12:**

**Abstract:** “Three possible scenarios for the future of reference services are described: outsourcing, the Web, and knowledge counseling. The ability to design reference services that users will continue to value in libraries of the future is limited by current professional reference practices. These limits are related to the failure to incorporate total quality management (TQM) principles into the design and practice of present day reference services. The following TQM principles are utilized to discuss the contrasts between TQM principles and current reference practices: focus on the customer, quality work the first time, strategic holistic approach to improvement, continuous improvement as a way of life, and mutual respect and teamwork. Finally, the roles that library organizations must fulfill to change the current professional culture are described.”

**Annotation:** This article is unique in that it addresses the design and management of reference services as a major factor in determining the future existence of reference services. It presents specific steps librarians can take to ensure the survival of reference services. However, it does not include any evidence to confirm that librarians are not already taking these steps. Additionally, it does not indicate that any libraries have successfully implemented the proposed changes.

**Search Strategy:** I searched the Library and Information Science Abstracts because the database stores a variety of journals and articles that focus on specific areas of library science. I conducted several keyword searches in the database beforehand. Using the results from previous searches, I combined two of the most appropriate subject headings to conduct this search and narrowed the results to just peer-reviewed journals.
Database: Library and Information Science Abstracts (ProQuest)

Method of Searching: Controlled vocabulary

Search String: SU("Reference work") AND SU("Future developments")

Scholarly/Refereed Status: LISA lists Reference Services Review as a peer-reviewed journal in this article’s indexing details. Ulrich’s also lists the journal as scholarly and refereed. The journal’s website notes that it is a “refereed, international journal.”

Entry 13:

Abstract: “This article addresses issues that relate to the changing functional relationship between the reference librarian and the user, based on the observation that the advance of information technology, particularly the Internet, has altered the values, attitudes, and beliefs of library users, and, as a consequence, their microculture. Highlights include: the traditional reference desk; the changed reference environment, the creation of electronic reference services, and direct connections to information resources; user cultures; the convenience quotient (a measure of what type of user orientation is most comfortable within a given type of relationship and who regards the services provided as convenient); and components of reference service with regard to information resources.”

Annotation: This article is unique because it discusses the future of reference from a cultural perspective. It builds on the existing literature by examining the changing relationship between the reference librarian and the user. The conclusions are particularly insightful as they note how to reconnect with lost users and reach out to “unreachable” users.

Search Strategy: I searched the Web of Science because the database stores “scholarly literature in the sciences, social sciences, arts, and humanities.” The database even has a category dedicated to information science and library science. When conducting this search, I looked up the exact category title and combined it with two keyword searches using the topic field tag for both.

Database: Web of Science

Method of Searching: Keyword searching

Search String: TS=(librar* AND reference) AND TS=(trend OR future) AND WC="Information Science & Library Science"
**Scholarly/Refereed Status:** Ulrich’s lists the journal as scholarly and refereed. The journal’s website includes the editorial policy “of double-blind refereeing of articles in advance of publication.”

---

**Entry 13:**

**Abstract:** “This article explores recent trends in reference and public services librarianship. According to statistics, reference transactions began to decline in 1998 and have decreased every subsequent year. The nature of reference queries has changed, due to the increased use of the Internet and email. Some approaches to changing reference patterns are presented. Trends in reference libraries include consolidation of service points and libraries, increased integration of public and technical services, partnership between libraries and an increase in the marketing of library services to the public.”

**Annotation:** This article is useful because it approaches the future of reference from a business angle, suggesting that librarians should utilize a strategy called environmental scanning to examine trends and predict future trends. *Factors Driving Change* is also a helpful section that considers the effects of generational change and big box bookstores on library services.

**Search Strategy:** I used the Library Literature & Information Science Full Text database through EBSCOhost because the database stores and retrieves articles focusing on the areas of library science. As this was an initial search, I just used title field tags. However, I used the advanced search options to limit the results to scholarly articles. While both part one and part two of this article appeared in the search results, I only chose to use part two because it focuses on change and the future of reference.

**Database:** Library Literature & Information Science Full Text (H.W. Wilson) [EBSCOhost]

**Method of Searching:** Title searching

**Search String:** TI (reference AND librari*) AND TI (trends OR future)

**Scholarly/Refereed Status:** Ulrich’s lists the journal as scholarly and refereed. The journal’s website includes the editorial policy “of double-blind refereeing of articles in advance of publication.”
Conclusion and Personal Statement

The future of reference is a topic that involves many answers as well as no answers. Library and information professionals have a wide range of varying opinions, ideas, and predictions about the future of reference. For the most part, they are optimistic that reference services will still exist in some form in the future. However, when it comes down to it, no matter how many studies are conducted or how much research is presented, there is no answer—there is only speculation. Unfortunately, that is the consequence when dealing with a question involving the future.

Regardless, there is still a lot to be learned from the knowledge, ideas, and experiences of past and present librarians. Their research and input is invaluable, especially because there is no real answer. The continuous discussion among professionals and colleagues is what will eventually guide information services in the direction they are meant to go in.

On a more personal note, I believe that as long as librarians continue to do what is best for users in order to meet their needs, reference services will always exist. There will always be a need for a trained professional that can search for, find, and evaluate information. Not only that, but they can also teach other professionals or users how to find information. There is far too much information in the world to go without such a professional, and that amount of information is only going to continue growing. Information services and professionals will have no choice but to grow with it.